In the Matter of

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES, AND COMPONENTS THEREOF, AND PRODUCTS CONTAINING SAME

337-TA-841

Publication 4573

November 2017

U.S. International Trade Commission

Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

Irving Williamson, Chairman Shara Aranoff, Commissioner, Dean Pinkert, Commissioner David Johanson, Commissioner Meredith Broadbent, Commissioner

Address all communications to Secretary to the Commission United States International Trade Commission Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436 www.usitc.gov

In the Matter of

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES, AND COMPONENTS THEREOF, AND PRODUCTS CONTAINING SAME

337-TA-841



UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES, AND COMPONENTS THEREOF, AND PRODUCTS CONTAINING SAME **Investigation No. 337-TA-841**

NOTICE OF COMMISSION DETERMINATION TERMINATING THE INVESTIGATION WITH A FINDING OF NO VIOLATION OF SECTION 337

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to terminate the above-captioned investigation with a finding of no violation of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337.

FOR FURTHER INFORMATION CONTACT: Sidney A. Rosenzweig, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2532. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at http://www.usitc.gov. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at http://edis.usitc.gov. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on May 2, 2012, based on a complaint filed by Technology Properties Limited, LLC ("TPL") of Cupertino, California. 77 Fed. Reg. 26041 (May 2, 2012). The complaint alleged violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, by reason of infringement of certain claims of U.S. Patent Nos. 6,976,623 ("the '623 patent"), 7,162,549 ("the '549 patent"), 7,295,443 ("the '443 patent"), 7,522,424 ("the '424 patent"), 6,438,638 ("the '638 patent"), and 7,719,847 ("the '847 patent"). The complaint further alleged the existence of a domestic industry. The notice of investigation named twenty-one respondents, some of whom have since settled from the

investigation. As a result of these settlements, the '638 patent is no longer at issue, as it has not been asserted against the remaining respondents. The remaining respondents are Acer Inc. of New Taipei City, Taiwan; Canon Inc. of Toyko, Japan; Hewlett-Packard Company of Palo Alto, California; HiTi Digital, Inc. of New Taipei City, Taiwan; Kingston Technology Company, Inc. of Fountain Valley, California; Newegg, Inc. and Rosewill Inc., both of City of Industry, California; and Seiko Epson Corporation of Nagano, Japan.

On October 4, 2012, the ALJ issued a *Markman* order construing disputed claim terms of the asserted patents. Order No. 23. On January 7-11, 2013, the ALJ conducted an evidentiary hearing, and on August 2, 2013, the ALJ issued the final ID. The ALJ found that TPL demonstrated the existence of a domestic industry, as required by 19 U.S.C. § 1337(a)(2), through TPL's licensing investment under 19 U.S.C. § 1337(a)(3)(C). ID at 152-55. The ALJ rejected TPL's domestic-industry showing based upon OnSpec Electronic, Inc.'s research and development, and engineering investments under section 337(a)(3)(C), as well as subsections (a)(3)(A) and (a)(3)(B). *Id.* at 155-57.

The ALJ found that the respondents had not shown that any of the asserted patent claims are invalid. However, the ALJ found that TPL demonstrated infringement of the '623 patent, and not the other patents. With respect to the '623 patent, the ALJ found that TPL demonstrated direct infringement of the asserted apparatus claims (claims 1-4 and 9-12). Accordingly, the ALJ found a violation of section 337 by the four respondents accused of infringing these apparatus claims.

On August 19, 2013, the parties filed petitions for review, and on August 27, 2013, the parties filed responses to each other's petitions.

On October 24, 2013, the Commission issued a notice that determined to review the ID in its entirety. The Commission notice invited briefing from the parties on five enumerated topics, and briefing from the parties and written submissions on remedy, the public interest, and bonding. On November 7, 2013, the parties filed opening briefs and written submissions, and non-party Intel Corp. filed a submission on remedy and the public interest. On November 15, 2013, the parties filed responses to each other's filings.

On December 11, 2013, TPL and Acer filed a joint motion to terminate the investigation as to Acer on the basis of a settlement agreement. Having examined the record of this investigation, including the December 11, 2013 motion and exhibits thereto, the Commission has determined to grant the motion to terminate the investigation as to Acer. *See* 19 C.F.R. § 210.21. The Commission finds that settlements are generally within the public interest and that terminating Acer will not cause an adverse effect on the public health and welfare, competitive conditions in the U.S. economy, the production of like or directly competitive articles in the United States, or U.S. consumers. *See* 19 C.F.R. § 210.50(b)(2).

Having examined the record of this investigation, including the ALJ's final ID, the petitions for review, and the responses thereto, and the briefing in response to the notice of review, the

Commission has determined to terminate the investigation with a finding of no violation of section 337.

The Commission has determined to find no violation of section 337 for the following reasons. For the '623 patent, the Commission adopts the respondents' proposed construction of "accessible in parallel." The Commission therefore reverses the ID's finding of infringement as to that patent. Based upon that claim construction, the Commission also finds that TPL has not demonstrated the existence of an article protected by the '623 patent. The Commission finds that the Federal Circuit's decisions in *InterDigital Communications, LLC v. ITC*, 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013) and *Microsoft Corp. v. ITC*, 731 F.3d 1354 (Fed. Cir. 2013), require a complainant to make such a demonstration regardless of whether the domestic industry is alleged to exist under 19 U.S.C. § 1337(a)(3)(A), (B), or (C).

For the '443, '424, and '847 patents, the Commission affirms the ID's determination that TPL failed to demonstrate that the accused products infringe the asserted claims. The Commission also finds for these three patents that TPL failed to demonstrate the existence of a domestic industry because it failed to demonstrate the existence of articles practicing these patents.

TPL did not raise the '549 patent in its petition for review. 19 C.F.R. § 210.43(b)(2). The Commission affirms the ID's noninfringement finding, and its finding that TPL failed to show that its domestic industry products meet certain claim limitations.

The reasons for the Commission's determinations will be set forth more fully in the Commission's opinion.

Commissioner Aranoff dissents from the Commission's finding that TPL was required to demonstrate the existence of articles practicing the asserted patents in order to show a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C).

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in sections 210.42-46, and 210.50 of the Commission's Rules of Practice and Procedure (19 C.F.R. §§ 210.42-46, 210.50).

By order of the Commission.

Lisa R. Barton

Acting Secretary to the Commission

Issued: December 19, 2013

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served upon the following parties as indicated on **December 19, 2013**.

Lisa R. Barton, Acting Secretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, DC 20436

On Behalf of Complainant Technology Properties Limited LLC:

Anthony G. Simon, Esq. THE SIMON LAW FIRM PC	() Via Hand Delivery() Via Express Delivery
800 Market St., Ste. 1700	(Via First Class Mail
St. Louis, MO 63101	() Other:
On Behalf of Respondent Hewlett-Packard Company:	
Marcia H. Sundeen, Esq.	() Via Hand Delivery
KENYON & KENYON LLP	() Via Express Delivery
1500 K Street, NW	(Via First Class Mail
Washington, DC 20005	() Other:
On Behalf of Respondent HiTi Digital Inc.:	
Jenny W. Chen, Esq.	() Via Hand Delivery
c/o Darrin A. Auito, Esq.	() Via Express Delivery
WESTERMAN HATTORI DANIELS & ADRIAN LLP	(Via First Class Mail
1250 Connecticut Avenue, NW, Suite 700	() Other:
Washington, DC 20036	
On Behalf of Respondent Acer Inc.:	
Eric C. Rusnak, Esq.	() Via Hand Delivery
K&L GATES LLP	() Via Express Delivery
1601 K Street, NW	(→ Via First Class Mail
Washington, DC 20006-1600	() Other:

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

Inv. No. 337-TA-841

Certificate of Service – Page 2

On Behalf of Respondent Seiko Epson Corporation:	
Louis S. Mastriani, Esq. ADDUCI, MASTRIANI & SCHAUMBERG LLP 1133 Connecticut Avenue, NW, 12 th Floor Washington, DC 20036	() Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Canon Inc.:	
David M. Maiorana, Esq. JONES DAY 901 Lakeside Avenue Cleveland, OH 44114	() Via Hand Delivery() Via Express Delivery() Via First Class Mail() Other:
On Behalf of Respondent Kingston Technology Company, Inc.:	
Christine Yang, Esq. LAW OFFICES OF S.J. CHRISTINE YANG 17220 Newhope Street, Suites 101-103 Fountain Valley, CA 92708	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondents Newegg Inc. and Rosewill Inc.:	*
Kent E. Baldauf, Esq. THE WEBB LAW FIRM 420 Ft. Duquesne Boulevard, Suite 1200 Pittsburgh, PA 15222	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Dane Memory, S.A. (a/k/a Dane-E	llec
Memory):	
Jeffrey G. Jacobs, Esq. THE LAW OFFICE OF JEFFREY G. JACOBS PC 15770 Laguna Canyon Road, Suite 100 Irvine, CA 92618	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES, AND COMPONENTS THEREOF, AND PRODUCTS CONTAINING SAME **Investigation No. 337-TA-841**

COMMISSION OPINION

I. INTRODUCTION

The Commission instituted this investigation on May 2, 2012, based on a complaint filed by Technology Properties Limited, LLC ("TPL") of Cupertino, California. 77 Fed.

Reg. 26041 (May 2, 2012). The complaint alleged violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, by reason of infringement of certain claims of U.S.

Patent Nos. 6,976,623 ("the '623 patent"), 7,162,549 ("the '549 patent"), 7,295,443 ("the '443 patent"), 7,522,424 ("the '424 patent"), 6,438,638 ("the '638 patent"), and 7,719,847 ("the '847 patent"). The complaint further alleged the existence of a domestic industry. The notice of investigation named twenty-one respondents, some of whom have since settled from the investigation. As a result of these settlements, the '638 patent is no longer at issue, as it has not been asserted against the remaining respondents. The Office of Unfair Import Investigations did not participate in this investigation.

On October 4, 2012, the presiding Administrative Law Judge ("ALJ") issued a *Markman* order construing disputed claim terms of the asserted patents. Order No. 23. On January 7-11, 2013, the ALJ conducted a hearing, and on August 2, 2013, the ALJ issued his

final Initial Determination ("the ID"). The ALJ found that TPL demonstrated the existence of a domestic industry, as required by 19 U.S.C. § 1337(a)(2), through TPL's licensing investments under 19 U.S.C. § 1337(a)(3)(C). ID at 152-55. The ALJ rejected TPL's domestic industry showing based upon OnSpec Electronic, Inc.'s expenses under section 337(a)(3)(A)-(C). *Id.* at 155-57. The ALJ found that TPL's technical prong showing for each patent was insufficient to demonstrate that the alleged domestic industry products actually practice one or more claims of each asserted patent. ID at 134-138. Yet, because the ALJ ruled that such a showing is not required under existing Commission precedent for licensing industries under subsection (a)(3)(C), the ALJ found that TPL showed the existence of a domestic industry in licensing the asserted patents.

The ALJ found that the respondents had not shown that any of the asserted patent claims are invalid. However, the ALJ found that TPL demonstrated infringement only of the '623 patent, and not the other patents. With respect to the '623 patent, the ALJ found that TPL demonstrated direct infringement of the asserted apparatus claims (claims 1-4 and 9-12). Accordingly, the ALJ found a violation of section 337 only as to the '623 patent. TPL asserted the '623 patent against only a subset of respondents ("the '623 respondents"), specifically Acer, Inc. ("Acer"); Kingston Technology Co., Inc. ("Kingston"); Newegg, Inc.; and Rosewill Inc. (collectively, "Newegg/Rosewill"). Thus, the ALJ found no violation of section 337 as to the remaining respondents ("the non-'623 respondents"), specifically Canon, Inc.; Hewlett-Packard Co. ("HP"); HiTi Digital, Inc. ("HiTi"); and Seiko Epson Corporation ("Seiko Epson").

¹ The ALJ also found that method claims 17-19 of the '623 patent were not infringed. The Commission does not reach those claims, which TPL concedes are no longer within the scope of the investigation, TPL Br. 12 n.3. The Commission vacates the ALJ's findings with respect to those claims.

On August 19, 2013, the parties filed petitions for review.² TPL's petition challenged the ALJ's noninfringement determinations for the '443, '424, and '847 patents ("the mapping patents"). TPL did not petition for review of the ALJ's noninfringement determination for the '549 patent. The respondents filed a petition for review, in which the '623 respondents challenged one of the ALJ's claim constructions, and independently challenged the ALJ's finding that the asserted claims of the '623 patent are not anticipated by, or obvious in view of, certain prior art. The '623 respondents also challenged the ALJ's finding that TPL demonstrated the existence of a domestic industry.

The non-'623 respondents contingently challenged the ALJ's determinations. They challenged the ALJ's domestic industry determination on the basis that "[t]here is no evidence that TPL's licensees' efforts relate to 'an article protected by' any of the asserted patents." Resp'ts Pet. 42, 54-56. The petition relies on the Federal Circuit's decision in *InterDigital Communications, LLC v. ITC*, 707 F.3d 1295 (Fed. Cir. 2013), the Court's decision denying rehearing in the appeal from Commission Investigation No. 337-TA-613, *Certain 3G Mobile Handsets and Components Thereof.* These respondents also challenged the ALJ's findings under the economic prong of the domestic industry requirement based on TPL's evidence of expenditures, as well as the nexus between those expenditures and the asserted patents.

² Complainant Technology Properties Limited LLC's Petition for Review of the Initial Determination (Aug. 19, 2013) ("TPL Pet."); Respondents Acer, Inc., Kingston Technology Company, Inc., Newegg, Inc. and Rosewill Inc.'s Petition for Review of Initial Determination Finding a Violation Based on U.S. Patent No. 6,976,623 and Respondents' Conditional Petition for Review of Initial Determination of Finding of Validity and Domestic Industry of the Remaining Patents in Suit (Aug. 19, 2013) ("Resp'ts Pet."); Contingent Petition for Review of Respondent Hewlett-Packard Company Relating to Domestic Industry (Aug. 19, 2013) ("HP Pet.").

The non-'623 respondents also argued that the four no-violation patents are invalid as anticipated or obvious in view of the prior art, and made additional non-infringement arguments for the three mapping patents, which were raised in TPL's petition.

Respondent HP filed a short petition for review on its own behalf. HP argued for a narrow interpretation of the domestic industry requirement, not only in which "articles protected by" the patent must be found to exist, but in which "protected by" has a narrow meaning:

"The articles protected by" the asserted IP are those which came to market, or are coming to market, under the protective umbrella of the asserted IP, which these articles commercialize. Articles independently created, and then taxed by a patent owner, such as TPL, are not "protected by" the IP by any reasonable interpretation of that word, and thus fail to satisfy the plain language of the statute.

HP Pet. 5.

On August 27, 2013, the parties filed responses to each other's petitions.³ In response to the domestic industry challenge lodged by the respondents collectively, TPL argued that the respondents confuse the technical prong with the economic prong and that there is no technical prong requirement for licensing under section 337(a)(3)(C). TPL Reply Pet. 28. In a short reply to HP's petition, TPL argues that HP never raised its theory of domestic industry below, making it waived, and that, in any event, HP's petition failed to satisfy Commission rule 210.43, because HP failed to explain the basis for its petition under Rule

³ Complainant Technology Properties Limited LLC's Response to Respondents Acer, Inc., Kingston Technology Company, Inc., Newegg, Inc., and Rosewill Inc.'s Petition for Review of Initial Determination Finding a Violation Based on U.S. Patent No. 6,976,623 and Response to Respondents' Conditional Petition for Review of Initial Determination of Finding of Validity and Domestic Industry of the Remaining Patents in Suit (Aug. 27, 2013) ("TPL Reply Pet."); Complainant Technology Properties Limited LLC's Response to Respondent Hewlett-Packard Company's Contingent Petition for Review Relating to Domestic Industry (Aug. 27, 2013); Respondents' Response to Complainant Technology Properties Limited, LLC's Petition for Review of the Initial Determination (Aug. 27, 2013) ("Resp'ts Reply Pet.")

210.43(b)(1) (factual findings "clearly erroneous," legal conclusions "erroneous," or that "the determination is one affecting Commission policy").

The Commission determined to review the ID in its entirety. The Commission notice solicited briefing from the parties on remedy, the public interest, and bonding, as well as on five specific questions:

- 1. Discuss, in light of the statutory language, legislative history, the Commission's prior decisions, and relevant court decisions, including *InterDigital Communications*, *LLC v. ITC*, 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013) and *Microsoft Corp. v. ITC*, Nos. 2012-1445 & -1535, 2013 WL 5479876 (Fed. Cir. Oct. 3, 2013), whether establishing a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C) requires proof of "articles protected by the patent" (*i.e.*, a technical prong). If so, please identify and describe the evidence in the record that establishes articles protected by the asserted patents.
- 2. Discuss the construction of "accessible in parallel" in view of the prosecution history of the '623 patent (including the Examiner's Statement of Reasons for Allowance, see Salazar v. Proctor & Gamble Co., 414 F.3d 1342, 1347 (Fed. Cir. 2005)), and whether the asserted patent claims are infringed and not invalid based upon that construction. Invalidity arguments not dependent on that claim construction should not be briefed.
- 3. Comment on whether the respondents' invalidity evidence and analysis as to the Pro II system, the Uno Mas article, the Kaneshiro patent, and the '928 Publication, and TPL's evidence and analysis as to the technical prong of the domestic industry requirement, were undisputed. Please cite all evidence in the record that supports your position.
- 4. Discuss whether TPL demonstrated that the products accused of infringing the '443, '424, and '847 patents receive or interface with SD cards that operate in a four-bit-bus mode, and if so, whether the accused products infringe the asserted claims.
- 5. If the Commission were to find that the accused products infringe the '443, '424, and '847 patents, discuss whether the SD specification invalidates the asserted claims of those patents.

Notice (October 24, 2013). The notice also solicited briefing from the public on remedy and the public interest.

On November 7, 2013, the parties filed opening submissions in response to the above-listed questions,⁴ as well as separate submissions on remedy the public interest, and bonding. That same day, non-party Intel Corp. filed comments on remedy and the public interest, supportive of the respondents. On November 15, 2013, the parties replied to each other's submissions.⁵ On December 11, 2013, TPL and Acer filed a joint motion to terminate the investigation as to Acer on the basis of a settlement agreement, which we granted in our notice terminating the investigation.

II. DISCUSSION

The respondents' petition for review and their subsequent briefing present a substantial domestic industry question, specifically, whether TPL, in alleging the existence of a domestic industry under section 337(a)(3)(C), must demonstrate the existence of articles practicing the asserted patents.⁶ We first address the patent issues in this investigation before turning to domestic industry.

⁴ Complainant Technology Properties Limited LLC's Response to the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 7, 2013) ("TPL Br."); Respondents' Written Submission Addressing Certain Issues Enumerated in the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 7, 2013) ("Resp'ts Br.").

⁵ Complainant Technology Properties Limited LLC's Reply Submission to the Notice of Commission Determination to Review in the Entirety a Final Initial Determination Finding a Violation of Section 337 (Nov. 15, 2013) ("TPL Reply Br."); Reply of Respondents to the Submission of Complainant on Review of the Final Initial Determination (Nov. 15, 2013) ("Resp'ts Reply Br.").

⁶ Commissioner Aranoff dissents from the Commission's determination that a complainant is required to demonstrate the existence of articles practicing the asserted patents in order to show a domestic industry based on licensing under section 337(a)(3)(C). She does not reach the question of whether there is a statutory requirement that a complainant demonstrate the existence of articles practicing the asserted patents for engineering and research and development industries under section 337(a)(3)(C). She otherwise joins the Commission's analysis to the extent that it is not inconsistent with her dissenting views.

A. Patent-Related Issues Concerning the '623 Patent

The '623 patent is directed toward a device into which several types of memory cards can be plugged at the same time, the memory cards being "accessible in parallel to transfer data from the" first card to the second card. '623 patent claims 1, 9; *accord* claim 17. The accused products, after accounting for respondent Acer's recent termination from the investigation, are memory card readers distributed by Kingston and Newegg/Rosewill. ID at 24-25. TPL asserted independent claims 1, 9, and 17 and dependent claims 2-4, 10-12, and 18-19. ID at 12. For domestic industry, TPL relied upon claim 1. ID at 137.

As noted earlier, the ALJ found a violation of section 337 as to the '623 patent. The principal dispositive issue regarding this patent is whether the patentee's amendments to the claims, and explanations of those amendments, constitute disavowal as to patent scope with regard to what is meant by "accessible in parallel." The ALJ concluded that there was no disavowal and found that the accused products infringe the claims. The ALJ then found that the respondents failed to demonstrate that the asserted claims are invalid.

1. Claim Construction and Infringement: "Accessible in Parallel"

The ALJ's finding of infringement was based on his claim construction of "accessible in parallel to transfer data" from one type of memory card to another. '623 patent claims 1, 9. Under guiding case law, the words of a claim are usually afforded their "ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history." *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). An exception to this canon of construction applies "when the patentee disavows the full scope of a claim term either in the specification or during prosecution." *Id.* Throughout proceedings, the respondents argued that, based

upon prosecution history disavowal, "accessible in parallel" requires that the claimed system be able to read from one type of memory card while writing to the other.

a) Recitation of the File History

Claim 1, which is illustrative, issued from application claim 1, which called, *inter alia*, for "a plurality of memory card interfaces accessible in parallel." The patent examiner rejected all of the application claims over a prior art patent application to Pua (U.S. 2002/0178307). Office Action (Aug. 22, 2003). Pua disclosed a memory card reader for connecting different types of memory cards to a computer. Pua contains a "memory card switching circuit" for controlling which memory card to access at any time. Pua ¶ 32.

In response to this rejection, the applicants explained (without amendment in this regard):

Claim 1 requires a "memory card interface apparatus comprising a plurality of memory card interfaces . . . the plurality of memory card interfaces <u>accessible in parallel</u>." (*emphasis added*). In contrast, Pua does not teach or suggest that the multiple card adapter 10 can provide parallel access to the interfaces 30. Rather, Pua merely teaches a multiple memory card adapter that provides an interface for various types of memory cards. Nowhere does Pua teach or suggest that these interfaces are accessible in parallel.

Amendment at 9 (Dec. 9, 2003) (emphasis in original).

The examiner rejected the claims again:

In response to applicant's argument that Pua et al does not teach or suggest that the multiple card adapter 10 can provide parallel access to the interfaces 30 . . . , in Pua et al the interfaces 30 are accessible in parallel in that they are connected to the memory card control interface 20 in parallel. The memory card control interface 20 includes a memory card switching circuit for managing data and command flow to the memory cards, and switches between card

⁷ Asserted independent claims 9 and 17 of the '623 patent issued from application claims 10 and 19, respectively. As claim 17 is no longer at issue, we do not address it further, though throughout the prosecution history, the amendments to issued claims 1, 9, and 17 were consistent and indistinguishable.

interfaces depending on which type of card is being accessed (see paragraphs 32, 37, and 38). Since the memory card control interface 20 is capable of accessing specific interfaces 30, the interfaces 30 are connected to the memory card control interface 20 in parallel. If the interfaces 30 were connected to the memory card control interface 20 in serial, the memory card control interface 20 would have to access one interface type while sending control signals through at least one second interface type Thus, it is clear that the interfaces 30 are connected to the memory card control interface 20 in parallel. Therefore, the teachings of Pua et al meet the claimed limitation that the interfaces are accessible in parallel.

Final Office Action at 3 (Mar. 5, 2004).

In attempting to overcome the rejection, the applicants amended the claims from "accessible in parallel" to "being accessible in parallel" (application claims 1 and 10), and explained:

The above-emphasized limitation of claim 1 requires that the plurality of memory card interfaces be accessible in parallel. The Examiner's above-quoted argument merely shows that the interface 30 for each type of memory card is connected to the memory card control interface 20 in parallel. However, the fact that the interface 30 for each type of memory card is connected in parallel does <u>not</u> mean that access to the interfaces 30 occurs in parallel.

In fact, Pua describes that the memory card control interface 20 comprises a memory card switching circuit which is switched to one of the interfaces 30 under control of a microprocessor. For example, in paragraph 32, Pua states, "If, for example, the host reads from or writes to a Compact Flash card, the microprocessor will switch this circuit to the Compact Flash interface. If, for example, the host reads from or to a Smart Media card, the microprocessor will switch this circuit to the Smart Media interface." Thus, in other words, depending on the type of card being written to or read from, the microprocessor switches the memory card switching circuit to the interface that supports the card being written to or from. Since the memory card switching circuit is switched between interfaces, it follows that no more than one interface can be operative at a given point in time. Thus, access to the interfaces does not occur in parallel.

Amendment at 7 (Apr. 29, 2004) (emphasis in original).

In his next rejection, instead of relying solely on the Pua application, the examiner relied for anticipation on U.S. Patent No. 6,381,513 to Takase. Office Action (May 27, 2004). That patent discloses a computer terminal that accommodates several memory cards at once. Takase explains that its "memory card interface 223 can simultaneously accept a plurality of memory cards 1 so that it can read, erase and write the data in parallel." Takase patent col. 13 lines 9-12.

In response to this rejection, the applicants amended application claim 1 as follows, with similar amendments to application claim 10:

(Currently Amended) A memory card interface apparatus comprising:

 a plurality of memory card interfaces, with at least a subset of the plurality of memory
 card interfaces eonfigured being selectively operable to interface with a plurality of memory
 cards of a first type, the plurality of memory card-interfaces accessible in parallel.

Amendments (June 16, 2004). The applicants explained that the memory card system of Takase was "not subject to selection." *Id.* at 6-7; *see* Takase patent col. 14 line 34 – col. 15 line 18. The examiner disagreed, and again rejected the claims as anticipated by Takase. Office Action 15 (Sept. 2, 2004).

The applicants amended the claims again, with the amendments to claim 1 shown below:

⁸ The examiner also found the claims obvious in view of Takase and Pua together.

1. (Currently Amended) A memory card interface apparatus comprising:

a plurality of memory card interfaces, with at least a subset of the plurality of memory card interfaces being selectively operable to interface with a plurality of memory cards of a first type comprising a first subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type, wherein the memory card of the first type and the memory card of the second type are accessible in parallel.

Amendment (Nov. 22, 2004). The applicants explained:

Takase describes a system in which a plurality of memory cards of the same type may be accessed <u>in parallel</u>. For example, see columns 15 and 16. However, Takase fails to teach or suggest that a memory card of the first type and a memory card of a second type may be accessed in parallel.

Pua (US 2002/0178307) describes a system which provides serial access to a number of memory cards of different types (see paragraph 37, column 2). However, Pua does not teach or suggest that a memory card of a first type and a memory card of a second type may be accessible in parallel.

Thus, the combination of Takase and Pua would provide a system in which there would be parallel access for memory cards of the same type, and serial access for memory cards of different types. The combination of Takase and Pua would still fail to teach or suggest that a memory card of the first type and a memory card of the second type may be access [sic] in parallel, as recited in claim 1.

Id. at 5 (emphasis in original).

Another rejection followed, this time relying on the combination of Takase and Pua, as opposed to each individually. Office Action (Feb. 5, 2005). The examiner argued that a person of ordinary skill would have been motivated to combine the two references "in order to provide the ability to interface with a plurality of memory cards as desired/required by users, thereby increasing the versatility and appeal of the system to a greater number of users." *Id.* at 9.

In response to this rejection, the applicants amended the claims again:

(Currently Amended) A memory card interface apparatus comprising:

 a plurality of memory card interfaces comprising a first subset to interface with a
 memory card of a first type and a second subset to interface with a memory card of a
 second type, wherein the memory card of the first type and the memory card of the
 second type are accessible in parallel to transfer data from the memory card of the first
 type to the memory card of the second type.

Amendments (Apr. 27, 2005). The applicants explained:

In contrast [to the newly added limitation], Takase discloses an electronic information distributing terminal for writing electronic information (such as text information and corresponding motion image information) into a memory card. . . . Takase's terminal does not teach or suggest transfer data [sic] from the memory card of the first type to the memory card of the second type.

Also, Pua discloses a multiple memory card adapter that comprises an interface for various types of memory cards, so that only one adapter is needed to allow different types of memory cards to be read from or written to by a host computer. Pua also does not teach or suggest transfer data [sic] from the memory card of the first type to the memory card of the second type.

Thus, Takase and Pua, individually or in combination, do not teach or suggest transfer data [sic] from the memory card of the first type to the memory card of the second type, as claimed in independent claims 1, 10 and 19.

Id. at 6-7.

These amendments overcame the rejection, but the examiner issued a detailed notice of allowability explaining the improvements over the prior art, including discussion of U.S. Patent No. 6, 010,066 to Itou:⁹

Itou et al... teaches transferring data from a first memory card to a second memory card (see column 1, lines 57-62, and column 2, lines 9-14). However, Itou et al fails to teach or suggest that the first

⁹ Until this point, the examiner had relied upon Itou in connection with claims 8 and 16 of the '623 patent (application claims 8 and 17), which call for a text display.

memory card and the second memory card are different types or accessible in parallel. Since the transfer of data from a first memory card to a second memory card necessarily includes reading data from the first memory card and then writing the data to the second memory card, the examiner believes that this suggests accessing the first and second memory cards serially, rather than in parallel.

It is also noted that applicants have made a distinction between the memory cards being connected in parallel and the memory cards being accessible in parallel. As applicants have stated, the fact that interfaces are connected in parallel does not mean that access to the interfaces occurs in parallel (see page 7 of the amendment filed on 5/3/2004).

Therefore, without the benefit of applicant's teachings, there is no motivation for one of ordinary skill in the art at the time of the invention to combine the teachings of the prior art in a manner so as to create the claimed invention.

Notice of Allowability at 3 (July 19, 2005).

b) Prosecution Disavowal Based Upon the File History

The respondents argued that the effect of this exhaustive file history is to disavow switching between two memory cards from the scope of "accessible in parallel," and proposed to the ALJ a construction of "accessible in parallel" as "each transmitting or receiving data simultaneously at a given point in time." Order No. 23 at 60. TPL argued for the plain and ordinary meaning of the term, and as an alternative also argued that "accessible in parallel" means "capable of concurrent read/write access." *Id.* While this appears to be the same as the respondents' position, it is based upon a loose usage of "concurrent" in which fast switching back and forth between two memory cards is sufficient to practice the patent claims. *See, e.g.,* TPL Reply Pet. 11 n.1.

The ALJ found that the prosecution history does not disavow claim scope whereby only one memory card is accessed at a time. To the ALJ, accessible in parallel meant that any one of several inserted memory cards could be accessed at a time: "This language does

not require that the cards function simultaneously, but rather that it be possible for them to be in their respective slots simultaneously, so the operator of the system can access them without taking them in and out." Order No. 23 at 61.

We reverse the ALJ and adopt the respondents' proposed claim construction. We find that the above-quoted statement from Order No. 23 fails to take into account the applicant's statements in the prosecution history distinguishing Pua, as Pua accommodated multiple cards as well. The respondents' petition for review focuses on this point. Resp'ts Pet. 8-19. We agree with the respondents that the ALJ's construction reads the "in parallel" language out of the claims. *Id.* at 11-12. We find the applicants' statements in response to the second rejection to be especially clear to disavow claim scope. The applicants there explained: "that the interface 30 for each type of memory card is connected in parallel does not mean that access to the interfaces 30 occurs in parallel." Amendment at 7 (Apr. 29, 2004) (emphasis in original). The applicants continued (distinguishing Pua):

Pua states, "If, for example, the host reads from or writes to a Compact Flash card, the microprocessor will switch this circuit to the Compact Flash interface. If, for example, the host reads from or to a Smart Media card, the microprocessor will switch this circuit to the Smart Media interface." Thus, in other words, depending on the type of card being written to or read from, the microprocessor switches the memory card switching circuit to the interface that supports the card being written to or from. Since the memory card switching circuit is switched between interfaces, it follows that no more than one interface can be operative at a given point in time. Thus, access to the interfaces does not occur in parallel.

Id.

In support of its argument against prosecution disavowal, TPL argues that the speed with which the switching occurs constitutes parallel access. TPL Reply Pet. 14-16. This argument misapprehends the prosecution history. The prosecution history surrounding the

Pua reference does not have to do with slow switching versus fast switching, but rather with whether switching is encompassed within the phrase "accessible in parallel." Based on the applicants' representations to the PTO, switching back and forth is beyond the scope of "accessible in parallel."

TPL also argues that a finding of disavowal causes construction difficulties with claim 17 of the '623 patent. TPL Br. 11. That claim, unlike claims 1 and 9, covers a method, rather than an apparatus, and includes the step of "selectively operating the first and second subsets to provide access to the memory cards of the first and second types in parallel to transfer data from the memory card of the first type to the memory card of the second type." TPL takes the position that "selectively" in this claim means accessing one card at a time. TPL Br. 11. TPL asserts that therefore, "the examiner (aware of the applicant's remarks) would not have allowed claim 17" based upon our construction of "accessible in parallel." *Id.* at 11-12.

In response to TPL's argument, the respondents assert that claim 17 "is no longer at issue." Resp'ts Reply Br. 10. They also observe that the "selectively" language was not at issue during prosecution, and that there is no reason to conjecture what the examiner could have done if such points had been raised during prosecution. *Id.* at 10-11. Moreover, they argue that "the most natural... reading of this phrase in view of the claim language is that the word 'selectively' denotes that it is the first and second interface subsets that are selected for operation..., not that the claim allows for – or requires – operating these interfaces one at a time." *Id.* We agree with the respondents' arguments.

Based upon our claim construction, there is no dispute that the accused products use "disclaimed prior art switching circuitry." Resp'ts Pet. 14-18; TPL Reply Pet. 15-16.

Accordingly, we find that the accused products do not infringe the asserted claims of the '623 patent.¹⁰

The respondents argued on petition that the asserted claims of the '623 patent are invalid as anticipated or obvious only under the ALJ's construction of "in parallel." Resp'ts Pet. 19-38. Because we reject the ALJ's claim construction, we do not reach the respondents' validity arguments based upon that construction.

B. <u>Patent-Related Issues Concerning the Mapping Patents</u> (the '443, '424 and '847 Patents)

The '443 patent was filed on July 26, 2006. It claims priority to a patent application filed in 2000. The '424 patent is a continuation of the application that issued as the '443 patent. In turn, the '847 patent is a continuation of the application that issued as the '424 patent. The three patents ("the mapping patents"), therefore, share a common specification and are directed to "universal" memory card readers or adapters, *i.e.*, devices that are capable of interfacing with multiple types of memory cards.¹¹

The following claims are asserted: from the '443 patent, independent claims 1 and 9, and dependent claims 3, 4, 7, 11, 12, and 14; from the '424 patent, independent claims 25 and 28, and dependent claims 26 and 29; and from the '847 patent independent claim 1, and dependent claims 2 and 3. ID at 12-16.

1. Infringement: "Mapping"

The asserted claims are substantially similar and the only dispute at the Commission is with respect to the "mapping" limitations in each claim:

¹⁰ Prosecution disavowal makes the doctrine of equivalents unavailable to TPL. See, e.g., American Calcar, Inc. v. American Honda Motor Co., 651 F.3d 1318, 1340 (Fed. Cir. 2011); Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995).

¹¹ Unless otherwise noted, we refer to the '443 specification for convenience.

- "a controller chip to map at least a subset of the at least one set of contact pins to a set of signal lines or power lines, based on an identified type of a memory media card." '443 patent claim 1; accord '443 patent claim 9.
- "means for mapping power, ground or data signals between said interconnection pins and said one or more contact pins depending upon the identification of the type of memory card inserted into said port." '424 patent claim 25; accord '424 patent claim 28 & '847 patent claim 1.

The ALJ construed what it means "to map":

Thus, the ALJ construes "to map at least a subset of the at least one set of contact pins to a set of signal lines or power lines, based on an identified type of the memory media card" [and the corresponding claim from '443 patent claim 9] to have its plain and ordinary meaning as outlined above and with the caveat that the mapping must occur based on the type of memory card inserted.

Order No. 23 at 32-33.¹² By "outlined above," the ALJ references his explanation that "mapping is a logical function and does not require some physical connection be changed in the device in order to accomplish it." *Id.* at 29. No party challenged the ALJ's claim construction to the Commission.¹³ On review by the Commission, then, is whether, based upon the ALJ's claim construction, the accused products and domestic industry products meet this claim limitation.

Explained at the simplest level, memory cards have sets of contacts for communication. The cards are read from or written to by connecting a pin to each contact (or to at least some of the contacts). *See, e.g.*, '443 patent col. 5 lines 22-24. The '443 patent teaches that notwithstanding that different types of cards have different contacts, an adapter can use the same pin for different cards. Figure 4, for instance, is a "table of pin mappings" that shows how 21 pins could be used to service a "Smart Media" card, an "MMC/SD" card,

¹² For the means-plus-function limitations, the ALJ found that the recited function is the same as for the mapping in the non-means-plus-function claims, and that the corresponding structure is a controller. *Id.* at 35-37.

¹³ The respondents had urged a narrower definition based upon prosecution disclaimer, *id.* at 28-30, but they chose not to advance that argument to the Commission.

or a Memory Stick. Figure 5 is a "table of pin mappings" that shows how 18 pins could be used to control an even greater variety of cards. When a pin is shared, it is said in the patent to be "multiplexed." The patent specification discusses Figure 5 in greater detail. '443 patent col. 6 lines 25-47.

The accused products are memory card readers that are designed to accommodate SD cards and MMC cards, and no others. The patent explains that these two types of cards "have the same form factor but slightly different pin-out." '443 patent col. 2 lines 1-2. The similarities are such that every further reference of these two types of memory cards in the asserted patents is conflated as "MMC/SD," including in Figures 4 and 5.

The respondents argued, and the ALJ found, that the claimed mapping does not occur because the operation of MMC and SD cards is substantially the same. ID at 37-48. SD cards can operate in one of two manners, with either a one-bit data bus (*i.e.*, reading or writing one bit of information at a time) or with a four-bit data bus (*i.e.*, reading or writing four bits in parallel, like a four-lane road instead of a one-lane road). In single-bit data bus usage, there is no genuine dispute that the MMC and SD cards operate in essentially the same manner. What remains is a theory of infringement reliant upon an SD card utilizing a four-bit data bus. The only difference is that four-bit-bus operation of an SD card uses three more pins than an MMC card (or than one-bit-bus operation of an SD card). ID at 45-46.

The parties' petitions for review contended that the ALJ's comparison of four-bit data-bus SD versus MMC was inconsistent. In particular, the ID states as follows:

The ALJ finds that Mr. Berg explained that distinguishing between an SD and MMC cards does not show evidence of the claimed "mapping" because, the evidence only shows that

according to the SD specification. (RX-2885C, Q/A 81-92; see also id. at Q/A 103-05, 110, 112-13, 119-21 (as to Acer).) Specifically, the

ALJ finds that a communication with an MMC card and communication with an SD card occurs across a 1-bit wide data bus. (*Id.* at 87.) The ALJ finds that Mr. Buscaino provided no evidence that any device ever operates using a data bus wider than 1-bit when an SD card is inserted, and Mr. Berg explained that such functionality is optional. (*Id.* at 88, 91-92.) Thus, although the ALJ notes that TPL's arguments regarding mapping were eminently reasonable, the ALJ finds that they have not proven that the "mapping" elements found in all the asserted claims of the '443, '424, and '847 Patents.

Accordingly, the ALJ finds that because TPL has failed to prove the presence of all of the elements of the asserted claims, TPL has failed to prove infringement of the asserted claims of the '443, '424, and '847 Patents.

ID at 48. But the ALJ also addressed the operation of the accused products in a four-bit bus mode. See, e.g., ID at 40-41 ([

On review, we reverse the ALJ's determination that TPL failed to show that the accused products can transfer data to or from SD cards with a four-bit-bus, and we vacate in its entirety the paragraph reprinted in the block quotation above. We find that TPL demonstrated, by a preponderance of the evidence, operation of the accused products in a four-bit-bus mode. TPL Br. 26-31; TPL Reply Br. 22-27. As discussed extensively in TPL's briefing, the evidence of record demonstrated the accused products all have connectors with pins for the four bits of data and that the controllers in the accused products are designed to process four bits of data. TPL Br. 26-31. We agree with TPL's characterization of the record that "neither Respondents nor Respondents' experts or fact witnesses dispute that the accused controllers operate in 4-bit SD mode when an SD card is

¹⁴ We give no weight to the ALJ's statement in the block quotation that certain TPL arguments were "eminently reasonable." We do not adopt that statement.

¹⁵ The respondents' arguments in their briefs to the Commission regarding whether the accused products operate in four-bit mode are inconsistent with the evidence of record.

inserted and in 1-bit MMC mode when an MMC card is inserted into the card connector." TPL Br. 41; *see also id.* at 31.

Moreover, we agree with TPL that its substantial showing went well beyond what is necessary pursuant to the language of the asserted claims. We find that TPL showed that the accused products are at least capable of operating in a four-bit bus mode, and that is all that is ordinarily required for apparatus claims. The Commission most recently addressed this issue in Certain Semiconductor Chips and Products Containing Same, Inv. No. 337-TA-753, Comm'n Op. 37-39 (July 31, 2012). That case presented a factually analogous question. The Commission considered the following Federal Circuit authorities in detail: Fantasy Sports Properties, Inc. v. Sportsline.com, Inc., 287 F.3d 1108, 1118 (Fed. Cir. 2002); Silicon Graphics, Inc. v. ATI Technologies., Inc., 607 F.3d 784, 794 (Fed. Cir. 2010); and ACCO Brands, Inc. v. ABA Locks Manufacturer Co., 501 F.3d 1307, 1310 (Fed. Cir. 2007). The claim language here is similar to that at issue in Silicon Graphics and Fantasy Sports. 16 Accordingly, it was not incumbent upon TPL to demonstrate actual use of the accused products in four-bit-bus mode. 17 Accordingly, we disagree with the first full paragraph of page 48 of the ID, in which the ALJ limits TPL's showing to one-bit-bus operation of the SD card, for which reason it has been vacated. We note that this paragraph in the ID was in

¹⁶ In Silicon Graphics, the patent claims called for "a rasterization circuit . . . that rasterizes the primitive according to a rasterization process," and the Federal Circuit found that the claim language merely required circuitry with the ability to rasterize. Silicon Graphics, 607 F.3d at 795. Fantasy Sports included claim language calling for a computer that included "means for setting up individual football franchises"; and other "means" for selecting rosters, trading players, and so forth. The court found that the infringing software (apparatus) included these means "regardless whether that means is activated or utilized in any way." Fantasy Sports, 287 F.3d at 1118. The claims in ACCO, on the other hand, called for a computer lock with: "a pin, coupled through said housing, for extending into said security slot proximate said slot engaging portion when said slot engagement member is in said locked position to thereby inhibit rotation of said slot engagement member to said unlocked position." ACCO, 501 F.3d at 1310. The Federal Circuit there found that the lock would only infringe after a user inserted the lock into a computer and turned the key to lock it. Id. at 1313-14.

¹⁷ As discussed earlier, in any event, we have also found that TPL demonstrated such operation.

conflict with earlier passages of the ID, including from page 45 through the top of page 48, which analyzed four-bit-bus SD operation.

While we vacate one paragraph of the ID, we affirm the remainder of the ALJ's analysis of the accused products. In so doing, we affirm the ALJ's determination that a "card reader does not need to perform the claimed 'mapping' to accommodate SD and MMC card types in the same slot." ID at 46. We disagree with TPL's contention that the ALJ's reasoning was based solely on the SD Specification's initialization processes. TPL Pet. 18-25, 34-35; *see* ID at 47-48. Rather, the ALJ explained that the "only difference between" SD and MMC "cards is that the data in the SD card is a four bit bus, which requires four pins for data, and the MMC card only requires one." ID at 45 (citing RX-2369.0019; RDX-0482). The ALJ explained that the "I

]" Id

(citing RX-2888C, Q/A 56-60, 160-79; RX-22369.0019-20; JX-0068.0019-20; RDX-0412; RDX-0480; RDX-0481). We agree with the ALJ that "[

]." Id. at 45 (citing CX-354C.18; CX-296C.27).

As the ALJ extensively and correctly discussed, in order to communicate with the SD and MMC cards, no mapping is required. Similarly, the mere use of additional signal lines in some circumstances but not others, based upon fixed assignments, does not constitute mapping. ID at 45; Resp'ts Br. 45-46 (citing RX-2885C, Q/A 265, 313, 355, 414, 461, 522, 564; RX-2888C Q/A 589, 634-35 (HP); RX-2888C Q/A 92, 180-88, 926-27; RX-3418C; RX3450 (Seiko Epson); RX-2888C Q/A 835-36, 864-65, CX-0322 (Newegg/Rosewill); RX-2888C, Q/A 256-76, 285-94, 226-47, 250-53 (Canon); RX-2885C, Q/A 75-80 (HP); RX-

2888C Q/A 761-62 (Kingston); RX-2888C, Q/A 453-64; RX-3481C, Q/A 30-36 (HiTi); Tr. 538-39).

2. Invalidity

On petition for review, the respondents contingently petitioned for review of the ALJ's determination that the asserted patent claims are not invalid as anticipated in view of certain prior art references. Resp'ts Pet. 60-73. *See* Resp'ts Pet. 62 (SD Specification); Resp'ts Summary of Pet. VI ("To the extent that the Commission reverses the ALJ's finding of non-infringement for the '443, '424, and '847 patents, the Commission should nonetheless find no violation because the record evidence clearly shows that these patents are invalid.").

We have determined to reach two of these arguments. In particular, Question No. 3 of the Commission notice of review asked the parties to brief whether TPL contested the respondents' invalidity arguments regarding Japanese patent publication JP H11-15928 ("the '928 Publication") (RX-817). The ALJ found that the '928 Publication is prior art to the mapping patents under 35 U.S.C. § 102(b), but found that the respondents' arguments in support of invalidity were too cursory to be preserved. ID at 108. Question No. 3 in the Commission notice asked whether invalidity in view of the '928 Publication was uncontested, in which case the Commission might excuse the lack of detailed briefing as to issues for which there was no genuine material dispute. See, e.g., Certain Mobile Devices, Associated Software and Components Thereof, Inv. No. 337-TA-744, Comm'n Op. 11-16 (May 18, 2012).

The respondents here argued that the '928 Publication anticipates all the asserted claims of the mapping patents, by describing the publication in only one paragraph, Resp'ts Post-Hearing Br. 153-54, and then asserting anticipation based upon citation to expert

testimony, *id.* at 154. Resp'ts Post-Hearing Br. 154. We affirm the ALJ's application of his ground rules because TPL challenged the respondents' invalidity argument based upon the '928 Publication. *See* TPL Post-Hearing Br. 254; CX-1205C at 157-169, Q/A 974-1035; TPL Post-Hearing Reply Br. 73-75. We note that the respondents moved to strike some of TPL's arguments from TPL's post-hearing reply brief, *see* Resp'ts Br. 34 & n.16, but they did not petition for review of denial of their motion, Resp'ts Pet. 67-69. In view of the ALJ's evidentiary determination that TPL's arguments for the '928 Publication were proper, we sustain the ALJ's application of his ground rules that the respondents' briefing was too cursory to demonstrate invalidity in view of the '928 Publication clearly and convincingly.

We also affirm the ALJ's determination that the respondents failed to demonstrate that the mapping patents are invalid in view of of European Patent 1 037 159 (RX-985) ("Lipponen") and its counterpart U.S. Patent No. 6,612,498 (RX-807). Respt's Pet. 60.

These patents teach a memory card reader for reading an MMC card as well as a SIM card. RX-0895 at 1. The only dispute is whether a SIM card – used inside a mobile telephone – is a "memory card" or "memory media card" within the scope of the patent claims. The ALJ concluded that the SIM card, which is used principally for subscriber identification as opposed to data storage, is not a memory card. ID at 105. We find that the respondents have not carried their burden to demonstrate that a person of skill in the art would have understood the claimed "memory media card" to encompass a SIM card as used in Lipponen. In Lipponen, the SIM card, while acknowledged to have memory on it, is used to enable a mobile telephone to access a network. RX-985 at 2 ¶¶ 4-6; see also TPL Reply Pet. 44-46.

We do not reach the respondents' other invalidity arguments.

C. Patent-Related Issues Concerning the '549 Patent

There had been a fifth patent asserted before the ALJ. The claims of the '549 patent are all directed toward systems and methods in which a "controller chip" determines whether the memory card itself has a controller, such that if the memory card does not, the "flash adapter" (the memory card reader) uses "firmware" to "manage error correction" in the memory card. '549 asserted patent claims 7 and 11; see also unasserted claim 1. The accused products were memory card readers that can read "xD" cards in addition to other types of cards. See ID at 77-78; TPL Post-Hearing Br. 196-97. xD cards, unlike other memory cards, lack an onboard controller. See id. The principal question before the ALJ was whether detecting the presence of an xD card is sufficient to detect whether a memory card contains a controller. The ALJ concluded that sensing an xD card was not detecting a controller, and therefore found that TPL failed to demonstrate infringement. TPL did not petition for review of that finding, and the Commission affirms the ALJ's finding of noninfringement as to the '549 patent for the reasons set forth in the ALJ's discussion of direct infringement on pages 73-81 of the ID. We do not reach, and vacate, the remainder of the ALJ's findings regarding the '549 patent, including findings regarding invalidity, as well as the ALJ's interpretation (ID at 69-73) of the Commission opinion from Certain Electronic Devices With Image Processing Systems, Components Thereof, and Associated Software, Inv. No. 337-TA-724 (Dec. 11, 2011).

D. The Domestic Industry Requirement

The principal domestic industry question on review is whether a showing of articles protected by the asserted patents is necessary in order for TPL to demonstrate the existence of a domestic industry under section 337(a)(3)(C). Question No. 1 of the Commission notice

of review sought briefing on this issue from the parties. To address this question, we discuss the history of section 337(a)(3) and recent decisions of the Federal Circuit before turning to the facts of this investigation.

1. The 1988 Amendments to Section 337 and Commission Practice in Response Thereto

Under paragraph (a)(2) of section 337, a complainant must show that an industry "relating to the articles protected by the patent . . . exists or is in the process of being established" in the United States. 19 U.S.C. § 1337(a)(2). Paragraph (a)(3) expands upon paragraph (a)(2) as follows:

- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—
 - (A) significant investment in plant and equipment;
 - (B) significant employment of labor or capital; or
 - (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

19 U.S.C. § 1337(a)(3).

Paragraph 337(a)(3) was added to the Tariff Act as part of the Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418, 102 Stat. 1107 (1988) ("1988 Act"). The 1988 Act effected significant changes in the requirements for intellectual-property-related investigations under section 337, including patent-based investigations, which comprise the bulk of section 337 investigations. Commission precedent prior to 1988 "customarily defined the domestic industry as consisting of the domestic operations of the patentee devoted to the exploitation of the teachings of the patent at issue," with "[e]xploitation of

¹⁸ Paragraph (a)(3) of section 337 applies to patents, registered copyrights, federally registered trademarks, registered semiconductor mask works, and certain vessel designs. 19 U.S.C. § 1337(a)(1)(B)-(a)(1)(E).

patent rights" including "domestic production and manufacture, development and sale of patented product[s]." *Certain Foam Earplugs*, Inv. No. 337-TA-184, Initial Determination, 0085 WL 1,127,231 at *56 (Nov. 30, 1984), *not reviewed*, 50 *Fed. Reg.* 4277 (Jan. 30, 1985). The 1988 amendments codified such precedent by adding subparagraphs 337(a)(3)(A) and (B) to the statute encompassing "significant investment in plant and equipment," and "significant employment of labor or capital." In addition, domestic industry was broadened to include new subparagraph 337(a)(3)(C), for "substantial investment in" the "exploitation" of the asserted intellectual-property right. 1988 Act § 1342(a) (amending 19 U.S.C. § 1337).

The domestic industry requirement of Section 337, as amended in 1988, has been interpreted by the Commission to consist of an "economic prong" and a "technical prong." See, e.g., Alloc, Inc. v. ITC, 342 F.3d 1361, 1375 (Fed. Cir. 2003). The "economic prong" of the domestic industry requirement is satisfied when it is determined that significant or substantial economic activities and investments set forth in subsections (A), (B), and/or (C) of subsection 337(a)(3) have taken place or are taking place. Certain Variable Speed Wind Turbines & Components Thereof, Inv. No. 337-TA-376, USITC Pub. No. 3003, Comm'n Op. at 21 (Nov. 1996). "To determine whether an industry relates to the protected articles (the 'technical prong' of the domestic industry requirement), the Commission examines whether the industry produces articles covered by the asserted claims." Alloc, 342 F.3d at 1375. To meet the technical prong, at least under section 337(a)(3)(A)-(B), it has been held that the complainant must establish that it practices at least one claim of the asserted patent. See Certain Microsphere Adhesives, Process for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes, Inv. No. 337-TA-366, Comm'n Op., 1996 WL 1056095, at *7-8 (Jan. 16, 1996). "The test for satisfying the 'technical prong' of the

industry requirement is essentially the same as that for infringement, *i.e.*, a comparison of domestic products to the asserted claims." *Alloc*, 342 F.3d at 1375. Thus, the term "technical prong" has been used to refer to a requirement that articles exist that are covered by at least one claim of the asserted patent.

The Commission has established that the "its" in "substantial investment in its exploitation" of subparagraph (a)(3)(C) refers to "the patent, copyright, trademark, mask work, or design." See Certain Microcomputer Memory Controllers, Components Thereof and Products Containing Same, Inv. No. 337-TA-331, Order No. 6, 1992 WL 811,299, at *2 (Jan. 8, 1992), not reviewed, 57 Fed. Reg. 5710 (Feb. 12, 1992). This analysis comports with the legislative history of the 1988 Act, in which an earlier version of subparagraph (C) called for a "substantial investment in exploitation of the intellectual property right, including engineering, research and development, or licensing." H.R. Rep. No. 100-576 at 634 (Apr. 20, 1988) (Conference Report for H.R. 3, "Omnibus Trade and Competitiveness Act of 1988"). See also InterDigital Commc 'ns, LLC v. ITC, 707 F.3d 1295, 1297 (Fed. Cir. 2013) ("The parties agree that the word 'its' in the last clause of paragraph 337(a)(3) refers to the intellectual property at issue.").

Until now, and relying substantially upon the legislative history of the 1988 Act, our practice has been not to require a complainant to demonstrate for purposes of a licensing-

¹⁹ The effect of such an interpretation of subparagraph (C) is to require the showing of a nexus between investment and the asserted intellectual property right. That is to say that the investment must be in "its" exploitation, and without the demonstration of such a nexus, the investment would not be cognizable under subparagraph (C). The Commission's most extensive analysis of the nexus issue, which collected Commission determinations on the matter, is the Commission opinion in *Navigation Devices*. See Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. at 7-13 (revised public version). We do not revisit those issues here.

²⁰ This conference report was expressly incorporated as part of the legislative history of enacted H.R. 4848. Pub. L. 100-418 § 2 (H.R. 4848) (Aug. 23, 1988).

based domestic industry the existence of protected articles practicing the asserted patents.²¹ Although there may have been protected articles actually practicing the asserted patents in our past investigations, such a showing was not mandatory. The decisions in these cases instead focused on whether the complainants' showings of licensing expenditures were tied sufficiently closely to the patents asserted in each investigation.

2. The Federal Circuit's InterDigital Decisions

InterDigital²² is the appeal of the Commission determination in Certain 3G Mobile

Handsets and Components Thereof, Inv. No. 337-TA-613. In that investigation, although the

Commission found no violation of section 337, the Commission found the domestic-industry
requirement to be satisfied, and respondent-intervenors Nokia, Inc. and Nokia Corp.

(collectively, "Nokia") challenged that finding on appeal.

a) Commission Proceedings

In the course of the 3G Mobile Handsets investigation, the ALJ issued two summary IDs regarding domestic industry. In Order No. 26, the ALJ granted complainant InterDigital Communications LLC's ("InterDigital") motion for summary determination that it satisfied the economic prong of the domestic industry requirement of section 337(a)(3)(C) through InterDigital's U.S.-based expenditures toward its own SlimChip product family (on which

²¹ Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432 ("Minimized Chip Packages"), Order No. 13 at 11-12, not reviewed, Notice, 66 Fed. Reg. 58424 (Nov. 21, 2001); Certain Digital Processors and Digital Processing Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-559 ("Digital Processors"), Initial Determination at 81-92 (May 11, 2007), not reviewed in relevant part, Notice at 2 (Aug. 6, 2007); Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. 6-16 (Aug. 8, 2011) (Corrected Public Version) (portfolio licensing); Certain Liquid Crystal Display Devices, Including Monitors, Televisions, and Modules, and Components Thereof, Inv. Nos. 337-TA-741 & -749, Comm'n Op. 108-15 (June 14, 2012) (portfolio licensing); Certain Semiconductor Chips and Products Containing Same, Inv. No. 337-TA-753, Comm'n Op. 44-51 (Aug. 17, 2012) (Public Version).

²² InterDigital Commc'ns, LLC v. ITC, 690 F.3d 1318 (Aug. 1, 2012) ("InterDigital I"), reh'g denied, 707 F.3d 1295 (Jan. 10, 2013) ("InterDigital II").

InterDigital intended to rely to satisfy the technical prong). Order No. 26 at 2 n.2 (Mar. 26, 2008) (public version). No petitions for review were filed, and the Commission determined not to review the ID. Notice at 2 (May 5, 2008).

In Order No. 42, the ALJ issued an ID granting complainant InterDigital's motion for summary determination that its licensing activities satisfied the economic prong of the domestic industry requirement of section 337(a)(3)(C). Order No. 42 (March 10, 2009) (public version). In that ID, the ALJ relied upon the *Minimized Chip Packages* and *Digital Processors* investigations we discussed above. *Id.* at 4-5. He found that InterDigital had invested a substantial amount of money in its licensing program and that InterDigital had demonstrated a nexus between the asserted patents and its licensing expenditures. *Id.* at 5-17. There was no dispute that "InterDigital licenses its wireless technology and patents to significant handset and device manufacturers throughout the world," and that through "its ongoing research and development, InterDigital developed proprietary technology that was ultimately incorporated into the wireless communications standards referred to generally as 3G." *Id.* at 6. Left unsaid, at least expressly, was that these licensees import and sell such handsets in the United States. Nokia filed a petition for review, but we determined not to review the ID. Notice at 2 (Apr. 9, 2009).

In view of Commission precedent that there was no separate technical prong for licensing, there was no need for InterDigital to present evidence at the hearing as to its licensing activities, the subject of Order No. 42. Consequently, InterDigital did not pursue such a showing at the hearing, and its post-hearing brief (unlike its pre-hearing brief) relied entirely on licensing. In his final ID, the ALJ found no violation of section 337 because the accused Nokia mobile handsets did not infringe the asserted claims. *See* Notice, 74 *Fed. Reg.*

55068 (Oct. 26, 2009). The ID only devoted one sentence to domestic industry: "The domestic industry requirement has been satisfied based upon complainants' licensing activities, see Order No. 42 (March 10, 2009) (unreviewed)." Final Initial and Recommended Determinations 225 (Aug. 14, 2009). There was no analysis in the ID concerning the previous Order No. 26, regarding a domestic industry founded upon, *inter alia*, InterDigital's research and development expenses.

On review, the Commission clarified certain claim constructions, but terminated the investigation with a finding of no violation owing to noninfringement. 74 Fed. Reg. 55068. InterDigital took an appeal and Nokia intervened to defend the Commission's finding of no violation of section 337 on the additional basis that InterDigital failed to demonstrate a domestic industry through its licensing. InterDigital I, 690 F.3d at 1329.

b) The Federal Circuit's Decision in *InterDigital I*

On appeal, the Federal Circuit reversed certain claim constructions that undergirded the finding of noninfringement, remanding the investigation to the Commission. *Id.* at 1320. The court rejected Nokia's challenge to the Commission's domestic industry determinations. The court agreed with the Commission's finding that "the required United States industry can be based on patent licensing alone; it does not require that the articles that are the object of the licensing activities (*i.e.*, the 'articles protected by the patent') be made in this country." *Id.* at 1329. The Court noted that the Commission had been consistent in reaching this conclusion and that the Commission has not "required that the licensed product be manufactured in this country." *Id.* at 1330.

²³ The Federal Circuit's focus on "made in this country" was based upon the legislative history of the 1988 Act. *See, e.g.*, 132 Cong. Rec. 30811 (Oct. 14, 1986) (subparagraph (C) "does not require actual (Footnote continued on the next page)

c) The Federal Circuit's Decision in InterDigital II

Nokia filed a combined petition for rehearing and rehearing *en banc*.²⁴ Nokia argued that the Commission and the court had improperly construed section 337 to read out the requirement for "articles" in connection with subpart (C) domestic industries. Nokia argued that the statute's requirement of articles is supported by past Federal Circuit decisions and by the 1988 legislative history. Nokia Reh'g Pet. 3-5 (Sept. 17, 2012). According to Nokia, "there must be articles protected by the patent actually in the United States." *Id.* at 9 n.1.

On January 10, 2013, the Federal Circuit denied rehearing and rehearing *en banc*, but issued a supplemental panel opinion in support of the earlier panel decision. The court explained that because "Nokia made a much more detailed argument" on domestic industry "on rehearing than it did in its brief on the merits, a response to Nokia's expanded submission is appropriate." *InterDigital II*, 707 F.3d at 1297. In that opinion, the Federal Circuit provides a comprehensive discussion of the legislative history of the 1988 amendments. *Id.* at 1300-04.

After endorsing the Commission's longstanding interpretation that the word "its" in subparagraph 337(a)(3)(C) refers "to the intellectual property at issue," the Federal Circuit explained as follows:

The Commission and the court construed those phrases to define the subject matter that is within the statute's protection. With respect to subparagraph (A) of paragraph 337(a)(3), the "significant investment in plant or equipment" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent" in question. That requirement will typically be met if the

production of the article *in the United States* if it can be demonstrated that significant investment and activities of the type enumerated are taking place in the United States") (emphasis added).

²⁴ Combined Pet. for Panel Reh'g and Reh'g En Banc of Intervenors Nokia Inc. and Nokia Corporation, *InterDigital Commc'ns, LLC v. ITC*, No. 2010-1093 (Fed. Cir. Sept. 17, 2012) ("Nokia Reh'g Pet.").

investment in plant and equipment is directed at production of articles protected by the patent. Similarly, with respect to subparagraph (B) of paragraph 337(a)(3), the "significant employment of labor or capital" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent." That requirement will likewise typically be met by a showing that significant labor or capital is being expended in the production of articles protected by the patent. Applying the same analysis to subparagraph (C) of paragraph 337(a)(3) produces a parallel result that is consistent with the Commission's and this court's statutory construction: The "substantial investment in [the patent's] exploitation, including engineering, research and development, or licensing" must be "with respect to the articles protected by the patent," which means that the engineering, research and development, or licensing activities must pertain to products that are covered by the patent that is being asserted. Thus, just as the "plant or equipment" referred to in subparagraph (A) must exist with respect to articles protected by the patent, such as by producing protected goods, the research and development or licensing activities referred to in subparagraph (C) must also exist with respect to articles protected by the patent, such as by licensing protected products. This accords with the common description of the domestic industry requirement as having two "prongs": the "economic prong," which requires that there be an industry in the United States, and the "technical prong," which requires that the industry relate to articles protected by the patent. [Citing the Commission opinions in Stringed Musical Instruments and Variable Speed Wind Turbines.]

Id. at 1297-98 (emphasis added).

The highlighted passages in the block quotation expressly hold that there is an "articles" requirement for subparagraph (C), in addition to (A) and (B). That interpretation is reiterated later in the opinion as well. *Id.* at 1299 ("The only question is whether the [sic] InterDigital's concededly substantial investment in exploitation of its intellectual property is 'with respect to the articles protected by the patent."). We find that the only plausible interpretation of the opinion is to impose an "articles" requirement for subparagraph (C) domestic industries, including licensing-based domestic industries.²⁵

²⁵ In view of the record of the underlying investigation in 3G Mobile Handsets, the Commission does not find its interpretation of InterDigital II to conflict with the Court's disposition of the appeal before it. In (Footnote continued on the next page)

There are several statements in the Court's opinion that we view as susceptible to being misconstrued. The sentence in *InterDigital II* that the articles are "found in the products that" InterDigital has licensed or "is attempting to exclude," *id.* at 1299, read out of context, might be construed to suggest that a complainant can rely on the accused products to satisfy the domestic industry requirement. Such a reading would make the "articles" requirement illusory because every investigation is founded upon a respondent's "importation into the United States, . . . sale for importation, or . . . sale within the United States after importation," of "articles." 19 U.S.C. § 1337(a)(1)(B). We reject such an interpretation, and conclude that, given the context of the *InterDigital* facts, the Court recognized merely that the licensed domestic industry products and the accused products practiced the same standards and thus practiced the patents, if at all, in the same way.

Similarly, another sentence that might be taken out of context is: "As long as the patent covers the article that is the subject of the exclusion proceeding, and as long as the party seeking relief can show that it has a sufficiently substantial investment in the exploitation of the intellectual property to satisfy the domestic industry requirement of the statute, that party is entitled to seek relief under section 337." *Id.* at 1304. We do not view that sentence as eliminating or excusing the demonstration of articles protected by the asserted patents. The preceding sentence in the Federal Circuit's opinion explains that it "is

particular, there appears to have been no genuine dispute that InterDigital's many licensees practice the asserted patents in the United States in the same manner that the accused infringers do, see InterDigital II, 707 F.3d at 1299; 3G Mobile Handsets, Final ID at 85-94 (WCDMA standard requirements); 3G Mobile Handsets, Order No. 42 at 6 (incorporation into 3G standards), and therefore specific identification of those products was not required in Commission proceedings prior to the Federal Circuit's review. In addition, although InterDigital did not rely upon engineering and research and development investment in Commission proceedings, the Federal Circuit does not strictly apply waiver in all appeals, and there appears to have been no genuine dispute about the existence of InterDigital's investment. InterDigital II, 707 F.3d at 1299 (finding "substantial investment by InterDigital in the research and development that led to the patents in suit"); id.. at 1298-99 ("The evidence before the Commission showed that InterDigital is a large, publicly traded company" that "has been engaged in research, development, engineering, and licensing of [CDMA] technology in the United States which work later transitioned into research, development, engineering, and licensing of [WCDMA].").

not necessary that the party manufacture the product that is protected by the patent, and it is not necessary that any other domestic party manufacture the protected article." *Id.* at 1303-04. Put differently, the existence of an article practicing the patent is required, but that article need not be made in the United States. The Federal Circuit reiterated that point, expressly, in the following paragraph: "Congress recognized the development in the United States of industries that devoted substantial investment to the exploitation of patent rights through engineering, research and development, and licensing, but not entailing domestic production of the goods that were protected by those patents." *Id.* at 1304.

On May 10, 2013, Nokia filed a petition for a writ of certiorari on, *inter alia*, the domestic industry issue. On October 15, 2013, the Supreme Court denied Nokia's petition.

3) The Federal Circuit's Decision in Microsoft

On October 3, 2013, the Federal Circuit decided *Microsoft Corp. v. ITC*, 731 F.3d 1354 (Fed. Cir. 2013), an appeal from the Commission determination in *Certain Mobile Devices, Associated Software, and Components Thereof*, Inv. No. 337-TA-744. In that investigation, complainant Microsoft argued for the existence of a domestic industry based upon the existence of "mobile devices allegedly loaded with the Microsoft Windows mobile operating system, in which Microsoft had invested substantial resources in the United States." *Microsoft*, 731 F.3d at 1358.

In *Microsoft*, the Federal Circuit held that there is an articles requirement for subparagraph (C) domestic industries, at least with regard to subparagraph (C) domestic industries based upon engineering and research and development. The Federal Circuit held as follows:

To establish a violation of section 337, Microsoft had to show not just infringement by Motorola's products but the existence of a domestic

industry "relating to the articles protected by the patent." 19 U.S.C. § 1337(a)(2), (3). The ALJ determined that Microsoft failed to make that domestic-industry showing because it did not offer sufficient proof of articles that were actually protected by the patent. . . . According to the ALJ, because Microsoft did not point to evidence that its expert examined client applications in fact running on third-party mobile phones or confirmed how they operated, Microsoft failed to show that there is a domestic industry product that actually practices the '376 patent. The Commission affirmed this determination. . . .

In this appeal, we do not reach Microsoft's challenge to the noninfringement determination because we find substantial evidence to support the Commission's finding of no domestic industry, which suffices to support its finding of no violation based on this patent. There is no question about the substantiality of Microsoft's investment in its operating system or about the importance of that operating system to mobile phones on which it runs. But that is not enough under the statute. Section 337, though not requiring that an article protected by the patent be produced in the United States, unmistakably requires that the domestic company's substantial investments relate to actual "articles protected by the patent." 19 U.S.C. § 1337(a)(2), (3). A company seeking section 337 protection must therefore provide evidence that its substantial domestic investment—e.g., in research and development—relates to an actual article that practices the patent, regardless of whether or not that article is manufactured domestically or abroad. InterDigital Commc'ns v. Int'l Trade Comm'n, 707 F.3d 1295, 1299, 1304 (Fed.Cir.2013).

731 F.3d at 1361-62 (emphasis added).

Thus, *Microsoft* confirms our reading of *InterDigital II* with respect to the articles requirement. While *Microsoft* was decided in the context of engineering and research and development, we do not interpret the opinion to provide a special, and more lenient, test for licensing-based industries. Rather, the Court discusses "research and development as an example, with the general statement that an article is required: "A company seeking section 337 protection must therefore provide evidence that its substantial domestic investment—*e.g.*, in research and development—relates to an actual article that practices the patent, regardless of whether or not that article is manufactured domestically or abroad." *Id.* at 1362. Additionally, special treatment for licensors is inconsistent with *InterDigital II*, which

did not distinguish between licensing and non-licensing activity under subparagraph (C), but instead looked at all of the subparagraph (C) activities together.

4) The Parties' Arguments About the Effect of the Federal Circuit Decisions

Our notice of review asked the parties to brief the following question:

Discuss, in light of the statutory language, legislative history, the Commission's prior decisions, and relevant court decisions, including *InterDigital Communications, LLC v. ITC*, 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013) and *Microsoft Corp. v. ITC*, Nos. 2012-1445 & -1535, 2013 WL 5479876 (Fed. Cir. Oct. 3, 2013), whether establishing a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C) requires proof of "articles protected by the patent" (*i.e.*, a technical prong). If so, please identify and describe the evidence in the record that establishes articles protected by the asserted patents.

Notice at 3.

TPL has taken the position that there is no articles requirement for licensing industries. TPL Br. 7. TPL's discussion is replete with citations to *InterDigital II* regarding "the articles protected by the patent," TPL Br. 1, 3,8 and "the product that it has licensed," *id.* at 3, 4, 7, 8, without ever explaining what those "articles" or "products" are in this investigation, and if they are not present, why that should be excused. We do not find TPL's arguments to be persuasive.

The respondents' position on review is the same as that which respondent HP alone took at the petition stage.²⁶ HP Pet. 3-5. The respondents recognize that accused products cannot be the articles protected by the patents. Resp'ts Br. 10-12. But the respondents

²⁶ Non-party Intel Corp. filed comments ostensibly on remedy and the public interest. Those comments make the same points as the respondents' briefing on domestic industry. Comments of Intel Corporation Regarding Remedy and the Public Interest in Response to Commission's Notice of Commission Determination to Review Final Initial Determination (Nov. 7, 2013). Non-party Ford Motor Company filed comments on public issues as well. Ford noted that the complainant could not prove that it was making or selling products covered by the patents in this investigation. Letter from William J. Coughlin, Assistant General Counsel, Intellectual Property, Ford Motor Company, to Hon. Lisa R. Barton, Acting Secretary to the Commission (Sept. 6, 2013).

would draw a distinction between patent-holders who license their patents to enable the production of protected articles and patent-holders who license others who already make articles that practice the patent. *Id.* at 9 ("Under this test, a complainant relying on licensing would be required to demonstrate both that its licensing investments are production-driven and that its licensee is making an effort to put the licensed patent to practical use."). In addition, the respondents confuse the test for domestic industry with the test for the process of establishing a domestic industry.

We reject the respondents' invitation to impose a production-driven requirement on licensing-based domestic industries. We note that we have expressed a preference – but not a requirement – for production-driven licensing, giving more weight to evidence of such licensing. See, e.g., Certain Multimedia Display and Navigation Devices and Systems,

Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. 25 & n.20 (Aug. 8, 2011).

The respondents base their position on the premise that "article protected by" the patent "must be a product that came to market, or is expected to come to market, under the protective umbrella of the asserted patent that the product commercializes." Resp'ts Br. 7; HP Pet. 5. We find that the plain meaning of "protected by" does not support the respondents' position. By way of example, a licensee benefits in the marketplace from having a license to practice the invention, and thus to make, use, and sell its protected products, while unprotected competitors making the same or similar products are subject to lawsuits and infringement determinations.

²⁷ A logical consequence of respondents' narrow definition of "protected by" would be that a manufacturing company that acquires a patent would not be able to rely on its own pre-existing products to establish the technical prong of the domestic industry requirement.

We also find that the respondents' proffered legislative history of the 1988 Act does not support the respondents' proposed requirement. Indeed, prior to the recent Federal Circuit decisions, we found that the policies supported by the legislative history of the 1988 Act point away from, rather than toward, the result sought by the respondents.²⁸

The respondents' position is also untenable because it is inconsistent with the facts of *InterDigital* itself. InterDigital asserted its patents against those who already practiced certain telecommunications standards, and yet the Federal Circuit credited InterDigital's licensing toward its demonstration of a subparagraph (C) domestic industry.²⁹ Moreover, it appears that the respondents wish to treat licensing differently, and punitively, from other subparagraph (C) investments. Especially in view of the Federal Circuit's treatment of the subparagraph (C) activities and investments together, we see no basis for singling out any subparagraph (C) activity for special treatment, in conflict with Federal Circuit authority.

Moreover, even if the meaning of "protected by" were as malleable as the respondents contend, and thus subject to Commission interpretation under *Chevron USA Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), the respondents offer no sound policy reasons for interpreting the statute in the manner they seek. Specifically, the respondents wish to invite an inquiry in every investigation as to the motivations not merely of the complainant-licensor, but of its licensees, specifically what they intended to obtain

²⁸ For discussions of the legislative history, see, e.g., Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432 ("Minimized Chip Packages"), Order No. 13 at 11-12, not reviewed, Notice, 66 Fed. Reg. 58424 (Nov. 21, 2001); Certain Digital Processors and Digital Processing Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-559 ("Digital Processors"), Initial Determination at 81-92 (May 11, 2007), not reviewed in relevant part, Notice at 2 (Aug. 6, 2007).

²⁹ The respondents attempt to explain away *InterDigital* in a footnote, but their explanation fails to establish that InterDigital's licensing efforts were production-oriented. Resp'ts Br. 6-7 n.6; Respt's Reply Br. 5-6.

from their licenses, and what they actually did obtain (*i.e.*, whether the actual effect of the license was to bring products to market sooner). Requiring such a showing is needlessly burdensome and costly to the complainant, its licensees, and the Commission; unreasonably subjective; and unwarranted in view of the statutory language and legislative history.

Additionally, the respondents would offer no relief to an inventor-complainant in certain circumstances, such as when an industry copies her invention – maybe verbatim from the published patent – before the complainant has had an opportunity to engage in production-oriented efforts of her own. Resp'ts Br. 9; *id.* at 12 ("Unless a licensee entered the license *prior to* researching, engineering and manufacturing its own product, there is no link between that previously infringing product and a complainant's alleged licensing investment."). We disagree with the respondents that their construction of the statute is permissible or appropriate, either under the plain meaning of the statute or its legislative history.

The respondents also appear to confuse the domestic industry test with the separate test for a complainant in the process of establishing a domestic industry. Resp'ts Br. 8. In the respondents' effort to make production-driven licensing the touchstone, they argue that doing so "is analogous to proving that a domestic industry 'is in the process of being established." Resp'ts Br. 9 (quoting 19 U.S.C. § 1337(a)(2)); see also Resp'ts Reply Br. 5 & nn. 4-5. Commission precedent – and the legislative history underpinning that precedent – requires the complainant alleging an industry "in the process of being established" to "demonstrate that he is taking the necessary tangible steps to establish such an industry in the United States." Certain Stringed Musical Instruments & Components Thereof, Inv. No. 337-TA-586, Comm'n Op., 2008 WL 2139143, at *10 (May 16, 2008) (quoting H. Rep. 100-40 at 157); see also Motiva, LLC v. ITC, 716 F.3d 596, 599-601 (Fed. Cir. 2013). The respondents

seem to assume that this process-of-establishment test is a production test, but they offer no reason why the business in the process of being established cannot instead be a licensing business, *i.e.*, a business in which a patent owner seeks to offer licenses to its intellectual property rights. This type of business was at issue in *Motiva, LLC v. ITC*, 716 F.3d 596, 601 (Fed. Cir. 2013), for example. Second, the "tangible steps" test is important to avoid "process of establishing" from subsuming domestic industry. Process-of-establishing necessarily calls for activity that is directed to launching a nascent industry by requiring a demonstration of the likelihood that the industry will be established in the future. The respondents cite statements meant to reign in abuse of "process of establishing" – Resp'ts Reply Br. 5 n. 5 – as though they applied instead to tests for the existence of a domestic industry. There is no sound reason – and no legislative intent – for applying this higher burden to showing the existence of a domestic industry.

Based on the *InterDigital* and *Microsoft* decisions, a complainant alleging the existence of a domestic industry under 19 U.S.C. § 1337(a)(3)(C) must show the existence of articles. As discussed extensively earlier, the substantial investment, once protected articles have been shown, is in exploitation of the intellectual-property rights, "including engineering, research and development, or licensing." *Id.* We reject the respondents' proposed production-driven requirement, which is in conflict with the plain language of the statute and its legislative history.

³⁰ We note that this investigation involves only TPL's specifically identified articles. We recognize that future investigations may present questions regarding the existence of an article, *see*, *e.g.*, *Certain Multiple-Beam Equalization Systems for Chest Radiography and Components Thereof*, Inv. No. 337-TA-326, Order No. 26, 1991 WL 788679, at *3 (Aug. 20, 1991) (discussing preparation of "a working model of the article practicing the patent claims" in connection with the investigation), and we do not reach such issues here. We also do not reach issues related to the analysis for industries in the "process of being established," *see generally Stringed Musical Instruments*, Comm'n Op., 2008 WL 2139143, at *10.

5) Whether TPL Demonstrated the Existence of Domestic Industry Articles

Having concluded that TPL must demonstrate the existence of protected articles practicing the asserted patents under subparagraphs (A), (B), and (C) of paragraph 337(a)(3), we turn to TPL's showings as to articles in this investigation, and we conclude that TPL failed to demonstrate the existence of articles practicing the asserted patents.

TPL attempted to establish the existence of a domestic industry based upon subparagraphs (A), (B), and (C) before the ALJ.³¹ TPL's petition for review, however, raised only subparagraph (C), and within subparagraph (C) only licensing-related investment. In response to Question No. 1 of the notice of review, which asked whether articles are required under subparagraph (C), and if so, what they are, TPL maintained that no such showing is required, and therefore failed to identify any such articles in connection with its response to that question. TPL Br. 1-8. Nonetheless, TPL did attempt to show the existence of articles under subparagraphs (A) and (B) before the ALJ. The ALJ rejected TPL's showing in part because TPL had failed to brief its arguments adequately, in violation of the ALJ's Ground Rules. Question No. 3 in the notice asked whether TPL's technical-prong showing was uncontested, in which case, as discussed earlier, the Commission might excuse the lack of detailed briefing as to issues for which there was no genuine material dispute. See, e.g., Certain Mobile Devices, Associated Software and Components Thereof, Inv. No. 337-TA-744, Comm'n Op. 11-16 (May 18, 2012).

For the '623 patent, for which the ALJ found a violation of section 337, TPL relied before the ALJ upon its licensees' memory card readers, specifically the Lenovo H320-4041-

³¹ TPL did not argue that there is a domestic industry in the process of being established, pursuant to 19 U.S.C. § 1337(a)(2). *See* TPL Post-Hearing Br. 267-289.

1JU and the Belkin PM00525-A. TPL's arguments are undisputed, and identical to the infringement dispute presented earlier. *See* TPL Br. 22; Resp'ts Br. 13. Based upon our claim construction of "accessible in parallel," TPL failed to demonstrate that these domestic industry products meet the "accessible in parallel" limitation of claim 1 of the '623 patent. Accordingly, we find that TPL failed to demonstrate the existence of protected articles practicing the '623 patent, as is required for subparagraphs (A)-(C) of the domestic industry requirement. 32

For the mapping patents, TPL relied on certain OnSpec products. In 2006, the original patent assignee, OnSpec Electronic, Inc. ("OnSpec"), assigned the asserted patents to MCM Portfolio LLC (formerly FMM Portfolio LLC). See CX-939C at Q/A 45-56. The complainant TPL received an exclusive license to assert the asserted patents and to collect royalties. See, e.g., id. OnSpec designed memory controllers, which it had third parties produce for OnSpec's customers. See id. at Q. 46. It is undisputed that in 2008, years prior to the complaint here, OnSpec ceased to exist, though TPL still sells a small number of OnSpec products designed prior to OnSpec's dissolution. CX-1084C (sales chart); CX-0941C at O/A 23, 35, 55; CX-939C at O/A 47-51; RX-2886C at O/A 35-42, 45-46.

We affirm the ALJ's determination, and adopt his reasoning, that TPL cannot avail itself of OnSpec's investments (for all asserted patents, and as to all subparagraphs of section 337(a)(3)). ID at 155-157. Nonetheless, TPL could still have demonstrated the existence of a domestic industry by identifying protected articles that practice the mapping patents and by

³² TPL's brief to the Commission only references the '549 patent once in passing. TPL Br. 21. We affirm the ALJ's determination that TPL's conclusory statements regarding the technical prong were insufficient to meet TPL's burden. ID at 135. We have affirmed the ID's determination of non-infringement, and therefore also affirm the ALJ's extension of that determination to TPL's domestic industry products, which operate in the same way as the accused products. ID at 135.

relying on TPL's own investments in the mapping patents, specifically TPL's investments in licensing.

We affirm the ALJ's application of his ground rules to find that TPL failed to demonstrate the existence of articles practicing the mapping patents. In their response to Ouestion No. 3 in the notice of review, the respondents argue that whether TPL's domestic industry products practice the mapping patents was materially disputed, Resp'ts Br. 13, pointing repeatedly to a portion of their expert's witness statement. *Id.* (citing RX-2888C, Q/A 984-994). The respondents cited that portion in their post-hearing reply brief, where they challenged TPL's proof. Resp'ts Post-Hearing Reply Br. 95-96. TPL's discussion in its opening post-hearing brief was cursory, TPL Post-Hearing Br. 228-233, and we conclude that the ALJ did not abuse his discretion to conclude that TPL's arguments were too scant to carry TPL's burden to demonstrate the existence of articles practicing the mapping patents. We note that TPL tried to cure this defect in its post-hearing reply brief, TPL Post-Hearing Reply Br. 45-49, but agree with the ALJ that this showing was untimely, ID at 137-138. In response to the Commission notice, TPL pointed to little to demonstrate that domestic industry articles practice the mapping patents beyond the same statements from its reply post-hearing brief that the ALJ found inadequate. TPL Br. 21-23. Because TPL did not demonstrate the existence of articles practicing the mapping patents, it cannot demonstrate the existence of a domestic industry.³³

³³ We therefore do not reach whether the economic prong would have been met if articles had been shown.

IV. CONCLUSION

For the foregoing reasons, we find that TPL failed to demonstrate that the accused products infringe and that domestic-industry articles practice, the asserted patents. The existence of articles is, in view of recent Federal Circuit authority, a requirement for demonstrating the existence of a domestic industry. The Commission terminates this investigation with a finding of no violation of section 337.

By order of the Commission.

Lisa R. Barton

Acting Secretary to the Commission

January 9, 2014

DISSENTING VIEWS OF COMMISSIONER SHARA L. ARANOFF

I find that, in an investigation asserting a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C), the complainant is not required to prove the existence of "articles" protected by the relevant patent or other intellectual property right. I believe this interpretation of the statute is supported by the language and legislative history of the 1988 amendments to section 337, consistent with nearly 25 years of agency practice, and consistent with the Court of Appeals for the Federal Circuit's ("Federal Circuit") holdings in *InterDigital I* and *II*. The interpretation adopted by the Commission leads to the very same unjust results that led Congress to amend section 337's domestic industry requirement in 1988 to add the licensing provision. Accordingly, I dissent from the Commission's finding that complainant Technology Properties Limited LLC ("TPL") was required to establish the "technical prong" of the domestic industry requirement in order to show a domestic industry based on licensing activities under section 337(a)(3)(C).¹

Statutory Language

The domestic industry requirement is described in section 337(a)(2) and (a)(3). Those provisions provide as follows:

- (2) Subparagraphs (B), (C), (D), and (E) of paragraph (1) apply only if an industry in the United States, relating to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.
- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—
- (A) significant investment in plant and equipment;
- (B) significant employment of labor or capital; or
- (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

TPL attempts to establish an engineering and research and development domestic industry case under section 337(a)(3)(C) by relying on the investments of OnSpec Electronic, Inc. ("OnSpec"). I agree with the Commission that TPL cannot rely on OnSpec's investments and consequently cannot establish engineering and research and development industries. Therefore, I do not reach the question of whether there is a statutory requirement that a complainant demonstrate the existence of articles practicing the asserted patents for engineering and research and development industries under section 337(a)(3)(C).

To properly answer the question of whether the "licensing" language of section 337(a)(3)(C) requires that a complainant prove the existence of "articles" protected by the relevant patent or other intellectual property right in order to establish a licensing-based industry, the statutory language must be considered in context of the purpose for which it was adopted. See Chapman v. Houston Welfare Rights Org., 441 U.S. 600, 608 (1979) ("As in all cases of statutory construction, our task is to interpret the words of these statutes in light of the purposes Congress sought to serve."); Candle Corp. of America v. Int'l Trade Comm'n, 374 F.3d 1087, 1093-94 (Fed. Cir. 2004) ("[W]here textual ambiguity exists, we must look beyond the bare text . . . to the context in which it was enacted and the purposes it was designed to accomplish."). Any understanding of the statutory language must also be guided by Commission precedent. Accordingly, I describe the legislative history that gave rise to the licensing provision of section 337(a)(3)(C) and the Commission precedent that has interpreted the provision.

The Domestic Industry Requirement and the 1988 Amendments to Section 337

Section 337 was passed into law by the Tariff Act of 1930, but its origins date back to section 316 of the Tariff Act of 1922. Congress saw section 316 as a trade remedy directed at "unfair methods of competition and unfair acts in the importation of articles" that were not addressed by the newly-minted Anti-Dumping Act of 1916. It was not until 1930 that a divided panel of the U.S. Court of Customs and Patent Appeals ruled that section 316 could apply to patent infringement. *Frischer & Co., Inc. v. Bakelite Corp.*, 39 F.2d 247 (CCPA 1930).

Like other trade remedies, Congress intended section 337 to protect American industries and American workers. Thus, section 316 provided that: "unfair methods of competition and unfair acts in the importation of articles into the United States . . . the effect or tendency of which is to destroy or substantially injure an industry, efficiently and economically operated, in the United States, or to prevent the establishment of such an industry, or to restrain or monopolize trade and commerce in the United States, are hereby declared unlawful." Tariff Act of 1922, Pub. L. No. 67-318, § 316(a), 42 Stat. 858, 943-44 (1922); see also S. Rep. No. 67-595, 2d Session, at 3 (1922) ("The provision relating to unfair methods of competition in the importation of goods is broad enough to prevent every type and form of unfair practice and is, therefore, a more adequate protection to American industry than any antidumping statute the country has ever had."); compare with 19 U.S.C. §§ 1677(4), (7) (defining domestic industry and material injury in the Title VII context), and 19 U.S.C. § 2252 (section 201).

While the statutory language has been amended a number of times since 1922, one basic premise has remained the same: the imposition of relief under section 337 is contingent upon the existence of a domestic industry and not merely upon ownership of a valid and infringed U.S. patent or other intellectual property right. *See John Mezzalingua Assocs. v. Int'l Trade Comm'n*, 660 F.3d 1322, 1327-28 (Fed. Cir. 2011); S. Rep. No. 100-71, at 129 (1987); H.R. Rep. No.100-40, Pt. 1, at 157 (1987).

Prior to 1988, the statute provided that:

Unfair methods of competition and unfair acts in the importation of articles into the United States, or in their sale by the owner, importer, consignee, or agent of either, the effect or tendency of which is to destroy or substantially injure and industry, efficiently and economically operated, in the United States, or to prevent the establishment of such an industry, or to restrain or monopolize trade and commerce in the United States, are declared unlawful....

19 U.S.C. § 1337(a) (1982).²

The Commission interpreted this pre-1988 statutory language to require evidence of manufacturing in the United States to satisfy the domestic industry requirement. For example, In *Certain Miniature, Battery-Operated, All-Terrain, Wheeled Vehicles*, Inv. No. 337-TA-122, complainants alleged patent infringement and false designation of origin by certain imported toy trucks. In that investigation, complainants' own STOMPER toy vehicles were manufactured under license by an unrelated company in Hong Kong. Complainant Goldfarb's U.S. activities consisted of designing and licensing toy truck designs to toy manufacturers. Complainant Schaper's U.S. activities consisted of further developing Goldfarb's designs into a complete engineering model, engineering drawings, and tooling for the manufacture of each toy truck design. Upon importation of the toy trucks manufactured, packaged and inspected in Hong Kong, Schaper performed some minor packaging and quality control operations in the United States, along with promotion, advertising and marketing activities.

While the ALJ found that complainants' activities established the existence of a domestic industry, the Commission reversed. The Commission reasoned that "the essence of Goldfarb's business in this case is licensing and the concomitant collection of royalties" and that "[d]efining 'industry' as the mere ownership or licensing of patent rights would be contrary to Commission precedent, legislative history, and the logical construction of the statute's wording." Opinion of Chairman Eckes, Commissioner Stern and Commissioner Haggart at 8 (Oct. 1982). The Commission found that Schaper's U.S. activities were both too minor and too unrelated to production to count toward establishment of a domestic industry. *Id.* at 9-11. On appeal, the Federal Circuit affirmed the Commission's finding of no domestic industry, holding that the "patent must be exploited by production in the United States". *Schaper Mfg. Co. v. Int'l Trade Comm'n*, 717 F.2d 1368, 1371 (Fed. Cir. 1983) ("There is nothing in the statute or its legislative

The legislative history of the Trade Act of 1974 provides: "In cases involving the claims of U.S. patents, the patent must be exploited by production in the United States, and the industry in the United States generally consists of the domestic operations of the patent owner, his assignees and licensees devoted to such exploitation of the patent." H.R. Rep. No. 93-571, at 78 (1973).

history to indicate that such activities, which do not involve either manufacture or production or servicing of the patented item, are meant to be protected by section 337.").

The Commission reached a similar result in Certain Products with Gremlins Character Depictions, Inv. No. 337-TA-201. In that case, complainant Warner Brothers alleged infringement of three copyrights by certain souvenir items related to its popular Gremlins feature film. Warner Brothers claimed the existence of a domestic industry exploiting the relevant copyrights through its marketing, financial, and legal activities related to the licensing of the Gremlins copyrights. Warner Brothers' own copyrighted souvenir items were manufactured by licensees both inside and outside the United States, but Warner Brothers did not offer evidence of its licensees' domestic production activities in support of its domestic industry claim. While conceding that Warner Brothers' licensing activities were more substantial in monetary terms than those involved in *Tov Vehicles*, the Commission stated that "[p]roduction-related activities distinguish a domestic industry from an importer or inventor. It is clear from section 337, its legislative history, past Commission decisions, and Schaper that section 337 protects domestic industries, not importers or inventors." Comm'n Op., 1986 ITC LEXIS 313, at *163 (Mar. 1986). The Commission concluded: "Because [Warner Brothers'] activities relate solely to the servicing of the intellectual property rights in question and are not the type of activities that Congress intended to protect by section 337, we reverse the ALJ on this issue." Id. at *171.⁴

It was against this background that intellectual property owners began to lobby Congress for changes to section 337's domestic industry requirement that would permit certain non-manufacturing entities to obtain relief from infringing imports. Congress requested that the General Accounting Office prepare a study, which analyzed the extent to which the Commission was finding no violation of section 337 based on a complainant's failure to show domestic manufacturing. See GAO Report to Selected Congressional Subcommittees, International Trade: Strengthening Trade Law Protection of Intellectual Property Rights, NSIAD-86-150 (Aug. 13, 1986). Industry associations weighed-in in support of expanding the domestic industry definition to encompass non-manufacturing activities like licensing and research and development. See, e.g., Intellectual Property Rights: Hearings before the Subcomm. on Int'l

The Federal Circuit made clear that it was not precluding the possibility that a complainant's non-production (and non-licensing) domestic activities might (unlike Schaper's) be great enough in some future case to establish a domestic industry. "As the statute now stands, Congress did not mean to protect American importers (like Schaper) who cause the imported item to be produced for them abroad and engage in relatively small nonpromotional and non-financing activities in this country." 717 F.2d at 1373. The Federal Circuit also noted that: "If, as appellants suggest, present-day 'economic realities' call for a broader definition to protect American interests (apparently including many of today's importers) it is for Congress, not the courts or the Commission, to legislate that policy." *Id*.

In her dissent, Vice Chairman Liebeler argued that the plain language of section 337 did not require evidence of manufacturing to establish a domestic industry, but left room for consideration of any domestic economic activity by complainant that adds economic value to an intellectual property right. Chairman Liebeler opined that domestic "service" activities, such as licensing, should be sufficient to establish a domestic industry, but that non-domestic activities (i.e. foreign manufacturing) should not. *See* Dissenting Views of Vice Chairman Liebeler, 1986 ITC LEXIS 313, at *204-220.

Trade of the S. Finance Comm., 99th Cong. 188 (1986) (statement of Richard C. Witte, Vice President, Intellectual Property Owners, Inc.). Commission Chairwoman Dr. Paula Stern confirmed in statements before Congress that "the mere licensing activities of an intellectual property owner do not constitute a domestic industry" in light of the Wheeled Vehicles and Gremlins decisions unless the invention is commercialized. See Intellectual Property and Trade: Hearings before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the H. Comm. on the Judiciary, 99th Cong. 470–474 (1986).

The legislative history makes clear that Congress's intent, in amending section 337 in 1988, was to reverse the Commission's practice of limiting section 337 relief to complainants that engage in the domestic manufacture of a product practicing the asserted patent or other intellectual property right. *See* H.R. Rep. No. 99-581, Pt.1, at 112 (1986) (explaining that the proposed legislation sought to address the *Wheeled Vehicles* and *Gremlins* decisions). Congress sought a broader definition of domestic industry, one that would provide access to relief under section 337 to entities previously excluded. The 1987 House Report therefore states:

The Committee is concerned, however, that in some recent decisions the Commission has interpreted the domestic industry requirement in an inconsistent and unduly narrow manner. In order to clarify the industry standard, a definition is included which specifies that an industry exists in the United States with respect to a particular article involving an intellectual property right if there is, in the United States, --

- 1. Significant investment in plant and equipment;
- 2. Significant employment of labor or capital; or
- 3. Substantial investment *in the exploitation of the intellectual property right* including engineering, research and development or licensing.

The first two factors in this definition have been relied on in some Commission decisions finding that an industry does exist in the United States. The third factor, however, goes beyond ITC's recent decisions in this area. This definition does not require actual production of the article in the United States if it can be demonstrated that significant investment and activities of the type enumerated are taking place in the United States. Marketing and sales in the United States alone would not, however, be sufficient to meet this test. The definition could, however, encompass universities and other intellectual property owners who engage in extensive licensing of their rights to manufacturers.

H. R. Rep. No.100-40, Pt. 1, at 157 (emphasis added); see also H. R. Rep. No. 100-576, at 634 (1988) (Conference Report for the "Omnibus Trade and Competitiveness Act of 1988" also

using the language "substantial investment in exploitation of the intellectual property right, including engineering, research and development, or licensing").

As the highlighted language indicates, Congress was concerned with expanding the definition of domestic industry to cover *domestic activities other than manufacturing* that exploit the relevant intellectual property right. While the legislative history does make passing reference to the idea that patentees license their rights "to manufacturers," that was likely the only licensing model that Congress was aware of at the time. The main point in the passage is not that Congress wanted to change from a domestic industry definition premised on domestic production to one based on domestic OR foreign production (the latter of which is nowhere mentioned), but that it wanted to change from a domestic industry definition premised on domestic production to one based on domestic production OR *other substantial domestic economic activities that exploit the asserted intellectual property right*.

Indeed, in the course of debate over the 1988 amendments, Congress gave serious consideration to proposals, including one supported by the Administration, to eliminate any domestic industry requirement from section 337. See Intellectual Property Rights: Hearings before the Subcomm. on Int'l Trade of the S. Finance Comm., 99th Cong. 11-13 (1986) (Finance Committee Trade Staff Memo to Finance Committee Members) ("Finance Committee Memo"). Opponents of eliminating the domestic industry requirement argued that such a change would turn the Commission into a forum where two foreign companies that import products into the United States, one of which owns a U.S. patent but neither of which engages in meaningful economic activity in the United States, could adjudicate patent rights. See Intellectual Property and Trade: Hearings before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the H. Comm. on the Judiciary, 99th Cong. 70 (1986) (statements of Dr. Paula Stern, Chairwoman, Int'l Trade Comm'n) ("We would be the arbiter as to who gets the marketplace among the importers."). Ultimately, Congress adopted a "middle ground," explaining that:

Although the injury test has been eliminated for intellectual property rights cases, a complainant must establish that a U.S. industry relating to the articles *or* intellectual property right concerned "exists or is in the process of being established." This requirement was maintained in order to preclude holders of U.S. intellectual property rights who have no contact with the United States other than owning such intellectual property rights from utilizing section 337. The purpose of the Commission is to adjudicate trade disputes between U.S. industries and those who seek to import goods from abroad. Retention of the requirement that the statute be utilized on behalf of an industry in the United States retains that essential nexus.

H.R. Rep. No.100-40, Pt. 1, at 156-157 (emphasis added); S. Rep. No. 100-71, at 129; *see also* Finance Committee Memo at 11 ("Those favoring retention of the industry requirement argue

that its elimination would in some cases leave the ITC merely protecting one foreign producer from another, with no appreciable benefit of U.S. jobs or production capability."). Thus, Congress was focused on extending section 337 to protect domestic jobs and economic activity associated with IP rights, without proof of manufacturing activities, be they domestic or foreign.

In passing the 1988 amendments, Congress listed a number of specific types of entities that it thought could not meet the domestic industry requirement under pre-1988 Commission practice, but should be able to do so under the amended definition. These entities included "universities and other intellectual property owners who engage in extensive licensing" (H. R. Rep. No.100-40, Pt. 1, at 157); inventors (133 Cong. Rec. S. 1795 (Feb. 4, 1987) (statement of Sen. Lautenberg) ("the New York inventor of fibre optic waveguide")); "the California movie studio that licenses the Gremlins character" (*id.*); "a start-up biotech firm" (*id.*); and "universities and small businesses" (132 Cong. Rec. H. 1784 (April 10, 1986) (statement of Rep. Kastenmeier)).

Ultimately, the final language adopted by Congress in 1988 is slightly different than the language quoted in the 1987 House Report noted above. Specifically, the statute has since 1988 provided as follows:

- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—
- (A) significant investment in plant and equipment;
- (B) significant employment of labor or capital; or
- (C) substantial investment in *its* exploitation, including engineering, research and development, or licensing.⁵

19 U.S.C. § 1337(a)(3) (emphasis added).

Commission Practice Since the 1988 Amendments

Soon after the enactment of the 1988 amendments, complainants began filing cases invoking subparagraph (a)(3)(C). In a series of investigations in the 1990s, Commission ALJs issued decisions holding that a complainant asserting a licensing-based domestic industry under

I have been unable to find any information in the legislative history of the 1988 amendments to section 337 that explains why the language quoted in the 1987 House Report ("substantial investment in the exploitation of the intellectual property right") was changed to "substantial investment in its exploitation" (the key statutory language at issue in the present investigation). *See* H. R. Rep. No. 100-576, at 634. Nonetheless, it would be difficult to conclude that, by making this change, Congress intended to change the meaning of the statute in a manner that would undermine the purposes for which the new statutory language was being adopted.

section 337(a)(3)(C) did not need to show that either it or its licensee practiced the asserted patent. ⁶ See Certain Microcomputer Memory Controllers, Components Thereof, and Products Containing Same, Inv. No. 337-TA-331, Order No. 6, 1992 WL 811299, at *4 (Jan. 8, 1992). not reviewed, 57 Fed. Reg. 5710 (Feb. 12, 1992). ("The word 'its' before the word 'exploitation' in (C) must refer to exploitation of the patent (because it is singular) rather than to exploitation of 'articles protected by the patent' (which are plural)"); Certain Dynamic Sequential Gradient Compression Devices and Component Parts Thereof, Inv. No. 337-TA-335, ID, 1992 WL 12 668881, at *43 (May 15, 1992), not reviewed in relevant part, 1992 WL 1266888, at *2 (June 15, 1992) ("non-manufacturing activities such as research and development and engineering (as well as licensing) can be sufficient to constitute a domestic industry. Accordingly, a complainant in a Section 337 investigation need not manufacture the product covered by the claims of the patent in order to establish that a domestic industry exists."); Certain Digital Satellite System (DSS) Receivers and Components Thereof, Inv. No. 337-TA-392, ID, 1997 WL 696255, at *8 (Oct. 20, 1997) ("[I]n view of the language of criterion (C) and its legislative history, supra, complainant has satisfied the domestic industry requirement if complainant has invested a substantial amount of money to exploit the [asserted] patent. [The ALJ] further finds that the statute does not require a complainant to manufacture the patented product nor does it require that a complainant show that a product covered by the [asserted] patent is made by complainant's licensees."), taking no position on domestic industry on review where respondents did not oppose the ALJ's domestic industry determination, 62 Fed. Reg. 65285 (Dec. 11, 1997).

In Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432 ("Semiconductor Chips"), the Commission was squarely presented with the issue of whether a complainant is required to show that it or one of its licensees practices a patent-in-suit in order to find that a domestic industry exists based on licensing under section 337. In that investigation, complainant Tessera did not undertake to show any specific articles practiced the asserted patents. In fact, respondent Texas Instruments had moved for sanctions on the grounds that Tessera allegedly misled the Commission by

During this period the Commission's ALJs, and eventually the Commission itself, first coined the terms "economic prong" and "technical prong" with respect to the statutory domestic industry requirement. See, e.g., Certain Integrated Circuit Telecommunications Chips and Products Containing Same, Including Dialing Apparatus, Inv. 337-TA-337, Order No. 44, 1992 WL 811431 (July 22, 1992). The term "economic prong" is loosely used to refer to the various "investment" requirements set out in section 337(a)(3), while the term "technical prong" is loosely used to refer to the statutory language in both (a)(2) and (a)(3) referring to "articles protected by the patent, copyright, trademark, or mask work concerned." The Commission first used these terms in an opinion in 1996. See Certain Variable Speed Wind Turbines and Components Thereof, Inv. No. 337-TA-376, Comm'n Op., 1996 WL 1056330, at *13-14 (Aug. 30, 1996). Since that time, some decisions have said that there is no technical prong requirement with respect to licensing industries, see, e.g., Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432, Order 13 at 11 (June 5, 2002), not reviewed, Notice, 66 Fed. Reg. 58424 (Nov. 21, 2001), while others have said that the technical prong is the requirement that the licensing activities are actually related to the asserted intellectual property right. See Certain Stringed Musical Instruments and Components Thereof, Inv. No. 337-TA-586, Comm'n Op., at 14 (May 16, 2008). Despite the frequent use of these shorthand terms by the Commission, its ALJs, and parties before the agency, it is important to note that these terms are not statutory and that it is the statutory language setting forth what is required to establish a domestic industry that is at issue in this investigation.

alleging satisfaction of the technical prong of the domestic industry requirement in its complaint, but then never attempted to offer proof of the existence of an actual article during the investigation.

On summary determination, the ALJ held that "as a matter of law, a complainant is not required to show that it or one of its licensees practices a patent-in-suit in order to find that a domestic industry exists pursuant to 19 U.S.C. § 1337 (a)(3)(C), which pertains to licensing." Order 13 at 11 (June 5, 2002). The ALJ's analysis considered both the language of the statute and the legislative history. He concluded that the words "its" in section 337(a)(3)(C) "cannot refer to the 'articles' protected by the patent." *Id* at 12. The ALJ reasoned that "[b]ecause of the singular nature of the word 'its,' it must refer to the singular noun 'patent' or one of the other forms of intellectual property, which are all enumerated in the singular." *Id*. Although Texas Instruments petitioned for review, the Commission determined not to review the initial determination. 66 Fed. Reg. 58424 (Nov. 21, 2001). The initial determination therefore became the final determination of the agency. Ultimately, the Commission found a violation of section 337.

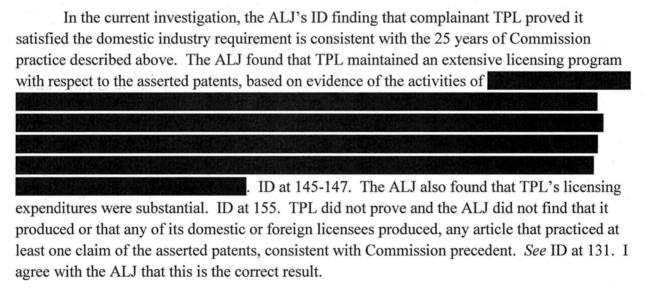
Again, in Certain Digital Processors and Digital Processing Systems, Inv. No. 337-TA-559 ("Digital Processors"), the Commission rejected the notion of an articles requirement for licensing under section 337(a)(3)(C). In that investigation, complainant Biax argued that it satisfied the domestic industry requirement based on licensing activities alone. Biax never established the existence of any specific articles that practiced the asserted patent.

The ALJ disposed of the articles issue explaining that, "[w]hen a complainant relies on the existence of a licensing program to satisfy subsection (C), the complainant need not show that it or one of its licensees practices the patent-in-suit in order for the Commission to find a domestic industry." ID at 85 (June 21, 2007). In so doing, the ALJ provided an extensive discussion of the legislative history of the 1988 amendments. *Id.* at 88-95. The ALJ concluded that it was clear that the intent of Congress was to allow entities that were actively licensing their patents in the United States to be able to avail themselves of the trade remedies offered by section 337. On review, the Commission determined not to review the pertinent portions of the ID, thus adopting the ALJ's ruling on domestic industry, but ultimately found no violation of section 337 on other grounds. Comm'n Notice at 2 (Aug. 6, 2007).

More recently, in *Certain 3G Wideband Code Division Multiple Access (WCDMA)*Handsets, Inv. 337-TA-601 ("3G Wideband Handsets"), the Commission again reaffirmed its understanding of the statute and legislative history. Similar to *Digital Processors*, complainant InterDigital did not undertake to show that any specific articles practiced the asserted patents. On summary determination, the ALJ found the existence of a domestic industry based purely on InterDigital's substantial investments in its licensing program. Order No. 20 (Feb. 20, 2009). Relying on Commission precedent, the ALJ rejected Samsung's argument regarding an alleged articles requirement. The ALJ explained that the statute for purposes of licensing "does not

require a complainant 'to manufacture the patented product nor does it require that a complainant show that a product covered by the . . . patent is made by the complainant's licensees." *Id.* at 4. The Commission determined not to review, and thus adopted, the ALJ's initial determination. Comm'n Notice (July 25, 2008).

The Commission's longstanding interpretation of section 337(a)(3)(C) with respect to the requirements for establishing a domestic industry based on licensing stands in stark contrast with its practice under sections 337(a)(3)(A) and (a)(3)(B), where it has always required a complainant to prove that it produces "articles" that practice at least one claim of each asserted patent (or that are covered by an asserted copyright, trademark, or mask work). See, e.g., Certain Stringed Musical Instruments and Components Thereof, Inv. No. 337-TA-586, Comm'n Op., at 13 (May 16, 2008) ("With respect to section 337(a)(3)(A) and (B), the technical prong is the requirement that the investments in plant or equipment and employment in labor or capital are actually related to 'articles protected by' the intellectual property right which forms the basis of the complaint.").⁷



The Federal Circuit's InterDigital Decisions

The Federal Circuit has recently addressed the requirements for establishing a domestic industry based on licensing under section 337(a)(3)(C) in its decisions in *InterDigital I* and

The Commission has never issued an opinion definitively ruling on whether a complainant asserting the existence of a domestic industry under section 337(a)(3)(C) based on engineering or research and development must, as a matter of law, prove that it produces an article that practices at least one claim of the asserted patent. As a practical matter, it is difficult to imagine how a complainant could show that it had made a substantial investment in the exploitation of a patent through engineering or research and development other than by showing that it spent resources to develop a product using the relevant technology. Thus, it is not surprising that complainants routinely offer such proof. Nonetheless, from a purely legal standpoint, one could argue that it is sufficient, but not necessary, to prove the existence of "articles" to demonstrate the existence of a domestic industry based on research and development or engineering.

InterDigital II. InterDigital Commc'ns, LLC v. Int'l Trade Comm'n, 690 F.3d 1318 (Fed. Cir. 2012) ("InterDigital I"); InterDigital Commc'ns, LLC v. Int'l Trade Comm'n, 707 F.3d 1295 (Fed. Cir. 2013) ("InterDigital II"). For the reasons discussed below, I believe my decision in this investigation is consistent with the Federal Circuit's holdings in its InterDigital opinions.

The InterDigital decisions arose out of Certain 3G Mobile Handsets and Components Thereof, Inv. 337-TA-613 ("Mobile Handsets"). In Mobile Handsets, similar to the current investigation, complainant InterDigital alleged a domestic industry based on licensing under section 337(a)(3)(C). Before the ALJ, InterDigital moved for summary determination that it satisfied the domestic industry requirement based solely on its investment in licensing activities in the United States. InterDigital did not undertake to show that any specific articles, including any licensee products manufactured abroad, practiced the asserted patents. In response to InterDigital's motion, respondent Nokia argued that the motion should be denied because a complainant seeking protection under the statute must show the existence of an article protected by the patent for licensing-based domestic industries. See Order No. 42 (July 27, 2009).

The ALJ granted InterDigital's motion finding the existence of a domestic industry under section 337(a)(3)(C) based purely on InterDigital's substantial investments in licensing. *Id.* Relying on Commission precedent, including *Semiconductor Chips* and *3G Wideband Handsets*, the ALJ rejected Nokia's argument regarding an alleged articles requirement. *Id.* at 17. The ALJ explained that the statute for purposes of licensing "does not require a complainant 'to manufacture the patented product nor does it require that a complainant show that a product covered by the . . . patent is made by the complainant's licensees." *Id.* at 5. The Commission determined not to review the ALJ's initial determination, which therefore became the final determination of the agency. Comm'n Notice (April 9, 2009).

On appeal, the Federal Circuit's initial panel opinion, *InterDigital I*, affirmed the Commission's domestic industry finding. *See InterDigital I*, 690 F.3d at 1329 ("The administrative law judge held that InterDigital's activities satisfied the domestic industry requirement, and *we agree*.") (emphasis added). Citing *Digital Processors* and *3G Wideband Handsets*, the Court explained that "the Commission has consistently ruled that a domestic industry can be found based on licensing activities alone." *Id.* at 1330. The Court also noted that "[i]f there were any ambiguity as to whether the statute could be applied to a domestic industry consisting purely of licensing activities, the Commission's consistent interpretation of the statute to reach such an industry would be entitled to deference under the principles of *Chevron*." *Id.* Because the Federal Circuit affirmed the Commission, stated that the Commission's statutory interpretation was entitled to *Chevron* deference, and approvingly noted the Commission's long practice of not requiring proof of the existence of articles, I understand *InterDigital I* to hold that a domestic industry under section 337(a)(3)(C) can be supported by substantial investments in licensing activities alone without proof of the existence of any articles. *Id.* at 1329.

In response to Nokia's petition for panel rehearing or rehearing en banc, the Federal Circuit subsequently issued a supplemental opinion, *InterDigital II*, in support of its decision in *InterDigital I. See* 707 F.3d 1295 (Fed. Cir. 2013). That opinion, however, contains a number of passages that are difficult to reconcile either with each other or with the Court's ultimate decision to uphold the Commission's domestic industry determination. Some language suggests that the Court intended to impose an "articles" requirement for licensing under section 337(a)(3)(C), in addition to sections 337(a)(3) (A) and (B). For example, the Court stated:

The Commission and the court construed those phrases to define the subject matter that is within the statute's protection. With respect to subparagraph (A) of paragraph 337(a)(3), the "significant investment in plant or equipment" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent" in question. That requirement will typically be met if the investment in plant and equipment is directed at production of articles protected by the patent. Similarly, with respect to subparagraph (B) of paragraph 337(a)(3), the "significant employment of labor or capital" that is required to show the existence of a domestic industry must exist "with respect to the articles protected by the patent." That requirement will likewise typically be met by a showing that significant labor or capital is being expended in the production of articles protected by the patent. Applying the same analysis to subparagraph (C) of paragraph 337(a)(3) produces a parallel result that is consistent with the Commission's and this court's statutory construction: The "substantial investment in [the patent's] exploitation, including engineering, research and development, or licensing" must be "with respect to the articles protected by the patent," which means that the engineering, research and development, or licensing activities must pertain to products that are covered by the patent that is being asserted. Thus, just as the "plant or equipment" referred to in subparagraph (A) must exist with respect to articles protected by the patent, such as by producing protected goods, the research and development or licensing activities referred to in subparagraph (C) must also exist with respect to articles protected by the patent, such as by licensing protected products. This accords with the common description of the domestic industry requirement as having two "prongs": the "economic prong," which requires that there be an industry in the United States, and the "technical prong," which requires that the industry relate to articles protected by the patent.

707 F.3d at 1297-98 (emphasis added).

In a similar manner, the Court also stated the following, which could be interpreted to endorse an "articles" requirement for licensing-based industries:

The only question is whether the [sic] InterDigital's concededly substantial investment in exploitation of its intellectual property is "with respect to the articles protected by the patent." That requirement is satisfied in this case because the patents in suit protect the technology that is, according to InterDigital's theory of the case, found in the products that it has licensed and that it is attempting to exclude.

Id. at 1299.

However, the Court's *InterDigital II* opinion also includes language that indicates that the Court was actually rejecting an "articles" requirement for a domestic industry premised on licensing under section 337(a)(3)(C). Notably, the Federal Circuit explained that, as it had done in the initial panel opinion, it was interpreting section 337(a)(3)(C) consistent with Commission precedent. 707 F.3d at 1298 ("As noted in the panel opinion in this case, the Commission has consistently construed subparagraph (C) in that manner."). In fact, the Court cited *Digital Processors* and *Semiconductor Chips* as being "consistent" with its ruling. *Id.* (noting that the Federal Circuit was "adopting the same statutory interpretation" as the Commission). As described above, those investigations clearly held that there is no "articles" requirement for a licensing-based domestic industry.

Further, when the Court summed-up its view and set forth its holding, the Court stated the following, which does not appear to impose an articles requirement:

It is not necessary that the party manufacture the product that is protected by the patent, and it is not necessary that any other domestic party manufacture the protected article. As long as the patent covers the article that is the subject of the exclusion proceeding, and as long as the party seeking relief can show that it has a sufficiently substantial investment in the exploitation of the intellectual property to satisfy the domestic industry requirement of the statute, that party is entitled to seek relief under section 337.

Id. at 1303-04.

Taken together, I find that the language of *InterDigital II* is, when viewed as a whole, ambiguous on the issue of an "articles" requirement. That being said, in my view the better

reading of the *InterDigital* opinions is that they do not bind the Commission to requiring an articles requirement for licensing-based industries under section 337(a)(3)(C). That view is the only one that is consistent with the Federal Circuit's ultimate decision to uphold the Commission's determination of the existence of a domestic industry where InterDigital did not allege, and the Commission never found, any specific articles that practiced the asserted patents. It also squares with the fact that the Federal Circuit stated that it was acting consistent with Commission precedent, granting the Commission *Chevron* deference, and citing Commission investigations where the Commission held that there was no articles requirement for licensing.

Further, I believe my view is the better reading given that the Court did not remand the issue of domestic industry to the Commission even though it remanded the issue of patent infringement after the Court modified the Commission's claim constructions. *See InterDigital I*, 690 F.3d at 1330 ("Because the Commission erred in construing the claim terms 'code' and 'increased power level' and in finding, based on those claim constructions, that Nokia's products do not infringe InterDigital's patents, we reverse the administrative law judge's determination of non-infringement and remand for further proceedings."). If there were an articles requirement, the Federal Circuit should have remanded the question of whether any articles satisfy the Court's new claim constructions, as it did with the question of patent infringement. *See Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003) ("The test for satisfying the 'technical prong' of the industry requirement is essentially the same as that for infringement, i.e., a comparison of domestic products to the asserted claims."). Instead, the Court affirmed the Commission's domestic industry findings.

The Federal Circuit's later-issued decisions in *Microsoft Corp. v. Int'l Trade Comm'n*, 731 F.3d 1354 (Fed. Cir. 2013), and *Motiva, LLC v. Int'l Trade Comm'n*, 716 F.3d 596 (Fed. Cir. 2013), do not change my view. Neither of those cases squarely addressed the technical prong requirement for licensing-based industries alleged to exist under section 337(a)(3)(C). *Motiva* addressed the question of whether alleged investments in licensing sufficed to establish that a domestic industry was "in the process of being established." *See* 716 F.3d at 600-01. *Microsoft*, on the other hand, holds that there is an articles requirement for a research-and-development-based domestic industry under section 337(a)(3)(C). 731 F.3d at 1361-62. As noted above in footnote 7, there are substantial reasons for differential proof requirements for industries based on licensing and those premised on investment in research and development. In particular, while a license to a particular patent ties expenditures to exploitation of that patent, generally it would be difficult to tie engineering or research-and-development efforts to a particular patent (as opposed to a general field of technology) without demonstrating that the patent is actually practiced, which, in tangible form would require the existence of an article. Further, one cannot

To put it another way, the only way to conclude that the *InterDigital* opinions on their own impose an articles requirement for licensing-based industries is to accept that the Federal Circuit misunderstood Commission precedent, misunderstood the facts that were in front of it with respect to InterDigital's asserted domestic industry, and assumed that the Commission had found articles protected by the patents, when it had not done so.

"exploit" an "article" through licensing. Rather, one "exploits" a "patent," or other intellectual property, through licensing.

Conclusion

When Congress amended section 337 in 1988 to add section 337(a)(3)(C), it made very clear its intent to enable certain specific categories of IP rights holders to pursue claims under the statute. These entities included inventors, small businesses, universities, start-ups, and licensing service industries. *See* S. Rep. No. 100-71, at 129; H. R. Rep. No.100-40, Pt.1, at 157; 133 Cong. Rec. S. 1795 (Feb. 4, 1987) (statement of Sen. Lautenberg); 132 Cong. Rec. H. 1784 (April 10, 1986) (statement of Rep. Kastenmeier). Today, all of these actors would fall within the broad category of "non-practicing entities," a term which, along with "patent assertion entity" or "patent troll," was not in usage at the time. Under the statutory interpretation that the Commission has consistently followed since 1988 and which I follow in this investigation, all of the types of non-practicing entities singled out by Congress as deserving of protection from infringing imports under section 337 can, upon an appropriate evidentiary showing, satisfy the domestic industry requirement. If, however, section 337 is interpreted to impose an "articles" requirement on complainants seeking to establish a domestic industry under subsection (C), the likely effect is to advantage speedy infringers and well-financed patent assertion entities, at the expense of inventors, small businesses, and start-ups.

In the "ideal" production-driven licensing model, an inventor receives a patent for his innovation. The inventor then needs to either raise funds to develop his patented technology into a marketable product or products, or to license his patent to another entity more capable of doing so. After appropriate licensing or funding, additional work is needed to develop a product that practices the invention and bring that product to market. All of this takes time. During this time, which can vary widely depending on the technology and market conditions, the inventor or start-up has not yet produced an "article" covered by its patent and therefore, under the Commission's analysis, cannot satisfy the domestic industry requirement. Meanwhile, a speedy infringer, which gets its infringing product to market in the United States before the inventor or start-up succeeds in doing the same, can now import with impunity under section 337, making it less likely that the inventor's product will ever make it to the market and trigger the right to seek relief under the statute. See Intellectual Property Rights: Hearings before the Subcomm. on

A complainant seeking to establish a domestic industry based on its investments in licensing must establish that its investments relate to exploitation of the asserted intellectual property right, that its investments relate to licensing, and that its investments occurred in the United States. See Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op., at 7-13 (Aug. 8, 2011).

This demonstrates why it is important not to equate the ability to prove the existence of "articles" with a production-driven licensing scenario and the absence of such articles with a revenue-driven licensing scenario. While that may be the case, it is not always true.

One could argue that the term "article" in section 337 is not necessarily limited to an article in full commercial production, but could be interpreted by the Commission in some future hypothetical case to include a

Int'l Trade of the S. Finance Comm., 99th Cong. 188 (1986) (statement of Richard C. Witte, Vice President, Intellectual Property Owners, Inc.) ("Some industries built on new technologies may never be established if patent owners cannot fend off foreign free riders.").

By contrast, a well-financed patent assertion entity with a large portfolio of revenuedriven licenses could meet the domestic industry requirement by relying on the "articles" produced by one or more of its licensees either in the United States (under subsection (A)) or outside the United States (under subsection (C) coupled with proof of its own substantial licensing activities).

Because I do not believe that Congress intended to leave this gap in section 337's availability as a remedy to the very entities the 1988 amendments were designed to help, I dissent from the Commission's finding that TPL was required to establish the "technical prong" of the domestic industry requirement in order to show a domestic industry based on licensing activities under section 337(a)(3)(C).

product at some earlier stage in the development process – e.g., a test model, prototype, or computer design. Until this question of statutory interpretation has been presented to the Commission for decision and to the Federal Circuit for review in some future case, it is speculative to assume that a factual showing of less than commercial production could satisfy the asserted "articles" requirement. Moreover, while such a broad interpretation of "articles," if adopted, could narrow the window between when an inventor receives a patent and embarks upon a production-driven licensing course, and when it has proceeded far enough along that course to satisfy the domestic industry requirement, it would not eliminate the gap entirely, because even getting to the stage of having a prototype takes time and money.

One could also argue that start-ups or inventors who cannot demonstrate the existence of a domestic industry may nonetheless be able to show an industry "in the process of being established." Such a showing would again depend upon both the Commission and its reviewing courts accepting evidence of prototypes or other preproduction activities as proof that the inventor or his licensee is "actively engaged in steps leading to the exploitation of the intellectual property" such that the domestic industry requirement will be satisfied "within a reasonable period of time." H. Rep. 100-40, Pt.1, at 157-158; see also Certain Stringed Musical Instruments and Components Thereof, Inv. No. 337-TA-586, Comm'n Op., at 13 (May 16, 2008). Again, even under the interpretation most favorable to the inventor, there is likely to be some time period during which the inventor is investing in the exploitation of its IP right, but has not yet crossed a threshold that entitles it to the protections of section 337.

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **COMMISSION OPINION** has been served upon the following parties as indicated on **January 9, 2014**.

Lisa R. Barton, Acting Secretary
U.S. International Trade Commission
500 E Street, SW, Room 112
Washington, DC 20436

On Behalf of Complainant Technology Properties Limited LLC:

Anthony G. Simon, Esq. THE SIMON LAW FIRM PC 800 Market St., Ste. 1700 St. Louis, MO 63101	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Hewlett-Packard Company:	
Marcia H. Sundeen, Esq. KENYON & KENYON LLP 1500 K Street, NW Washington, DC 20005	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent HiTi Digital Inc.:	
Jenny W. Chen, Esq. c/o Darrin A. Auito, Esq. WESTERMAN HATTORI DANIELS & ADRIAN LLP 1250 Connecticut Avenue, NW, Suite 700 Washington, DC 20036	() Via Hand Delivery (√) Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Acer Inc.:	
Eric C. Rusnak, Esq. K&L GATES LLP 1601 K Street, NW Washington, DC 20006-1600	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:

) Other:

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

Certificate of Service - Page 2

Irvine, CA 92618

On Behalf of Respondent Seiko Epson Corporation:	
Louis S. Mastriani, Esq. ADDUCI, MASTRIANI & SCHAUMBERG LLP 1133 Connecticut Avenue, NW, 12 th Floor Washington, DC 20036	() Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Canon Inc.:	
David M. Maiorana, Esq. JONES DAY 901 Lakeside Avenue Cleveland, OH 44114	 () Via Hand Delivery (√) Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Kingston Technology Company,	
Inc.:	•
Christine Yang, Esq. LAW OFFICES OF S.J. CHRISTINE YANG 17220 Newhope Street, Suites 101-103 Fountain Valley, CA 92708	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondents Newegg Inc. and Rosewill Inc.:	8
Kent E. Baldauf, Esq. THE WEBB LAW FIRM 420 Ft. Duquesne Boulevard, Suite 1200 Pittsburgh, PA 15222	 () Via Hand Delivery (√) Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Dane Memory, S.A. (a/k/a Dane-	-Elec
Memory):	
Jeffrey G. Jacobs, Esq. THE LAW OFFICE OF JEFFREY G. JACOBS PC 15770 Laguna Canyon Road, Suite 100	() Xia Hand Delivery (✓) Via Express Delivery () Via First Class Mail

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN COMPUTER AND COMPUTER PERIPHERAL DEVICES, AND COMPONENTS THEREOF, AND PRODUCTS CONTAINING SAME Investigation No. 337-TA-841

NOTICE OF COMMISSION DETERMINATION TO REVIEW IN THE ENTIRETY A FINAL INITIAL DETERMINATION FINDING A VIOLATION OF SECTION 337; SCHEDULE FOR FILING WRITTEN SUBMISSIONS ON CERTAIN ISSUES AND ON REMEDY, THE PUBLIC INTEREST, AND BONDING

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to review in the entirety the final initial determination ("ID") issued by the presiding administrative law judge ("ALJ") on August 2, 2013, finding a violation of section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, in this investigation.

FOR FURTHER INFORMATION CONTACT: Sidney A. Rosenzweig, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2532. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at http://www.usitc.gov. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at http://edis.usitc.gov. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on May 2, 2012, based on a complaint filed by Technology Properties Limited, LLC ("TPL") of Cupertino, California. 77 Fed. Reg. 26041 (May 2, 2012). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, by reason of infringement of certain

claims of U.S. Patent Nos. 6,976,623 ("the '623 patent"), 7,162,549 ("the '549 patent"), 7,295,443 ("the '443 patent"), 7,522,424 ("the '424 patent"), 6,438,638 ("the '638 patent"), and 7,719,847 ("the '847 patent"). The complaint further alleges the existence of a domestic industry. The notice of investigation named twenty-one respondents, some of whom have since settled from the investigation. As a result of these settlements, the '638 patent is no longer at issue, as it has not been asserted against the remaining respondents. The remaining respondents are Acer Inc. of New Taipei City, Taiwan ("Acer"); Canon Inc. of Toyko, Japan; Hewlett-Packard Company of Palo Alto, California ("HP"); HiTi Digital, Inc. of New Taipei City, Taiwan; Kingston Technology Company, Inc. of Fountain Valley, California ("Kingston"); Newegg, Inc. and Rosewill Inc., both of City of Industry, California ("Newegg/Rosewill"); and Seiko Epson Corporation of Nagano, Japan.

On October 4, 2012, the ALJ issued a *Markman* order construing disputed claim terms of the asserted patents. Order No. 23. On January 7-11, 2013, the ALJ conducted a hearing, and on August 2, 2013, the ALJ issued the final ID. The ALJ found that TPL demonstrated the existence of a domestic industry, as required by 19 U.S.C. § 1337(a)(2), through TPL's licensing investment under 19 U.S.C. § 1337(a)(3)(C). ID at 152-55. The ALJ rejected TPL's showing based upon OnSpec Electronic, Inc.'s research and development, and engineering investments for section 337(a)(3)(C), as well as subsections (a)(3)(A) and (a)(3)(B). *Id.* at 155-57.

The ALJ found that the respondents had not shown that any of the asserted patent claims are invalid. However, the ALJ found that TPL demonstrated infringement of the '623 patent, and not the other patents. With respect to the '623 patent, the ALJ found that TPL demonstrated direct infringement of the asserted apparatus claims (claims 1-4 and 9-12). Accordingly, the ALJ found a violation of section 337 by Acer, Kingston and Newegg/Rosewill (collectively, "the '623 respondents") as to these apparatus claims of the '623 patent.

On August 19, 2013, the parties filed petitions for review. TPL's petition challenges the ALJ's noninfringement determinations for the '443, '424, and '847 patents. TPL did not petition for review of the ALJ's noninfringement determination for the '549 patent. The '623 respondents challenge one of the ALJ's claim constructions, and independently challenge the ALJ's finding that the asserted claims of the '623 patent are not anticipated by, or obvious in view of, three pieces of prior art. The '623 respondents also challenge the ALJ's finding that TPL demonstrated the existence of a domestic industry, and subscribe to the analysis presented by the respondents against whom the '623 patent was not asserted.

The respondents against whom the '623 patent was not asserted contingently challenge TPL's evidence of expenditures, as well as the nexus between those expenditures and the asserted patents, for purposes of showing a domestic industry under section 337(a)(3)(C). They also argue that "[t]here is no evidence that TPL's licensees' efforts relate to 'an article protected by' any of the asserted patents." Resp'ts' Pet. 42, 54-56. The respondents against whom the '623 patent was not asserted also argue that the four patents asserted against them are invalid as anticipated or obvious in view of the prior art. They also make additional non-infringement arguments for the

three patents asserted against them for which TPL has petitioned for review (the '443, '424 and '847 patents).

Respondent HP filed a short petition for review on its own behalf. HP argues for a narrow interpretation of articles "protected by" an asserted patent. HP Pet. 5.

On August 27, 2013, the parties filed responses to each other's petitions.

Having examined the record of this investigation, including the ALJ's final ID, the petitions for review, and the responses thereto, the Commission has determined to review the ID in its entirety.

In connection with the Commission's review, the parties are asked to brief only the issues enumerated below. See 19 C.F.R. § 210.43(b)(2).

- (1) Discuss, in light of the statutory language, legislative history, the Commission's prior decisions, and relevant court decisions, including *InterDigital Communications, LLC v. ITC*, 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013) and *Microsoft Corp. v. ITC*, Nos. 2012-1445 & -1535, 2013 WL 5479876 (Fed. Cir. Oct. 3, 2013), whether establishing a domestic industry based on licensing under 19 U.S.C. § 1337(a)(3)(C) requires proof of "articles protected by the patent" (*i.e.*, a technical prong). If so, please identify and describe the evidence in the record that establishes articles protected by the asserted patents.
- (2) Discuss the construction of "accessible in parallel" in view of the prosecution history of the '623 patent (including the Examiner's Statement of Reasons for Allowance, see Salazar v. Proctor & Gamble Co., 414 F.3d 1342, 1347 (Fed. Cir. 2005)), and whether the asserted patent claims are infringed and not invalid based upon that construction. Invalidity arguments not dependent on that claim construction should not be briefed.
- (3) Comment on whether the respondents' invalidity evidence and analysis as to the Pro II system, the Uno Mas article, the Kaneshiro patent, and the '928 Publication, and TPL's evidence and analysis as to the technical prong of the domestic industry requirement, were undisputed. Please cite all evidence in the record that supports your position.
- (4) Discuss whether TPL demonstrated that the products accused of infringing the '443, '424, and '847 patents receive or interface with SD cards that operate in a four-bit-bus mode, and if so, whether the accused products infringe the asserted claims.
- (5) If the Commission were to find that the accused products infringe the '443, '424, and '847 patents, discuss whether the SD specification invalidates the asserted claims of those patents.

In connection with the final disposition of this investigation, the Commission may (1) issue an order that could result in the exclusion of the subject articles from entry into the United States,

and/or (2) issue one or more cease and desist orders that could result in the respondent(s) being required to cease and desist from engaging in unfair acts in the importation and sale of such articles. Accordingly, the Commission is interested in receiving written submissions that address the form of remedy, if any, that should be ordered. If a party seeks exclusion of an article from entry into the United States for purposes other than entry for consumption, the party should so indicate and provide information establishing that activities involving other types of entry either are adversely affecting it or likely to do so. For background, see *Certain Devices for Connecting Computers via Telephone Lines*, Inv. No. 337-TA-360, USITC Pub. No. 2843, Comm'n Op. (December 1994).

If the Commission contemplates some form of remedy, it must consider the effects of that remedy upon the public interest. The factors the Commission will consider include the effect that an exclusion order and/or cease and desist orders would have on (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) U.S. production of articles that are like or directly competitive with those that are subject to investigation, and (4) U.S. consumers. The Commission is therefore interested in receiving written submissions that address the aforementioned public interest factors in the context of this investigation.

If the Commission orders some form of remedy, the U.S. Trade Representative, as delegated by the President, has 60 days to approve or disapprove the Commission's action. *See* Presidential Memorandum of July 21, 2005, 70 *Fed. Reg.* 43251 (July 26, 2005). During this period, the subject articles would be entitled to enter the United States under bond, in an amount determined by the Commission. The Commission is therefore interested in receiving submissions concerning the amount of the bond that should be imposed if a remedy is ordered.

WRITTEN SUBMISSIONS: The parties to the investigation are requested to file written submissions as set forth above. Parties to the investigation, interested government agencies, and any other interested parties are encouraged to file written submissions on the issues of remedy, the public interest, and bonding. Such submissions should address the recommended determination by the ALJ on remedy and bonding. The complainants are also requested to submit proposed remedial orders for the Commission's consideration. The complainants are also requested to state the date that the asserted patents expire and the HTSUS numbers under which the accused products are imported. The written submissions and proposed remedial orders must be filed no later than close of business on Thursday, November 7, 2013 and responses to the Commission's questions should not exceed 75 pages. Reply submissions must be filed no later than the close of business on Friday, November 15, 2013, and such replies should not exceed 50 pages. No further submissions on these issues will be permitted unless otherwise ordered by the Commission.

Persons filing written submissions must file the original document electronically on or before the deadlines stated above and submit 8 true paper copies to the Office of the Secretary by noon the next day pursuant to section 210.4(f) of the Commission's Rules of Practice and Procedure (19 C.F.R. 210.4(f)). Submissions should refer to the investigation number ("Inv. No. 337-TA-841") in a prominent place on the cover page and/or the first page. (See Handbook for Electronic Filing Procedures, http://www.usitc.gov/secretary/fed reg notices/rules/handbook on electronic

filing.pdf). Persons with questions regarding filing should contact the Secretary (202-205-2000).

Any person desiring to submit a document to the Commission in confidence must request confidential treatment. All such requests should be directed to the Secretary to the Commission and must include a full statement of the reasons why the Commission should grant such treatment. See 19 C.F.R. § 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. A redacted non-confidential version of the document must also be filed simultaneously with the any confidential filing. All non-confidential written submissions will be available for public inspection at the Office of the Secretary and on EDIS.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in sections 210.42-46 of the Commission's Rules of Practice and Procedure (19 C.F.R. §§ 210.42-46).

By order of the Commission.

Lisa R. Barton

Acting Secretary to the Commission

Issued: October 24, 2013

On Behalf of Complainant Technology Properties Limited

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served upon the following parties as indicated on **October 24, 2013**.

7935

Lisa R. Barton, Acting Secretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, DC 20436

LLC: Anthony G. Simon, Esq.) Via Hand Delivery THE SIMON LAW FIRM PC) Via Express Delivery Via First Class Mail 800 Market St., Ste. 1700 St. Louis, MO 63101) Other: On Behalf of Respondent Hewlett-Packard Company: Marcia H. Sundeen, Esq.) Via Hand Delivery KENYON & KENYON LLP) Via Express Delivery 1500 K Street, NW Via First Class Mail Washington, DC 20005) Other: On Behalf of Respondent HiTi Digital Inc.: Jenny W. Chen, Esq.) Via Hand Delivery c/o Darrin A. Auito, Esq.) Via Express Delivery Via First Class Mail WESTERMAN HATTORI DANIELS & ADRIAN LLP 1250 Connecticut Avenue, NW, Suite 700) Other: Washington, DC 20036 On Behalf of Respondent Acer Inc.: Eric C. Rusnak, Esq.) Via Hand Delivery) Nia Express Delivery K&L GATES LLP Via First Class Mail 1601 K Street, NW Washington, DC 20006-1600) Other:

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

Inv. No. 337-TA-841

Certificate of Service – Page 2

On Behalf of Respondent Seiko Epson Corporation:	
Louis S. Mastriani, Esq. ADDUCI, MASTRIANI & SCHAUMBERG LLP 1133 Connecticut Avenue, NW, 12 th Floor Washington, DC 20036	() Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Canon Inc.:	
David M. Maiorana, Esq. JONES DAY 901 Lakeside Avenue Cleveland, OH 44114	() Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Kingston Technology Company, Inc.:	
Christine Yang, Esq. LAW OFFICES OF S.J. CHRISTINE YANG 17220 Newhope Street, Suites 101-103 Fountain Valley, CA 92708	() Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondents Newegg Inc. and Rosewill Inc.:	*
Kent E. Baldauf, Esq. THE WEBB LAW FIRM 420 Ft. Duquesne Boulevard, Suite 1200 Pittsburgh, PA 15222	() Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Dane Memory, S.A. (a/k/a Dane-Elec Memory):	2
Jeffrey G. Jacobs, Esq. THE LAW OFFICE OF JEFFREY G. JACOBS PC 15770 Laguna Canyon Road, Suite 100 Irvine, CA 92618	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME Inv. No. 337-TA-841

INITIAL DETERMINATION ON VIOLATION OF SECTION 337 AND RECOMMENDED DETERMINATION ON REMEDY AND BOND

Administrative Law Judge Theodore R. Essex

(August 2, 2013)

Appearances:

For the Complainant Technology Properties Limited LLC:

Anthony G. Simon, Esq.; Benjamin R. Askew, Esq.; Michael P. Kella, Esq.; and Stephanie H. To, Esq. of the Simon Law Firm, P.C. of St. Louis, Missouri

For Respondent Hewlett-Packard Co.:

Marcia H. Sundeen, Esq.; T. Cy Walker, Esq.; and Aimee N. Soucie, Esq. of Kenyon & Kenyon LLP of Washington, D.C.

Rose Cordero Prey, Esq. and Bradley D. Roush, Esq. of Kenyon & Kenyon LLP of New York, New York

For Respondent Seiko Epson Corporation:

Louis S. Mastriani, Esq. and Sarah E. Hamblin, Esq. of Adduci, Mastriani & Schaumberg, LLP of Washington, D.C.

William E. Devitt, P.C.,; Matthew J. Hertko, Esq.; Scott S. Evans, Esq.; Adam M. Kaufmann, Esq. of Kirkland & Ellis LLP of Chicago, Illinois

Edward C. Donovan, Esq. and D. Sean Trainor, Esq. of Kirkland & Ellis LLP of Washington, D.C.

For Respondent Kingston Technology Company, Inc.:

David M. Hoffman, Esq. of Fish & Richardson, P.C. of Austin, Texas

Christine Yang, Esq. and Victoria Hao, Esq. of Law Offices of S.J. Christine Yang of Fountain Valley, California

For Respondent HiTi Digital, Inc.:

Darrin A. Auito, Esq. of Westereman, Hattori, Daniels & Adrian, LLP of Washington, D.C. Jenny W. Chen, Esq. of Chen IP Law Group of Taipei, Taiwan

Vinay V. Joshi of Eastwind Consultants Company Limited of Cleveland, Ohio

For Respondent Canon Inc.:

Calvin P. Griffith, Esq., David M. Maiorana, Esq.; David B. Cochran, Esq.; and Tracy A. Stitt, Esq. of Jones Day of Cleveland, Ohio

Ric Macciaroli, Esq. of Jones Day of Washington, D.C.

For Respondents Newegg Inc. and Rosewill Inc.:

Kent E. Baldauf, Jr., Esq.; Bryan P. Clark, Esq.; and Ryan J. Miller, Esq. of The Webb Law Firm of Pittsburgh, Pennsylvania

For Respondent Acer Inc.:

Eric C. Rusnak, Esq. and Harold Davis, Esq. of K&L Gates LLP of Washington, D.C.

Pursuant to the Notice of Investigation, 77 Fed. Reg. 26041 (May 2, 2012), this is the Initial Determination of the in the matter of *Certain Computers, Computer Peripheral Devices, and Components Thereof, and Products Containing the Same*, United States International Trade Commission Investigation No. 337-TA-841. *See* 19 C.F.R. § 210.42(a).

It is held that no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain computers and computer peripheral devices and components thereof and products containing the same that infringe one or more of claims 7, 11, 19, and 21 of U.S. Patent No. 7,162,549; claims 1, 3, 4, 7, 9, 11, 12, and 14 of the U.S. Patent No. 7,295,443; claims 25, 26, 28, and 39 of U.S. Patent No. 7,522,424; claims 17-19 of the U.S. Patent No. 6,976,623; and claims 1-3 of U.S. Patent No. 7,719,847.

It is held that a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain computers and computer peripheral devices and components thereof and products containing the same that infringe one or more of claims 1-4 and 9-12 of U.S. Patent No. 6,976,623.

TABLE OF CONTENTS

I.	BAG	CKGROUND	
	A.	Institution and Procedural History of This Investigation	6
	B.	The Parties	10
	C.	The Patents at Issue and Overview of the Technology	11
	D.	The Products At Issue	
II.	IMP	ORTATION OR SALE	26
III.		ISDICTION	
IV.	CLA	AIM CONSTRUCTION	31
V.	INF	RINGEMENT DETERMINATION	31
	A.	Applicable Law	
	B.	The '443, '424, and '847 Patents	37
	C.	The '623 Patent	49
	D.	The '549 Patent	69
	E.	TPL's Failure of Proof	81
VI.	VAI	LIDITY	84
	A.	Background	84
	B.	Priority Date	85
	C.	The Prior Art Devices	94
	D.	The '443, '424, and '847 Patents	104
	E.	'549 Patent	114
	F.	'623 Patent	124
VII.	DO	MESTIC INDUSTRY	127
	A.	Applicable Law	127
	В.	Technical Prong.	134
	C.	Economic Prong	
VIII.		CONCLUSIONS OF LAW	
IX.		TIAL DETERMINATION AND ORDER	
I.	Ren	nedy and Bonding	161
	A.	Limited Exclusion Order	
	В.	Cease and Desist Order	
	C.	Bond During Presidential Review Period	164
II.	Con	clusion	166

The following abbreviations may be used in this Initial Determination:

CDX	Complainants' demonstrative exhibit				
CIB	Complainants' initial post-hearing brief				
CPX	Complainants' physical exhibit				
CRB	Complainants' reply post-hearing brief				
CX	Complainants' exhibit				
Dep.	Deposition				
JX	Joint Exhibit				
RDX	Respondents' demonstrative exhibit				
RIB	Respondents' initial post-hearing brief				
RPX	Respondents' physical exhibit				
RRB	Respondents' reply post-hearing brief				
RRX	Respondents' rebuttal exhibit				
RX	Respondents' exhibit				
SIB	Staff's initial post-hearing brief				
SRB	Staff's reply post-hearing brief				
Tr.	Transcript				

I. BACKGROUND1

A. Institution and Procedural History of This Investigation

By publication of a notice in the *Federal Register* on May 2, 2012, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission instituted Investigation No. 337-TA-841 with respect to U.S. Patent Nos. 6,976,623 ("the '623 Patent"); 7,162,549 ("the '549 Patent"); 7,295,443 ("the '443 Patent"); 7,522,424 ("the '424 Patent"); 6,438,638 ("the '638 Patent"); and 7,719,847 ("the '847 Patent") to determine:

[W]hether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of the sale for importation, or the sale within the United States after importation of certain computers and computer peripheral devices and components thereof and products containing the same that infringe one or more of claims 1-4, 9-12, and 17-19 of the '623 patent; claims 7, 11, 19, and 21 of the '549 patent; claims 1, 3, 4, 7, 9, 11, 12, and 14 of the '443 patent; claims 25, 26, 28, and 39 of the '424 patent; claims 13-18 and 25-27 of the '638 patent; and claims 1-3 of the '847 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

77 Fed. Reg. 26041 (May 2, 2012).

The complainant is Technology Patent Licensing Company, LLC ("TPL") of Cupertino, California. (*Id.*) The Notice of Investigation named the respondents as Acer Inc. of New Taipei City, Taiwan; Brother Industries, Ltd. of Aichi, Japan; Canon Inc. of Tokyo, Japan; Dane-Elec. Memory of Bagnolet Cedex, France; Dell Inc. of Round Rock, Texas; Falcon Northwest Computer Systems, Inc. of Medford, Oregon; Fujitsu Limited, of Tokyo, Japan; Jasco Products

¹ The ALJ notes, at the outset, that this case has suffered from the parties failing to heed the frequent warning to simplify their case as much as possible that I (and other ALJs) have given in the past. TPL has pushed forward asserting too many patents and too many claims, against too many parties and too many products. TPL's case would have benefitted tremendously by simplifying this case in one of these four dimensions.

Yet, TPL cannot alone be blamed for the unneeded density in this case. Respondents' briefs reveal their reluctance to give up even a single defense or argument, no matter how small or meritless.

Company of Oklahoma City, Oklahoma; Hewlett-Packard Company of Palo Alto, California; HiTi Digital, Inc. of New Taipei City, Taiwan; Kingston Technology Company, Inc. of Fountain Valley, California; Micron Technology Company, Inc. of Boise, Idaho; Lexar Media, Inc. of Fremont, California; Microdia Limited, of San Jose, California; Newegg, Inc. of City of Industry, California; Rosewill, Inc. of City of Industry, California; Sabrent of Chatsworth, California; Samsung Electronics Co., Ltd. of Seoul, Korea; Seiko Epson Corporation of Nagano, Japan; Shuttle Inc. of Taipei, Taiwan; and Systemax Inc. of Port Washington, New York. The Commission Investigative Staff ("Staff") of the Office of Unfair Import Investigations was also a party in this investigation. (*Id.*)

On May 22, 2012, the ALJ granted TPL's and Samsung's joint motion to terminate the investigation with respect to Samsung. (Order No. 12.) On June 18, 2012, the Commission determined not to review the initial determination. (Commission Determination Not to Review an Initial Determination Granting Joint Motion to Terminate).

On June 8, 2012, the ALJ issued an order granting a motion to terminate Jasco Products Company on the basis of a settlement agreement. (Order No. 14.) On that same day, the ALJ granted a motion to terminate Falcon Northwest Computer Systems, Inc. on the basis of a consent order stipulation and consent order. (Order No. 15.) On June 29, 2012, the Commission determined not to review either order. (Commission Determination Not to Review an Initial Determination Terminating the Investigation With Respect to Respondent Falcon Northwest Computer Systems, Inc. Based on a Consent Order Stipulation; Entry of Consent Order and Commission Determination Not to Review an Initial Determination Granting a Joint Motion to Terminate the Investigation With Respect to Respondent Jasco Products Company, LLC.)

On June 13, 2012, Staff filed a notice of non-participation. (Commission Investigative Staff's Notice of Non-Participation.)

On August 9, 2012, the ALJ held a *Markman* hearing. TPL and respondents Dell, Inc., Brother Industries, Ltd., Fujitsu Limited, Newegg Inc., Rosewill Inc., Seiko Epson Corporation, Acer, Inc., Canon Inc., Micron Technology, Inc., Lexar Media, Inc., Systemax Inc., HiTi Digital Inc., Shuttle Inc., Hewlett-Packard Co., and Kingston Technology, Inc. participated in the *Markman* hearing. On October 4, 2012, the ALJ issued the *Markman* order construing the disputed claim terms. (Order No. 23.)

On October 10, 2012, the ALJ granted a motion to terminate respondent Sabrent on the basis of settlement agreement. (Order No. 24.) On November 9, 2012, the Commission determined not to review the order. (Commission Determination Not to Review an Initial Determination Granting Complainant's Motion to Terminate the Investigation With Respect to Respondent Sabrent.)

On October 23, 2012, the ALJ issued an initial determination finding respondent Microdia Limited in default for failure to respond to the Complaint and Notice of Investigation. (Order No. 26.) On November 8, 2012, the Commission determined not to review the order. (Commission Determination Not to Review to Initial Determination Finding Respondent Microdia Limited in Default.)

On October 26, 2012, the ALJ issued an initial determination terminating respondent Shuttle, Inc. on the basis of consent order. (Order No. 28.) On November 26, 2012, the Commission determined not to review the order. (Commission Determination Not to Review an Initial Determination Terminating the Investigation With Respect to Respondent Shuttle, Inc. Based on a Consent Order Stipulation; Entry of Consent Order.)

On November 6, 2012, the ALJ issued an initial determination granting a joint motion to terminate respondents Micron Technology, Inc. and Lexar Media, Inc. on the basis of settlement agreement. (Order No. 29.) On December 12, 2012, the Commission determined not to review the order. (Commission Determination Not to Review an Initial Determination Granting a Joint Motion to Terminate the Investigation With Respect to Respondents Micron Technology, Inc. and Lexar Media, Inc.)

On November 27, 2012, the ALJ issued an initial determination granting a joint motion to terminate respondent Systemex, Inc. on the basis of settlement agreement. (Order No. 34.) On December 20, 2012, the Commission determined not to review the order. (Commission Determination Not to Review an Initial Determination Granting a Joint Motion to Terminate the Investigation With Respect to Respondent Systemax Inc.)

On January 8, 2012, the ALJ issued an initial determination granting a joint motion to terminate with respect to respondent Fujitsu Limited. (Order No. 44.) On January 29, 2013, the Commission determined not to review the order. (Commission Determination Not to Review an Initial Determination Granting a Joint Motion to Terminate the Investigation with Respect to Respondent Fujitsu Limited.)

On January 7-11, 2013, the ALJ held an evidentiary hearing.

On April 22, 2013, TPL filed a notice that it had filed for reorganization under Chapter 11 of the U.S. Bankruptcy Code in the Bankruptcy Court for Northern District California. (EDIS Doc. ID 508078.)

On June 19, 2013, the ALJ issued an initial determination granting a joint motion to terminate with respect to respondent Dell, Inc. (Order No. 46.) On July 16, 2013, the Commission determined not to review the order. (Commission Determination Not to Review an

Initial Determination Granting Joint Motion to Terminate Investigation with Respect to Respondent Dell Inc. Based on a Settlement Agreement.)

On August 1, 2013, TPL and respondent Brother Industries, Inc. filed a joint motion to terminate Brother from the investigation based on settlement agreement. (Motion Docket No. 841-093.) On this same day, the ALJ granted the motion to terminate. (*See* Order No. 48.)

B. The Parties

1. Technology Properties Limited, LLC

Complainant Technology Properties Limited, LLC ("TPL") is a California limited liability company involved in the licensing of technology with its principal place of business in Cupertino, California. TPL is the exclusive licensee of the asserted patents. (CIB at 4.)

2. Acer, Inc.

Respondent Acer, Inc. ("Acer") is a Taiwanese corporation involved in the manufacture and sale of consumer electronics, including laptops, with a principal place of business in New Taipei City, Taiwan. (RIB at 10-11.)

3. Canon, Inc.

Respondent Canon, Inc. ("Canon") is a Japanese corporation involved in the manufacture and sale of consumer electronics, including printers and copiers, with its principal place of business in Tokyo, Japan. (RIB at 10-11.)

4. Hewlett-Packard Co.

Respondent Hewlett-Packard Co. ("HP") is a Delaware corporation involved in the manufacture and sale of consumer electronics, such as printers, personal computers, and laptops, with a principal place of business in Palo Alto, California. (RIB at 10-11.)

5. HiTi Digital, Inc.

Respondent HiTi Digital, Inc. ("HiTi") is a Taiwanese corporation involved in the manufacture and sale of consumer electronics with its principal place of business in New Taipei City, Taiwan. (RIB at 10-11.)

6. Kingston Technology Company, Inc.

Respondent Kingston Technology Company, Inc. ("Kingston") is a California corporation with a principal place of business in Fountain Valley, California. (RIB at 10-11.)

7. Newegg, Inc. and Rosewill Inc.

Respondent Newegg, Inc. ("Newegg") is a Delaware corporation involved in the sale of consumer electronics with a principal place of business in City of Industry, California. Respondent Rosewill Inc. is a California corporation that is a subsidiary of Newegg and has its principal place of business in City of Industry, California. (RIB at 10-11.)

8. Seiko Epson Corporation

Respondent Seiko Epson Corporation ("Seiko Epson") is a Japanese corporation involved in the manufacture and sale of printers and other consumer electronics with its principal place of business in Nagano, Japan. (RIB at 10-11.)

C. The Patents at Issue and Overview of the Technology

The following Table summarizes the patents and claims that are asserted against Respondents in this investigation.

			3	US	'44	13				US	424	1	US	s '8	47		US	'54	9					ι	JS'	623	T.			
121 May 181 181 181	1	3	4	7	9	11	12	14	25	26	28	29	1	2	3	7	11	19	21	1	2	3	4	9	10	11	12	17	18	19
Acer					Х	х	X	Х	Х	х	х	х	х	х	х	X	х	х	Х	х	х	х	х	х	х	Х	Х	х	х	х
Canon	х	x	х	X	Х	Х	X	X	х	х	X	х								188										
HP	х	х	х	х	Х	х	х	х	х	х	х	х	х		х	Х	Х	Х	Х											
HITI					х			х	х	х	Х	х																		
Kingston					Х	х	х		х	х	Х	х		9		***		157	1	х	х	1		х	х	1		х	х	
NewEgg and Rosewill					X	х	х		X	х	X	х				X	х	x	x	X	х	x	x	x	х	X	х	х	х	х
Seiko Epson	х	x		х	х	х		х	х	х	х	х				х	х	х	х	14	100			1/2	-					

Table 1 - Summary of Patents and Claims Asserted by TPL

1. The '638 Patent

U.S. Patent No. 6,438,638 ("the '638 Patent"), entitled "Flashtoaster for Reading Several Types of Flash-Memory Cards With or Without a PC," was filed on July 6, 2000, and issued on (See JX-0005). Larry Lawson Jones, Sreenath Mambakkam, and August 20, 2002. Arocklyaswamy Venkidu are the named inventors of the '638 Patent. (Id.) The '638 Patent generally discloses and claims flash memory readers, particularly for interfacing several types of flash-memory cards to a personal computer. (Id. at Abstract.) This patent was originally asserted only against respondent Dell. Dell is no longer a party to this investigation. The '638 Patent was only asserted against respondent Dell. After the hearing and before the issuance of this Final ID, Dell was terminated from this investigation based on a settlement agreement. (See Order No. 46.) Because the '638 Patent is not asserted against any remaining respondent to this investigation, the ALJ finds that there are no active infringement allegations remaining. Accordingly, the ALJ finds the infringement allegations with respect to the '638 Patent are MOOT. The ALJ also finds any validity or domestic industry allegations MOOT. The ALJ includes the '638 Patent here only because it remains an issue because TPL asserts that a number of the asserted patents are entitled to claim priority to this patent.

2. The '443 Patent

U.S. Patent No. 7,295,443 ("the '443 Patent"), entitled "SmartConnect Universal Flash Media Card Adapters," was filed on July 24, 2006, and issued on November 13, 2007. (*See JX-0003*). Larry Lawson Jones, Sreenath Mambakkam, and Arocklyaswamy Venkidu are the named inventors of the '443 Patent. (*Id.*)

The asserted claims of the '443 Patent are claims 1, 3, 4, 7, 9, 11, 12, and 14. Claims 1 and 9 are independent claims and claims 3, 4, and 7 depend on claim 1 and claims 11, 12, and 14 depend on claim 9. These claims read as follows (with the disputed claim terms in **bold**):

1. A multi-memory media adapter comprising:

a first planar element having an upper surface and a lower surface, the first planar element comprising molded plastic;

a second planar element having an upper surface and a lower surface, the first planar element and the second planar element disposed such that a port is formed between the lower surface of the first planar element and the upper surface of the second planar element, the port capable of receiving a memory media card, the second planar element comprising molded plastic;

at least one set of contact pins protruding from the lower surface of the first planar element or the upper surface of the second planar element such that the at least one set of contact pins are disposed within the port, the at least one set of contact pins capable of contacting a set of memory media card contacts, wherein the at least one set of **contact pins are integrated within the molded plastic** of the first planar element or the second planar element; and

a controller chip to map at least a subset of the at least one set of contact pins to a set of signal lines or power lines, based on an identified type of a memory media card.

- 3. The multi-memory media adapter of claim 1 having a system connector surface-mounted thereon, the system connector electrically coupled to the at least one set of contact pins.
- 4. The multi-memory media adapter of claim 3 wherein the system connector is selected from the group comprising of a PCMCIA, USB, WiFi, Firewire, IDE, serial ATA connector, an IDE, and a CompactFlash connector.

7. The multi-memory media adapter of claim 1 having at least 18 contact pins configured to accommodate at least one of a group comprising, an xD, MMC/SD, Memory Stick, miniSD, RSMMC, and MS Duo.

9. A system comprising:

a multi-memory media adapter to read data from a plurality of memory media cards, the multi-memory media adapter having at least one port formed between an upper portion and a lower portion of the multi-memory media adapter, the port to receive a memory media card of the plurality of memory media cards;

a set of contact pins protruding from the upper portion or the lower portion, the set of contact pins to contact a set of memory media card contacts, wherein the set of **contact pins are integrated within molded plastic** of the upper portion or the lower portion; and

a controller integrated into the multi-memory media adapter to map at least a subset of the set of contact pins to a set of signal lines or power lines, based an identified type of the memory media card.

- 11. The system of claim 9 further comprising a system connector, the system connector electrically coupled to the set of contact pins.
- 12. The system of claim 11 wherein the system connector is selected from the group comprising of a PCMCIA, USB, WiFi, Firewire, IDE, serial ATA connector, an IDE, and a CompactFlash connector.
- 14. The system of claim 9 having at least eighteen contact pins configured to accommodate at least one of a group comprising, an xD, MMC/SD, Memory Stick, miniSD, RSMMC, and MS Duo.

The '443 Patent is directed to certain aspects of multi-memory flash media adapters that can interface with several types of flash media cards. (*Id.* at Abstract.)

3. The '424 Patent

U.S. Patent No. 7,522,424 ("the '424 Patent"), entitled "SmartConnect Universal Flash Media Card Adapters," was filed on September 19, 2007, and issued on April 21, 2009. (*See JX-0004*). Larry Lawson Jones, Sreenath Mambakkam, and Arocklyaswamy Venkidu are the named inventors of the '424 Patent. (*Id.*)

The asserted claims of the '424 Patent are claims 25, 26, 28, and 29. Claims 25 and 28 are independent claims and claims 26 and 29 depend on claims 25 and 28 respectively. The asserted claims are (with disputed terms in bold):

25. Apparatus comprising:

a housing having a port and a surface;

an interconnection means having a plurality of interconnection pins;

one or more sets of contact pins mounted on said surface at locations adapted to interface with the electrical contacts of a corresponding one of a plurality of different types of memory media cards when inserted into said port;

a set of signal lines connected to said interconnection pins;

means for identifying the type of memory card inserted into said port;

means for mapping power, ground or data signals between said interconnection pins and said one or more contact pins depending upon the identification of the type of memory card inserted into said port.

26. Apparatus according to claim 25 where the means for mapping comprises a controller.

28. Apparatus comprising:

a housing having a port and a surface;

a plurality of sets of contact pins mounted on said surface at locations adapted to interface with the electrical contacts of a corresponding one of a plurality of different type memory media cards when inserted into said port;

a set of signal lines connected to an interconnection means;

means for identifying the type of memory card inserted into said port;

means for mapping power, ground or data signals between said interconnection means and said one or more contact pins depending upon the identification of the type of memory card inserted into said port.

29. Apparatus according to claim 28 where said means for mapping comprises a controller.

The '424 Patent is directed to certain aspects of multi-memory flash media adapters that can interface with several types of flash media cards. (*Id.* at Abstract.)

4. The '847 Patent

U.S. Patent No. 7,719,847 ("the '847 Patent"), entitled "SmartConnect Universal Flash Card Adapter," was filed on August 11, 2008, and issued on May 18, 2010. (See JX-0006). Larry Lawson Jones, Sreenath Mambakkam, and Arocklyaswamy Venkidu are the named inventors of the '847 Patent. (Id.)

TPL has asserted Claims 1-3 of the '847 patent. Claim 1 is an independent claim and claims 2 and 3 depend on claim 1. The asserted claims read as follow (with the disputed terms in bold):

1. Apparatus comprising:

a housing having a port and a surface;

a plurality of sets of **contact pins** mounted on said surface at locations adapted to interface with the electrical contacts **of a plurality of different type memory media cards** when inserted into said port;

a set of signal lines connected to a controller, the number of signal lines being fewer than the number of **contact pins**;

the signal lines located between the controller and an **interconnection means**; said interconnection means being located between the signal lines and the plurality of sets of contact connecting said signal lines to said one or more **contact pins**; and

means for mapping power, ground or data signals between said signal lines and said <u>contact pins</u> depending upon the identification of the type of memory card inserted into said port;

wherein the means for mapping comprises a controller.

- 2. Apparatus according to claim 1 where said controller comprises means for determining the type of memory card inserted into said port.
- 3. Apparatus according to claim 1 wherein said interconnection means is selected

from a group consisting of simple wires, flat cables, printed circuit board interconnections, or wiring traces.

The '847 Patent is directed generally towards flash media adapters. (Id. at Abstract.)

5. The '549 Patent

U.S. Patent No. 7,162,549 ("the '549 Patent"), entitled "Multimode Controller for Intelligent and 'Dumb' Flash Cards," was filed on October 2, 2002, and issued on January 9, 2007. (See JX-0002). Larry Lawson Jones, Sreenath Mambakkam, Arocklyaswamy Venkidu, and Nicholas Antonopoulos are the named inventors of the '549 Patent. (Id.)

TPL asserted claims 7, 11, 19 and 21. Claims 7 and 11 are independent claims and claims 19 and 21 depend on claims 7 and 11, respectively. The asserted claims are (with disputed terms in bold):

7. A method comprising:

using a controller chip to interface a flash storage system with or without a controller to a computing device, the controller chip comprising a **flash adapter**, wherein the flash storage system comprises a flash section and at least a medium ID;

determining whether the flash storage system includes a controller for error correction; and

in an event where the flash storage system does not have a controller for error correction, using firmware in the flash adapter to perform operations to manage error correction of the flash section, including bad block mapping of the flash section in the flash storage system that is coupled to the **flash adapter section**.

11. A system comprising:

a computing device;

a flash storage system comprising a flash section and at least a portion of a medium ID; and

a controller chip coupled between the computing device and the flash storage system to interface the flash storage system to the computing device, the controller chip comprising an interface mechanism capable of receiving flash storage systems with controller and controllerless flash storage systems, a detector

to determine whether the flash storage system includes a controller for error correction and a **flash adapter** which comprises firmware to perform, in an event where the flash storage system does not have a controller for error correction, operations to manage error correction of the flash section, including bad block mapping of the flash section in the flash storage system that is coupled to the **flash adapter section**.

- 19. The method of claim 7, wherein the flash adapter further comprises a plurality of interfaces for receiving a plurality of flash storage systems.
- 21. The system of claim 11, wherein the flash adapter further comprises a plurality of interfaces for receiving a plurality of flash storage systems.

The '549 Patent is directed to a controller that can interface with memory cards, both with and without onboard controllers, and perform error correction including block mapping. (*Id.* at Abstract.)

6. The '623 Patent

U.S. Patent No. 6,976,623 ("the '623 Patent"), entitled "Flash Juke Box," was filed on October 2, 2002, and issued on January 9, 2007. (*See* JX-0001). Larry Lawson Jones, Sreenath Mambakkam, and Arocklyaswamy Venkidu are the named inventors of the '623 Patent. (*Id.*) TPL has asserted Claims 1-4, 9-12 and 17-19 of the '623 Patent. Claims 1, 9, and 17 are independent claims. Claims 2-4 depend on claim 1, claims 10-12 depend on claim 9, and 18-19 depend on claim 17. The asserted claims read as follow (with the disputed terms in bold):

1. A memory card interface apparatus comprising:

- a plurality of memory card interfaces comprising a first 30 subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type, wherein the memory card of the first type and the memory card of the second type are **accessible in parallel** to transfer data from the memory card of the first type to the memory card of the second type.
- 2. The apparatus of claim 1, wherein at least one of the memory card interfaces is configured to read a plurality of different memory card types.
- 3. The apparatus of claim 1, wherein at least one of the memory card

interfaces includes an indicator identifying a status of an operation for a respective memory reader interface.

4. The apparatus of claim 1, wherein the indicator includes a light indicating data is being written to a card in the respective memory card interface.

9. A system comprising:

- a controller circuit;
- a bus coupled to the controller circuit;
- a plurality of memory card interfaces comprising a first subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type, wherein the memory card of the first type and the memory card of the second type are **accessible in parallel** to transfer data from the memory card of the first type to the memory card of the second type.
- 10. The system of claim 7, wherein at least one of the memory card interfaces is configured to interface with a plurality of different memory card types.
- 11. The system of claim 7, wherein at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory card interface.
- 12. The system of claim 9, wherein the indicator includes a light indicating data is being written to a card in the respective memory card interface.

17. A method comprising:

providing access to a plurality of memory card interfaces comprising a first subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type;

and selectively operating the first and second subsets to provide access to the memory cards of the first and second types in parallel to transfer data from the memory card of the first type to the memory card of the second type.

- 18. The method of claim 17, wherein at least one of the memory card interfaces is configured to interface with a plurality of different memory card types.
- 19. The method of claim 17, wherein at least one of the memory card interfaces

includes an indicator identifying a status of an operation for a respective memory card interface.

The '623 Patent relates generally to flash memory readers. (Id.)

D. The Products At Issue

1. The Accused Products

The accused products are listed below by respondent in charts. The claims for the patents asserted against each product are identified in the charts. If no claims are listed, that patent is not asserted against the product for which no claims are listed.

		RESPONDENT	ACER		
Model Number	'443	'424	'847	'549	'623
Aspire AX 1935 (Rev. A.)	Cl. 9, 11, 12, 14	Cl. 25, 26, 28, 29	Cl. 1, 2, 3	Cl. 7, 11, 19, 21	
Aspire M3970				4. 100	Cl. 1-4, 9-12, 17-19
Aspire AS7750 (Rev. B)	Cl. 9, 14	Cl. 25, 26, 28, 29	Cl. 1, 2, 3	Cl. 7, 11, 19, 21	
Aspire AS5349 (Rev. A)	Cl. 9	Cl. 25, 26			
Aspire AS5349 (Rev. B)	Cl. 9	Cl. 25, 26	-	X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Aspire S5 S5-391	Cl. 9	Cl. 25, 26			
Aspire V5 V5-431 (Rev. A)	Cl. 9	Cl. 25, 26		3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Aspire V5 V5-431 (Rev. B)	Cl. 9	Cl. 25, 26			
Chromebook AC700 (Rev. A)	Cl. 9	Cl. 25, 26, 28, 29			
Chromebook AC700 (Rev. B)	Cl. 9	Cl. 25, 26, 28, 29			
Aspire AS5750 (Rev. A)	Cl. 9	Cl. 25, 26, 28, 29			
Aspire AS5750 (Rev. B)	Cl. 9	Cl. 25, 26, 28, 29			
Aspire AS7750 (Rev. A)	Cl. 9	Cl. 25, 26, 28, 29	X + 4		
Aspire AS8951G	Cl. 9	Cl. 25, 26, 28, 29	N 0 0		
Aspire V3 V3-551 (Rev. A)	Cl. 9	Cl. 25, 26, 28, 29	1. 4		

		RESPONDENT	ACER		
Model Number	'443	'424	'847	'549	'623
Aspire V3 V3-551 (Rev. B)	Cl. 9	Cl. 25, 26, 28, 29	8 9 5		
Aspire AZ3771- UR20P	Cl. 9	Cl. 25, 26			
Aspire Slimline All- in-one A5600U	Cl. 9	Cl. 25, 26	* * 1		
Aspire All in One AZ1620	Cl. 9	Cl. 25, 26		h \	
All in One Z3 AZ3170	Cl. 9	Cl. 25, 26			
Veriton Z VZ291G	Cl. 9	Cl. 25, 26	13		
ZX4250	Cl. 9	Cl. 25, 26	- 4		
Veriton N281G	Cl. 9	Cl. 25, 26			. 1
Aspire M3 AM3420 (Rev. A)	Cl. 9	Cl. 25, 26	-		
Aspire M3 AM3420 (Rev. B)	Cl. 9	Cl. 25, 26			
Aspire X1 AX1935 (Rev. B)	Cl. 9	Cl. 25, 26, 28, 29			
SX2370 (Rev. A)	Cl. 9	Cl. 25, 26			22.
SX2370 (Rev. B)	Cl. 9	Cl. 25, 26,			
Revo 70 RL70	Cl. 9	Cl. 25, 26, 28, 29	*		27

	RESPONDENT C	CANON
Model Number	'443	'424
PIXMA-MG8220	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29
PIXMA-MG5520	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29
PIXMA-MG6220	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29
PIXMA-MX712	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29
PIXMA-MG5320	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29
Colorimage CLASS MF9280Cdn	Cl. 9	Cl 25, 26, 28, 29
Colorimage Runner C1030	Cl. 9	Cl 25, 26, 28, 29
Colorimage Runner C1030If	Cl. 9	Cl 25, 26, 28, 29
SELPHY CP800	Cl. 9	Cl 25, 26
SELPHY CP900	Cl. 9	Cl 25, 26
Canon Multimedia reader/writer A1 3721B001AA-Group E	C1. 9	Cl 25, 26, 28, 29

RESPONDENT CANON					
Model Number	'443	'424			
Canon Multimedia reader/writer A1 3721B002AA-Group E	Cl. 9	Cl 25, 26, 28, 29			

RESPONDENT HEWLETT PACKARD					
Model Number	'443	'424	'847	'549	
HP 644491-001	Cl. 9, 11, 12 14	Cl. 25, 26		Cl. 7, 11, 19, 21	
6in1 Media Card Reader	Cl. 9, 11, 12, 14	Cl. 25, 26, 28, 29	Cl. 1, 3	Cl. 7, 11, 19, 21	
HP Slimline S5-1260	Cl. 9, 11, 12, 14	Cl. 25, 26, 28, 29	Cl. 1, 3	Cl. 7, 11, 19, 21	
HP Pavilion HPE Phoenix h9-1130	Cl. 9, 11, 12 14	Cl. 25, 26, -		Cl. 7, 11, 19, 21	
HP Photosmart 5510	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29			
HP Photosmart 5512	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29			
HP Photosmart 5514	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29			
HP Photosmart 5515	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29		1	
HP Photosmart 5520	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29			
HP Photosmart 5522	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29	4 .	E	
HP Photosmart 5525	Cl. 1, 3, 4, 7, 9, 11, 12, 14	Cl. 25, 26, 28, 29			
HP 630/631	Cl. 9	Cl. 25, 26		4	
HP2000	Cl. 9	Cl. 25, 26		4	
HP430/431	Cl. 9	Cl. 25, 26		4 []	
HP435/436	Cl. 9	Cl. 25, 26			
HP635/636	Cl. 9	Cl. 25, 26			
Presario CQ57 (HP2000)	Cl. 9	Cl. 25, 26			
HP OfficeJet Pro 8600 e-AIO	Cl. 9	Cl. 25, 26			
HP OfficeJet Pro 8600 Plus e-AIO	Cl. 9	Cl. 25, 26			
HP OfficeJet Pro 8600 Premium e-AIO	Cl. 9	Cl. 25, 26			

	RESPONDENT HEWLETT PACKARD					
Model Number	'443	'424	'847	'549		
Pavilion dv3-	Cl. 9	Cl. 25, 26, 28, 29				
Pavilion dv7	Cl. 9	Cl. 25, 26, 28, 29				
Pavilion dv4	Cl. 9	Cl. 25, 26, 28, 29				
Pavilion dm4	Cl. 9	Cl. 25, 26, 28, 29				
Pavilion dv3	Cl. 9	Cl. 25, 26, 28, 29				
Pavilion dm4	Cl. 9	Cl. 25, 26				
Pavilion dv4	Cl. 9	Cl. 25, 26				
Pavilion dv6	Cl. 9	Cl. 25, 26, 28, 29				
Pavilion dv7	Cl. 9	Cl. 25, 26, 28, 29				
Envy 13	Cl. 9	Cl. 25, 26				
Pavilion g6	Cl. 9	Cl. 25, 26				
Pavilion g7	Cl. 9	Cl. 25, 26				
ENVY 15	Cl. 9	Cl. 25, 26				
Pavilion dm1	Cl. 9	Cl. 25, 26, 28, 29				
Pavilion dv6	Cl. 9	Cl. 25, 26	3-			
Pavilion dv7	Cl. 9	Cl. 25, 26	# 10 m			
ENVY 17	Cl. 9	Cl. 25, 26, 28, 29				
HP ENVY 14 SPECTRE	Cl. 9	Cl. 25, 26	y *			
HP 2000	Cl. 9	Cl. 25, 26				
HP 650	Cl. 9	Cl. 25, 26				
Presario CQ58 HP 2000	Cl. 9	Cl. 25, 26	-			
Pavilion dm4	Cl. 9	Cl. 25, 26				
Pavilion dv4	Cl. 9	Cl. 25, 26				
ENVY 14	Cl. 9	Cl. 25, 26		- x - x - x		
ENVY 15	Cl. 9	Cl. 25, 26				
ENVY 17	Cl. 9	Cl. 25, 26				

	RESPONDENT	THEWLETT PACKARD		
Model Number	³ 443	'424	'847	'549
HP 450	Cl. 9	Cl. 25, 26		
HP 455	Cl. 9	Cl. 25, 26	wild of the second of the seco	
Presario CQ58HP 2000	Cl. 9	Cl. 25, 26		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ENVY 14	Cl. 9	Cl. 25, 26		-5.
Pavilion dm1	Cl. 9	Cl. 25, 26		
ENVY 6	Cl. 9	Cl. 25, 26		lv j
Pavilion dm1	Cl. 9	Cl. 25, 26		
Pavilion dv7	Cl. 9	Cl. 25, 26		
ENVY 4	Cl. 9	Cl. 25, 26		
ENVY 6	Cl. 9	Cl. 25, 26		
Pavilion m6	Cl. 9	Cl. 25, 26		
Pavilion dv6	Cl. 9	Cl. 25, 26	2 17	
Pavilion dv6	Cl. 9	Cl. 25, 26	an an	× ,3
Pavilion dv7	Cl. 9	Cl. 25, 26		
Pavilion dv4	Cl. 9	Cl. 25, 26		3.0
Pavilion g6	Cl. 9	Cl. 25, 26		-

	RESPONDENT HITI						
Model Number	'443	'424					
P110S	Cl. 9, 14	Cl. 25, 26, 28, 29					
P510S/Si	Cl. 9, 14	Cl. 25, 26, 28, 29					
BS-id400	Cl. 9, 14	Cl. 25, 26, 28, 29					
S420	Cl. 9, 14	Cl. 25, 26, 28, 29					
P510K	Cl. 9	Cl. 25, 26					
T570	Cl. 9	Cl. 25, 26					

RESPONDENT KINGSTON				
Model Number	'443	'424	'623	
FCR-HS219/1	Cl. 9, 11, 12	Cl. 25, 26, 28, 29	Cl. 1, 2, 9, 10, 17, 18	
FCR-HS219/CR	Cl. 9, 11, 12	Cl. 25, 26, 28, 29	Cl. 1, 2, 9, 10, 17, 18	
FCR-HS219/KR	Cl. 9, 11, 12	Cl. 25, 26, 28, 29	Cl. 1, 2, 9, 10, 17, 18	
FCR-HS3	Cl. 9	Cl. 25, 26, 28, 29	Cl. 1, 9, 17	
FCR-MLG3	Cl. 9	Cl. 25, 26, 28, 29	Cl. 1, 9, 17	

RESPONDENTS NEWEGG/ROSEWILL					
Model Number	'443	'424	'549	'623	
RCR-YJ-EX601	Cl. 9, 11, 12	Cl. 25, 26	Cl. 7, 11, 19, 21	Cl. 1-4, 9-12, 17-19	
RCR-IM5001	Cl. 9, 11, 12	Cl. 25, 26		Cl. 1-4, 9-12, 17-19	
RCR-IC002	Cl. 9, 11, 12	Cl. 25, 26	Cl. 7, 11, 19, 21	Cl. 1-4, 9-12, 17-19	
RDCR-11004	Cl. 9, 11, 12	Cl. 25, 26	Cl. 7, 11, 19, 21	Cl. 1-4, 9-12, 17-19	
RCR-AK-IM5002	Cl. 9, 11, 12	Cl. 25, 26		Cl. 1-4, 9-12, 17-19	

RESPONDENT SEIKO EPSON				
Model Number	'443	'424	'549	
Seiko Epson Artisan 730	Cl. 1, 3, 7, 9, 11, 14	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
Artisan 725 (Arctic Edition)	Cl. 1, 3, 7, 9, 11, 14	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
Artisan 725	Cl. 1, 3, 7, 9, 11, 14	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
Artisan 837	Cl. 1, 3, 7, 9, 11, 14	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
Stylus NX330	Cl. 1, 9	Cl. 25, 26, 28, 29	7	
Stylus NX430	Cl. 1, 9	Cl. 25, 26, 28, 29		
PM 300	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
Stylus NX625	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce 545	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce 630	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce 635	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce 645	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce 840	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce 845	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce WF-7510	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
WorkForce WF-7520	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
Stylus NX530	Cl. 1, 9	Cl. 25, 26, 28, 29	Cl. 7, 11, 19, 21	
XP-400	Cl. 1, 9	Cl. 25, 26, 28, 29	in the second se	

2. Domestic Industry Products

TPL contends that products incorporating OnSpec chips meets the limitations of all but the '623 Patent. TPL contends that those chips were incorporated in Addonics products (among others). With respect to the '623 Patent, TPL contends that the products of its licensees Lenovo and Belkin practice that patent. The technical prong products and the claims that they are alleged to practice are listed in the chart below.

DOMESTIC INDUSTRY PRODUCTS						
Model Number	'443	'424	'549	'847	'638	'623
Addonics ADPMAF-X	Cl. 9	Cl. 25	Cl. 11	A W		
Addonics AEPDDESU-WP	2			Cl. 1		
Addonics AEIDDSAU-WP		in Par or	0.18**		Cl. 13	
Lenovo H320- 4041-1JU						Cl. 1
Belkin PM00525-A						Cl. 1

II. IMPORTATION OR SALE

Section 337 of the Tariff Act prohibits the importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignees of articles that infringe a valid and enforceable United States patent. *See* 19 U.S.C. § 1337(a)(1)(B). A complainant "need only prove importation of a single accused product to satisfy the importation element." *Certain Purple Protective Gloves*, 337-TA-500, Order No. 17 (September 23, 2004).

TPL has entered into stipulations regarding importation with respondents HP, Dell, and Kingston. (*See* JX-0087, JX-0088, and JX-0089.) Acer, Brother, Newegg-Rosewill, and Seiko Epson do not contest TPL's allegations regarding importation. Only Canon and HiTi assert that TPL has failed to prove that they meet the importation requirement. (RIB at 253-256.)

As for Acer, Brother, Newegg-Rosewill, and Seiko Epson, the ALJ finds that TPL presented sufficient evidence to establish that these companies meet the importation requirement of Section 337. (CX-0940C at Q/A 6-12; CX-0132C, CX-0136 (Acer); CX-0141C (Brother); CX-0224 (Newegg-Rosewill); CX-0234C (Seiko Epson).) Accordingly, the ALJ finds that Acer, Brother, Newegg-Rosewill, and Seiko Epson meet the importation requirement of Section 337.

As for Canon and HiTi, they admit that at least one of all of the accused products have been imported into the United States, but they argue that TPL failed to present any evidence that the specific entities TPL named—Canon, Inc. and HiTi Digital, Inc.—are responsible for importation of products into the United States. (RIB at 253-256.) Canon and HiTi argue that while TPL did ask in interrogatories "Identify, by model name and/or number, all Accused Products that you sell in the United States…" and each of them responded to this interrogatory identifying products, TPL never asked for clarification of either Canon's or HiTi's objections. (RIB at 256.)

The ALJ finds Canon and HiTi's arguments unpersuasive. As an initial matter, TPL "need only prove importation of a single accused product to satisfy the importation element." Certain Purple Protective Gloves, 337-TA-500, Order No. 17 (September 23, 2004). Here, there is no dispute that accused products have been imported into the United States. The presence of a single one of those accused products in the United States clearly satisfies the importation requirement. Moreover, it does not matter whether HiTi Digital, Inc. or Canon, Inc. themselves have imported the products. The statute specifically states "importation into the United States, the sale for importation, or the sale within the United States after importation by "the owner, importer, or consignee, of articles" is prohibited. 19 U.S.C. § 1337(a)(1)(B). Neither HiTi Digital, Inc. or Canon, Inc. argue that the accused product was not imported by an "owner,

importer, or consignee" of the accused product. Moreover, even assuming such an argument were to be made, the importation requirement would still be satisfied since the accused product itself is in the United States and subject to the Commission's *in rem* jurisdiction. *Sealed Air Corp. v. United States Int'l Trade Comm'n*, 645 F.2d 976, 985 (C.C.P.A. 1981). Indeed, to follow HiTi Digital, Inc. and Canon, Inc.'s arguments to its logical conclusion, the Commission could never issue a general exclusion order as it would be necessary for the party "responsible" for importation to be named a party to the investigation.

Beginning with HiTi, the ALJ finds its arguments fall short of the standard that the ALJ expects of attorneys appearing before the Commission. To begin with, this defense appears to have never been raised or preserved. While HiTi's denies that it has "engaged in any unfair acts, including the alleged unlawful importation into the United States, the alleged unlawful sale for importation, and/or the alleged unlawful sale within the United States after importation" of the accused products in its Answer to the Complainant, its response also admits that it manufactures the products at issue that are indisputably being imported into the United States. (HiTi Response to the Complaint at ¶145.) Assuming that the conflicting answers in its Response to the Complaint was sufficient to preserve this importation argument, the ALJ still finds that HiTi never preserved this defense in its discovery responses or its pre-hearing brief. In response to TPL's interrogatory asking HiTi to "Identify . . . all of the Accused Products you sell in the United States," HiTi identified English language user manuals for various products. (RIB at 256 n.30.) HiTi claims, however, that because it objected, in the general objections section, that the definition of "you" was overly broad, TPL should have known that this response to this interrogatory was not an admission that it was importing these products. In a footnote in the post-hearing brief, HiTi explains that its response included affiliates over which it has little

control and TPL should have understood that. (RIB at 256 n.30.) However, HiTi never made such an assertion in its interrogatory response. The ALJ will not allow HiTi to amend its interrogatory responses through a footnote in its post-hearing brief. Thus, the ALJ finds that HiTi has admitted that it meets the importation requirement in its response to TPL's interrogatories.

If HiTi's two previous forfeitures of this argument were not enough, HiTi's discussion of its importation argument in its pre-hearing statement is equally vague. In that submission, HiTi stated in a footnote that it was contesting "personal jurisdiction." (RRB at 105 (citing RPHS at 3 n.1).) HiTi argues that based on this footnote "HiTi squarely contested importation in its pre-hearing brief." (RRB at 105.) The ALJ does not agree with HiTi that its reference to personal jurisdiction in a footnote "squarely raised" the issue of importation. Moreover, there is no mention of importation in the pre-hearing brief, only this footnote in the pre-hearing statement. If such vague allusions were allowed to preserve arguments, Section 337 investigations would descend (further) into a morass of gamesmanship and sandbagging. If HiTi believed it had a legitimate argument regarding importation, it must maintain that argument clearly and unambiguously. (Ground Rule 8.1.)

With HiTi's efforts to rewrite its discovery responses cast aside, the ALJ finds that TPL has presented evidence that HiTi meets the importation requirement. TPL presented interrogatory responses where HiTi identified the accused products it was selling in the United States. (CX-0202.003.) Also, TPL presented evidence that TPL purchased the accused HiTi products in the United States. (CX-0940C at Q&A 6-12.) Accordingly, the ALJ finds that TPL has presented sufficient evidence to demonstrate that HiTi meets the importation requirement.

Canon presents a more difficult case. It is beyond dispute that the accused Canon products are imported into the United States. The question is whether Canon, Inc. is responsible for that importation or sale after importation. However, some cases have stated that "[w]ith regard to sale for importation, the requisite nexus exists when a respondent that sold infringing articles knew or should have known that those articles would be subsequently exported to the United States." See Certain Inkjet Ink Cartridges with Printheads & Components Thereof, Inv. No. 337-TA-723, Final Initial Determination, at 8 (January 28, 2011). Under this standard, the ALJ finds that TPL has proved that the requisite nexus exists between Canon, Inc. and the importation. There is no dispute that the accused products were imported into the United States and that this importation was done by Canon's subsidiaries and affiliates. (See CX-0152C, Canon's First Supplemental Response to TPL's First Set of Interrogatories at Supplemental Response to No. 1; CX-0940C at Q&A 6-12; CX-151; RRB at 104.) Thus, the ALJ finds that TPL has proven by a preponderance of the evidence that Canon meets the importation requirement.

III. JURISDICTION

In order to have the power to decide a case, a court or agency must have both subject matter jurisdiction and jurisdiction over either the parties or the property involved. *See Certain Steel Rod Treating Apparatus and Components Thereof*, Inv. No. 337-TA-97, Commission Memorandum Opinion, 215 U.S.P.Q. 229, 231 (1981). For the reasons discussed below, the ALJ finds the Commission has jurisdiction over this investigation.

Section 337 declares unlawful the importation, the sale for importation, or the sale after importation into the United States of articles that infringe a valid and enforceable United States patent by the owner, importer, or consignee of the articles, if an industry relating to the articles

protected by the patent exists or is in the process of being established in the United States. *See* 19 U.S.C. §§ 1337(a)(1)(B)(I) and (a)(2). Pursuant to Section 337, the Commission shall investigate alleged violations of the Section and hear and decide actions involving those alleged violations.

As set forth *supra* in Section II, TPL has met the importation requirement. Furthermore, Respondents do not dispute that the Commission has *in personam* and *in rem* jurisdiction. (RIB at 16.) The Respondents have appeared at the hearing. Accordingly, the ALJ finds that Respondents have submitted to the jurisdiction of the Commission. *See Certain Miniature Hacksaws*, Inv. No. 337-TA-237, Pub. No. 1948, Initial Determination at 4, 1986 WL 379287 (U.S.I.T.C., October 15, 1986) (unreviewed by Commission in relevant part).

IV. CLAIM CONSTRUCTION

On October 4, 2012, the ALJ issued *Order No. 23: Construing the Terms of the Asserted Claims of the Patent at Issue*. Order No. 23 is incorporated herein in its entirety.

V. INFRINGEMENT DETERMINATION

A. Applicable Law

In a Section 337 investigation, the complainant bears the burden of proving infringement of the asserted patent claims by a preponderance of the evidence. *Certain Flooring Products*, Inv. No. 337-TA-443, Commission Notice of Final Determination of No Violation of Section 337, 2002 WL 448690 at 59, (March 22, 2002); *Enercon GmbH v. Int'l Trade Comm'n*, 151 F.3d 1376 (Fed. Cir. 1998).

Each patent claim element or limitation is considered material and essential. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991). Literal infringement of a claim occurs when every limitation recited in the claim appears in the accused device, *i.e.*, when the

properly construed claim reads on the accused device exactly. *Amhil Enters., Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996); *Southwall Tech. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed Cir. 1995).

If the accused product does not literally infringe the patent claim, infringement might be found under the doctrine of equivalents. The Supreme Court has described the essential inquiry of the doctrine of equivalents analysis in terms of whether the accused product or process contains elements identical or equivalent to each claimed element of the patented invention. Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 17, 40 (1997).

Under the doctrine of equivalents, infringement may be found if the accused product or process performs substantially the same function in substantially the same way to obtain substantially the same result. *Valmont Indus., Inc. v. Reinke Mfg. Co.,* 983 F.2d 1039, 1043 (Fed. Cir. 1993). The doctrine of equivalents does not allow claim limitations to be ignored. Evidence must be presented on a limitation-by-limitation basis, and not for the invention as a whole. *Warner-Jenkinson,* 520 U.S. at 29; *Hughes Aircraft Co. v. U.S.,* 86 F.3d 1566 (Fed. Cir. 1996). Thus, if an element is missing or not satisfied, infringement cannot be found under the doctrine of equivalents as a matter of law. *See, e.g., Wright Medical,* 122 F.3d 1440, 1444 (Fed. Cir. 1997); *Dolly, Inc. v. Spalding & Evenflo Cos., Inc.,* 16 F.3d 394, 398 (Fed. Cir. 1994); *London v. Carson Pirie Scott & Co.,* 946 F.2d 1534, 1538-39 (Fed. Cir. 1991); *Becton Dickinson and Co. v. C.R. Bard, Inc.,* 922 F.2d 792, 798 (Fed. Cir. 1990).

The concept of equivalency cannot embrace a structure that is specifically excluded from the scope of the claims. *Athletic Alternatives v. Prince Mfg., Inc.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996). In applying the doctrine of equivalents, the Commission must be informed by the fundamental principle that a patent's claims define the limits of its protection. *See Charles*

Greiner & Co. v. Mari-Med. Mfg., Inc., 92 F.2d 1031, 1036 (Fed. Cir. 1992). As the Supreme Court has affirmed:

Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.

Warner-Jenkinson, 520 U.S. at 29.

The Federal Circuit has recently clarified the vitiation limitation on the doctrine of equivalents in *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349 (Fed. Cir. 2012):

"Vitiation" is not an exception to the doctrine of equivalents, but instead a legal determination that "the evidence is such that no reasonable jury could determine two elements to be equivalent." The proper inquiry for the court is to apply the doctrine of equivalents, asking whether an asserted equivalent represents an "insubstantial difference" from the claimed element, or "whether the substitute element matches the function, way, and result of the claimed element." If no reasonable jury could find equivalence, then the court must grant summary judgment of no infringement under the doctrine of equivalents.

Id. at 1356 (citations omitted). The vitiation concept has its clearest application "where the accused device contain[s] the antithesis of the claimed structure." Planet Bingo, LLC v. GameTech Int'l, Inc., 472 F.3d 1338, 1345 (Fed. Cir. 2006). As the Federal Circuit explained in Deere, "[c]ourts should be cautious not to shortcut this inquiry by identifying a 'binary' choice in which an element is either present or 'not present.' Stated otherwise, the vitiation test cannot be satisfied by simply noting that an element is missing from the claimed structure or process because the doctrine of equivalents, by definition, recognizes that an element is missing that must be supplied by the equivalent substitute." Deere, 703 F.3d at 1356–57. The Federal Circuit has further clarified that:

The vitiation test cannot be satisfied merely by noting that the equivalent substitute is outside the claimed limitation's literal scope. Rather, vitiation applies when one of skill in the art would understand that the literal and substitute limitations are not interchangeable, not insubstantially different, and when they do

not perform substantially the same function in substantially the same way, to accomplish substantially the same result. In short, saying that a claim element would be vitiated is akin to saying that there is no equivalent to the claim element in the accused device based on the well-established "function-way-result" or "insubstantial differences" tests.

Brilliant Instruments, Inc. v. GuideTech, LLC, 707 F.3d 1342, 1347 (Fed. Cir. 2013).

Prosecution history estoppel may bar the patentee from asserting equivalents if the scope of the claims has been narrowed by amendment during prosecution. A narrowing amendment may occur when either a preexisting claim limitation is narrowed by amendment, or a new claim limitation is added by amendment. These decisions make no distinction between the narrowing of a preexisting limitation and the addition of a new limitation. Either amendment will give rise to a presumptive estoppel if made for a reason related to patentability. Honeywell Int'l Inc. v. Hamilton Sundstrand Corp., 370 F.3d 1131, 1139-41 (Fed. Cir. 2004), cert. denied, 545 U.S. 1127 (2005)(citing Warner-Jenkinson, 520 U.S. at 22, 33-34; and Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 733-34, 741 (2002)). The presumption of estoppel may be rebutted if the patentee can demonstrate that: (1) the alleged equivalent would have been unforeseeable at the time the narrowing amendment was made; (2) the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent at issue; or (3) there was some other reason suggesting that the patentee could not reasonably have been expected to have described the alleged equivalent. Honeywell, 370 F.3d at 1140 (citing, inter alia, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 344 F.3d 1359 (Fed. Cir. 2003)(en banc)). "Generalized testimony as to the overall similarity between the claims and the accused infringer's product or process will not suffice [to prove infringement under the doctrine of equivalents]." Tex. Instruments, Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1567 (Fed. Cir. 1996).

To prove direct infringement, TPL must prove by a preponderance of the evidence that each of the accused products either literally infringe or infringe under the doctrine of equivalents the asserted claims of the asserted patents. *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001).

A party can also indirectly infringe a patent. To prevail on a claim for indirect infringement, a patentee must first demonstrate direct infringement, and then establish that the "defendant possessed the requisite knowledge or intent to be held vicariously liable." *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272–73 (Fed. Cir. 2004). The knowledge requirement must be met by a showing of either actual knowledge or willful blindness. *Global–Tech Appliances, Inc. v. SEB S.A.*, — U.S. —, 131 S. Ct. 2060, 2068 (2011).

Under 35 U.S.C. § 271(b), "[w]hoever actively induces infringement of a patent shall be liable as an infringer." "To prove induced infringement, the patentee must show direct infringement, and that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another's infringement." *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1363 (Fed. Cir. 2012) (internal quotations omitted).

The Supreme Court has held that "induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement." *Global-Tech*, 131 S. Ct. at 2070. In so holding, the Supreme Court rejected the Federal Circuit's "deliberate indifference" to a "known risk" test. *Id.* at 2071. It explained that the "knowledge" required under § 271(b) could be satisfied by a showing of actual knowledge or "willful blindness." *Id.* at 2068–71. The Supreme Court explained that a defendant acts with willful blindness if she "subjectively believe[s] that there is a high probability that a fact exists" and "take[s] deliberate actions to avoid learning of the fact." *Id.* at 2070, 2070 n.9. In contrast, a defendant who "merely knows

of a substantial and unjustified risk of [] wrongdoing" acts recklessly, and a defendant who "should have known of a similar risk, but in fact, did not" acts negligently. *Id.* at 2071. "Inducement requires evidence of culpable conduct, directed to encouraging another's infringement, not merely that the inducer had knowledge of the direct infringer's activities." *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006) (*en banc*).

Under 35 U.S.C. § 271(c), "[w]hoever offers to sell or sells within the United States or imports into the Unites States a component of a patented machine, manufacture, combination, or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be specifically made to or specially adapted for use in the infringement of the patent, and not a staple article or commodity suitable for substantial non-infringing use, shall be liable as a contributory infringer." "Contributory infringement imposes liability on one who embodies in a non-staple device the heart of a patented process and supplies the device to others to complete the process and appropriate the benefit of the patented invention." Vita-Mix Corp. v. Basic Holding, Inc., 581 F.3d 1317, 1327 (Fed. Cir. 2009). To state a claim for contributory infringement, an infringer must sell, offer to sell or import into the United States a component of an infringing product "knowing [the component] to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non infringing use." 35 U.S.C. § 271(c); see Lucent Techs. v. Gateway, Inc., 580 F.3d 1301, 1320 (Fed. Cir. 2009). As with induced infringement, a claim for contributory infringement must also contain allegations of the requisite knowledge of the patent-in-suit at the time of infringement. Global-Tech, 131 S. Ct. at 2068. In addition, the patentee bears the burden of proving that the accused

products have no substantial non-infringing uses. See Golden Blount, Inc. v. Robert H. Peterson Co., 438 F.3d 1354, 1363 (Fed. Cir. 2006).

A seller of a component of an infringing product can also be held liable for contributory infringement if: (1) there is an act of direct infringement by another person; (2) the accused contributory infringer knows its component is included in a combination that is both patented and infringing; and (3) there are no substantial non-infringing uses for the accused component, *i.e.*, the component is not a staple article of commerce. *Carborundum Co. v. Molten Equip. Innovations, Inc.*, 72 F.3d 872, 876 (Fed. Cir. 1995).

B. The '443, '424, and '847 Patents

1. Respondents Products Do Not Practice "Mapping" as Claimed

Respondents argue that their products do not have a "controller to map" or a "means for mapping..." as identified in the claims. (RIB at 62.) Respondents note that all of the asserted claims of the '443, '424, and '847 Patents contain a mapping requirement. The elements in dispute as:

- a controller chip to map at least a subset of the at least one set of contact pins to a set of signal lines or power lines, based on an identified type of a memory media card. ('443 Patent at Claims 1, 3, 4, 7.)
- "a controller integrated into the multi-memory media adapter to map at least a subset of the set of contact pins to a set of signal lines or power lines, based an identified type of the memory media card" ('443 Patent at Claims 9, 11, 12, 14.)
- "means for mapping power, ground or data signals between said interconnection pins and said one or more contact pins depending upon the identification of the type of memory card inserted into said port" ('424 Patent at Claims 25, 26, 28, 29.)
- "means for mapping power, ground or data signals between said signal lines and said contact pins depending upon the identification of the type of memory card inserted into said port; wherein the means for mapping comprises a controller" ('847 Patent at Claim 1-3.)

TPL asserts that these elements because Respondents products contain a controller that according to TPL maps at least one of contact pins to a set of signal lines or power lines based on whether the identified type of memory card is SD or MMC. (*See, e.g.*, CIB at 67.) Some background on the products will help make the parties' arguments comprehensible.

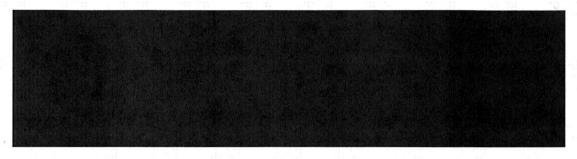
It is undisputed that the controllers in the accused SD/MMC readers have signal lines that connect the controller to the "contact pins" on the SD/MMC readers. For the sake of this discussion, the ALJ refers to the accused HP Photosmart 55100 printer. The HP Photosmart 55100 has a memory card reader that can read SD and MMC cards. This memory card reader includes a memory card connector into which the user inserts the memory card, an ASIC, and signal lines that connect the ASIC to the memory card connector. Shown below for representative purposes is a schematic of the ASIC and connector. The ASIC controller's pins



(CIB at 67 (citing CX-320C.1; CX-944C at Q/A1022-1023.)

² For purposes of this discussion the ALJ is not finding that these are "contact pins" or "interconnection means" within the meaning of the patent. The ALJ is simply using this terminology to discuss the alleged mapping.

	(CIB at 68.) TPL contends that
	The ALJ will assume that they are such
for the sake of this discussion. Once again, the nar	mes and order of these points on the alleged
interconnection pins or means will vary based on	the specific controller used in the accused
products.	
(CIB at 68 (citing CX-320C.4; CX-944C at Q/A1022	2-1023.)
It is undisputed that the table below sh	ows the
(CX-296C.27; CX-944C at QA1022-1023.) It is fund	ther undisputed the table below shows the

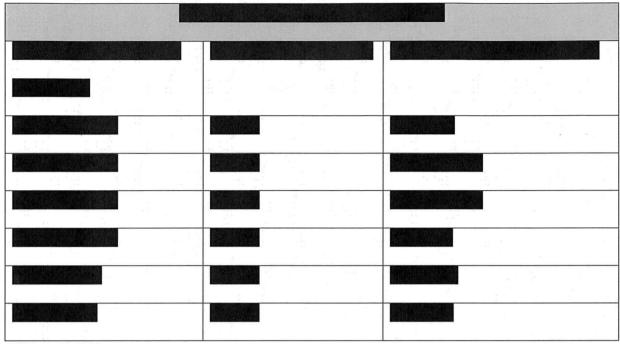


(CX-354C.18; CX-944C at QA1022-1023.)

It is further undisputed between the parties about how the products operate and for purposes of the discussion of this element at this level of generality, that they operate in relatively a similar way. For example, in the HP Photosmart, TPL explains that:

[W]hen an SD card is utilized, contact pins 7, 8, 9 and 1 are assocaited with signals DAT0, DAT 1, DAT2, and DAT3 (for 4-bit data transfer). When an MMC card is inserted, contact pin 7 is associated with a DAT signal (for 1-bit data transfer) and contact pins 8, 9, and 1 are not utilized. This is because SD cards operating in SD Mode operate in 4-bit mode and MMC cards operate in 1-bit mode. Taking the above evidence, the following tables summarize how at least a subset of the set of contact pins are mapped to a set of signal lines based on whether the identifed type of memory card is SD or MMC.

	- 3	



(CIB at 69-70.)

Thus, TPL argues that the controller in the accused products maps contact pins 7, 8, 9, 1, 2, and 5 to signal lines

respectively, if the identifed type of card is SD (for 4-bit data mode). However, only contact pins 7, 1, 2, and 5 are mapped to signal lines

respectively, if the identifed type of card is

MMC (for 1-bit data mode). (CIB at 70.)

Respondents argue that this is simply not "mapping" within the meaning of claims. First, Respondents argue that the claims require that "mapping' must occur between between between disparate physical structures—contact pins at one two physical elements—the interconnection pins/means or signal/power lines at the other end." (RIB at 62.) Second, Respondents argue that "mapping" cannot simply mean a pre-selected, fixed assignment of contact pins to signal/power lines or interconnection pins/means because a fixed assignment of contact pins is contrary to the plain language of the claims. (RIB at 62-63.) Respondents argue that the ability of a card reader

to accommodate and distinguish between SD cards and MMC cards is nothing more than a fixed assignment of pins. (RIB at 63.) The ALJ considers each in turn.

TPL argues that mapping signals does not require the controller physically fix and un-fix different contact pins to different signals or interconnction pins/means. TPL asserts that this theory would require the controller be somehow located between the contact pins and signal lines which TPL contends makes no sense in the context of the these patents.

The ALJ agrees that the accused products do not perform "mapping" within the meaning of the claim elements of the '443, '424, and '847 Patents, but not for all the reasons that Respondents provide. The ALJ would first like to finally lay to rest Respondents' "physically between" arguments. Respondents have built an edifice of various convuluted arguments on a brief discussion in the ALJ's claim construction, while ignoring any other contrary discussion in the same claim construction order. The discussion in question is from the ALJ's construction of the terms "contact pins" and "interrconnection means":

The claim language in both the '424 Patent and the '847 Patent also support such a construction. Claims 25 and 28 clearly indicate that the "interconnection means" is a "separate and distinct" structure from the connection pin. Claims 25 and 28 require a "means for mapping" between "interconnection pins/means" and contact pins. ('424 Patent claim 25 and 28.) Thus, in order to map signals between "interconnection pins/means" and contact pins, "interconnection pins/means" and contact pins must be separate and distinct structures. Similarly, claim 1 of the '847 Patent claims an "interconnection means" that "connect[s] said signal lines to one or more contact pins."

Order No. 23 at 20.

In this discussion, the ALJ was attempting to decide the parties' claim construction dispute about whether the "contact pins" and "interconnection means" had to be separate structures or could be the same structure. (See Order No. 23 at 18-20 (laying out the dispute between the parties). This discussion was not directed at whether mapping requires connecting

or creating paths between different physical structures or not. Indeed, this claim construction dispute has matured into the lengthy infringement dispute between the parties as to whether structures that TPL has identified as the "contact pins" and "interconnection means" are separate structures or not. (*See* RIB at 53-63.) The ALJ was not seeking to resolve anything more than that claim construction dispute. The ALJ was simply noting that the claim language describes these two things — the contact pins and interconnection means — as distinct things, which supported the argument that the contact pins and interconnection means were could not be the same thing as TPL was arguing, without rendering the claim language superfluous.

The ALJ was not deciding through that brief paragraph whether the claim imposes any physical requirements on mapping. Indeed, the ALJ dealt (and thought he had resolved) the parties' disputes regarding whether mapping required altering physical connections in another part of Order No. 23:

Respondents appear to concede that the mapping is a logical function and does not require some physical connection be changed in the device in order to accomplish it. Thus, TPL's concerns that the phrase "selectively connecting" will be used by Respondents to argue that the controller must physically connect the contact pins to different signal lines is also without foundation.

Order No. 23 at 29.

Now, Respondents seek impose a requirement that "[m]apping' as disclosed and claimed in the '443, '424, and '847 Patents, involves establishing a physical or logical connection between physical point 'A' (*i.e.*, 'contact pins') and physical point 'B' (i.e., interconnection pins/means' or 'signal/power lines')." (RIB at 63.) The ALJ notes that by including the words "logical connection", Respondents appear to be an attempt to harmonize this argument with their concession at the Markman stage that they wouldn't require a physical connection be changed for mapping to occur. However, the ALJ has no idea how one creates a logical connection or path between two physical points for a signal (which is another physical thing) to travel. The

testimony of Mr. McAlexander that Respondents offer (RIB at 63) on this point is incomprehensible. It seems to use logical path and physical path the same way:

And so you have separate, distinct, identifiable, separated isolated structures, in this case at least one set of contact pins on one side and a set of signal lines or power lines on the other. And "to map" means to interconnect, to create a map between these two sets of disparate or different sets of structures, such as the contact pins and the power lines. So "to map" is to create the path. It's to identify the path. Now, that path can be physical, it can be logical. But there has to be a connectivity, has to be a path that's established. And that's what mapping is.

(Tr. 1471:18-1427:7.)

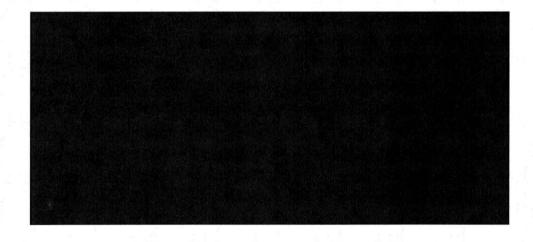
What does make sense to the ALJ is making a logical connection between physical points and some other data. For example, a logical connection can be made between a fixed electrical path and the identity of the signal that travels along that path. This is what is shown in Figures 4 and 5 of the patent. Thus, as those figures demonstrate, if an xD card is inserted, the controller knows that signal on contact pin 10 is the D0 signal and can map or logically associate the identity of that signal to that contact pin.

The ALJ finds, however, that this logical pathway leads to a point that TPL conceded: there cannot be fixed logical assignments of signals. (Order No. 23 at 29.) And on this point, Respondents raise an excellent and coherent argument: that the accused products cannot infringe because the logical assignments for the various contact pins is never mapped and is fixed. (RIB at 72-79.) The ALJ agrees.

Respondents argue that SD and MMC cards have compatible pin configurations, and the SD Specifications were drafted such that a single set of contact pins can accept both card types without the need to perform the "mapping" required for incompatible pin configurations. (RIB at 72.) Respondents assert that the ability of a card reader to distinguish between SD cards and MMC cards

and thus neither of these processes can constitute the claimed "mapping" of the '443, '424, or '847 Patents. The ALJ finds that as can be seen above in the Figures (CX-354C.18; CX-296C.27.) (Id.; RX-2888C at Q/A 82, 164; RX-2885C at Q/A 59, RX-2369.0019; JX-0068.0019.) The only difference between the cards is that the data in the SD card is four bit bus, which requires four pins for data, and the MMC card only requires one. (RX-2369.0019; RDX-0482.) (RX-2888C, Q/A 56-60, 160-79; RX-22369.0019-20; JX-0068.0019-20; RDX-0412; RDX-0480; RDX-0481.)

SUBJECT TO PROTECTIVE ORDER



As Dr. Mercer explained, when the SD card is inserted the compatibility between the SD and MMC cards allows the controller to begin communication with the inserted card, performing card initialization (*i.e.*, hand shaking) and data transfer without the need for "mapping." (RX-2888C at Q/A 172; RDX-0484 through RDX-0488.) Therefore, the ALJ finds that a card reader does not need to perform the claimed mapping" to accommodate SD and MMC card types in the same slot. (RX-2888C, Q/A 56-60; RDX-0412.)

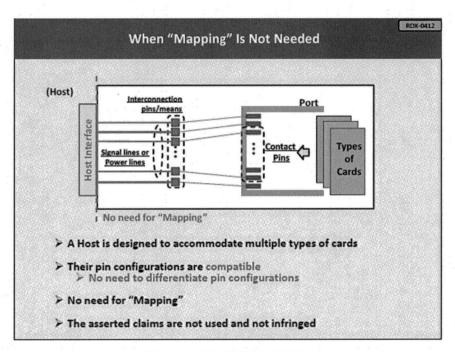


Figure 19 (RDX-0412)

The SD and MMC card types are designed to have compatible pin configurations, and they are treated exactly the same in the '443, '424, and '847 Patents. (*See, e.g.*, Figs. 4 and 5 of JX-0003, JX-0004, and JX-0006.) Therefore, the ALJ finds that a card reader does not need to perform the claimed "mapping" to accommodate SD and MMC card types in the same slot. (RX-2888C, Q/A 56-60; RDX-0412.)

The SD Specifications describe the initialization process as follows:

The ALJ finds that when a car	d is inserted into a card reader, the SD Specifications
	(RX-2888C, Q/A 170-76.) As shown
in RDX-0487,	
	(RX-2888C,
Q/A 175; RDX-0487.) However,	
	(Id.) After the
card type is identified,	
	(RX-2888C, Q/A 177-79.) However,
as Dr. Mercer explains,	

(Buscaino, Tr. 538:16-539:4.)

The ALJ finds that Mr. Berg explained that distinguishing between an SD and MMC cards does not show evidence of the claimed "mapping" because, the evidence only shows that

(RX-2885C, Q/A 81-92; *see also id.* at Q/A 103-05, 110, 112-13, 119-21 (as to Acer).) Specifically, the ALJ finds that a communication with an MMC card and communication with an SD card occurs across a 1-bit wide data bus. (*Id.* at 87.) The ALJ finds that Mr. Buscaino provided no evidence that any device ever operates using a data bus wider than 1-bit when an SD card is inserted, and Mr. Berg explained that such functionality is optional. (*Id.* at 88, 91-92.) Thus, although the ALJ notes that TPL's arguments regarding mapping were eminently reasonable, the ALJ finds that they have not proven that the "mapping" elements found in all the asserted claims of the '443, '424, and '847 Patents. Accordingly, the ALJ finds that because TPL has failed to prove the presence of all of the elements of the asserted claims, TPL has failed to prove infringement of the asserted claims of the '443, '424, and '847 Patents.

2. Respondents' Products Which Support Only One Memory Card Type Do Not Infringe

Respondents contend that under the ALJ's claim construction, the "mapping limitations of the asserted claims of the '443, '424, and '847 Patents require that "at least some of the contact pins must be shared by different memory card types." (RIB at 83 (quoting Order No. 23 at 31).) Respondents argue that certain Respondents have modified products in this investigation or added new products that do not read from or write to MMC memory cards. (RIB at 83.) Thus, the memory card adapters of these new and modified products only support one card type

and do not infringe the asserted claims of the '443, '424, and '847 Patents. TPL does not dispute this point in its post hearing briefs.

The ALJ agrees with Respondents although other aspects of "mapping" are hotly disputed between the parties, it is essentially undisputed that card readers that can only support one type of memory card cannot infringe the asserted claims of the '443, '424, and '847 Patents. Indeed, Mr. Buscaino, conceded at the hearing that a product that reads SD only would not infringe the asserted claims of the '443, '424, and '847 Patents. (Tr. 574:14-22.) Accordingly, the ALJ finds that Respondents' products that include a memory card reader adapter that does not support MMC cards and only support SD cards, do not infringe the asserted claims.

C. The '623 Patent

1. Claim 1

TPL alleges that respondents Acer, Kingston, and Newegg/Rosewill infringe claim 1 of the '623 Patent. The three accused products include the Acer M3970, the Kingston FCR-HS219/1, and the Rosewill RCR-YJ-EX601 (collectively, "the Accused Products).

a) "a plurality of memory card interfaces comprising a first subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type"

TPL asserts that the presence of "a plurality of memory card interfaces comprising a first subset to interface with a memory card of a first type and a second subset to interface with a memory card of a second type," in the Acer M3970 is undisputed. (CIB at 175.) The Acer M3970 includes a plurality of memory card interfaces, which include a first subset to interface with a memory card of a first type, e.g., a subset to interface with a CompactFlash ("CF") card,

and a second subset to interface with a Secure Digital ("SD") or MultiMediaCard ("MMC") type card. (Id.)

TPL also asserts that the Kingston FCR-HS219/1 includes the claimed plurality of memory card interfaces. (*Id.* at 182.) The interfaces of the Kingston FCR-HS219/1 include a first subset, which interfaces with a memory card of a first type, *e.g.*, a subset to interface with a CF card. (*Id.*) The Kingston FCR-HS219/1 also includes a second subset of interfaces, which interface with a SD or MMC type card. (*Id.*)

In addition, TPL argues that the Rosewill RCR-YJ-EX601 includes the claimed plurality of memory card interfaces. (*Id.* at 185-86.) The Rosewill RCR-YJ-EX601 includes a first subset of interfaces for memory cards of a first type, *e.g.*, an xD card, and a second subset of interfaces for memory cards of a second type, *e.g.*, SD or MMC cards. (*Id.*)

Respondents do not dispute the presence of "a plurality of memory card interfaces with a memory card of a first type and a second subset to interface with a memory card of a second type," in the Accused Products. (*See generally* RIB at 220-26.) The evidence shows that the Accused Products include a first subset that interfaces with one type of memory card and a second subset that interfaces with a second type. (CX-0944C at Q&A 457-58, 1381-82, 1479-80.)

b) "wherein the memory card of the first type and the memory card of the second type are accessible in parallel to transfer data from the memory card of the first type to the memory card of the second type"

The only limitation in claim 1 of the '623 Patent that TPL and Respondents dispute is whether the Accused Products include "wherein the memory card of the first type and the memory card of the second type are accessible in parallel to transfer data from the memory card of the first type to the memory card of the second type." (CIB at 175.) In the claim construction

order issued on October 4, 2012, the ALJ found that the plain and ordinary meaning of "accessible in parallel" should apply. (Order No. 23 at 63.) In the order, the ALJ rejected Respondents' proposal to interpret "accessible in parallel" as "each transmitting or receiving data simultaneously at a given point in time." (*Id.* at 61.) The order also held that "to transfer from the memory card of the first type to the memory card of the second type" should be given its plain and ordinary meaning. (*Id.* at 69.)

TPL states that the Acer M3970 includes the claimed configuration of memory cards of a first and second type. (CIB at 175.) In the Acer M3970, when the CF and SD cards are inserted into the ports, the cards are accessible in parallel and data can be concurrently read from the CF memory card and written to the SD memory card in parallel. (*Id.*)

TPL also asserts that the Kingston FCR-HS219/1 includes the claimed configuration of memory cards of a first and second type. (*Id.* at 183.) When CF and SD cards are inserted into ports of the Kingston FCR-HS219/1, both the CF and SD cards are accessible in parallel and data can be concurrently read from a CF memory card and written to an SD memory card in parallel. (*Id.*)

In addition, TPL argues that the Rosewill RCR-YJ-EX601 includes the claimed configuration of memory cards of a first and second type. (*Id.* at 186.) When xD and SD cards are inserted into ports of the Rosewill RCR-YJ-EX601, both the xD and SD cards are accessible in parallel and data can be concurrently read from the xD memory card and written to the SD memory card. (*Id.*)

In response, Respondents believe the plain and ordinary meaning of "accessible in parallel" requires that the first and second memory cards can be accessed at the same time or during overlapping times. (RIB at 220.) This interpretation takes into account TPL's expert's

statement that accessible and parallel data can be concurrently read from one type of card and written to another type of card. (*Id.*)

Respondents argue that TPL's expert, Mr. Buscaino, testified that the limitation is satisfied if the reading and writing of the cards "appears to be at the same time to the user," even if the cards cannot actually be accessed in parallel. (*Id.* at 221.) Respondents disagree that the claims can be interpreted this way because it defies the plain meaning of the claim limitation and conflicts with Respondents' expert, Dr. Wolfe, who testified that parallel requires doing two or more things at the exact same time. (*Id.* at 221-22.)

Respondents base their interpretation of "accessible in parallel" on a prior art reference raised during prosecution of the '623 Patent. (*Id.* at 222.) In the prosecution history, the '623 Patent was distinguished from U.S. Publication No. 2002/0178307 to Pua ("Pua"). (*Id.*) Pua does not teach or suggest that the memory cards may be accessible in parallel, but does teach memory cards accessed in sequence. (*Id.*) Therefore, claim 1 of the '623 Patent must require memory cards of a first and second type that can be accessed concurrently because this limitation was used to overcome the prior art reference Pua. (*Id.* at 223.)

Based on Respondents' interpretation of "accessible in parallel," Respondents believe the memory cards in the Accused Products cannot be accessed in parallel. (*Id.*) The first and second memory cards in the Accused Products use a controller chip that includes one or more switches. (*Id.* at 224.) Because of the switches, the card readers in the Accused Products can only be accessed one at a time. (*Id.*) Dr. Wolfe tracked and logged all disk and memory card activity during the file transfer operation using a Microsoft diagnostic tool. (*Id.* at 225.) According to the data gathered by Dr. Wolfe, the Accused Products were only accessed in sequence, *i.e.*, one at a time, rather than in parallel. (*Id.* at 223.)

Respondents assert that the evidence presented by Mr. Buscaino is insufficient to show that the Accused Products are "accessible in parallel." (RIB at 226.) Mr. Buscaino concluded that the memory cards were "accessible in parallel" because a file can be copied from one memory card to the other. (Id.) Respondents are unconvinced that the memory cards are "accessible in parallel" merely because data can be transferred from one memory card to another. (Id.) Mr. Buscaino's evidence that memory cards are assigned a drive letter by Microsoft Windows is also unpersuasive because the assignment of drive letters only indicates the host computer is aware of the presence of each memory card, not that the memory cards are accessed "in parallel." (Id.)

TPL responds by focusing on the ALJ's claim construction. (See CRB at 86.) TPL explicitly cites from the claim construction order:

The '623 Patent contains no requirement that each memory card in the invention will be transmitting or receiving data simultaneously at a given point in time . . . This language does not require that the cards function simultaneously, but rather that it be possible for them to be in their respective slots simultaneously, so the operator of the system can access them without taking them in and out.

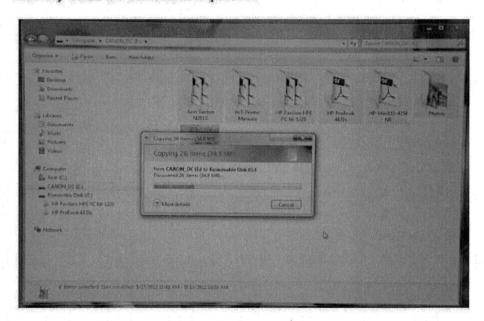
(*Id.*; see Order No. 23 at 61.) In other words, the invention encompassed in the patent involves multiple memory cards in memory card interfaces simultaneously. (*Id.*) In addition, TPL states Respondents' proposed construction requiring simultaneous access was expressly rejected by the ALJ. (*Id.*) TPL asserts that the evidence shows the Accused Products meet the "accessible in parallel" limitation. (*Id.* at 87.)

Respondents reply by arguing neither TPL nor Mr. Buscaino provide any evidence in that Respondents' products practicing the parallel accessibility of the '623 Patent. (RRB at 43.) TPL urges that the first and second memory cards are accessible in parallel in the Accused Products

because data can be "concurrently" read from the first card and written to a second card, but TPL does not provide any evidence to support the assertion. (*Id.*)

The ALJ finds memory cards in the Accused Products are capable of being accessed in parallel based on his construction set forth in the *Markman* Order. (*See* CX-0944C at Q&A 460, 1384, 1482.) For each of the Accused Products, TPL provides a screen shot and explanation describing how each product is accessed in parallel. (*Id.* at Q&A 460, 1384, 1482.) Specifically, the screen shot shows files being transferred from the CF memory card in one memory port to an SD memory card in the second memory port:

Data can be concurrently read from the CF memory card (LUN0) and written to the SD memory card (LUN2). Both the CF and SD memory cards are accessible in parallel.



As shown above, files from the CF memory card are copied to the SD memory card. Both the CF and SD memory cards are accessible in parallel and are capable of concurrent read/write access. See, e.g., CX-0472C (TPL1038499), (Photo from examination at TPL on October 1st, 2012, TPL200012).

Therefore, a preponderance of the evidence shows the memory cards in the Accused Products can be accessed in parallel. (*Id.*)

Many of Respondents' arguments focus on whether memory cards in the Accused Products are accessed in parallel. (e.g., RIB at 220.) However, as the ALJ explained in the Markman order, TPL only needs to show memory cards in the Accused Products are capable of being accessed in parallel. (Order at 62.) In addition, Respondents' evidence shows that memory cards in the Accused Products are accessed in sequence, but that does not necessarily mean that the memory cards are incapable of being accessed in parallel. (See RX-2891 at Q&A 137-38, 156-57, 179-80.) Respondents' argument regarding Pua was already addressed and dismissed in the claim construction order. (Order at 61-62.) The claim construction order explained that the patent applicants indicated that the memory cards claimed in the '623 Patent "can be operated at a given point in time," not that they must be operated at the same time. (Id. at 62.)

Respondents argue that Mr. Buscaino testimony does not employ the plain and ordinary meaning of "in parallel." (Tr. 716:6-8 ("What I mean by 'concurrently' is that concurrent appears to be happening at the same time to the user, for example '[C]oncurrently' means that it's occurring at the same time and it's perceived to be happening at the same time.").) Based on the general description of "in parallel" in the '623 Patent, the ALJ finds Mr. Buscaino's interpretation captures the plain and ordinary meaning. (See JX-0001.0007.) The specification of the '623 Patent describes prior art requiring serial downloading of images from a digital camera to flash memory. (Id.) The specification also discloses an improvement over serial downloading involving a jukebox with interfaces for different memory card types, which can be accessed "on demand" or simultaneously. (Id.) Based on this intrinsic evidence, the memory cards must be able to be reached at the same time. (Id.) In the Accused Products, multiple

memory cards can be inserted into memory card interfaces and, therefore, are accessible in parallel and capable of concurrently reading and writing. (CX-0944C at Q&A 460, 1384, 1482.)

Therefore, the ALJ finds that the Accused Products meet each and every limitation of claim 1.

2. Claim 2

Claim 2 of the '623 Patent includes the additional limitation "at least one of the memory card interfaces is configured to read a plurality of different memory card types." The parties do not dispute that the Accused Products include the claimed memory card interfaces. (CIB at 275, 183, 186; *see generally* RIB at 226.) TPL states that at least one of the memory card interfaces in the Acer M3970 is configured to read a plurality of different memory card types. (CIB at 175.) TPL also states that at least one of the memory card interfaces in the Kingston FCR-HS219/1 memory card interfaces is configured to read a plurality of different memory card types. (*Id.* at 183.) In addition, TPL asserts that at least one of the memory card interfaces in the Rosewill RCR-YJ-EX601 is configured to read a plurality of different memory card types, namely SD and MMC card types. (*Id.* at 186.)

The ALJ finds that the Accused Products meet the limitation of claim 2. (CX-0944C at Q&A 461-62, 1385-86, 1483-84.) Text adjacent to a memory card interface in each of the Accused Products indicates different types of memory cards can be used in that interface. (*Id.* at Q&A 461 ("SD MMC"), 1386 ("miniSD SD/MMC"), 1484 ("SD/SDHC/MMC/RSMMC").)

Based on this text, the Accused Products include "at least one of the memory card interfaces is configured to read a plurality of different memory card types." (CX-0944C at Q&A 462, 1386, 1484.)

3. Claim 3

Claim 3 of the '623 Patent includes the additional limitation "at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory reader." TPL and Respondents disagree about whether the Acer M3970 and the Rosewill RCR-YJ-EX601 include the claimed indicator of claim 3. (See CIB at 175, 186; RIB at 227.)

TPL argues that at least one of the memory card interfaces in the Acer M3970 includes an indicator identifying a status of operating for a respective memory card interface. (CIB at 175.) In addition, TPL states at least one of the memory card interfaces in the Rosewill RCR-YJ-EX601 includes an indicator identifying a status of operation for a respective memory card interface. (*Id.* at 186.) Both products include a light that flashes when data is being written onto a card. (*Id.* at 176, 186.)

Respondents counter that TPL has not provided any evidence showing that a single light on the Acer M3970 and the Rosewill RCR-YJ-EX601 identifies the status of an operation for a particular memory card interface or what the light indicates. (RIB at 227.) TPL replies by indicating Mr. Buscaino provided evidence that the Acer M3970 and the Rosewill RCR-YJ-EX601 include the indicator element per his witness statement. (CRB at 87.) Respondents argue that the evidence does not show a single light on the Acer M3970 and the Rosewill RCR-YJ-EX601 that identifies the status of operation for a particular interface or what the light indicates when lit. (RRB at 45-46.)

The ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 include the claimed "at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory reader interface." (See CX-0944C at Q&A 463, 1485.)

The evidence shows a light on both the Acer M3970 and the Rosewill RCR-YJ-EX601 and explains that a flashing light indicates data is being written onto a card. (*Id.* at Q&A 464-65, 1485-86; CX-0559C.)

Respondents argue that TPL did not proffer evidence showing a light identifies the status of an operation of a particular memory card interface or what the light indicates on the Acer M3970 and the Rosewill RCR-YJ-EX601. (RIB at 227; RRB at 45-46.) However, the evidence shows the lights indicating that data is written onto a memory card for the Acer M3970 and the Rosewill RCR-YJ-EX601. (CX-0944C at Q&A 466, 1488; CX-0559.) The light corresponds to the claimed indicator and a flashing light identifies the status of operation, in this case writing onto a memory card. (*Id.*)

Respondents also argue that a light is not provided for each slot; however, the claim language does not require an indicator for each memory card interface. (See RIB at 227; JX-0001.0009 (stating "at least one of the memory card interfaces includes an indicator" (emphasis added)).) Respondents also argue that there is no evidence that a single light identifies the status of an operation for a particular memory card interface. (RIB at 227.) Contrary to Respondents' assertion, the claim language does not require that the indicator only identifies the status of a single interface. (See JX-0001.0009.) Respondents read additional limitations into the claim by requiring that the indicator only shows the status of operation for a single interface. (See id. ("[T]he memory card interface[] includes an indicator").) In addition, the evidence shows a light flashes when data is being written to a memory card. (CX-0944C at Q&A 466, 1488.) In other words, a light flashes to indicate a status of an operation where data is being written to a memory card. (Id. at Q&A 466, 1488.) For these reasons, Respondents arguments that the Acer M3970 and the Rosewill RCR-YJ-EX601 do not include the indicator of claim 3 are

unpersuasive. Therefore, the ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 meet the limitations of claim 3.

4. Claim 4

Claim 4 of the '623 Patent includes the additional limitation "the indicator includes a light indicating data is being written to a card in the respective memory card interface." This limitation is similar to that of claim 3. (Id.) TPL's and Respondents' arguments for claim 4 are nearly identical to those for claim 3.

Consequently, the ALJ's finding regarding the "indicator" element in claim 4 are consistent with the findings for claim 3. The ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 include the claimed "the indicator includes a light indicating data is being written to a card in the respective memory card interface." (CX-0944C at Q&A 466, 1487-88.) The evidence shows lights on the Acer M3970 and the Rosewill RCR-YJ-EX601 and explains that a flashing light indicates data is being written onto a card. (Id. at Q&A 465-66, 1487-88; CX-0559C.) The ALJ also finds Respondents' arguments unpersuasive for the same reasons set forth for claim 3.

Therefore, the ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 meet the limitations of claim 4.

5. Claim 9

Claim 9 is similar to claim 1, but adds "a control circuit" and "a bus coupled to the control circuit." (CIB at 176.)

TPL's and Respondents' arguments regarding "accessible in parallel" in claim 1 also apply to claim 9. (Id. at 175, 183, 186; RIB at 220.) For claim 9, TPL provides evidence of the additional limitations "a control circuit" and "a bus coupled to the control circuit" in the Accused

Products. (CIB at 176.) Respondents do not challenge TPL's evidence showing the Accused Products meet the limitations "a control circuit" and "a bus coupled to the control circuit." (See generally RIB at 220-26.)

TPL states that the Acer M3970 includes a universal serial bus ("USB") connector connected to a BCM and a Realtek RTS5181 controller. (CIB at 176.) The Realtek RTS5181 controller corresponds to the claimed control circuit. (*Id.*) The USB connector corresponds to the claimed bus. (*Id.*) In addition, TPL states that the Kingston FCR-HS219/1 has a USB type A connector, or bus, that is connected to an ATech AFT655486JJ controller, or control circuit. (*Id.* at 183.) TPL also asserts that the Rosewill RCR-YJ-EX601 includes a USB type mini-B connector, or bus, connected to a Realtek RTS5130 controller, or control circuit. (*Id.* at 187.)

The ALJ finds that the evidence shows that the Accused Products include "a control circuit" and "a bus coupled to the control circuit." (CX-0944C at Q&A 467-70, 1387-90, 1489-92.) The evidence shows controllers mounted to the PCBs of the respective Accused Products. (Id. at Q&A 468, 1388, 1490.) The evidence also shows a bus coupled to said controller. (Id. at Q&A 470,1390,1491; CX-0473C; CX-0549C; CX-0557C.) Regarding the remaining limitations of claim 9, the ALJ's findings are the same as those for claim 1.

6. Claim 10

Claim 10 of the '623 Patent includes the additional limitation "at least one of the memory card interfaces with a memory card of a first type and a second subset to interface with a memory card of a second type." This limitation of claim 10 is similar to that of claim 2. (JX-0001.0009.) As with claim 2, Respondents do not dispute that the Accused Product infringe claim 10. (See generally RIB at 226.)

The ALJ finds that the Acer M3970 meets the limitations of claim 10 for the same reasons they meet the limitations of claim 2. (See CX-0944C at Q&A 461-62, 475-76.) Similarly, the ALJ finds the Kingston FCR-HS219/1 meets the limitations of claim 10 for the same reasons set forth for claim 2. (See id. at Q&A 1385-86, 1395-96.) In addition, for the same reasons the Rosewill RCR-YJ-EX601 meets the limitations of claim 2, the Rosewill RCR-YJ-EX601 also meets the limitations of claim 10. (See id. at Q&A 1483-84, 1497-98.) In summary, the ALJ finds that the Accused Products meet the limitations of claim 10.

7. Claim 11

Claim 11 of the '623 Patent includes the additional limitation "at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory card interface." This additional limitation of claim 11 is similar to the additional limitation of claim 3. (JX-0001.0009.) TPL's and Respondents' arguments regarding the "indicator" element for claim 11 are similar to those for claim 3.

The ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 include the claimed "at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory card interface." (CX-0944C at Q&A 477-78, 1499-1500.) The evidence shows a light on both the Acer M3970 and the Rosewill RCR-YJ-EX601 and explains that a flashing light indicates data is being written onto a card. (*Id.* at Q&A 477-78, 1499-1500.) The ALJ also finds Respondents' arguments unpersuasive for the same reasons set forth for claim 3.

Therefore, the ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 meet the limitations of claim 11.

8. Claim 12

Claim 12 of the '623 Patent includes the additional limitation "the indicator includes a light indicating data is being written to a card in the respective memory card interface." (JX-0001.0009.) This limitation of claim 12 is identical to that of claim 4. (*Id.*) TPL's and Respondents' arguments regarding claim 3, which also apply to claim 4, apply to claim 12. (*See* RIB at 226-27.) TPL states that the Acer M3970 infringes claim 12 because it infringes claim 4. (CIB at 176.) The Rosewill RCR-YJ-EX601 also infringes claim 12 because it infringes claim 4. (*Id.* at 188.) Respondents do not agree that the Accused Products infringe claim 12. (RIB at 226.)

The ALJ's findings regarding the "indicator" element in claim 3 also apply to claim 12. Therefore, the ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 include the claimed "the indicator includes a light indicating data is being written to a card in the respective memory card interface." (CX-0944C at Q&A 479-80, 1501-02.) The evidence shows a light on both the Acer M3970 and the Rosewill RCR-YJ-EX601 and explains that a flashing light indicates data is being written onto a card. (*Id.* at Q&A 479-80, 1501-02.)

Therefore, the ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 meet the limitations of claim 12.

9. Claim 17

Unlike independent claims 1 and 9, independent claim 17 requires "selectively operating the first and second subsets." (*Id.*)

TPL's and Respondents' arguments regarding "accessible in parallel" in claim 1 also apply to claim 17. (CIB at 176, 184, 188; RIB at 220.) For claim 17, TPL provides evidence of the additional limitation "selectively operating the first and second subset" in the Accused

Products. (CRB at 86.) Respondents challenge TPL's evidence showing the Accused Products meet the limitation "selectively operating the first and second subset." (RRB at 44.)

TPL asserts that the claimed "selectively operating the first and second subsets to provide access . . . in parallel" requires that the first subset be selectively operated to read or write data, and then the second subset be selectively operated to write or read data. (CRB at 86.) Based on the TPL's interpretation, simultaneous read and write access to the memory cards would directly contradict the phrase "selectively operating." (*Id.* at 86-87.)

Respondents are not persuaded by TPL's interpretation of "selectively operating." (RRB at 44.) Respondents identify two issues with TPL's interpretation of "selectively operating." (Id.) First, the interpretation directly contradicts the plain language of claim 17. (Id.) The claim language requires that the memory cards of the first and second types are accessed in parallel, which is the opposite of sequential. (Id.) Second, Mr. Buscaino testified that the accessible in parallel limitation requires data to be concurrently read from the first card and written on the second card. (Id. at 44-45.) Because data cannot be concurrently read from the first card and written to a second card in the Accused Products, none of Respondents' Accused Products infringe the asserted claims of the '623 Patent. (Id. at 45.)

The ALJ finds the Accused Products meet the limitation "selectively operating" because the Accused Products selectively operate multiple memory cards. The evidence shows that the Accused products selectively provide access to the two different types of memory cards. (CX-0944C at Q&A 483-84, 1399-1400, 1503-05.) The evidence further shows that memory cards in the Accused Products are capable of being accessed in parallel. (*See id.* at Q&A 483-4, 1399-1400, 1505.) As with claim 1, the evidence includes a screen shot that shows files being transferred from one memory port to the second memory port. (*Id.* at Q&A 484, 1399, 1505.)

Therefore, a preponderance of the evidence shows the memory cards in the Accused Products can be accessed in parallel. (*Id.*)

TPL also argues that Respondents induce infringement of claim 17. (CIB at 176, 184, 188.) TPL states that Acer instructs end users to use the Acer M3970 in accordance with the claim 17 and, therefore, induces infringement by the users. (*Id.* at 176.) Because the Acer M3970 includes the structure of claim 17, as shown in claim 1, The product practices each element of claim 17. (*Id.*)

Similarly, TPL asserts that Kingston induces users to infringe claim 17 through use of the Kingston FCR-HS219/1. (*Id.* at 184.) The Kingston FCR-HS219/1 provides access to a plurality of memory card interfaces comprising a first subset to interface with a memory card of a first type and a second subset interface with a memory card of a second type. (*Id.*) Kingston induces end users to insert a first type of memory card into one interface, *e.g.*, CF interface, and a second type of interface, *e.g.*, MMC and SD interface, as evidence by the ports available with card indications instructing end users where to insert different card types. (*Id.*) The Kingston FCR-HS219/1 selectively operates the first and second subsets, *e.g.*, CF, SD, and MMC, to provide access to the memory cards of the first and second types in parallel to transfer data from the memory card of the first type to the memory card of the second type. (*Id.* at 185.)

In addition, TPL states Rosewill induces users to infringe claim 17. (*Id.* at 188.) TPL argues that Rosewill induces users to insert a first type of memory card into one interface, *e.g.*, xD interface, and a second type into another interface, *e.g.*, MMC and SD interface, as evidenced by the ports that Rosewill makes available on the Rosewill RCR-YJ-EX601. (*Id.*) The Rosewill also induces users of the Rosewill RCR-YJ-EX601 to practice the limitation "selectively operating the first and second subset to provide access to the memory cards of the

first and second types in parallel to transfer data from the memory card of the first type to the memory card of the second type," JX-0001.0009. (*Id.*) Specifically, Rosewill induces users to use the Rosewill RCR-YJ-EX601 in which at least one of the memory card interfaces is configured to interface with a plurality of different memory card types. (*Id.* at 189.)

In response to TPL's claim that the Respondents induce infringement of claim 17 through its users, Respondents argue that TPL failed to present evidence that an entity practiced the method recited in claim 17. (RIB at 227.) To prove induced infringement, TPL must show that a witness, other than the experts involved in the investigation, used an accused product to practice the claimed method. (*Id.*) Respondents further argue that TPL has waived any arguments relating to induced infringement because TPL did not raise it in its Pre-Hearing Brief. (RRB at 46-47.)

As an initial matter, the ALJ finds that TPL has waived any argument of induced infringement. Ground Rule 8.1(f) states, in relevant part:

A statement of the issues to be considered at the hearing that sets forth with particularity a party's contentions on each of the proposed issues, including citations to legal authorities in support thereof. Any contentions not set forth in detail as required herein shall be deemed abandoned, or withdrawn, except for contentions of which a party is not aware and could not be aware in the exercise of reasonable diligence at the time of filing the pre-hearing statements.

There is nothing in TPL's pre-hearing brief that discusses induced infringement of the '623 Patent. Thus, pursuant to Ground Rule 8.1(f), the ALJ finds that TPL has waived that argument.

Moreover, even if the ALJ were to consider induced infringement, the ALJ finds that TPL has failed to present any "evidence of culpable conduct, directed to encouraging another's infringement, not merely that the inducer had knowledge of the direct infringer's activities." (*See DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006) (*en banc*); CX-0944C at Q&A 481-82, 1379-80, 1401-08, 1507-08 (lacking proof of Respondents' intent and knowledge).)

Consequently, the ALJ finds that TPL has failed to show that Respondents induce infringement of claim 17. As discussed, *infra* Section V.D.1, TPL has failed to satisfy the requirements for *Certain Electronic Devices with Image Processing Systems, Components Thereof, and Associated Software*, Inv. No. 337-TA-724, Commission Op. (December 21, 2011), for this method claim, because it has failed to show induced infringement at the time of importation.

10. Claim 18

Claim 18 of the '623 Patent includes the additional limitation "at least one of the memory card interfaces is configured to interface with a plurality of different memory card types." This limitation is similar to that in claims 2 and 10. (*Id.*) Like claim 2, Respondents do not appear to dispute that the Accused Products include the additional limitation of claim 18. (RIB at 226-27.)

The ALJ finds that the Accused Products meet the limitation of claim 18. (CX-0944C at Q&A 485-86, 1401-02, 1507-8.) Text adjacent to a memory card interface in each of the Accused Products indicates different types of memory cards can be used in that interface. (*Id.* at Q&A 486, 1402, 1508.) Based on this text, the Accused Products include "at least one of the memory card interfaces is configured to read a plurality of different memory card types." (CX-0944C at Q&A 486, 1402, 1508.)

TPL states that Acer induces end users to use the Acer M3970 wherein at least one of the memory card interfaces is configured to interface with a plurality of different memory card types—one interface for CF or MD and one for SD or MMC. (CIB at 177.) TPL also states the Kingston FCR-HS219/1 includes at least one memory card interface configured to interface a plurality of different memory card types. (*Id.* at 185.) In addition, TPL asserts Rosewill induces

users to use the Rosewill RCR-YJ-EX601, at least one of the memory card interfaces is configured to interface with a plurality of different memory card types. (*Id.* at 189.)

As set forth *supra*, the ALJ finds that TPL has waived any arguments relating to induced infringement. Nevertheless, the ALJ further finds that TPL failed to prove the knowledge and intent required for induced infringement. (*Id.* at Q&A 485-86, 1401-02, 1507-8 (lacking proof of Respondents' intent and knowledge).) Consequently, the ALJ finds that TPL has failed to show that Respondents induce infringement of claim 18. As discussed, *infra* Section V.D.1, TPL has failed to satisfy the requirements for *Certain Electronic Devices with Image Processing Systems, Components Thereof, and Associated Software*, Inv. No. 337-TA-724, Commission Op. (December 21, 2011), for this method claim, because it has failed to show induced infringement at the time of importation.

11. Claim 19

Claim 19 of the '623 Patent includes the additional limitation "at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory card interface." This limitation is identical to claims 3 and 11. (*Id.*) Respondents disagree that the Acer M3970 and the Rosewill RCR-YJ-EX601infringe claim 19. (RIB at 226.) TPL's and Respondents' arguments regarding the "indicator" of claim 3 also apply to claim 19.

The ALJ's findings regarding the "indicator" element in claim 3 also apply to claim 19. Therefore, the ALJ finds that the Acer M3970 and the Rosewill RCR-YJ-EX601 include the claimed "at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory card interface." (CX-0944C at Q&A 487-88, 1509-10.) The evidence shows a light on both the Acer M3970 and the Rosewill RCR-YJ-EX601 and explains that a flashing light indicates data is being written onto a card. (*Id.* at Q&A 487-88,

1509-10.) The ALJ also finds Respondents' arguments unpersuasive for the same reasons set forth for claim 3.

TPL states Acer induces users to use the Acer M3970 wherein at least one of the memory card interfaces includes an indicator identifying a status of an operation for a respective memory card interface as shown for claim 11. (CIB at 177.) TPL also asserts that Rosewill induces users to use the Rosewill RCR-YJ-EX601 in a manner that infringes claim 18. (*Id.* at 189.) In the Rosewill RCR-YJ-EX601, at least one of the memory card interfaces includes an indicator identifying status of an operation for a respective memory card interface. (*Id.* at 188-89.)

As set forth *supra*, the ALJ finds that TPL has waived any arguments relating to induced infringement. Nevertheless, TPL failed to prove the knowledge and intent required for induced infringement. (*See id.* at Q&A 487-88, 1509-10 (lacking proof of Respondents' intent and knowledge).) Consequently, the ALJ finds that TPL has failed to show that Respondents induce infringement of claim 19. As discussed, *infra* Section V.D.1, TPL has failed to satisfy the requirements for *Certain Electronic Devices with Image Processing Systems, Components Thereof, and Associated Software*, Inv. No. 337-TA-724, Commission Op. (December 21, 2011), for this method claim, because it has failed to show induced infringement at the time of importation.

12. Conclusion

As set forth *supra*, the ALJ finds that the Accused Products meet the limitations of claims 1-4, 9-12 and 17-19. However, the ALJ finds that TPL has waived any arguments that Respondents induce infringement of claims 17-19. The ALJ further finds that TPL has failed to satisfy the requirements for *Certain Electronic Devices with Image Processing Systems*, Components Thereof, and Associated Software, Inv. No. 337-TA-724, Commission Op.

(December 21, 2011), for this method claim, because it has failed to show induced infringement at the time of importation for claims 17-19.

D. The '549 Patent

1. The Commission's Decision in *Electronic Devices* Does Not Prevent a Finding of Importation

Respondents initial argument regarding the '549 Patent is that there can be no violation of Section 337 under the Commission's recent opinion in *Certain Electronic Devices with Image Processing Systems, Components Thereof, and Associated Software*, Inv. No. 337-TA-724, Commission Op. (December 21, 2011) ("*Electronic Devices*"), because there is no proof of any infringement of the '549 Patent at the time of importation. (RIB at 166-171.) To understand this argument, the ALJ must explain the holding of the recent Commission decision in *Electronic Devices*.

The Commission Opinion in *Electronic Devices* begins its analysis by looking at the language of Section 337. *See Electronic Devices*, Comm'n Op. at 12-13. The Commission explained that "[t]he plain language of the statute identifies three specific acts that may form the basis of a violation of section 337: importation, selling for importation, and selling after importation." *Id.* at 13. The Commission explained that the statute then specifies in list form the categories of articles that must be involved in the proscribed acts. *Id.* At issue in *Electronic Devices* (and in this investigation) is the first category in that list—"articles that – infringe" a U.S. Patent. *Id.* (quoting 19 U.S.C. § 1337(a)(1)(B)(i)). The Commission explained that "[b]ecause the statute specifies that the articles in question must 'infringe,' an importation analysis that ignores the question of infringement would be incomplete." (*Id.* (footnote omitted).) The Commission then looked to the definition of "infringe" found in 35 U.S.C. § 271. (*Id.*)

Based on that section of the patent statute, the Commission held that Section 337(a)(1)(B), the Commission held that "articles that — infringe" refers to articles that directly or indirectly infringe. (*Id.*) The Commission then further held that the "infringement, direct or indirect, must be based on the articles *as imported* to satisfy the requirements of Section 337." (*Id.* at 13) (emphasis added).

For the apparatus claims (claims 11 and 21), Respondents are correct that at importation the accused devices do not include, at the very least, a "flash storage system.³" Indeed, TPL does not dispute that the products at importation lack at least this element. Thus, TPL concedes that the accused products do not directly infringe claims 11 and 21 at importation. (CIB at 217-219.) Instead, TPL contends that Respondents indirectly infringe claims 11 and 21 at importation because TPL contends that Respondents induce infringement of claims 11 and 21. TPL bases its claims of inducement on an allegation that the accused devices are intended to be combined with "flash storage system" and a "computing device" for the products that also lack that element. This contention presents an interesting question not fully explored in *Electronic Devices*—whether an imported component can induce infringement of system claims at importation, where the allegedly infringing system is assembled after importation. In order to begin to understand the answer to that question, we must look at the Commission's discussion of method claims in *Electronic Devices*.

With respect to method claims, the Commission further held in *Electronic Devices* that the practice of an asserted method claim within the United States after importation cannot serve as the basis for an exclusion order. *Electronic Devices*, Comm'n Op. at 17. This holding arises because an article, standing alone, cannot directly infringe a method claim. *Id.*; see also Cardiac

³ Respondents are also correct that some of the products also lack a "computing device" as required by the claims, but for the same reasons as discussed above for flash storage system that is not significant.

Pacemakers, Inc. v. St. Jude Medical, Inc., 576 F.3d 1348, 1364 (Fed. Cir. 2009). A method claim is infringed only where someone performs all of the claimed method steps. See NTP v. Research in Motion, Ltd., 418 F.3d 1282, 1318 (Fed. Cir. 2005) ("[T]he use of a [claimed] process necessarily involves doing or performing each of the steps recited."); Joy Techs., Inc. v. Flakt, Inc., 6 F.3d 770, 775 (Fed. Cir. 1993) ("A method claim is directly infringed only by one practicing the patented method").

The Commission ruled that complainant did not have a legally cognizable claim that respondent violated the statute by using articles within the United States when infringement allegedly occurred by virtue of that use. *Electronic Devices*, Comm'n Op. at 19 ("domestic use of such a method, without more, is not a sufficient basis for a violation of Section 337(a)(1)(B)(i)"). Nevertheless, the Commission stated that the complainant "might have proved a violation of section 337 if it had proved indirect infringement" of the method claim. *Id.* The Commission cited, as an example, *Certain Chemiluminescent Compositions, and Components Thereof and Methods of Using, and Products Incorporating the Same*, Inv. No. 337-TA-285, USITC Pub. 2370, Order No. 25 (Initial Determination) at 38 n. 12 (March 1991), in which "the ALJ found that the 'importation and sale' of the accused articles constituted contributory and induced infringement of the method claim at issue in that investigation." *Electronic Devices*, Comm'n Op. at 18 n. 11.

Thus, TPL can, at the very least, meet the importation requirement for its method claims (claims 7 and 9) if it can show that the importation and sale of the accused articles constitutes contributory or induced infringement of the method claims. Furthermore, the ALJ extends the reasoning of *Electronic Devices* to conclude that if TPL can show the importation and sale of the accused articles constitutes contributory or induced infringement of the apparatus claims (claims

11 and 21), then TPL can also meet the importation requirement for those claims as well. The ALJ notes that there is some internal tension in reasoning of *Electronic Devices*. For instance, while *Electronic Devices* holds the domestic use of a method cannot serve the basis for meeting the importation requirement, proof of induced infringement will likely rest on proof of domestic use of the method (i.e., domestic direct infringement). *See Mirror Worlds, LLC v. Apple, Inc.*, 692 F.3d 1351 (Fed. Cir. 2012) ("Inducement of infringement requires that there be a showing of an underlying act of direct infringement.").

Moreover, the ALJ further notes that the facts in this case differ from Chemiluminescent Compositions, which was cited by the Commission as an example of the application of indirect infringement to meet the importation requirement. In Chemiluminescent Compositions, the accused device (glow-in-the-dark necklace) as imported was a product that need not be combined with any other product in order to be used in an infringing manner. Chemiluminescent Compositions, Order No. 25 (Initial Determination) at 7-8. The present investigation more closely resembles the ALJ's recent decision in Certain Gaming and Entertainment Consoles, Related Software, and Components Thereof, Inv. 337-TA-752, Final Initial Remand Determination (March 25, 2012) ("Gaming and Entertainment Consoles) (unreviewed). In the present in investigation and in Gaming and Entertainment Consoles, to practice the asserted method claims, the accused devices must be used in conjunction with a separate device. In Gaming and Entertainment Devices, the accused device, Microsoft's Xbox 360 system, was accused of infringing the asserted method claims when it was used with a wireless accessory, such as a wireless controller. (Gaming and Entertainment Consoles, Final IRD, at 13.) This is similar to the asserted method claims in this investigation where the accused devices must be used in conjunction with a flash memory card in order to infringe.

However, the ALJ believes that neither the tension in *Electronic Devices* nor the differences between this investigation and *Chemiluminescent Compositions* alters the conclusion that TPL can meet the importation requirement if it can prove that the importation and sale induces infringement or is contributory infringement of the asserted apparatus and method claims of the '549 Patent. TPL does not allege that Respondents have committed contributory infringement, so the sole question is whether the Respondents induce infringement of the apparatus and method claims through their importation and sale of the accused devices.

2. Induced Infringement

As was explained above, the Patent Act provides that a party who "actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b). Inducement of infringement requires that there be a showing of an underlying act of direct infringement. *See Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1326 (Fed. Cir. 2004). "[I]nduced infringement under § 271(b) [also] requires knowledge that the induced acts constitute patent infringement." *Global-Tech*, 131 S. Ct. at 2068. The ALJ finds that TPL fails to show that the accused products directly infringe the asserted claims for at least two reasons. Thus, TPL has failed to show Respondents induce infringement of the asserted claims.

a. Direct Infringement

(1) Disputed Claim Elements

Beginning with direct infringement, Respondents argue that the following limitations of independent claims 7 and 11 are not met by the accused products:

Claim 7: "determining whether the flash storage system includes a controller for error correction." (JX-0002, 30:30-31.)

Claim 11: "a detector to determine whether the flash storage system includes a controller for error correction." (Id. at 30:57-59.)

Claim 7: "in an event where the flash storage system does not have a controller for error correction, using firmware in the flash adapter to perform operations to manage error correction of the flash section, including bad block mapping of the flash section in the flash storage system that is coupled to the flash adapter section." (Id. at 30:32-37.)

Claim 11: "a flash adapter which comprises firmware to perform, in an event where the flash storage system does not have a controller for error correction, operations to manage error correction of the flash section, including bad block mapping of the flash section in the flash storage system that is coupled to the flash adapter section." (Id. at 30:59-65.)

These four limitations fall into two groups. The first group consists of the "determining" and "detector" limitations of claims 7 and 11, respectively. The second group consists of the "using firmware" and "firmware" limitations of claims 7 and 11, respectively.

Respondents argue that the "plain language" of claims 7 and 11 require the affirmative step of determining whether the flash memory has a controller for error correction. (RIB at 171.) Respondents assert that this requires more than simply detecting or determined the type of memory card inserted. (RIB at 172.) Respondents argue that the accused products neither determine whether there is a controller nor contain a detector to determine whether there is a controller. (RIB at 172-174.) Instead, Respondents contend that their products merely utilize third-party controllers that detect the insertion of a card, identify the type of card inserted, and interface with the asserted card pursuant to the appropriate flash memory card standard. (RIB at 173-174.) Respondents assert that "[a]t no point do the third-party controllers—or any other component in the Respondents' accused products—determine whether the inserted card has a controller as required by claims 7 and 11, as no such determination is necessary." (RIB at 174.) Respondents further assert that TPL's expert conceded this. (RRB at 37 (citing Tr. 743:24-45:7).) Respondents contend that their expert testified that the controllers in the accused products have many sections and interfaces, and that depending on the detection of the type of card inserted or

the slot into which the card is inserted, the controller will use the appropriate controller subsection to interface with the card. (RRB at 38.) Respondents argue that this confirms that the accused products to not meet the determining/detector limitations because the accused products do not need to determine whether the inserted card has a controller for error correction. (RRB at 38.)

TPL responds that these arguments have no merit. TPL contends that nothing in the claims requires that the controller chip must physically detect the presence of a controller for error correction in an inserted flash memory card. (CIB at 216.) TPL further argues that the claims only require that the controller chip determine whether inserted card has a controller for error correction. (CRB at 76.) TPL asserts that the claims are open ended and do not preclude the controller chip from making this determination by identifying the type of card and knowing that that card type does or does not have a controller for error correction. (CRB at 76.) TPL responds that to the extent that the controller needs to detect the physical presence of a controller within the xD flash storage system to meet this element, there would still be infringement under the doctrine of equivalents. (CIB at 217.)

The ALJ agrees with Respondents that the accused products do not meet this limitation. The ALJ finds that this result is compelled by the language of the claims. Claim 7 requires "determining whether the flash storage system includes a controller for error correction." There is no dispute between the parties that the products do not explicitly determine if the flash storage system contains a controller or not. (Tr. 743:24-745:7; *see also* CX-0944C, Q&A 764-65, 774-75, 787-88, 797-98 (Dell); 1595, 1605 (Epson).) Instead, the accused products all simply determine what type of memory card has been inserted into the slot. (*See, e.g.*, Buscaino Tr. 555:4-561:1, 743:24-745:7; CX-0944C at Q/A 764-65, 774-75, 787-88, 797-98 (Dell), RX-

2884C, Q/A 543 (Brother); 1205-06, 1231-32 (HP), 1456-57, 1466-67 (as to Newegg/Rosewill); CX-0944C, Q/A 1594-95, 1604-05 (Seiko Epson); 81-88j, 102-1 (as to Acer).) The ALJ agrees with Respondents that because there is no actual determination of whether a controller exists, then the accused products cannot meet the literal language of the claims. (Brother: RX-2884C, Q/A 146-52, 154-74; 186-202; RX-1341C.0007; RX-2386; RX-2376C; RX-0587C; RDX-0270C; Banerjee, Tr. 1421:21-1422:6, 1422:17-1423:13; Dell: RX-2884C, Q/A 242-63, 278-95, 311-35, 351-68; RDX-277C, RDX-281C; RX-3192.0001-20; RX-3162C.9-11; RX-3167C.0004-8; RX-3168C.0001-2; CX-0944C, Q/A 765, 775, 788, 798; Seiko Epson: RX-2884C, Q/A 621-38, 648-49, 653-70, 680-81; RX-3419C.0006, RX-3426C.0005, .0009, RDX-0290C; RDX-0291C; CX-0944C, Q/A 1595, 1605; Acer: RX-2884C, Q/A 81-88, 102-13; HP: RX-2884C, Q/A 489; Newegg/Rosewill: RX-2884C, Q/A 536-43, 564-72; CX-0322.0007.0009; RDX-0285; CX-0944C, Q/A 1457, 1467.)

The ALJ finds that this same argument applies with even greater force to Claim 11. The ALJ finds that the plain language of Claim 11 requires that the accused products contain "a detector to determine whether the flash storage system includes a controller for error correction." (*See* RX-2884C, Q/A 38-46.) There is simply no such "detector" in the accused products. Thus, they do not infringe Claim 11. (Brother: RX-2884C, Q/A 146-52, 154-74; 186-202; RX-1341C.0007; RX-2386; RX-2376C; RX-0587C; RDX-0270C; Banerjee, Tr. 1421:21-1422:6, 1422:17-1423:13; Dell: RX-2884C, Q/A 242-63, 278-95, 311-35, 351-68; RDX-277C, RDX-281C; RX-3192.0001-20; RX-3162C.9-11; RX-3167C.0004-8; RX-3168C.0001-2; CX-0944C, Q/A 765, 775, 788, 798; Seiko Epson: RX-2884C, Q/A 621-38, 648-49, 653-70, 680-81; RX-3419C.0006, RX-3426C.0005, .0009, RDX-0290C; RDX-0291C; CX-0944C, Q/A 1595, 1605;

Acer: RX-2884C, Q/A 81-88, 102-13; HP: RX-2884C, Q/A 489; Newegg/Rosewill: RX-2884C, Q/A 536-43, 564-72; CX-0322.0007.0009; RDX-0285; CX-0944C, Q/A 1457, 1467.)

At bottom, TPL's infringement argument for this element is a doctrine of equivalents argument, not a literal infringement argument. TPL is arguing that detecting or determining the type of the card effectively detects or determines whether there is a controller or not. However, the ALJ cannot ignore the explicit claim language for literal infringement. *See Key Mfg. Group, Inc. v. Microdot, Inc.*, 925 F.2d 1444 (Fed. Cir. 1991). Thus, because the literal claim language requires a "detector" or "determining" whether or not there is a controller and the products do not do this, there can be no literal infringement.

As for TPL's doctrine of equivalent arguments, the ALJ finds that they are waived. These arguments were not presented in TPL's expert's direct witness statement or in its prehearing brief. *See* Ground Rule 8. Thus, the ALJ declines to find that this claim element is met by the doctrine of equivalents.

The other disputed limitation of the '549 Patent relates to whether the accused products have "firmware" for "error correction" such as "bad block mapping." (RIB at 174-177.) Respondents argue that TPL has failed to show that the accused products meet this requirement, which is found in all of the asserted claims. This dispute is narrow. It is undisputed (or at least not seriously disputed) that "error correction," such as bad block mapping, is an essential function of any memory system using the memory cards that are at issue here (xD). It also appears to be undisputed that any error correction must be performed in the accused product (because the accused readers involve xD cards that lack a controller within the card). The dispute, as the ALJ understands it, is whether TPL has proven that Respondents' products use firmware to accomplish this. Respondents note that Mr. Buscaino testified that he did not look at

any firmware in the Respondents' accused products or do any testing on any of the Respondents' accused products to determine if the accused products had firmware to perform the required error correction and bad block mapping functions. (RIB at 175.) Rather, Respondents argue that the documents Mr. Buscaino does rely upon do not support his opinion that the Respondents' accused products use firmware to accomplish the error correction. (RIB at 175.) Respondents assert that these documents relating to third-party controller chips utilized in the accused products make no reference to firmware that performs error correction or bad block mapping, and they provide no explanation as to how any such operation would be or are allegedly performed. (RIB at 175.) Respondents contend that these documents indicate that card-specific interface operations are performed by card-specific hardware interfaces within the host controller, not by the general microprocessor to which Mr. Buscaino points. (RIB at 175-176.) Respondents assert that to the extent the documents for certain third party controllers disclose performance of error correction, they do so by stating error correction is performed by hardware without any mention of firmware. (RIB at 176.)

Respondents argue that the evidence shows that using firmware in the flash adapter is not the only way to accomplish error correction and bad block mapping for xD cards, and TPL's reliance on the xD standard to demonstrate that Respondents' products allegedly meet the "firmware" limitation is insufficient. (RIB at 176.) Respondents assert that there is no mention of firmware for error correction or bad block mapping in these documents. (RIB at 177.) Respondents further argue that some documents regarding components used in the accused products indicate that those products do not use firmware to accomplish error correction or bad block mapping. (RRB at 39.) Respondents contend that because the standard "does not provide the level of specificity required to establish that practicing that standard would always result in

infringement" or the standard is optional or can be implemented in different ways, reliance on that standard is insufficient as a matter of law. (RRB at 40 (quoting *Fujitsu Ltd. v. LG Elecs.*, *Inc.*, 620 F.3d 1321, 1327-28 (Fed. Cir. 2010)).)

TPL argues that in light of all the other evidence it submitted and Mr. Buscaino reviewed, there was no need for Mr. Buscaino to review the firmware code of the accused products. (CRB at 77.) TPL points to evidence including the datasheets for the microprocessor controller, the xD memory card specification, testimony by its expert, and testimony by Respondents' expert that software or firmware would have to perform the error correction and bad block mapping. (See, e.g., CIB at 197, 200-201, 206-207, 211-212, 214-215; CRB at 77-78.) TPL argues that this is more than sufficient to show that the accused products meet this claim limitation.

While it is a close call and there is a reasonable likelihood that the accused products use firmware, the ALJ finds that TPL has failed to show that the accused products meet this claim limitation by a preponderance of the evidence. The ALJ finds that the xD specification says nothing about firmware or how the bad block mapping and error correction are done. (CX-359C.22-25.) Thus, the xD specification cannot, by itself, prove that firmware is used. The same problem exists for the various controller chip specifications for the controller chips used in the accused products that TPL cites. While those controller chip specifications do contain block diagrams showing that the controller chips have a CPU and ROM, none of the specifications cited by TPL discuss firmware or by themselves prove that the bad block mapping is performed by firmware. Mr. Buscaino's testimony is similarly inadequate. Mr. Buscaino simply testifies that "firmware executed" by each controller performs the bad block mapping. (See, e.g., CX-0944C at Q/A 403.) But he fails to explain how he reaches the conclusion that firmware is used to perform these functions. He only cites to the xD specification and the various controller chip

specifications, but as discussed above, those specifications do not establish that firmware is used to perform these functions. The ALJ finds that without some reasoning, explanation, or specific evidence to support his conclusion that firmware is performing these functions, Mr. Buscaino's conclusory testimony that firmware performs these functions is inadequate. Finally, TPL points to testimony by Dr. Banerjee where TPL contends that Dr. Banerjee "confirmed" that the accused products meet this limitation. (CIB at 197; *see also* CRB at 77 (citing Tr. 1375:19-1403:16).) The ALJ has reviewed this testimony and while Dr. Banerjee admitted that bad block mapping would require either firmware or software, he did not admit that this must be performed by firmware. If one reviews the entire testimony, he makes clear that it could be performed by software saved elsewhere and not necessarily by firmware, which he defined as software permanently saved to the ROM. (Tr. 1375:19-1403:16.) Thus, even this testimony does not establish by a preponderance of the evidence that firmware is performing these functions.

The ALJ notes that if Mr. Buscaino provided additional reasoning for why he reached the conclusion he did, the ALJ would be able to give more weight to his testimony. However, without any explanation for how he reached his conclusion and given the uncertainty about whether firmware, software, or even hardware are used to perform error correction and bad block mapping, the ALJ cannot find that TPL met its burden of proof regarding this element.

TPL failed to show that the "determining/detector" and "bad block/firmware" limitations were met. Therefore, there is no direct infringement of the independent claims.

(2) Dependent Claims 19 and 21

Claims 19 and 21 depend on independent claims 7 and 11 respectively. Inasmuch as each claim limitation must be present in an accused device in order for infringement to be found (either literally or under the doctrine of equivalents), a device cannot infringe a

dependent claim if it does not practice every limitation of the independent claim from which it depends. *See Warner-Jenkinson Co.*, 520 U.S. at 40; *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007). Furthermore, the Federal Circuit explained that:

One may infringe an independent claim and not infringe a claim dependent on that claim. The reverse is not true. One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.

Wahpelton Canvas Co., Inc. v. Frontier, Inc., 870 F.2d 1546, 1552 (Fed. Cir. 1989). Accordingly, the ALJ finds that TPL has failed to prove infringement of claims 19 and 21 as well.

b) Induced Infringement

Because induced infringement requires a showing of direct infringement and TPL has failed to show direct infringement of the asserted claims of the '549 Patent, TPL's assertions that Respondents induce infringement of the asserted claims also fails. *See Mirror Worlds, LLC v. Apple, Inc.*, 692 F.3d 1351, 1359-60 (Fed. Cir. 2012) (finding no inducement where acts constituting direct infringement had not been found).

E. TPL's Failure of Proof

Respondents argue that TPL failed to provide any analysis or evidence that each limitation of any asserted claim is present and, consequently, has failed to prove infringement of any of the asserted patents. (RIB at 248.) Respondents argue that TPL only provided conclusory statements of its expert without any analysis, which is insufficient to meet its burden. (RIB at 248-249.) Respondents argue that TPL provided a claim-by-claim, limitation-by-limitation analysis for only a couple of products, but that the remainder of the accused products ("the Uncharted Products") were only set forth in a table that identified the controller and connector combinations and included conclusory statements from TPL's experts that the controllers and

connectors perform certain functions related to the asserted claims. (RIB at 249.) TPL's experts failed to provide additional infringement allegations on these additional controller and connector assembly combinations. (RIB at 249.) Rather, the experts simply "hypothesize" that these controller and connector assemblies have certain attributes or perform certain functions. (RIB at 249-250.) Respondents argue that for the listed Uncharted Products, the ALJ should find that TPL failed to provide sufficient evidence to show infringement. (RIB at 250-253.)

Respondents further assert that for the Seiko Epson products that TPL did provide a limitation by limitation analysis, TPL failed to show that the necessary signal/power lines or card detect signal lines that connect the controller to the card connector. (RIB at 253.)

TPL argues that it provided sufficient evidence to prove infringement even for those products for which Mr. Buscaino did not provide claim charts. (CRB at 89.) TPL argues that Respondents' expert and Mr. Buscaino agree on how the products operate. (CRB at 89.) TPL notes that Respondents do not challenge the accuracy of the infringement charts that form the basis for his opinion on the Uncharted Products, the accuracy of the information reflected in those charts, nor do they disagree with Mr. Buscaino on how the products operate, yet Respondents still failed to stipulate to representative products. (CRB at 89.) TPL explains, in further detail, how the Seiko Epson WorkForce 545, the Canon Color ImageCLASS Mf9280Cdn, HP Pavilion dv7 Notebook Computer, and Brother MFC-J5910DW infringe the asserted claims. (CIB at 89-101.)

The ALJ finds Respondents' arguments puzzling. It is not clear, what, exactly, Respondents are attempting to argue. At best, it appears that Respondents argue that TPL should not have used representative products, but do not go so far as to dispute that the products included in the infringement claim charts are not, in fact, representative. Indeed, it is not quite

clear what the significance of Mr. Buscaino's failure, according to Respondents, to "analyze any of the controllers or assemblies by name" actually is. Respondents do not assert that the controller and connector assemblies actually perform the certain functions differently or have different attributes nor do they present any evidence to that effect. Respondents also do not assert that the information set forth in the tables is inaccurate. Rather, Respondents argue that the controllers and connector assemblies are manufactured differently, have different configurations and specifications, schematics, design considerations, etc. but do not explain or cite to any evidence as to how these differences would affect the assumption that the representative products are accurate representations of the accused products for purposes of infringement analysis. There is no evidence before the ALJ that these different controllers and connector assemblies are so different as to make the representative product an inadequate means of showing how these controllers or connector assemblies work.

In sum, it appears to the ALJ that Respondents argue that TPL should not have used representative products and should have performed an analysis on each and every single accused product, but fail to present any evidence that the representative products relied upon by TPL are inaccurate representations of the Uncharted Products. According to Respondents, TPL should have charted every accused product in this investigation. Absent some showing by Respondents that the representative products relied upon are not, in fact, representative of all of the accused products, the ALJ will not make such an onerous requirement. Infringement analyses of accused products based on analyses of representative products is not a novel concept before this ALJ and the Commission and, given the size of Section 337 investigations and the number of accused products, it is a fairly common practice for complainants to use representative products in proving infringement. While Respondents are, of course, not required to stipulate to

representative products, a failure to do so, especially in cases such as this one where there is no *genuine* dispute as to whether the representative product is an accurate representation of the accused products, smacks of petty of gamesmanship. The purpose and focus of a Section 337 investigation as it relates to infringement is to determine whether the accused products infringe the asserted patent and any means of making such a determination more streamlined and focused should be the goal of all parties participating in the investigation. Consequently, to the extent that Respondents argument appears to be that TPL has failed to prove infringement because it failed to chart each and every accused product, the ALJ finds such a requirement unnecessary given that there is no evidence before the ALJ that the representative products are inaccurate.

VI. VALIDITY

A. Background

One cannot be held liable for practicing an invalid patent claim. *See Pandrol USA, LP v. AirBoss Railway Prods., Inc.*, 320 F.3d 1354, 1365 (Fed. Cir. 2003). However, the claims of a patent are presumed to be valid. 35 U.S.C. § 282; *DMI Inc. v. Deere & Co.*, 802 F.2d 421 (Fed. Cir. 1986). Although a complainant has the burden of proving a violation of section 337, it can rely on this presumption of validity.

Respondents have the burden of proving invalidity of the patent. This "burden is constant and never changes and is to convince the court of invalidity by clear evidence." *i4i v. Microsoft Corp*, 131 S. Ct. 2338, 2243 (2010) (citing Judge Rich in *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F. 2d 1350, 1360 (CA Fed. 1984)). Respondents' burden of persuasion *never shifts. Id.* The risk of "decisional uncertainty" remains on the respondent. *Technology Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327 (Fed. Cir. 2008); *see also PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1303, 1305 (Fed. Cir. 2008); *Pfizer, Inc.*

v. Apotex, Inc., 480 F.3d 1348, 1360 (Fed. Cir. 2007). Thus, it is Respondent's burden to prove by clear and convincing evidence that any of the alleged prior art references anticipate or render obvious the asserted claims of the patents in suit. Failure to do so means that Respondents lose on this point. Id. (stating, "[I]f the fact trier of the issue is left uncertain, the party with the burden [of persuasion] loses.").

Respondents also bear the burden of going forward with evidence, *i.e.*, the burden of production. *Id.* This is "a shifting burden the allocation of which depends on where in the process of a trial the issue arises." *Id.* However, this burden does not shift until a respondent presents "evidence that might lead to a conclusion of invalidity." *Pfizer*, 480 F.3d at 1360. Once a respondent "has presented a prima facie case of invalidity, the patentee has the burden of going forward with rebuttal evidence." *Id.*

B. Priority Date

The parties do not dispute that the priority dates for the '549 Patent and '623 Patent are June 4, 2002 and November 18, 2002, respectively. (CIB at 14-15; RIB at 181, 217.) The parties do dispute the priority date to which the '443, '424, and '847 Patents are entitled.

TPL contends that the '443, '424, and '847 Patents are entitled to an effective filing date of July 6, 2000, which is the filing date for the '638 patent, and that they have an invention priority date of no later than February 18, 2000. (CIB at 233-240.) TPL only cursorily presses its claim that the '443, '424, and '847 Patents are entitled to an invention date of February 18, 2000. (See CIB at 234.) The ALJ finds that this single sentence is insufficient to prove this earlier date

of invention and, in any event, it is irrelevant, because only the effective filing date appears to have any significance to the parties' arguments in this case.⁴ (CIB at 233-240.)

Respondents argue that the patents are not entitled to an effective filing date of July 6, 2000 because the '638 patent fails to provide an adequate written description of the asserted claims of the '424, '443 and '847 patents. (RIB at 86-87.) Specifically, Respondents argue that the '638 patent fails to disclose the following limitations:

'443 Patent, all asserted claims:

- a controller / controller chip to map at least a subset of the at least one set of contact pins to a set of signal lines or power lines, based on an identified type of a memory media card.
- a set of contact pins protruding from an upper or lower surface /portion of an adapter, wherein the set of contact pins are integrated within molded plastic (embedded).

'424 and '847 Patents, all asserted claims:

- means for mapping power, ground or data signals between said interconnection pins / interconnection means / signal lines and said one or more contact pins depending upon the identification of the type of memory card inserted into said port (structure: a controller).
- a plurality of sets of contact pins mounted on said surface at locations adapted to interface with the electrical contacts of a corresponding one of a plurality of different type memory media cards when inserted into said port

'424 Patent, all asserted claims:

• means for identifying the type of memory card inserted into said port

'847 Patent, all asserted claims:

⁴ The parties also disputed the date of invention for the claims that were asserted in the '638 Patent, but as discussed earlier, the '638 Patent was only asserted against Dell, which has been terminated from this investigation. Because this dispute was only relevant to the asserted claims of the '638 Patent and no other patent, the ALJ finds that this dispute is now MOOT and will not consider any claims of prior invention dates for the asserted claims of the '638 Patent.

• a set of signal lines connected to a controller, the number of signal lines being fewer than the number of contact pins

(RIB at 87-88.)

Typically, the priority date, or effective filing date, of a patent is the date of the filing of the first patent application. The right to claim priority is codified in 25 U.S.C. § 120, which states, in pertinent part:

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing data of the first application and if it contains or is amended to contain a specific reference to the earlier filed application

Thus, to claim benefit to an earlier patent application the patentee must satisfy the substantive requirements of 35 U.S.C. § 112 (*i.e.*, does the parent application "reasonably convey to the artisan that the inventor had possession at the time of the later claimed subject matter") and the procedural requirements of 35 U.S.C. § 120. *See Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997) ("a prior application itself must describe an invention, and do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought") (citations omitted); *see also Amgen Inc. v. Hoechst Marion Rousell*, Inc., 314 F.3d 1313, 1330 (Fed. Cir. 2003) ("Satisfaction of this requirement is measured by the understanding of the ordinarily skilled artisan.") (citation omitted). A party challenging priority date must demonstrate by clear and convincing evidence that the parent application does not disclose the invention at issue as of the relevant filing date. *Certain Adjustable Keyboard Support Systems and Components Thereof*, Inv. No. 337-TA-670, Final Initial Determination at p. 77 (November 2011).

The ALJ finds that Respondents have failed to show by clear and convincing evidence that the '638 patent fails to disclose the inventions claimed in the asserted claims of the '424, '442. and the '847 patents.

1. "controller/controller chip" and "means for mapping" limitations

Respondents argue that the '638 Patent fails to disclose a controller because (1) the '638 patent fails to disclose an "all-in-one design" that is utilized by the '424, '443 and '847 patents and (2) the '638 patent touts the use of passive adapters while the '424, '443 and '847 patents disclose and claim active adapters. (RIB at 88-90.) Specifically, Respondents note that the '638 patent discloses the use of separate adapters and separate connectors to accommodate different card formats while the '424, '443 and the '847 patents discloses multiple sets of contact pins mounted on a single surface to interface with different card formats. (RIB at 88.) Furthermore, the '638 patent's disclosure of separate adapters means that an onboard controller located on the adapters to map contact pins to interconnection pins was not necessary. (RIB at 89-90.)

TPL argues that the '638 Patent discloses these elements. (CIB at 239; CRB at 54-56.)

TPL cites to specific parts of the '638 patent that it asserts discloses these elements. (CRB at 54 (citing '638 Patent, figures 3B,4A-E, 5, 6, 7, 9, 10; 3: 13-48; 4:35-56; 7: 35-49,62-64; 8:5-21; 30-42;11:6-34, 44-49; 4: 35-38; 7-35-8:12; 8:38-48; 9:4-17; 9:58- 10:1; 11:6-15; 11:38-52.)

TPL asserts that based on these disclosures, one of ordinary skill in the art would understand from the specification that the inventors were in possession of a controller that maps contact pins to signal lines and data signals between interconnection pins/means or signal lines and contact pins depending on the identified type of card. (CRB at 55-56.)

TPL further disputes Respondents' arguments that the '638 Patent negates the laterclaimed inventions of the '424, '443, and '847 Patents because the inventors, according to

Respondents, recognized there was no need to have an onboard controller. (CRB at 56.) As shown in the examples above, the inventors' disclosure explicitly calls for a single on-board controller / converter chip read data and identify card type. And, as evidenced by the examples discussed above, the on-board controller that is disclosed necessarily maps data signals depending on card type because 1-bit MMC and 4-bit SD share the same set of contact pins, per the '638 Patent's disclosure.

The ALJ finds that Respondents have failed to show by clear and convincing evidence that TPL is not entitled to claim the earlier priority date based on Respondents' contention that the "means for mapping..." elements are not disclosed in the '638 Patent. For example, the ALJ finds that the '638 Patent contains the following disclosures that support this element:

- A converter chip / controller chip "that is programmed to read and write I/O pins that are connected to flash-memory-card connectors and USB interface. Several different controller and transfer routines are written and programmed CPU 92 then executes these routines. A high-level scanning routine can sense when a flash-memory card is inserted. CPU 92 can then begins execution of another routine specific to that type of flash memory card. Transfer and handshake subroutes can then be called." '638 Patent at 10:42-53.
- "Shifter 98 is connected to the data and clock signals from connectors . . . When data is read from the flash-memory card, a clock is pulsed to synchronize the data transfer. Shifter 98 clocks in one bit (serial) or word (parallel) of data for each clock pulse." '638 Patent at 11:6-13.
- In addition, Figure 10 shows that the shifter 98 is part of the controller or converter chip. '638 Patent at Fig. 10

Accordingly, the ALJ finds that Respondents have failed to prove by clear and convincing that this element is not present in the '638 Patent.

2. "Contact Pins Mounted On Said Surface," "Contact Pins Integrated Within the Molded Plastic," and "Contact Pins Protruding From the Upper Surface" or "Lower Surface"/"Upper Portion or Lower Portion"

Respondents next argue that the '638 Patent does not teach the structural features of the contact pins that Respondents assert the '443, '424, and '847 Patents identify as novel features of their later-filed applications. (RIB at 90.) Specifically, Respondents contend that the '638 Patent does not refer to adapters that are made of molded plastic, to embedding contact pins in the molded plastic, or to contact pins that protrude from upper or lower surfaces of the molded plastic. (RIB at 90-91.) Respondents argue that the '638 Patent's disclosure of a "connector" is insufficient because "connector" can include plastic and non-plastic connectors and Respondents assert that plastic connectors were identified as an improvement in the '443 Patent. (RIB at 91.) Moreover, Respondents argue that TPL distinguished the '443 Patent over the prior art because it used molded plastic. (RIB at 91.) Respondents also argue that the '638 Patent does not disclose multiple sets of contact pins mounted to a housing surfaces at a location adapted to interface with different cards. (RIB at 91.)

TPL argues that while the '638 Patent does not use the word "molded plastic," it does disclose "connectors" and a person of ordinary skill would have understood that to include connectors made of molded plastic. (CIB at 235-236; CRB at 56-58.) TPL also makes similar arguments with respect to whether the contacts should protrude from the connector. (CIB at 236-237.)

The ALJ agrees with TPL that Respondents have not shown that the '443, '424, and '847 Patents are not entitled to the effective filing date of the '638 Patent because they do not disclose the connectors and contact pins claims in those patents. As TPL has shown, the '638 Patent does disclose connectors. ('638 Patent at Figure 3B, 2:38-50, 3:29-35, 4:21-24, 7:45-59, 7:62-8:32, 8:30-35, 8:67-9:3, 12:34-41, 19:19-26.) Moreover, as TPL has further shown, a person of ordinary skill would have understood this disclose to include the claimed connectors and contact

pins. (CX-0944C at Q/A 134, 135A, 136, 138; Tr. 397:22-287:8, 401:9-402:7, 610:7-25.) Accordingly, the ALJ finds that Respondents' arguments fail to carry their burden of proof and are rejected.

3. Means for Identifying a Type of Card

Respondents also argue that the '638 Patent fails to disclose a means for identifying a type of card as recited in the asserted claims of the '424 Patent. Respondents argue that Order No. 23 identifies card detect lines and the binary state of data lines as part of the structure corresponding to this means element. (RIB at 92.) Respondents contend that the '638 Patent has no disclosure of the structure that corresponds to the use of card detect lines multiplexed with data lines of another card format. Thus, Respondents argue that the '638 Patent does not disclose the full scope of the means for identifying. (RIB at 92.)

TPL responds that associated structure for the "means for identifying..." is a controller and that it is undisputed that the '638 Patent discloses a controller. (CRB at 59.) Moreover, TPL argues that the '638 Patent teaches using a controller to identify the type of card inserted into the port. (CRB at 59 (citing CX-0944C at Q/A 168-169; '638 Patent, Figs 4A-E, 5 (pins 25, 26), 4:60-7:32, 8:14-21, 10:42-53, and 11:44-57).) Moreover, TPL notes that the '638 Patent states "Converter chip 40 detects when a flash-memory card has been inserted into one of the connectors." (CRB at 59 (quoting '638 Patent, 8:38-42).) Thus, TPL argues a person of ordinary skill would understand that the inventors were in possession of a controller for identifying the type of memory card inserted into said port at the time of filing.

The ALJ agrees with TPL that the specification contains adequate disclosure of the means for identifying a type of card. (See CX-0944C at Q&A 168-169; '638 Patent, Figs 4A-E,

5 (pins 25, 26), 4:60-7:32, 8:14-21, 8:38-42, 10:42-53, and 11:44-57.) Accordingly, the ALJ finds that Respondents have not shown that this element is not disclosed in the '638 Patent.

4. Fewer Signal Lines Than Contact Pins

Respondents contend that the '638 Patent also fails to disclose the '847 Patent's limitation that the number of signal lines in the adapter be fewer than the number of contact pins provided within the housing. (RIB at 92.) Respondents argue that TPL's expert "acknowledged that the elements that he identified from the '638 Patents [sic.] as allegedly teaching this feature — a double arrow connecting a converter chip 40 to a connector 44 in FIG. 3B and a connection between USB chip 40 and connector 64 in FIG. 6 — do not disclose a structure that provides fewer signal lines for contact pins provided in a housing." (RIB at 92.) Respondents assert that "[w]ith respect to the FIG. 3B configuration, Mr. Buscaino testified there are 50 signal lines for a 50 pin CompactFlash connector 44." (RIB at 92 (citing Tr. 649:23-650:8).) Respondents further assert that "[f]or the FIG. 6 configuration, [Mr. Buscaino] testified there are 9 signal lines for a 9 pin MMC/SD connector." (RIB at 92 (citing Tr. 651:4-20).) Respondents argue that this demonstrates that there are an equal number of signal lines as contact pins, not fewer as the '847 Patent's claims require. (RIB at 92-93.) Respondents further dispute TPL's contention that the number of pins in connector 44 is fewer than the number of pins on the controller 40. (RRB at 54.) Respondents argue that this still does not provide support the priority date because TPL does not discuss "signal lines" or "contact pins" in its argument. Respondents argue that TPL "confusingly compares pins on a controller to pins on a connector 44 that receives adapters and not memory cards." (RRB at 54.) Respondents assert that controller 40 is not a housing having a port and surface with pins adapted to interface with the electrical contacts of memory cards and thus its pins are not contact pins.

TPL responds by arguing that Mr. Buscaino testified that this element is disclosed by Figure 3B (double arrow), 6, 7, and 9 (line connection 40 and 64). (CIB at 240 (citing CX-0944C at Q/A 187-188).) TPL argues that Mr. Buscaino explained that signal lines are the electrical paths between the interconnection pins and the pins on the controller chip and are usually traces on the PCB on which the chips and connectors are mounted. (CIB at 240.) TPL argues that as shown in Figure 3B of the '638 Patent, the number of pins in the connector 44 are fewer in number than the pins on controller 40. (CIB at 240.)

The ALJ agrees with TPL that Respondents have failed to show that this element is not met. As an initial matter, the ALJ notes that the only evidence cited by Respondents are snippets of testimony by Mr. Buscaino on cross examination. They point to no testimony by their own expert. As TPL explained, the number of connections on the controller are fewer than the number of connections at the connector. Contrary to what Respondents claim, this is not irrelevant. This demonstrates that while each connection in the connector has electrical connection connected to it, some of those connections are in fact the same signal line. Moreover, TPL offered evidence, namely the testimony of Mr. Buscaino, that this element is disclosed in the '638 Patent. While the ALJ believes that the evidence offered by both sides leaves much to be desired, the ALJ cannot say that Respondents have demonstrated by clear and convincing evidence that claim 1 is not entitled to claim priority to the '847 Patent. See Certain Adjustable Keyboard Support Systems and Components Thereof, Inv. No. 337-TA-670, Final Initial Determination at p. 77, 93.

5. Other Elements

Respondents also raise in their Post-Hearing Reply Brief a number new elements that they claim are not contained in the '638 Patent that were not contained in their Opening Post

Hearing Brief. The ALJ declines to consider these new arguments raised for the first time in their reply brief. Respondents bear the burden of showing that TPL's patents are not entitled to claim priority to the parent application disclosed on their face. Respondents failed to raise these arguments in their opening brief. Moreover, Respondents' reply brief contains only the barest amount of argument (a single paragraph) and cites no evidence to support their clear and convincing evidence burden. Arguments that are not supported, particularly for arguments on which a party bears the burden of proof by clear and convincing evidence, will not be considered. While TPL did provide some argument in its opening brief on these points because they were contained in Respondents pre-hearing briefs, the ALJ will not allow Respondents to raise new arguments on which they bear the burden of proof in their reply brief. Accordingly, the ALJ finds that Respondents' arguments that the '638 Patent does not disclose xD cards or Wi-Fi is waived.

C. The Prior Art Devices

Respondents have put forward three prior art devices that they contend (in various combinations) anticipate or render obvious the asserted claims of the asserted patents. Because these three references all raise common threshold issues of public availability and clear and convincing proof of their content, the ALJ considers those issues separately here. These devices are the Atech Pro II, the Dazzle 6-in-1 DM-8400, and the MultiFlash Device.

1. Atech Pro II

Respondents contend that the asserted claims of the '623 Patent and the '549 Patent are invalid under 35 U.S.C. §§ 102 (a) and (b) based on the Pro II that was allegedly sold by Atech Flash Technology, Inc. ("Atech"). (RIB at 230.) Respondents argue that the Pro II sold beginning in October 2001. (RIB at 230.) Respondents assert that the Pro II was manufactured

by a company called

(RIB at 230.) Respondents further claim that on November 15, 2001, the Pro II device was publicly displayed at an electronics show in Las Vegas, Nevada. (RIB at 230.) Respondents also point to a review allegedly published on November 15, 2001 and some U.S. sales that allegedly occurred in February 22, 2002. (RIB at 230.)

Respondents argue that TPL's examination of Mr. Eric Liu, who Respondents contend "designed and oversaw the production of the Pro II in 2001, and sold the Pro II in 2001, 2002, and beyond," did not establish that "any of Mr. Liu's documents or testimony are unreliable." (RIB at 231.) Respondents argue that Mr. McAlexander's opinion is "based on many different kinds of evidence, each of which buttresses the reliability of the evidence as a whole." (RIB at 231.)

TPL argues that Respondents have failed to prove that the Pro II device functioned the way they claim or that it existed when they claim. (CIB at 247.) TPL notes that Respondents principal witness regarding the Pro II device, Mr. Eric Liu, provided and testified documents that he obtained from web searches after he received a subpoena in this investigation. (CIB at 247.) TPL argues that the only proof Respondents have of the functionality of the Pro II device is based on a model that may have been manufactured in 2003. (CIB at 248.) TPL asserts that there is no corroboration of documentation regarding the functionality of the Pro II device in 2002 or before. (CIB at 248.) For example, TPL contends that RX-346, an internet review of the Pro II, contains no details about how the device functions and notes that the author had not received a device yet. (CIB at 248.) As for RX-0354C, TPL asserts that Mr. Liu obtained the document from the internet after he could not confirm that the document corresponded to the

controller that was used in the Pro II device sold before the critical date. (CIB at 248-49.) In fact, TPL argues that Mr. Liu based his belief that RX-0354C related to the correct controller based on some information that told Atech, which based on information that was allegedly provided by the chip maker. (CIB at 249.) TPL argues that this fails to meet clear and convincing evidence.

The ALJ agrees with TPL that Respondents have not proved that the Atech Pro II device, as analyzed by Mr. McAlexander, was available before the priority date for the '632 and '549 Patents. While the ALJ agrees that Respondents offered evidence that devices that are possibly similar to the Pro II that Mr. McAlexander analyzed may have been available and sold before the critical date, Respondents failed to establish by clear and convincing evidence how those devices functioned at that time. Indeed, the testimony of Mr. Liu falls far short of clear and convincing evidence. While Mr. Liu offered some testimony as to the functionality, the documents he offered to corroborate his testimony and confirm the functionality of the device were all obtained from internet searches long after the fact and many of them were only obtained after TPL sent a demand letter asserting patent infringement to his company. For example, Mr. Liu admitted that RX-346 contained no technical details about how the device operated. (Tr. 125:12-25.) The ALJ further finds that Respondents contentions are undermined by their reliance on RX-0354C, a specification sheet for the controller Mr. Liu believes was used in the Pro II. However, Mr. Liu admitted on the stand that he never had seen the document before he "Googled it" when he was searching for documents in response to the subpoena in this investigation that was served on him in 2012. (Tr. 132:22-133:17.) Mr. Liu further stated that he "assumed" that this was correct document, but did not know for certain. (Tr. 131:16-19.) Moreover, he admitted that there may be different version of the spec sheet. (Tr. 131:3-8, 131:9-

15.) Indeed, Mr. Liu testified that he only learned that this may be the controller from discussions he allegedly had with a manufacturer of the device and from testing documents that were not submitted into evidence. This does not meet a clear and convincing evidence standard. Thus, the ALJ finds this evidence to be insufficient to establish by clear and convincing evidence that the Pro II analyzed by Respondents was available before the priority dates for the '623 and '549 Patents.

2. Dazzle 6-in-1 DM-8400

Respondents contend that the Dazzle 6-in-1 DM-8400 is prior art to the '623, '443,'424, and '847 Patents because Respondents allege that it was on sale and was first made available to the public as of October 24, 2001. (RIB at 236.) The ALJ has already determined that the '443,'424, and '847 Patents are entitled to a priority date before October 24, 2001, so the Dazzle 6-in-1 DM-8400 is not prior art for those patents. The only remaining issue is whether the Dazzle 6-in-1 DM-8400 is prior art for the '623 Patent.

The Respondents argue that they have proven that the Dazzle 6-in-1 DM-8400 ("Dazzle Reader") is prior art. (RIB at 236.) Respondents contend that TPL only "complains that witness' memories might be incorrect" or that documents produced by corporate and individuals may be facially incorrect. (RRB at 64.) Respondents argue that at the hearing they supported their invalidity challenges with reference to numerous evidentiary sources that demonstrate the prior art documents and products were published or publicly available prior to the effective filing dates of TPL's patents. (RRB at 64-68.) In response, Respondents complain that TPL attempts to attack the credibility or authenticity of certain isolated pieces of this evidence, ignoring the plethora of evidence that contradicts its theory. (RRB at 64-68.) Respondents argue that they have submitted evidence regarding the prior art products that is "self-corroborative," and as a

whole shows that the prior art products are in fact prior art and invalidate the asserted claims of the Asserted Patents. (RRB at 64-68.)

The ALJ agrees with TPL that Respondents have failed to prove by clear and convincing evidence that the Dazzle Reader is prior art to the '623 Patent. Respondents arguments that they have met their burden in proving that the Dazzle Reader is prior art fall wide from the mark for a number of reasons. First, Respondents mistake not only who bears the burden of proving the reference is prior art, but also what their burden is. TPL is free to challenge the evidence that Respondents submitted because Respondents bear the burden of showing that the Dazzle Reader is prior art by clear and convincing evidence.

Second, Respondents failed to even present any evidence, besides a cursory assertion that the Dazzle Reader was prior art in their opening brief. This alone would be sufficient to warrant finding that they have failed to carry their burden.

Third, TPL is correct about many of their complaints about the "evidence" that Respondents have submitted. For example, the ALJ agrees with TPL and finds that the testimony and evidence submitted by Mr. Balasubramanian is entitled to almost no weight. While Respondents are correct that Mr. Balasubramanian did testify that he created his summary document that Respondents rely on (RX-0182C) "as part of [his] way of getting familiar with all the products...to increase my knowledge of it...", the ALJ does not find it to be entitled to much weight for a number of reasons. First, the document was prepared years after the events it allegedly documents happened. (RX-0177C at 194:21-195:23, 196:13-197:4). Second, involve events in which Mr. Balasubramanian was not involved. (RX-0177C at 194:21-195:23, 196:13-197:4). Third, Mr. Balasubramanian's reasons for producing such a document were not very clear nor was it clear that it was meant to be an accurate record of the actual dates when these

events occurred. Indeed, the very nature of the document and its emphasis on dates is not the sort of document an engineer prepares to get himself familiar with products. Given that the timing of this document coincides with the beginning of TPL's licensing campaign (*see infra* Section VII.C), the ALJ suspects that this document may have been motivated at least in part by the possibility of litigation with TPL. Such documents are "dripping with motivations to misrepresent." *Hoffman v. Palmer*, 129 F.2d 976, 991 (2d Cir.1942) (Frank, J.) (documents prepared for litigation are "dripping with motivations to misrepresent"), *aff'd*, 318 U.S. 109. In sum, the ALJ finds that these circumstances make this document extremely suspect and leads the ALJ to question Mr. Balasubramian's assertions.

In addition, Mr. Balasubramanian's testimony is further suspect because he does not know who first sold the Dazzle 6-in-1. (RX-0177C at 206:14-21). He does not know how many versions of the Dazzle 6-in-1 were offered for sale because he "didn't handle that product." (RX-0177C at 240:3-7.) When was asked when the Dazzle 6-in-1 was first sold, he testified: "I'm not aware of that one. The sales -- the sales detail, I'm not aware of it." (RX-0177C at 149:19-23.) Because press releases "usually [] comes when there is already a customer commitment," he "assum[ed]" it was sold in late 2001, but further testified "I don't know that." (RX-0177C at 149:19-150:9.)

Mr. Balasubramanian had no knowledge of some of the exhibits Respondents seek to introduce to support their date. For example, Respondents' counsel brought to his deposition document IDEN-ITC-0000034, which was marked as Exhibit 17 (now RX-0637). Mr. Balasubramanian testified that Exhibit 17 "wouldn't have come from me. I don't recall printing this." (RX-0177C at 142:5-9). Despite being Bates-stamped with his company's name, Identive, he could not testify to ever having seen Exhibit 17. He is merely "assuming" Exhibit 17 is the

same as the article he "chanced upon" in 2007. (RX-0177C, 141:22-142:3). Mr. Balasubramanian was then shown Exhibit 29 (now, RX-0203), which has a different URL than Exhibit 17 and has a Hewlett-Packard Bates label, not an Identive label. In his deposition, he believed that Exhibit 29 was the basis for the "2001" introduction date entry on RX-0182C, but, as TPL points out, Exhibit 29 was produced by HP in this investigation and did not come from Identive or Mr. Balasubramanian. *Compare* RX-0203 (HP059512) *with* RX-0637 (IDEN-ITC0000034); (RX-0177C at 177:1-11). The ALJ further notes that Mr. Balasubramanian was not even able to distinguish between a Dazzle 6-in-1 and a Dazzle 8-in-1. (RX-0177C at 179:9-18).

Respondents also rely on Mr. Warner's testimony. However, as TPL points out, Mr. Warner was also shown Balasubramanian Exhibit 17 (RX-0637). He did not recall reading the document before his deposition, was not sure where it came from, and believed the content came from SCM "[b]ecause it says so." (Tr. 1446:14-1447:14). Mr. Warner testified on cross-examination that SCM made different Dazzle 6-in-1's and that different Dazzle 6-in-1's operated differently depending on when they were made, but he did not know how or in what manner the different Dazzle 6-in-1's would operate differently. (Tr. 1447:15-1448:6).

TPL also notes that Mr. McAlexander relies on an engineering report from TechInsights for the Dazzle 6-in-1 DM-8400. TPL argues that that particular product in the report was manufactured in the seventh week of 2002 as indicated by the "0207" in the serial number. (Tr. 1519:7-25). The product could not have been sold in the U.S. until after it was made in China in 2002 and then shipped. (Tr. 1520:1-11).

Mr. McAlexander never reviewed the controller specifications for the Dazzle 6-in-1 DM-8400. (Tr. 1521:15-19). The test run by TechInsights on the Dazzle 6-in-1 DM-8400 was

"corrupted." (Tr. 1530:14-25). Mr. McAlexander testified that either the product or the card "wasn't operating correctly." (Tr. 1531:1-17). Later, he believed it was the card that was not operating correctly. (Tr. 1532:16-1533:3). He also had TechInsights tear down and test another Dazzle product manufactured in 2003. (Tr. 1533:4-1534:6, 1534:15-25). That testing showed the later manufactured Dazzle product could read SD cards in 4 bit mode. (Tr.1535:9-19).

The ALJ finds that the evidence presented by Respondents simply does not permit the ALJ to find that the Dazzle Reader was available in November 2001. The ALJ reviewed Mr. Balasubramanian's testimony and found that it was not credible and, further, he lacked firsthand knowledge of when these devices were available. The testimony of Mr. Warner provided little insight into the date that the products were available. Finally, the devices tested by Mr. McAlexander do not confirm that the products functioned the way Respondents claim before the priority date. Accordingly, the ALJ finds that Respondents have failed to meet the clear and convincing standard of proof regarding the Dazzle Reader.

3. MultiFlash Product

Respondents contend the AcomData MultiFlash product is prior art to the '443, '424, and '847, and '549 Patents with an April 2001 sale date. The ALJ has found that the priority date or the '443, '424, and '847 Patents is before April 2001, and therefore the MultiFlash Product is not prior art for those patents. As for the '549 Patent, Respondents contend that it was available before the date of the invention of June 4, 2002. The ALJ finds that Respondents have failed to show by clear and convincing evidence that the MultiFlash was available by that date for several reasons. Respondents argue that MultiFlash was on sale by April 2001 and they further contend that it was available by July 2001. (RIB at 195.) Respondents fail to argue for any other date, but evidence does not support either of those dates and there is no evidence in the

record that supports a finding by clear and convincing evidence that it was available even by the '549 Patent date of invention.

First, the controller chip used in the MultiFLASH product shown, however, has a date of "0139." (RX-0846C at 9). TPL presented "0139" means the chip was manufactured on the thirty-ninth week of 2001. (Tr 1522:7-1523:13). While the chip might have been available by that point, there is no evidence to support when the product was actually made available. At best, it shows that Respondents' assertion that the product was available in April 2001 does not match the evidence because the controller chip was not even manufactured until months after the date on which Respondents claim the finished product was sold. Respondents offer no alternative evidence that would support a finding by clear and convincing evidence about when it was available.

Second, Respondents cite to RX-0288C.0004-7 and argue the MultiFlash product appeared on Steve's Digicams website on July 18, 2001. *Id.* However, the ALJ finds that RX-0288C.4-7 is a document for the Iomega Click! Drive and does not support a finding by clear and convincing evidence that this particular device was available on that date. Respondents also cite to RX-1001.0004 to argue the MultiFlash product was on sale by April 6, 2001. (RIB at 126.) The ALJ finds, however, that although RX-1001.0004 may have been the AcomData website at some point in time, this page does not contain a product called the "AcomData MultiFlash." Rather, it refers to a "Flash! USB Memory Card Reader" and a "Multi-Format Memory Card Reader." The document does not indicate any product is on sale, much less the exact "MultiFlash product" Respondents contend is prior art. (RX-1001.0004.) Respondents have no evidence that the product pictured is the same or similar to the physical product claimed to be

prior art. (RPX-0002.) Further, the document is undated other than the archive address at the bottom of the page. (RX-1001.0004.)

Third, Respondents submitted no evidence to date the image on any website. In fact, RX-0288 discussing the Dazzle 6-in-1 and the MultiFlash is one of the examples that shows why the Internet Archive's Affidavit is correct that images may have been placed on a page later than the dated HTML file. RX-288.34 places a time stamp of February 11, 2002 for the HTML file according to the URL text. ("http://web.archive.org/web/20020211185459/http://www.stevesdigicams.com/2002 reviews/dazzle 6in1.html.") However, the date of the image relied on by Respondents is dated August 7, 2006—1,638 days after the HTML purportedly was present. RX-0288.35 discusses the MultiFlash and places a date of July 30, 2001 for the HTML file according to the URL text. ("http://web.archive.org/web/20010730070740/http://www.stevesdigicams.com/2001 reviews/multiflash.html.") However, the image relied on by Respondents is 2003—737 dated August 6. days the text. ("http://web.archive.org/web/20030806082527im /http://www.stevesdigicams.com/images4/multiflash drives.jpg")

Finally, Respondents' expert, Mr. McAlexander, relies on Steve's Digicam website review of a MultiFlash product in an attempt to establish how the product operated in April 2001. (Tr.1504:18-1505:20.) However, Mr. McAlexander relies on an engineering report showing the "0139" date for the controller chip, and inexplicably concludes that the tested product functioned the same as the MultiFLASH product shown in the Steve's Digicams July 18, 2001 review and could read SD and MMC cards. (RX-0288 at 34-37); (Tr.1504:18-1505:20). He relies on this information despite the fact that the Digicams review states "I have no Secure Digital or MultiMediaCard cards here so I could not try them...." (Tr. 1505:21-1506:10). Further, the

Steve's Digicams document was produced as part of the Internet Archive's Affidavit that says "images that appear on a page may not have been archived on the same date as the HTML file." (RX-0288 at 1). The website states that MMC or SD cards were not tested; however, the picture on the website shows an MMC card. (Tr. 1505:21-1506:10); (RX-0288 at 34, 36). Respondents submitted no evidence to date the image on any website. Thus, the ALJ finds that Respondents' evidence fails to meet the clear and evidence standard of proof.

D. The '443, '424, and '847 Patents

Respondents offer at least 10 different invalidity defenses against these three related patents. As in other areas of their brief, Respondents' arguments suffer from their efforts to retain as many arguments as possible. The ALJ now proceeds through the bog of arguments Respondents raise to attempt to find those potentially meritorious defenses.

1. The Lipponen Patents

Respondents argue that the assert claims of the '443, '424, and '847 Patents are rendered invalid by U.S. Patent No. 6,612,498 ("the '498 Patent") (RX-0807) and EP 1 037 159 ("the EP '159 Patent"), which Respondents group together and call the Lipponen Patents. (RIB at 97-111.) The ALJ declines to consider these references together. Either the '498 Patent or the EP '159 Patent anticipates, not an amalgamation of both. While the two Lipponen references are certainly related—they have similar specifications and claim priority to the same Finnish patent application, the law of anticipation requires a single prior art reference that includes all the elements of the claim in the four corners of the document. *See Net MoneyIn, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) ("[T]he proponent [of anticipation] must show that the four corners of a single, prior art document describe every element of the claimed invention. (quotation marks omitted).). The ALJ further notes that "differences between the prior art

reference and a claimed invention, however slight, invoke the question of obviousness, not anticipation." *Id.* at 1371. Respondents do not cite to these separate references separately, but instead merge them together into one reference obscuring one from the other, which creates the potential for finding anticipation in a situation where the element is not found in both references. It appears that the bulk of Respondents' pinpoint citations are to the EP '159 Patent, so the ALJ will only consider that patent in his invalidity analysis. The ALJ will not risk confusing the matter by taking Respondents' approach of inexplicably combining references together.

The ALJ finds that the EP '159 Patent published on September 20, 2000. (RX-0985.) Thus, the ALJ finds that the EP '159 Patent is prior art under 35 U.S.C. § 102(a).

The ALJ finds that Respondents have failed to prove that the EP '159 Patent discloses a "multi-memory media adapter" and therefore cannot anticipate the asserted claims the '443, '424, and '847 Patents. The ALJ finds that while Respondents have shown that the invention disclosed in the EP '159 Patent supports two types of cards, there is only one memory media card disclosed. (RX-0985 at ¶ 0002.) The ALJ finds that Respondents have not shown by clear and convincing evidence that SIM cards or "Subscriber Identification Module" cards, the other type of card disclosed, are memory cards. (*Id.*) TPL provided evidence that SIM cards are embedded integrated circuits used primarily for identification purposes in mobile telephone devices. (*Id.*) Accordingly, the ALJ finds that Respondents have failed to show that the EP '159 anticipates the asserted claims of the '443, '424, and '847 Patents. (*See* CX-1205C at Q/A 440-465.)

As for obviousness, Respondents offer barely half a page of analysis of why the Lipponen Patents would render the asserted claims of the '443, '424, and '847 Patents obvious. They offer the same boilerplate motivation to combine: "The combination of references would have been obvious to a person of ordinary skill in the art because the references are in the same

field, the references show housing for similar memory cards, any combination would be a trivial modification capable of being implemented as a mere workshop improvement, and any such combination would yield predictable and expected results." (RIB at 105-106.) This same reasoning is repeated elsewhere Respondents brief. (RIB at 122, 214.)

A little more than one page of analysis is simply insufficient to overcome the presumption of validity and to meet the clear and convincing standard of proof for invalidity of three patent claims. *See Certain Mobile Devices, Associated Software and Components Thereof*, Inv. No. 337-TA-744, Final Initial Determination, at 117 (December 20, 2011) (unreviewed in relevant part).

2. The SD Specification

Respondents' arguments regarding invalidity based on the SD Specification are based TPL's infringement assertions against the accused products for the "mapping" elements of the asserted claims. (RIB at 114-118.) The ALJ rejected TPL's infringement arguments for "mapping." (See supra Section V.B.1.) In light of that determination, the ALJ finds that Respondents have failed to show by clear and convincing evidence that that the SD Specification meets the "mapping" limitation of the asserted claims of '443, '424, and '847 Patents. Accordingly, the ALJ finds that Respondents have not shown by clear and convincing evidence that the asserted claims of the '443, '424, and '847 Patents are rendered invalid by the SD Specification.

3. MultiFLASH Product

As the ALJ found above, Respondents failed to prove by clear and convincing evidence that MultiFLASH is not prior art to the '443, '424, and '847 Patents. (*See supra* Section VI.C.3.)

Accordingly, the ALJ finds that Respondents have not proven that the MultiFLASH product renders the asserted claims of the '443, '424, and '847 Patents invalid.

4. Dazzle 6-in-1 DM-8400 Reader

As discussed above, the Respondents have failed to show that the Dazzle 6-in-1 DM-8400 Reader is prior art to the '443, '424, and '847 Patents. (*See supra* SectionVI.C.2.) In addition to those general reasons stated above, the ALJ finds two additional reasons why the Dazzle 6-in-1 DM-8400 Reader fails to render the asserted claims of the '443 and '424 Patents invalid. First, because the ALJ has found that the '443 and '424 Patents have a priority date of July 6, 2000, even if the Respondents proved the October 2001 date, the Dazzle 6-in-1 DM-8400 would still not be prior art. Second, the Respondents base their invalidity allegations on the fact that they allege that the Dazzle reader, as with the accused products, has a SD/MMC slot. Thus, Respondents contend that if the accused products infringe and the ALJ found that the shared SD/MMC slot constituted "mapping," then the Dazzle reader would also invalidate those claims. However, the ALJ found that the shared SD/MMC slot to not practice mapping as claimed in the '443 and '424, so the Dazzle reader would also not invalidate the asserted claims.

5. The Sun References

Respondents argue that the asserted claims of the '443, '424, and '847 Patents are invalidated by two related prior art references, Japanese patent publication JP2001-184462 ("the '462 Publication") (RX-0821) and U.S. Patent No. 6,663,007 ("the '007 Patent") (RX-0819), which Respondents refer collectively to as the Sun References. The '462 Publication published on July 6, 2001 and therefore is not prior art to the '443, '424, and '847 Patents under

⁵ The ALJ notes that once again Respondents confusingly collect several related, but separate, prior art publications and confusingly refer to them as a single reference.

the effective filing date of July 6, 2000. (RX-0821.) The '007 Patent was filed on November 13, 2000 and issued on December 13, 2003 and is therefore also not prior art to the '443, '424, and '847 Patents under the effective filing date of July 6, 2000. (RX-0819.) Accordingly, the ALJ finds that Respondents have not shown that the Sun References invalidate the asserted claims of the '443, '424, and '847 Patents because they are not prior art.

6. The '928 Publication

Respondents assert that Japanese patent publication JP H11-15928 ("the '928 Publication") invalidates the asserted claims of the '443, '424, and '847 Patents. (RIB at 153-154.) The ALJ finds that the '928 Publication, which published on January 22, 1999, is prior art to the '443, '424, and '847 Patents under 35 U.S.C. 102(b). (RX-0817.)

The ALJ begins by noting that Respondents contend that the '928 Publication renders obvious *all* of the asserted claims of the '443, '424, and '847 Patents. However, its analysis is limited *only to "[t]hose claims* are rendered obvious by the '928 Publication." Even if these conflicting statements could somehow be reconciled, This is grossly inadequate. Thus, the ALJ finds that Respondents have failed to prove the asserted claims of the '443, '424, and '847 Patents are rendered obvious by the '928 Publication.

As for Respondents' anticipation analysis, it is only very slightly better, but the ALJ finds that it is still inadequate. There is no element-by-element analysis as required by the ALJ's Ground Rules. There is one paragraph of discussion of some generic elements of the '443, '424, and '847 Patents that Respondents appear to apply to all of the patents. (RIB at 153-154.) The only specific discussion of the '443, '424, and '847 Patents with respect to the '928 Publication is a single sentence for each patent: "The '928 publication discloses all of the limitations of the asserted claims [list of asserted claims] of the ['443, '424, or '847 Patent] and, therefore the '928

publication anticipates the asserted claims." (RIB at 154.) The ALJ finds that this is inadequate to carry Respondents' burden to prove invalidity by clear and convincing evidence. Accordingly, the ALJ finds that Respondents have failed to prove invalidity under the '928 Publication by clear and convincing evidence.

7. Toshiba Prior Art

Respondents argue that the asserted claims of the '443, '424, and '847 Patents are invalid as obvious over what they designated the "Toshiba Prior Art": (1) the TC6375AF Controller chip (RX-0862); and (2) the "Saito" patents (RX-0883; RX-2383.) Respondents contend that the datasheet for the TC6375AF constitutes a prior art publication because it bears a publication date of February 15, 2002 and identifies other version of the datasheet that were issued March 7, 2001 (revision 0.94) and May 18, 2001 (revision 1.00). (RX-0862.125.) Setting aside that Respondents presented no evidence regarding the public availability of this datasheet or confirming the date it was available, the ALJ finds that the TC6375AF is not prior art because even if Respondents' contentions are correct it was available after the priority date for the '443, '424, and '847 Patents. (RX-0862.125.)

As for the Saito Patents, the ALJ finds that they are also not prior art. The Japanese application JP 2001-223044 (RX-2383) published on August 17, 2001, which is after the priority date for the '443, '424, and '847 Patents. (RX-2383.) Accordingly, the ALJ finds that it is not prior art. Respondents assert that the U.S. counterpart of the Sato patents (RX-0883) has a priority date of August 18, 2002. (RIB at 155.) The ALJ finds that the U.S. counterpart of the Sato patents is not prior art to the '443, '424, and '847 Patents. (RX-0883.)

Moreover, even assuming that the TC6375AF data sheet and the Saito Patents are prior art, Respondents provided no motivation to combine these two references. (RIB at 154-158.)

Accordingly, because Respondents have not shown that the Toshiba Prior Art is prior art, the ALJ finds that the Toshiba Prior Art does not render the asserted claims of the '443, '424, and '847 Patents obvious.

8. Indefiniteness

Respondents contend that the asserted claims of the '424 and '847 Patents, which each recite the claim element "a means for mapping power ground or data signals between said [interconnection pins/interconnection means/signal lines] and said one or more contact pins depending upon the identification of the type of memory card inserted into said port," are invalid because they are indefinite under 35 U.S.C. § 112(f) for failing to disclose an adequate algorithm. Respondents argue that while the corresponding structure is a controller, there is no disclosure of the algorithm to perform mapping for that controller. Respondents assert that without an algorithm or any other limiting structure the asserted claims of the '424 and '847 Patents are invalid as a matter of law. The ALJ finds that the testimony of Mr. Buscaino persuasive and the ALJ finds the citations therein sufficiently disclose an algorithm for mapping. (See Tr. 830:1-24; CX-1205C at Q/A 1166-1184.) Accordingly, the ALJ finds that Respondents have failed to prove by clear and convincing evidence that the asserted claims of the '424 and '847 Patents are invalid as indefinite under 35 U.S.C. § 112(f).

9. New Matter

Respondents argue that the asserted claims of the '424 Patent are invalid under 35 U.S.C. § 112(a) because they rely on new matter. (RIB at 161-162.) Specifically, Respondents contend that the "means for identifying the type of card inserted into said port" element does not find support in the original '424 Patent specification. (RIB at 161.) Respondents point to the structure identified for this element ('424 Patent at 6:36-53), and claim that part of this section is

new matter that was added by amendment when the '424 Patent was pending at the USPTO. (RIB at 162.) Respondents assert that when TPL added this material, it argued that the added material was present in the '638 Patent, but Respondents argue that it was not. (RIB at 162.) Respondents content that "[t]he description as it appears in the '638 Patent, described card detect lines that appeared in three separate, format-specific passive adapters 30, 32, 34 of Figure 3B." (RIB at 162 (citing JX-0005 at 5:60-7:32).) Respondents argue that when it added this matter TPL transformed this disclosure. (RIB at 162.)

"[I]n the context of a validity challenge based on new matter, the fact that the [PTO] has allowed an amendment without objection is entitled to [an] especially weighty presumption of correctness in a subsequent validity challenge based on the alleged introduction of new matter." Commonwealth Scientific and Indus. Research Organisation v. Buffalo Tech. (USA), Inc., 542 F.3d 1363, 1381 (Fed. Cir. 2008) (quotation omitted). Whether an amendment's additions constitute "new matter" is a factual inquiry, and Respondents must present clear and convincing evidence demonstrating that the claims at issue injected new matter. Id. at 1380; Brooktree Corp. v. Advanced Micro Devices, Inc., 977 F.2d 1555, 1574 (Fed. Cir. 1992). The ALJ finds that Respondents new matter defense must fail. Respondents came forward with only attorney argument to support their interpretation of what the '638 Patent disclosed and whether that disclosure supported the additions to the '424 Patent, which the USPTO had allowed and found were supported by the '638 Patent. Accordingly, the ALJ finds that Respondents have failed to carry their clear and convincing burden of proof that the asserted claims of the '424 Patent are invalid for new matter.

10. Written Description

Respondents contend that claim 1-3 of the '847 Patents are invalid for lack written description. (RIB at 162-163.) Respondents argue that this claim "refers to two controllers at two different locations within an adapter." (RIB at 163.) Respondents assert that "[t]he second controller is between the signal lines and contact pins." (RIB at 163.) Respondents further assert that "[t]he first controller is provided on one side of the contact pins, away from an interconnection means which is recited as being on another side of the signal lines connecting those signal lines to the contact pins." (RIB at 163.) Respondents conclude that "[t]hus, the two controllers are recited as being in separate locations from each other." (RIB at 163.) Respondents argue that there is no written description of a "dual-controller" system. (RIB at 163.)

The ALJ rejects Respondents' argument. It is based on their strained and unnatural reading of the claims and appears to reprise an argument that the ALJ has repeatedly rejected. (See Order No. 40.) In the motion for summary determination of non-infringement ruled upon in Order No. 40, Respondents first floated this argument that the controller must be located between the signal lines and the contact pins. They based it on a strained reading of the claims. The ALJ lays out a little extra reasoning to help prevent this argument from rising from the grave a third time.

Respondents' argument is based on the final element of claim 1 of the '847 Patent, which states:

Means for mapping power ground and data signals between said lines and said contact pins depending upon the identification of the type of memory card inserted into said port; wherein the means for mapping comprises a controller.

Respondents' underlying "logic" (which is laid out fully in their summary determination motion) is that in Order No. 23, the ALJ construed this element (and the other similar elements in the other '443, 424, and '847 Patents) as a "controller." Respondents then performed what can best be described as a "mad lib" exercise substituting "controller" in for this element. However, where their reasoning went wildly off track is that they limited the element to only the phrase "means for mapping," despite the *Markman* Order's clear explanation that the construction was for the entire element (not just the phrase "means for mapping"). (*See* Order No. 23 at 33-39.) Thus, the element, in their understanding, came to read "[controller for mapping power ground and data signals] between said lines and said contact pins depending upon the identification of the type of memory card inserted into said port; wherein the means for mapping comprises a controller." Based on this substitution, they reasoned that the "controller" must be located between the contact pins and signal lines.

This reading is absurd –the element is not limited to the phrase "means for mapping." As the parties *agreed* at the Markman hearing, the function for the element is not just "mapping," it is "mapping power, ground, and data signals between said lines and said contact pins depending on the type of memory card inserted into said port." (*See* EDIS Doc. No. 486171, Respondents Responsive Markman Br. at 20 (showing both parties proposed functions and claim element for this term).) Thus, this is all functional and not structural language. The language "between said lines and said contact pins" does not describe the physical location of the controller—it is attempting to describe the function of the controller. In other words, the function of the controller is to take a signal at a certain contact pin, *e.g.*, the power signal, and map it to a particular signal line, *e.g.*, line 1, based on the type of card inserted into the controller. While the ALJ freely admits that the claim element was poorly drafted, the ALJ's claim construction, when

correctly followed, reads more naturally since the controller maps the identity of the signal that comes in at the contact pin to a particular signal line. Under this reading the controller connected to the signal lines in the first element of the claim is the controller that does the mapping in the last element of the claim. Thus, the ALJ finds that there is no "dual-controller" requirement of the claims and no written description problem.

E. '549 Patent

1. The AwYong Thesis

The Respondents contend that the asserted claims of the '549 Patent are anticipated and rendered obvious by a thesis authored by Chee-Kong AwYong entitled "An Integrated Control System Design of Portable Computer Storage Peripherals" that states that it was submitted to the Department of Electrical and Control Engineering at the National Chiao-Tung University in Taiwan (the "AwYong Thesis"). (RX-0456). Respondents claim that the AwYong Thesis was publically available as of December 22, 2000. (RIB at 185.) In support of this contention, Respondents submit the testimony of Dr. Robert Ellett, a librarian Respondents hired to testify. Respondents contend that "Dr. Ellett explained the MARC (Machine Readable Cataloging) system and his inspection of the MARC record for the AwYong Thesis[,] which he obtained the National Chiao-Tung University (NCTU) Library in Hsinchu, Taiwan." (RIB at 185.) Respondents further contend that "[Dr. Ellett] testified about the process by which the AwYong Thesis was indexed, cataloged, shelved, and publicly searchable." (RIB at 186.) Respondents argue that "[a]s explained by Dr. Ellett, the thesis was submitted in June 2000 (as indicated on the cover of the thesis); approved by the thesis advisor on June 9, 2000 (as indicated on page 2 of the thesis); and indexed, cataloged, shelved, and publicly accessible as of December 22, 2000 (as indicated on the back cover of the thesis)." (RIB at 186.) Respondents continue that "[a]s Dr.

Ellett explained, NCTU is a public university whose resources are available to the general public, and thus a member of the public would be able to search for the [AwYong] Thesis as of December 22, 2000." (RIB at 186.) Respondents emphasize Dr. Ellett's expertise in library science. (RRB at 72.) Respondents further argue that Dr. Ellett's testimony is not based on "his conversation with the Taiwanese library, but rather from documents." (RRB at 73.) Respondents argue that Dr. Ellett is simply a fact witness on the MARC system and that the conversation with Taiwanese librarian "simply confirmed his understanding of the documents and that the university library followed the standard practice of using the MARC system to indicate the availability of a publication." (RRB at 73.) Based on this testimony, Respondents assert that the AwYong Thesis is prior art under 35 U.S.C. § 102(b).

TPL argues that Respondents have failed to present competent evidence that establishes that the AwYong Thesis is prior art to the '549 Patent. TPL argues that Dr. Ellett is a hired witness who Respondents paid to call a Taiwanese librarian to discuss a document he had no personal knowledge of, and then Dr. Ellett testified about what he hear from the Taiwanese librarian. (CRB at 83.)

The ALJ agrees with TPL that Respondents have failed to prove that the AwYong Thesis is prior art to the '549 Patent. The ALJ begins by noting that Respondents efforts to prove that AwYong Thesis was prior art are inappropriate. While the ALJ has explained that the Administrative Procedure Act permits the ALJ to receive hearsay evidence and give it appropriate weight, this does not amount to a free pass. Respondents attempt to use the flexibility of the APA to enable them to, in effect, manufacture fact witnesses for hearings. This

is simply improper. Indeed, the infirmities of Dr. Ellett's "fact" testimony are manifest. First, Dr. Ellett had no personal knowledge of the AwYong Thesis or of the particulars of the NCTU Library System before he was retained to testify in this investigation. He is an expert in general library science; not a person knowledgeable about the particular facts of this case, the AwYong Thesis or the NCTU library in Taiwan.

Second, much of the testimony he attempts to offer appears to be expert testimony, not fact testimony. Respondents offer these opinions (or as he calls them in his witness statement "observations") without providing a proper expert report or identifying him as an expert. In particular, his interpretation of the MARC record and his opinion that based on the MARC record and "standard library practice," (RRB at 73), the AwYong Thesis would be publicly available are really expert opinions masquerading as fact testimony. While he is certainly permitted to come and testify about the MARC system generally and how it works, it goes beyond the bounds of fact testimony for him to examine records from the Taiwanese library and then offer an opinion based on those documents and his expertise in the MARC system as to when the AwYong Thesis was publicly available. Thus, this improper opinion testimony is entitled to no weight.

Third, nearly all of his non-expert (*i.e.*, non-MARC) testimony is simply him loosely recounting an off-the-record interview with a Taiwanese librarian arranged by the Respondents' attorneys and testimony on documents that the librarian provided to either him or to Respondents' attorneys (it is unclear when and to whom the documents were provided). (RX-0454 at Q&A 22-31; Tr. 1332:17-1339:3.) While the APA permits hearsay, hearsay arranged by counsel for a

116

⁶ The ALJ notes that he does not believe Dr. Ellett did anything improper. Instead, the ALJ believes that Respondents' counsel acted improperly by offering this evidence in this way.

paid, non-party fact witness to testify about at the hearing, in lieu of the declarant, does not strike the ALJ as persuasive.

Finally, the ALJ notes that Dr. Ellett was paid \$250 per hour for his testimony. While this is normally only a minor consideration for expert witnesses or witnesses with actual personal knowledge, the ALJ notes that paying a third-party fact witness to "gain knowledge" just to testify. In the end, Dr. Ellett is really testifying in the place of the Taiwanese librarian who Respondents chose not to depose or bring to testify at the hearing. The ALJ notes that parties frequently take discovery in Taiwan or obtain such discovery through the Hague Convention. As such, it was entirely possible for Respondents to obtain this information in a conventional way. Without some exceptional circumstances, the ALJ declines to give any weight to Dr. Ellett's testimony regarding information he obtained from his off-the-record, counsel-arranged conversation with the Taiwanese librarian, especially since Respondents should have obtained such testimony directly from said librarian.

The ALJ further notes that Respondents could avoided many of these problems by properly disclosing Dr. Ellett as expert witness and providing an expert report with his opinions regarding the public availability of the AwYong Thesis and the evidence he believed supported those opinions (such as the conversation with the Taiwanese librarian). However, Respondents chose a different route.

Setting aside the improper expert testimony and channeled testimony of the absent Taiwanese librarian, the only evidence that Respondents offered are the markings on the AwYong Thesis, a "Thesis Publication Certification" from National Chiao Tung University that "this degree thesis was on public display at the National Chiao Tung University on December 22,

2000," and a MARC record from the library. While this evidence is hearsay, the ALJ will allow this evidence.

While this evidence indicates that it is possible that the AwYong Thesis was publicly available, the ALJ finds that, without testimony regarding the specific library procedures in place at the NCTU library, this evidence cannot establish by clear and convincing evidence that the thesis was publicly available within the meaning of U.S. patent law. *See SRI Int'l Inc. v. Internet Security Sys., Inc.*, 511 F.3d 1186, 1188 (Fed. Cir. 2008). The ALJ notes that even if he gave weight to Dr. Ellett's testimony, it would be insufficient without more particulars about the availability of the thesis to say that the thesis was prior art under a clear and convincing evidence standard.

Accordingly, the ALJ finds that the Respondents have not shown that the AwYong Thesis anticipates or renders obvious the asserted claims of the '549 Patent.

2. MultiFlash Product

As discussed above, the ALJ finds that Respondents have failed to prove by clear and convincing evidence that the MultiFlash Product is prior art to the '549 Patent. (See supra Section VI.C.3.) In addition, the ALJ finds Respondents failed to set forth a sufficiently detailed analysis to establish invalidity by clear and convincing evidence. The ALJ finds that a little more than two pages of analysis is simply insufficient to overcome the presumption of validity and to meet the clear and convincing standard of proof for invalidity of three patent claims. See Certain Mobile Devices, Associated Software and Components Thereof, Inv. No. 337-TA-744, Final Initial Determination, at 117 (December 20, 2011) (unreviewed in relevant part). It is clear to the ALJ that Respondents had more than sufficient pages to perform a proper analysis, but chose instead to perform inadequate cursory summations of an exceedingly large amount of prior

art references rather than perform a proper analysis on a few number of references. Accordingly, the ALJ declines Respondents' invitation to find the asserted claims of the '549 Patent invalid as anticipated by the MultiFlash Product.

3. U.S. Patent No. 6,987,927

Respondents argue that U.S. Patent No. 6,987,927 ("the '927 Patent") anticipates and renders obvious the asserted claims of the '549 Patent. (RIB 205-207.) The '927 Patent was filed on July 13, 2000 and issued on January 17, 2006. (RX-0732; RX-0420C at Q/A 360-364.) The '927 claims priority to U.S. Provisional Application No. 60/200,470, which was filed on April 28, 2000. (RX-0732; RX-0420C at Q/A 360-364.) The ALJ finds that the '927 Patent is prior art under 35 U.S.C. § 102(e).

The ALJ finds that Respondents have not shown that the '927 Patent anticipates or renders obvious the asserted claims of the '549 Patent. The ALJ finds that Respondents have failed to show that the '927 Patent discloses the determining/detector limitation of the independent claims. Specifically, claim 7 requires the step of "determining whether the flash storage system includes a controller for error correction" and claim 11 requires a "detector to determine whether the flash storage system includes a controller for error correction." Respondents' invalidity reading is based on TPL's infringement contention that determining the type of card or having a detector that determines the type of card is sufficient to meet this limitation. As was held above with respect to infringement, the claim requires more than merely determining the type of card or a detector to determine the type of card. Instead, the claim requires that whether the card has a controller or not be "determined" or "a detector to determine" whether there is a controller or not. Thus, the ALJ finds that this reference does not anticipate the asserted claims of the '549 Patent.

As for Respondents' obviousness, the ALJ finds that they are insufficient to demonstrate the patent would be obvious by clear and convincing evidence. Respondents raise three possible combinations that would meet this limitation: (1) the AwYong Thesis; (2) U.S. Patent No. 6,199,122, and (3) U.S. Patent No. 6,754,765. Respondents' obviousness arguments are that "a person of ordinary skill in the art at the time of the alleged invention would have known to implement the step of determining whether the flash storage system includes a controller for error correction," because the '927 Patent "teaches compatibility with both controllerless cards and cards having a controller for error correction." (RIB at 199-200.) Respondents further argue that a person of ordinary skill in the art at the time of the invention would have been motivated to "seek already available methods and detectors for doing so, as disclosed in a number of prior art references...." (RIB at 200.) Respondents also argue that the combination of the '927 Patent and any of the three references would have been "merely the product of ordinary skill and common sense." (RIB at 200.)

The ALJ finds that this is insufficient to prove obviousness by clear and convincing evidence for several reasons. First, the AwYong Thesis has not been shown to be prior art. Second, the ALJ finds that merely claiming that "common sense" would lead to the invention is not sufficient where Respondents have failed to show why it would be common sense to modify a system that determines the type of card into one that actually detects whether there is a controller or not. *See Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1377 (Fed. Cir. 2012) ("The mere recitation of the words 'common sense' without any support adds nothing to the obviousness equation. Within the statutory test to determine if a claimed invention has advanced its technical art field enough to warrant an exclusive right, 'common sense' is a shorthand label for knowledge so basic that it certainly lies within the skill set of an ordinary artisan. With little

more than an invocation of the words 'common sense' (without any record support showing that this knowledge would reside in the ordinarily skilled artisan), the district court overreached in its determination of obviousness.") *TriMed, Inc. v. Stryker, Inc.*, 608 F.3d 1333, 1343 (Fed. Cir. 2010) ("Merely saying that an invention is a logical, commonsense solution to a known problem does not make it so."). Finally, while the '927 Patent does teach the use of controller and controllerless cards, that is not sufficient to establish that a person of ordinary skill would be motivated to modify a system that detects or determines the type of card to one that detects or determines specifically whether or not a controller is present. Because Respondents provide insufficient discussion of why a person of ordinary skill would be so motivated, the ALJ finds that Respondents have failed to show the patent obvious by clear and convincing evidence.

4. The Kokai Publication, Japanese Patent Application No. 2001-75745

Respondents also assert that the asserted claims of the '549 Patent are invalid over Japanese Patent Application No. 2001-75745 to Kokai ("the Kokai Application"). (RIB at 205-207.) The Kokai Application was published by the Japan Patent Office on March 23, 2001 and is prior art under 35 U.S.C. § 102(b). (RX-1198.0002; RX-0420C at Q/A 241-247.)

The ALJ finds that Respondents have failed to show that the '549 Patent is invalid in light of the Koaki Application for several reasons. First, the ALJ finds that Respondents' cursory discussion (a little under two pages) is insufficient to establish by clear and convincing evidence that the asserted claims of the '549 Patent. Second, the ALJ finds that the Kokai Application fails to disclose at least the "firmware" limitations of the asserted claims of the '549 Patent. As Respondents' brief makes clear, their analysis is premised TPL's infringement analysis that the use of bad block mapping "per se discloses that firmware performs this error correction and bad block mapping." (RIB at 206-207.) The ALJ found this argument failed to

establish that TPL proved infringement by a preponderance of the evidence, so it necessarily also fails to establish invalidity under the higher evidentiary standard of clear and convincing evidence. Finally, to the extent that Respondents contend that the Kokai Application renders the asserted claims of the '549 Patent obvious, the ALJ finds that there is absolutely no argument contained in its briefs to support that argument, so the ALJ finds that it is waived.

5. Atech Pro II

As discussed above, Respondents have not shown by clear and convincing evidence that the Atech Pro II was available before the priority date for the '549 Patent. Accordingly, the ALJ finds that they have not overcome the presumption of validity and proved that the asserted claims of the '549 Patent are invalid in light of the Atech Pro II. (*See supra* Section VI.C.1.)

6. "Secondary References"

Not content with the phalanx of references cited above, Respondents also include a lengthy discussion of so-called "Secondary References." (RIB at 211-217.) While it is not entirely clear whether these references constitute their own obviousness combination, it appears to the ALJ that they are not meant as their own discussion, but instead are intended to supplement the obviousness analysis for each of the individual references. There is no element-by-element discussion of the references, merely a general description of what Respondents contend is disclosed in the "Secondary References." Nothing is done to put these references in the context of any of the particular combinations. As best as the ALJ can discern, this section is intended as a "reservoir of obviousness" to be drawn upon at will. Indeed, Respondents explain in the subsection entitled "Motivation to Combine" that "[a] person of ordinary skill would have been motivated to combine the references as discussed above because the references are all in the same field of art, and the references are directed to interfacing, and disclose compatibility, with

multiple types of memory cards." (RIB at 214.) Respondents continue that "such combinations would be trivial modifications capable of being implemented as a mere workshop improvement, and such combinations would yield extremely predictable and expected results." In support of these conclusions, Respondents cite 21 questions and answers from Mr. McAlexander's witness statement. (RIB at 214.) Yet no other explanation is provided. Moreover, the information is not placed in context of any particular reference. These conclusory, out-of-context statements add nothing to what was already said regarding obviousness of the '549 Patent and none of this discussion alters the ALJ's conclusions regarding the non-obviousness of the '549 Patent. Thus, the ALJ finds that the Secondary References alone or combined with any of the other references do not even establish a prima facie case obviousness.

Moreover, it is not clear as to what is the exact the scope and content of the prior art that Respondents are asserting. See Smiths Indus. Med. Sys., Inc., 183 F.3d at 1354 (Fed. Cir. 1999) ("[t]]he second step in an obviousness inquiry is to determine whether the claimed invention would have been obvious as a legal matter, based on underlying factual inquiries including: (1) the scope and content of the prior art...") (emphasis added). The ALJ is left to guess which elements of the prior art references Respondents seek to combine, or, rather, if Respondents argue that it is the prior art reference in its entirety that renders the '549Patent obvious. There is not even a cursory attempt at analyses with the references that were already previously discussed in prior sections. (See Ground Rule 8(h).) The ALJ will not guess at which prior art combinations Respondents would have put forth in its post-hearing briefs or how those prior art references render the claims of the '549 patent obvious (or which claims it renders obvious). (See Ground Rule 11.1 (stating, in relevant part, that the post-hearing brief shall "discuss the issues and evidence tried").)

7. Written Description

Respondents also contend that the asserted claims are invalid under the written description requirement of 35 U.S.C. § 112(a) for failing to disclose the "determining" limitation of claims 7 and 19 and the "detector to determine" limitations of claims 11 and 21. Respondents' entire argument consists of a single paragraph and the actual analysis consists of only a single sentence. (*See* RIB at 217.) This is insufficient to establish invalidity by clear and convincing evidence. Accordingly, the ALJ finds that Respondents have failed to prove by clear and convincing evidence that the asserted claims of the '549 Patent are invalid for failure to comply with the written description requirement.

F. '623 Patent

1. Pro II Device

As discussed above, Respondents have not shown by clear and convincing evidence that the Atech Pro II was available before the priority date for the '623 Patent. Accordingly, the ALJ finds that they have not overcome the presumption of validity and proved that the asserted claims of the '623 Patent are invalid in light of the Atech Pro II. (*See supra* Section VI.C.1.)

2. Dazzle 6-in1 DM-8400 Device

As discussed above, the ALJ has found that the Dazzle reader was proved to be prior art to the '623 Patent. Thus, the ALJ finds that Respondents have not shown that the Dazzle reader renders the asserted claims of the '623 Patent invalid. (*See supra* Section VI.C.2.)

3. The Uno Mas Article

Respondents contend that the Uno Mas article (RX-1148) anticipates the asserted claims of the '623 Patent. The ALJ finds that a little more than one page of analysis is simply insufficient to overcome the presumption of validity and to meet the clear and convincing

standard of proof for invalidity of three patent claims. See Certain Mobile Devices, Associated Software and Components Thereof, Inv. No. 337-TA-744, Final Initial Determination, at 117 (December 20, 2011) (unreviewed in relevant part). It is clear to the ALJ from his review of Respondents' brief, that they had more than sufficient pages to perform a proper analysis. Accordingly, the ALJ declines Respondents' invitation to find the asserted claims of the '623 Patent invalid as anticipated by the Uno Mas article.

4. Kaneshiro Patents: WO 01/80171 (RX-0800 and RX-0801) and U.S. Patent No. 6,808,424 (RX-0932)

Respondents argue that independent claims 1, 9, and 17 of the '623 Patent are anticipated by each of the PCT International Publication No. WO 01/80171 (RX-0800; RX-0801) ("the Kaneshiro PCT Publication") and U.S. Patent No. 6,808,424 (RX-0932) ("the Kaneshiro Patent"). The Kaneshiro PCT Publication published on October 25, 2001, and is prior art to the '623 Patent under 35 U.S.C. § 102(b). (RX-0800; RX-0801.) The Kaneshiro Patent issued on October 26, 2004, and claims priority to PCT filing on April 9, 2001 for a PCT application that published on October 25, 2001. (RX-0932.) There is no dispute that the Kaneshiro Patent is prior art under 35 U.S.C. § 102(e).

Respondents had ample room in their briefs but spend only a little more than one page total on the Kaneshiro PCT Publication and Kaneshiro Patent—a prior art reference that TPL allegedly concedes anticipates the three asserted independent claims of the '632 Patent.⁷ A little more than one page of analysis is simply insufficient to overcome the presumption of validity and to meet the clear and convincing standard of proof for invalidity of three patent claims. *See Certain Mobile Devices, Associated Software and Components Thereof*, Inv. No. 337-TA-744,

⁷ Even if TPL "conceded" or did not dispute that the Kaneshiro Patents anticipate the independent claims 1, 9, and 17, Respondents still carry the burden of showing by clear and convincing evidence that the prior art references do, in fact, anticipate the claims and requires a thorough analysis and not cursory and conclusory statements.

Final Initial Determination, at 117 (December 20, 2011) (unreviewed in relevant part). Moreover, Respondents' brief does not contain a single citation in its "invalidity analysis" of the Kaneshiro PCT Publication. Accordingly, the ALJ finds that Respondents have not shown that the Kaneshiro Patents anticipate the asserted claims of the '623 Patent.

5. Kaneshiro Patents In View of the '369 Patent, the Dell Inspiron 3000 Manual and/or the Dell Inpiron 7000 Manual

Respondents argue that the claims 2, 10, and 18 are invalid in light of the combination of Kaneshiro Patents in view of U.S. Patent No. 6,859,369 (RX-0812) ("the '369 Patent"), the Dell Inspiron 3000 Service Manual (RX-1006), or the Dell Inspiron 7000 Service Manual (RX-1007). (RIB at 245-247.) The ALJ finds that the '369 Patent is prior art under 35 U.S.C. § 102(e) because it was filed on September 4, 2002. (RX-0812.) The ALJ finds that the Dell Inspiron 3000 Service Manual and the Dell Inspiron 7000 Service Manual are both prior art under 35 U.S.C. § 102(b) because they were publicly available printed publications in July and August 1998, respectively. (RX-1006; RX-1007.)

Respondents offer no element by element analysis of how the three or four reference combinations of the Kaneshiro Patents, the '369 Patent, the Dell Inspiron 3000 Service Manual, or Dell Inspiron Service Manual renders the asserted claims obvious. In fact, they appear to rely on their inadequate anticipation analysis as the basis for their obviousness analysis on these dependent claims. The ALJ found that analysis inadequate for anticipation and further finds that it is inadequate as a basis for obviousness. Furthermore, the ALJ finds Respondents' analysis of the motivation to combine these three or four references together to be inadequate to meet the clear convincing standard. Respondents' entire motivation to combine these references is "[a] person of ordinary skill would have been motivated to combine these references at least because the references are in the same field and combination would achieve predictable results such as

reduced size and/or lower cost, thereby supporting the SD specification's requirement for backward compatibility with MMC cards." (RIB at 246.) The ALJ finds this analysis conclusory, unsupported and insufficient to meet the clear and convincing standard. Accordingly, the ALJ finds that Respondents have not proven by clear and convincing evidence that claims 2, 10, and 18 of the '623 Patent are invalid as obvious in light of these references.

VII. DOMESTIC INDUSTRY

A. Applicable Law

In patent based proceedings under section 337, a complainant must establish that an industry "relating to the articles protected by the patent . . . exists or is in the process of being established" in the United States. 19 U.S.C. § 1337(a)(2). Under Commission precedent, the domestic industry requirement of Section 337 consists of a "technical prong" and an "economic prong." *Certain Data Storage Systems and Components Thereof*, Inv. No. 337-TA-471, Initial Determination Granting EMC's Motion No. 471-8 Relating to the Domestic Industry Requirement's Economic Prong (unreviewed) at 3 (Public Version, October 25, 2002) The "economic prong" of the domestic industry requirement is satisfied when the economic activities set forth in subsections (A), (B), and/or (C) of subsection 337(a)(3) have taken place or are taking place with respect to the protected articles. *Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Commission Op. at 25 (February 17, 2011) ("*Printing and Imaging Devices*"). With respect to the "economic prong," 19 U.S.C. § 1337(a)(2) and (3) provide, in full:

(2) Subparagraphs (B), (C), (D), and (E) of paragraph (1) apply only if an industry in the United States, relating to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.

- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—
 - (A) significant investment in plant and equipment;
 - (B) significant employment of labor or capital; or
 - (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

Id.

Given that these criteria are in the disjunctive, satisfaction of any one of them will be sufficient to meet the domestic industry requirement. *Certain Integrated Circuit Chipsets and Products Containing Same*, Inv. No. 337-TA-428, Order No 10 at 3, Initial Determination (Unreviewed) (May 4, 2000), citing *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, Commission Op. at 15, USITC Pub. 3003 (Nov. 1996). The Commission has embraced a flexible, market-oriented approach to domestic industry, favoring case-by-case determination "in light of the realities of the marketplace" that encompass "not only the manufacturing operations" but may also include "distribution, research and development and sales." *Certain Dynamic Random Access Memories*, Inv. No. 337-TA-242, USITC Pub. 2034, Commission Op. at 62 (Nov. 1987) ("*DRAMs*").

To meet the technical prong, the complainant must establish that it practices at least one claim of the asserted patent. *Certain Point of Sale Terminals and Components Thereof*, Inv. No. 337-TA-524, Order No. 40 (April 11, 2005). The test for claim coverage for the purposes of the technical prong of the domestic industry requirement is the same as that for infringement. *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003); *see also Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109 (U.S.I.T.C., May 21, 1990) ("*Certain Doxorubicin*"), *aff'd*, Views of the Commission at 22

(October 31, 1990). "First, the claims of the patent are construed. Second, the complainant's article or process is examined to determine whether it falls within the scope of the claims." (Id.) As with infringement, the first step of claim construction is a question of law, whereas the second step of comparing the article to the claims is a factual determination. Markman, 52 F.3d at 976. The technical prong of the domestic industry can be satisfied either literally or under the doctrine of equivalents. Certain Excimer Laser Systems for Vision Correction Surgery and Components Thereof and Methods for Performing Such Surgery, Inv. No. 337-TA-419, Order No. 43 (July 30, 1999). The patentee must establish by a preponderance of the evidence that the domestic product practices one or more claims of the patent. See Bayer, 212 F.3d at 1247.

TPL argues that it meets the domestic industry requirement based on three categories of activities: (1) substantial investments in TPL's licensing activities under Section 337(a)(3)(C); (2) substantial investments by TPL and its predecessor OnSpec in engineering and research and development activities under Section 337(a)(3)(C); and (3) significant investments in domestic plant, equipment, labor, and capital by TPL and its predecessor, OnSpec under Section 337(a)(3)(A) and (B).

Congress enacted 19 U.S.C. § 1337(a)(3) in 1988 as part of the Omnibus Trade and Competitiveness Act. *See Certain Plastic Encapsulated Integrated Circuits*, Inv. No. 337-TA-315, USITC Pub. No. 2574 (Nov. 1992), Initial Determination at 89 (October 16, 1991) (unreviewed in relevant part). The first two sub-paragraphs codified existing Commission practice. *See id.* at 89; *see also Certain Male Prophylactic Devices*, Inv. No. 337-TA-546, Commission Op. at 39 (June 29, 2007). Under Commission precedent, these requirements could be met by manufacturing the articles in the United States, *see, e.g., DRAMs*, Commission Op. at 61, or other related activities, *see Schaper Mfg. Co. v. U.S. Int'l Trade Comm'n*, 717 F.2d 1368,

1373 (Fed. Cir. 1983) ("[I]n proper cases, 'industry' may encompass more than the manufacturing of the patented item. . . . ").

In addition to subsections (A) and (B), there is also subsection (C). "In amending section 337 in 1988 to include subsection (C), Congress intended to liberalize the domestic industry requirement so that it could be satisfied by all 'holders of U.S. intellectual property rights who are engaged in activities genuinely designed to exploit their intellectual property' in the United States," Certain Multimedia Display and Navigation Devices and Systems and Components Thereof, and Products Containing Same, Inv. No. 337-TA-694, Commission Op. at 7 (August 8, 2011) (quoting Certain Digital Processors and Digital Processing Systems, Components Thereof. and Products Containing Same, Inv. No. 337-TA-559, Final Initial Determination at 93 (unreviewed in relevant part) (May 11, 2007). Thus, "[u]nlike sub-parts (A) and (B), sub-part (C) of section 337(a)(3) 'does not require actual production of the article in the United States if it can be demonstrated that substantial investment and activities of the type enumerated are taking place in the United States." Certain Personal Data and Mobile Communications Devices and Related Softwares, No. 337-TA-710, Order 102: ID on Economic Prong at 4 (April 6, 2011) (unreviewed in relevant part) ("Personal Data and Mobile Communications Devices") (quoting H.R. Rep. No. 100-40, pt. 1, at 157 (1987)).

In *Printing and Imaging Devices*, the Commission held that "under the statute, whether the complainant's investment and/or employment activities are 'significant' is not measured in the abstract or absolute sense, but rather is assessed with respect to the nature of the activities and how they are 'significant' to the articles protected by the intellectual property right." *Printing and Imaging Devices*, Commission Op. at 26. The Commission further stated that:

the magnitude of the investment cannot be assessed without consideration of the nature and importance of the

complainant's activities to the patented products in the context of the marketplace or industry in question whether an investment is 'substantial' or 'significant' is context dependent. (*Id.* at 31.)

Indeed, the Commission has emphasized that "there is no minimum monetary expenditure that a complainant must demonstrate to qualify as a domestic industry under the 'substantial investment' requirement" of section 337(a)(3)(C). Certain Stringed Musical Instruments and Components Thereof, Inv. No. 337-TA-586, Commission Op. at 25 (May 16, 2008). Moreover, the Commission has stated that the complainant need not "define or quantify the industry itself in absolute mathematical terms." *Id.* at 26.

Section 337(a)(3)(C) provides for domestic industry based on "substantial investment" in the enumerated activities, including licensing of a patent. See Certain Digital Processors and Digital Processing Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-559, Initial Determination at 88 (May 11, 2007) ("Certain Digital Processors"). Mere ownership of the patent is insufficient to satisfy the domestic industry requirement. Certain Digital Processors at 93. (citing the Senate and House Reports on the Omnibus Trade and Competitiveness Act of 1988, S.Rep. No. 71). However, entities that are actively engaged in licensing their patents in the United States can meet the domestic industry requirement. Certain Digital Processors at 93. In establishing a domestic industry under Section 337(a)(3)(C), the complainant does not need to show that it or one of its licensees is practicing a patent-in-suit. See Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432, Order No. 13, at 11, (January 24, 2001) ("Certain Semiconductor Chips"). The complainant must, however, receive revenue, e.g. royalty payments, from its licensing activities. Certain Digital Processors, at 93-95 ("Commission decisions also reflect the fact that a complainant's receipt of royalties is an important factor in determining whether the

domestic industry requirement is satisfied . . . [t]here is no Commission precedent for the establishment of a domestic industry based on licensing in which a complainant did not receive any revenue from alleged licensing activities. In fact, in previous investigations in which a complainant successfully relied solely on licensing activities to satisfy section 337(a)(3), the complainant had licenses yielding royalty payments.") (citations omitted). See also Certain Video Graphics Display Controllers and Products Containing Same, Inv. No. 337-TA-412, Initial Determination at 13 (May 14, 1999) ("Certain Video Graphics Display Controllers"); Certain Integrated Circuit Telecommunication Chips and Products Containing Same Including Dialing Apparatus, Inv. No. 337-TA-337, U.S.I.T.C. Pub. No. 2670, Initial Determination at 98 (March 3, 1993) ("Certain Integrated Circuit Telecommunication Chips"); Certain Zero-Mercury-Added Alkaline Batteries, Parts Thereof and Products Containing Same, Inv. No. 337-TA-493, Initial Determination at 142 (June 2, 2004) ("Certain Zero-Mercury-Added Alkaline Batteries"); Certain Semiconductor Chips, Order No. 13 at 6 (January 24, 2001); Certain Digital Satellite System DSS Receivers and Components Thereof, Inv. No. 337-TA-392, Initial and Recommended Determinations at 11 (December 4, 1997) ("Certain Digital Satellite System DSS Receivers").

In Certain Multimedia Display & Navigation Devices & Systems, Components Thereof, & Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. (Aug. 8, 2011) ("Navigation Devices"), the Commission stated that a complainant seeking to rely on licensing activities must satisfy three requirements: (1) the investment must be "an investment in the exploitation of the asserted patent;" (2) the investment must relate to licensing; and (3) the investment "must be domestic, i.e., it must occur in the United States." Id. at 7-8. The Commission stated that "[o]nly after determining the extent to which the complainant's investments fall within these

statutory parameters can we evaluate whether complainant's qualifying investments are 'substantial,' as required by the statute." *Id.* at 8.

Under the first of the three requirements, the complainant must show a nexus between the licensing activity and the asserted patent. Id. at 9. When the asserted patent is part of a patent portfolio, and the licensing activities relate to the portfolio as a whole, the Commission requires that the facts be examined to determine the strength of the nexus between the asserted patent and the licensing activities. Id. The Commission provided a non-exhaustive list of factors to consider, such as (1) whether the licensee's efforts relate to "an article protected by" the asserted patent under Section 337 (a)(2)-(3); (2) the number of patents in the portfolio; (3) the relative value contributed by the asserted patent to the portfolio; (4) the prominence of the asserted patent in licensing discussions, negotiations, and any resulting licensing agreement; and (5) the scope of technology covered by the portfolio compared to the scope of the asserted patent. *Id.* at 9-10. The Commission explained that the asserted patent may be shown to be particularly important or valuable within the portfolio where there is evidence that: (1) it was discussed during licensing negotiations; (2) it has been successfully litigated before by the complainant; (3) it is related to a technology industry standard; (4) it is a base patent or pioneering patent; (5) it is infringed or practiced in the United States; or (6) the market recognizes the patent's value in some other way. Id. at 10-11.

Once a complainant's investment in licensing the asserted patent in the United States has been assessed in the manner described above, the next inquiry is whether the investment is "substantial." 19 U.S.C. § 1337(a)(3)(C). The Commission takes "a flexible approach whereby a complainant whose showing on one or more of the three section 337(a)(3)(C) requirements is relatively weak may nevertheless establish that its investment is 'substantial' by demonstrating

that its activities and/or expenses are of a large magnitude." *Multimedia Display and Navigation Devices*, Comm'n Op. at 15. The Commission has indicated that whether an investment is "substantial" may depend on:

- (1) the nature of the industry and the resources of the complainant;
- (2) the existence of other types of "exploitation" activities;
- (3) the existence of license-related "ancillary" activities;
- (4) whether complainant's licensing activities are continuing; and
- (5) whether complainant's licensing activities are the type of activities that are referenced favorably in the legislative history of section 337(a)(3)(C).

Id. at 15-16. The complainant's return on its licensing investment (or lack thereof) may also be circumstantial evidence of substantiality. Id. at 16. In addition, litigation expenses may be evidence of the complainant's investment, but "should not automatically be considered a 'substantial investment in . . . licensing,' even if the lawsuit happens to culminate in a license."

John Mezzalingua Assocs., Inc. v. Int'l Trade Comm'n, 660 F.3d 1322 (Fed. Cir. 2011).

B. Technical Prong

1. '549 Patent

TPL contends that "[n]umerous products incorporating OnSpec chips meet each element of at least one claim of the '549 patent." (CIB at 230.) Specifically, TPL refers to the Addonics ADPMAF-X as meeting each element of claim 11 when used with a computing device and memory card as intended. (CIB at 230.) TPL also asserts the AEPDDESU-WP also meets the limitations of claim 11. (CRB at 79-83.) Both products use the OnSpec xSil45 controller. (CRB at 80.)

Respondents argue that TPL has failed to establish that any of the products on which it relies for the technical prong of the domestic industry requirement practice any claim of the '549 Patent. (RIB at 178.) Respondents assert that "[t]he only evidence that TPL proffered in support of the technical prong of the domestic industry requirement—Mr. Buscaino's conclusory statements that certain products claim 11 of the '549 Patent—is insufficient for TPL to satisfy its burden." (RIB at 178.) Respondents complain that Mr. Buscaino simply references a table (CX-0053) that only consists of citations to other documents and references five exhibits from TPL's complaint that compare five products to the claims of the '549 Patent. (RIB at 179.) Respondents further argue that TPL has failed to establish that any of the domestic industry products meet the same "detector" and "firmware" limitations that Respondents also contend are lacking from the accused products. (RIB at 179.)

Setting aside the problems with the barebones expert testimony and paltry evidence that TPL has offered, the ALJ finds that TPL has failed to show that this evidence establishes that the domestic industry products meet the "detector" and "firmware" limitations of claim 11. As discussed above in the infringement section, *supra* Section V.D, claim 11 requires that the accused device include "a detector to determine whether the flash storage system includes a controller for error correction." TPL has failed to show that any such "detector" exists in the domestic industry products. As with the accused products, TPL's theory that the domestic industry products meet this claim limitation rests on the determination of the type of card that is asserted. TPL does not contend that any "detector" in the domestic industry products determines whether the card has a controller or not. However, the ALJ finds that the plain language of the claims requires that there be a detector that determines whether or not the inserted card includes a controller or not. Merely determining the type of card that is inserted cannot meet this plain

language. This might be equivalent to specifically determining if the card contains a controller or not, but TPL makes no arguments that the domestic industry products meet this limitation under the doctrine of equivalents. Thus, for similar reasons that the accused products do not meet this limitation, the ALJ finds that the domestic industry products do not meet this limitation either.

In addition, the ALJ further finds that TPL has not shown that the domestic industry products meet the "firmware" limitation of claim 11. As discussed above in greater detail with regard to the accused products, TPL has failed to show that the domestic industry products use firmware for the error correction and bad block mapping. TPL cites three documents in its brief⁸ to support its contention that the domestic industry products use firmware in their error correction and bad block mapping: CX-0677C, CX-0358C, and CX-0359C. None of these documents disclose that the onSpec products use firmware. CX-0358C and CX-0359C are specifications for the xD memory card standard. As discussed in the infringement section, these documents

CX-0677C is OnSpec xSil 145 controller chip specification.

(CX-0677C.) The ALJ notes that this evidentiary deficiency could have been easily corrected because a number of the OnSpec employees involved in the design and development of these products were available to testify. Thus, the lack of evidence to establish that this element is met is inexcusable. Accordingly, the ALJ finds that TPL has not established that its domestic industry products practice the '549 Patent.

136

⁸ Oddly, TPL's reply brief omits this element in its element-by-element analysis of the AEPDDESU-WP. (See CRB at 82-83.) Thus, the ALJ will only consider the evidence cited in its opening brief.

2. '623 Patent

TPL contends that the Lenovo H320-4041-1JU and the Belkin PM00525-A meet each element of claim 1 of the '623 Patent. (CIB at 232-3.) In its opening brief, TPL provides only an extremely cursory element-by-element analysis for the Lenovo H320-4041-1JU and the Belkin PM00525-A. (CIB at 232-3.) Specifically, TPL only recites the element and contends that the Lenovo H320-4041-1JU and the Belkin PM00525-A contain the elements. TPL's reply brief contains a more fulsome analysis, but cites primarily to a demonstrative exhibit that is not evidence. (CRB at 87-88.) As such, the ALJ finds that TPL has not met its burden in proving that Lenovo H320-4041-1JU and the Belkin PM00525-A meet the elements of claim 1 of the '623 Patent. Accordingly, the ALJ finds that TPL has not proven that it meets the technical prong of domestic industry requirement for the '623 Patent.

3. '424 Patent

TPL contends that the Addonics ADPMAF-X, which incorporates OnSpec chips meets each element of claim 25 of the '424 Patent. (CIB at 228.) In its opening brief, TPL provides only an extremely cursory element-by-element analysis for the Addonics ADPMAF-X. (CIB at 228-229.) Specifically, TPL only recites the element and contends that the ADPMAF-X contains the element. TPL reply brief contains a more fulsome analysis, but cites primarily to a demonstrative exhibit that is not evidence. (CRB at 45-48.) As such, the ALJ finds that TPL has not met its burden in proving that the Addonics ADPMAF-X meets the elements of claim 25 of the '424 Patent. Accordingly, the ALJ finds that TPL has not proven that it meets the technical prong of domestic industry requirement for the '424 Patent.

4. '443 Patent

TPL contends that the Addonics ADPMAF-X, which incorporates OnSpec chips meets each element of claim 9 of the '443 Patent. (CIB at 229.) In its opening brief, TPL provides only an extremely cursory element-by-element analysis for the Addonics ADPMAF-X. (CIB at 229.) Specifically, TPL only recites the element and contends that the ADPMAF-X contains the element. TPL's reply brief contains a more fulsome analysis, but cites primarily to a demonstrative exhibit that is not evidence. (CRB at 43-45.) As such, the ALJ finds that TPL has not met its burden in proving that the Addonics ADPMAF-X meets the elements of claim 9 of the '443 Patent. Accordingly, the ALJ finds that TPL has not proven that it meets the technical prong of domestic industry requirement for the '443 Patent.

5. '847 Patent

TPL contends that the Addonics AEPDDESU-WP, which incorporates the OnSpec xSil145 controller chip meets at each element of claim 1 of the '847 Patent. (CIB at 228.) In its opening brief, TPL provides only an extremely cursory element-by-element analysis for the Addonics AEPDDESU-WP. (CIB at 228-229.) Specifically, TPL only recites the element and contends that the Addonics AEPDDESU-WP contains the element. TPL reply brief contains a more fulsome analysis, but cites primarily to a demonstrative exhibit that is not evidence. (CRB at 48-51.) As such, the ALJ finds that TPL has not met its burden in proving that the Addonics AEPDDESU-WP meets the elements of claim 1 of the '847 Patent. Accordingly, the ALJ finds that TPL has not proven that it meets the technical prong of domestic industry requirement for the '847 Patent.

C. Economic Prong

TPL argues that it satisfied the economic prong under Section (C) based on its own licensing activities as well as its own substantial investments in engineering and research and development. (CIB at 267-282.) TPL also asserts that the activities of OnSpec, a company that it acquired in 2006, also satisfy the economic prong of the domestic industry requirement under Section (C). (CIB at 281-282.) Finally, TPL asserts that it has satisfied the economic prong of the domestic industry requirement under Sections (A) and (B).

As to TPL's licensing investments, TPL argues that its CFO, Mr. Dwayne Hannah, presented detailed evidence of domestic investments in licensing for the CORE Flash portfolio. (CIB at 268.) TPL asserts that its licensing investments through the filing of the complaint exceed are domestic investments made in California, and are tied directly and wholly to the exploitation of the CORE Flash portfolio, which include the asserted patents. (CIB at 268.) Specifically, TPL argues, and explains in detail, that it has made and continues to make substantial investments in licensing and that such investments are domestic. (CIB at 271-276.) TPL further argues that it has established a nexus between its licensing activities and the asserted patents (CIB 276-281.)

TPL also relies on the activities of OnSpec, Electronics, Inc. to satisfy the economic prong. (CIB at 281-282.) Specifically, TPL argues that OnSpec has made substantial investments in engineering and research and development. (*Id.*) OnSpec also made significant investments in plant, equipment, labor and capital. (CIB at 282-284.)

Respondents argue that TPL has failed to satisfy the economic prong because TPL's analysis is summary and conclusory and fails to allocate the expenses to the Asserted Patents or articles protected by those patents. (RIB at 257.) Specifically, Respondents argue that TPL fails to satisfy Section (C) because it has failed to allocate non-domestic industry related expenses

from the licensing expenses and has failed to demonstrate a nexus between the alleged investments and licensing. (RIB at 261-268.) Respondents further argue that TPL's allocation method is not credible because TPL failed to present any documentary evidence or uninterested witness testimony. (RIB at 268-269.) Respondents further argue that TPL failed to establish a nexus between the licensing investments and Asserted Patents. (RIB at 269-275.) Respondents finally argue that TPL has failed to show that its investment is substantial. (RIB at 275-278.)

Respondents assert that TPL's reliance on OnSpec's activities to establish a domestic industry cannot succeed because OnSpec was dissolved over four years ago and TPL merely continued to sell the OnSpec controller chips. (RIB at 278.) Respondents argue that OnSpec's activities are too remote to be considered in the domestic industry analysis and TPL failed to provide necessary detail relating to OnSpec's investments. (RIB at 279-280.) Respondents further argue that TPL's reliance on OnSpec is misplaced because OnSpec was never owned by TPL and it was never a TPL licensee. (RIB at 279-280.)

1. TPL's Activities

TPL argues that it meets all three factors articulated by the Commission in *Certain Multimedia Display and Navigation Devices & Systems, Components Thereof, and Products Containing the Same* ("Navigation Devices"), Inv. No. 337-TA-694, Commission Op. (July 22, 2011) and that its activities and expenses are of a large magnitude and exceed the standard for proving domestic industry. (CIB at 276.) TPL contends that the requisite "nexus" exists between its licensing expenditures on the CORE Flash Portfolio and the asserted patents. (CIB at 277-281.)

a) Nexus between licensing activities and the asserted patents

The evidence shows that the CORE Flash licenses state that

(e.g., CX-0800C, at Section 4.3). The evidence shows that licenses explicitly list approximately products that are licensed by the CORE Flash Portfolio. (CX-0810C/JX-0038C (TPL388481-388482); CX-0811C/JX-0039C (TPL388506); CX-0812C/JX-0040C (TPL388525); CX-0813C/JX-0041C (TPL388544); CX-0814C/JX-0042C (TPL388565-388569); CX-0815C/JX-0043C (TPL388589-388590); CX-0816C/JX-0044C (TPL388609); CX-0821C/JX-0049C (TPL388704); CX-0824C/JX-0052C (TPL388765); CX-0829C/JX-0057C (TPL388863); CX-0830C (TPL388883-388884); CPX-0831C/JX-0058C (TPL388903); CX-0833C/JX-0060C (TPL388951); CPX-0834C/JX-0061C (TPL388969); CX-0836C/JX-0063C (TPL389006).) The evidence also includes claim charts demonstrating that TPL's licensees' products practice the Asserted Patents. (CX-0688C at 27-50; CX-0729 through CX-0752; CX-0944C, Q&A 1667-1676; CX-0941C, Q&A 46-47.)

The evidence shows that the CORE Flash Portfolio covers a specific technology: flash memory card readers. The patents in the portfolio are highly interrelated and do not span "a wide variety of technologies" and the patents in the CORE Flash Portfolio deal in the same focused technological area. (CX-0941C, Q&A 13-15.) The scope of the technology covered by the portfolio is quite similar to the scope of the Asserted Patents, which collectively cover flash memory technology. (*Id*; CX-0943C, Q&A 14-89; CX-0939C, Q&A 20-21; JX-0001-JX-0006.)

The evidence also shows that the Asserted Patents have often been mentioned during licensing negotiations and are often attached in correspondence by TPL. (CX-0941C, Q&A 48-53; CX-0782C; CX-0781C; CX-0785C through CX-0797C; CX-0838C through CX-0845C.) The Asserted Patents have often been substantively discussed in depth with prospective licensees, some of whom became licensees. (*Id.*)

Further, the evidence shows that the '638 Patent is a base patent as each of the '443, the '424 and the '847 Patents are continuations or continuation-in-parts of the application that issued as the '638 Patent. (JX-0005, JX-0004, JX-0003, JX-0006; *see also* Section VI.B.)

The evidence shows that the market has recognized the pioneering nature of the CORE Flash Technology since electronic devices that must interface with multiple flash formats have adopted the CORE Flash technology. (CX-0939C, Q&A 45-46; CX-1207C, Q&A 6-18.) In addition, the evidence further shows that four of the six patents were successfully litigated in Investigation 337-TA-807. (Compl., Doc. No. 475846, at ¶ 201.) The '638, '443, '549, and '623 patents have been successfully litigated in Federal Court. (*Id.* at ¶¶ 198-202.)

Thus, the evidence shows that there is a nexus between TPL's licensing activities and the Asserted Patents.

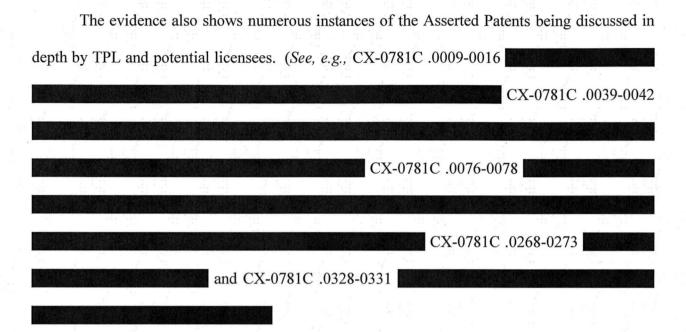
Respondents argue that TPL failed to demonstrate the requisite nexus between its licensing activities and the Asserted Patents because (1) TPL failed to show that its CORE Flash Portfolio investments related to an article protected by the Asserted Patents; (2) the Asserted Patents comprise a small part of the CORE Flash Portfolio and TPL failed to show their value or prominence relative to the rest of the portfolio; (3) TPL failed to establish that the Asserted patents relate to an industry standard or are base or pioneering patents; (4) TPL failed to show that the CORE Flash Portfolio and the Asserted Patents cover the same scope of technology; (5) the Asserted Patents have not been successfully litigated; and (6) TPL failed to establish that the market has recognized the value of the Asserted Patents in some other way. (RIB at 269-274.)

The ALJ finds Respondents arguments unpersuasive. First, Respondents make conclusory and generalized statements regarding TPL's evidence and arguments. In light of TPL's extensive and detailed explanation of its evidence, such cursory statements do not

adequately rebut or raise any doubts as to the credibility of certain of TPL's witnesses. In many instances, Respondents simply make one sentence statements regarding the general inadequacy of evidence. For example, Respondents summarily dismiss TPL's evidence that the CORE Flash Portfolio and the Asserted Patents cover the same scope of technology as "unsupported and conclusory statements" of certain witnesses. (RIB at 273.) However, Respondents failed to cite to any successful impeachment of TPL's witnesses and, instead, simply state that "[t]hese statements fall short of establishing that the scope of the Asserted Patents is the same as the scope of the technology of the Portfolio." (Id.) In another instance, Respondents state "the charts are TPL's own documents, uncorroborated by any evidence originating from, e.g. TPL's licensees." (RIB at 270.) Indeed, the ALJ finds that the only argument that Respondents set forth in sufficient detail relates to the relative value of the Asserted Patents to the Flash CORE Portfolio. For the remaining arguments, Respondents fail to adequately develop their arguments and, instead, simply provide conclusory statements or, at best, cursory arguments. To the extent that Respondents did not adequately develop their arguments, the ALJ will not simply guess or attempt to extrapolate what, exactly, Respondents intended to argue. The ALJ finds, quite simply, that Respondents have failed to make any persuasive argument against TPL's assertions that there is a nexus between investments in the Flash CORE portfolio and the Asserted Patents.

As for Respondents argument that the Asserted Patents comprise only a small part of the Flash CORE Portfolio and that there is no evidence of the value or prominence of the Asserted Patents to the rest of the portfolio, the ALJ finds that the evidence shows otherwise. Specifically, the evidence shows that the Asserted Patents are discussed in detail and asserted in licensing communications, including claim charts and extensive, detailed memoranda on the technical aspects of the Asserted Patents. The evidence includes a representative sample of such

communications and memoranda and include responses discussing the '443, '424, '623, '549, '638 patents in technical detail to licensees (CX-0781C.0250), 0781C.0103, .0243), (CX-0781C.0586), (CX-0781C.0149, .0175, .0254), (CX-0781C.0003, .0006), (CX-0781C.0140), (CX-0781C.0116), (CX-0781C.0300, .0312, .0316, .0472), (CX-0781C.0534) , 0781C.0142, .0179), (CX-0781C.0001, .0004), (CX-0781C.0109, .0176), (CX-0781C.0021, .0153, .0177), (CX-0781C.0429), (.0111), (CX-0781C.0076, .0122, .0170), (CX-0781C.0249) and 0781C.0275.) The evidence also includes communications, which include technical discussions of the '847, '424, '443, '549, '638, and '623 patents, to potential licensees (CX-0781C.0535), Brother (CX-0781C.0343), (CX-0781C.0210, .0252, .0264), (CX-0781C.0138), Dell (CX-0781C.0465, .0509, .0515), (CX-0781C.0236), (CX-0781C.0009, .0160, .0214, .0259, .0279, .0446), 0781C.0087), (CX-0781C.0031, .0090, .0119, .0542), (CX-0781C.0081, .0124, .0237), (CX-0781C.0039, .0104, .0164, .0240), (CX-0781C.0026), (CX-0781C.0028, .0121, .0181,.0268, .0306, .0640, .0436), (CX-0781C.0284), (CX-0781C.0132), Seiko Epson (CX-0781C.0245, .0346, .0463, .0481, .0518), (CX-0781C.0588), (CX-0781C.0095, .0244, .0290, .0415, and .0462) and (CX-0781C.0017.) The evidence also includes claim charts comparing the Asserted Patents to potential licensees' products. (Tr., 1265:9-1266:2; CX-0781C.0543-0551; CX-0781C.0552-0567; CX-0781C.0574-0585 (charts for the and the '623 Patent, the '549 Patent and the '638 Patent).



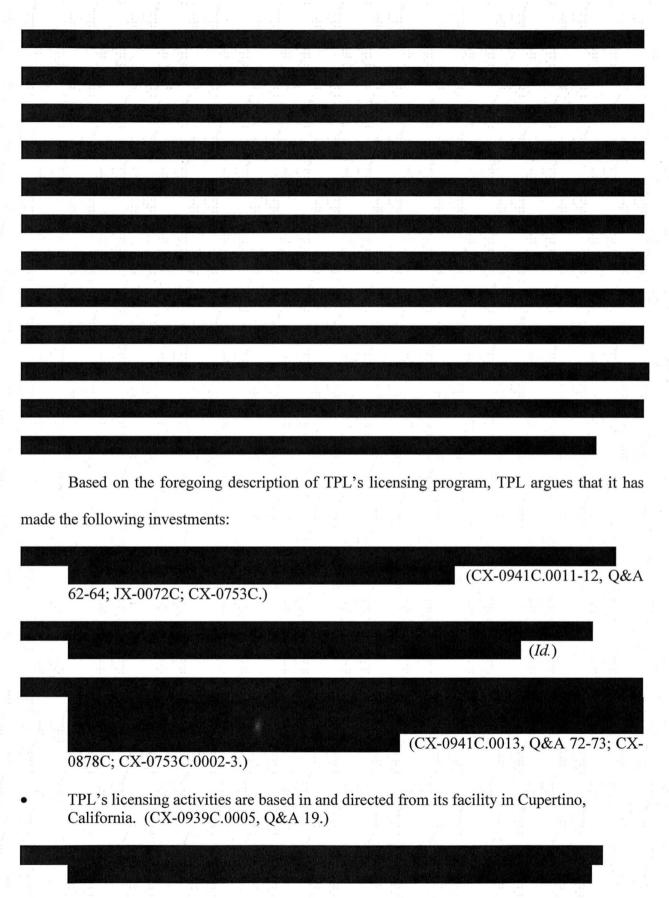
Thus, the ALJ finds that TPL has adequately shown that there is a nexus between the Flash CORE Portfolio and the Asserted Patents.

b) Licensing Activities

TPL argues that since 2007, it has maintained an extensive licensing program with respect to the Asserted Patents. (CIB at 271.) TPL notes that it is the exclusive licensee to the Asserted Patents and licenses the Asserted Patents, which are part of TPL's CORE Flash portfolio. (CIB at 271.) TPL argues that there are licensees to the CORE Flash portfolio, each of which chose to license all six Asserted Patents. (CIB at 271.) TPL explains in extensive detail the investments the nature of its licensing program as well as the extent of its investments in that program. (CIB at 271-276.)

The evidence shows that TPL's licensing program works in the following manner: In mid-2011, approximately different TPL and Alliacense employees performed work relevant to TPL's licensing activities for the CORE Flash Portfolio. (CX-0941C (Q&A 73).) TPL and Alliacense employees

					(CX-
0941C, Q&A 62-	-73.) TPL asserts	that it has unde	erreported resou	rces spent on the	he portfolio
because					
	(Tr. 258:3-25	5.)			yl yy
The state of the s					



- (CX-0941C, Q&A 43-44; JX-0035 through JX-0064, CX-0799C through CX-0804C, CX-0806C, CX-0809C, and CX-0830C; CX-0939C, Q&A 37-38.)
- (CX-0941C.0010, Q&A 56-57; CX-1115C.)
- (CX-0941C, Q&A 57; CX-0939C, Q&A 36; CX-0754C.)

(CX-0799C; CX-800C;Motion to Terminate with Respect to Fujitsu (EDIS Doc. ID 500162.)

• JX-0035 through JX-0064, CX-0799C through CX-0804C, CX-0806C, CX-0809C, and CX-0830C.)

Respondents argue that TPL's purported expenses include investments that bear no relationship to licensing. (RIB at 261.) Specifically, Respondents argue that TPL has improperly included litigation expenses, patent prosecution and procurement expenses, foreign licensing expenses, marketing and promotion expenses, post-complaint expenses, leasing and facilities expenses, and product purchase expenses in its licensing expenses. (RIB at 261-267.)

The ALJ finds certain of Respondents' arguments, *i.e.*, arguments relating to marketing and promotion expenses, post-complaint expenses, leasing and facilities expenses and product purchase expenses, unpersuasive for the same reasons set forth *supra* in Section VII.C.1.a. Respondents make conclusory and generalized statements regarding TPL's evidence and arguments. In light of TPL's extensive and detailed explanation of its evidence, such cursory statements do not adequately rebut or raise any doubts as to the credibility of certain of TPL's witnesses. In many instances, Respondents simply make one sentence statements regarding the general inadequacy of evidence. For example, Respondents simply state that "TPL overstates its alleged licensing investments by including post-complaint activities and expenses." (RIB at 266.)

Respondents failed to adequately develop their arguments and, instead, simply provide conclusory statements or, at best, cursory arguments.

Furthermore, certain of these arguments the ALJ finds unpersuasive on substantive grounds. First, the ALJ finds that TPL's investments in "marketing and promotion expenses" do relate to TPL's licensing portfolio. The evidence shows that the marketing and promotion expenses are related to licensing and are not merely "general" marketing and promotion expenses. Mr. Hannah explained what, exactly, he meant by "marketing and promotion":



(RX-0259C.0093 at 93:10-21; CX0877C) Mr. Hannah went on to state

(RX-0259C.0094 at 94:7-12.) Despite Respondents' attempts otherwise, the evidence shows that these expenses that "market and promote" the portfolio are related to TPL's attempts at licensing. (Tr., 224:16-225:16; 227:25-228:17; CX-0941C at Q&A 61-90.)

Second, as for Respondents argument that TPL's product purchase expenses should not be considered, the ALJ also finds those unpersuasive on substantive grounds. As set forth above,

TPL explains

(See supra; CX-0941C and Q&A 76.) The evidence shows that TPL's

(CX-0941C at Q&A 78; JX-0075C.)

Respondents remaining arguments, *i.e.*, failure to allocate domestic versus foreign products, whether products are covered by more than one patent in the portfolio, etc., go to what portion of such expenses TPL can rely upon – they do not go to whether such expenses can be relied upon. Given their clear role in TPL's comprehensive licensing program, the ALJ finds that these expenses can be included. Similarly, the leasing and facilities expenses can also be included as they relate to TPL's licensing activities and Respondents' arguments are directed more to how much of those expenses should be properly allocated to the Asserted Patents.

As for those expenses related to litigation expenses, ⁹ patent prosecution and procurement expenses, and TPL's post-complaint expenses, TPL has agreed to withdraw those expenses from consideration. (CRB at 103-105; 109-110.)

Respondents further argue that TPL improperly included "foreign licensing" expenses, which are expenses related to "licensing foreign patents." (RIB at 264.) Respondents argue that this "foreign" component was "clearly" a motivator in some foreign-based entities' decisions to enter into license agreements. (RIB at 264-265.) Respondents note that TPL did not allocate expenses relating to these foreign patent from its overall licensing expenses. (RIB at 265-266.) In support of their arguments, Respondents cite the Commission's Opinion in *Certain Integrated Circuits*, Inv. No. 337-TA-786, as support their contention that the alleged inability to discern

⁹ While TPL has agreed to withdraw these expenses from consideration, the ALJ notes that such expenses are not per se excluded from consideration in the economic prong analysis. See Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same, Inv. No. 337-TA-650, Comm'n Op. at 50 (March 31, 2010) ("A complainant must also show that licensing activities pertain to the particular patent(s) at issue. Depending on the circumstances, such activities may include, among other things, drafting and sending cease and desist letters, filing and conducting a patent infringement litigation, conducting settlement negotiations, and negotiating, drafting and executing a license.") (emphasis added); see also Motiva, LLC v. Int'l Trade Comm'n, 716 F.3d 596, 600 (Fed. Cir. 2013) ("Motiva's investment in the litigation against Nintendo could indeed satisfy the economic prong of the domestic industry requirement if it was substantial and directed toward a licensing program that would encourage adoption and development of articles that incorporated Motiva's patented technology.")

how much of TPL's alleged licensing investment in attributable to the foreign patents "precludes a finding of domestic industry based on licensing." (RIB at 264.)

The ALJ finds Respondents' arguments unpersuasive. First, the ALJ finds that *Integrated Circuits* does not support Respondents' argument. The Commission's issue with the complainant's evidence in that investigation had more to do with the inability to allocate domestic-licensing expenses from foreign-licensing expenses. *Certain Integrated Circuits*, Inv. No. 337-TA-786, Comm'n Op. at 32 (Public Version) (September 19, 2012). Second, even assuming that "foreign licenses" cannot be considered, the evidence shows that TPL did not include such expenses in its evidence. The evidence consists of evidence limited to the portfolio at issue and is based on

(CX-0941C at Q&A 67.) The evidence shows that

(CX-0799C.0016-.0017; CX-0800C.0015-.0016; CX-0801C.0016-.0017; CX-0802C.0015-.0016; CX-0803C.0014-.0015; CX-0804C.0014-.0015; CX-0806C.0016-.0017; CX-0809C.0016-.0017; CX-0830C.0014-.0016; JX-0035C.0015-.0016; JX-0036C.0016-.0017; JX-0037C.0014-.0015; JX-0038C.0015-.0016; JX-0039C.0014-.0015; JX-0040C.0014-.0015; JX-0041C.0015-.0016; JX-0042C.0014-.0015; JX-0043C.0015-.0016; JX-0044C.0014-.0015; JX-0045C.0013-.0014; JX-0046C.0011-.0013; JX-0047C.0013-.0014; JX-0048C.0013-.0015; JX-0049C.0011; JX-0050C.0014-.0015; JX-0051C.0013-.0015; JX-0052C.0014-.0015; JX-0053C.0012-.0015; JX-0054C.0013-.0015; JX-0055C.0014-.0016; JX-0056C.0013-.0014; JX-0057C.0015-.0016; JX-0058C.0014-.0015; JX-0059C.0016-.0017; JX-0060C.0015-.0016; JX-0061C.0013-.0014; JX-0062C.0015-.0016; JX-0063C.0014-.0015; JX-0064C.0015-.0016.)

Therefore, as set forth above, the ALJ finds that TPL's investments, except those that TPL has explicitly agreed to withdraw, relate to licensing activities.

c) Investments occurred in the United States

The parties do not dispute that TPL's licensing activities occurred in the United States. (see generally CIB at 267-284; RIB at 256-282.) The evidence shows that TPL is headquartered in Cupertino, California. (CX-0939C at Q&A 7.) TPL conducts all CORE Flash licensing activities from Cupertino. (CX-0939C, Q&A 19; CX-0905C at 34:4-22; CX-0688C at 24.)

d) Whether investments are substantial

Using the "flexible approach" advocated by the Commission, the ALJ finds that the evidence, while an extremely close call, shows that TPL's investments are substantial. *Multimedia Display and Navigation Devices*, Comm'n Op. at 15. As set forth above, TPL's licensing program is fairly comprehensive and involves several steps from market research to reverse engineering to licensing negotiations. *See supra* Section VII.C.1.b. As will be set forth in greater detail below, the evidence shows that TPL's allocated costs presented in this investigation are limited to the CORE Flash Portfolio and not the entirety of TPL's general licensing program and, further, that the allocation of expenses is based on and not a calculation or estimate. The ALJ finds that this

Respondents argue that TPL's investments are not substantial because (1) TPL's licensing activities are not among those referenced favorably in the legislative history of Section 337(A)(3); (2) TPL's investment is trivial compared to the size of its resources and industry; (3) TPL does not otherwise exploit the Asserted Patents through research and development; (4) TPL does not engage in ancillary licensing activities such as research and development or any training

direct method of allocating expenditures to be extremely reliable.

or technical support; and (5) TPL did not present any evidence of return on licensing investment related to the Asserted Patents. (RIB at 275-278.)

With regard to Respondents' arguments relating to a distinction between revenue-driven licensing and production-driven licensing, the ALJ finds that such a distinction is no longer the seminal factor to be considered in light of the Federal Circuit's opinion in *InterDigital Cmmc'ns* v. *Int'l Trade Comm'n*, 707 F.3d 1295, 1303-4 where it stated

It is not necessary that the party manufacture the product that is protected by the patent, and it is not necessary that any other domestic party manufacture the protected article. As long as the patent covers the article that is the subject of the exclusion proceeding, and as long as the party seeking relief can show that it has a sufficiently substantial investment in the exploitation of the intellectual property to satisfy the domestic industry requirement of the statute, that party is entitled to seek relief under section 337.

Thus, the Federal Circuit has explicitly stated that the manufacture of a product that practices the patent is no longer necessary. The implication of such a holding means that the focus is on a complainant's licensing efforts, generally, and not what "type" of licensing it is, *i.e.*, production-driven or revenue-driven.

The ALJ also finds Respondents' arguments that TPL's investments are trivial relative to the size of its resources and the industry to be unpersuasive. Respondents argue that the CORE Flash Portfolio revenue

(RIB at 277.) However, the in licensing revenue is what TPL has generated since it was established in the late 1980s. (CX-0939C at Q&A 31.) TPL did not acquire the Asserted Patents until 2006 so Respondents' comparison with over 20 years of licensing revenue is improper. In a similar vein, Respondents cite to the revenue generated in the entire flash memory industry for the United States in an attempt to shows that TPL's licensing investments are insubstantial. (RIB at 277; RX-2886C at Q&A 154.) The ALJ finds such an

analysis is not an adequate means of determining whether TPL's investments are substantial relative to the industry because the comparison is too broad. The "flash memory industry" revenue cited by Dr. Leonard is what is generated by the entire industry and not by a single entity similar to TPL in the flash memory industry. Indeed, in general, any comparison of any individual entity to an entirety of a large industry made will always lead to the conclusion that the individual entity is insignificant compared to an entire industry. Such an analysis provides little to no value in determining the significance of the investment.

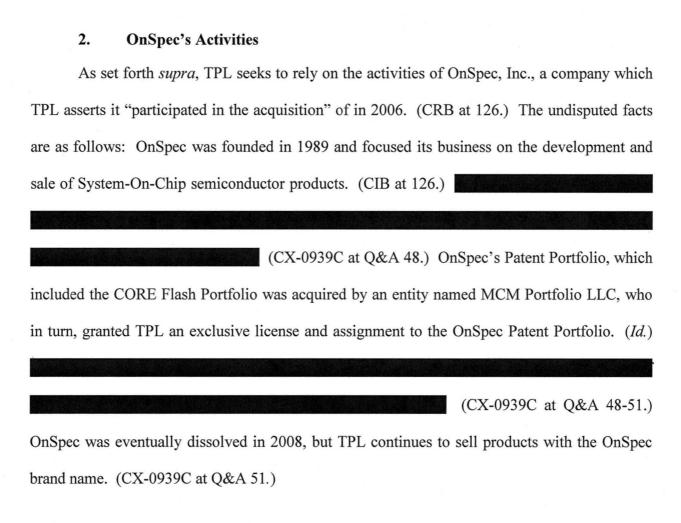
Respondents further argue that TPL's evidence is unreliable because TPL failed to offer any documentary evidence or "uninterested witness testimony." (RIB at 268-269.) The evidence shows that

(JX-0072C, CX-0753C, and CX-0877C; CX-0941C at Q&A 67; RX-0259C, 56:14-57:17.)

Given the limited size and resources of TPL, the evidence shows that TPL has made investments that are "large" in magnitude. The evidence relating to TPL's litigation expenses and prosecution history expenses ("IP Legal") were withdrawn by TPL and the ALJ is excluding all 2012 expenditures in his analysis. ¹⁰ The evidence still shows that TPL still expended nearly

¹⁰ The ALJ does not include any expenses from 2012 because TPL included expenses incurred after the date of filing the complaint and there was no means of allocating pre-complaint revenue from post-complaint revenue in 2012. (See JX-0753C) Motiva, LLC, 716 F.3d at 601 n. 6 ("We also affirm the Commission's use of the date of the filing")

in expenses relating to licensing the CORE Flash Portfolio. (CX-0753C.) TPL's CORE Flash Portfolio generated in licensing revenue from 2007 to December 31, 2011. (CX-0941 at Q&A 56-57; JX-0017C.) TPL's Cupertino, California facilities where it conducts all CORE Flash licensing activities costs (CX-0941C at Q&A 91; CX-0783C; CX-0784C.) Thus, the evidence shows that TPL's investments are substantial relative to its size, resources and industry.



of Motiva's complaint in this case as the relevant date at which to determine if the domestic industry requirement of Section 337 was satisfied.").

(CX-0753C)

¹¹ The total expenditures for 2007 through 2011

The ALJ does not include any revenue generated in 2012 because TPL included revenue generated after the date of filing the complaint and there was no means of allocating pre-complaint revenue from post-complaint revenue in 2012. (See JX-0071C) Motiva, LLC, 716 F.3d at 601 n. 6.

The ALJ finds that the relationship between OnSpec and TPL does not allow for TPL to rely on OnSpec's expenditure for purposes of satisfying the domestic industry requirement. The ALJ does not dispute that the companies are related or that TPL continues to sell OnSpec branded products. However, it is not clear what, specifically, is meant by the fact that OnSpec "merged" into TPL - indeed, MR. Leckrone testified that At best, that merely shows that OnSpec and TPL were sister corporations where one corporation sold the goods branded with the name of its sister corporation. The ALJ finds that none of these facts are sufficient to inure any benefit of OnSpec's expenditures to TPL. Indeed, it appears that the companies were separate entities, despite common ownership, and maintained separate identities for the remainder of OnSpec's corporate existence. Moreover, The ALJ finds that the relationship between OnSpec and TPL has not been sufficiently established to allow TPL to inure any benefit of OnSpec's expenditures. Consequently, to the extent that TPL seeks to rely on OnSpec's expenditures to satisfy the economic prong, the ALJ declines to allow them to do so. TPL argues that the fact that it sells OnSpec's products that generated revenue of nearly in sales should suffice to create a relationship between the two entities such that OnSpec's expenditures can be considered for the economic prong analysis. (CRB at 126.) Respondents argue that the sales revenue cannot establish a domestic industry because sales alone cannot prove that a domestic industry exists, and further, TPL did not continue to invest in research and development of the OnSpec products. (RIB at 281-282.) Moreover, Respondents note that the sales reflect the sales of existing inventory and do not reflect any new investments

in the OnSpec products by TPL. (RIB at 281-282.) The ALJ agrees with Respondents that sales

alone are insufficient to establish a domestic industry. Commission precedent has long held that "marketing and sales" alone are insufficient to establish a domestic industry. *Certain Integrated Circuits, Processes for Making Same, and Products Containing Same,* Inv. No. 337-TA-450, Comm'n Op., 2003 ITC LEXIS 510, at *442 ("Furthermore, the mere marketing and sale of products in the United States is insufficient to constitute a domestic industry.") (citing, *inter alia*, S. Rep. No. 71, 100th Cong. 1st Sess., at 129 (1987); H.R. Rep. No. 40, 100th Cong., 1st Sess., pt. 1, at 157 (1987).) Therefore, TPL's sale of OnSpec products alone are insufficient to satisfy the economic prong.

VIII. CONCLUSIONS OF LAW

- The Commission has personal jurisdiction over the parties and subject-matter and in rem jurisdiction over the accused products.
- 2. The importation or sale requirement of section 337 is satisfied.
- 3. The Accused Products do not infringe the '443, '424, '847, and '549 Patents.
- 4. The Accused Products infringe the asserted claims of the '623 Patent.
- 5. TPL has failed to prove that Respondents induced infringement of the '623 Patent.
- 6. The '443, '424, '847,'549, and '623 Patents are not invalid under 35 USC § 102 for anticipation.
- 7. The '443, '424, '847,'549, and '623 Patents are not invalid under 35 USC § 103 for obviousness.
- 8. The '424 and '847 Patents are not invalid under 35 USC § 112 for indefiniteness.
- 9. The '424 Patent is not invalid under 35 USC § 112 for new matter.
- 10. The '847 and '549 Patents are not invalid under 35 USC § 112 for lack of written description.
- 11. The technical prong of the domestic industry requirement has not been satisfied.
- 12. The economic prong of the domestic industry requirement under 19 U.S.C. § 1337(a)(3)(C) has been satisfied.
- 13. It has not been established that a violation exists of section 337 for the asserted claims of the '443, '424, '847, and '549 Patents.
- 14. It has been established that a violation exists of section 337 for claims 1-4 and 9-12 of the '623 Patent.

IX. INITIAL DETERMINATION AND ORDER

Based on the foregoing, it is the INITIAL DETERMINATION of this ALJ that no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain computers and computer peripheral devices and components thereof and products containing the same that infringe one or more of claims 7, 11, 19, and 21 of U.S. Patent No. 7,162,549; claims 1, 3, 4, 7, 9, 11, 12, and 14 of the U.S. Patent No. 7,295,443; claims 25, 26, 28, and 39 of U.S. Patent No. 7,522,424; claims 17-19 of the U.S. Patent No. 6,976,623; and claims 1-3 of U.S. Patent No. 7,719,847.

It is the INITIAL DETERMINATION of this ALJ that a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain computers and computer peripheral devices and components thereof and products containing the same that infringe one or more of claims 1-4 and 9-12 of U.S. Patent No. 6,976,623.

Further, this Initial Determination, together with the record of the hearing in this investigation consisting of:

- (1) the transcript of the hearing, with appropriate corrections as may hereafter be ordered, and
- (2) the exhibits received into evidence in this investigation, as listed in the attached exhibit lists in Appendix A,

are CERTIFIED to the Commission. In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential by the undersigned under 19 C.F.R. § 210.5 is to be given *in camera* treatment.

The Secretary shall serve a public version of this ID upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order (Order No. 1.) issued in this investigation.

RECOMMENDED DETERMINATION ON REMEDY AND BOND

I. Remedy and Bonding

The Commission's Rules provide that subsequent to an initial determination on the question of violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, the administrative law judge shall issue a recommended determination containing findings of fact and recommendations concerning: (1) the appropriate remedy in the event that the Commission finds a violation of section 337, and (2) the amount of bond to be posted by respondents during Presidential review of Commission action under section 337(j). *See* 19 C.F.R. § 210.42(a)(1)(ii).

A. Limited Exclusion Order

Under Section 337(d), the Commission may issue either a limited or a general exclusion order. A limited exclusion order directed to respondents' infringing products is among the remedies that the Commission may impose, as is a general exclusion order that would apply to all infringing products, regardless of their manufacturer. *See* 19 U.S.C. § 1337(d).

TPL seeks a limited exclusion order that bar from entry into the United States "infringing computers and computer peripheral devices and components thereof and products containing the same." (CIB at 284.) TPL argues that the accused products fall within the scope of the investigation and that they should not be considered downstream products such that an *EPROMs* analysis is triggered. (CIB at 284-285.) TPL argues, nevertheless, that to the extent the *EPROMs* factors should be considered, those factors weigh in favor of issuing an exclusion order that extends to these "downstream" products. (CRB at 127-129.) TPL further argues that an LEO is in the public interest. (CIB at 287.)

Respondents argue that the scope of the LEO should not include Respondents' downstream products that contain the accused card readers. (RIB at 283.) In support of their

arguments, Respondents rely on the *EPROMs* factors arguing that consideration of these factors weighs against issuing any LEO that would include Respondents' downstream products. (RIB at 283-289.) Respondents further argue that any LEO should include an adjustment period "to alleviate any harm to U.S. consumers and legitimate commerce caused by disruption to the supply of downstream products" as well as a certification provision so that Respondents may certify to CBP that certain imported products do not infringe and do not fall within the scope of this investigation. (RIB at 289-290.)

Should the Commission find a violation, the ALJ recommends that the limited exclusion order should apply to any downstream products that contain the accused chip readers. The ALJ disagrees with Respondents' assertion that an *EPROMs* analysis is warranted. Respondents provide no basis for arguing that the *EPROMs* analysis is necessary in light of *Kyocera* and *Certain Semiconductor Chips*, 337-TA-661 (Commission issued LEO excluding downstream products without *EPROMs* analysis). Respondents cite to the Recommended Determination in *Certain Light-Emitting Diodes and Products Containing Same*, 337-TA-784, where the ALJ performed an *EPROMs*. (RRB at 101.) However, that investigation was terminated based on settlement agreement before the Commission issued an opinion on whether an *EPROMs* analysis was necessary. Consequently, the only *Commission* decision on the matter stems from *Certain Semiconductor Chips*, 337-TA-661, wherein the Commission determined that the limited exclusion order included downstream products without performing an *EPROMs* analysis. Based on the foregoing, the ALJ finds that the Commission no longer finds an *EPROMs* analysis necessary to include downstream products within the scope of any limited exclusion order.

The ALJ also declines to recommend that any issued LEO include an adjustment period.

Respondents' basis for seeking the adjustment period is to limit TPL's ability to "hold up"

Respondents. (RIB at 289.) Respondents cite to no evidence of any "harm" to U.S. consumers and legitimate commerce, but rather simply cite to the impact on their own bottom line. (RIB at 289-290.) As such, the ALJ declines to recommend an adjustment period.

As for Respondents' request for a certification provision, TPL did not oppose such a request and the ALJ finds no basis for not permitting Respondents to certify to CBP that certain imported products are outside the scope of this investigation. (CRB at 129-130.)

B. Cease and Desist Order

Section 337 provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a cease and desist order as a remedy for violation of section 337. *See* 19 U.S.C. § 1337(f)(1). The Commission generally issues a cease and desist order directed to a domestic respondent when there is a "commercially significant" amount of infringing, imported product in the United States that could be sold so as to undercut the remedy provided by an exclusion order. *See Certain Crystalline Cefadroxil Monohydrate*, Inv. No. 337-TA-293, USITC Pub. 2391, Comm'n Op. on Remedy, the Public Interest and Bonding at 37-42 (June 1991); *Certain Condensers, Parts Thereof and Products Containing Same, Including Air Conditioners for Automobiles*, Inv. No. 337-TA-334, Comm'n Op. at 26-28 (Aug. 27, 1997).

TPL seeks a cease and desist order against all respondents HP, Kingston and Newegg/Rosewill. (CIB at 286.) Specifically, TPL argues that the evidence shows that these respondents maintain "commercially significant" inventories of the accused products in the United States and provides specific amounts of inventories retained by each of these respondents. (CIB at 286-287.) TPL seeks a cease and desist order that prohibits these respondents, their subsidiaries and related companies from engaging in "importation, sale for importation,

manufacture, assembly, marketing and/or advertising, distribution, offer for sale, sale, or other transfer within the United States" of the accused products. (CIB at 287.)

Respondents argue that TPL has failed to show that any of these respondents maintain commercially significant inventories in the United States. (RRB at 103.) Respondents argue that the evidence shows that any inventory it retains "is minimal

(RRB at 103.)

The ALJ finds that the evidence shows that respondents HP, Kingston and Newegg/Rosewill currently maintain significant inventories of accused products in the United States. (CX-0190C at Resp. to Interrogatory 10; CX0217C at Resp. to Interrogatory No. 10; CX-224 at Resp. Interrog. No. 10.) The ALJ finds HP's arguments that its inventory is not "commercially significant" to be irrelevant. The focus is not on HP's own activities, but rather on the relief that can be afforded to the complainant. *Certain Hardware Logic Emulation Systems and Components Thereof*, 337-TA-383, U.S.I.T.C. Pub. No. 3089 at 25, note 121 ("The Commission's purpose in issuing cease and desist orders in patent-based cases has been to afford complete relief to complainants where infringing goods are already present in the United States, and thus cannot be reached by issuance of an exclusion order.") Therefore, cease and desist orders are appropriate as to these Respondents.

C. Bond During Presidential Review Period

The Administrative Law Judge and the Commission must determine the amount of bond to be required of a respondent, pursuant to section 337(j)(3), during the 60-day Presidential review period following the issuance of permanent relief, in the event that the Commission determines to issue a remedy. The purpose of the bond is to protect the complainant from any injury. 19 C.F.R. § 210.42(a)(1)(ii), § 210.50(a)(3).

When reliable price information is available, the Commission has often set the bond by eliminating the differential between the domestic product and the imported, infringing product. See Certain Microsphere Adhesives, Processes for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes, Inv. No. 337-TA-366, Comm'n Op. a 24 (1995). In other cases, the Commission has turned to alternative approaches, especially when the level of a reasonable royalty rate could be ascertained. See, e.g., Certain Integrated Circuit Telecommunication Chips and Products Containing Same, Including Dialing Apparatus, Inv. No. 337-TA-337, Comm'n Op. at 41 (1995). A 100 percent bond has been required when no effective alternative existed. See, e.g., Certain Flash Memory Circuits and Products Containing Same, Inv. No. 337-TA-382, USITC Pub. No. 3046, Comm'n Op. at 26-27 (July 1997)(a 100% bond imposed when price comparison was not practical because the parties sold products at different levels of commerce, and the proposed royalty rate appeared to be de minimis and without adequate support in the record).

TPL argues that the bond should be set at 100% of the entered value. (CIB at 288-289.)

TPL argues that, in the alternative, a bond may be set at a reasonable royalty rate, which is (CIB at 289.)

Respondents argue that no bond should be required since TPL failed to show the need for any bond and ignored any evidence from which an appropriate bond could be calculated. (RRB at 103.) Respondents further argue that TPL's request for a reasonable royalty rate based on its portfolio license agreement is unwarranted because it incorporates "hold-up" value and Respondents' own license agreements with standards bodies are a more reasonable bases for determining a royalty rate. (RRB at 103-104.)

The ALJ recommends that the Commission set a bond at a reasonable royalty rate of the entered value of the accused products based on TPL's portfolio license agreement. Respondents' argument that the bond rate should be based on its own license agreements fails to adequately protect <u>TPL</u> from any injury, but rather minimizes the effect on Respondents.

II. Conclusion

In accordance with the discussion of the issues contained herein, it is the RECOMMENDED DETERMINATION ("RD") of the ALJ should the Commission find a violation, then it should issue a limited exclusion order against Respondents including downstream products and contains a certification provision. The ALJ recommends that the Commission should also issue cease and desist orders directed at respondents HP, Kingston and Newegg/Rosewill. Furthermore, Respondents should be required to post a bond based on royalty rates contained in TPL's license agreements during the Presidential review period.

Within seven days of the date of this document, each party shall submit to the office of the Administrative Law Judge a statement as to whether or not it seeks to have any portion of this document deleted from the public version. The parties' submissions must be made by hard copy by the aforementioned date.

Any party seeking to have any portion of this document deleted from the public version thereof must submit to this office (1) a copy of this document with red brackets indicating any portion asserted to contain confidential business information by the aforementioned date and (2) a list specifying where said redactions are located. The parties' submission concerning the public version of this document need not be filed with the Commission Secretary.

SO ORDERED.

Theodore R. Essex

Administrative Law Judge

JX No.	CX No	RX No.	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Date Received Into Evidence
JX-0001	CX- 0001	RX-0001	_	TPL Complaint Exh.1 - Certified Copy of U.S. Patent No. 6,976,623	TPL1020953- TPL1020962	D. Leckrone; Vendiku; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	Infringement; Noninfringement; Validity; Invalidity; Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0002	CX- 0002	RX-0002	-	TPL Complaint Exh. 2 - Certified Copy of U.S. Patent No. 7,162,549	TPL1020963- TPL1021018	D. Leckrone; Mambakkam Iyer, Vendiku; Jones; Antonopoulos; Banerjee; Berg; Mercer; Mroczkowski; Buscaino	Infringement; Noninfringement; Validity; Invalidity; Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0003	CX- 0003	RX-0003	_	TPL Complaint Exh. 3 - Certified Copy of U.S. Patent No. 7,295,443	TPL1021019- TPL1021034	D. Leckrone; Mambakkam Iyer; Vendiku; Jones; Antonopoulos; Banerjee; Berg; McAlexander; Mercer, Mroczkowski; Buscaino	Infringement, Noninfringement, Validity, Invalidity, Domestic Industry, Lack of Domestic Industry	Jan 7
JX-0004	CX- 0004	RX-0004	_	TPL Complaint Exh. 4 - Certified Copy of U.S. Patent No. 7,522,424	TPL1021035- TPL1021051	D. Leckrone; Mambakkam Iyer; Vendiku; Jones; Antonopoulos; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Buscaino	Infringement; Noninfringement; Validity; Invalidity; Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0005	CX- 0005	RX-0005	_	TPL Complaint Exh. 5 - Certified Copy of U.S. Patent No. 6,438,638	TPL1021052- TPL1021075	D. Leckrone; Mambakkam Iyer; Vendiku; Jones; Antonopoulos; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Buscaino	Infringement; Noninfringement; Validity; Invalidity; Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0006	CX- 0006	RX-0006	_	TPL Complaint Exh. 6 - Certified Copy of U.S. Patent No. 7,719,847	TPL1021076- TPL1021092	D. Leckrone; Mambakkam Iyer; Vendiku; Jones; Antonopoulos; Banerjee; Berg; McAlexander, Mercer; Mroczkowski; Buscaino	Infringement; Noninfringement; Validity; Invalidity; Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0007	CX- 0007	RX-0007	С	TPL Complaint Exh. 7 - Assignment of U.S. Patent No. 6,976,623	TPL1042477- TPL1042535	D. Leckrone; Leonard	Ownership; Standing; Lack of Standing; Domestic Industry; Lack of Domestic Industry; Invalidity	Jan 7/9
JX-0008	CX- 0019	RX-2397	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0009	CX- 0020	RX-1340	-	TPL Complaint Exh. 23 - Claim Chart applying U.S. Patent No. 7,162,549 to accused Brother Industries, Ltd. product	TPL1021621- TPL1021645	Buscaino; Banerjee	Infringement; Noninfringement	1/10/13-Moved to Joint Demonstrative Exhibit List as JDX-0007
JX-0010	CX- 0032	RX-0034	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0011	CX- 0033	RX-0011	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

JX No.	CX No	RX No.	Conf	Description	Bates Number	Sponsoring Witness	Purpose .	Date Received Into Evidence
JX-0012	CX- 0034	RX-0009	_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0013	CX- 0035	RX-2687	_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0014	CX- 0046	RX-0008	_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0015	CX- 0047	RX-0010	_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0016	CX- 0049	RX-0012	_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0017	CX- 0243	RX-1815	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0018	CX- 0245	RX-1837	_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0019	CX- 0662	RX-0156	-	Intel Desktop Boards Hannacroix Concept PC	TPL036807-TPL036808	Antonopoulos	Domestic Industry; Secondary Considerations; Lack of Domestic Industry; Invalidity	1/7/2013 (as CX-0662)
JX-0020	CX- 0663	RX-0158	-	Intel Desktop Platforms Lecta Concept Platform	TPL036809-TPL036812	Antonopoulos	Domestic Industry; Secondary Considerations; Lack of Domestic Industry; Invalidity	1/7/2013 (ax CX-0663)
JX-0021	CX- 0665	RX-0712	-	Windows Platform Design Notes; WinHEC Reference PC	TPL036818-TPL036820	Antonopoulos; Buscaino; Banerjee; McAlexander	Domestic Industry; Secondary Considerations; Lack of Domestic Industry; Invalidity	Jan 10
JX-0022	CX- 0687	RX-0023	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

JX No.	CX No	RX No.	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Date Received Into Evidence
JX-0023	CX- 0688	RX-0040	С	TPL Complaint Exh. 105 - Declaration of Dwayne Hannah	TPL1042838- TPL1042850	Hannah; Leonard; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 25
JX-0024	CX- 0690; CX- 0910	RX-0035	С	TPL Complaint Exh. 105-2 - Sample License Agreement	TPL1023041- TPL1023060	Hannah; D. Leckrone; Leonard; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0025	CX- 0691	RX-0165	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0026	CX- 0692	RX-0020; RX-0264	С	TPL Complaint Exh. 105-4 - OnSpec Chip Sales	TPL1042851- TPL1042855	Hannah; Antonopolous; M. Leckrone; D. Leckrone; Leonard	Domestic Industry; Lack of Domestic Industry	Jan 10
JX-0027	CX- 0697	RX-0022	-	TPL Complaint Exh. 105-9 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP Practices the '443 Patent	TPL1023152- TPL1023162	Buscaino; Hannah; McAlexander; Lum	Domestic Industry; Lack of Domestic Industry; Invalidity	Jan 7 (Moved to Joint Demonstrative Exhibit List as JDX-0001)
JX-0028	CX- 0699	RX-0364	-	TPL Complaint Exh. 105-11 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP	TPL1023182- TPL1023201	Buscaino; Hannah; McAlexander; Lum	Domestic Industry; Lack of Domestic Industry; Invalidity	Jan 7 (Moved to Joint Demonstrative Exhibit List as JDX-0002)
JX-0029	CX- 0701	RX-1328	_	TPL Complaint Exh. 105-13 Addonics PCMCIA Flash DigiAdapter Extreme ADPMAF-X	TPL1023214- TPL1023234	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7 (Moved to Joint Demonstrative Exhibit List as JDX-0003)
JX-0030	CX- 0705	RX-1330	-	TPL Complaint Exh. 105-17 Addonics Pocket eSATA/USB DigiDrive AEPDDESU / WP	TPL1023306- TPL1023325	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7 (Moved to Joint Demonstrative Exhibit List as JDX-0004)
JX-0031	CX- 0716	RX-1331	-	TPL Complaint Exh. 105-28 CompuApps OmniFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023542- TPL1023560	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7 (Moved to Joint Demonstrative Exhibit List as JDX-0005)
JX-0032	CX- 0720	RX-1332	-	TPL Complaint Exh. 105-32 CompuApps OmniFlash IDE Kiosk Flash Memory Card Reader xSil146-G	TPL1023608- TPL1023626	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7 (Moved to Joint Demonstrative Exhibit List as JDX-0006)
JX-0033	CX- 0727	RX-0025	С	TPL Complaint Exh. 105-39 - A List of the Companies Offered Licenses to the CORE Flash Portfolio	TPL1042856- TPL1042861	D, Leekrone; Hannah; M. Leekrone	Domestic Industry; Lack of Domestic Industry	Jan 7

JX No.	CX No	RX No.	Conf	Description:	Bates Number	Sponsoring Witness	Purpose	Date Received Into Evidence
JX-0034	CX- 0755	RX-0167; RX-0265	С	OnSpec Asset Information	TPL041253-TPL041258	Antonopoulos; Hannah; M. Leckrone;	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0035	CX- 0805	RX-0554	С	TPL/ License Agreement	TPL1040288- TPL1040313	D. Leckrone; Hannah; Vander Veen; Leonard	Domestic Industry, Lack of Domestic Industry	Jan 7
JX-0036	CX- 0807	RX-2738	С	TPL License Agreement	TPL1040348- TPL1040370	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0037	CX- 0808	RX-2747	С	TPL / Agreement	TPL1040371- TPL1040388	D. Leckrone; Hannah; Vander Veen; Leonard	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0038	CX- 0810	RX-2749	С	TPL, License Agreement	TPL388464-TPL388489	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0039	CX- 0811	RX-2750	С	TPL; License Agreement	TPL388490-TPL388508	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0040	CX- 0812	RX-2751	С	TPL Agreement	TPL388509-TPL388526	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0041	CX- 0813	RX-2752	С	TPL License Agreement	TPL388527-TPL388548	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0042	CX- 0814	RX-2753	С	TPL License Agreement	TPL388549-TPL38857	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0043	CX- 0815	RX-2754	С	TPL License Agreement	TPL388572-TPL388592	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0044	CX- 0816	RX-2755	С	TPL License Agreement	TPL388593-TPL388609	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7

JX No.	CX No	RX No.	Conf	Description	Bates Number	Spansoring Witness	Purpose	Date Received Into Evidence
JX-0045	CX- 0817	RX-2756	С	TPL License Agreement	TPL388610-TPL388633	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0046	CX- 0818	RX-2757	С	TPLA License Agreement	TPL388634-TPL388652	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0047	CX- 0819	RX-2758	С	TPL. Agreement	TPL388653-TPL388674	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0048	CX- 0820	RX-2759	С	TPL License Agreement	TPL388675-TPL388692	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0049	CX- 0821	RX-2760	С	TPLL License Agreement	TPL388693-TPL388707	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0050	CX- 0822	RX-2761	С	TPL License Agreement	TPL388708-TPL388726	D. Leekrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0051	CX- 0823	RX-2762	С	TPL License Agreement	TPL388727-TPL388747	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0052	CX- 0824	RX-2763	С	TPLioense Agreement	TPL388748-TPL388768	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0053	CX- 0825	RX-2764	С	TPL License Agreement	TPL388769-TPL388784	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0054	CX- 0826	RX-2765	С	TPL/ License Agreement	TPL388785-TPL388803	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0055	CX- 0827	RX-2766	С	TPL License Agreement	TPL388804-TPL38824	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7

JX No.	CX No	RX No.	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Date Received Into Evidence
JX-0056	CX- 0828	RX-2767	С	TPL,License Agreement	TPL388825-TPL388844	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0057	CX- 0829	RX-2768	С	TPL License Agreement	TPL388845-TPL388865	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0058	CX- 0831	RX-2770	С	TPL License Agreement	TPL388886-TPL388907	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0059	CX- 0832	RX-2771	С	TPL License Agreement	TPL388908-TPL388932	D. Leckre , Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0060	CX- 0833	RX-2772	С	TPLE License Agreement	TPL388933-TPL388952	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0061	CX- 0834	RX-2773	С	TPLL License Agreement	TPL388953-TPL388969	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0062	CX- 0835	RX-2774	С	TPLLicense Agreement	TPL388970-TPL388988	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0063	CX- 0836	RX-2775	С	TPL/ELicense Agreement	TPL388989-TPL389006	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0064	CX- 0837	RX-2776	С	TPL/ License Agreement	TPL389007-TPL389026	D. Leckrone; Hannah; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0065	CX- 0852	RX-0303	С	Agreement and Plan of Merger dated April 3, 2006, (D. Leckrone Dep. Exh. 4)	TPL041313-TPL041430	D. Leckrone; M. Leckrone; Venkidu; Leonard	Domestic Industry; Lack of Domestic Industry; Invalidity; Remedy	Jan 7/10
JX-0066	CX- 0879	RX-0335; RX-0274	С	OnSpec Income Statement - Rolling Ten Year 2001 through September 30, 2010, Deposition of Dwayne Hannah, Exh. 15	TPL036785	Hannah; M. Leckrone; Buscaino; Banerjee; McAlexander; Vander Veen	Domestic Industry; Lack of Domestic Industry	Jan 7

JX No.	CX No	RX No.	Conf	Description	Bates Number	Spansoring Witness	Purpose	Date Received Into Evidence
JX-0067	CX- 0880	RX-0275	С	Office Lease Stevens Creek Office Center Dated July 23, 2010, Deposition of Dwayne Hannah, Exh. 16	TPL041265-TPL041298	Hannah; D. Leekrone	Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0068	CX- 0904	RX-0709	С	SD Memory Card Specifications, Part 1, Deposition of Larry Jones, Exh. 17	TPL125919-TPL126035	Buscaino; Banerjee; McAlexander	Infringement; Noninfringement; Invalidity	Jan 10
JX-0069	Withdra wn	Withdrawn	(4)	Withdrawn	Withdrawn	. Withdrawn	Withdrawn	Withdrawn
JX-0070	CX- 0908	RX-0325	_	Document titled 'CORE Flash Please' (M. Leckrone Dep. Exh. 11)	TPL1045464- TPL1045465	D. Leckrone; Hannah; M. Leckrone	Domestic Industry; Lack of Domestic Industry	Jan 25
JX-0071	CX- 0909	RX-0326	С	Summary of CoreFlash Revenue 2007 YTD (M. Leckrone Dep. Exh. 12)	TPL389797	D. Leckrone; Hannah; M. Leckrone, Leonard	Domestic Industry; Lack of Domestic Industry	Jan 7
JX-0072	CX- 0911	RX-0329; RX-1018	С	Employee Spreadsheet (M, Leckrone Dep. Exh. 15)	TPL036784	Hannah; M. Leckrone	Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0073	CX- 0912	RX-0330	С	TPL Project Detail by Year (M. Leckrone Dep. Exh. 16)	TPL1038185- TPL1038187	Hannah; M. Leckrone	Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0074	CX- 0913	RX-0332	С	TPL/Intellisys Product Group, Product Sales Revenue by Year (M. Leckrone Dep. Exh. 18)	TPL036766	Hannah; Antonopoulos; M. Leckrone	Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0075	CX- 0914	RX-0333	С	TdReport Spreadsheet (M. Leckrone Dep. Exh. 20)	TPL036774-TPL036780	M. Leckrone; Hannah	Domestic Industry; Lack of Domestic Industry	Jan 7/9
JX-0076	CX- 1114	RX-0717	С	Sales of OnSpec Chip Products 2006-2011	TPL038069-TPL038072	Antonopoulos; Buscaino; Banerjee; McAlexander	Domestic Industry; Lack of Domestic Industry; Invalidity	Jan 7/10
JX-0077	Withdra wn	Withdrawn		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Admitted as RX-0177C Jan 28

Page 7 of 9

List of Joint Documentary Exhibits Received Into Evidence (Comprehensive) Inv. No. 337-TA-841

JX No.	CX No	RX No.	Conf	'Description	Bates Number	Sponsoring Witness	Purpose	Date Received Into Evidence
JX-0078	Withdra wn	Withdrawn		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0079	Withdra wn	Withdrawn		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Admitted as RX-0411 Jan 28
JX-0080	Withdra wn	Withdrawn		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0081	N/A	RX-1123	С	Nicholas Antonopoulos Deposition Designations, Inv. No. 337-TA-807	N/A	Antonopoulos	Validity; Invalidity; Domestic Industry; Lack of Domestic Industry	Jan 25
JX-0082	N/A	RX-2897	С	Dwayne Hannah Deposition Designations	N/A	Hannah	Domestic Industry; Lack of Domestic Industry	Jan 25
JX-0083	N/A	RX-1009	С	Dwayne Hannah Deposition Designations, Inv. No. 337- TA-807	N/A	Hannah	Domestic Industry; Lack of Domestic Industry	Jan 25
JX-0084	Withdra wn	Withdrawn		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0085	Withdra wn	Withdrawn		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
JX-0086	N/A	N/A	_	Stipulation Regarding Kingston New Design Products	N/A	N/A	Related to Accused Products	Jan 10
JX-0087	N/A	N/A	С	Stipulation Regarding Hewlett Packard Importation	N/A	N/A	Importation	Jan 28
JX-0088	N/A	N/A		Stipulation Regarding Dell Importation	N/A	N/A	Importation	Jan 28

List of Joint Documentary Exhibits Received Into Evidence (Comprehensive) Inv. No. 337-TA-841

JX No.	CX No	RX No.	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Date Received Into Evidence
JX-0089	N/A	N/A		Stipulation Regarding Kingston Importation	N/A	N/A	Importation	Jan 28

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0001	xxx	moved to Joint Exhibit List	x000000000X	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0002	ххх	moved to Joint Exhibit List	xxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0003	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-0004	xxx	moved to Joint Exhibit List	XXXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0005	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0006	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	X0000000000	XXXXXXXXXX	N/A
RX-0007	xxx	moved to Joint Exhibit List	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-0008	ххх	moved to Joint Exhibit List	xxxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0009	xxx	moved to Joint Exhibit List	XXXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0010	XXX	moved to Joint Exhibit List	xxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0011	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0012	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0013	xxx	moved to Joint Exhibit List	xxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0014	xxx	moved to Joint Exhibit List	XXXXXXXXXX	xxxxxxxxxx	>0000000000	xxxxxxxxxx	N/A
RX-0015	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0016	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0017	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0018	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0019	xxx	withdrawn	XXXXXXXXX	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0020	xxx	moved to Joint Exhibit List	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0021	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxx	xxxxxxxxxx	N/A
RX-0022	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0023	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0024	xxx	moved to Joint Exhibit List	XXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0025	XXX	moved to Joint Exhibit List	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0026	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxxx	XXXXXXXXXXX	N/A
RX-0027	xxx	not assigned	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXXX	N/A
RX-0028 RX-0030	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-0031	_	Complaint Exh. 45 - Claim Chart applying U.S. Patent No. 6,976,623 to accused Falcon Northwest Computer Systems, Inc. product	Invalidity; Lack of Domestic Industry	McAlexander; Leonard	N/A	N/A	Jan 10
RX-0032	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	x0000000000	N/A
RX-0033	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0034	ххх	moved to Joint Exhibit List	XXXXXXXXXXX	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0035	xxx	moved to Joint Exhibit List	XXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0036 RX-0039	xxx	withdrawn	xxxxxxxxxx	xxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0040	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0041	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0042	XXX	not assigned	xxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-0043	_	File History of U.S. Patent No. 6,976,623 (Complaint App. A)	Invalidity	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	N/A	N/A	Jan 9
RX-0044	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0045	_	File History of U.S. Patent No. 7,162,549 (Complaint App. C)	Invalidity	Mambakkam lyer, Venkidu; Jones; Antonopoulos; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	TPL1000802	TPL1001102	Jan 10
RX-0046		Copies of each reference mentioned in the file history for U.S. Patent No. 7,162,549 (Complaint App. D)	Invalidity	Mambakkam lyer; Venkidu; Jones; Antonopoulos; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	N/A	N/A	Jan 10
RX-0047	_	File History of U.S. Patent No. 7,295,443 (Complaint App. E)	Invalidity; Noninfringement	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	TPL1002199	TPL1002436	Jan 8
RX-0048		Copies of each reference mentioned in the file history for U.S. Patent No. 7,295,443 (Complaint App. F)	Invalidity	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	N/A	N/A	Jan 10
RX-0049		File History of U.S. Patent No. 7,522,424 (Complaint App. G)	Invalidity	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	TPL1004133	TPL1004489	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0050	_	Copies of each reference mentioned in the file history for U.S. Patent No. 7,522,424 (Complaint App. H)	Invalidity	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	N/A	N/A	Jan 10
RX-0051	_	File History of U.S. Patent No. 6,438,638 (Complaint App. I)	Invalidity	Mambakkam lyer, Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Buscaino	TPL1006295	TPL1006364	Jan 10
RX-0052	_	Copies of each reference mentioned in the file history for U.S. Patent No. 6,438,638 (Complaint App. J)	Invalidity	Mambakkam Iyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Buscaino	N/A	N/A	Jan 10
RX-0053	_	File History of U.S. Patent No. 7,719,847 (Complaint App. K)	Invalidity	Mambakkam lyer, Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	TPL1006725	TPL1007149	Jan 10
RX-0054	_	Copies of each reference mentioned in the file history for U.S. Patent No. 7,719,847 (Complaint App. L)	Invalidity	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	N/A	N/A	Jan 10
RX-0055	xxx	not assigned	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0056	_	Respondents' Opening Claim Construction Brief dated 07/23/2012	Invalidity; Noninfringement	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino	N/A	N/A	Jan 10
RX-0057 - RX-0060	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-0061	_	Order No. 23 Construing the Terms of the Asserted Claims of the Patents issued 10/04/2012	Invalidity; Noninfringement	Mambakkam lyer; Venkidu; Jones; Banerjee; McAlexander; Mroczkowski; Buscaino	N/A	N/A	Jan 9
RX-0062	xxx	not assigned	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0063 RX-0088	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0089	С	TPL's Responses to Seiko's 1st Set of Interrogatories	Invalidity; Noninfringement; Lack of Domestic Industry; Remedy; Bonding	Mambakkam lyer, Venkidu; Jones; Banerjee; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino; Respondent Party Witnesses; Leonard	N/A	N/A	Jan 10
RX-0090 RX-0094	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXX	N/A

Inv. No.	337-TA-841

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0095	С	TPL's Responses to Respondents' 1st Set of RFAs	Invalidity; Noninfringement	Mambakkam Iyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino; Respondent Party Witnesses	N/A	N/A	Jan 10
RX-0096 - RX-0098	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-0099	С	TPL's Supplemental Responses to Dell's 1st Set of Interrogatories	Invalidity; Noninfringement	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino; Respondent Party Witnesses; Leonard	N/A	N/A	Jan 10
RX-0100 - RX-0123	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxx	N/A
RX-0124	С	TPL's Responses to HiTi's 1st Set of RFAs	Invalidity; Noninfringement	Mambakkam lyer; Venkidu; Jones; Banerjee; Berg; McAlexander; Mercer; Mroczkowski; Wolfe; Buscaino; Respondent Party Witnesses	N/A	N/A	Jan 10
RX-0125 - RX-0139	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0140	xxx	not assigned	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXXX	x00000000x	N/A
RX-0141	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0142	С	Antonopoulos Deposition Transcript, 10/30/2012	Invalidity; Lack of Domestic Industry	Antonopoulos; Leonard	N/A	N/A	Jan 9
RX-0143	xxx	withdrawn	xxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-0144	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0145	_	OnSpec releases OmniFlash Console (Antonopoulos Dep. Exh. 03)	Lack of Domestic Industry	Antonopoulos	N/A	N/A	Jan 25
RX-0146	_	OnSpec releases OmniFlash Octopus (Antonopoulos Dep. Exh. 04)	Lack of Domestic Industry	Antonopoulos	N/A	N/A	Jan 25
RX-0147	_	OnSpec releases Kiosk all in one (Antonopoulos Dep. Exh. 06)	Lack of Domestic Industry	Antonopoulos	N/A	N/A	Jan 25
RX-0148	_	Product Sheet for OmniFlash Kiosk (Antonopoulos Dep. Exh. 07)	Lack of Domestic Industry	Antonopoulos	N/A	N/A	Jan 25
RX-0149	-	OnSpec Releases OmniFlash Uno (Antonopoulos Dep. Exh. 08)	Lack of Domestic Industry	Antonopoulos	N/A	N/A	Jan 25
RX-0150 RX-0154	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	N/A
RX-0155	_	Imation Investor Relations News Release (Antonopoulos Dep. Exh. 15)	Lack of Domestic Industry	Antonopoulos	TPL388436	TPL388439	Jan 25
RX-0156	xxx	moved to Joint Exhibit List	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0157	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	20000000000	xxxxxxxxxx	N/A
RX-0158	xxx	moved to Joint Exhibit List	XXXXXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0159 RX-0162	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0163	С	Employee Contact List (Antonopoulos Dep. Exh. 23)	Lack of Domestic Industry	Antonopoulos	TPL389998	TPL390044	Jan 25
RX-0164	xxx	withdrawn	XXXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-0165	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0166	ххх	withdrawn	XXXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxx	xxxxxxxx	N/A
RX-0167	С	OnSpec Assets Sheet (Antonopoulos Dep. Exh. 26) [also on Joint Exhibit List - see JX-0034]	Lack of Domestic Industry	Antonopoulos; Leonard	TPL041253	TPL041254	Jan 9
RX-0168	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxxx	>>>>>>>	xxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0169 - RX-0176	xxx	withdrawn	x0000000000	XXXXXXXXXX	хоохоохох	XXXXXXXXXX	N/A
RX-0177	С	designated testimony of Vijaykumar Balasubramanian from deposition taken on 10/08/2012	Invalidity	Balasubramanian	N/A	N/A	Jan 28
RX-0178 - RX-0181	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxx)000000000X	XXXXXXXXXXX	N/A
RX-0182	С	SCM PCD series of Digital Media Readers Summary of product evolution (Balasubramanian Dep. Exh. 05)	Invalidity	Banerjee; McAlexander; Balasubramanian	IDEN-ITC0000035	IDEN-ITC0000041	Jan 10
RX-0183 - RX-0185	ххх	withdrawn .	XXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	N/A
RX-0186	С	PCD Series Product Brief (Balasubramanian Dep. Exh. 09)	Invalidity	McAlexander; Balasubramanian	IDEN-ITC0000114	IDEN-ITC0000117	Jan 10
RX-0187	С	PCD47 Test Plan dated 3/18 (Balasubramanian Dep. Exh. 10)	Invalidity	McAlexander; Balasubramanian	IDEN-ITC0000131	IDEN-ITC0000145	Jan 10
RX-0188 - RX-0192	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0193	_	Dazzle Six-in-One USB card reader (Balasubramanian Dep. Exh. 17)	Invalidity	Banerjee; McAlexander; Balasubramanian	IDEN-ITC0000034	IDEN-ITC0000034	Jan 10
RX-0194	-	Dazzle 6 in 1 Reader User's Manual (Balasubramanian Dep. Exh. 18)	Invalidity	McAlexander; Balasubramanian	BROTHER01740442	BROTHER01740500	Jan 10
RX-0195	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0196	С	Dazzle Digital Media and Video Power Point (Balasubramanian Dep. Exh. 20)	Invalidity	McAlexander; Balasubramanian	IDEN-ITC0000042	IDEN-ITC0000077	Jan 25
RX-0197	_	Dazzle Universal 8 in 1 Reader/Writer User Guide (Balasubramanian Dep. Exh. 23)	Invalidity	McAlexander; Balasubramanian	BROTHER01740501	BROTHER01740541	Jan 25
RX-0198	_	Microtech PDC-47B SCSI Digital Film Reader/Writer (Balasubramanian Dep. Exh. 24)	Invalidity	McAlexander; Balasubramanian	HP060945	HP060946	Jan 10
RX-0199	_	PCD-47 User's Manual (Balasubramanian Dep. Exh. 25)	Invalidity	McAlexander; Balasubramanian	HP054597	HP054631	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0200	_	Press Release (Balasubramanian Dep. Exh. 26)	Invalidity	McAlexander; Balasubramanian	HP176318	HP176319	Jan 10
RX-0201	_	Photographs PCD-45 (Balasubramanian Dep. Exh. 27)	Invalidity	McAlexander; Balasubramanian	HP176507	HP176512	Jan 10
RX-0202	_	Steve's Digicams Microtech USB CameraMate Flash Card Reader/Writer (Balasubramanian Dep. Exh. 28)	Invalidity	McAlexander; Balasubramanian	HP060934	HP060938	Jan 10
RX-0203	_	"Dazzle Six in One USB Card Reader," webpage dpreview.com (Balasubramanian Dep. Exh. 29)	Invalidity	Banerjee; McAlexander; Balasubramanian	HP059512	HP059513	Jan 10
RX-0204	_	Dazzle Card Reader User's Manual (Balasubramanian Dep. Exh. 30)	Invalidity	McAlexander; Balasubramanian	BROTHER01740630	BROTHER01740688	Jan 10
RX-0205	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-0206	_	Photographs of "Dazzle" products (Balasubramanian Dep. Exh. 32)	Invalidity	McAlexander; Balasubramanian	HP176482	HP176492	Jan 10
RX-0207 - RX-0211	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	x00000000X	xxxxxxxxxx	N/A
RX-0212	-	Declaration of Dale E. Buscaino in Support of TPL's Response to Respondents' Opening Claim Construction Brief (Buscaino Dep. Exh. 2)	Invalidity; Noninfringement	Buscaino; Banerjee; McAlexander; Mercer; Mroczkowski	N/A	N/A	Jan 10
RX-0213 RX-0236	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	XXXXXXXXXX	N/A
RX-0237	С	March 2000 SD Memory Card Specifications, Part 1 Physical Layer Specification, Version 1.0 (Buscaino Dep. Exh. 26)	Invalidity; Noninfringement; Lack of Domestic Industry	Buscaino	N/A	N/A	Jan 10
RX-0238 RX-0240	ххх	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0241	С	Exhs. 1-10 of Buscaino Report pertaining to Acer (Buscaino Dep. Exh. 30)	Noninfringement	Buscaino	N/A	N/A	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0242 RX-0255	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N/A
RX-0256	С	designated testimony of Al Conte from deposition taken on 11/01/2012	Invalidity	Conte	N/A	N/A	Jan 25
RX-0257	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0258	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXXXXXX	xxxxxxxxx	xxxxxxxxx	N/A
RX-0259	С	designated testimony of Dwayne Hannah from deposition taken on 10/26/2012 in Inv. No. 337-TA-841	Lack of Domestic Industry	Hannah; Leonard	N/A	N/A	Jan 25
RX-0260	_	Respondents' 1st Notice of Taking Deposition of Complainant Technology Properties Limited, LLC (Hannah Dep. Exh. 1)	Lack of Domestic Industry	N/A	N/A	N/A	Jan 25
RX-0261	-	Resp. Hewlett-Packard Co. et al. 's Notice of Deposition of Dwayne Hannah (Hannah Dep. Exh. 2)	Lack of Domestic Industry	N/A	N/A	N/A	Jan 25
RX-0262	C	Hannah Direct Witness Statement, Inv. No. 337-TA-807 (Hannah Dep. Exh. 3)	Lack of Domestic Industry	Hannah; Leonard	TPL1037678	TPL1037693	Jan 25
RX-0263	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	N/A
RX-0264	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	N/A
RX-0265	xxx	moved to Joint Exhibit List	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0266	С	Decl. of Dwayne Hannah dated 08/23/2011 from Inv. No. 337-TA-807 (Hannah Dep. Exh. 7)	Lack of Domestic Industry	Hannah	TPL038043	TPL038054	Jan 25
RX-0267	С	OnSpec CoreFlash Total Salary and Benefits Spreadsheet (Hannah Dep. Exh. 8)	Lack of Domestic Industry	Hannah	TPL41254	TPL41254	Jan 25
RX-0268	С	TPL CoreFlash Project Detail by Year as of May 31, 2011 (Hannah Dep. Exh. 9)	Lack of Domestic Industry	Hannah	TPL036781	TPL036783	Jan 9
RX-0269	С	TPL CoreFlash Project Detail by Year As of April 30, 2012 (Hannah Dep. Exh. 10)	Lack of Domestic Industry	Hannah; Leonard	TPL1025259	TPL1025262	Jan 25
RX-0270	XXX	withdrawn	XXXXXXXXXXX	xxxxxxxxx	XXXXXXXXX	XXXXXXXXXXXX	N/A
RX-0271	С	TPL CoreFlash Headcount Summary by Company and Month (Hannah Dep. Exh. 12)	Lack of Domestic Industry	Hannah	TPL041251	TPL041252	Jan 25
RX-0272	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXXX	N/A
RX-0273	С	TPL/IntellaSys Product Group Product Revenue by Year (Hannah Dep. Exh. 14)	Lack of Domestic Industry	Hannah; Leonard	TPL389901	TPL389902	Jan 9
RX-0274	С	OnSpec Income Statement - Rolling Ten Year 2001 through September 30, 2010 (Hannah Dep. Exh. 15)	Lack of Domestic Industry	Hannah	TPL036785	TPL036785	Jan 25
RX-0275	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0276	С	TriNet Payroll Headcount by Location as of 8/31/2011 (Hannah Dep. Exh. 17)	Lack of Domestic Industry	Hannah	TPL036757-0001	TPL036757-0244	Jan 25
RX-0277	С	designated testimony of Larry Lawson Jones from deposition taken on 10/17/2012 in Inv. No. 337-TA-841	Invalidity; Noninfringement; Lack of Domestic Industry	Jones	N/A	N/A	Jan 25
RX-0278	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0279	XXX	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0280	С	OnSpec Sales Data 1998 Thru Sept 2006 (Jones Dep. Exh. 2)	Lack of Domestic Industry	Jones; McAlexander	TPL389798	TPL389900	Jan 25
RX-0281 - RX-0287	XXX	withdrawn	хххххххххх	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0288	_	Affidavit of Christopher Butler (Jones Dep. Exh. 10)	Invalidity	Jones	HP176331	HP176395	Jan 10
RX-0289	-	Photograph of Physical Exh. 11 - AcomData product (Jones Dep. Exh. 12)	Invalidity	Jones; Leonard	HP174405	HP174435	Jan 10
RX-0290	С	Boards List (Jones Dep. Exh. 13)	Invalidity	Jones	TPL283566	TPL283572	Jan 10
RX-0291	T-	Colored Photos, Flash (Jones Dep. Exh. 14)	Invalidity	Jones; McAlexander	HP176320	HP176330	Jan 10
RX-0292 RX-0295	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-0296	-	SMIL Hardware Edition, Version 1.00 (Jones Dep. Exh. 19)	Invalidity	Jones	HP 174125	HP 174160	Jan 25
RX-0297	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-0298	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0299	С	transcript of the deposition of Daniel Leckrone taken on 10/25/2012 in Inv. No. 337-TA-841	Lack of Domestic Industry	D. Leckrone; Leonard	N/A	N/A	Jan 9
RX-0300 RX-0302	xxx	withdrawn	x000000000	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0303	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0304	XXX	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-0305	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0306	xxx	moved to Joint Exhibit List	xxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0307	XXX	withdrawn	xxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-0308	С	Alliacense Correspondence dated May 11, 2010	Lack of Domestic Industry; Remedy	D. Leckrone	TPL015886	TPL015945	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0309	XXX	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0310	С	Agreement between Technology Properties Limited and	Lack of Domestic Industry; Remedy	D. Leckrone; Leonard	TPL388769	TPL388784	Jan 9
RX-0311	С	Email from Yasuko Nakagami-Sher dated 03/12/2012	Lack of Domestic Industry; Remedy	D. Leckrone; Leonard	TPL1036994	TPL1037043	Jan 9
RX-0312	XXX	withdrawn	XXXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	N/A
RX-0313	С	designated testimony of Daniel McNary "Mac" Leckrone from deposition taken on 10/22/2012 in Inv. No. 337-TA-841	Lack of Domestic Industry	M. Leckrone; Leonard	N/A	N/A	Jan 25
RX-0314	_	Hewlett-Packard Co. et al. 's Notice of Deposition of Mac Leckrone M. Leckrone Dep. Exh.1)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-0315	_	Respondents' 1st Notice of Taking Deposition of Complainant TPL M. Leckrone Dep. Exh. 2)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-0316	_	"Licensing Programs," http://www.alliacense.com/licensing-programs (M. Leckrone Dep. Exh. 3)	Lack of Domestic Industry	M. Leckrone; Leonard	N/A	N/A	Jan 10
RX-0317	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	3000000000	xxxxxxxxx	N/A
RX-0318	xxx	moved to Joint Exhibit List	>000000000X	xxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0319	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0320	-	Complaint Exh. 47 - A Notice Letter to Fujitsu Limited - '443 patent (M. Leckrone Dep. Exh. 6)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-0321	-	Complaint Exh. 42-A - Notice letter to Falcon Northwest Computer Systems, Inc '443 patent (M. Leckrone Dep. Exh. 7)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-0322 RX-0324	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-0325	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0326	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0327	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0328	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	N/A
RX-0329	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	N/A
RX-0330	XXX	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into
RX-0331	С	TPL CoreFlash Project Detail by Year As of May 31, 2011 (M. Leckrone Dep. Exh. 17; Hannah Dep. Exh. 9)	Lack of Domestic Industry	M. Leckrone; Hannah; Vander Veen	TPL036781	TPL036783	Jan 25
RX-0332	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	>>>>>>>	N/A
RX-0333	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0334	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0335	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0336	xxx	moved to Joint Exhibit List	XXXXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0337	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-0338	хох	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0339	XXX	withdrawn	xxxxxxxxx	xxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0340	С	Direct Witness Statement of Eric Liu	Invalidity	Liu	N/A	N/A	Jan 4
RX-0341	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0342	_	Subpoena <i>Duc</i> es <i>Tecum</i> to Atech Flash Technology, Inc., 07/11/2012 (Liu Dep. Exh. 1)	Invalidity	N/A	N/A	N/A	Jan 4
RX-0343	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0344	xxx	withdrawn	xxxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0345		DataFab 9/10/99 press release, DataFab Systems Inc., leading in portable storage systems, is now offering dual-slot CompactFlash and SmartMedia card reader (Liu Dep. Exh. 4)	Invalidity	McAlexander, Liu	ATECH841_ITC_000005	ATECH841_ITC_000005	Jan 4
RX-0346	_	Tom's Hardware, All Reviews, Special, Miscellaneous, Comdex 2001 Day 3: Affordable DVD-4; Atech Flash Technology, 06:00 - Thursday 15 November 2001 by David Stellmack, and attachments (Liu Dep. Exh. 5)	Invalidity	McAlexander; Liu	ATECH841_ITC_000012	ATECH841_ITC_000021	Jan 4
RX-0347	-	Invoice 17480, Sunus Suntek International Corp. to Tom's Hardware, Product Reviews, 11/21/01 (Liu Dep. Exh. 6)	Invalidity	McAlexander; Liu	ATECH841_ITC_000156	ATECH841_ITC_000156	Jan 4
RX-0348	-	Purchase Order 177-E, Order Date 10/18/01, Sunus Suntek; Vendor: DataFab, USA Office; Ship To: Sunus Suntek Int'l Corp. (Liu Dep. Exh. 7)	Invalidity	McAlexander; Eric Liu	ATECH841_ITC_000158	ATECH841_ITC_000159	Jan 4
RX-0349	-	Invoice No. GS003326, DataFab Systems Inc.; Customer: Sunus Suntek; Ship to: Sunus Suntek, and attachment (Liu Dep. Exh. 8)	Invalidity	McAlexander; Liu	ATECH841_ITC_000160	ATECH841_ITC_000161	Jan 4

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0350	_	Invoice 2015, Atech Flash Technology, Inc.; Elitegroup Computer System, 2/22/02 (Liu Dep. Exh. 9)	Invalidity	McAlexander; Liu	ATECH841_ITC_000051	ATECH841_ITC_000051	Jan 4
RX-0351	_	Top photograph of Atech PRO II sample (Liu Dep. Exh. 10)	Invalidity	McAlexander; Liu	ACER841_ITC_0050261	ACER841_ITC_0050261	Jan 4
RX-0352		Front photograph of Atech PRO II sample (Liu Dep. Exh. 11)	Invalidity	McAlexander; Liu	ACER841_ITC_0050262	ACER841_ITC_0050262	Jan 4
RX-0353	_	Bottom photograph of Atech PRO II sample (Liu Dep. Exh. 12)	Invalidity	McAlexander; Liu	ACER841_ITC_0050263	ACER841_ITC_0050263	Jan 4
RX-0354	С	ND3060, A Multi-Format Card Reader/Writer Controller with USB Interface Specification, Neodio Technologies Corporation, Spec. v1.00, 4/4/01 (Liu Dep. Exh. 13)	Invalidity	McAlexander, Liu	ATECH841_ITC_0001 45	ATECH841_ITC_0001 54	Jan 4
RX-0355	_	The Pro-Mouse, Optical Mouse Plus Multiple Flash Card Reader; The AFT6551, ATX Mid Tower Case with 330W P4 Power Supply, and attachments (Liu Dep. Exh. 15)	Invalidity	McAlexander; Liu	ATECH841_ITC_000001	ATECH841_ITC_000004	Jan 4
RX-0356	_	Letter from Liang to Alliacense, 06/25/2007 (Liu Dep. Exh. 16)	Invalidity	McAlexander; Liu	ATECH841_ITC_000011	ATECH841_ITC_000011	Jan 4
RX-0357	С	Email from Tan to Lucas Yong, Yang Rong, lisasun, and Suntek, 08/09/2001, and attachments (Liu Dep. Exh. 17)	Invalidity	McAlexander; Liu	ATECH841_ITC_0000 22	ATECH841_ITC_0000 25	Jan 10
RX-0358 - RX-0362	xxx	withdrawn	xxxxxxxxx	x00000000x	x000000000X	x000000xxxxx	N/A
RX-0363	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0364	ххх	moved to Joint Exhibit List	>>>>>>>	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0365 - RX-0377	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	30000000000	N/A
RX-0378	_	Declaration of Sree Mambakkam Iyer Under 37 C.F.R. 1.131 (Mambakkam Iyer Dep. Exh. 11)	Invalidity	Mambakkam lyer	TPL388270	TPL388273	Jan 10
RX-0379 RX-0388	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	300000000X	xxxxxxxxx	N/A
RX-0389	_	Exh. D to Banerjee Invalidity Expert Report - Declaration of Dr. Robert Ellett Re Public Accessibility of Certain References	Invalidity	Banerjee; Ellett	N/A	N/A	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into
RX-0390	С	SD memory card specifications, part 1, physical layer specification, version 0.96, dated January 2000 (SDK) (Moyer Dep. Exh. 8)	Invalidity	Moyer	SDK000002	SDK000117	Jan 9
RX-0391	_	SD memory card specifications, part 1, physical layer specification, version 0.96, dated January 2000 (HP) (Moyer Dep. Exh. 9; Mambakkam lyer Dep. Exh. 8)	Invalidity	Moyer; Mambakkam lyer	HP175408	HP175435	Jan 9
RX-0392 RX-0398	ххх	withdrawn	x00000000x	XXXXXXXXXXX	хоооооооо	xxxxxxxxx	N/A
RX-0399	_	SD memory card specifications, part 1, physical layer specification, version 1.00, dated March 2000 (Moyer Dep. Exh. 17)	Invalidity	Moyer; McAlexander	SEC 841 _0002101	SEC 841 _0002217	Jan 9
RX-0400 RX-0404	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxxx	xxxxxxxxx	3000000000X	N/A
RX-0405	С	designations of the testimony of Jeanette Taggart from deposition taken on 10/24/2012	Invalidity	Taggart	N/A	N/A	Jan 25
RX-0406	xxx	withdrawn	XXXXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-0407	С	SD Host/Ancillary Product License Agreement	Invalidity	Taggart	TPL392164	TPL392222	Jan 25
RX-0408 - RX-0410	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-0411	С	designated testimony of Bharath Venkatesan from deposition taken on 10/15/2012	Invalidity	Venkatesan	N/A	N/A	Jan 25
RX-0412	_	Dazzle 6 in 1 Reader User's Manual (Venkatesan Dep. Exh. 3)	Invalidity	McAlexander; Venkatesan	BROTHER01740442	BROTHER01740500	Jan 10
RX-0413	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0414	-	TechInsights Engineering Report on the Pin Analysis of the Dazzle DM-21200 Universal 6 in 1 Memory Card Reader - October 2, 2012 (Venkatesan Dep. Exh. 5)	Invalidity	Venkatesan	BROTHER01740859	BROTHER01740883	Jan 10
RX-0415 - RX-0417	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-0418	С	Product: Orca Dolphin (4in1) Orca Dolphin description (Venkatesan Dep. Exh. 9)	Invalidity	Venkatesan	IDEN-ITC0000030	IDEN-ITC0000030	Jan 25
RX-0419	xxx	withdrawn	XXXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	N/A
RX-0420	С	Direct Witness Statement of Dr. Sanjay Banerjee	Invalidity; Noninfringement	Banerjee	N/A	N/A	Jan 10
RX-0421 - RX-0451	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0452	_	Exh. C to Banerjee Invalidity Expert Report - Curriculum Vitae	Invalidity	Banerjee	N/A	N/A	Jan 10
RX-0453	_	Exh. D to Banerjee Invalidity Expert Report - Declaration of Dr. Robert Ellett Re Public Accessibility of Certain References ("Ellett Decl.")	Invalidity	Banerjee;	N/A	N/A	Jan 10
RX-0454	_	Direct Witness Statement of Dr. Robert Ellett Regarding Public Accessibility of Certain References	Invalidity	Ellett	N/A	N/A	Jan 9
RX-0455	_	Ellett Decl. Exh. 1 - Chinese MARC record and certified translation (part of Banerjee Init. Rpt. Exh. D)	Invalidity	Banerjee; Ellett	ACER-841-ITC- 0081893	ACER-841-ITC- 0081894; ACER-841- ITC-0081988	Jan 9
RX-0456		Ellett Decl. Exh. 2 - AwYong, C.K., "An Integrated Control System Design of Portable Computer Storage Peripherals," master's thesis submitted to Dept. of Electrical and Control Engineering, Nat'l Chiao-Tung University, June 2000 certified translation ("Aw Yong Thesis")	Invalidity	Banerjee; McAlexander; Ellett	ACER-841-ITC- 0081806; HP058627	ACER-841-ITC- 0081890; HP058695	Jan 9
RX-0457	_·	Ellett Decl. Exh. 3 - Back cover of AwYong Thesis with certified translation (part of Banerjee Init. Rpt. Exh. D)	Invalidity	Banerjee; Ellett	ACER-841-ITC- 0081985	ACER-841-ITC- 0081987	Jan 9
RX-0458	-	Ellett Decl. Exh. 4 - AwYong Thesis official certificate of publication from National Chiao Tung University (part of Banerjee Init. Rpt. Exh. D)	Invalidity	Banerjee; Ellett	ACER-841-ITC- 0081982	ACER-841-ITC- 0081982	Jan 9
RX-0459	_	Ellett Decl. Exh. 5 - AwYong Thesis certified translation of official certificate of publication from National Chiao Tung University (part of Banerjee Init. Rpt. Exh. D)	Invalidity	Banerjee; Ellett	ACER-841-ITC- 0081983	ACER-841-ITC- 0081984	Jan 9
RX-0460	С	Direct Witness Statement of Joseph McAlexander	Invalidity	McAlexander	N/A	N/A	Jan 10
RX-0461 - RX-0535	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	x000000000	xxxxxxxxxx	N/A
RX-0536	_	SmartMedia File System (2000)	Invalidity	Banerjee; McAlexander	HP062965	HP062981	Jan 10
RX-0537	<u> </u>	SmartMedia Interface Library (2000)	Invalidity	Banerjee; McAlexander	HP174125	HP174160	Jan 10
RX-0538	 	SmartMedia Logical Format Specifications (1999)	Invalidity	Banerjee; McAlexander	HP063018	HP063032	Jan 10
RX-0539	-	SmartMedia Physical Specifications (1999)	Invalidity	Banerjee; McAlexander	HP177082	HP177107	Jan 10
RX-0540 - RX-0542	xxx	withdrawn	XXXXXXXXXXXX	X000000000	xxxxxxxxxx	xxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0543	-	U.S. Patent Appl. No. 2002/0065001	Invalidity	McAlexander	HP063121	HP063135	Jan 10
RX-0544	_	U.S. Patent Application Publication No. 2003/0095386	Invalidity	McAlexander	HP060783	HP060798	Jan 10
RX-0545	_	U.S. Patent No. 6,062,887 (Schuster)	Invalidity	McAlexander	SEC841_0006736	SEC841_0006758	Jan 10
RX-0546	, ,	U.S. Patent No. 6,402,558 (Hung Ju)	Invalidity	McAlexander; Banerjee	HP059964	HP059973	Jan 10
RX-0547	- 1	U.S. Patent No. 6,062,887 (Schuster)	Invalidity	McAlexander	HP065538	HP065560	Jan 10
RX-0548	xxx	withdrawn	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0549	-	U.S. Patent No. 6,612,492	Invalidity	McAlexander; Banerjee	HP066401	HP066412	Jan 10
RX-0550	-	U.S. Patent No. 6,746,280	Invalidity	McAlexander; Banerjee	HP173163	HP173177	Jan 10
RX-0551 - RX-0553	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-0554	xxx	moved to Joint Exhibit List	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0555	-	JP 2001-223044	Invalidity	McAlexander; Banerjee	HP062406 Eng with Certification: HP174811 - HP174828	HP062437	Jan 10
RX-0556	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0557	-	Project ID: DM- FLEX_PCD50BSCSI_PCCFSMSDMS_SCM release notes	Invalidity	Banerjee; McAlexander; Balasubramanian	IDEN-ITC0000001	IDEN-ITC0000002	Jan 10
RX-0558	С	Project ID: DM_LYNX_CF_SCM release notes	Invalidity	Banerjee; McAlexander; Balasubramanian	IDEN-ITC0000003	IDEN-ITC0000006	Jan 10
RX-0559	С	General Information - SCM Microsystems	Invalidity	Banerjee; McAlexander; Balasubramanian	IDEN-ITC0000007	IDEN-ITC0000016	Jan 10
RX-0560	c	eUSBDM CompactFlash-SmartMedia Firmware Version 5.05, Release Notes	Invalidity	Banerjee; McAlexander; Balasubramanian	IDEN-ITC0000031	IDEN-ITC0000033	Jan 10
RX-0561 - RX-0586	XXX	withdrawn	xxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0587	С	Rebuttal Expert Witness Report of Dr. Sanjay Banerjee Regarding Non-Infringement of United States Patent No. 7,163,549, Exhibit D, Appendices 1-12	Invalidity; Noninfringement	Banerjee	N/A	N/A	Jan 10
RX-0588	С	SCM Microsystems DM_PCB01_CFSM_BELKIN Rev. 2.2 PCB Gerber doc	Invalidity	Banerjee; McAlexander; Balasubramanian; Conte	IDEN-ITC0000017	IDEN-ITC0000029	Jan 10
RX-0589 - RX-0608	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	хооохоохох	хооохохох	N/A
RX-0609	_	Binder of documents and reports showing types of products sold in the retail channel	Invalidity	Warner	N/A	N/A	Jan 10
RX-0610 - RX-0617	XXX	withdrawn	xxxxxxxxxx	хххххххх	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0618	_	NPD TechWorld Report 3/1/2004 (pp. 42 - 46)	Invalidity	Warner	N/A	N/A	Jan 9
RX-0619 - RX-0623	xxx	withdrawn	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXX	xxxxxxxxxx	N/A
RX-0624	_	NPD TechWorld Report 12/1/2003 (pp. 107-120)	Invalidity	Warner	N/A	N/A	Jan 10
RX-0625 - RX-0636	xxx	withdrawn	x000000000x	XXXXXXXXXXXX	xxxxxxxx)00000000000	N/A
RX-0637	-	Dazzle Six in One USB Card Reader, October 24, 2001	Invalidity	Warner	IDEN-ITC0000034	IDEN-ITC0000034	Jan 10
RX-0638 - RX-0647	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXXX	>>>>>>>	N/A
RX-0648	-	Direct Witness Statement of Andrew Warner	Invalidity	Warner	N/A	N/A	Jan 10
RX-0649 - RX-0680	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0681	xxx	moved to Joint Exhibit List	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0682 - RX-0686	ххх	withdrawn	xxxxxxxxxx	>>>>>>>	xxxxxxxxxx	x000000000	N/A
RX-0687	_	"Engineering Report on the Pin Analysis of the Dazzle MD-8400 Universal 6-in-1 Digital Media Card Reader"	Invalidity	Banerjee	BROTHER01741090	BROTHER01741120	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0688	_	FCC Equipment Registration MFC9200C	Invalidity	Banerjee; Brother Witness	BROTHER01741008	BROTHER01741008	Jan 10
RX-0689	xxx.	withdrawn	XXXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-0690	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0691	С	Brother MFC-7400C Service Manual, Appendix 2 Circuit Diagrams (F Media PCB).	Invalidity	Banerjee; Brother Witness	BROTHER01742082	BROTHER01742310	Jan 10
RX-0692	_	Brother MFC-7400C User Manual	Invalidity	Banerjee; Brother Witness	BROTHER01724935	BROTHER01725186	Jan 10
RX-0693	С	Brother MFC-9200C Service Manual, Appendix 2 Circuit Diagrams (F Media PCB),	Invalidity	Banerjee; Brother Witness	BROTHER01742311	BROTHER01742544	Jan 10
RX-0694		Brother MFC-9200C User Manual	Invalidity	Banerjee; Brother Witness	BROTHER01725187	BROTHER01725430	Jan 10
RX-0695	_	Hard Copy Observer October 2001	Invalidity	Banerjee; Brother Witness	BROTHER01723848	BROTHER01723849	Jan 10
RX-0696	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0697	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0698		FCC Equipment Registration MFC7300C, MFC7400C	Invalidity	Banerjee; Brother Witness	BROTHER01741010	BROTHER01741010	Jan 10
RX-0699	жx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	N/A
RX-0700	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0701	-	MultiMediaCard Product Manual, SanDisk Corp., 2000	Invalidity; Noninfringement	Banerjee; McAlexander; Mercer	SEC841_0001699	SEC841_0001784	Jan 10
RX-0702	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0703	_	Samsung K9D1208V0A	Invalidity	Banerjee	HP062448	HP062473	Jan 10
RX-0704 - RX-0708	xxx	withdrawn	хохохохох	X000000000X	хоохоох	XXXXXXXXXX	N/A
RX-0709	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0710	-	The SMIL (SmartMedia Interface Library) Hardware Edition Version 1.00, Toshiba Corp., July 1, 2000	Invalidity	Banerjee; Jones; McAlexander	HP174125	HP174160	Jan 10
RX-0711	l -	Toshiba TC58V64ADC Datasheet	Invalidity	Banerjee; McAlexander	HP063320	HP063352	Jan 10
RX-0712	xxx	moved to Joint Exhibit List	x00000000X	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into
RX-0713	С	Imation Showcase Full Line of Personal Storage Offerings During CES 2002	Invalidity	TPL witness; Buscaino; Banerjee; McAlexander	TPL388436	TPL388439	Jan 10
RX-0714	_	Investor Relations News Release: Imation Showcases Full Line of Personal and Network Storage Offerings at PCEXPO 2001, 6/26/2001	Invalidity	TPL witness; Buscaino; Banerjee; McAlexander	TPL0038864	TPL0038867	Jan 10
RX-0715	С	Intel Desktop Boards Hannacroix Concept PC	Invalidity	TPL witness; Buscaino; Banerjee; McAlexander	TPL036807	TPL036808	Jan 10
RX-0716	С	Intel Desktop Platforms Lecta Concept Platform	Invalidity	TPL witness; Buscaino; Banerjee; McAlexander	TPL036809	TPL036817	Jan 10
RX-0717	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0718	ххх	withdrawn	XXXXXXXXXX	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-0719	С	OnSpec sales data 1998 thru Sept 2006	Invalidity	TPL witness; Buscaino; Banerjee; McAlexander	TPL389798	TPL389900	Jan 10
RX-0720	С	TPL/IntellaSys Product Group Product Revenue by Year	Invalidity; Lack of Domestic Industry	TPL witness; Buscaino; Banerjee; McAlexander; Leonard	TPL389901	TPL389902	Jan 10
RX-0721	С	Invoice and Order Sheet	Invalidity	TPL witness; Buscaino; Banerjee; McAlexander	TPL389903	TPL389911	Jan 10
RX-0722	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0723	-	U.S. Patent No. 5,740,349	Invalidity; Noninfringement	Banerjee; McAlexander	HP064938	HP064954	Jan 10
RX-0724	xxx	withdrawn	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0725	_	U.S. Patent No. 5,928,347 (Jones)	Invalidity	Banerjee; McAlexander	SEC841_0006136	SEC841_0006145	Jan 10
RX-0726		U.S. Patent No. 6,185,134	Invalidity	Banerjee; McAlexander	SEC841_0067015	SEC841_0067033	Jan 10
RX-0727	_	U.S. Patent No. 6,199,122	Invalidity	Banerjee; McAlexander	SEC841_0007041	SEC841_0007060	Jan 10
RX-0728	_	U.S. Patent No. 6,260,156	Invalidity	Banerjee; McAlexander	SEC841_0007163	SEC841_0007193	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0729	_	U.S. Patent No. 6,388,919	Invalidity	Banerjee; McAlexander	SEC841_0007597	SEC841_0007621	Jan 10
RX-0730	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxx	N/A
RX-0731	_	U.S. Patent No. 6,984,152	Invalidity	Banerjee; McAlexander	\$EC841_0006469	SEC841_0006487	Jan 10
RX-0732	_	U.S. Patent No. 6,987,927	Invalidity	Banerjee; McAlexander	SEC841_0006488	SEC841_0006517	Jan 10
RX-0733 RX-0740	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0741		U.S. Patent Application No. 10/264,466	Invalidity	Banerjee; McAlexander	SEC841_0024574	SEC841_0025132	Jan 10
RX-0742 RX-0745	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXXX	N/A
RX-0746	-	U.S. Patent Application Publication No. 2003/0038177	Invalidity	Banerjee; McAlexander	SEC841_0003403	SEC841_0003433	Jan 10
RX-0747 RX-0751	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0752	_	U.S. Patent No. 5,887,145	Invalidity	Banerjee; McAlexander	HP065144	HP065164	Jan 10
RX-0753	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-0754		U.S. Patent No. 6,402,558 (Hung-ju)	invalidity	Banerjee	HP065357	HP065366	Jan 8
RX-0755	-	U.S. Patent No. 6,658,202 (Battaglia)	Invalidity	McAlexander; Banerjee	TPL063225	TPL063238	Jan 10
RX-0756 RX-0758	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0759	-	"The Review": Microtech USB CameraMate	Invalidity	Banerjee	HP063181	HP063182	Jan 10
RX-0760	С	SmartMedia Algorithm v1.00	Invalidity; Noninfringement	Banerjee; McAlexander	TPL139179	TPL139200	Jan 10
RX-0761	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxxx	N/A
RX-0762	_	CF+ and CompactFlash Specification Revision 1.4	Invalidity; Noninfringement	McAlexander; Mercer; Mroczkowski	SEC841_0001070	SEC841_0001185	Jan 10
RX-0763	С	Memory Stick Standard	Invalidity; Noninfringement	McAlexander; Banerjee	SEC841_0063812	SEC841_0064089	Jan 10
RX-0764	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0765	_	Product Brief - Toshiba PC Card ATA to Secure Digital (SD) Memory Card Controller - TC6374AF	Invalidity	McAlexander	HP177243	HP177244	Jan 10
RX-0766 - RX-0771	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	N/A
RX-0772	_	Press release - Toshiba Launches First Portable PC Host- Controller LSI for SD Memory Card and SmartMedia - Oct. 2, 2000	Invalidity	McAlexander	HP177245	HP177246	Jan 10
RX-0773 RX-0775	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N/A
RX-0776	-	DataFab Systems Inc. leading in portable storage systems, is now offering dual-slot CompactFlash and SmartMedia card reader	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000005	ATECH841_ITC_000005	Jan 10
RX-0777	С	letter from Atech to Alliacense/TPL dated 01/28/2008 responding to infringement notice & denying infringement of TPL patents	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000006	ATECH841_ITC_000011	Jan 10
RX-0778	-	Stellmack, D., 'Atech Flash Technology,' Tom's Hardware review	Invalidity	Banerjee; McAlexander, Liu	ATECH841_ITC_000012	ATECH841_ITC_000021	Jan 10
RX-0779	С	correspondence with Suntek regarding product concept drawings	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000022	ATECH841_ITC_000043	Jan 10
RX-0780		Atech webpage advertising Pro II and Pro III readers	Invalidity	Banerjee; McAlexander, Liu	ATECH841_ITC_000044	ATECH841_ITC_000047	Jan 10
RX-0781	-	Invoices from Atech to Voodoo Computer, ABS Computer, Elitegroup, Tiger Direct, Systemax, Central Computer, Promar, and Fry's for Pro-II Multi-Slot Reader with USB	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000048	ATECH841_ITC_000058	Jan 10
RX-0782	-	rendering of Pro III packaging	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000059	ATECH841_ITC_000062	Jan 10
RX-0783	_	Pro III schematic	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000063	ATECH841_ITC_000082	Jan 10
RX-0784	_	Atech invoices for Pro III card reader	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000083	ATECH841_ITC_000087	Jan 10
RX-0785	С	Email regarding Internal Bay Drive	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000088	ATECH841_ITC_000090	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0786	С	Email regarding Lynx-M2	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000091	ATECH841_ITC_000094	Jan 10
RX-0787	С	Email regarding 4-Slot Reader	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000095	ATECH841_ITC_000106	Jan 10
RX-0788	С	correspondence between Carry Computer and SunTek re USIDMC4S Drive samples, attaching document file titled "ISDMC4S Spec.pdf"	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000107	ATECH841_ITC_000115	Jan 10
RX-0789	_	USC connector photo	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000116	ATECH841_ITC_000116	Jan 10
RX-0790	_	Cable connectors drawing	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000117	ATECH841_ITC_000117	Jan 10
RX-0791	_	USB 5-in-1Card Reader/Writer Installation Guide	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000118	ATECH841_ITC_000122	Jan 10
RX-0792	С	Atech 6in1 Flash Card Reader Bill of Materials	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000123	ATECH841_ITC_000123	Jan 10
RX-0793	С	Tritonic 6in1 Memory Card Reader/Writer Specification	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000124	ATECH841_ITC_000127	Jan 10
RX-0794	С	Real Design Preliminary Solution for Memory Card Reader Specification	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000128	ATECH841_ITC_000128	Jan 10
RX-0795	С	DataFab Model No. ML3SD-USBN Specification for Approval	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000129	ATECH841_ITC_000138	Jan 10
RX-0796	С	USB 3 Slot Test Report	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000139	ATECH841_ITC_000144	Jan 10
RX-0797	С	Neodio ND3060 Multi-Format Reader/Writer Controller With USB Interface Specification	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000145	ATECH841_ITC_000154	Jan 10
RX-0798	С	Multi-card reader specification for USB Layout	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000155	ATECH841_ITC_000155	Jan 10
RX-0799	_	Suntek invoices for PRO II card reader	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_000156	ATECH841_ITC_000180	Jan 10
RX-0800	-	WO01/80171	Invalidity	McAlexander	HP068018	HP068055	Jan 10
RX-0801	_	WO01/80171	Invalidity	McAlexander	DELL00092801	DELL00092839	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0802 -	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXX	N/A
RX-0807	_	U.S. Patent No. 6,612,498 (Lipponen)	Invalidity	McAlexander	TPL060585	TPL060604	Jan 10
RX-0808	_	U.S. Patent No. 5,388,248 (Robinson)	Invalidity	McAlexander	HP050510	HP050565	Jan 10
RX-0809	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	N/A
RX-0810		U.S. Patent No. 6,470,284 (Oh)	Invalidity	McAlexander	TPL041947	TPL041962	Jan 10
RX-0811	XXX	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0812	_	U.S. Patent No. 6,859,369 (Mambakkam)	Invalidity	McAlexander	TPL059472	TPL059483	Jan 10
RX-0813	xxx	withdrawn	XXXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0814	-	U.S. Patent No. 6,699,061 (Abe)	Invalidity	McAlexander	HP066596	HP066613	Jan 10
RX-0815	_	U.S. Patent No. 6,385,677 (Yao)	Invalidity	McAlexander	HP066043	HP066053	Jan 10
RX-0816	-	U.S. Patent No. 6,352,445 (Takei)	Invalidity	McAlexander	HP067877	HP067888	Jan 10
RX-0817	-	JP H11-15928 with certified translation	Invalidity	McAlexander	HP060576	HP060577D	Jan 10
RX-0818	-	JP H11-15928 with certified translation	Invalidity	McAlexander	DELL00092763	DELL00092773	Jan 10
RX-0819	-	U.S. Patent No. 6,663,007	Invalidity	McAlexander	TPL043440	TPL043460	Jan 10
RX-0820	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0821	-	JP 2001-184462	Invalidity	McAlexander	HP174801	HP174810	Jan 10
RX-0822	XXX	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-0823	_	U.S. Patent No. 6,247,947	Invalidity	McAlexander	TPL041937	TPL041946	Jan 10
RX-0824	_	JP 2001-67303 Publication	Invalidity	McAlexander	BROTHER01749970	BROTHER01750001	Jan 10
RX-0825	T-	U.S. Patent No. 6,002,605	Invalidity	McAlexander	TPL043689	TPL043716	Jan 10
RX-0826 RX-0828	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-0829	_	U.S. Patent No. 7,222,205	Invalidity	McAlexander	TPL059164	TPL059184	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0830 - RX-0839	xxx	withdrawn	x000000000	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-0840	_	Actiontec.com CameraConnect Pro overview	Invalidity	Banerjee; McAlexander	HP057322	HP057324	Jan 10
RX-0841	_	Actiontec.com CameraConnect Pro Technical Data	Invalidity	Banerjee; McAlexander	HP058501	HP058501	Jan 10
RX-0842	_	Actiontec.com CameraConnect Pro user's Manual	Invalidity	Banerjee; McAlexander	HP058506	HP058538	Jan 10
RX-0843	_	Datafab.com product sheet: USB Port Dual-Stot CompactFlash/SmartMedia Card Reader	Invalidity	Banerjee	HP176481	HP176481	Jan 10
RX-0844	_	Datafab.com info sheet: USB Port Dual-Slot Compact Flash/SmartMedia Card Reader	Invalidity	Banerjee	HP174296	HP174296	Jan 10
RX-0845	XXX	withdrawn	x000000000x	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0846	С	Engineering Report on the Signal Trace Mapping Analysis of the AcomData Multi-Format Memory Card Reader	Invalidity	Banerjee; McAlexander	HP177753	HP177755	Jan 10
RX-0847	xxx	withdrawn	>0000000000	xxxxxxxxxxx	20000000000	xxxxxxxxxx	N/A
RX-0848	_	HP PhotoSmart 1000 User's Guide	Invalidity	Banerjee	HP059851	HP059963	Jan 8
RX-0849	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0850	_	Lexmark 5770 printer controller chip	Invalidity	Banerjee	HP176504	HP176506	Jan 10
RX-0851	_	Microtech Press Release re 3 Slot SCSI Digital Film Reader for Photo Kiosk Environment	Invalidity	Banerjee	HP060941	HP060942	Jan 10
RX-0852	-	d-store USB CameraMate information sheet	Invalidity	Banerjee	HP056387	HP056389	Jan 10
RX-0853	_	Microtech Press Release: Microtech USB CameraMate Supports IBM Microdrive	Invalidity	Banerjee	HP060947	HP060949	Jan 10
RX-0854	-	News Article: ActionTec debuts 3-in-one PC card reader/writer for digital photos	Invalidity	Banerjee	HP057329	HP057329	Jan 10
RX-0855	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0856	С	SmartMedia™ ECC Reference Manual Version 2.1	Invalidity	Banerjee; McAlexander	TPL118990	TPL119015	Jan 10
RX-0857	ххх	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0858	_	Steve's Digicams Camera Connect Pro	Invalidity	Banerjee; McAlexander	HP058502	HP058505	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0859	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0860	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0861	_	Toshiba TC6371AF Datasheet	Invalidity	Banerjee; McAlexander	HP063353	HP063410	Jan 10
RX-0862	_	Toshiba TC6374AF Hardware Datasheet Rev. 1.22 02/2/15	Invalidity	Banerjee; McAlexander	HP063536	HP063660	Jan 10
RX-0863 RX-0879	XXX	withdrawn	XXXXXXXXXXX	x0000000000	XXXXXXXXXX	XXXXXXXXXX	N/A
RX-0880	_	JP 2001-67303	Invalidity	McAlexander	CANITC 2546	CANITC 2575	Jan 10
RX-0881	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0882	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0883	_	U.S. Patent No. 6,402,529	Invalidity	McAlexander	HP066054	HP066071	Jan 10
RX-0884	С	SD Specification, version 0.96	Invalidity; Noninfringement	McAlexander	HP175408	HP175435	Jan 28
RX-0885 - RX-0891	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	300000000X	xxxxxxxxx	N/A
RX-0892	-	U.S. Patent Appl. Publication No. 2004/0068601	Invalidity	McAlexander	SEC841_0073939	SEC841_0073952	Jan 10
RX-0893	_	U.S. Patent No. 6,097,605	Invalidity	Banerjee; McAlexander	HP065627	HP065635	Jan 10
RX-0894 - RX-0896	XXX	withdrawn	xxxxxxxxxx	xxxxxxxxxx	x00000000x	xxxxxxxxxx	N/A
RX-0897	-	U.S. Patent No. 6,754,765 (Chang)	Invalidity	Banerjee	SEC841_0008774	SEC841_0008789	Jan 10
RX-0898	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	x0000000000	xxxxxxxxxx	N/A
RX-0899	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	N/A
RX-0900	-	U.S. Patent No. 5,320,552 (1994)	Invalidity	McAlexander	HP064520	HP064540	Jan 10
RX-0901	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	x000000000x	N/A
RX-0902	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0903	С	PCD-47 Auto-upgrade Firmware Utility Schedule	Invalidity	Banerjee; McAlexander; Balasubramanian; Conte	IDEN-ITC0000118	IDEN-ITC0000118	Jan 10
RX-0904 - RX-0931	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-0932	- 7	U.S. Patent No. 6,808,424	Invalidity	McAlexander	BROTHER00005458	BROTHER00005479	Jan 10
RX-0933 RX-0938	ххх	withdrawn	xxxxxxxxx	xxxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-0939	_	Engineering Report on the Pin Analysis of the Imation FlashGO! Plus32 Memory Card Reader	Invalidity	McAlexander	BROTHER01741182	BROTHER01741205	Jan 10
RX-0940 - RX-0943	xxx	withdrawn	XXXXXXXXXXXX	x000000000x	3000000000	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N/A
RX-0944	_	MMCA Tech Committee The MultiMediaCard System Specs 2.11	Invalidity; Noninfringement	Banerjee; McAlexander	HP176513	HP176635	Jan 10
RX-0945	C	90C36LC1A Specification OnSpec Electronic Inc.	Invalidity	McAlexander	JONES009274	JONES009312	Jan 10
RX-0946	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-0947	_	Palm m500 User Guide	Invalidity	McAlexander	HP061564	HP061849	Jan 10
RX-0948 - RX-0950	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0951	-	PCD-47 User's Manual	Invalidity	McAlexander	HP054597	HP054631	Jan 10
RX-0952 - RX-0954	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXXX	N/A
RX-0955	С	OnSpec Income Statement - Rolling Ten Year	Invalidity; Lack of Domestic Industry	TPL witness; Buscaino; Banerjee; McAlexander; Vander Veen	TPL036785	TPL036785	Jan 10
RX-0956 - RX-0959	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	x000000000	xxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into
RX-0960	_	Engineering Report on the Pin Analysis of the Atech PRO II Internal/External 6 in 1 USB Multi-Slot Card Reader/Writer	Invalidity	McAlexander	BROTHER01749930	BROTHER01749953	Jan 10
RX-0961	_	Engineering Report. on the Card Transfer Analysis of the Dazzle DM-8400 universal 6 in 1 Memory Card Adapter	Invalidity	McAlexander	BROTHER01741206	BROTHER01741236	Jan 10
RX-0962	С	Dazzle Orca Dolphin Product Page	Invalidity	McAlexander; Balasubramanian	IDEN-ITC0000030	IDEN-ITC0000030	Jan 10
RX-0963	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxx	N/A
RX-0964	_	Dazzle Six in One USB Card Reader, October 24, 2001	Invalidity	McAlexander; Balasubramanian	IDEN-ITC0000034	IDEN-ITC0000034	Jan 10
RX-0965	С	SCM PCD Series of Digital Media Readers: Summary of product evolution, SCM Microsystems	Invalidity	McAlexander	IDEN-ITC0000035	IDEN-ITC0000041	Jan 10
RX-0966	хоох	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxx	N/A
RX-0967	_	Press release of April 1, 2003 in English	Invalidity	McAlexander	BROTHER01741086	BROTHER01741087	Jan 10
RX-0968 RX-0971	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	x0000xx0000x	x000000000x	N/A
RX-0972	_	Specifications for Dell Inspiron 7000	Invalidity	McAlexander	DELL00092895	DELL00092897	Jan 10
RX-0973	_	Specs for Dell Inspiron 7000	Invalidity	McAlexander	DELL00092898	DELL00092900	Jan 10
RX-0974	_	"OmniFlash Uno Mas Universal Card Reader"	Invalidity	McAlexander	SEC841_0001788	SEC841_0001790	Jan 10
RX-0975	С	Dell Inspiron 7000 Schematic	Invalidity	McAlexander	DELL00092715	DELL00092752	Jan 10
RX-0976	-	TI PCI1220 PC Card Controller Specification	Invalidity	McAlexander	DELL00092774	DELL00092800	Jan 10
RX-0977	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-0978	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-0979	С	Fujitsu C2210 Manual Connector Purchase Specification, 2012	Invalidity	McAlexander; T. Yamamoto	FJ0058227	FJ0058248	Jan 10
RX-0980	С	Fujitsu C2210 Parts List, 2010	Invalidity	McAlexander; T. Yamamoto	FJ0058367	FJ0058379	Jan 10
RX-0981	С	Fujitsu C2210 Circuit Diagram, 2002	Invalidity	McAlexander; T. Yamamoto	FJ0058223	FJ0058226	Jan 10
RX-0982 - RX-0984	xxx	withdrawn	xxxxxxxxx	xxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-0985	_	EP 1037159 A2 (Lipponen)	Invalidity	McAlexander	HP174519	HP174541	Jan 10
RX-0986 - RX-0988	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	x000000000x	N/A
RX-0989	-	PXA250 datasheet	Invalidity	McAlexander	HP059974	HP059989	Jan 10
RX-0990	XXX	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	>000000000X	20000000000	N/A
RX-0991	XXX	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-0992	_	U.S. Patent No. 6,658,202 (Battaglia)	Invalidity	McAlexander; Banerjee	SEC841_0008473	SEC841_0008486	Jan 10
RX-0993 RX-0998	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxx	x000000000	N/A
RX-0999	_	Direct Witness Statement of Yoshinari Morimoto	Invalidity	Morimoto	N/A	N/A	Jan 10
RX-1000	XXX	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	>>>>>>>>>	xxxxxxxxxx	N/A
RX-1001	-	2012-11-02 Butler Affidavit (Acomdata.com)	Invalidity	Banerjee; McAlexander	HP178862	HP178868	Jan 10
RX-1002	XXX	withdrawn	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	N/A
RX-1003	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-1004	-	Electronic Packaging and Interconnection Handbook, 2nd ed., Harper, 1997, p. 3.25	Invalidity	McAlexander	HP059690	HP059776	Jan 10
RX-1005	xxx	withdrawn	>>>>>>>	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-1006	-	Dell 3000 Service Manual	Invalidity	McAlexander	DELL00092499	DELL00092610	Jan 10
RX-1007	_	Dell 7000 Service Manual	Invalidity	McAlexander	DELL00092611	DELL00092714	Jan 10
RX-1008	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-1009	С	designated testimony of Dwayne Hannah from deposition taken on 05/16/2012 in Inv. No. 337-TA-807	Lack of Domestic Industry	Hannah; Leonard	N/A	N/A	Jan 9
RX-1010	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxx	x000000000X	XXXXXXXXXXXX	N/A
RX-1011	_	Transcend Information, Inc.'s First Notice of Deposition of Technology Properties Limited, LLC (Topic Nos. 1-75) (Hannah Dep. Exh. 1; (Antonopoulos Dep. Exh. 2)	Lack of Domestic Industry	Hannah; Antonopoulos	N/A	N/A	Jan 25

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd into Evidence
RX-1012 - RX-1017	xxx	withdrawn	x000000000x	xxxxxxxxxx	хоохохох	XXXXXXXXXX	N/A
RX-1018	С	Employee Hour Breakdown	Lack of Domestic Industry	Hannah	TPL036784	TPL036784	Jan 25
RX-1019	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-1020	С	Project List	Lack of Domestic Industry	Hannah	TPL036774	TPL036780	Jan 25
RX-1021	XXX	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1022	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-1023	С	807 Complaint Exh. 77-4	Lack of Domestic Industry	Dwayne Hannah	N/A	N/A	Jan 25
RX-1024 - RX-1026	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	x000000000x	xxxxxxxxx	N/A
RX-1027	С	807 Complaint Exh. 77-31	Lack of Domestic Industry	Dwayne Hannah	N/A	N/A	Jan 25
RX-1028	С	Summary of CORE Flash Revenue 2007 - 2012 YTD	Lack of Domestic Industry	Hannah	TPL389797	TPL389797	Jan 25
RX-1029 - RX-1070	XXX	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-1071	С	designated testimony of Daniel McNary "Mac" Leckrone from deposition taken on 05/17/2012 in Inv. No. 337-TA-807	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-1072 - RX-1074	xxx	withdrawn	xxxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	хххохохох	N/A
RX-1075	-	Alliacense Licensing Programs	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-1076	С	Services Agreement Between Technology Properties Limited and Alliacense Limited	Lack of Domestic Industry	M. Leckrone	TPL047697	TPL047703	Jan 25
RX-1077	С	807 Complaint Exh. 77-28 (four double-sided sheets)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-1078	С	807 Complaint Exh. 77-30 (three double-sided sheets)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-1079	С	Alliacense - About Us (color print-out)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-1080	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-1081	жх	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-1082	С	CORE Flash Portfolio License Agreements	Lack of Domestic Industry	Leonard	TPL388440	TPL389026	Jan 9
RX-1083	C	Confidential Exh. 77-2 from Complaint filed in Inv. No. 337-TA-807 (8 double-sided sheets)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-1084	С	Exh. 77-1 from Complaint filed in Inv. No. 337-TA-807 (M. Leckrone 807 Dep. Exh. 12)	Lack of Domestic Industry	M. Leckrone	N/A	N/A	Jan 25
RX-1085	С	TPL License Agreement	Lack of Domestic Industry	Leonard	TPL388989	TPL389006	Jan 9
RX-1086	С	CORE Flash Portfolio License Agreement	Lack of Domestic Industry	M. Leckrone	TPL388440	TPL388463	Jan 25
RX-1087	С	License Agreement between TPL and	Lack of Domestic Industry	Leonard	TPL388693	TPL388707	Jan 9
RX-1088	С	CORE Flash Portfolio License Agreement between Technology Properties Limited and	Lack of Domestic Industry	Leonard	TPL388886	TPL388907	Jan 9
RX-1089	С	TPL License Agreement	Lack of Domestic Industry	Leonard	TPL388908	TPL388930	Jan 9
RX-1090	С	TPL s License Agreement	Lack of Domestic Industry	Leonard	TPL388866	TPL388885	Jan 9
RX-1091 - RX-1122	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1123	С	designated testimony of Nicholas Antonopoulos from deposition taken on 05/22/2012 in Inv. No. 337-TA-807	Invalidity	Antonopoulos	N/A	N/A	Jan 25
RX-1124 - RX-1142	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1143	С	Direct Witness Statement of Dwayne Hannah from Inv. No. 337-TA-807	Invalidity; Noninfringement; Lack of Domestic Industry	Hannah; Leonard	TPL1037678	TPL1037693	Jan 9
RX-1144 RX-1147	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXX	N/A
RX-1148		OmniFlash Uno Mas universal card reader publication	Invalidity	McAlexander	N/A	N/A	Jan 10
RX-1149 RX-1180	XXX	withdrawn ·	x000000000	xxxxxxxxxxx	3000000000	ххххххххххх	N/A
RX-1181	С	Direct Witness Statement of Larry Lawson Jones from Inv. No. 337-TA-807	Invalidity; Noninfringement; Lack of Domestic Industry	Jones	TPL 1037968	TPL 1037984	excluded Jan 4

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-1182 RX-1192	xxx	withdrawn	x00000000x	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N/A
RX-1193	С	Attachment F to McAlexander Initial Report re Invalidity of U.S. Patent Nos. 6,438,638, 6,976,623, 7,295,443, 7,522,424, and 7,719,847 - Documents Considered	Invalidity	McAlexander	N/A	N/A	Jan 10
RX-1194	С	Attachment G to McAlexander Initial Report re Invalidity of U.S. Patent Nos. 6,438,638, 6,976,623, 7,295,443, 7,522,424, and 7,719,847 - Curriculum Vitae, Other Cases	Invalidity	McAlexander	N/A	N/A	Jan 10
RX-1195 RX-1197	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	N/A
RX-1198	_	Japanese Patent Application Kokai Publication No. 2001-75745 (English translation)	Invalidity	Banerjee; McAlexander	SEC841_0093341	SEC841_0093355	Jan 10
RX-1199	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX	N/A
RX-1200	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXXX	XXXXXXXXXX	N/A
RX-1201	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N/A
RX-1202	С	Initial Expert Report of Dale E. Buscaino dated	Noninfringement	Buscaino	N/A	N/A	Jan 9
RX-1203 - RX-1214	xxx	withdrawn	x000000000	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	N/A
RX-1215	С	Buscaino Expert Report Dell Exh. 7 – '623 Dell 19in1 Long Bay Reader	Noninfringement	Buscaino; McAlexander	N/A	N/A	Jan 9
RX-1216	С	Buscaino Expert Report Dell Exh. 8 – '638 Dell 19in1 Long Bay Reader	Noninfringement	Buscaino; McAlexander	N/A	N/A	Jan 9
RX-1217 RX-1244	XXX .	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	хохохохох	N/A
RX-1245	С	Banerjee Rebuttal Report Exh. D, Appendix 1-12	Noninfringement; Lack of Domestic Industry; Invalidity	Banerjee	N/A	N/A	Jan 10
RX-1246 RX-1251	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-1252	С	Exh. 1 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement - Brian A. Berg CV	Noninfringement	Berg	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-1253	С	Exh. 2 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1254 - RX-1257	xxx	withdrawn)000000000X	xxxxxxxxxx	xxxxxxxxx	20000000000	N/A
RX-1258	С	Exh. 7 to the Rebuttal Report of Brian A. Berg on Non- Infringement - Acer product inspection photos	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1259	С	Exh. 8 to the Rebuttal Report of Brian A. Berg on Non- Infringement - continuity test tables for the Acer products	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1260	С	Exh. 9 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1261	С	Exh. 10 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1262	С	Exh. 11 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1263	С	Exh. 12 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1264	С	Exh. 13 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1265	С	Exh. 14 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement - HP Continuity Test Tables	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1266	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1267	С	Exh. 16 to the Rebuttal Expert Report of Brian A. Berg on Non-Infringement - Fujitsu Redesigned Product Testing Photos	Noninfringement	Berg	N/A	N/A	Jan 10
RX-1268 - RX-1275	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1276	С	Mercer Rebuttal Report Exh. B	Noninfringement; Lack of Domestic Industry	Mercer	N/A	N/A	Jan 10
RX-1277 - RX-1325	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1326	С	TPL's Responses and Objs. to Respondents HP, Canon Inc., Micron, Lexar, Brother, Kingston, HiTi, Shuttle, Inc., Seiko Epson, NewEgg, and Rosewill's 1st Set of RFAs	Noninfringement	Banerjee	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-1327	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxx	XXXXXXXXX	XXXXXXXXXX	N/A
RX-1328	xxx	moved to Joint Exhibit List	xxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-1329	xxx	withdrawn	XXXXXXXXXXXX	XXXXXXXXXXX	x00000000x	XXXXXXXXXXX	N/A
RX-1330	ххх	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-1331	ххх	moved to Joint Exhibit List	x0000000000	xxxxxxxxx	xxxxxxxxxxx	XXXXXXXXXXXX	N/A
RX-1332	xxx	moved to Joint Exhibit List	XXXXXXXXXX	xxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-1333 RX-1337	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-1338	С	MMC System Specification Version 3.31 MMCA Technical Committee	Noninfringement	Banerjee	TPL138316	TPL138465	Jan 10
RX-1339	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-1340	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-1341	С	Brother's 1st Supplemental Responses and Objections to TPL's 1st Set of Interrogatories	Noninfringement	Banerjee; Mercer; Leonard	N/A	N/A	Jan 9
RX-1342	С	Brother's Responses and Objections to TPL's 2nd Set of Interrogatories	Noninfringement	Bannerjee; Mercer	N/A	N/A	Jan 10
RX-1343 - RX-1460	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	x0000000000	N/A
RX-1461	С	Technical Schematics for Fujitsu Products	Noninfringement	Berg; Mroczkowski; T. Yamamoto	FJ0062406	FJ0062408	Jan 8
RX-1462 - RX-1793	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-1794	С	SD Specifications Part 1 Physical Layer Specification Version 2.00	Noninfringement	Berg; Mroczkowski; T. Yamamoto	TPL0379909	TPL0380092	Jan 10
RX-1795 - RX-1814	xxx	withdrawn	xxxxxxxxx	3000000000	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-1815	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1816 RX-1835	xxx	withdrawn	,0000000000	XXXXXXXXXX	xxxxxxxxxx	ххххххххххх	N/A
RX-1836	С	Direct Witness Statement of Takahiko Yamamoto	Invalidity	T. Yamamoto	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-1837	xxx	moved to Joint Exhibit List	XXXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-1838 - RX-1841	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-1842	С	Northstar Systems schematic for MSU	Noninfringement	Berg	HP175880	HP175882	Jan 10
RX-1843 - RX-1846	ххх	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-1847	С	Northstar systems schematic for SD+MS+XD	Noninfringement	Berg	HP175883	HP175884	Jan 10
RX-1848 - RX-1850	ххх	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-1851	С	ODM Specification Sheet for HP 630 Notebook	Noninfringement	Berg	HP089678	HP089678	Jan 10
RX-1852 - RX-2366	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXX	xxxxxxxxxx	N/A
RX-2367	С	Northstar spec sheet	Noninfringement	Berg	HP089683	HP089684	Jan 10
RX-2368	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-2369	_	SD Memory Card Specifications, Part 1, v. 1.0, March 2000	Noninfringement	Mercer; McAlexander	CANITC2720	CANITC2836	Jan 10
RX-2370	_	SmartMedia™ Electrical Specifications Web-Online V. 1.00, May 19, 1999	Invalidity	Banerjee; McAlexander	CANITC2837	CANITC2862	Jan 10
RX-2371	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxxx	xxxxxxxxxx	N/A
RX-2372	С	Brother BH15-01 PCB Schematic	Noninfringement	Mercer; Brother Witness	BROTHER01019872	BROTHER01019880	Jan 28
RX-2373	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-2374	С	Brother BH15-02 PCB Schematic	Noninfringement	Mercer; Brother Witness	BROTHER01019881	BROTHER01019889	Jan 28
RX-2375	XXX	withdrawn	xxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2376	С	DDK MCH-LNS5D-A-PC Card Connector Specification	Noninfringement	Mercer; Mroczkowski; Brother Witness	BROTHER00010038	BROTHER00010088	Jan 10
RX-2377 - RX-2381	xxx	withdrawn	xxxxxxxxx	xxxxxxxx	xxxxxxxxx	xxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2382	_	Photos of Yamaichi H001-A022 (4 in 1) Card Connector	Noninfringement	Mercer; Mroczkowski	BROTHER01749851	BROTHER01749861	Jan 8
RX-2383	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXX	N/A
RX-2384	С	Software/Firmware Specification, Version 2 - Brother MFC-J220 / Brother MFC-J5910DW / Brother MFC-J6510DW / Brother MFC-J6910DW / Brother MFC-J6910DW	Noninfringement	Mercer; Brother Witness	BROTHER01740339	BROTHER01740365	Jan 28
RX-2385	С	Software/Firmware Specification, Version 2 - Brother MFC-J625DW / Brother MFC-J825DW / Brother MFC-J835DW	Noninfringement	Mercer; Brother Witness	BROTHER01740366	BROTHER01740393	Jan 28
RX-2386	_	User's Guide - Brother MFC-5895CW	Noninfringement	Mercer; Brother Witness	BROTHER00008902	BROTHER00009148	Jan 10
RX-2387	_	The MultiMediaCard Specification V2.11	Invalidity	Banerjee; McAlexander	HP176513	HP176635	Jan 10
RX-2388	_	Basic User's Guide - Brother MFC-J6510DW / Brother MFC-J6710DW	Noninfringement	Mercer; Brother Witness	BROTHER00009238	BROTHER00009400	Jan 10
RX-2389 RX-2393	xxx	withdrawn	>>>>>>>	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2394	-	Receipts and Photos of Redesigned HP Products	Noninfringement	Mercer; Berg	HP177600	HP177621	Jan 10
RX-2395	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2396	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2397	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-2398	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2399	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	>>>>>>>	xxxxxxxxxx	N/A
RX-2400	-	CF+ and CompactFlash Specification Revision 1.4	Invalidity; Noninfringement	Banerjee; McAlexander; Mercer; Mroczkowski	SEC841_0001070	SEC841_0001185	Jan 8
RX-2401 - RX-2404	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	XXXXXXXXXX	N/A
RX-2405	-	16-001 (1) Pre-Inspection Photos	Noninfringement	Mroczkowski	HP178633	HP178639	Jan 8
RX-2406	-	16-001 (2) Post-Inspection Photos	Noninfringement	Mroczkowski	HP178640	HP178646	Jan 8

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2407	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2408	_	10-010 (1) Pre-Inspection Photos	Noninfringement	Mroczkowski	HP178485	HP178494	Jan 8
RX-2409	-	10-010 (2) Post-Inspection Photos	Noninfringement	Mroczkowski	HP178495	HP178501	Jan 8
RX-2410	_	HP630 - Post-Inspection Photos	Noninfringement	Mroczkowski	HP178830	HP178853	Jan 8
RX-2411	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2412	_	11-001 (2) Post-Inspection Photos	Noninfringement	Mroczkowski	HP178509	HP178582	Jan 8
RX-2413	_	13-002 (1) Pre-Inspection Photos	Noninfringement	Mroczkowski	HP178583	HP178589	Jan 8
RX-2414	_	13-002 (2) Post-Inspection Photos	Noninfringement	Mroczkowski	HP178590	HP178622	Jan 8
RX-2415 - RX-2419	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-2420	С	Photograph of a Fujitsu Lifebook S752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062921	FJ0062921	Jan 8
RX-2421	С	Photograph of a Fujitsu Lifebook S752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062922	FJ0062922	Jan 8
RX-2422	С	Photograph of a Fujitsu Lifebook S752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062923	FJ0062923	Jan 8
RX-2423	С	Photograph of a Fujitsu Lifebook S752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062924	FJ0062924	Jan 8
RX-2424	С	Photograph of a Fujitsu Lifebook S752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062925	FJ0062925	Jan 8
RX-2425	С	Photograph of a Fujitsu Lifebook S752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062926	FJ0062926	Jan 8
RX-2426	С	Photograph of a Fujitsu Lifebook E752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062927	FJ0062927	Jan 8
RX-2427	С	Photograph of a Fujitsu Lifebook E752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062928	FJ0062928	Jan 8
RX-2428	С	Photograph of a Fujitsu Lifebook E752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062929	FJ0062929	Jan 8
RX-2429	С	Photograph of a Fujitsu Lifebook E752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062930	FJ0062930	Jan 8
RX-2430	С	Photograph of a Fujitsu Lifebook E752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062931	FJ0062931	Jan 8
RX-2431	С	Photograph of a Fujitsu Lifebook E752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062932	FJ0062932	Jan 8
RX-2432	С	Photograph of a Fujitsu Lifebook E752	Noninfringement	Mroczkowski; T. Yamamoto	FJ0062933	FJ0062933	Jan 8

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2433 RX-2441	xxx	withdrawn	ххххххххххх	XXXXXXXXXXX)000000000X	x00000000x	N/A
RX-2442	_	Photographs of HiTi-P9	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006348	HITI-006352	Jan 8
RX-2443 RX-2559	XXX	withdrawn)OOOXXXXXXX	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2560	_	Product page for Rosewill RCR-YJ-EX601	Noninfringement	Mercer	TPL1037652	TPL1037653	Jan 10
RX-2561 RX-2575	XXX	withdrawn	xxxxxxxxxx	x000000000	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2576	_	U.S. Patent No. 6,859,369 B2 (Mambakkam)	Invalidity	McAlexander	SEC841_0009118	SEC841_0009130	Jan 10
RX-2577 - RX-2595	xxx	withdrawn	x000000000X	xxxxxxxxxx	x000000000	xxxxxxxxxx	N/A
RX-2596	С	SmartMedia Electrical Specifications Version 1.30	Invalidity; Noninfringement	Banerjee; McAlexander	SEC841_0077128	SEC841_0077163	Jan 10
RX-2597 - RX-2673	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	>>>>>>>	xxxxxxxxx	N/A
RX-2674	С	Expert Report of Dr. Gregory K. Leonard Regarding Domestic Industry, Remedy and Bonding	Lack of Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RX-2675 - RX-2684	ххх	withdrawn	xxxxxxxxxx	XXXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-2685	С	TPL License Agreement Portfolio	Lack of Domestic Industry	Leonard	TPL388440	TPL389026	Jan 9
RX-2686	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxxx	N/A
- RX-2687	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-2688	С	Letter from Alliacense to Paul Roeder at HP and attached "TPL Patent Portfolios"	Lack of Domestic Industry; Remedy	Leonard	TPL015886	TPL015945	Jan 9
RX-2689	С	Alliacense License Discussions and Product Analysis	Lack of Domestic Industry; Remedy	Leonard	TPL002200	TPL002260	Jan 9
RX-2690	С	Flash Portfolio"	Lack of Domestic Industry; Remedy	Leonard	TPL033965	TPL033968	Jan 9
RX-2691	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2692	С	Re: CORE	Lack of Domestic Industry; Remedy	Leonard	TPL017191	TPL017197	Jan 9
RX-2693	С	Re: CORE Flash Licensing Program	Lack of Domestic Industry; Remedy	Leonard	TPL018347	PL018349	Jan 9
RX-2694	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	30000000000	N/A
RX-2695	xxx	withdrawn	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-2696	С	CORE Flash Portfolio Licensing Program	Lack of Domestic Industry; Remedy	Leonard	TPL008373	TPL008375	Jan 9
RX-2697	С	re CORE Flash Portfolio Licensing Program	Lack of Domestic Industry; Remedy	Leonard	TPL053638	TPL053639	Jan 9
RX-2698	С	Re: CORE Flash Portfolio Licensing Program	Lack of Domestic Industry; Remedy	Leonard	TPL054017	TPL054017	Jan 9
RX-2699	С	Hewlett-Packard ID11 Stargell 6-in-1 Media Card Reader with Front I/O Cable, Specification	Remedy	Leonard; HP witness	HP089685	HP089710	Jan 4
RX-2700	С	TPL's 1st Supplemental Response to HP's Interrogatory No. 24	Lack of Domestic Industry; Remedy	Leonard	N/A	N/A	Jan 28
RX-2701 RX-2708	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxx	N/A
RX-2709	С	HP Shopper Insights 2012 Select and Buy	Domestic Industry; Remedy; Bonding	Leonard	HP178208	HP178231	Jan 8
RX-2710	С	Native Excel File from iSuppli	Domestic Industry; Remedy; Bonding	Leonard	HP178207	HP178207	Jan 9
RX-2711 RX-2713	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	xxx0000000x	хохохохох	N/A
RX-2714	С	xD-Picture Card License Agreement	Bond	Leonard; HP witness	HP178473	HP178484	Jan 4
RX-2715	-	HP® Official Store — Buy and Customize your p7-1400t series PC	Remedy	Leonard; HP witness	HP178858	HP178861	Jan 9
RX-2716	XXX	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2717	С	Chicago Platform Agreement	Remedy	Leonard; HP witness	HP178873	HP178874	Jan 4
RX-2718 - RX-2720	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-2721	С	HP PhotoSmart 5510 BOM	Remedy	Leonard; HP witness	HP178232	HP178261	Jan 8

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2722	С	HP Inventory of Computer Products	Remedy	Leonard; HP witness	HP178262	HP178277	Jan 4
RX-2723	С	HP PSG Sales Data	Remedy	Leonard; HP witness	HP178278	HP178280	Jan 4
RX-2724	С	HP US Retail Supply Chain (PSG)	Remedy	Leonard; HP witness	HP178281	HP178289	Jan 4
RX-2725	С	HP Printer Sales Data, IJ HW Summary: US FY10- Q3FY12	Remedy	Leonard; HP witness	HP178290	HP178291	Jan 8
RX-2726	С	HP Printing & Supplies, AMS IWS HW Demand Planning	Remedy	HP witness	HP178292	HP178295	Jan 8
RX-2727	С	HP Inventory of Printer Products	Remedy	Leonard; HP witness	HP178296	HP178296	Jan 8
RX-2728	С	SD Host/Ancillary Product License Agreement	Bond	Leonard; HP witness	HP178392	HP178427	Jan 4
RX-2729	С	Memory Stick Pro Controller IC Agreement	Bond	Leonard; HP witness	HP178428	HP178442	Jan 4
RX-2730	С	Memory Stick Pro Hardware Agreement	Bond	Leonard; HP witness	HP178443	HP178460	Jan 4
RX-2731	С	Memory Stick Pro Host Controller IP Agreement	Bond	Leonard; HP witness	HP178461	HP178472	Jan 4
RX-2732 - RX-2737	XXX	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	хоооооооо	N/A
RX-2738	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	300000000XX	N/A
RX-2739 - RX-2746	xxx	withdrawn	x00000xxxxx	xxxxxxxxxx	xxxxxxxxx	x00000000X	N/A
RX-2747	xxx	moved to Joint Exhibit List	XXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	N/A
RX-2748	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXX	N/A
RX-2749	xxx	moved to Joint Exhibit List	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-2750	ххх	moved to Joint Exhibit List	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	N/A
RX-2751	XXX	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-2752	XXX	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2753	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2754	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	x000000000	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2755	xxx	moved to Joint Exhibit List	XXXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	N/A
RX-2756	xxx	moved to Joint Exhibit List	x000000000x	xxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2757	XXX	moved to Joint Exhibit List	xxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-2758	xxx	moved to Joint Exhibit List	X00000000X	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2759	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-2760	XXX	moved to Joint Exhibit List	xxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-2761	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	N/A
RX-2762	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2763	xxx	moved to Joint Exhibit List	XXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2764	xxx	moved to Joint Exhibit List	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	. xxxxxxxxxx	N/A
RX-2765	хох	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-2766	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2767	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-2768	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2769	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-2770	xxx	moved to Joint Exhibit List	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-2771	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2772	xxx	moved to Joint Exhibit List	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2773	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2774	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-2775	xxx	moved to Joint Exhibit List	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2776	xxx	moved to Joint Exhibit List	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	N/A
RX-2777 - RX-2817	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2818	С	designated testimony of Arockiyaswamy Venkidu from deposition taken on 10/19/2012	Invalidity	Venkidu	N/A	N/A	Jan 25
RX-2819 - RX-2824	ххх	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	xxxxxxxxx	N/A
RX-2825	С		Invalidity	Venkidu	Jones 000084	Jones 000093	Jan 25
RX-2826 - RX-2845	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2846	С	Leonard Curriculum Vitae	Lack of Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RX-2847 - RX-2858	xxx	withdrawn	x000xx0000x	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-2859	-	Service Manual: 5000 and 5700 Color Jetprinter; 5770 Photo Jetprinter	Invalidity	Banerjee	HP060817	HP060906	Jan 10
RX-2860	—	Lexmark 5770 Photo Jetprinter: Hardware Reviews	Invalidity	Banerjee	HP173767	HP173769	Jan 10
RX-2861	_	Lexmark Photo Jetprinter 5770 User Guide	Invalidity	Banerjee	HP174829	HP174924	Jan 10
RX-2862	xxx	withdrawn	XXXXXXXXXXXX	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A
RX-2863	хох	withdrawn	XXXXXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxx	xxxxxxxxx	N/A
RX-2864	С	Sales report	Invalidity	McAlexander; Banerjee	TAEC000001	TAEC000001	Jan 10
RX-2865	С	Secure Digital Card Host Controller Presentation	Invalidity	McAlexander; Banerjee	TAEC000002	TAEC000144	Jan 10
RX-2866 - RX-2883	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	хохохохох	N/A
RX-2884	С	Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RX-2885	С	Direct Witness Statement of Brian A. Berg dated 12/14/2012	Noninfringement	Berg	N/A	N/A	Jan 10
RX-2886	С	Corrected Leonard Rebuttal Witness Statement	Lack of Domestic Industry Economic; Remedy; Bonding	Leonard	N/A	N/A	Jan 9
RX-2887	С	McAlexander Rebuttal Witness Statement	Lack of Domestic Industry; Remedy; Bonding	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2888	С	Mercer Rebuttal Witness Statement	Noninfringement; Lack of Domestic Industry Technical Prong	Mercer	N/A	N/A	Jan 10
RX-2889	С	Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RX-2890	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2891	С	Wolfe Rebuttal Witness Statement	Noninfringement; Lack of Domestic Industry Technical Prong; Remedy; Bonding	Wolfe	N/A	N/A	Jan 9
RX-2892	xxx	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-2893	С	T. Yamamoto Rebuttal Witness Statement	Noninfringement; Remedy	T. Yamamoto	N/A	N/A	Jan 10
RX-2894	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxx	N/A
RX-2895	С	Gerry Juan Direct Witness Statement	Noninfringement	Gerry Juan	N/A	N/A	Jan 9
RX-2896	С	designated testimony of Nicholas Antonopoulos from deposition taken on 10/30/2012 in Inv. No. 337-TA-841	Noninfringement; Lack of Domestic Industry	Antonopoulos	N/A	N/A	Jan 25
RX-2897 - RX-2899	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-2900	С	designated testimony of Daniel Leckrone from deposition taken on 10/25/2012 in Inv. No. 337-TA-841	Lack of Domestic Industry	D. Leckrone	N/A	N/A	Jan 25
RX-2901 - RX-2909	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	N/A
RX-2910	С	xD-Picture Card Physical Format and Processing	Lack of Domestic Industry	Banerjee	TPL0390835	TPL0390843	Jan 10
RX-2911 RX-2920	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2921	-	Lenovo Annual Report Fiscal Year 2012 ended March 31, 2012	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD000107	LEONARD000286	Jan 9
RX-2922	_	http://www.sandisk.com/about-sandisk	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD000287	LEONARD000287	Jan 9
RX-2923	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-2924	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2925	_	http://www.aipla.org/advocacy/executive/Documents/AIPL A%20Comments%20to%20IPEC%20on%20Joint%20Str ategic%20Plan%20on%20IP%20Enforcement%20- %208.10.12.pdf	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD000361	LEONARD000365	Jan 9
RX-2926 - RX-2929	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	x000000000X	N/A
RX-2930	_	HP 2011 Annual Report	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD000508	LEONARD000689	Jan 4
RX-2931	_	J.P. Morgan, Global Memory Market Report, April 6, 2012	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD000690	LEONARD000726	Jan 9
RX-2932 - RX-2934	xxx	withdrawn	xxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	>>>>>>>>	N/A
RX-2935	_	http://www.alliacense.com/licensing-programs webpage listing licensing of 13 patent portfolios apart from CORE Flash: MMP, Array, Fastlogic, CryptaByte, STRATA, TruVNS, 3D-ART, SWAT, Audition, Chip Scale, Occam, Nexus and eCommer\$se patent portfolios.	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD000861	LEONARD000863	Jan 9
RX-2936	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2937	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-2938	-	SanDisk 2011 Annual Report	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD001225	LEONARD001416	Jan 9
RX-2939		SanDisk Financial Analyst Day, 02/24/2011	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD001417	LEONARD001656	Jan 9
RX-2940	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2941	XXX	withdrawn	XXXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2942	_	The Evolving IP Marketplace	Lack of Domestic Industry; Remedy; Bonding	Leonard	LEONARD001667	LEONARD001975	Jan 9
RX-2943 - RX-2975	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-2976	С	Exh. C to Wolfe Rebuttal Expert Report re Acer Products	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	N/A	N/A	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-2977 - RX-2982	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXX	N/A
RX-2983		U.S. Patent Appl. No. 2002/0178307 (Pua)	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	TPL043572	TPL043579	Jan 9
RX-2984	_	Acer Diskmon trace sd to cf.LOG	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	ACER-841-ITC- 0082008	ACER-841-ITC- 0082210	Jan 9
RX-2985		Acer Diskmon trace sd to microSD partial.LOG	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	ACER-841-ITC- 0082211	ACER-841-ITC- 0082242	Jan 9
RX-2986	_	Acer Diskmon trace sd to ms.LOG	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	ACER-841-ITC- 0082243	ACER-841-ITC- 0082252	Jan 9
RX-2987 - RX-2989	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A
RX-2990	_	Datasheet for Genesys Logic GL826 controller	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	KT000666 .	KT000698	Jan 9
RX-2991	-	GL826 Block Diagram	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	KT000678	KT000678	Jan 9
RX-2992	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-2993	С	Complaint Exh. 105-46C	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	N/A	N/A	Jan 9
RX-2994	С	Complaint Exh. 105-54C	Noninfringement; Lack of Domestic Industry Technical Prong	Wolfe	N/A	N/A	Jan 9
RX-2995 - RX-2997	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-2998	T -	Photographs of card connector in Acer X1935	Noninfringement	Mroczkowski	ACER-841-ITC- 0081998	ACER-841-ITC-82002	Jan 8
RX-2999	1-	Photographs of card connector in Acer AS7750	Noninfringement	Mroczkowski	ACER-841-ITC-82003	ACER-841-ITC-82007	Jan 8
RX-3000 - RX-3023	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-3024	_	Photos of Yamaichi H001-A022 (4 in 1) Card Connector	Noninfringement	Mercer; Mroczkowski	BROTHER01749851	BROTHER01749861	Jan 8
RX-3025 - RX-3086	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3087	_	Photo of PIXMA MG8220 Connector	Noninfringement	Mroczkowski	CANITC 2576	CANITC 2576	Jan 8
RX-3088	_	Photo of PIXMA MG8220 Connector	Noninfringement	Mroczkowski	CANITC 2577	CANITC 2577	Jan 8
RX-3089		Photo of PIXMA MG8220 Connector	Noninfringement	Mroczkowski	CANITC 2578	CANITC 2578	Jan 8
RX-3090	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-3091	_	Photo of PIXMA MG8220 Connector	Noninfringement	Mroczkowski	CANITC 2580	CANITC 2580	Jan 10
RX-3092	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-3093	_	Photo of PIXMA MG8220 Connector	Noninfringement	Mroczkowski	CANITC 2582	CANITC 2582	Jan 10
RX-3094	_	CF+ and CompactFlash Specification Rev. 2.0 May 2003	Noninfringement	Mercer	CANITC 2583	CANITC 2719	Jan 10
RX-3095 - RX-3134	xxx	withdrawn	xxxxxxxx	xxxxxxxxxx	x0000xxxxxxx	xxxxxxxxxx	N/A
RX-3135	С	Wolfe Rebuttal Expert Report re Dell Products Exh. B	Noninfringement	Wolfe	N/A	N/A	Jan 9
RX-3136 RX-3140	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-3141	С	Experimental Test Results of Dr. Wolfe	Noninfringement	Andrew Wolfe	N/A	N/A	Jan 9
RX-3142	С	Experimental Test Results of Dr. Wolfe	Noninfringement	Andrew Wolfe	N/A	N/A	Jan 9
RX-3143	C	Experimental Test Results of Dr. Wolfe	Noninfringement	Andrew Wolfe	N/A	N/A	Jan 9
RX-3144	С	Experimental Test Results of Dr. Wolfe	Noninfringement	Andrew Wolfe	N/A	N/A	Jan 9
RX-3145	_	Wolfe Curriculum Vitae	Noninfringement	Andrew Wolfe	N/A	N/A	Jan 9
RX-3146	С	Experimental Test Results of IOI	Noninfringement	Andrew Wolfe	N/A	N/A	Jan 9
RX-3147 - RX-3155	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-3156	С	Rebuttal Expert Report of Brian A. Berg on Non- Infringement Exh. 15	Noninfringement	Berg	N/A	N/A	Jan 10
RX-3157	xxx	moved to Demonstrative Exhibit List	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-3158	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3159	С	Dell Product Inspection Photos	Noninfringement	Berg	N/A	N/A	Jan 10
RX-3160	С	Dell Continuity Test Tables	Noninfringement	Berg	N/A	N/A	Jan 10
RX-3161	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX	N/A
RX-3162	С	AU6475 USB2.0 Multi-LUN Flash Card Reader Controller Technical Reference Manual Rev. 1.05 28 APR. 2009	Noninfringement	Berg; Banerjee; Wolfe	DELL00089179	DELL00089195	Jan 9
RX-3163	С	I/O Interconnect R-680-070-215A Specification	Noninfringement	Berg; Banerjee; Wolfe	DELL00039253	DELL00039312	Jan 9
RX-3164	С	I/O Interconnect R-680-070-215A Schematic	Noninfringement	Berg; Wolfe	DELL00091867	DELL00091869	Jan 9
RX-3165	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx	N/A
RX-3166	хоох	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	N/A
RX-3167	С	Realtek RTS5138 One-LUN USB 2.0 Card Reader Controller Datasheet	Noninfringement	Berg; Banerjee	DELL00037801	DELL00037813	Jan 10
RX-3168	С	Realtek RTS5138 Schematic	Noninfringement	Berg; Banerjee	DELL00037814	DELL00037815	Jan 10
RX-3169	xxx	withdrawn	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-3170	С	Vostro 3555 Schematic	Noninfringement	Berg; Banerjee	DELL00000775	DELL00000877	Jan 10
RX-3171 - RX-3181	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-3182	С	Photos of card reader having I/O Interconnect part no. R-680-070-215A	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RX-3183	С	Photos of connector having Plastron Technology Co., Ltd. part no. CM7S-132-H-D	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RX-3184 - RX-3187	ххх	withdrawn	xxxxxxxxxx	xxxxxxxxxx	x0000000000	XXXXXXXXX	N/A
RX-3188	С	IOI 19in1 long bay reader spec	Noninfringement	Banerjee	DELL00000882	DELL00000904	Jan 10
RX-3189	С	Dell Vostro 3555 Owner's Manual	Noninfringement	Banerjee	DELL00000001	DELL00000116	Jan 10
RX-3190	С	Dell Vostro 3555 Training tool	Noninfringement	Banerjee	DELL00000905	DELL00001094	Jan 10
RX-3191	ххх	withdrawn	XXXXXXXXXXX	xxxxxxxxxxx	XXXXXXXXXXX	. xxxxxxxxxx	N/A
RX-3192	С	AU6475 USB2.0 Multi-LUN Flash Card Reader Controller Technical Reference Manual	Noninfringement	Banerjee; Berg; Wolfe	TPL1037632	TPL1037651	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3193 RX-3201	xxx	withdrawn _	XXXXXXXXXXX	xxxxxxxxx	хоооооооох	X000000000X	N/A
RX-3202	_	October 31, 2012 DELL website printouts - OPTIPLEX 9010 with card reader	Remedy	Leonard	DELL00092879	DELL0092880	Jan 9
RX-3203		October 31, 2012 DELL website printouts - OPTIPLEX 9010 without card reader	Remedy	Leonard	DELL00092881	DELL00092882	Jan 9
RX-3204 - RX-3207	ххх	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-3208	_	October 31, 2012 DELL website printouts - PRECISION T7600 with card reader	Remedy	Leonard	DELL00092891	DELL0092892	Jan 9
RX-3209	_	October 31, 2012 DELL website printouts - PRECISION T7600 without card reader	Remedy	Leonard	DELL00092893	DELL00092894	Jan 9
RX-3210 RX-3223	xxx	withdrawn	xxxxxxxxxx	x00000000x	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-3224	С	TPL Complaint Exhibit 7C	Lack of Domestic Industry	McAlexander	N/A	N/A	Jan 10
RX-3225	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-3226	_	U.S. Patent No. 7,412,552	Lack of Domestic Industry	McAlexander	TPL106080	TPL106101	Jan 10
RX-3227	-	U.S. Patent No. 7,493,437	Lack of Domestic Industry	McAlexander	TPL107320	TPL107343	Jan 10
RX-3228		U.S. Patent No. 6,832,281	Lack of Domestic Industry	McAlexander	TPL105110	TPL105131	Jan 10
RX-3229	-	U.S. Patent No. 8,011,964 (application no. 12/759,550)	Lack of Domestic Industry	McAlexander	TPL112670	TPL112684	Jan 10
RX-3230	_	U.S. Patent No. 5,841,424	Lack of Domestic Industry	McAlexander	TPL064767	TPL064777	Jan 10
RX-3231		U.S. Patent No. 7,093,161	Lack of Domestic Industry	McAlexander	TPL059997	TPL060016	Jan 10
RX-3232	-	U.S. Patent No. 7,526,675	Lack of Domestic Industry	McAlexander	TPL114449	TPL114469	Jan 10
RX-3233	_	U.S. Patent No. 6,859,361	Lack of Domestic Industry	McAlexander	TPL115088	TPL115095	Jan 10
RX-3234	-	U.S. Patent No. 7,508,659	Lack of Domestic Industry	McAlexander	TPL115341	TPL115351	Jan 10
RX-3235	_	U.S. Patent No. 6,839,864	Lack of Domestic Industry	McAlexander	TPL113492	TPL113524	Jan 10
RX-3236	T-	U.S. Patent No. 7,278,051	Lack of Domestic Industry	McAlexander	TPL114108	TPL114143	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3237	_	U.S. Patent No. 7,620,844	Lack of Domestic Industry	McAlexander	TPL114929	TPL114965	Jan 10
RX-3238	_	U.S. Patent No. 7,252,240	Lack of Domestic Industry	McAlexander	TPL105410	TPL105418	Jan 10
RX-3239	_	U.S. Patent No. 7,597,268	Lack of Domestic Industry	McAlexander	TPL107995	TPL108005	Jan 10
RX-3240	-	U.S. Patent No. 6,903,727	Lack of Domestic Industry	McAlexander	TPL113123	TPL113131	Jan 10
RX-3241	_	U.S. Patent No. 7,352,362	Lack of Domestic Industry	McAlexander	TPL113289	TPL113298	Jan 10
RX-3242	_	U.S. Patent No. 6,932,275	Lack of Domestic Industry	McAlexander	TPL110070	TPL110078	Jan 10
RX-3243	xxx	withdrawn	XXXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	N/A
RX-3244	С	designated testimony of Daniel Leckrone from deposition taken on 05/18/2012 in Inv. No. 337-TA-807	Lack of Domestic Industry	D. Leckrone	N/A	N/A	Jan 25
RX-3245 - RX-3247	xxx	withdrawn	XXXXXXXXXXXXX	xxxxxxxx	XXXXXXXXXX	xxxxxxxxx	N/A
RX-3248	_	Micron Technology, Inc. 10-K, August 2012	Lack of Domestic Industry	Leonard	LEONARD000864	LEONARD001161	Jan 9
RX-3249	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-3250	С	Declaration of Dwayne Hannah dated 03/09/2012 08/23/11, Inv. 337-TA-807	Lack of Domestic Industry; Remedy Bond	Vander Veen; Hannah	N/A	N/A	Jan 9
RX-3251 RX-3257	xxx	withdrawn	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A
RX-3258	С	Witness Statement of Robin Castell	Lack of Domestic Industry; Remedy; Bonding	Castell; Leonard	N/A	N/A	Jan 4
RX-3259	С	Witness Statement of David Tribolet	Lack of Domestic Industry; Remedy; Bonding	David Tribolet; Leonard	N/A	N/A	Jan 8
RX-3260	xxx	withdrawn	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	N/A
RX-3261	_	Hewlett Packard 2011 Annual Report	Remedy	Leonard; HP witness	HP178648	HP178829	Jan 4
RX-3262	_	HP® Official Store — Buy and Customize your p6-2320t series PC	Remedy	Leonard; HP witness	HP178854	HP178857	Jan 4
RX-3263	XXX	withdrawn	xxxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into
RX-3264	С	Respondent Hewlett-Packard Company's Supplemental Objections and Responses to Complainant Technology Properties Limited LLC's Interrogatory Nos. 33, 60, 61, and 64 (Nov. 14, 2012)	Noninfringement; Remedy; Bonding	Banerjee; Berg; Mercer; Mroczkowski; Leonard; HP witness	N/A	N/A	Jan 4
RX-3265	XXX	withdrawn	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-3266	С	HP-TPL Briefing, November 15, 2012	Lack of Domestic Industry; Remedy; Bonding	TPL witness	N/A	N/A	Jan 9
RX-3267	XXX	withdrawn	xxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXXX	N/A
RX-3268	-	Mark A. Lemley and Carl Shapiro, "Patent Holdup and Royalty Stacking," Texas Law Review, Vol. 85, 2007	Remedy; Bonding	Leonard	N/A	N/A	Jan 4
RX-3269	-	Photographs of HiTi-P1	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006333	HITI-006335	Jan 9
RX-3270	-	Photographs of HiTi-P2	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006341	HITI-006343	Jan 9
RX-3271	-	Photographs of HiTi-P3	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006339	HITI-006340	Jan 9
RX-3272	_	Photographs of HiTi-P4	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006336	HITI-006338	Jan 9
RX-3273	-	Photographs of HiTi-P5	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006329	HITI-006332	Jan 9
RX-3274	_	Photographs of HiTi-P6	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006344	HITI-006345	Jan 9
RX-3275	-	Photographs of HiTi-P7	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006346	HITI-006347	Jan 9
RX-3276	-	Photographs of HiTi-P8	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006353	HITI-006357	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3277	_	Photographs of HiTi-P9	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006348	HITI-006352	Jan 9
RX-3278	_	Photographs of HiTi-P10	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI-006358	HITI-006358	Jan 9
RX-3279 - RX-3281	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	хоооооооо	xxxxxxxxxxx	N/A
RX-3282	С	BS-iD400 card reader connector schematic diagram	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI001023	HITI001023	Jan 9
RX-3283	c	P510S/Si card reader connector schematic diagram	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HIT1003590	HIT1003590	Jan 9
RX-3284	С	P510S/Si card reader controller chip schematic diagram	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HiTI003591	HITI003591	Jan 9
RX-3285	С	P510K/T570 card reader controller chip and connector schematic diagrams	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI006279	HITI006321	Jan 9
RX-3286	С	S420 card reader controller chip schematic diagram	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HIT1006325	HITI006325	Jan 9
RX-3287	С	S420 card reader connector schematic diagram	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	НІТІ006326	HIT1006326	Jan 9
RX-3288	С	BS-id400 schematics	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HIT1006327	HITI006328	Jan 9
RX-3289 RX-3292	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	x000000000X	N/A
RX-3293	С	HiTi BS-ID400 Release Note - Schematics for main board, power board, controller board Rev. A	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HIT1001018	HITI001031	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3294	С	HiTi P110S Schematics	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI001611	HITI001629	Jan 9
RX-3295	С	P510S Release Notice re Schematics Rev. A	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI003573	HITI003595	Jan 9
RX-3296 - RX-3298	xxx	withdrawn	x000000000	xxxxxxxxxx	300000000X	XXXXXXXXXXXX	N/A
RX-3299	С	P110S card reader PCB drawings	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HIT1001682	HIT1001692	Jan 9
RX-3300 - RX-3323	xxx	withdrawn	XXXXXXXXXX	XXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-3324	C	S420 Release Notice re Artwork of Main PCB, Controller PCB, IF PCB, Smart Card Rev. A	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HITI004641	HITI004651	Jan 10
RX-3325 RX-3340	xxx	withdrawn	xxxxxxxxxx	XXXXXXXXXXX	xxxx	хохохохох	N/A
RX-3341	С	4-in-1 socket sample/dimension/data test approval sheet and specification sheet	Noninfringement	Alex Fang; Elliott Liu; Mroczkowski; Mercer	HIT1000001	HIT1000005	Jan 9
RX-3342 RX-3344	xxx	withdrawn	x000000000x	xxxxxxxxx	xxxxxxxxxx	хохохохохх	N/A
RX-3345	С	Photos of Kingston FCR-HS219/1 and components	Noninfringement	Mroczkowski; Mercer	KT000848	KT000851	Jan 8
RX-3346	С	AFT Information Sheet on Kingston FCR-HS219/1	Noninfringement	Wolfe	KT000500	KT00506	Jan 9
RX-3347	С	GL826 USB Card Reader Controller Drawings	Noninfringement	Wolfe	KT000508	KT000510	Jan 9
RX-3348	С	GL826 Block Diagram	Noninfringement	Wolfe	KT000678	KT000678	Jan 9
RX-3349	С	Experimental Test Results of Dr. Wolfe	Noninfringement	Wolfe	KT000864	KT000864	Jan 9
RX-3350	С	Experimental Test Results of Dr. Wolfe	Noninfringement	Wolfe	KT000865	KT000865	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3351	С	Experimental Test Results of Dr. Wolfe	Noninfringement	Wolfe	KT000866	KT000866	Jan 9
RX-3352	С	Experimental Test Results of Dr. Wolfe	Noninfringement	Wolfe	KT000869	KT000869	Jan 9
RX-3353	_	CV of Dr. Andrew Wolfe	Noninfringement	Wolfe	KT000861	KT000863	Jan 9
RX-3354	_	DiskMon for Windows v.2.01	Noninfringement	Wolfe	KT000867	KT000867	Jan 9
RX-3355	_	DiskMon for Windows v. 2.01 Program	Noninfringement	Wolfe	KT-N-0004	KT-N-0004	Jan 9
RX-3356	C	USB 3.0 Reader	Noninfringement	Wolfe	KT000494	KT000495	Jan 9
RX-3357	_	Stipulation re New FCR-HS3 product	Noninfringement	Mercer	N/A	N/A	Jan 10
RX-3358 - RX-3377	xxx	withdrawn	>000000000x	xxxxxxxxx	XXXXXXXXXXXXX	300000000X	N/A
RX-3378	C	Wolfe Rebuttal Expert Report re Newegg Products Exh. B (materials considered)	Noninfringement	Wolfe	N/A	N/A	Jan 9
RX-3379	С	Wolfe Rebuttal Expert Report re Newegg Products, DiskMon capture log - Rosewill RCR-YJ-EX601	Noninfringement	Wolfe	N/A	N/A	Jan 9
RX-3380 RX-3386	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXX	xxxxxxxxxx	N/A
RX-3387	С	Rosewill Exh. 5 - '623 Rosewill RCR-YJ-EX601 to Dale Buscaino's Initial Expert Report	Noninfringement	Wolfe; Buscaino	N/A	N/A	Jan 9
RX-3388	xxx	withdrawn	xxxxxxxxx	XXXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-3389	С	Epson Price List, April 6, 2010	Remedy	Epson Witness; Leonard	SEC841_0012068	SEC841_0012068	Jan 9
RX-3390	С	Epson Price List, May 11, 2010	Remedy	Epson Witness; Leonard	SEC841_0012069	SEC841_0012069	Jan 9
RX-3391	С	Epson Price List, June 4, 2010	Remedy	Epson Witness; Leonard	SEC841_0012070	SEC841_0012070	Jan 9
RX-3392	С	Epson Price List, July 6, 2010	Remedy	Epson Witness; Leonard	SEC841_0012071	SEC841_0012071	Jan 9
RX-3393	С	Epson Price List, August 30, 2010	Remedy	Epson Witness; Leonard	SEC841_0012072	SEC841_0012072	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3394	С	Epson Price List, September 30, 2010	Remedy	Epson Witness; Leonard	SEC841_0012073	SEC841_0012073	Jan 9
RX-3395	С	Epson Price List, November 1, 2010	Remedy	Epson Witness; Leonard	SEC841_0012074	SEC841_0012074	Jan 9
RX-3396	С	Epson Price List, November 29, 2010	Remedy	Epson Witness; Leonard	SEC841_0012075	SEC841_0012075	Jan 9
RX-3397	С	Epson Price List, December 2, 2010	Remedy	Epson Witness; Leonard	SEC841_0012076	SEC841_0012076	Jan 9
RX-3398	С	Epson Price List, February 23, 2011	Remedy	Epson Witness; Leonard	SEC841_0012077	SEC841_0012077	Jan 9
RX-3399	С	Epson Price List, July 8, 2008	Remedy	Epson Witness; Leonard	SEC841_0012078	SEC841_0012078	Jan 9
RX-3400	С	Epson Price List, March 30, 2011	Remedy	Epson Witness; Leonard	SEC841_0012079	SEC841_0012079	Jan 9
RX-3401	С	Epson Price List, May 13, 2011	Remedy	Epson Witness; Leonard	SEC841_0012080	SEC841_0012080	Jan 9
RX-3402	С	Epson Price List, May 31, 2011	Remedy	Epson Witness; Leonard	SEC841_0012081	SEC841_0012081	Jan 9
RX-3403	С	Epson Price List, June 24, 2011	Remedy	Epson Witness; Leonard	SEC841_0012082	SEC841_0012082	Jan 9
RX-3404	С	Epson Price List, August 22, 2011	Remedy	Epson Witness; Leonard	SEC841_0012083	SEC841_0012083	Jan 9
RX-3405	С	Epson Price List, September 15, 2011	Remedy	Epson Witness; Leonard	SEC841_0012084	SEC841_0012084	Jan 9
RX-3406	С	Epson Price List, September 29, 2011	Remedy	Epson Witness; Leonard	SEC841_0012085	SEC841_0012085	Jan 9
RX-3407	С	Epson Price List, November 1, 2011	Remedy	Epson Witness; Leonard	SEC841_0012086	SEC841_0012086	Jan 9
RX-3408	С	Epson Price List, November 28, 2011	Remedy	Epson Witness; Leonard	SEC841_0012087	SEC841_0012087	Jan 9
RX-3409	С	Epson Price List, December 27, 2011	Remedy	Epson Witness; Leonard	SEC841_0012088	SEC841_0012088	Jan 9
RX-3410	С	Epson Price List, February 8 2012	Remedy	Epson Witness; Leonard	SEC841_0012089	SEC841_0012089	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3411	С	Epson Price List, February 29, 2012	Remedy	Epson Witness; Leonard	SEC841_0012090	SEC841_0012090	Jan 9
RX-3412	С	Epson Price List, March 5, 2012	Remedy	Epson Witness; Leonard	SEC841_0012091	SEC841_0012091	Jan 9
RX-3413 RX-3418	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx	хохохохох	хоооооооо	N/A
RX-3419	С	SMSC USB2601/USB2602 4th Generation USB2.0 Flash Media Controller with Integrated Card Power FETs and HS Hub	Noninfringement	Banerjee; Mercer; Epson Witness	SEC841_0036339	SEC841_0036364	Jan 10
RX-3420 RX-3425	xxx	withdrawn	xxxxxxxxx	XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxx	N/A
RX-3426	С	USB2602(USX2007): Epson Firmware Specification Rev 2.4	Noninfringement	Banerjee; Mercer; Epson Witness	SEC841_0067848	SEC841_0067860	Jan 10
RX-3427 RX-3433	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxxx	300000000x	XXXXXXXXXXX	N/A
RX-3434	С	Epson profit spreadsheet	Remedy	Epson Witness; Leonard	SEC841_0093535	SEC841_0093540	Jan 9
RX-3435	С	Epson profit spreadsheet (translation of SEC841_0093535-540)	Remedy	Epson Witness; Leonard	N/A	N/A	Jan 28
RX-3436 - RX-3443	ххх	withdrawn	xxxxxxxxx	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A
RX-3444	-	Web page - www.bestbuy.com, USB 2.0 3-in-1 Memory Card Reader Product Information	Remedy	Epson Witness; Leonard	SEC841_0093574	SEC841_0093578	Jan 9
RX-3445	-	Web page - www.bestbuy.com, Epson Artisan 730 Product Information	Remedy	Epson Witness; Leonard	SEC841_0093579	SEC841_0093582	Jan 8
RX-3446 - RX-3449	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxx	x000000000x	xxxxxxxxxx	N/A
RX-3450	_	Photograph of Yamaichi FRS016-3000-0(01) connector assembly	Noninfringement	Mroczkowski	SEC841_0093594	SEC841_0093594	Jan 10
RX-3451 RX-3476	xxx	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	x000000000X	xxxxxxxxxx	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RX-3477	С	TPL's Supplemental Responses to Fujitsu Limited's First Set of Requests for Admission	Noninfringement	Berg; T. Yamamoto	N/A	N/A	Jan 10
RX-3478	xxx	withdrawn)0000000000	XXXXXXXXXXX	xxxxxxxxx	xxxxxxxxxx	N/A
RX-3479	хох	withdrawn	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	N/A
RX-3480	С	TPL's Memorandum in Response to Brother's Motion for Leave to File a Reply in Support of its Motion for Summary Determination	Noninfringement	Mercer	N/A	N/A	Jan 10
RX-3481	С	Direct Witness Statement of Yu-Fan 'Alex' Fang	Noninfringement	Alex Fang	N/A	N/A	Jan 28
RX-3482	С	Letter to HP Auditor dated 12/14/2012	Impeachment; Domestic Industry; Remedy; Bonding	Hannah	N/A	N/A	Jan 9
RX-3483	_	Complaint of Technology Properties Limited, LLC Under Section 337 of the Tariff Act of 1930, as Amended, dated 03/26/2012	Impeachment; Domestic Industry; Remedy; Bonding	Hannah	N/A	N/A	Jan 9
RX-3484	С	Alliacense Letter with attachments (Sep. 25, 2009)	Impeachment; Domestic Industry; Remedy; Bonding	Hannah	TPL002302	TPL002427	Jan 9
RX-3485	_	Pandigital, Inc.'s 1st Notice of Deposition of Technology Properties Limited, LLC. (Antonopoulos 807 Dep. Exh. 1)	Invalidity; Lack of Domestic Industry	Antonopoulos	N/A	N/A	Jan 25
tage, compression to the contra	- Aldred Berghores (Demonstrative Subject in Support of Panagina Direct	न महामुख्य (१७५३), कर्ना (१५५५), व नामक सम्बद्ध (१५५५) । इ.स.च्या	ration of the establishment.	AND AND COMMENT OF COMMENTS OF THE COMMENT	e en de la grande en en la dec	
RDX-0001	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0002	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0003	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0004	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0005	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0006	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0007	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0008	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0009	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0010	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	·N/A	Jan 10
RDX-0011	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0012	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0013	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0014	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0015	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0016	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0017	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0018	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0019	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0020	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0021	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0022	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0023	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0024	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0025	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0026	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	. N/A	Jan 10
RDX-0027	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0028	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0029	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0030	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0031	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0032	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0033	_	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0034	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0035	-	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0036	С	Demonstrative Exhibit in Support of Banerjee Direct Witness Statement	Invalidity	Banerjee	N/A	N/A	Jan 10
RDX-0037 RDX-0079	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0080	-	Mapping Limitations of claims 1 and 9 from U.S. Patent 7,295,443, claims 25 and 28 from U.S. Patent 7,522,424, and claim 1 from U.S. Patent 7,719,847	N/A	N/A	N/A	N/A	Jan 10
RDX-0081	-	Accused MMC/SD System	N/A	N/A	N/A	N/A	Jan 10
RDX-0082 - RDX-0084	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0085	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0086	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0087	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0088	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0089	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0090	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0091	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0092	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0093	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0094	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0095	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0096	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0097	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0098	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	• McAlexander	N/A	N/A	Jan 10
RDX-0099	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0100	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0101	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0102	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0103	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0104 RDX-0105	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0106	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0107	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0108	1-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0109	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0110	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0111	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0112	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0113	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0114	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0115	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0116	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0117	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0118	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0119	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0120	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0121	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0122	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0123	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0124	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0125	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0126	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0127 - RDX-0130	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0131	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0132	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0133	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0134	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0135	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0136	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0137	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0138	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0139	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0140	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0141	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0142	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0143	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0144	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0145	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0146	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0147	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0148	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0149	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0150	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0151		Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0152	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0153	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0154	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0155	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0156	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0157		Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0158	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0159	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0160	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0161	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0162	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0163	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0164	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0165	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0166	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0167	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0168	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	,_ N/A	Jan 10
RDX-0169	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0170	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0171 - RDX-0175	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0176	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0177	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0178	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0179	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0180	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0181	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0182	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0183	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0184	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0185	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0186	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0187	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0188	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0189	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0190	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0191	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0192	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0193	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0194	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0195	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0196	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0197	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0198	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0199	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0200	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0201	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0202	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0203	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0204	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0205	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0206	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0207	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0208	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0209	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0210	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0211	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0212 - RDX-0215	xxx	not assigned	N/A	N/A	N/A	N/A	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0216	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0217	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0218	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0219	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0220	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0221	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0222	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0223	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0224	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0225	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0226	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0227	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0228	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0229	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0230	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0231	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0232	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0233		Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0234	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0235	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0236	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0237	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0238	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0239	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0240	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0241	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0242	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0243	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0244	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0245	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0246	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0247	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0248	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0249	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0250	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0251	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0252	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0253	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0254	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0255	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0256	-	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0257	_	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0258 - RDX-0260	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0261	С	Demonstrative Exhibit in Support of McAlexander Direct Witness Statement	Invalidity	McAlexander	N/A	N/A	Jan 10
RDX-0262	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0263	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0264	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0265	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0266	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0267	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0268	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0269	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0270	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0271	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0272	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0273	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0274	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0275	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0276	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0277	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0278	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0279	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0280	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0281	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0282	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0283	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0284	-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0285	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0286	,-	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0287		Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0288	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0289	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0290	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0291	С	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0292	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0293	_	Demonstrative Exhibit in Support of Banerjee Rebuttal Witness Statement	Noninfringement	Banerjee	N/A	N/A	Jan 10
RDX-0294 - RDX-0300	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0301	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0302	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0303	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0304	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0305	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0306	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0307	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0308	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0309	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0310	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0311	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0312	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	· Berg	N/A	N/A	Jan 10
RDX-0313	Ç	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0314	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0315	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0316	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0317	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0318	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0319	C.	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0320	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0321	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0322	С	Demonstrative Exhibit in Support of Berg Rebuttal Witness Statement	Noninfringement	Berg	N/A	N/A	Jan 10
RDX-0323 - RDX-0400	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0401	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0402		Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0403	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0404	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0405	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0406	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0407	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0408	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0409	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0410	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0411	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0412	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0413		Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0414	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0415	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A .	Jan 10
RDX-0416	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0417	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0418	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0419	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0420	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0421	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0422	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0423	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0424	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0425	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0426	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0427	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0428	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0429	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0430	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0431	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0432	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0433	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0434	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0435	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0436	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0437	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0438	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0439	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0440	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0441	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0442	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0443	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0444	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0445	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0446	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	· N/A	Jan 10
RDX-0447	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0448	· —	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0449	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0450	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0451	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0452	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0453	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0454		Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0455	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0456	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0457	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0458	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0459	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0460	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0461	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0462	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0463	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0464	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0465	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0466	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0467	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0468	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0469	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0470	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	, N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0471	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0472	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0473	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0474	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0475	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0476	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0477	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0478	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0479	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0480	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0481	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0482	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0483		Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0484	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0485	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0486	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0487	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0488	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0489	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0490	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0491	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0492	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0493	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-0494 - RDX-0500	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0501	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0502	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0503	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0504	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0505	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0506 - RDX-0511	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0512	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0513	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0514	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0515	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8

Exh. No.	Conf. Desig.	. Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0516	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0517	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0518 RDX-0521	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0522	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0523	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0524	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0525	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0526	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	. N/A	N/A	Jan 8
RDX-0527	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0528	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0529	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0530 - RDX-0531	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0532	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0533 - RDX-0541	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0542		Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0543 - RDX-0551	xxx	not assigned	N/A	N/A	N/A	N/A	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0552	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0553	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0554	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0555	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0556 RDX-0561	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0562	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 28
RDX-0563 - RDX-0571	xxx	not assigned .	N/A	N/A	N/A	N/A	N/A
RDX-0572	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0573	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0574 RDX-0581	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0582	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0583	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0584	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0585	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0586	-	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0587	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0588	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0589	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0590	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0591	_	Demonstrative Exhibit in Support of Mroczkowski Rebuttal Witness Statement	Noninfringement	Mroczkowski	N/A	N/A	Jan 8
RDX-0592 - RDX-0600	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0601	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0602	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0603	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0604	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0605	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0606	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0607	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0608		Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0609	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0610	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0611	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0612	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0613		Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0614	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0615	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0616	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0617	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0618	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A .	Jan 9
RDX-0619		Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0620	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0621	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0622	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0623	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0624	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0625	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0626	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0627	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0628	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0629	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0630	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0631	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0632	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0633	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0634	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0635	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0636	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0637	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0638	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0639	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0640	-	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0641	_	Demonstrative Exhibit in Support of Wolfe Rebuttal Witness Statement	Noninfringement	Wolfe	N/A	N/A	Jan 9
RDX-0642 - RSX-0649	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0650	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0651	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0652	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0653	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy, Bond	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	. Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0654	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0655	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0656	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0657	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry, Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0658	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0659	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0660	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0661	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0662	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0663	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0664	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0665	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0666	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0667	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0668	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0669	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0670	-	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry, Remedy; Bond	McAlexander	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0671	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0672	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0673	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0674	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0675	_	Demonstrative Exhibit in Support of McAlexander Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	McAlexander	N/A	N/A	Jan 10
RDX-0676 - RDX-0700	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-0701	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0702	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0703	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0704	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0705	-	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0706	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0707	_	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0708	_	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0709	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0710	-	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0711	_	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy, Bond	Leonard	N/A	N/A	Jan 9

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-0712	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0713	С	Demonstrative Exhibit in Support of Leonard Rebuttal Witness Statement	Domestic Industry; Remedy; Bond	Leonard	N/A	N/A	Jan 9
RDX-0714 RDX-1075	ххх	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-1076	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1077	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1078 - RDX-1100	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-1101	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1102	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1103	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1104 RDX-1125	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-1126	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1127	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1128 RDX-1150	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-1151	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1152 - RDX-1175	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-1176	С	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-1177 - RDX-1200	ххх	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-1201	-	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1202	_	Demonstrative Exhibit in Support of Mercer Rebuttal Witness Statement	Noninfringement	Mercer	N/A	N/A	Jan 10
RDX-1203 - RDX-1499	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-1500	С	Appendix B of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 – U.S. Patent Appl. Pub. No. 2004/0068601	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1501	С	Appendix A of Attachment A of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,438,638 - invalidity claim chart over U.S. Patent No. 6,658,202	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1502	С	Appendix B of Attachment A of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,438,638 - invalidity claim chart over Chee-Kong AwYong, "An Integrated Control System Design of Portable Computer Storage Peripherals"	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1503	С	Appendix C of Attachment A of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,438,638 - Invalidity Claim Chart in View of the Actiontec Camera Connect Pro	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1504	С	Appendix D of Attachment A of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,438,638 - Invalidity Claim Chart in View of the MicroTech PCD-47	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1505	С	Appendix A of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 - invalidity claim chart over U.S. Patent No. 7,522,424	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1506	С	Appendix C of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 - invalidity claim chart over the OmniFlash Uno Mas Universal Card Reader Article	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1507	_	Appendix D of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 - invalidity claim chart over the Dazzle 6 in 1 Card Reader	Invalidity	McAlexander	N/A	N/A	Jan 28

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-1508	С	Appendix E of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 - invalidity claim chart in View of Chee-Kong AwYong "An Integrated Control System Design of Portable Computer Storage Peripherals"	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1509	С	Appendix F of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 - invalidity claim chart over the MicroTech PCD-47B	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1510	С	Appendix H of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 - invalidity claim chart over the Atech Pro II	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1511	С	Appendix I of Attachment B of McAlexander Initial Report regarding invalidity of U.S. Patent No. 6,976,623 - invalidity claim chart over the Dell Inspiron 7000	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1512	_	Appendix A of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over European Patent EP 1 037 159	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1513	-	Appendix B of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over U.S. Patent No. 5,887,145	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1514	С	Appendix C of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over the Toshiba TC6374AF Controller	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1515	-	Appendix D of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over U.S. Patent No. 6,746,280	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1516	С	Appendix E of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over JP Publication No.11-15928	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1517	С	Appendix F of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over the SD Memory Card Specifications	tnválidíty	McAlexander	N/A	N/A	Jan 28

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-1518	С	Appendix G of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over the Imation FlashGo Adapter	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1519	С	Appendix I of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over the Dazzle DM-8400	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1520	С	Appendix J of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over JP 2001-184462	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1521	С	Appendix K of Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over the AcomData MultiFlash	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1522	C	Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over U.S. Patent No. 6,402,558 (Hung-Ju)	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1523	С	Attachment C of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,295,443 - invalidity claim chart over Fujitsu C2210	Invalidity	McAlexander	. N/A	N/A	Jan 28
RDX-1524	_	Appendix A of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over European Patent EP 1 037 159	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1525	_	Appendix B of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over U.S. Patent No. 5,887,145	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1526	С	Appendix C of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 invalidity claim chart over the Toshiba TC6374AF Controller	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1527	-	Appendix D of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over U.S. Patent No. 6,746,280	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1528	С	Appendix E of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over JP Pub. No. 11-15928	Invalidity	McAlexander	N/A	N/A	Jan 28

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-1529	С	Appendix F of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over the SD Memory Card Specifications	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1530	С	Appendix G of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over U.S. Patent No. 6,663,007	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1531	С	Appendix H of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over the Imation FlashGo Adapter	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1532	С	Appendix J of Attachment D ofnMcAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over the Dazzle DM-8400	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1533	С	Appendix K of Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over the AcomData MultiFlash	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1534	С	Attachment D to McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over U.S. Patent No. 6,402,558	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1535	С	Attachment D of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,522,424 - invalidity claim chart over Fujitsu C2210	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1536	С	Appendix A of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over European Patent EP 1 037 159	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1537	С	Appendix B of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over U.S. Patent 5,887,145	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1538	С	Appendix C of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over the Toshiba TC6347AF Controller	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1539	С	Appendix D of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over U.S. Patent No. 6,746,280	Invalidity	McAlexander	N/A	N/A	Jan 28

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RDX-1540	С	Appendix E of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over JP Publication No. 11-15928	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1541	С	Appendix F of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over U.S. Patent No. 6,663,007	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1542	С	Appendix G of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over the Imation FlashGo Adapter	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1543	С	Appendix H of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over the SD Specifications	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1544	С	Appendix I of Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart over the AcomData MultiFlash	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1545	С	Attachment E of McAlexander Initial Report regarding invalidity of U.S. Patent No. 7,719,847 - invalidity claim chart in view of the U.S. Patent No. 6,402,558	Invalidity	McAlexander	N/A	N/A	Jan 28
RDX-1546 - RDX-3156	xxx	not assigned	N/A	N/A	N/A	N/A	N/A
RDX-3157	С	Exh. 18 to the Rebuttal Expert Report of Brian A. Berg on NonInfringement	Noninfringement	Berg	N/A	N/A	Jan 10
RPX-0001	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	N/A	N/A
RPX-0002	-	AcomData Multi-format Memory Card Reader	Invalidity	McAlexander; Berg; Mercer; Banerjee	N/A	N/A	Jan 10
RPX-0003		Actiontec Camera Connect Pro	Invalidity	McAlexander; Berg; Mercer; Banerjee	N/A	N/A	Jan 10
RPX-0004 - RPX-0006	ххх	withdrawn	xxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A	N/A
RPX-0007	_	Atech Flash Technology MS-AFT PRO Mouse Poster	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_PHY_001	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RPX-0008	XXX	withdrawn	XXXXXXXXXXXX	XXXXXXXXXXXXXXXX	XXXXXXXXXXXX	N/A	N/A
RPX-0009	_	Atech Flash Technology MS-AFT PRO Mouse Poster from trade shows in 2001-2002	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_PHY_011	N/A	Jan 10
RPX-0010 - RPX-0013	ххх	withdrawn	xxxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXX	N/A	N/A
RPX-0014	_	Atech Pro II External All-in-One Flash Reader	Invalidity	Banerjee; McAlexander; Liu	ATECH841_ITC_PHY_004	N/A	Jan 4
RPX-0015 - RPX-0021	xxx	withdrawn	xxxxxxxxx	x0000000000	xxxxxxxxxx	N/A	N/A
RPX-0022	_	Brother MFC-9200C	Invalidity	Banerjee; Brother Witness	BROTHER01741064	BROTHER01741065	Jan 10
RPX-0023	_	Brother MFC-J220 v.2	Noninfringement	Mercer; Brother Witness	BROTHER01752002	N/A	Jan 28
RPX-0024	_	Brother MFC-J4510DW v.2	Noninfringement	Mercer	BROTHER01751984	N/A	Jan 28
RPX-0025	_	Brother MFC-J5910DW v.2	Noninfringement	Mercer; Brother Witness	BROTHER01751990	N/A	Jan 28
RPX-0026	_	Brother MFC-J625DW v.2	Noninfringement	Mercer; Brother Witness	BROTHER01751987	N/A	Jan 28
RPX-0027	_	Brother MFC-J6510DW v.2	Noninfringement	Mercer; Brother Witness	N/A	N/A	Jan 28
RPX-0028	_	Brother MFC-J6710DW v. 2	Noninfringement	Mercer; Brother Witness	BROTHER01751988	N/A	Jan 28
RPX-0029	_	Brother MFC-J6910DW v.2	Noninfringement	Mercer; Brother Witness	BROTHER01751989	N/A	Jan 28
RPX-0030	_	Brother MFC-J825DW v.2	Noninfringement	Mercer; Brother Witness	BROTHER01751991	N/A	Jan 28
RPX-0031	-	Brother MFC-J835DW v.2	Noninfringement	Mercer; Brother Witness	BROTHER01751992	N/A	Jan 28
RPX-0032	xxx	withdrawn	x000000000X	xxxxxxxxxx	xxxxxxxxxx	N/A	N/A
RPX-0033	-	Datafab MDCFSM-B-USB	Invalidity	Banerjee; McAlexander; Liu	ТВР	N/A	Jan 10
RPX-0034 - RPX-0040	xxx	withdrawn	xxxxxxxxxxx	xxxxxxxxxxx)000000000X	N/A	N/A
RPX-0041		Dazzle Universal 6 in 1 Reader	Invalidity	McAlexander; Venkatesan	BROTHER01741067	N/A	Jan 10
RPX-0041A	-	Dazzle Universal 6 in 1 Reader	Invalidity	McAlexander; Venkatesan	BROTHER01741067	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RPX-0042	_	Dazzle Universal 6 in 1 Reader DM-8400	Noninfringement	Mercer	BROTHER01741004	N/A	Jan 10
RPX-0043	xxx	withdrawn	xxxxxxxxxxx	xxxxxxxxxx	XXXXXXXXXXX	N/A	N/A
RPX-0044	_	Dell Inspiron 7000	Invalidity	McAlexander	TBP	N/A	Jan 10
RPX-0045	_	Dell Vostro 3555 (SD Only)	Noninfringement	Berg	TBP	N/A	Jan 10
RPX-0046	-,	FlashGO Imation Corp Flash Card Reader and CD	Invalidity	Mercer	BROTHER01741068	N/A	Jan 10
RPX-0047 RPX-0078	xxx	withdrawn	xxxxxxxxx	xxxxxxxxxx)0000000000	N/A	N/A
RPX-0079 - RPX-0088	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	N/A	N/A
RPX-0089	_	HP Photosmart 1000	Invalidity	HP Witness; Banerjee	N/A	N/A	Jan 10
RPX-0090 - RPX-0096	xxx	withdrawn	XXXXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	N/A	N/A
RPX-0097	_	Lexmark 5770 Photo Jetprinter	Invalidity	Banerjee; McAlexander	ТВР	N/A	Jan 10
RPX-0098 - RPX-0109	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxxx	хххххххххх	N/A	N/A
RPX-0110	_	Microtech DPCM USB CameraMate Card Reader aka ActionTec CameraMate	Invalidity	McAlexander, Banerjee; Balasubramanian; Conte	ACER841_ITC_PHY010	N/A	Jan 10
RPX-0111	-	Microtech PCD-47	Invalidity	McAlexander; Banerjee; Balasubramanian; Conte	TBP	N/A	Jan 10
RPX-0112 - RPX-0121	XXX	withdrawn	xxxxxxxxxxx	xxxxxxxxxxx	x0000000000	N/A	N/A
RPX-0122	_	HP ID11 Stargell 6-in-1 Reader HP P/ N: 644492-001	Noninfringement	Mroczkowski	N/A	N/A	Jan 10
RPX-0122	-	HP ID11 Stargell 6-in-1 Reader HP P/N: 644492-001 (with plastic dissolved)	Noninfringement	Mroczkowski	N/A	N/A	Jan 10
RPX-0123 RPX-0143	XXX	withdrawn	XXXXXXXXXXX	xxxxxxxxxxx	XXXXXXXXXXXXX	N/A	N/A

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RPX-0144	_	Dell – Samples of card reader having IO Interconnect part no. R-680-070-215A	Noninfringement	Mroczkowski	ТВР	N/A	Jan 28
RPX-0145	_	Dell – Samples of connector having Plastron Technology Co., Ltd. part no. CM7S-132-H-D	Noninfringement	Mroczkowski	ТВР	N/A	Jan 28
RPX-0146 RPX-0167	XXX	withdrawn	x00000000000	XXXXXXXXXXXX	XXXXXXXXXXX	N/A	N/A
RPX-0168	_	Seiko Epson FRS016-3000-0(01) Connector Assembly	Noninfringement	Mercer; Mroczkowski; Epson witness	N/A	N/A	Jan 9
RPX-0168A	_	Seiko Epson FRS016-3000-0(01) Connector Assembly (with pin removed)	Noninfringement	Mercer; Mroczkowski; Epson witness	N/A	N/A	Jan 9
RPX-0168B	_	Pin from FRS016-3000-0(01) Connector Assembly	Noninfringement	Mercer; Mroczkowski; Epson witness	N/A	N/A	Jan 9
RPX-0169	_	FRS016-3100-0 connector assemblies	Noninfringement	Mercer; Mroczkowski; Epson witness	N/A	N/A	Jan 9
RPX-0170	_	FRS019-3000-0(01) prototype connector assemblies	Noninfringement	Mercer; Mroczkowski; Epson witness	N/A	N/A	Jan 9
RPX-0171	_	Sample of Dell Optiplex 3010 and components thereof, inloluding the card reader having I/O Interconnect part no. R-680-070-215A	Noninfringement	Berg	N/A	N/A	Jan 10
RPX-0172	-	Sample of Dell Vostro 3555 and components thereof, inloluding the connector having Plastron Technology Co. Ltd. part no. CM7S-132-H-D	Noninfringement	Berg	N/A	N/A	Jan 10
RPX-0173 RPX-0176	xxx	withdrawn	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	N/A	N/A
RPX-0177	_	Yamaichi Electronics Co., Ltd. connector - part no. H001-A022 (MFC-J6510DW)	Noninfringement	Mroczkowski	BROTHER01752008	N/A	Jan 28
RPX-0178	_	Plastron Precision Co., Ltd. connector (part no. CM4S-085)	Noninfringement	Mroczkowski	BROTHER01752009	N/A	Jan 28
RPX-0179 RPX-0181	XXX	withdrawn	xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxxx	N/A	N/A
RPX-0182	_	Acer X1935	Noninfringement	Mroczkowski	ТВР	N/A	Jan 10
RPX-0183	_	Acer AS7750	Noninfringement	Mroczkowski	TBP	N/A	Jan 10

Exh. No.	Conf. Desig.	Title/Description	Purpose	Sponsoring Witness	Beg Bates No.	End Bates No.	Rec'd Into Evidence
RPX-0184	_	Sample of Dell Optiplex 3010 and components thereof, including the card reader having I/O Interconnect part no. R-680-070-215A	Noninfringement	Wolfe	N/A	N/A	Jan 9
RPX-0185	_	Sample of Belkin F4U003	Lack of Domestic Industry	Wolfe	N/A	N/A	Jan 9
RPX-0186	_	Sample of Lenovo H320-4041-1JU	Lack of Domestic Industry	Wolfe	N/A	N/A	Jan 9
RPX-0187 RPX-0193	xxx	withdrawn	xxxxxxxxxxx	XXXXXXXXXXX	хохохохохох	N/A	N/A

List of Joint Demonstrative Exhibits Received Into Evidence (Public) Inv. No. 337-TA-841

JDX No.	JX No.	CX No	RX No.	Conf.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received Into Evidence
JDX-0001	JX- 0027	CX- 0697	RX- 0022		TPL Complaint Exh. 105-9 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP Practices the '443 Patent	TPL1023152-TPL1023162	Buscaino; Hannah; McAlexander; Lum	Domestic Industry; Lack of Domestic Industry; Invalidity	Jan 7
JDX-0002	JX- 0028	CX- 0699	RX- 0364	_	TPL Complaint Exh. 105-11 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP	TPL1023182-TPL1023201	Buscaino; Hannah; McAlexander; Lum	Domestic Industry; Lack of Domestic Industry; Invalidity	Jan 7
JDX-0003	JX- 0029	CX- 0701	RX- 1328	_	TPL Complaint Exh. 105-13 Addonics PCMCIA Flash DigiAdapter Extreme ADPMAF-X	TPL1023214-TPL1023234	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7
JDX-0004	JX- 0030	CX- 0705	RX- 1330	_	TPL Complaint Exh. 105-17 Addonics Pocket eSATA/USB DigiDrive AEPDDESU / WP	TPL1023306-TPL1023325	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7
JDX-0005	JX- 0031	CX- 0716	RX- 1331	-	TPL Complaint Exh. 105-28 CompuApps OnmiFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023542-TPL1023560	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7
JDX-0006	JX- 0032	CX- 0720	RX- 1332	_	TPL Complaint Exh. 105-32 CompuApps OnwiFlash IDE Kiosk Flash Memory Card Reader xSil146-G	TPL1023608-TPL1023626	Buscaino; Hannah; Banerjee	Domestic Industry; Lack of Domestic Industry; Noninfringement	Jan 7
JDX-0007	JX- 0009	CX- 0020	RX- 1340	_	TPL Complaint Exh. 23 - Claim Chart applying U.S. Patent No. 7,162,549 to accused Brother Industries, Ltd. product	TPL1021621-TPL1021645	Buscaino; Banerjee	Infringement; Noninfringement	Jan 10

Inv. 337-TA-841 Complainant Technology Proporties Limited LLC's Final Documentary Exhibit List (Comprehensive)

T. No 45	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.	Description				School Mile Administra
X-0001/JX-0001		TPL Complaint Exhibit 1- Certified Copy of '623 Patent	TPL1020953-TPL1020962	Sree Iyer; Dale Buscaine; Dan Leckrone	Infringement; Domestic Industry	1/7/13 - Moved to Joint Exhibit List as JX-0001
X-0002/JX-0002		TPL Complaint Exhibit 2- Certified Copy of '549 Patent	TPL1020963-TPL1021018	Sree Iyer; Dale Buscaino; Dan Leckrone; Nicholas Antonopoulos	Infringement; Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0002
X-0003/1X-0003		TPL Complaint Exhibit 3 - Certified Copy of '443 Patent	TPL1021019-TPL1021034	Sree lyer; Dale Buscaino; Dan Leckrone	Infringement; Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0003
X-0004/JX-0004		TPL Complaint Exhibit 4 -Certified Copy of 424 Patent	TPL1021035-TPL1021051	Sree Iyer; Dale Buscaino; Dan Leckrono	Infringement; Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0004
X-0005/JX-0005		TPL Complaint Exhibit 5 -Cortified Copy of 638 Patent	TPL1021052-TPL1021075	Sree Iyer, Dale Buscaino, Dan Leckrone	Infringement; Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0005
CX-0006/JX-0006		TPL Complaint Exhibit 6 -Certified Copy of '847 Patent	TPL1021076-TPL1021092	Sree Iyer; Dale Buscaino; Dan Leckrone	Infringement; Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0006
CX-0007/JX-0007	С	TPL Complaint Exhibit 7 - Assignment of '623 Patent	TPL1042477-TPL1042535	Dan Leckrone	Ownership/Standing; domestic industry	1/7/13-Moved to Joint Exhibit List as JX-0007C
CX-0008	С	TPL Complaint Exhibit 8 -Assignment of '549 Patent	TPL1042536-TPL1042593	Dan Leekrone	Ownership/Standing; domestic industry	1/7/2013
CX-0009	C	TPL Complaint Exhibit 9 - Assignment of '443 Patent	TPL1042594-TPL1042652	Dan Leckrone	Ownership/Standing; domestic industry	1/7/2013
CX-0010	c	TPL Complaint Exhibit 10 -Assignment of 424 Patent	TPL1042653-TPL1042711	Dan Leckrone	Ownership/Standing; domestic industry	1/7/2013
CX-0011	С	TPL Complaint Exhibit 11 -Assignment of '638 Patent	TPL1042712- TPL1042770	Dan Leekrone	Ownership/Standing; domestic industry	17/2013
CX-0012	С	TPL Complaint Exhibit 12 -Assignment of '847 Patent	TPL1042771-TPL1042826	Dan Leckrone	Ownership/Standing; domestic industry	1/7/2013
CX-0013		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0014		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0015		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0016		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0017		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0018		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0019/JX-0008		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0020/JX-0009		TPL Complaint Exhibit 23- Claim Chart applying U.S. Patent No. 7,162,549 to accused Brother ladustries, Ltd., product	TPL1021621-TPL1021645	Dale Buscaino	Infringement	1/7/13-Moved to Joint Exhibit List as JDX-0007

Inv. 337-TA-841 Complainant Technology Properties Limited LLC's Final Documentary Exhibit List (Comprehensive)

	P. Carlotte and P. Carlotte an	The second section with the second se		IN DAME OF STREET		
≤ No	Conf. Dea:	Description Withdrawn	Bates Number	Sponsoring Witness	Purpose	Status/Date Admirted
CX-0021		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0022		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0023		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0024		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0025		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0026		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0027		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0028		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0029		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0030		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0031		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0032/JX-0010		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0033/JX-0011		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0034/JX-0012		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdraws
CX-0035/JX-0013		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0036		Withdrawn	Withdrawn .	Withdrawn	Withdrawn	Withdrawn
CX-0037	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0038		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0039		Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn
CX-0040		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Inv. 337-TA-841 Complainant Technology Properties Limited LLC's Final Documentary Exhibit List (Comprehensive)

± No-L	Coul.	Description	Bates Number	Spensoring Witness	Purpose	Status/Date-Admitted
	Des.					S. C.
CX-0041		Withdraws	Withdrawn	Withdrawn	Withdrawn	Wilhdrawn
CX-0042		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0043		Withdrawn	Withdrawa	Withdrawn	Withdrawn	Withdrawn
CX-0044		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0045		Widsdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0046/JX-0014		Withdrawn	Withdrawa	Withdrawn	Withdrawn	Withdrawn
CX-0047/JX-0015		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0048		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0049/JX-0016		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0050	С	Wishdraws	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0051		CV of Dale Buscaino, attached as Exhibit A to Mr. Buscaino's Initial Expert Report	TPL1042912-TPL1042914	Dale Buscaino	Infringement; Domestic Industry	1/(0/2013
CX-0052		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0053		Domestic Industry Reference Chart, attached as Exhibit C to Mr. Buscaine's Initial Expert Report	TPL1042917-TPL1042927	Dale Buscaino	Domestic Industry	1/9/2013
CX-0054		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0055		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0056	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0057	С	Acer Ex. 2-424 Acer AX1935 to Dale Buscoino's Initial Export Report	TPL1043120-TPL1043159	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0126C
CX-0058	С	Acer Ex. 3 -424 Acer AS7750 to Dale Buscaino's Initial Expert Report	TPL1043160-TPL1043196	Dule Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0127C
CX-0059	С	Acer Ex. 4 - 443 Acer AX1935 to Dale Buscaino's Initial Expert Report	TPL1043197-TPL1043212	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0128C
CX-0060	С	Acer Ex. 5 -443 Acer AS7750 to Date Buscaino's Initial Expert Report	TPL1043213-TPL1043224	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0129C

x. No		Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.					
X-0061	C	Acer Ex. 6-549 Acer AX1935 to Date Busenino's Initial Export Report	TPL1043225-TPL1043252	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0130C
CX-0062	Ċ	Acer Ex. 7-549 Acer AS7750 to Dale Buscaino's Initial Expert Report	TPL1043253-TPL1043280	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0131C
CX-0063	С	Acer Ex. 8-623 Acer Aspire M3970 to Dale Buscaino's Initial Expert Report	TPL1043281-TPL1043294	Dole Buscaino	Infringement	1/10/13-Moved to Domonstrative Exhibit List as CDX- 0132C
CX-0064	С	Acor Ex. 9 -847 Acer AX1935 to Dale Buscaino's Initial Expert Report	TPL1043295-TPL1043315	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0133C
CX-0065	c	Acer Ex. 10-847 Acer AS7750 to Dale Buscaino's Initial Expert Report	TPL1043101-TPL1043119	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0134C
CX-0066	c	Acer Ex. 11 - Acer Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043316-TPL1043319	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0067	c	Amended Acer Exhibit 1 - Acer Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043320-TPL1043224	Dale Buscaino	Infringement	1/8/2013
CX-0068	С	Brother fix. 1- Brother Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043325-TPL1043327	Dale Buscaino	Infringement	1/8/2013
CX-0069	С	Brother Ex. 2 -424 Brother MFC-J6510DW to Dale Buscoine's Initial Expert Report	TPL1043328-TPL1043349	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0138C
CX-0070	c	Brother Ex. 3-443 Brother MFC-J6510DW to Dale Buscaino's Initial Expert Report	TPL1043350-TPL1043377	Dale Buscaino	Infringoment	1/10/13-Moved to Demonstrative Exhibit List as CDX-0139C
CX-0071	С	Brother Amended Exhibit 2 - 424 Brother MFC-J6510DW to Dale Buscaino's Initial Expert Report	TPL1043378-TPL1043399	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0072	c	Brother Amended Exhibit 3 - 443 Brother MFC-J6510DW to Dale Buscaino's Initial Expert Report	TPL1043400-TPL1043427	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0073	С	Canon Ex. 1 - Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043428-TPL1043430	Dale Buscaino	Infringement	1/8/2013
CX-0074	c	Canon Ex. 2 -424 Canon PIXMA MG8220 to Dale Buscaino's Initial Export Report	TPL1043431-TPL1043469	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0143C
CX-0075	c	Canon Ex. 3 -443 Canon PIXMA MG8220 to Dale Buscaino's Initial Expert Report	TPL1043470-TPL1043499	Dale Buscaino	Infringement	1/10/13-Moved to Domonstrative Exhibit List as CDX- 0144C
CX-0076	С	Dell Ex. 1 - 424 Dell 19inl Long Bay Reader to Dale Buseaino's Initial Export Report	TPL1043500-TPL1043533	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0145C
CX-0077	С	Dell Ex. 2 - 424 Dell Vostro 3555 to Dale Buscaino's Initial Expert Report	TPL1043534-TPL1043568	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0146C
CX-0078	c	Dell Ex. 3 - 443 Dell 19in1 Long Bay Reader to Dale Buscaino's Initial Expert Report	TPL1043569-TPL1043581	Dale Busenino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0147C
CX-0079	c	Dell Ex. 4- 443 Dell Vestro 3555 to Dale Buscaino's Initial Expert Report	TPL1043582-TPL1043593	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0148C
CX-0080	С	Dell Ex. 5 - 549 Dell 19in1 Long Bay Render to Dale Buscaino's Initial Expert Report	TPL1043594-TPL1043620	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0149C

Inv. 337-TA-841 Complainant Technology Properties Limited LLC's Finel Documentary Exhibit List (Comprehensive)

Ex. No	Conf	Description	Butes Number	Sponsering Witness	Purpose	Status/Date Admitted
	Des.			chouse and a contract of the c	eurose.	SIRROD DIRE AMERICA
CX-0081	С	Dell Ex. 6 - 549 Dell Vostro 3555 to Dale Buseaino's Initial Expert Report	TPL1043621-TPL1043647	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0150C
CX-0082	C	Dell Ex, 7- 623 Dell 19in1 Long Bay Reader to Onle Buscaino's Initial Expert Report	TPL1043648-TPL1043665	Dale Buscaino	Infringoment	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0151C
CX-0083	С	Dell Ex. 8 - 638 Dell 19int Long Boy Reader to Dale Buscaino's Initial Expert Report	TPL1043666-TPL1043719	Dale Buscaine	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0152C
CX-0084	С	Dell Ex. 9 - 847 Dell Vostro 3555 to Dale Buscaino's Initial Expert Report	TPL1043720-TPL1043738	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0153C
CX-0085	С	Dell Exhibit 10 to Dale Buscaino's Initial Expert Report	TPL1043739-TPL1043750	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0086	С	Dell Amended Ex. 1 -424 Dell 19in1 Long Bay Reader to Dale Buscaino's Initial Expert Report	TPL1043751-TPL1043784	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0087	С	Dell Amended Ex. 3-443 Dell 19in1 Long Bay Reader to Dule Buscaino's Initial Export Report	TPL1043785-TPL1043797	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0088	С	Dell Amended Ex, 5-549 Dell 19in I Long Bay Reader to Date Buscaino's Initial Expert Report	TPL1043798-TPL1043824	Dale Buscuino	Infringement	Excluded 1/4/13
CX-0089	c	Dell Amended Ex. 7-623 Dell 19in1 Long Bay Reader to Dale Buscaino's Initial Export Report	TPL1043825-TPL1043842	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0090	С	Dell Amended Ex. 8 -638 Dell 19in1 Long Bay Reader to Dale Buscaino's Initial Expert Report	TPL1043843-TPL1043896	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0091	Ĉ	Fujitsu Éx. 1 - Infringement Analysis Chart to Dalo Buscaino's Initial Expert Report	TPL1043897-TPL1043900	Dale Buscaino	Infringement	1/8/2013
CX-0092	c	Fujitsu Ex. 2 - 424 Fujitsu Lifobook \$752 to Dale Busanino's Initial Expert Report	TPL1043901-TPL1043911	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0161C
CX-0093	С	Fujitsu Ex. 3 -443 Fujitsu Lifebook S752 to Dale Buscaino's Initial Expert Report	TPL1043912-TPL1043931	Dale Buscnino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0162C
CX-0094	c	HiTTi Ex. 1 -Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043932-TPL1043933	Dale Buscaino	Infringement	1/8/2013
CX-0095	С	HiTi Ex. 2 - 424 HiTi P110S to Dale Buscaino's Initial Expert Report	TPL1043934-TPL1043976	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0164C
CX-0096	С	HITI Ex. 3 -443 HITI P110S to Dale Buscaine's Initial Expert Report	TPL1043977-TPL1043988	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0165C
CX-0097	С	HP Ex. 1 - Notebook Infringement Analysis Chart to Dalo Buscaino's Initial Expert Report	TPL1043989-TPL1043996	Dale Buscaino	Infringement	1/8/2013
CX-0098	c	HP Ex. 2- Printer Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043997-TPL1043999	Dale Buscaino	Infringement	1/8/2013
CX-0099	С	HP Ex. 3 -424 HP 630 to Dalo Buscaino's Initial Export Roport	TPL1044000-TPL1044018	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0168C
CX-0100	С	HP Ex. 4 -424 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044019-TPL1044040	Dale Basenine	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0169C

Inv. 337-TA-841 Complainent Technology Properties Limited LLC's Final Documentary Exhibit List (Comprehensive)

r. No		Description	Bates Number	Sponsoring Witness	Parpose	Status/Date Admitted
	Das	Description				
X-0101	C		TPL1044041-TPL1044080	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0170C
X-0102	Ċ	HP Ex. 6 -424 HP Photosmart 5510 to Dalc Buscaino's Initial Expert Report	TPL1044081-TPL1044116	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0171C
X-0103	c	HP Ex. 7 - 443 HP 630 to Dale Busoaino's Initial Expert Report	TPL1044117-TPL1044126	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0172C
X-0104	C	HP Ex. 8-443 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044127-TPL1044143	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0173C
X-0105	С	HP Ex. 9 - 443 HP ID11 Stargell Card Resider to Dale Buscaine's Initial Expert Report	TPL1044144-TPL1044158	Dalo Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0174C
CX-0106	c	HP Ex. 10 - 443 HP Photosmart 5510 to Dale Buscaine's Initial Expert Report	TPL1044159-TPL1044187	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0175C
X-0107	С	HP Ex. 11 -549 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044188-TPL1044219	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0176C
CX-0108	С	HP Ex. 12 - 549 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Export Report	TPL1044220-TPL1044248	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0177C
CX-0109	С	HP Ex. 15 - 847 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044249-TPL1044269	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0178C
CX-0110	c	HP Amended Exhibit 4 - 424 HP 644491-001 Card Reader to Dale Busenino's Initial Expert Report	TPL1044270-TPL1044297	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0111	c	HP Amended Exhibit 5-424 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044298-TPL1044340	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0112	С	HP Amended Exhibit 8 -443 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044341-TPL1044363	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0113	С	HP Amended Exhibit 9 - 443 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044364-TPL1044380	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0114	c	HP Amended Exhibit 11 - 549 HP 644491-001 Card Reader to Dale Buscaino's Initial Experi Report	TPL1044381-TPL1044418	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0115	С	HP Amended Exhibit 12 - 549 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044419-TPL1044449	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0116	С	HP Amended Exhibit 15 - 847 HP ID11 Stargell Cord Reader to Date Busenino's Initial Expert Report	TPL1044450-TPL1044472	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0117	С	Kingston Ex. 1 -Infringement Analysis Chart to Dale Buscaino's Initial Export Report	TPL1044473-TPL1044474	Dale Buscaino	Infringement	1/8/2013
CX-0118	c	Kingston Ex. 2 - 424 Kingston FCR-HS219-1 to Dale Buscaino's Initial Expert Report	TPL1044475-TPL1044513	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0187C
CX-0119	С	Kingston Ex. 3 - 443 Kingston FCR-HS219-1 to Dale Buscaino's Initial Expert Report	TPL1044514-TPL1044528	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0188C
CX-0120	c	Kingston Ex. 4- 623 Kingston FCR-HS219-I to Dale Buscaino's Initial Expert Report	TPL1044529-TPL1044542	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0189C

Inv. 337-TA-841 Complainant Technology Properties Limited LLC's Final Documentary Exhibit List (Comprehensive)

x. No	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.					
X-0121	C		TPL1044543-TPL1044544	Dale Buscaino	Infringement	1/10/2013
X-0122	С	Rosewill Ex. 2 -424 Rosewill RCR-YJ-EX601 to Dalo Buscaino's Initial Expert Report	TPL1044545-TPL1044561	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0191C
X-0123	С	Rosewill Ex. 3 - 443 Rosewill RCR-YJ-EX601 to Dale Buscaino's Initial Expert Report	TPL1044562-TPL1044572	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0192C
X-0124	С	Rosewill Ex. 4-549 Rosewill RCR-YJ-EX601 to Dalo Busesino's Initial Expert Report	TPL1044573-TPL1044598	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0193C
CX-0125	С	Rosewill Ex. 5 -623 Rosewill RCR-YJ-EX601 to Dalo Buscaino's Initial Expert Report	TPL1044599-TPL1044615	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX-0194C
CX-0126	С	Sciko Ex. 1 -Seiko Epson Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1044616-TPL1044619	Dale Buscaino	Infringement	1/8/2013
CX-0127	С	Seiko Ex. 2 - 424 Seiko Epson Artisan 730 to Dale Buscaino's Initial Expert Report	TPL1044620-TPL1044659	Dale Buscaino .	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0196C
CX-0128	С	Seiko Ex. 3 -443 Seiko Epson Artisan 730 to Dale Buscaino's Initial Expert Report	TPL1044660-TPL1044692	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0197C
CX-0129	С	Seiko Ex. 4-549 Seiko Epson Artisan 730 to Dale Buscaino's Initial Expert Report	TPL1044693-TPL1044720	Dale Buscaino	Infringement	1/10/13-Moved to Demonstrative Exhibit List as CDX- 0198C
CX-0130	С	Acer's Response to TPL's First Interrogatories (5/31/12)		Accr	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0131	С	Accr's Supplemental Responses to TPL's First Interrogatories (6/21/12)		Acer	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0132	С	Acer's Supplemental Responses to TPL's First interrogetorics Nos. 1, 2, 48, and 50 (9/24/12)		Acer	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0133	С	Acer's Supplemental Responses to TPL's First Interrogatories Nos. 13-15, 18, and 40 (10/4/12)		Acer	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0134	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0135	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0136	С	Acer's Responsos to TPL's Second Interrogatories (9/10/12)		Acer	Importation, infringement, domestic industry, remedy	1/8/2013
CX-0137	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0138	C	Withdrawn	Withdrawn	Withdrown	Withdrawn	Withdrawn
CX-0139	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0140	С	Brother's Rosponses to TPL's First Interrogatories (5/31/12)		Brother	Importation, infringement, domestic industry, remedy	1/10/2013

Inv., 337-TA-841 Complainant Technology Properties Limited LLC's Final Documentary Exhibit List (Comprehensive)

z.No	D	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	-	Description				
X-0141	С	Brother's First Supplemental Responses to TPL's First Interrogatories (8/6/12)		Brother	Importation, infringement, domestic industry, remody	1/10/2013
X-0142	С	Brother's Second Supplemental Responses to TPL's First Interrogatories (10/22/12)		Brother	Importation, infringement, demostic industry, remedy	1/8/2013
X-0143	С	Brother's Fourth Supplemental Responses to TPL's First Interrogatories (11/14/12)	-	Brother	Importation, infringement, domestic industry, remedy	1/10/2013
X-0144	С	Brother's Responses to TPL's Second Interrogatories (9/10/12)		Brother	Importation, infringement, domestic industry, remedy	1/10/2013
X-0145	Ċ	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0146	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0147	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0148	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0149	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0150	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0151	c	Canon's Responses to TPL's First Interrogatories (5/31/12)		Canon .	Importation, infringement, domestic industry, remedy	1/(0/2013
CX-0152	С	Canon's First Supplemental Responses to TPL's First Interrogatories (9/20/12)		Сапоп	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0153	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0154	C	Canon's Second Supplemental Responses to TPL's Interrogatories (11/14/12)		Canon	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0155	С	Canon's Responses to TPL's Second Interrogatories (9/10/12)		Canon	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0156	С	Canon's Supplemental Responses to TPL's Second Interrogatories (10/2/12)		Canon	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0157	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0158		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0159	С	Withdrawn	Withdrawn	Withdrasyn	Withdrawn	Withdrawn
CX-0160		Dells Responses to TPL's First Interrogatories (5/31/12)		Dell	Importation, infringement, domestic industry, remedy	1/10/2013

Inv. 337-TA-841 Complainent Technology Properties Limited LLC's Final Documentary Exhibit List (Comprehensive)

r. No	Cenf. Des.	Description	Bates Number	NOTIFICATION OF THE PARTY	Purpose	Status/Date Admitted
	C					
X-0161	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
K-0162	c	Dell's Second Supplemental Responses to TPL's Interrogatories (11,14.12)		Dell	Importation, infringement, domestic	1/10/2013
					industry, remedy	
X-0163	С	Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn
K-0164	Ċ.	Dell's First Supplemental Responses to TPL's Second Interrogatories (10/4/12)		Dell	Importation, infringement, domestic industry, remedy	1/10/2013
X-0165		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0166	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0167		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
X-0168		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0169	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0170	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0171	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0172	c	Withdrawn'	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0173		Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0174	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0175	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0176	C	Withdrawn	Withdrawn	Withdrawn -	Withdrawn	Withdrawn
CX-0177	С	Fajitsu's Responses to TPL's Second Interrogatories (9/10/12)		Fujitsu	Importation, infringement, domestic industry, remedy	1/10/2013
X-0178	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0179	c	Withdrawn	Withdrawn	Withdrawn .	Withdrawn	Withdrawn
X-0180	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Status/Date Admitted Withdrawn Withdrawn Withdrawn 1/10/2013 1/10/2013 1/10/2013 1/10/2013 1/10/2013 Withdrawn
Withdrawn Withdrawn 1/10/2013 1/10/2013 1/10/2013 1/10/2013
Withdrawn 1/10/2013 1/10/2013 1/10/2013 1/10/2013
1/10/2013 1/10/2013 1/10/2013 1/25/2013
1/10/2013 1/10/2013 1/25/2013
1/10/2013 1/25/2013
1/25/2013
1/10/2013
1 7
Withdrawn
1/10/2013
1/10/2013
1/10/2013
1/8/2013
Withdrawn
Withdrawn
Withdrawn
Withdrawn
1/10/2013
Withdrawn
1/10/2013

Ex No	TC8-0'52	Description	Bates Number	Snowening Witness	District of the Asset of the Asset of the	
	Des	Description		opportunity of the second	Purpose	Status/Date Admitted
CX-0201	С	HiTt's Second Supplemental Responses to TPL's First Interrogatories (9/24/12)		HiTi	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0202		HTT's Third Supplemental Responses to TPL's First Interrogatories (10/22/12)		HiTi	Importation, infringement, domestic industry, remedy	1/(0/2013
CX-0203	С	HTT's Fourth Supplemental Responses to TPL's First Interrogatories (11/14/12)		нті	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0204	С	HiTi's Responses to TPL's Second Interrogatories (9/10/12)		Hiri	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0205		HiTt's First Supplemental Responses to TPL's Second Interrogatories (9/25/12)		нт	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0206	С	HiTi'Second Supplemental Responses to TPL's Second Interrogatories (10/22/12)		HiTi	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0207	С	HTT's Responses to TPL's Third Interrogatories (9/24/12)	1	HiTi	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0208		HITI's First Supplemental Responses to TPL's Third Interrogatories (10/22/12)		ніті	Importation, infringement, domestic industry, remedy	1/9/2013
CX-0209	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0210	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0211	С	Withdrawn	Withdrawn	Withdrawn .	Withdrawn	Withdrawn
CX-0212	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0213	c	Kingston's Responses to TPL's First Interrogatories (5/31/12)		Kingston	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0214	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0215	С	Kingston's Supplemental Responses to TPL's First Interrogatories (9/17/12)		Kingston	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0216	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0217	c	Kingston's Second Supplemental Responses to TPL's Interrogatories Nos. 1,2,3,10,21,43,50 and 55 (11/2/12)		Kingston	Importation, infringement, domestic industry, remody	1/10/2013
CX-0218	С	Kingston's Responses to TPL's Second Interrogatories (9/10/12)		Kingston	Importation, infringement, domestic industry, remody	1/10/2013
CX-0219	С	Kingston's Supplemental Responses to TPL's Second Interrogatories (9/17/12)	·	Kingston	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0220	С	Withdrawn	Withdrawn	Withdrasvo	Withdrawn	Withdrawn

x. No	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Canton Maria Admitted
	Dex.	Description		openant ing		Status/Date Admitted
X-0221		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0222	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0223		Newegg/Roscwift's Responses to TPL's First Interrogalories (6/5/12)	-	Newegg/Rosewill	Importation, infringement, domestic industry, remedy	1/10/2013
X-0224	С	Newogg/Rosewill's First Supplemental Responses to TPL's First Interrogatories (9/14/12)		Newegg/Roscwill	Importation, infringement, domestic industry, remedy	1/10/2013
X-0225	С	Newegg/Rosewill's Second Supplemental Responses to TPL's First Interrogatories (10/22/12)		Newegg/Roscwill	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0226	c	Newegg/Roscwill's Second Supplemental Responses to TPL's First Interrogatorics (11/14/12)		Newegg/Rosewill	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0227		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0228		Newegg/Rosewill's Responses to TPL's Third Interrogatories (9/24/12)		Newegg/Rosewill	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0229		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0230	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0231		Withdrawn	Withdeawn	Withdrawn	Withdrawn	Withdrawn
CX-0232	С	Sciko Epson's Responses to TPL's First Interrogatories (5/31/12)		Sciko Epson	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0233	С	Seiko Epson's First Supplemental Responses to TPL's First Interrogataries (8/1/12)		Sciko Epson	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0234	c	Seiko Epson's Second supplemental Responses to TPL's First Interrogatories (8/28/12)		Sciko Epson	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0235	С	Sciko Epson's Third Supplemental Responses to TPL's First Interrogatories (10/8/12)		Seiko Epson	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0236	С	Scike Epson's Fourth Supplemental Responses to TPL's First Interrogetories (19/22/12)		Seiko Epson	Importation, infringement, domestic industry, remody	1/10/2013
CX-0237	С	Sciko Epson's Sixth Supplemental Responses to TPL's First Interrogatories (11/14/12)		Sciko Epson	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0238	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0239	С	Seiko Epson's First Supplemental Responses to TPL's Second Interrogatories (9/26/12)		Sciko Epson	Importation, infringement, domestic industry, remedy	1/10/2013
CX-0240	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

/ithdrawn /ithdrawn	Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn	Withdrawn Withdrawn Withdrawn Withdrawn	Withdrawn Withdrawn Withdrawn	Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn
Vithdrawn Vithdrawn Vithdrawn Vithdrawn	Withdrawn Withdrawn Withdrawn Withdrawn	Withdrawn Withdrawn Withdrawn	Withdrawn Withdrawn Withdrawn Withdrawn	Withdrawn Withdrawn Withdrawn Withdrawn
Vithdrawn Vithdrawn Vithdrawn	Withdrawn Withdrawn Withdrawn	Withdrawn	Withdrawn Withdrawn	Withdrawn Withdrawn
Vithdrawn Vithdrawn Vithdrawn	Withdrawn Withdrawn	Withdrawn	Withdrawn	Withdrawn
Vithdrawn . Vithdrawn	Withdrawn			X.
Vithdrawn		Withdrawn	Withdrawn	Withdrawa
	Withdrawn			Trinuadva
Vithdrawn		Withdrawn	Withdrawn	Withdrawn
	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Vithdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Vihdravn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn .	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
Wildrawn	Withdrawn	Withdrawn	Withdrawn ·	Withdrawn
W W W	fihdrawn fihdrawn fihdrawn fihdrawn fihdrawn fihdrawn	Fithdrawn Withdrawn Withdrawn	filhdrawn Withdrawn	Tilldrawn Withdrawn Withdrawn Withdrawn Withdrawn Tilldrawn Withdrawn Withdrawn Withdrawn Withdrawn

The state of the s	A		D. C.			
x. No	Des	Description	Bates Number	Sponspring Witness;	Purpose	Status/Date Admitted
		Withdrawn	Withdrawn	Withdrawn		Withdrawn
X-0262	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0263	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0264	Ċ	Withdraws	Withdrawn	Withdrawa	Withdrawn	Withdrawn
CX-0265	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0266	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0267	С	Withdrawn	Withdrawn	Withdenwn	Withdrawn .	Withdrawn
CX-0268	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0269	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0270	С	Withdraws	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0271	c	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0272	С	Withdrawn	Withdrawn	Withdrawn	Withdraws	Withdrawn
CX-0273	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0274		Withdrawn	Withdrawn	Withdrawn	Withdrown	Withdrawn
CX-0275		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0276	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0277	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0278	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0279		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0280	C	Withdrawn	Withdrawn	Withdrasvn	Withdrawn	Withdrawn

I. No	Conf.	Description	Bates Number	Sponsoring Witness	D. C.	Commence
	Des.	gan dir			Purpose.	Status/Date Admitted
CX-0281	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0282	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0283	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0284		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0285	С	Widsdrawn	Withdrawa	Withdrawn	Withdrawn	Withdrawn
CX-0286	С	Withdrawn	Withdrawn	Withdrawn	Withdrown	Withdrawn
CX-0287	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0288	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0289	С	Withdrawa	Withdrawn .	Withdrawn	Withdrawn	Withdrawn
CX-0290	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0291	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0292	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0293	С	Vostro 355 Product Specification	DELL00000905- DELL00001094	Dale Buscaino	Infringement	1/10/2013
CX-0294		S752 Uger's Manual	TPL1027646-TPL1027824	Dale Buscaino	Infringement	1/10/2013
CX-0295		M3970 Product Specification	TPL1037694-TPL1037696	Dale Buscaino	Infringement	1/9/2013
CX-0296	С	SD Specifications Part 1 V2.00 Section 3.5-3.7	TPL379909-TPL380092	Dale Buscaino	Infringement	1/10/2013
CX-0297	С	MFC-J6510DW Schematics	BROTHER00054849 BROTHER00054846 BROTHER00054856	Dale Buscaino	Infringement	1/10/2013
CX-0298	С	MFC-J6510DW BOM	BROTHER00061113- BROTHER00061120	Dale Buscaino	Infringement	1/10/2013
CX-0299	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0300	c	GL837SC Datashoot	CANITC000174-212	Dale Buscaino	Infringement	1/10/2013

r, No	Couf.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.	Description				Status/Date Admitted
X-0301	С	MG8220 QM3-9716 board schomatics	CANITC000258	Dale Buscaino	Infringement	1/10/2013
X-0302		Vostro 3555 Owner's Manual	DELL00000001- DELL00000116	Dale Buscaino	Infringement	1/10/2013
X-0303	С	Vostro 3555 Schematics	DELL00000775- DELL00000877	Dale Buscaino	Infringement	1/10/2013
X-0304	C .	Dell 19int Long Bay Reader	DELL00000882- DELL00000904	Dale Buscaine	Infringement	1/9/2013
X-0305	С	7in I Card Connector	DELL00037797- DELL00037800	Dale Buscaino	Infringement	1/10/2013
X-0306	С	19in1 Long Bay Roader	DELL00039253- DELL00039283	Dale Buscaino	Infringement	1/9/2013
X-0307	С	19in1 Long Bay Reader	DELL00039284- DELL00039312	Dale Buscaino	Infringement	1/9/2013
CX-0308	С	Withdrawn	Withdrawn .	Withdrawn	Withdrawn	Withdrawn
CX-0309	С	S752 Schematics	FJ0054804-FJ0054928	Dale Buscaino	Infringement	1/10/2013
CX-0310	С	4in I Card Connector	HIT1000005	Dale Buscaino	Infringement	1/28/2013
CX-0311	С	P110S Schematics	HIT1001472-HIT1-001473	Dale Buscaino	Infringament	1/10/2013
CX-0312	С	CS1S-25*-*-* series connector	HP089674-HP089677	Dale Buscaino	Infringement	1/10/2013
CX-0313	С	HP175739-758; HP ID11 Stargell Card Reader Schematics	HP089683-HP089684	Dale Buscaino	Infringement	1/10/2013
CX-0314	C	HP ID11 Stargell 6in1 Media Card Reader specification	HP089685-710	Dale Buscaino	Infringement	1/10/2013
CX-0315	C	2ia I Card Connector	HP172842-HP17843	Dale Buscaino	Infringement	1/10/2013
CX-0316	c	Memory Stick/Memory Stick Pro specifications V1.3	HP175436-HP175477	Dale Buscaino	Infringement	1/10/2013
CX-0317	С	AU6433 Technical Reference Manual	HP175739-HP175758	Dale Buscaino	Infringement	1/10/2013
CX-0318	c	AU6476 Technical Reference Manual	HP175779-HP175798	Dale Buscaino	Infringement	1/10/2013
CX-0319	С	HP 644491-001 Card Reader schematics	HP175880-HP175882	Dale Buscaino	Infringement	1/10/2013
CX-0320	C	Photosmart 5510 Schematics, Deposition of David Tribolet, Exhibit 4	HP176000-HP176004	Dale Buscaino	Infringement	1/10/2013

x. No	Conf.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.	Description;			Purpose	Status/Dale Admitted
X-0321		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0322	-	RTSS130 Datasheet	ROSE0001568-ROSE0001583	Dale Buscaine	Infringement	1/9/2013
X-0323	С	Artisan 730 Schematics	SEC841_0013733	Dale Buscaino	Infringement	Excluded 1/4/13
X-0324	c	RTS5181 Detochect	SEC841_0036258- SEC841_0036283	Dale Buscaino	Infringement	1/9/2013
X-0325	С	USB 2601/2602 Datashoot	SEC841_0036339- SEC841_0036364	Dale Buscaino	InTringement	1/10/2013
CX-0326	С	USB2602/USX2007 Epson Firmware Spoc	SEC841_0067848- SEC841_0067860	Dale Buscaino	Infringement	1/10/2013
CX-0327		Brother Quick Setup Geide	TPL1027556-TPL1027595	Dale Buscaino	Infringement	1/10/2013
CX-0328		Artisan 730 Product Brochure	TPL1027554-TPL1027555	Dale Buscaino	infringement	1/10/2013
CX-0329	-	P110S Product Brochure	TPL1027596-TPL1027599	Dale Buscaine	Infringement	1/10/2013
CX-0330		P110S User Manual	TPL1027600-TPL1027631	Dale Buscaino	Infringement	1/10/2013
CX-0331	1	Withdrawn	Withdrawn	Wilhdrawn	Withdrawa	Withdrawn
CX-0332	\dagger	Artisan 730 electronic User's Guide Mamory Card Types	TPL1027632-TPL1027639	Dale Buscaino	Infringement	1/10/2013
CX-0333		Artisan 730 Quick Guide	TPL1027640	Dale Buscaino	Infringement	1/10/2013
CX-0334	T	S732 Notebook Data Sheet	TPL1027641-TPL1027645	Dale Buscaino	Infringament	1/10/2013
CX-0335	+	MG88200 series on-seroen manual Main Components	TPL1028019	Dole Buscaino	Infringement	1/10/2013
CX-0336		MG88200 series on-sereen manual Setting up the eard slot as the Memory Card Drive of the Computer	TPL1028020-TPL1028026	Dnle Buscoino	Infringement	1/10/2013
CX-0337		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrasyn
CX-0338		MG8200 series specifications	TPL1028027-TPL1028028	Dale Buscaino	Infringement	1/10/2013
CX-0339		6in1 multi-memory card connector	TPL1028033-TPL1028034	Dale Buscaino	Infringement	1/10/2013
CX-0340	+-	6in1 multi-memory card connector	TPL1027546-TPL1027547	Dale Buscaino	Infringement	1/10/2013

x. No	Conf. Des	Description:	Bates Number	Sponsoring Witness 1	Purpose.	Status/Date Admitted
	100					
X-0341		6in1 Card Connector	TPL1027548-TPL1027549	Dale Buscaino	Infringement	1/10/2013
X-0342		7ESMD-X0-0000 6in1 Card Connector	TPL1028035-TPL1028037	Dale Butcaino	Infringement	1/10/2013
X-0343		727003351XX 6in! Card Connector	TPL1028038-TPL1028039	Dale Buscaino	Infringement	1/10/2013
X-0344		Sin1 Card Connector	TPL1037334-TPL1037335	Dale Buscaino	Infringement	1/8/2013
X-0345		Aspire Notebook Series Quick Guide	TPL1037336-TPL1037345	Dale Buscaino	Infringement	1/10/2013
X-0346		Aspira 7750 Series Notebook Specifications	TPL1037346-TPL1037349	Dale Buscaino	Infringement	1/10/2013
CX-0347		Aspire X1935 Service Guide	TPL1037350-TPL1037361	Dale Buscaino	Infringement	1/10/2013
CX-0348		AU6475 Technical Reference Manual	TPL1037632-TPL1037651	Dale Buscaino	Infringement	1/9/2013
CX-0349		Rosewill USB 2.0 External 74-in-1 Card Reader Product Specification	TPL1037652-TPL1037653	Dale Buscaino	Infringement	1/10/2013
CX-0350		HP 630 Maintenance and Service Guide; Deposition of Robin Castell, Exhibit 17	TPL1037654-TPL1037677	Dale Buscaino	Infringement	1/10/2013
CX-0351		CompactFlash Specification Rev 4.0 Section 4.2	TPL1037697-TPL1037891	Dale Buscaino	Infringement	1/10/2013
CX-0352		SanDisk SmartMedia 64MB Product Manual Section 3	TPL1037892-TPL1037955	Dale Buscaino	Infringement	1/10/2013
CX-0353		HP Pavilion HPE h9-1130 Product Specification	TPL1038049-TPL1038056	Dale Buscaino	Infringement	1/10/2013
CX-0354	c	The MultiMediaCard System Specification V3.31 Section 2	TPL138316-TPL138465	Dale Buscaino	Infringement	1/10/2013
CX-0355	С	The MultiMedisCard System Specification v4.1 Section 3	TPL378310-TPL378474	Dale Buscaino	Infringement	1/10/2013
CX-0356	С	SD Specifications Part I V2.00 Section 2	TPL379724-TPL379908	Dale Buscaino	Infringement	1/10/2013
CX-0357		xD-Picture Card Specification Version 1.20	TPL390697-TPL390762	Dale Buscaino	Infringement	1/10/2013
CX-0358	-	xD-Picture Card Format Specification Version 1.11 Section 2 Appendix 3	TPL390777-TPL390815	Daic Buscaino	Infringement	1/10/2013
CX-0359		xD-Picture Card Host Guidelines Version 1,20 Section 4,5	TPL390816 - TPL390888	Date Buscaino	Infringement	1/10/2013
CX-0360		Memory Stick Pro Specification Summary Dec. 2004 Section 4	TPL391084-TPL391111	Dale Buscaino	Infringement	1/10/2013

x. No	Cont.	Description	Bates Number	Spousoring Witness	Parpose	Status/Date Admitted
	Conf. Des.				Parpose	
CX-0361		SanDisk SD Card Product Manual V2,2 Section 1	TPL391509-TPL391631	Dale Buscaino	Infringement	1/10/2013
CX-0362		SanDisk MultiMediaCard Product Manual Rev. 2 Section I	TPL391632-TPL391717	Dale Buscaino	Infringement	1/10/2013
CX-0363		Brother Basic User's Guide MFC-J6510DW	BROTHER00009238- BROTHER00009400	Dale Buscaino	Infringement	1/10/2013
CX-0364		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0365 .	c	Declaration of Conformity with Dell Specifications	DELL00000878- DELL00000881	Dale Buscaino	Infringement	1/10/2013
CX-0366	С	Realtek RT\$5138	DELL00037801- DELL00037813	Dale Buscaino	Infringement	1/10/2013
CX-0367	С	Realtek RT\$\$209	HP089839-HP089851	Dale Buscaine	Infringement	1/10/2013
CX-0368	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0369	С	Roaltek RTL3411	HP175478-HP175520	Dale Buscaine	Infringement	1/10/2013
CX-0370		Broadcom BCM577785 Product Brief	TPL1038147-TPL1038148	Dale Buscaine	Infringement	1/10/2013
CX-0371		JMicron JMB388 Product Brief	TPL1038157-TPL1038159	Dale Buscaino	Infringement	1/10/2013
CX-0372		JMicron JMB385 Product Brief	TPL1038151-TPL1038153	Dale Buscaino	Infringement	1/10/2013
CX-0373		JMicron JMB387 Product Brief	TPL1038154-TPL1038156	Dale Buscaino	Infringement	1/10/2013
CX-0374		Alcor Micro AU6437 Technical Reference Manual	TPL1038127-TPL1038146	Date Buscaino	Infringement	1/10/2013
CX-0375		JMicron JMB389 Product Brief	TPL1038160-TPL1038162	Dale Buscaino	Infringement	1/10/2013
CX-0376	С	Realtek RTS5159	HP089810-HP089824	Dale Buscaino	Infringement	1/(0/2013
CX-0377		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0378	c	Alcor Micro AU6475	DELL00089394- DELL00089410	Dale Busenino	Infringement	1/10/2013
CX-0379	С	Plastron CM4S-085	BROTHER00087960- BROTHER00088045	Dale Buscaine	Infringement	1/10/2013
CX-0380	С	MB8AA1320PMC-G-BNDEI Pasta	BROTHER00137534 BROTHER00137529- BROTHER00137535	Dale Buscaino	Infringement	1/10/2013

x. No	Couf.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Den	Description:				State Barrier and State Barrie
CX-0381	С	MB8AA4321PB-GEI Dolce	BROTHER01053254 BROTHER01053247- BROTHER01053255	Dale Buscaino	Infringement	1/10/2013
CX-0382	C	MB8AA4011PB Apricot	BROTHER®1146904 BROTHER®1146896- BROTHER®1146906	Dale Buscaino	Infringement	1/10/2013
CX-0383	С	Yamaichi H00I-A022	BROTHER00088318- BROTHER00088363	Dale Buscaine	Infringement	1/10/2013
CX-0384	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0385	С	Fujitsu FCN-568Q029	CANITC000115- CANITC000130	Dale Buscaino	Infringement	1/10/2013
CX-0386	С	Genosys Logic GL837C	CANITC000132- CANITC000172	Dale Buscaine	Infringement	1/10/2013
CX-0387	С	Taisol Electronies Co, Ltd. WS1-7098	CANITCO01342	Dale Buscaine	Infringement	1/10/2013
CX-0388	С	Integrated Circuit Solutions IC1230-F128LQ(C)	CANITC001297- CANITC001323	Dale Buscaine	Infringement	1/10/2013
CX-0389	c	Foxconn WK21921-C2-4F	CANITC001843	Dale Buscaino	Infringament	1/10/2013
CX-0390	С	Alcor Micro AU6476-GBL	CANITC001813- CANITC001842	Dale Buscaino	Infringement	1/10/2013
CX-0391	С	Alps Electronies Co., SCDBA0101	CANITC001811- CANITC001812	Dale Buscaino	Infringement	1/10/2013
CX-0392	С	Alcor Micro, Corp AU6378-GAL	CANITC001380- CANITC001422	Dale Buscaino	Infringement	1/10/2013
CX-0393	С	Realtek Semiconductor Corp. RTS5209-GR	FJ0049501-FJ0049513	Dale Buscaino	Infringement	1/10/2013
CX-0394	С	Resitek Semiconductor Corp. RTS5229-GR	FJ0049514-FJ0049525	Dale Buscoino	Infringement	1/10/2013
CX-0395	С	O2Micro Corp. OZ711MZ2TN-A-0	FJ0055813-FJ0055849	Dale Buscaino	Infringement	1/10/2013
CX-0396	С	O2Micro Corp. OZ600RJ1LN-B-0-TR	FJ0055760-FJ0055812	Dale Buscaino	Infringement	1/10/2013
CX-0397	c	Alps Electric - SCDAAA0102 (Fig 5)	FJ0051497-FJ0051570	Dale Buscaino	Infringement	1/10/2013
CX-0398	С	Intel Corp. AF82SM35	FJ0055988-FJ0056077	Dalo Buscaino	Infringement	1/10/2013
CX-0399	C	Yamaichi Electronics Co., Ltd. FRS018-2311-0 (Fig 7,8)	FJ0051571-FJ0051611	Dale Buscaino	Infringement	1/10/2013
CX-0400	c	TaiSol Electronics Co., Ltd PSB1E901A	Hiti000004	Dale Buscaine	Infringement	1/10/2013

x No	Conf.	Description	Bates Number	Sponsoring Witness	Parnase	Status/Date Admitted
	Des.	Description	The second secon		Parpase	
	5.					1/10/2013
X-0401	С	Phison Electronics Corp. PS3002	Hiti000028-Hiti000066	Dale Buscaino	Infringement	1/10/2013
					·	
X-0402	С	Genesys Logic Inc. GL826	Hiti000500-Hiti000521	Dalo Buscaino	Infringement	1/10/2013
CX-0403	C	Taitwun R015-B10-LM	HP090069-HP090072	Dale Buscaino	Infringement	1/10/2013
1						
CX-0404	c	Realtok RYSS158E	HP089796-HP089809	Dale Buscaino		
LA-0404	10	Keanek K153138E	HP089796-HP089809	Dale Buscaino	Infringement	1/10/2013
CX-0405	С	JMicron JMB385	HP172927-HP172956	Dale Buscaino	Infringement	1/10/2013
222-0403	-	21/10/01/21/10/20	111 172527410 172550	Date Offscamo	in agoneit	
CX-0406	С	Realtek RTS5159	HP177308 -HP177321	Dale Buscaine	Infringement	1/10/2013
						1
CX-0407	c	Schematic	HP089501	Dale Buscaino	Infringement	1/10/2013
				1		
CX-0408	C	ALPS Electric SCDA7A1300	HP089511-HP089512	Dale Buscaino	Infringement	1/10/2013
			1	1		
CX-0409	C	Renltek RT\$5229	HP089865-HP089876	Dale Buscaino	Infringement	1/10/2013
	1			1	1	1
01.0110	_	AT DE CLASS CORPORATION	ITPURCADO LIDORADAS	2.2	1.5	1405012
CX-0410	C	ALPS Electric SCDAAA0100	HP089889-HP089901	Dala Buscaino	Infringement	1/10/2013
	1		1	1	1 *	
CX-0411	c	Realtek RTS5219	HP089852-HP089864	Dale Buscaino	Infringement	1/10/2013
CA-OTT	-	ACARCK RESSZES	717 047432-711 047404	Date Descario	indingencit	171012413
	ĺ					,
CX-0412	C	Northstar 72700327123	HP089735-HP089738	Dale Buscaino	Infringement	1/10/2013
		A SHOULD THINK (SHEET), ALL Y MAN ARROY SHEET WAS ARROY OF THE SHEET O	1 500 500 500 500 500 500 500 500 500	300 State of Contract of Contr		2004
	1					
CX-0413	C	Realtek RTS5158	HP089825-HP089838	Dale Buscaino	Infringement	1/10/2013
	1		1	1	1	
CX-0414	C	PLASTRON CM4S-12* Scries	HP089563-HP089566	Dale Buscaino	Infringement	1/10/2013
	1		1			
CX-0415	C	PLASTRON CM4S-20*-H Series	HP089567-HP089668	Dale Buscaino	Infringement	1/10/2013
			1	· I		1
CX-0416	c	REALTEK RTS5138	HP089783-HP089795	Dale Buscaine	Infringement	1/10/2013
CX-0416	10	REALIER RISSIS	111-083783-111 0113733	Date Bilacamo	January Control	37.02013
	1	× ×				
CX-0417	c	PLASTRON CS1M-05*** Series	HP089912-HP089915	Dale Buscaino	Infringement .	1/10/2013
	1					
) · · · · · · · · · · · · · · · · · · ·				
CX-0418	C	PLASTRON CS1M-89*** Series	HP090059-HP090062	Dale Buscaino	Infringement	1/10/2013
	l					
CX-0419	C	MSM8960	HP173020-HP173119	Dale Buscaino	Infringement	1/10/2013
			1	1		
CX-0420	C	PLASTRON CS1R-073-H-N	HP089715-HP089718	Dale Buscaino	Infringement	1/10/2013
	1		100	1	1	1

x, No	Conf. Des.	Description	Bates Number	Spousoring Witness	Purpose	Status/Date Admitted
	Des.	Description				
X-0421	C	PLASTRON CS1S-201-H-N-I1P	HP089727-HP089730	Dale Buscaine	Infringement	1/10/2013
X-0422	С	PLASTRON CS1S-25*** Scries	HP089723-HP089726	Dale Buscaino	Infringement	1/10/2013
X-0423	С	JMicron JMB709	HP172987-HP173019	Dale Buscaino	Infringement	1/10/2013
CX-0424	С	REALTEK RTS5128	HP089770-HP089782	Dale Buscaino	Infringement	1/10/2013
X-0425	С	REALTEK RTS5239	HP089877-HP089888	Dalo Buscaine	Infringement	1/10/2013
CX-0426	С	PLASTRON CS1S-3*8-H-N	HP089743-I-IP089746	Dale Buscaine	Infringement	1/10/2013
CX-0427	С	PROCONN 8793-N009-05A0	HP089732-HP089734	Dalc Buscaino	Infringement	1/10/2013
CX-0428	c	PROCONN SDSN09-A0-0015	HP089902-HP089904	Dale Buscaino	Infringement	1/10/2013
CX-0429	С	Taisol 156-1000302601	HP090065-HP090066	Dale Buscaine	Infringement	1/10/2013
CX-0430		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0431	С	Taitwun PSDBT5-09GLBS1N14H0	HP089506-HP089507	Dale Buscaino	Infringement	1/10/2013
CX-0432	С	Taitwum PSDBTC-09GL8SIN14H0	HP089503-HP089505	Dale Buscaino	Infringement	1/10/2013
CX-0433	С	Taitwun PSDAT0-11GLBS1N14H0-11P	HP089921-HP089983	Dale Buscaino	Infringement	1/10/2013
CX-0434	С	Tuisol Electronics Co., Ltd. 143-1309400601; Deposition of David Tribolet, Exhibit 5	HP176023-HP176025	Dale Buscaino	Infringoment	1/10/2013
CX-0435	С	Hon Hai Precision Ind. Co. Ltd. (FOXCONN) WK21927-ASSI-4H	HP176015	Dale Buscaino	Infringement	1/10/2013
CX-0436	С	Schematics, Deposition of David Tribolet, Exhibit 7	HP175902	Dale Buscaino	Infringem eni	1/10/2013
CX-0437	c	FCR-HS3 Schematics; Deposition of Joel Tang, Exhibit 14	KT000510	Dale Buscaino	Infringoment	1/10/2013
CX-0438	С	Alcor Micro Corp. AU6475 Technical Reference Manual	DELL00089377- DELL00089393	Dale Buscaino	Infringement	1/10/2013
CX-0439	С	JMicron Technology Corp. JMB380 Datashost	HP172844-HP172926	Dale Buscaino	Infringement	1/10/2013
CX-0440	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x No	Conf.	Description	Bates Number	Sponsoring Witness,	Purpose	Status/Date Admitted
· Carlotte Back	Des.					
A. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	54.05		THE PARTY OF A STATE OF	AND SECTION OF THE SE		
K-0441	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
K-0442	c	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
						Transport of the state of the s
X-0443	С	Roallok Semiconductor Corp. RTS5128	FJ0049475-FJ0049487	Dale Buscaino	Infringement	1/10/2013
X-0444	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0445	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0446	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
		9				
CX-0447	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0448	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0449	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn -
CX-0450	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa .
CX-0451	С	O2 Micro International Ltd., OZ600FJ0LN	FJ0055717-FJ0055759	Dale Buscaino	Infringement	1/10/2013
CX-0452	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0453	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0454	С	Yamaichi Electronics Co. Ltd. 4-in-1 (SD, MMC, MS, xD) - FRS016-3000-0(01)	SEC841_0033852- SEC841_0033854	Dale Buscaino	Infringement	1/10/2013
CX-0455	С	Yamaichi Electronics Co. Ltd. 3-in-1 (SD, MMC, MS) - FRS016-3100-0	SEC841_0034541- SEC841_0034554	Dule Buscaino	Infringement	Excluded 1/4/13
CX-0456	С	Realtek Semiconductor Corp. RTS5186-VDD-GR	SEC841_0035419- SEC841_0035431	Dale Buscaine	Infringement	1/10/2013
CX-0457	С	Renesas Electronics Corp. X01C01CC / CA96	SEC841_0013758- SEC841_0013760	Dale Buscaino	Infringement	1/10/2013
CX-0458	c	Yamaichi Electronics Co. Ltd. 3-in-1 (SD, MMC, MS-Duo) - FRS019-3000-0(01)	SEC841_0034132- SEC841_0034136	Dale Buscaino	Infringement	1/10/2013
CX-0459		HP Part Store Product List - 644491-001	TPL1046146-TPL1046151	Dale Buscaino	Infringement	Excluded 1/4/13
CX-0460	-	HP Part Store Product List - 644492-001	TPL1046152-TPL1046153	Dale Buscaino	Infringement	Excluded 1/4/13

x. No	Conf. Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Conf. Description Des.				
X-0461	Photograph of Acer Desktop AX1935	TPL1038380	Dale Buscaino	Infringement	1/10/2013
X-0462	Photograph of Acer Desktop AX1935	TPL1038376	Dale Buscaino	Infringement	1/10/2013
X-0463	Photograph of Acer Desktop AX1935	TPL1038388	Dale Buscaino	Infringement	1/10/2013
X-0464	Photograph of Acer Desktop AX1935	TPL1038392	Dale Buscaino	Infringement	1/10/2013
X-0465	Photograph of Acer Desktop AX1935	TPL1038386	Dale Buscaino	Infringement	1/10/2013
CX-0466	Photograph of Acer Aspire 7750	TPL1038325	Dale Buscaine	Infringement	1/10/2013
CX-0467	Photograph of Acer Aspire 7750	TPL1038330	Dale Buscaino	Infringement	1/10/2013
CX-0468	Photograph of Acor Aspire 7750	TPL1038328	Dalo Busonino	Infringement	1/10/2013
CX-0469	Photograph of Acer Aspire 7750	TPL1038333	Dale Buscaino	Infringement	1/10/2013
CX-0470	Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn
CX-0471	Photograph of Acer Aspire M3970	TPL1038498	Dale Buscaino	Infringement	1/10/2013
CX-0472	Photograph of Acer Aspire M3970	TPL1038499	Dale Buscaino	Infringement	1/10/2013
CX-0473	Photograph of Acer Aspire M3970	TPL1038509	Dale Buscaino	Infringement	1/10/2013
CX-0474	Photograph of Brother MFC-J6510DW	TPL1038641	Dale Buscaino	Infringement	1/10/2013
CX-0475	Photograph of Brother MFC-i6510DW	TPL1038644	Dale Buscaino	Infringement	1/10/2013
CX-0476	Photograph of Brother MFC-J6510DW	TPL1038637	Dale Buscaino	Infringement	1/10/2013
CX-0477	Photograph of Brother MFC-J6510DW	TPL1038640	Dule Buscaino	Infringement	1/10/2013
CX-0478	Photograph of Canon PIXMA MG8220	TPL1038776	Dale Buscaino	Infringement	1/10/2013
CX-0479	Photograph of Canon PIXMA MG8220	TPL1038756	Dale Buscaino	Infringement	1/10/2013
CX-0480	Photograph of Canon PIXMA MG8220	TPL1038754	Dale Buscaino	Infringement	1/10/2013

	Conf. Des.	Descriptor.	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
X-0481		Photograph of Canon PIXMA MG8220	TPL1038794	Dale Buscaino	Infringement	1/10/2013
			B			
X-0482		Photograph of Canon PIXMA MG8220	TPL1038748	Dale Buscaine	Infringement	1/10/2013
					E 9 4	
X-0483		Photograph of Canon PIXMA MG8220	TPL1038757	Dale Buscaino	Infringement .	1/10/2013
X-0484		Photograph of Canon PIXMA MG8220	TPL1038751	Dale Buscaino	Infringement	1/10/2013
X-0485	\vdash	Photograph of Canon PIXMA MG8220	TPL1038758	Dale Buscaino	Infringement	1/10/2013
					in the second	
CX-0486		Photograph of Canon PIXMA MG8220	TPL1038760	Dale Buscaino	Infringement	1/10/2013
X-0487		Photograph of Dell Vostro 3555	TPL1039030	Dale Buscaino	Infringement	1/10/2013
		**				
CX-0488		Photograph of Dell Vostro 3555	TPL1039042	Dale Buscaino	Infringement	1/10/2013
CX-0489		Photograph of Dell Vostro 3555	TPL1039033	Dale Buscaino	Infringement	1/10/2013
CX-0490	\vdash	Photograph of Dell Vostro 3555	TPL1039043	Dale Buscaino	Infringement	1/10/2013
CX-0491		Photograph of Dell Vostro 3555	TPL1039037	Dale Buscaino	Infringement	1/10/2013
CX-0492	-	Photograph of Doll Vostro 3555	TPL1039041	Dale Buscaino	I-6:	1/10/2013
LA-0494		Photograph of Deli Vosito 3555	1PL1039041	Date Buscamb	Infringement	1710/2013
CX-0493	+-	Photograph of Dell OptiPlex 3010	TPL1038972	Dale Buscaino	Infringoment	1/10/2013
CX-0494		Photograph of Delt OptiPlex 3010	TPL1038952	Dale Buscaino	Infringement	1/10/2013
CX-0495		Photograph of Dell OptiPiex 3010	TPL1038979	Dalo Buscaino	Infringement	1/10/2013
CX-0493		Prodograph of Den Ophrick 5010	17L1038979	Date Buscanto	minagement	1714/2013
CX-0496	+	Photograph of Dell OptiPlex 3010	TPL1038984	Dale Buscaino	Infringement	1/10/2013
		4				
CX-0497		Photograph of Dell OptiPlex 3010	TPL1038980	Dale Buscaino	Infringement	1/10/2013
CX-0498	-	Photograph of Dell OptiPlex 3010	TPL1038982	Dale Buscaino	Infringement	1/10/2013
CA-0470		i notograpa or bon opin accionio	11.01000002	CAN DESCRIP		
CX-0499	+-	Photograph of Dell OptiPlex 3010	TPL1038978	Dale Buscaino	Infringement	1/10/2013
CX-0500		Photograph of Dell OptiPlex 3010	TPL1038983	Dale Buscaino	Infringement	1/10/2013

z. No	Conf. Dea.	Description:	Bates Number	Sponsoring Witness	Ридрове	Status/Date Admitted
X-0501	1	Photograph of Dell OptiPlex 3010	TPL1038973			
24-0201		Cholograph of Gen Ophrack 5010	IPL1038973	Dale Buscaino	Infringement	1/10/2013
X-0502		Photograph of Dell OptiPlex 3010	TPL1038953	Dale Buscaino	Infringement	1/10/2013
CX-0503		Photograph of Dell OptiPlex 3010	TPL1038954	Dale Buscaino	Infringement	1/10/2013
X-0504	-	Photograph of Dell OptiPlex 3010	TPL1038974	Dale Buscaino	I-Ci	
			1121038514	Date Buscand	Infringement	1/10/2013
CX-0505		Photograph of Dell OptiPlex 3010	TPL1038956	Dale Buscnino	Infringement	1/10/2013
CX-0506		Photograph of Dell OptiPlex 3010	TPL1038970	Dale Buscaino	Infringement	1/10/2013
OAR DEED		D				
CX-0507		Photograph of Fujitsu Lifebook S752	TPL1039263	Dale Buscaino	Infringement	1/10/2013
CX-0508	-	Photograph of Fujitsu Lifebook S752	TPL1039265	Dale Buscaino	Infringement	1/10/2013
CX-0509		Photograph of Fujitsu Lifebook S752	TPL1039272	Dale Buscaino	Infringement	1/10/2013
CX-0510		Photograph of HiTi Studio On the Go P1 10S	TPL1039353	Dalo Buscaino	Infringement	1/10/2013
CX-0511		Photograph of Hill Studio On the Go P110S	TPL1039355	Dule Buscaino	Infringement	1/10/2013
CX-0512		Photograph of HiTi Studio On the Go P110S	TPL1039347	Dalc Buscaino	Infringement	1/10/2013
CX-0513		Photograph of HiTi Studio On the Go P110S	TPL1039350	Dale Buscaino	Infringement	1/10/2013
CX-0514		District Annual Court Co	7701 1020244	D.I. D	1.02	Lisamus
CX-0314		Photograph of HiTi Studio On the Go P110S	TPL1039356	Dale Buscaino	Infringement	1/10/2013
CX-0515	-	Photograph of HP Photosmart 5510	TPL1039686	Dale Buscaino	Infringement	1/10/2013
CX-0516		Photograph of HP Photosman 5510	TPL1039685	Dale Buscaino	Infringement	1/10/2013
			R .			
CX-0517		Photograph of HP Photosmart 5510	TPL1039694	Dale Buscaino	Infringement	1/10/2013
CX-0518	+	Photograph of HP Photosmart 5510	TPL1039693	Dale Buscaino	Infringement	1/10/2013
CX-0519	+	Photograph of HP Photosman 5510	TPL1039700	Dalo Buscaino	Infringement	1/10/2013
		a a constant of the constant o				
CX-0520	1	Photograph of HP Photosmart 5510	TPL1039688	Dale Buscaino	Infringement	1/10/2013

L No	Cont	Description	Bater Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Dex.	Description Photograph of HP Photosmant 5510			4 7 7 7 7	
K-0521		Photograph of HP Photosmart \$510	TPL1039699	Dale Buscaino	Infringement	1/10/2013
X-0522		Photograph of HP Photosmart 5510	TPL1039703	Dale Buscaino	Infringement	1/10/2013
X-0523		Photograph of HP Slimline \$5-1260 (HP ID11 Stargell 6in1 Media Card Rander)	TPL1039675	Dale Buscaino	Infringement	1/10/2013
C-0524		Photograph of HP Slimlino S5-1260 (HP ID11 Stargell 6in1 Media Card Reader)	TPL1039642	Dale Buscaino	Infringement	1/10/2013
K-0525	-	Photograph of HP Slimline S3-1260 (HP ID11 Stargell 6int Media Card Reader)	TPL1039655	Dale Buscaino	Infringement	1/10/2013
X-0526		Photograph of HP Stimline S5-1260 (HP ID11 Stargell 6in1 Media Card Reader)	TPL1039659	Date Buscaino	Infringement	1/10/2013
X-0527		Photograph of HP Slimlino S5-1260 (HP ID11 Stargell 6in1 Media Card Reader)	TPL1039650	Dale Buscaino	Infringement	1/10/2013
X-0528		Photograph of HP Slimline S5-1260 (HP ID11 Stargell 6in1 Media Card Reader)	TPL1039653	Dale Buscaino	Infringement	1/10/2013
X-0529		Photograph of HP Slimline S5-1260 (HP ID11 Stargell 6in1 Modia Card Reader)	TPL1039658	Dale Buscaino	Infringement	1/10/2013
X-0530		Photograph of HP Slimiline S5-1260 (HP IDI I Stargell 6in1 Media Card Reader)	TPL1039657	Dale Buscaino	Infringement	1/10/2013
X-0531		Photograph of HP Slimline SS-1260 (HP ID11 Stargell 6in1 Media Card Reader)	TPL1039656	Dale Busceino	Infringement	1/10/2013
X-0532	-	Photograph of HP 630 Notebook Computer -	TPL1039519	Dale Buscaino	Infringement	1/10/2013
X-0533	-	Photograph of HP 630 Nosebook Computer	TPL1039531	Dalo Buscaino	Infringement	1/(0/2013
X-0534		Photograph of HP 630 Notebook Computer	TPL1039521	Dale Buscaino	Infringement	1/10/2013
X-0535		Photograph of HP 630 Notebook Computer	TPL1039527	Dale Buscaino	Infringement	1/10/2013
X-0536		Photograph of HP Pavilion HPE Phoenix h9-1130 (HP 644491-001 Card Reader)	TPL1039622	Dale Buscaino	Infringement	1/(0/2013
X-0537	-	Photograph of HP Pavilion HPE Phoenix h9	TPL1039629	Dale Buscaino	Infringement	1/10/2013
CX-0538		Photograph of HP Pavilion HPE Phoenix h9	TPL1039636	Dale Buscaino	Infringement	1/10/2013
:X-0539	1	Photograph of HP Pavilion HPE Phoenix h9	TPL1039627	Dale Buscaino	Infringement	1/10/2013
X-0540	+	Photograph of HP Pavilion HPE Phoenix h9	TPL1039637	Dale Buscaine	Infringement	1/10/2013

z. No	Cond.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.	Description		Book and the second second second		
X-0541		Withdrawn	Withdrown	Withdrawn	Withdrawn	Withdrawn
X-0542		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0543		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0544		Withdrawn	Withdrawn	Withdeawn	Withdrawn	Withdrawn
X-0545		Photograph of Kingston FCR-HS219-1	TPL1039764	Dale Buscaino	Infringement	1/10/2013
X-0546		Photograph of Kingston FCR-HS219-1	TPL1039779	Dale Buscaino	Infringement	1/10/2013
X-0547		Photograph of Kingston FCR-HS219-1	TPL1039780	Dale Buscaino	Infringement	1/10/2013
CX-0548		Photograph of Kingston FCR-HS219-1	TPL1039782	Dale Buscaino	Infringoment	1/10/2013
CX-0549	-	Photograph of Kingston FCR-HS219-I	TPL1039777	Dale Buscaino	Infringement	1/10/2013
CX-0550		Photograph of Kingston FCR-HS219-1	TPL1039771	Dale Buscaino	Infringement	1/10/2013
CX-0551	-	Photograph of Kingston FCR-HS219-1	TPL1039774	Dale Buscaino	Infringament	1/10/2013
CX-0552		Photograph of Rosewill RCR-YJ-EX601	TPL1039905	Dale Buscaine	Infringement	1/10/2013
CX-0553	-	Photograph of Rosewill RCR-YJ-EX601	TPL1039899	Dale Buscaino	Infringement	1/10/2013
CX-0554	1	Photograph of Rosewill RCR-YJ-EX601	TPL1039907	Dale Buscaino	Infringement	1/10/2013
CX-0555	-	Photograph of Rosewill RCR-YJ-EX601	TPL1039908	Dale Buscaino	Infringement	1/10/2013
CX-0556	-	Photograph of Rosewill RCR-YJ-EX601	TPL1039910	Dale Buscaino	Infringement	1/10/2013
CX-0557	,	Photograph of Rosewill RCR-YJ-EX601	TPL1039914	Dale Buscaino	Infringement	1/10/2013
CX-0558	-	Photograph of Rescwill RCR-YJ-EX601	TPL1039915	Dale Buscaino	Infringement	1/10/2013
CX-0559	-	Photograph of Rosewill RCR-YJ-EX601	TPL1039916	Dale Buscaino	Infringement	1/10/2013
CX-0560	+	Photograph of Rosswill RCR-YJ-EX601	TPL1039906	Dale Buscaino	Infringement	1/10/2013

x No Co	onf, Description	Bates Number	Sponsoring Witness	Purposo	Status/Date Admitted
De	nf Description				
CX-0561	Photograph of Rosewill RCR-YJ-EX601	TPL1039917	Dule Buscaino	Infringement	1/10/2013
CX-0562	Photograph of Scike Epson Artisan 730	TPL1039056	Dalo Buscaino	Infringement	1/10/2013
CX-0563	Photograph of Seiko Epson Artisan 730	TPL1039068	Dale Buscaino	Infringement	1/10/2013
CX-0564	Photograph of Saiko Epson Artisan 730	TPL1039058	Date Buscaino	Infringement	1/10/2013
CX-0565	Photograph of Sciko Epson Artisan 730	TPL1039067	Dale Buscaino	Infringement	1/10/2013
CX-0566	Photograph of Seiko Epson Artisan 730	TPL1039066	Dale Buscaino	Infringoment	1/10/2013
CX-0567	Photograph of Soiko Epson Artisan 730	TPL1039062	Dule Buscaino	Infringement	1/10/2013
CX-0568	Photograph of Sciko Epson Artisan 730	TPL1039055	Dule Buscaino	Infringement	1/10/2013
CX-0569	Photographs of the Acer Aspire 7750	TPL1038302-TPL1038339	Dale Buscaino	Infringement	1/10/2013
CX-0570	Photographs of the Acer Desktop AX1935	TPL1038340-TPL1038399	Dala Buscaino	Infringement	1/10/2013
CX-0571	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0572	Photographs of the Acer Aspire M3970	TPL1038483-TPL1038512	Dale Buscaine	Infringement	1/10/2013
CX-0573	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0574	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0575	Withdrawa	Withdrawn	Withdrawn .	Withdrawn	Withdrawn
CX-0576	Withdrawn	Withdrawn	Withdrawn	Withdrawa	Withdrawn
CX-0577	Photographs of the Brother MFC-J6510DW	TPL1038636-TPL1038654	Dale Buscaino	Infringement	1/10/2013
CX-0578	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0579	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0580	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x. Ne.	Conf.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des	Description .			Purpose	
C-0581		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0582		Photographs of the Canon PIXMA MG8220	TPL1038762-TPL1038822	Dale Buscaino	Infringement	1/10/2013
X-0583		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0584		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
X-0585		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0586		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0587		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0588		Photographs of the Dell Optiplex 3010	TPC1038951-TPL1038984	Dale Buscaino	Infringement	1/10/2013
CX-0589		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0590		Photographs of the Dell Vostre 3555	TPL1039013-TPL1039045	Dale Buscaino	Infringement	1/10/2013
CX-0591		Photographs of the Epson Artisan 730	TPL1039046-TPL1039068	Dale Buscnino	Infringement	1/10/2013
CX-0592		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0593	 	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0594		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0595	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0596	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0597	\top	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0598	+	Wildrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0599	1	Photographs of the Fujitsu Lifebook \$752	TPL1039244-TPL1039272	Dale Bascaino	Infringement	1/10/2013
CX-0600	+	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x. No	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.	Description	A. SANCES CO. LANCE OF	A total and the standard which the	and the state of t	Statos/Date Admitted
						The transfer of the state of the state of
X-0601		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0602		Photographs of the HiTi Studio On the Go P110S	TPL1039332-TPL1039356	Dale Buscaino	Infringement	1/10/2013
W nena						
CX-0603		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0604		Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn
CX-0605		Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn
CX-0606	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CA-0000		Y III III II II	Windrawn	Wingrave	windrawn	Wilhdrawn
CX-0607		Photographs of the HP Notebook 630	TPL1039500-TPL1039531	Dale Buscaino	Infringement	1/10/2013
CX-0608	 	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0609		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0610		Photographs of the HP Pavilion E Phoenix H91130	TPL1039600-TPL1039637	Dale Buscaino	Infringement	1/10/2013
CX-0611		Photographs of the HP Pavilion Slim Line s5-1260	TPL1039638-TPL1039677	Dale Buscaino	Infringement	1/10/2013
CX-0612		Photographs of the HP Photosmart 5510 e-ALL-IN-ONE	TPL1039678-TPL1039703	Dale Buscaino	Infringement	1/10/2013
CX-0613	 	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0614	+	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0615	\vdash	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0616		Photographs of the Kingston FCR-HS219-1	TPL1039761-TPL1039782	Dale Buscaino	Infringement	1/10/2013
CX-0617		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0618		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0619		Wühdrayn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0620	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x No	Conf.	Description	Bates Number	Sponsoring Witness	The state of the s	Status/Date Admitted
100000000000000000000000000000000000000	Des.	Description	Triple	Sponsoring systems	Purpose	States/Dirte Admitted.
CX-0621		Photographs of the Reservill RCR-YJ-EX601	TPL1039893-TPL1039917	Dale Buscaine	Infringament	1/10/2013
CX-0622		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0623		Withdrawn	Withdrawn	Withdrawn	Withdrawa	Wilhdrawn
CX-0624		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0625		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0626		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0627		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0628		Photographs of the Acor AS7750	TPL1042327-TPL1042332	Dale Buscaino	Infringement	1/10/2013
CX-0629		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0630		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0631		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0632		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn .
CX-0633		Withdraym	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0634		Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn
CX-0635		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0636		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0637		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0638		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0639		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0640		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Company of the Party of the Par	200		A COLUMN TO THE REAL PROPERTY.			
Ex. No	Des.	Description:	Bates Number	Sponsoring Witness	Parpose	Status/Dale Admitted
CX-0641		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0642		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0643		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0644		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdraws
CX-0645		Wikidrawn	Withdrawn	Widdenson	Widhdrown	Willsdrawa
CX-0646		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0647		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0648		Complaint Exhibit 103-1 Receipt for purchase of Acor AM3410-UR21P Desktop PC	TPL1022975-TPL1022977	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0649		Complaint Exhibit 183-2 Receipt for purchase of Acer Aspire TimelineX AS4820T-6447 [4-Inch Laptop	TPL1022978-TPL1022980	Dwayne Hannah; Donglas Lum	Importation	177/2013
CX-0650		Complaint Exhibit 103-3 Receipt for purchase of Brother MFC3895CW Wireless Color Photo Printer with Scanner, Copier and Fax	TPL1022981-TPL1022982	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0651		Complaint Exhibit 103-4 Receipt for purchase of Canon PIXMA MG5220 All-In-One Color Printer	TPL1022983-TPL1022984	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0652		Complaint Exhibit 103-6 Receipt for purchase of Dell Inspiron 560 Minitower	TPL1022987-TPL1022990	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0653		Complaint Exhibit 103-7 Receipt for purchase of Dell Vostro 3555 Laptop	TPL1022991-TPL1022994	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0654		Complaint Exhibit 103-8 Receipt for purchase of Fujitsu Notebook Thin & Light Lifebook LH531	TPL1022995-TPL1022997	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0655		Complaint Exhibit 103-9 Receipt for purchase of Fujitsu Notebook Lifebook T580	TPL1022998-TPL1023000	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0656		Complaint Exhibit 103-11 Receipt for purchase of HP Photosmart Premium Fax e-All-in-One Printer C410a	TPL1023003-TPL1023005	Dwayne Hannah; Douglas Lum	Importation	177/2013
CX-0657		Complaint Exhibit 103-12 Receipt for purchase of HP Pavilion Slimline s5xt Series	TPL1023006-TPL1023008	Dwayne Honnah; Douglas Lum	Importation	1/7/2013
CX-0658		Complaint Exhibit 103-13 Receipt for purchase of HiTi Passport/ID Photo Printer S420	TPL1023009-TPL1023011	Dwayne Hannah; Douglas Luin	Importation	1/7/2013
CX-0659	-	Complaint Exhibit 103-14 Receipt for purchase of Kingston Media Reader FCR-HS219/I	TPL1023012-TPL1023013	Dwayne Hannah; Douglas Lum	Importation	1/7/2013
CX-0660		Complaint Exhibit 103-17 Receipt for purchase of Resewill 74-in-1 Internal Card Reader RCR AK-IM5002	TPL1023019-TPL1023020	Dwayne Hannah; Douglas Lum	Importation	1/7/2013

z. No	Conf.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.	Description			Importation	
X-0661		Complaint Exhibit 103-20 Receipt for purchase of Seiko Epson All-In-One Printer Artisan 725 – Arctic Edition		Dwayne Hannah; Douglas Lum	Importation	1/7/2013
X-0662/JX-0019		Intel Desktop Boards Hannacroix Concept PC; Deposition of Nicholas Antonopoulos, Exhibit 16	TPL036807-TPL036808	Nicholas Antonopoulos	Donostic industry; secondary considerations	1/7/13 -Moved to Joint Exhibit List us JX-0019
X-0663/JX-0020		Intel Desktop Platforms Lecta Concept Platform; Deposition of Nicholas Antonoponics, Exhibit 18	TPL036809-TPL036812	Nicholas Antonopoulos	Domestic industry; secondary considerations	1/7/13 -Moved to Joint Exhibit List as JX-0020
X-0664		Convergence is Here by Nick Antonopoulos; Deposition of Nicholas Antonopoulos, Exhibit 19	TPL036813-TPL036817	Nicholas Antonopoulos	Domestic industry; secondary considerations	1/7/2013
X-0665/JX-0021		Windows Platform Design Notes; WinHEC Reference PC; Deposition of Nicholas Antonopoules, Exhibit 20	TPL036818-TPL036820	Nicholas Antonopoulos	Domestic industry; secondary considerations	1/10/13 -Moved to Joint Exhibit List as JX-0021
CX-0666		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Wilhdrawn
2X-0667		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0668		Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0669		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0670		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0671	С	1999-2000 Sreenath Mambakkam Handwritten Notebook	TPL209696-TPL209805	Sree lyer, Dale Buscaino	Priority of Invention	1/7/2013
CX-0672	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0673	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0674	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0675	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0676	С	90C46D-LF General Specification	TPL382949-TPL382963	Dale Buscaino; Sree Iyer	Domestic Industry	1/10/2013
CX-0677	С	xSil145 Chip Specification 1, V1.1	TPL382977-TPL382988	Dale Buscaine; Sree lyer	Domestic Industry	1/10/2013
CX-0678	С	xSil 145 IDE Kiosk Product Data Sheet Version 1,01	TPL383005-TPL383010	Dale Buscaino; Sree lyer	Domostic Industry	1/10/2013
CX-0679	Ċ	xSil 146 IDE Kiesk, Product Data Sheet VI.1	TPL383059-TPL383064	Dale Buscoino	Domestic Industry	1/10/2013
CX-0680	-	ND-Picture Card Compliance Guidelines Version 1.20 (November 15, 2004)	TPL390763-TPL390776	Dale Buscaino	Infringement	1/10/2013

	754-Yabita					
	Den.	Description:	Bates Number	Sponspring Witness	Porpose	Status/Date Admitted
CX-0681		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Wilhdrawn
CX-0682		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0683		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0684		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0685		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0686		Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0687/JX-0022		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0688/JX-0023	С	TPL Complaint Exhibit 105 - Declaration of Dwayne Hannah	TPL1042838-TPL1042850	Омауне Наппан	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0023C
CX-0689	, P.	TPL Complaint Exhibit 105-1 - Sample License Communication	TPL1023038-TPL1023040	Dwayne Hannah; Dan Leckrone	Domestic Industry	1/7/2013
CX-0690/JX-0024	С	TPL Complaint Exhibit 105-2 - Samplo License Agreement; Deposition of Mac Leckrone, Exhibit 13	TPL1023041-TPL1023060	Dwayne Hannali; Dan Leckrone	Domostic Industry	1/7/13-Moved to Joint Exhibit List as JX-0024C
CX-0691/JX-0025		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0692/1X-0026	С	TPL Complaint Exhibit 105-4 On Spec Chip Sales	TPL1042851-TPL1042855	Dwayne Hannah; Nick Antonopolous	Domestic Industry	1/10/13-Moved to Joint Exhibit List as JX-0026C
CX-0693		TPL Complaint Exhibit 105-5 Sony VRD-MC6	TPL1023063-TPL1023084	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0205
CX-0694		TPL Complaint Exhibit 105-6 Sony VRD-MC6	TPL1023085-TPL1023096	Dalo Buscaino; Dwayno Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0206
CX-0695		TPL Complaint fixhibit 105-7 Sony VRD-MC6	TPL1023097-TPL1023117	Dalo Buscaino; Dwayne Hannah	Domostic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0207
CX-0696		TPL Complaint Exhibit 105-8 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP	TPL1023118-TPL1023151	Dale Buscaine; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Demonstrative Exhibit List as CDX- 0208
CX-0697/JX-0027		TPL Complaint Exhibit 105-9 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP Practices the '443 Patent	TPL1023152-TPL1023162	Dale Buscaino; Dwayne Hannala	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0027
CX-0698		TPL Complaint Exhibit 103-10 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP	TPL1023163-TPL1023181	Duk Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0209
CX-0699/JX-0028		TPL Complaint Exhibit 105-11 Addonies Internal SATA/USB DigiDrive AEIDDSAU / WP	TPL1023182-TPL1023201	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0028
CX-0700		TPL Complaint Exhibit 105-12 Addenies PCMCIA Flesh DigiAdapter Extreme ADPMAF-X	TPL1023202-TPL1023213	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0210

	Conf.	Description	Bates Number	Sponsoring Witness	Purpose	States/Date Admitted
	DEL					
X-0701/JX-0029		TPL Complaint Exhibit 105-13 Addonies PCMCIA Flash DigiAdapter Extrome ADPMAF-X	TPL1023214-TPL1023234	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0029
X-0702		TPL Complaint Exhibit 105-14 Addonics PCMCIA Flash DigiAdapter Extreme ADPMAF-X	TPL1023235-TPL1023256	Dale Buscaino; Dwayne Hannah	Domostic Industry	1/28/13-Moved to Domonstrative Exhibit List as CDX-0211
X-0703		TPL Complaint Exhibit 105-15 Addonics Pocket cSATA/USB DigiDrive AEPDDESU / WP	TPL1023257-TPL1023291	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Demonstrative Exhibit List as CDX-0212
X-0704		TPL Complaint Exhibit 105-16 Addonics Pocket eSATA/USB DigiDrive ARPDDESU / WP P	TPL1023292-TPL103305	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0213
X-0705/JX-0030		TPL Complaint Exhibit 103-17 Addonies Packet eSATA/USB DigiDrive AEPDDESU / WP	TPL1023306-TPL1023325	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/7/13-Moyed to Joint Exhibit List as 1X-0030
X-0706		TPL Complaint Exhibit 105-18 Addonies Pocket cSATA/USB DigiDrive AEPDDESU / WP	TPL1023326-TPL1023337	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Dentonstrative Exhibit List as CDX- 0214
CX-0707	, ,	TPL Complaint Exhibit 105-19 Addonics Pocket eSATA/USB DigiDrive AEPDDESU / WP	TPL1023338-TPL1023359	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0215
CX-0708		TPL Complaint Exhibit 105-20 CMING - Digigear SD/SDHC/SDXC to High-Speed Extreme CF Type It SDXCF	TPL1023360-TPL1023372	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX-0216
CX-0709		TPL Complaint Exhibit 105-21 CMING - Digigear SD/SDHC/SDXC to High-Speed Extreme CF Type II SDXCF	TPL1023373-TPL1023393	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0217
CX-0710		TPL Complaint Exhibit 105-22 CompuApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023394-TPL1023436	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0218
CX-0711		TPL Complaint Exhibit 105-23 CompuApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023437-TPL1023458	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0219
CX-0712		TPL Complaint Exhibit 105-24 CompuApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023459-TPL1023470	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0220
CX-0713		TPL Complaint Exhibit 105-25 CompnApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023471-TPL1023491	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0221
CX-0714		TPL Complaint Exhibit 105-26 CompuApps OmniFlash eSATA Klosk Flash Modia Card Reader xSill45-C-ES1	TPL1023492-TPL1023528	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Demonstrative Exhibit List as CDX- 0222
CX-0715		TPL Complaint Exhibit 105-27 CompnApps OmniFlash eSATA Kiosk Flash Media Card Reader xSill45-G-ES1	TPL1023529-TPL1023541	Dale Buscaine; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Domonstrative Exhibit List as CDX-0223
CX-0716/JX-0031		TPL Complaint Exhibit 105-28 CompuApps OmniFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023542-TPL1023560	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0031
CX-0717		TPL Complaint Exhibit 105-29 CompuApps OmniFlash cSATA Kiosk Flash Media Card Reader xSil143-G-ES1	TPL1023561-TPL1023573	Dale Buscaino; Dwayac Hannah	Domestic Industry	1/28/13-Moved to Domonstrative Exhibit List as CDX- 0224
CX-0718		TPL Complaint Exhibit 105-30 CompuApps OmniFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023574-TPL1023593	Dale Buscaino; Divayne Hannah	Domestic Industry	1/2s/13-Moved to Demonstrative Exhibit List as CDX- 0225
CX-0719		TPL Complaint Exhibit 105-31 CompuApps OmniFlash IDE Kiosk Flash Memory Card Reader xSil146-G	TPL1023594-TPL1023607	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0226
CX-0720/JX-0032		TPL Complaint Exhibit 105-32 CompuApps OmniFlash IDE Kiosk Flash Memory Card Reader xSil146-Q	TPL1023608-TPL1023626	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/7/9-Moved to Joint Exhibit List as JX-0032

L No	Conf.	Description	Bates Number	Sponsoring Witness	The same of the sa	Status/Date Admitted
	Des.			Appril 50 and 10	Perpose	Sting Date Admitted
CX-0721		TPL Complaint Ethibit 105-33 CompuApps OmniFlash IDE Kiośk Flash Memory Card Roader xSil146-G	TPL1023627-TPL1023643	Dale Buscaine; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX-0227
CX-0722		TPL Complaint Exhibit 105-34 CompuApps OmniFlash IDE741 Multislot Flash Card Reader/Writer 90C46D-LF	TPL1023644-TPL1023678	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Demonstrative Exhibit List as CDX- 0228
CX-0723		TPL Complaint Exhibit 105-35 CompaApps OmniFlash IDE741 Multislot Flash Card Reador/Writer 90C46D-LF	TPL1023679-TPL1023689	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0229
CX-0724		TPL Complaint Exhibit 105-36 CompuApps OmniFlash IDE741 Multislot Flash Card Reader/Writer 99C46D-LF	TPL1023690-TPL1023709	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/28/13-Moved to Demonstrative Exhibit List as CDX- 0230
CX-0725		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0726		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0727/JX-0033	С	TPL Complaint Exhibit 105-39-A List of the Companies Offered Licenses to the CORE Flash Portfolio	TPL1042856-TPL1042861	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0033C
CX-0728		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0729		TPL Complaint Exhibit 105-41 Lexauark X5650	TPL1023723-TPL1023738	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13 -Moved to Demonstrative Exhibit List as CDX- 0231
CX-0730		TPL Complaint Exhibit 105-42 Lexmark X3650	TPL1023739-TPL1023763	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13 - Moved to Demonstrative Exhibit List as CDX- 0232
CX-0731		TPL Complaint Exhibit 105-43 Lexmark X5650	TPL1023764-TPL1023787	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13 -Moved to Demonstrative Exhibit List as CDX-0233
CX-0732		TPL Complaint Exhibit 105-44 Lexmark X5650	TPL1023788-TPL1023810	Dale Buscaine; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0234
CX-0733		TPL Complaint Exhibit 105-45 Belkin PM00525-A	TPL1023811-TPL1023843	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0235
CX-0734		TPL Complaint Exhibit 105-46 Belkin PM00525-A	TPL1023844-TPL1023857	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0236
CX-0735		TPL Complaint Exhibit 105-47 Belkin PM00525-A	TPL1023858-TPL1023876	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX-0237
CX-0736		TPL Complaint Exhibit 105-48 Gearhead 23-in-1 Card Render All-in-One CR4200	TPL1023877-TPL1023893	Onle Buscaino, Dwayne Hannah	Domostic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0238
CX-0737		TPL Complaint Exhibit 105-49 Gearhead 23-in-1 Card Reader All-in-One CR4200	TPL1023894-TPL1023916	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13 -Moved to Demonstrative Exhibit List as CDX-0239
CX-0738		TPL Complaint Exhibit 105-50 Gearhead 58-in-1 Card Reader CR7400M	TPL1023917-TPL1023934	Dala Buscaino; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX-0240
CX-0739		TPL Complaint Exhibit 105-51 Gearhead 58-in-1 Card Reader CR7400M	TPL1023935-TPL1023958	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX-0241
CX-0740	-	TPL Complaint Exhibit 105-52 Gearhead 58-in-1 Card Reader CR7400M	TPL1023959-TPL1023980	Dale Buscaino; Dwayne Hannah	Domostic Industry	1/9/13- Moved to Domonstrative Exhibit List as CDX- 0242

x. No	Cont.	Description	Butes Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.					
X-0741		TPL Complaint Exhibit 105-53 Lenovo 58-in-1 Card Reader CR7500H	TPL1023981-TPL1023992	Dale Buscaino; Dwayne Haunah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0243
X-0742		TPL Complaint Exhibit 105-54 Lenovo H320-4041-IJU	TPL1023993-TPL1024009	Dale Buscaino; Divayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX-0244
X-0743		TPL Complaint Exhibit 105-55 Lenovo H320-4041-1JU	TPL1024010-TPL1024033	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0245
X-0744		TPL Complaint Exhibit 105-56 Lenovo IdeaPad Z560-09144D	TPL1024034-TPL1024045	Dale Buscaino; Dwnyne Hannalı	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX-0246
X-0745		TPL Complaint Exhibit 105-57 Lenovo IdeaPud Z560-09144D	TPL1024046-TPL1024066	Dale Buscaino; Dwayne Hannalı	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX-0247
X-0746		TPL Complaint Exhibit 105-58 Lenovo IdeaPad 2560-09144D	TPL1024067-TPL1024086	Dale Buscaino; Dwayno Hannah	Domestic Industry	169/13 -Moved to Demonstrative Exhibit List as CDX- 0248
CX-0747		TPL Complaint Exhibit 10S-59 Xi MTower 2P64X	TPL1024087-TPL1024130	Dale Buscaino; Dwayne Hannah	Domestic Industry	1/9/13 •Moved to Demonstrative Exhibit List as CDX- 0249
CX-0748		TPL Complaint Exhibit 105-60 Xi MTower 2P64X	TPL1024131-TPL1024142	Dale Buscaine; Dwuyne Hannah	Domestic Industry	1/9/13 -Moved to Demonstrative Exhibit List as CDX- 0250
CX-0749		TPL Complaint Exhibit 105-61 Xi MTower 2P64X	TPL1024143-TPL1024166	Dale Buscaino; Dwayne Hannah	Donestic Industry	1/9/13 -Moved to Domonstrative Exhibit List as CDX- 0251
CX-0750		TPL Complaint Exhibit 105-62 Xi MTower 2P64X	TPL1024167-TPL1024187	Dale Buscaine; Owayne Hannah	Domostic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0252
CX-0751		TPL Complaint Exhibit 105-63 Apple 13" Macbook Pro (2011)	TPL1024188-TPL1024198	Dale Buscaine; Dwayne Hannalı	Domestic Industry	1/9/13- Moved to Demonstrative Exhibit List as CDX- 0253
CX-0752		TPL Complaint Exhibit 105-64 T Apple 13" Macbook Pro (2011)	TPL1024199-TPL1024214	Dale Buscaine; Dwayne Hannah	Domestic Industry	1/9/13 -Moved to Demonstrative Exhibit List as CDX- 0254
CX-0753	С	TPL Project Detail by Year ns of 9/30/12	TPL1038185-TPL1038787	Dwayne Hannah	Domestic Industry	1/7/2013
CX-0754	С	2012 Coreflash License Ravenue 19/22/12	TPL103XIRR	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0755/JX-0034	С	OnSpec Asset Information; Deposition of Mac Leckrone, Exhibit 26	TPL041253-TPL041258	Nicholas Antonopoulos; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Joint Exhibit List as JX-0034C
CX-0756	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0757	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0758		Imation Investor Relations - News Release	TPL388436-TPL388439	Nicholas Antonoponlos; Dale Buscuino	Domestic Industry; Secondary Considerations	1/1/2013
CX-0759		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0760	С	- MAI	TPL389795	Dwayne Hannah	Domestic Industry	1/7/2013

The state of the s	San		- Participant of the second of			
	Conf. Des	Description.	Bates Number	Spansoring Witness	Purpose	Status/Datg Admitted
CX-0761	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0762	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0763	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0764	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0765	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0766	Ċ	OnSpec Contact List	TPL389994-TPL390044	Nicholas Antonopoulos	Domestic Industry	1/7/2013
CX-0767	С	Wihdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0768	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0769	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0770	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0771	С	Lesse Agreements	TPL392399 - TPL392436	Nicholas Antonopoulos; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0772	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0773		Anandtech - Intel IDF Report #2 - Serial ATA & USB 2.0	TPL393671 - TPL393672	Dule Buscaino	Invention and Effective Filing Dates	1/10/2013
CX-0774	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0775	С		TPL038889-TPL038895	Nicholas Antonopoulos; Dwayne Hannah; Sree Iyer	Domestic Industry	1/7/2013
CX-0776	c	A AMPL	TPL038896	Nicholas Antonopoulos; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0777	С	Ь	TPL038897-TPL038912	Nicholas Antonopoulos; Dwayne Hannah; Sree Iyer	Domestic Industry	1/7/2013
CX-0778	С	a	TPL038913-TPL038928	Dwayna Hannah; Sree lyer	Domestic Industry	1/7/2013
CX-0779	С	Arockiyaswamy Venkidu, Exhibit 4	TPL038929-TPL038944	Dwayne Hannah	Domestic Industry	1/7/2013
CX-0780	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x, No	Conf.	Description	Bates Number	Sponsoring Witness	December 1	Ctation/Date Admitted
	Des.	Description		Sponsoring writers	Forpose	Status/Date Admitted
X-0781	С	Licensing Communication	TPL040657-TPL041245	Dwayne Hannah; Dan Leckrone	Domestic Industry	1/7/2013
X-0782	С	File Names	TPL041246-TPL041250	Dwayne Hannah	Domestic Industry	1/7/2013
CX-0783	c	June 1, 2007 Letter to TPL Lesse	TPL041259-TPL41261	Dwayne Hannah; Dan Leckrone	Domestic Industry	1/7/2013
CX-0784	Ċ	Second Amendment to Lease	TPL041262-TPL41264	Dwayno Hannah; Dan Leckrone	Domestic Industry	L/7/2013
CX-0785	С	Licensing Communication	TPL030691-TPL030692	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0786	С	Licensing Communication	TPL030709-TPL030725	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0787	С	Licensing Communication	TPL030726-TPL030729	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0788	c	Liconsing Communication	TPL006878-TPL006879	Dan Leckrone; Dwayne Hannah	Domostic Industry	1/7/2013
CX-0789	С	Licensing Communication	TPL025396-TPL025404	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0790	c	Licensing Communication	TPL007003-TPL007004	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0791	С	Licensing Communication	TPL013134-TPL013136	Dan Leckrone; Dwayne Hannah	Donostic Industry	1/7/2013
CX-0792	c	Licensing Communication	TPL030840-TPL030841	Dan Leckrone; Dwayne Hannalı	Domestic Industry	1/7/2013
CX-0793	c	Licensing Communication	TPL007039-TPL007039	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0794	С	Licensing Communication	TPL002262-TPL002264	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0795	С	Licensing Communication	TPL030876-TPL030877	Dan Leckrone; Divayne Hannah	Domestic Industry	1/7/2013
CX-0796	c	Licensing Communication	TPL013169-TPL013171	Dan Leekrone, Dwayne Hannah	Domestic Industry	1/7/2013
CX-0797	С	Licensing Communication	TPL025511-TPL025587	Dan Lockrone; Dwayne Hannah	Domostic Industry	1/7/2013
CX-0798	С	Provisional Patent Application 60/386,396	TPL080742-TPL080841	Nicholas Antonopoulos	Secondary Considerations	1/10/2013
CX-0799	С	TPL License Agreement	TPL1046121-TPL1046145	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0800	C	TPL/ License Agreement	TPL1042268-TPL1042290	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/7/2013

x. No	Conf.	Description	Bates Number	Sponsoring Witness	Perpose	Status/Date Admitted
	Det.					
(-0801	С	TPL Cicense Agreement	TPL1040191-TPL1040219	Dan Leckrone; Dwayne Hanneh	Domestic Industry	L/7/2013
(-0802	c	TPL/rr inc License Agreement	TPL1040220-TPL1040245	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
		-			Daniel Many	1772015
X-0803	c	TPL Siconse Agreement	TPL1040246-TPL1040265	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
K-0804	С	TPL/(************************************	TPL1040266-TPL1040287	Dan Leckrone; Dwayne Hannah	Domestic Industry	177/2013
K-0805/JX-0035	С	TPLA License Agrooment	TPL1040288-TPL1040313	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/13 - Moved to Joint Exhibit List as JX-0035C
X-0806	С	TPL/ icenso Agreement	TPL1040314-TPL1040347	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
X-0807/JX-0036	C	TPLE License Agreement	TPL1040348-TPL1040370	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13- Moved to Joint Exhibit List as JX-0036C
X-0808/JX-0037	С	TPL/ License Agrooment	TPL1040371-TPL1040388	Dan Leekrone; Dwayne Hannah	Domostic Industry	1/9/13-Moved to Joint Exhibit List as JX-0037C
X-0809	С	TPL/Y	TPL388440-TPL388463	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/1/2013
X-0810/1X-0038	С	TPL/#UPD TO LICENSE Agrocment	TPL388464-TPL388489	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0038C
X-0811/JX-0039	С	TPL/II Inq. License Agreement	TPL388490-TPL388508	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0039C
X-0812/JX-0040	c ·	TPL/TATTHERMAN License Agreement	TPL388509-TPL388526	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0040C
X-0813/JX-0041	С	TPL/4 By License Agreement	TPL388527-T[PL388548	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0041C
X-0814/JX-0042	С	TPLA License Agreement	TPL388549-TPL388571	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0042C
X-0815/JX-0043	C	TPD Liconso Agrocations	TPL388572-TPL388592	Dan Leckrone; Dwayne Harnah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0043C
X-0816/JX-0044	С	TPI de licenso Agréement	TPL388593-TPL388609	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0044C
X-0817/JX-0045	С	TPL/Col. M. License Agreement	TPL388610-TPL388633	Dan Leckrone; Dwayne Hannah	Domostic Industry	1/9/13-Moved to Joint Exhibit List as JX-0045C
X-0818/JX-0046	c	TPLI: License Agreement	TPL388634-TPL388652	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0046C
X-0819/JX-0047	С	TPL License Agreement	TPL388653-TPL388674	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0047C
X-0820/JX-0048	С	TPL/ To License Agreement	TPL388675-TPL388692	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0048C

	Conf. Des.	Description	Bates Number	Sponsering Witness	Purpose	Status/Date Admitted
CX-0821/JX-0049	c	TPL/	TPL388693-TPL388707	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0049C
CX-0822/JX-0050	С	TPLN License Agreement	TPL388708-TPL388726	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0050C
CX-0823/JX-0051	С	TPL License Agreement	TPL388727-TPL388747	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0051C
CX-0824/JX-0052	С	Tpr N:1 icense Agreement	TPL388748-TPL388768	Dan Leckrone; Dwayne Hannah	Domostic Industry	1/9/13-Moved to Joint Exhibit List as JX-0052C
CX-0825/JX-0053	С	TPL Apple License Agreement	TPL388769-TPL388784	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0053C
CX-0826/JX-0054	С	TPL Group License Agreement	TPL388785-TPL388803	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0054C
CX-0827/JX-0055	С	TPL Technologies License Agreement	TPL388804-TPL38824	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0055C
CX-0828/JX-0056	С	TPL/VI	TPL388825-TPL388844	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0056C
CX-0829/JX-0057	c	TPL 285 Licenso Agroement	TPL388845-TPL388865	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0057C
CX-0830	С	TPLIe License Agreement	TPL388866-TPL388885	Dan Leekrone; Dwayne Hannah	Domestic Industry	L/7/2013
CX-0831/JX-0058	С	TPL/ Deposition of Mac Leckrone (337-807), Exhibit	TPL388886-TPL388907	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0058C
CX-0832/JX-0059	С	TPJ 7 - License Agreement	TPL388908-TPL388932	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0059C
CX-0833/JX-0060	С	TPL P P C C C C C C C C C C C C C C C C C	TPL388933-TPL388952	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0060C
CX-0834/JX-0061	С	TPL License Agreement	TPL388953-TPL388969	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List us JX-0061C
CX-0835/JX-0062	С	TPL/Mr. Licenso Agreement	TPL388970-TPL388988	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0062C
CX-0836/JX-0063	c	TPL License Agreement	TPL388989-TPL389006	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0063C
CX-0837/JX-0064	С	TPLE: License Agreement	TPL389007-TPL389026	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/9/13-Moved to Joint Exhibit List as JX-0064C
CX-0838	С	Correspondence from TPL to produce of enclosing the CORE Flash Portfolio Materials Disc, version 1 (8/29/08)	TPL004066	Dan Leekrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0839	С	Correspondence from TPL to enclosing the CORE Flash Portfolio Materials Disc, version 2 (12/27/16)	TPL036751-TPL036754	Dan Leekrone; Dwayne Hannah	Domostic Industry	1/7/2013
CX-0840	С	Correspondence from TPL to tenclosing the CORE Flash Portfolio Materials Disc, version 3 (2/6/07)	TPL034856-TPL034859	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013

and the same of the same of the same of	-					
Ex. No	Conf. Des.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Ċ	Correspondence from TPL to Brother Industries enclosing the CORE Flash Portfolio Materials Disc, version 4 (7/12/07)	TPL005335	Dan Leckrone: Owayne Hannah	Domostic Industry	1/7/2013
CX-0842	С	Correspondence from TPL to semmunicies enclosing the CORE Flash Portfolio Materials Disc, version 5 (12/3/07)	TPL026679-TPL026680	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0843	С	Correspondence from TPL to denclosing the CORE Flash Portfolio Materials Disc, version 6 (6/25/091)	TPL017240-TPL017247	Dan Leckrone; Dwayne Hannah	Domostic Industry	1/7/2013
CX-0844	Ċ	Correspondence from TPL to Id enclosing the CORE Flash Portfolio Materials Disc, version 7 (8/22/11)	TPL036186-TPL036193	Dan Lockrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0845	С	Correspondence from TPL to dence a single the CORE Flash Portfolio Materials Disc, version 8 (9/12/11)	TPL047735	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0846	С	Transcript of Deposition of Arockiyaswamy Venkidu (10/19/12)	TPL1045999-TPL1046074	N/A	Domestic industry; conception; reduction to practice; priority date	Duplicate of RX-2818C, admited 1/25/13
CX-0847	С	Correspondence to Arockiyaswamy Venkidu dated June 16, 2006, Deposition of Arockiyaswamy Venkidu, Exhibit 4	TPL390674-TPL390696	Dan Leckrone; Dwayne Hannah	Domestie Industry	1/25/2013
CX-0848	С	Correspondence from TPL to Arockiyasvamy Venkidu dated December 22, 2006, Deposition of Arockiyasvamy Venkidu, Exhibit 5	TPL041309-TPL041310	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/2013
CX-0849		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0850		TPL Group Correspondence "Key Points To DEAL with Swamy", Deposition of Daniel Leckrone, Exhibit 2; Deposition of Arackiyaswamy Venkidn, Exhibit 6	TPL1044745-TPL1044746	Dwayne Hannah; Nicholas Antonopoulos	Domostic Industry	1/25/2013
CX-0851	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0852/JX-0065	С	Agreement and Plan of Merger dated April 3, 2006, Deposition of Daniel Leckrone, Exhibit 4	TPL041313-TPL041430	Dan Leckrone	Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0065C
CX-0853	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0854	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0855	С	Parties Designations of the Transcript of Deposition of David Tribolet (19/10/12)	TPL1045902-TPL1045940	НР	Infringement	1/25/2013
CX-0856		Notice of Deposition to Hervlett Packard Company Deposition of David Tribolet, Exhibit 1	TPL1045941-TPL1045956	HP	Infringement	1/25/2013
CX-0857	С	Respondent Hewlett Peckard's Objections and Responses to Technology Properties Limited's Second Set of Interrogatories Numbers 48-53, Deposition of David Tribolet, Exhibit 2	TPL1045967-TPL1045998	НР	Infringement	1/25/2013
CX-0858	c	Larry ASIC data sheet , Deposition of David Tribolet, Exhibit 3	HP175903	НР	Infringement	1/10/2013
CX-0859	С	Schematics Bates stamped HP 176112-176116, Deposition of David Tribolet, Exhibit 6	HP176112-HP176116	HP	Infringement	1/25/2013
CX-0860	C ·	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x. No	Conf. Des.	Description	Bates Number	Spantoring Witness	Purpose	Status/Date Admitted
4. A C. A. B. B.	200					
K-0861	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
C-0862	С	Wind ASIC data sheet, Deposition of David Tribolet, Exhibit 9	HP175993	HP	Infringement	1/25/2013
C-0863		HP Photosmart 5510 User Guide, Deposition of David Tribolet, Exhibit 10	HP033136-HP033187	НР	Infringement	1/10/2013
C-0864	c	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
C-0865	С	Schematic Bates stamped HP 177406, Deposition of David Tribolot, Exhibit 12	HP177406	НР	Infringement	1/25/2013
C-0866	С	Schematic Bates stamped HP 177407, Deposition of David Tribolet, Exhibit 13	HP177407	НР	Infringement	1/25/2013
X-0867	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0868		Withdrawn	Withdrawn	Withdrawn	Withdrown	Withdrawn
X-0869		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0870		Withdrown	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0871		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0872	х	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0873		Direct Witness Statement of Dwayne Hannah, Inv. 337-807, Deposition of Dwayne Hannah, Exhibit 3	TPL1037678-TPL1037693	Dwayne Hannah	Domostic Industry	1/10/2013
X-0874	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0875	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
K-0876	c	Confidential Declaration of Dwayne Hannah, Inv. 337-807, Deposition of Dwayne Hannah, Exhibit 7	TPL038043-TPL038054	Dwayne Hannak	Domestic Industry	1/9/2013
K-0877	С	TPL CoreFlash Project Detail by Year As of May 31, 2011, Deposition of Dwayne Hannah, Exhibit 9; Deposition of Dwayne Hannah (337-807), Exhibit 9	TPL036781-TPL036783	Dwayno Hannah	Domestic Industry	1772013
K-0878	С	TPL CoreFlash Headcount Summary by Company and Month, Deposition of Dwayne Hannah, Exhibit 12	TPL041251-TPL041252	Dwayne Hannah	Domestic Industry	1/7/2013
K-0879/JX-0066	С	OnSpec Income Statement - Rolling Ten Year 2001 through September 30, 2010, Deposition of Dwayne Hannah, Exhibit 15	TPL036785	Dwayne Hannah	Domestic Industry	1/7/13 -Moved to Joint Exhibit List as JX-0066C
X-0880/JX-0067	С	Office Lease Stevens Creek Office Center Dated July 23, 2010, Deposition of Dwayne Hannah, Exhibit 16	TPL041265-TPL041298	Dwayne Hannah; Dan Leckrone	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-9067C

Ex. No	Conf.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.	Description .				
CX-0881	С	TriNet Payroll Headcount by Location as of 8/31/2011, Deposition of Dwayno Hannah, Exhibit 17	TPL036757-001 - TPL036757- 0243	Dwayne Hannah	Domestic Industry	1/7/2013
CX-0882	С	Parties Designations of the Transcript of Deposition of Joel Tang (9/24/12)	TPL1045705-TPL1045751	Kingston	Infringement; Importation	1/25/2013
CX-0883		Notice of Deposition to Kingston Technology, Deposition of Joel Tang, Exhibit 1	TPL1045752-TPL1045764	Kingston	Infringement; Importation	1/25/2013
CX-0884	С	Respondent Kingston Technology Company, Inc.'s, Responses to Complainan's First Set of Interrogatorics, Deposition of Joel Tang, Exhibit 2	TPL1045797-TPL1045860	Kingston	Infringement; Importation	1/25/2013
CX-0885	c	Respondent Kingston Technology Company, Inc.'s, Supplemental Objections and Responses to Complainant's First Set of Common Interrogatories to Respondents, Deposition of Joel Tang, Exhibit 3	TPL1045861-TPL1045875	Kingston	Infringement; Importation	1/25/2013
CX-0886		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0887		Data Sheet for FCR-MLG3 , Deposition of Joel Tang, Exhibit 6	KT000494 - KT000495	Kingston	Infringement	1/25/2013
CX-0888	C	Withdrawn .	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0889		Card Readers information , Deposition of Joel Tang, Exhibit 8	KT000360 - KT000361	Kingston	Infringement	1/25/2013
CX-0890	С	Respondent Kingston Technology Company, Inc.'s, Responses to Complainant's Set of Individual Interrogatories (Nos. 48-53), Deposition of Joel Tang, Exhibit 9	TPL1045876-TPL1045901	Kingston	Infringement	1/25/2013
CX-0891	С	Respondent Kingston Technology Company, Inc.'s, Supplemental Objections and Responses to Complainant's First Set of Interrogatories, Deposition of Joel Tang, Exhibit 10	TPL1045765-TPL1045772	Kingston	Infringement; Importation	1/25/2013
CX-0892	С	GL826 USB 2.0 Card Reader Controller Schematic , Deposition of Joel Tang, Exhibit 11	KT000507 - KT000509	Kingston	Infringement	1/10/2013
CX-0893	c	Tooling information , Deposition of Jeel Tang, Exhibit 12	KT000504 - KT000506	Kingston	Infringement	1/25/2013
CX-0894		GL\$26 Data sheet Revision 1.05, Deposition of Joel Tang, Exhibit 13	TPL1045773-TPL1045794	Kingston	Infringement	1/25/2013
CX-0895		Customer drawing A106X Sheet 1/2, Deposition of Joel Tang, Exhibit 15	TPL1045795	Kingston	Infringement	1/25/2013
CX-0896		Customer drawing A106X sheet 2/2, Deposition of Joel Tang, Exhibit 16	TPL1045796	Kingston	Infringement	1/25/2013
CX-0897	 	GL\$26 Data sheet Revision 1.01, Deposition of Joel Tang, Exhibit 17	KT000666- KT000000698	Kingston	Infringement	1/25/2013
CX-0898	С	Flash Verification Form , Deposition of Joel Tang, Exhibit 18	KT000432 - KT000433	Kingston	Infringement	1/25/2013
CX-0899	С	Mechanical Drawing for FCR-HS219/1, Deposition of Joel Tung, Exhibit 19	KT000503	Kingston	Infringement	1/25/2013
CX-0900	c	Customer Drawing, Deposition of Joel Tang, Exhibit 20	KT000631	Kingston	Infringement	1/25/2013

X. No.	Conf	Description	Bates Number	Spansoring Witness	Porpose	Status/Date Admitted
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Des.	Description	A SALES OF THE SAL	A DESCRIPTION OF THE PARTY OF T		
40 . A.	M-V			The second secon		
X-0901		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0902	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0903	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0904/JX-0068	С	SD Memory Card Specifications, Part 1, Deposition of Larry Jones, Exhibit 17	TPL125919-TPL126035	Dale Buscaino	Infringement	1/10/13 - Moved to Joint Exhibit List as JX-0068C
X-0905	С	Transcript of Deposition of Mac Leckrone (10/22/12)	TPL1045333-TPL1045422	N/A	Domestic industry	Duplicate of RX-0313C, Admitted 1/25/13
X-0906/JX-0069	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0907		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0908/JX-0070		Document entitled CORE Flash PLs, Deposition of Mac Leckrone, Exhibit 11	TPL1045464-TPL1045465	Dan Leekrone; Dwayne Hannah	Domostic Industry	1/25/13 -Moved to Joint Exhibit List as JX-0070C
X-0909/JX-0071	С	Summary of CorcFlash Revenue 2007, YTD, Deposition of Mac Lockrone, Exhibit 12	TPL389797	Dan Leckrone; Dwayne Hannah	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0071C
X-0910		Complaint Confidential Exhibit 105-2, Deposition of Mac Lockrone, Exhibit 13	TPL1045466-TPL1045480	Dan Lockrone; Dwayne Hannah	Domestic Industry	1/25/2013
CX-0911/JX-0072	С	Employee Spreadsheet, Deposition of Mac Leckrone, Exhibit 15; Deposition of Dwayne Hannah (337-807), exhibit 8	TPL036784	Dwayne Hannah	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0072C
X-0912/JX-0073	c	TPL Project Detail by Year, Deposition of Mac Leekrone, Exhibit 16	TPL1038185-TPL1038187	Dwayne Hannah	Demestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0073C
CX-0913/JX-0074	С	TPL/Intellisys Product Group, Product Sales Revenue by Year, Deposition of Mac Leckrone, Exhibit 18	TPL036766	Dwayne Hannah; Nicholas Antonopoulos	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0074C
CX-0914/JX-0075	С	TdReport Spreadsheet, Deposition of Mac Leckrone, Exhibit 20	TPL036774-TPL036780	Dwayne Honnah	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0075C
CX-0915	С	TDRoport Date Requested Project, Deposition of Mac Leckrone, Exhibit 21	TPL036768-TPL036773	Dwayne Hannah	Domestic Industry	1/7/2013
X-0916	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
X-0917	С	OnSpoc Sales Data 1998-2006Deposition of Nicholas Autonopoulos, Exhibit 9	TPL389798-389900	Dwayne Hannah; Nicholas Antonopoulos	Domostic Industry	1/7/2013
CX-0918		Wilhdrawn	Withdrawn	Withdrasyn	Withdrawn	Withdrawn
CX-0919		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0920		Withdrawn	Withdrawn	Withdrawn	Withdraws	Withdrawn

Ex. No	Conf.					The state of the s
	Des.	Description	Bates Number	Sponsoring Witness	Purpose	Status/Onte Admitted
CX-0921		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0922		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-0923	С	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0924		OnSpec Chip Products, Deposition of Nicholas Antonopoulos, Exhibit 24	TPL038031	Nicholas Antonopoulos	Domostic industry	1/7/2013
CX-0925		Withdrawn	Wididrawn	Withdrawn	Wishdrawn	Withdrawn
CX-0926	.c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0927	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0928		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0929		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0930		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0931		Withdzawn	Withdrawn	Withdraws	Withdrawn	Withdrawn
CX-0932	С	Parties Designations of the Transcript of Deposition of Robin Castell (10/12/12)	TPL1045626-TPL1045659	НР	Infringement; Importation	1/8/2013
CX-0933		Notice of Deposition to Hewlett-Packard Company, Deposition of Robin Castell, Exhibit 15	TPL1045689-TPL1045704	НP	Infringement; Importation	1/25/2013
CX-0934	С	Respondent Hewlett-Packard Company's First Supplemental Objections and Responses to Technology Properties Limited LLC's Second Set of Interrogatories Nos. 48 through 53, with Attachment A, Deposition of Robin Castell, Exhibit 16	TPL1045660-TPL1045688	НР	Infringement	1/25/2013
CX-0935	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0936	С	Alsor Micro AU6433E54-GCL-GR USB2.0 Single-LUN Flash Card Reader Controller dated 21 January 2009, Deposition of Robin Castell, Exhibit 21	HP089522 - 089542	НР	Infringement	1/10/2013
CX-0937	С	Direct Witness statement of Sree Mambakkam Tyer, Inv. 337-807, Deposition of Sree Lyer, Exhibit 9	TPL1044999-TPL1045014	Sree lyer	Conception; Reduction to Practice; priority date; infringement	1/10/2013
CX-0938		Declaration of Sree Mambakkam (yer Under 37 C.F.R., 1.131, Deposition of Sree (yer, Exhibit 11	TPL388270-TPL388273	Sree Iyer	Conception; Reduction to Practice; priority date	1/7/2013
CX-0939	C	Direct Witness Statement of Daniel Leckrone		Dan Leckrone	Domostic industry	1/7/2013
CX-0940	c	Direct Witness Statement of Douglas Lum		Douglas Lum	Domestic industry, importation; infringement	1/7/2013

		Description	Bates Number	Sponspring Witness	Perpose	Status/Date Admitted	
	Des.	Description:		Oppositing Witness	Purpose		
CX-0941	С	Direct Witness Statement of Dwayne Hannah		Dwayne Hannah	Domestic industry	1/7/2013	
CX-0942	C	Direct Witness Statement of Nicholas Antonopoulos		Nicholas Antonopoulos	Domestic industry; conception; reduction to practice; priority date	1/7/2013	
CX-0943	С	Direct Witness Statement of Sree tyer		Sree lyer	Conception; Reduction to Practice; priority date; infringement	1/7/2013	
CX-0944	С	Direct Witness Statement of Dale Buscaino		Dale Buscaino	Infringement, Domestic Industry, conception, reduction to practice, priority date	1/8/2013	
CX-0945	С	Wihdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0946	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0947	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0948	С	Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn	
CX-0949	С	Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn	
CX-0950	С	Withdrawn	Withdrawa	Withdrawn	Withdrawa	Withdrawn	
CX-0951	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0952	c	Withdrawn	Withdrawa	Withdrawn	Withdrawn	Wishdrawn	
CX-0953	С	Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn	
CX-0954	С	Withdrawn.	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0955	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0956	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0957	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0958	С	Widdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CX-0959	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdraws	
CX-0960	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	

	Conf.	Description	Bater Number	Sponsoring Witness	Purpose	Status/Date Admitted
12	Des.					Struty Date Admitted
X-0961	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0962		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0963	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0964		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0965		WithdrawA	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0966		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0967		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0968		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0969		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0970		Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0971	Ċ	Photograph of Olympus xD-Picture Card 16MB	TPL1017723-TPL1017726	Doug Lum; Dale Buscaino	Infringement	1/10/2013
X-0972		Memory Stick Features - Interface	TPL1017727-TPL1017727	Doug Lum; Dale Buscaino	Infringement	1/10/2013
X-0973	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0974	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
X-0975	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0976	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0977	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0978	c.	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0979	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0980	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x.No	Conf	Description	Bater Number	Sponsoring Witness	Purpose-	Status/Date Admitted
- 19-	Des.	Description .				
44	1. 4 . A					
C-0981	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
K-0982		Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0983	-	MFC-5895CW Technical Specification	TPL1017960-TPL1017961	Doug Lum; Dale Buscaino	Infringement	1/10/2013
X-0984	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0985	С	Reverse Engineering Report -Brother All-in-One Inkjet Printer - MFC-5895CW	TPL1017968-TPL1017993	Doug Lum; Dale Buscaino	Infringement	1/10/2013
X-0986	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0987	С	Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawn
CX-0988		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0989		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0990	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0991	c ,	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0992	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0993	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
:X-0994	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0995	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0996	С	Withdrawp	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-0997	c	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0998	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-0999	С	Withdrawn	Withdrawn	Withdrawn .	Withdrawn	Withdrawn
X-1000	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x. No	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Conf. Des.	Description	MARKE MARK	o de la companya del companya de la companya del companya de la co	Purpose	A CONTRACTOR OF STATE
X-1001		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
						- erone regions
CX-1002		Withdrawn	Withdrawn	Withdrawn .	Withdrawn	Withdrawn
,		7'				
77 LOUIZ		nrd t	West 1			
CX-1003		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1004	_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
					T ALLEI ETT	T I I I I I I I I I I I I I I I I I I I
CX-1005		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
						2000 COLONY (1900)
		*				
CX-1006		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1007		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1008	С	Milat James	Withdrawn	Withdrawn	Withdrawn	Withdrawn
LX-1008	L	Withdrawn	windrawn	Withdrawn	Willidrawn	Withdrawn
CX-1009	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1010	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
		¥		1		
CX-1011	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
			1) h	1
					NEL I	
CX-1012	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1013	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
0,0-1013	1	William				
	1			1	*	
CX-1014	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1015		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
					Med 4	111.4.1
CX-1016		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1017	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
ev-1011		TO SALING ACCOUNT				
	1					
CX-1018	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	ľ					
CX-1019	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
					1	par "
						Y
CX-1020	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
						v
					· ·	· ·

		Description	Bates Number	Sponsoring Witness	Ригрозе	Status/Date Admitted
	Des.	Description				
CX-1021	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1022	С	Withdrawa	Withdrawn	Withdrawn	Withdrawa	Withdrawn
CX-1023	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1024		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1025		Withdrawn	Withdrawe	Withdrawn	Withdrawn	Withdrawn
CX-1026	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1027	C .	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1028	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1029	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1030	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1031	С	Withdrawn	Withdrawn	Wilhdrawn	Withdrawn	Withdrawa
CX-1032	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1033	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1034	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1035	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1036	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1037	С	Withdrawn	Withdrawa	Withdrawn	Withdrawn	Withdrawn
CX-1038	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1039	С	Withdraws	Withdrawn	Withdrasyn	Withdrawn	Withdrawn
CX-1040	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x. No	Conf	Description	Bates Number	Sponsoring Witness	Purpose	Status/Dute Admitted
	Des.	Description		Sports of the second	Purpose	Status/Date Admitted
CX-1041	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1042	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1043		Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1044		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1045		Withdraws	Wahdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1046		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1047		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1048		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1049		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1050		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1051	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1052	С	Withdrawn	Withdrawa	Withdrawn	Withdrawn	Withdrawn
CX-1053	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1054	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1055	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1056	Ċ	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1057	c	Withdrawn	Withdrawa	Withdrawn	Withdrawn	Withdrawa
CX-1058	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1059	С	Withdrawa	Withdrawn	Withdrawn	Withdrawa	Withdrawn
CX-1060		Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn

x. No	Conf.	Description	Bates Number	Sponsoring Witness	Perpose	Status/Date Admitted
Market 1	Des.	Description	Bates Number	Spensoring Witness		The state of the s
the state of the state of			are many of the principles between the said of the said of	Contract to the second section in the section		THE PROPERTY OF THE
K-1061	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
			1		w	
₹-1062	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
		986-897 5	2000-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-		as	William awa
	-					
X-1063	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
						ļ
X-1064	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
		(2000)				· · · · · · · · · · · · · · · · · · ·
X-1065	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Į .			Į .		
X-1066	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
			1000000			The state of the s
X-1067	C	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
		,				
X-1068	С	Withdrawn	Withdrawn	Withdrawn	Wish day	DCA I
X-1004		- William I	Windrawn	Windrawn	Withdrawn	Withdrawn
X-1069		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
24 1070		Interior Company Compa				
CX-1070		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
						* ,
X-1071		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

V 1077		West A	ne. i			
X-1072		Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1073	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
		Δ.	я			
W 1074	C	West to the second seco	West 4	near t	West 1	WELL A
X-1074		Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1075	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
						,
	_					
X-1076	С	Waltdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1077	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
NEC - 27 F				- CONT	anance Tr	(February)
X-1078	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
			, ,	,		
X-1079	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1080		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	ĺ		a a	, , , , , , , , , , , , , , , , , , ,		
						L

Can Canal		Daniel Control of the		Control of the same of the sam	
Dest.	Description	Bates Number	Spansering Witness	Purpose	Status/Date Admitted
	Withdrawn	Withdrawn	Withdrawn	Withdrawa	Withdrawn
С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
С	Withdrawn	Withdrawn	Withdrawn	Withdrawa	Withdrawn
С	TPL Product Sales Revenue by Yoar, October 2006 to August 2011	TPL389901-389902	Dwayne Hannah; Nicholas Antonopoulos	Domestic Industry	177/2013
С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
С	Acer S7750 Guide	ACER-841-ITC-0069787- ACER-841-ITC-0070060	Dale Busceine	Infringement	1/10/2013
c	Brother MFC-5895csv Service Manual	BROTHER01743351- BROTHER01743798	Dale Buscaino	Infringement	1/10/2013
	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Withdrawn	Withdrawn	Withdrawa	Withdrawn	Withdrawa
С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
	Seiko Artisan 730 Usor's Guide	EA1841ITC_0001562- EA1841ITC_0001868	Dale Buscaino	Infringement	1/10/2013
	Withdrawn	Withdrawa	Withdrawn	Withdrawn	Withdrawn
	c c c c c c c c c c c c c c c c c c c	Withdrawn C Withdrawn C Withdrawn C Withdrawn C Withdrawn C Acer \$7750 Guide C Brother MPC-5895cw Service Manual Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn C Withdrawn Selko Artisan 730 Upor's Guide	Withdrawn C Acer \$7750 Guide ACER-\$41-ITC-0005787- ACER-\$41-ITC-001805 Brother MFC-\$895cw Service Magual BROTHER01743331- BROTHER01743331- BROTHER01743798 Withdrawn C Withdrawn O Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn O Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn O Withdrawn Withdrawn Withdrawn Withdrawn O Withdrawn Withdrawn Withdrawn O Withdrawn Withdrawn O Withdrawn Withdrawn O Withdrawn Withdrawn Withdrawn O Withdrawn Withdrawn O Withdrawn Withdrawn O Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn Withdrawn	Withdrawn Withdr	Wilderwen Wilder

z. No	Conf. Des	Description		Sponsoring Witness	Purpose	Status/Date Admitted
	4	Description				
K-1101		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
K-1102		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1103		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
K-1104		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
K-1105	-	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1106		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1107		Withdrawn	Withdrawn	Withdrown	Withdrawn	Withdrawn
X-1108		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1109		Kingston FCR-HS3 Product Literature; Deposition of Joel Tang, Exhibit 4	KT000003-KT00004	Dale Buscuino	Infringement	1/25/2013
X-1110	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1111		Kingston FCR-HS2 19/1 Product Literature; Deposition of Joel Tang, Exhibit 5	KT000007-KT000008	Dale Buscaino	Infringement	1/10/2013
X-1112		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1113	Ċ	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1114/3X-0076	С	Sales of OnSpec Chips 2006-2011	TPL038069-TPL038072	Nicholas Antonopoulos	Domestic Industry	1/7/13-Moved to Joint Exhibit List as JX-0076C
X-1115	С	Summary of CoreFlash Revenue 2007-2012 YTD	TPL389797	Dan Leckrone	Domestic Industry	1/7/2013
X-1116	С	Schematics	HP176110	Dale Buscaino	Infringement	1/10/2013
X-1117	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1118	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1119	С	Flash Toaster Specification, dated August 7, 2000	TPL124725-TPL124730	Dale Buscaino, Sree lyer	Priority of Invention	1/7/2013
X-1120	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

z, No	Cont	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des	Descriptios	The stay of the state of the stay	The state of the s	Purpose	
X-1121	0	NEA .				
A-1121		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1122	С	Schematic	CANITC000256	Dale Buscaino	Infringement	1/10/2013
					18	
X-1123	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
X-1124	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1125	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1126	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1127	С	Brother Software User's Geide	TPL1046334-TPL1046540	Dale Buscaino	Infringement	1/10/2013
CX-1128		Photograph of Aspire M3970	TPL1038491	Dale Buscaino	Infringement	1/10/2013
CX-1129		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1130		GL326, USB 2.0 MultiSlot Flash Card Reader Controller, Revision 1.05	TPL1038163-TPL1038184	Dale Buscaino	Infringement	1/10/2013
CX-1131	С	Artisan 730 Schematics	SEC841_0013729	Dale Buscaino	Infringement	Excluded 1/4/13
CX-1132		Purchase Receipt for the Acer VN281 G/Acer Venton N	TPL1046157- TPL1046158	Dale Busciano, Douglas Lum	infringement; importation	177/2013
CX-1133		Purchase Receipt for the Acer AZ3771-UR20P/Acer All-in-One Z3	TPL1046159-TPL1046160	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1134		Purchase Receipt for the Acer AX1935	TPL1046155-TPL1046156	Dale Busciano; Douglas Lum	infringement, importation	1/7/2013
CX-1135	_	Purchase Receipt for the Acer Aspire M3/ Acer AM3970	TPL1046296-TPL1046297	Dulc Busciano, Douglas Lum	infringement; importation	1/7/2013
CX-1136		Purchase Receipt for the Acer AS7750	TPL1046154	Dale Busciano; Douglas Lum	infringement, importation	177/2013
CX-1137	-	Purchase Receipt for the Acer Revo 100	TPL1046299-TPL1046300	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1138		Purchase Receipt for the Acer aspire Timeline X	TPL1046298	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1139		Purchase Receipt for the Brother MPC-1220	TPL1046161	Dale Busciano; Douglas Lum	infringement, importation	1/7/2013
CX-1140		Purchase Receipt for the Brother MFC-J625DW	TPL1046165	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013

x.No	Conf.	Description	Bates Number	Sponsoring Witness	Purpose*	Status/Date Admitted
	Des.	Description			Purpose	
X-1141		Purchase Receipt for the Brother MFCJ6510DW	TPL1046162- TPL1046164	Dale Busciano; Donglas Lum	infringement; importation	1/7/2013
X-1142		Purchase Receipt for the Brother MFC-5895cw	TPL1046301	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1143	_	Purchase Receipt for the Canon PIXMA MG3320	TPL1046168- TPL1046169	Dale Busciane; Douglas Lum	infringement; importation	1/7/2013
X-1144	-	Purchase Receipt for the Canon PIXMA MG8220	TPL1046170	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1145		Purchase Receipt for the Canon A2:37218002AA TPL1046167 Dale Busciane; Donglas Lum infringement; importation 1		177/2013		
CX-1146	-	Purchase Receipt for the Canon PIXMA MG5220	TPL1046302-TPL1046303	Dale Busciano; Douglas Lum	infringement; importation	177/2013
X-1147		Purchase Receipt for the Canon SELPHY CP800	TPL1046171-TPL1046172	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1148		Purchase Receipt for the Canon SELPHY CP900	TPL1046173-, TPL1046174	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1149		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1150		Purchase Receipt for the Dell 560	TPL1046314- TPL1046316	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1151		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1152		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1153		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-1154		Purchase Receipt for the Dell OptiPlex 3010 Desktop	TPL1046189, TPL1046190, TPL1046191	Dule Busciano; Douglas Lum	infringement; importation	1772013
CX-1155		Purchase Receipt for the Dell 3555	TPL1046317, TPL1046318, TPL1046319	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1156		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1157 .		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1158		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa
CX-1159		Purchase Receipt for the Fajisu Lifebook T580	TPL1046322, TPL1046323	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1160	1	Purchase Receipt for the Fujitsu Lifebook P702	TPL1046209	Dale Busciano; Douglas Lunz	infringement; importation	1/7/2013

liw. 337-7A-841 Complainant Technology Properties Limited LLC's Finel Documentary Exhibit List (Comprehensive)

s. No	Cont	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
	Des.					
CX-1161		Purchase Receipt for the Fujitsu S752	TPL1046210	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1162		Purchase Receipt for the Fujitsu Lifebook LH531	TPL1046208	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1163		Purchase Receipt for the HiTi P110S	TPL1046213	Dale Busciano; Douglas Lum	infringement; importation	17/2013
CX-1164		Purchase Recoipt for the HiTi P510S	TPL1046214, TPL1046215	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1165		Purchase Receipt for the HiTi Photo Printer S420	TPL1046324, TPL1046325	Dale Busciano, Douglas Lum	infringement; importation	1/7/2013
CX-1166		Purchase Receipt for the HP 630 Notebook	TPL1046216	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1167		Purchase Receipt for the HP 110-4250NR	TPL1046234	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1168		Purchase Receipt for the HP 4430s	TPL1046248	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1169		Purchase Receipt for the HP 2170p	TPL1046224, TPL1046225, TPL1046226	Dale Busciano; Douglas Luna	infringement; importation	1/7/2013
CX-1170		Purchase Receipt for the HP 3420 All-in-One	TPL1046217	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1171		Purchase Receipt for the HP h9-1130	TPL1046240	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1172		Purchase Receipt for the HP Photosman 5510 e-ALL-IN-ONE	TPL1046246-TPL1046247	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1173	<u> </u>	Prirchase Receipt for the HP p7-1232	TPL1046242, TPL1046243	Dalc Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1174		Purchase Receipt for the HP h8-1220	TPL1046241	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1175		Purchase Receipt for the HP ENVY 14 series	TPL1046326	Dale Busciano, Douglas Lum	infringement; importation	1/7/2013
CX-1176		Purchase Receipt for the HP Omni 120z series	TPL1046307	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1177		Purchase Receipt for the HP Pavilion dm1z	TPL1046327	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1178		Purchase Receipt for the HP e-All-in-One Printer - C410a	TPL1046328- TPL1046329	Dale Busciano; Douglas Lum	infringement; importation	177/2013
CX-1179		Purchase Receipt for the HP Pavilion Slimline s5x1 series 1070	TPL1046330-TPL1046331	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1180		Purchase Receipt for the HP 687097-001	TPL1046222-TPL1046223	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013

x.No	Conf. Description	Bates Number	Spensoring Witness	Purpose	Status/Date Admitted
	Design				
X-1181	Purchase Receipt for the HP 644491-001	TPL1046220- TPL1046221	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1182	Purchase Receipt for the HP 636166-001	TPL1046218TPL1046219	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1183	Purchase Receipt for the Kingston FCR-HS3	TPL1046254- TPL1046255,	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1184	Purchase Receipt for the Kingston FCR-MLC3	TPL1046249-TPL1046251	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1185	Purchase Receipt for the Kingston FCR-H219/1	TPL1046252-TPL1046253	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1186	Purchase Receipt for the Rosewill RDCR-11002	TPL1046270, TPL1046271	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1187	Purchase Receipt for the Rosewill RCR-IM5001, Rosewill RCR-IC002	TPL1046265-67	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1188	Purchase Receipt for the Rosewill External - RSD-CR106	TPL1046332	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
X-1189	Purchase Receipt for the Rosewill RDCR-11004	TPL1046259-60	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1190	Purchase Receipt for the Rosewill 74-in-1 Internal - RCR-AK-IM5002; Rosewill RCR-AK-IM5002	TPL1046261-62	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1191	Purchase Recaipt for the Rosewill RCR-YJ-EX601	TPL1046268-69	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1192	Purchase Receipt for the Rosewill RDCR-12001	TPL1046272-73	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1 193	Purchase Receipt for the Reservit RCR-IC001	TPL1046264	Dale Busciano; Douglas Lum	infringement; importation	1/1/2013
CX-1194	Purchase Receipt for Ille Seiko Epson PictureMate Churm Photo Printer	TPL1046276-78	Dale Busciano; Douglas Lum	infringen ent; importation	1/7/2013
CX-1195	Purchase Receipt for the Seiko Epson WF-7510	TPL1046284-85	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1196	Purchase Receipt for the Seiko Epson Stylus NX625	TPL1046279-81	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1197	Purchase Receipt for the Seiko Epson WorkForce 435	TPL1046282	Dale Busciano; Donglas Lum	infringement; importation	1/1/2013
CX-1198	Purchase Receipt for the Seiko Epson XP-400	TPL1046286	Dalo Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1199	Purchase Receipt for the Seiko Epson Artisan 730	TPL1046274-TPL1046275	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013
CX-1200	Purchase Receipt for the Seiko Epson WorkForce 545	TPL1046283	Dale Busciano; Douglas Lum	infringement; importation	1/7/2013

x. No	Conf.	Description	Bates Number	Spensoring Witness	Purpose	Status/Date Admitted
	Des.	Description			Purpose	
CX-1201		Purchase Receipt for the Seike Epson Artisan 725 All-in-One Printer - Arctic Edition	TPL1046320-TPL1046321	Dale Buscinno; Douglas Lum	infringement; importation	177/2013
CX-1202		Photograph for the HP h9-2130	TPL1046694	Dale Busciano; Donglas Lum	infringement; importation	1/10/2013
CX-1203		Photograph for the HP Slimline \$5-1260	TPL1046695	Dale Buscaino	Infringement	1/10/2013
CX-1204	C	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1205	c	Rebuttal Witness Statement of Dale Buscaino	N/A	Dale Buscaino	Validity, conception; reduction to practice; priority date; date of invention	1/10/2013
CX-1206	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1207	С	Rebuttal Witness Statement of Nicholas Antonopolous	N/A	Nicholas Antonopoulos	Secondary considerations	1/7/2013
CX-1208	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1209	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1210	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1211	С	Withdrawu	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1212	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1213	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1214	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1215	С	Withdrawn	Withdrawn	Withdrawn	Withdrawa	Withdrawn
CX-1216	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1217	c	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1218	c	Withdrawn	Withdraws	Withdrawn	Withdrawn	Withdrawn
CX-1219	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1220	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawa

x. No	Conf. Des	Description	Bates Number	Sponsoring Witness	Purpose	Status/Date Admitted
CX-1221	c	Wilhdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1222	С	Withdrawn	Withdrawn	Withdrawn	Wilhdrawn	Withdrawn
CX-1223	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1224	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1225	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1226	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn.
CX-1227	С	Withdrawa	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1228	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1229	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1230	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1231	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1232	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CX-1233	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Exhibit No.	Conf. Des.	Description	Bates No	Sponsoring Witness	Purpose	Date Admitted
CPX-0001		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0002		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0003		Withdrawn	Withdrawn	_	Withdrawn	
		Withdrawn	winanwa	Withdrawn		Withdrawn
CPX-0004		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0005		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0006		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0007		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0008		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0009		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0010		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0011		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0012		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0013		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0014		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0015		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0016		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0017		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0018		OnSpec Evaluation Board; Physical Exhibit Pictured in Inv. 337-807 Iyer Deposition Exhibit 8		Sree Iyer, Dale Buscaino	Invention date, domestic industry	1/7/2013
	c		Withdrawn		Withdrawn	Withdrawn
CPX-0019		Withdrawn	W HINGISWII	Withdrawn		
CPX-0020	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0021	1	Product sample for the Acer VN281G	TPL2000017	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0022		Product sample for the Acer AZ3771-UR20P	TPL2000032,TPL2000033	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0023		Product sample for the Acer AX1935	TPL2000116, TPL2000117	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013

Exhibit No. Conf.	Des Description	Bates No.	Sponsoring Witness	Purpose	Date Admitted
CPX-0024	Product sample for the Acer Veriton N	N/A	Dale Buscaino; Douglas Lum	Infringement: importation	1/7/2013
CPX-0025	Product sample for the Acer Aspire M3	N/A	Dale Buscaino, Douglas Lum	Infringement; importation	1/7/2013
CPX-0026	Product sample for the Acer AS7750	TPL2000118, TPL2000119	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0027	Product sample for the Acer All-in-One Z3	n/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0028	Product sample for the Acer AM3970	TPL2000128,TPL2000129	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0029	Product sample for the Acer Revo 100	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0030	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0031	Product sample for the Brother MFC-J220	TPL2000007	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0032	Product sample for the Brother MFC-J625DW	TPL2000008	Dale Buscaino; Douglas Lum	Infringement, importation	1/7/2013
CPX-0033	Product sample for the Brother MFCJ6S10DW	TPL2000009	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0034	Product sample for the Brother MFC-5895cw	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0035	Product sample for the Brother PrinterMFC- 5895CW	TPL2000136, TPL2000137	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0036	Product sample for the Canon PIXMA MG5320	TPL2000001	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0037	Product sample for the Canon PIXMA MG8220	TPL2000000	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0038	Product sample for the Canon A2:3721B002AA	TPL2000134,TPL2000135	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0039	Product sample for the Canon PIXMA MG5220	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0040	Product sample for the Canon SELPHY CP800	TPL2000003	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0041	Product sample for the Canon SELPHY CP900	TPL2000002	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0042	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0043	Product sample for the Dell 560	TPL2000122,TPL2000123	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0044	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn (Duplicate of CPX-0043)
CPX-0045	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0046	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

FT (1) Yes 12 12 13			er alektrar ezetek		
Exhibit No Conf. Des	Description	Bates No 1	Sponsoring Witness	Purpose	Date Admitted
CPX-0047	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0048	Product sample for the Dell OptiPlex 3010 Desktop	TPL2000126,TPL2000127	Dale Busçaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0049	Product sample for the Dell 3555	TPL2000124,TPL2000125	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0050	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0051	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0052	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0053	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn (Duplicate of CPX-0049)
CPX-0054	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0055	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0056	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0057	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0058	Product sample for the HITi P110S	TPL2000046,TPL2000047	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0059	Product sample for the HiTi P510S	TPL2000048,TPL2000049	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0060	Product sample for the HiTi Photo Printer S420	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0061	Product sample for the HP 630 Notebook	TPL2000132, TPL2000133	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0062	Product sample for the HP 110-4250NR	TPL2000011	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0063	Product sample for the HP 4430s	TPL2000012	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0064	Product sample for the HP 2170p	TPL2000042,TPL2000043	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0065	Product sample for the HP 3420 All-in-One	TPL2000106,TPL2000107	Dale Buscaino; Douglas Lum	Infringement, importation	1/7/2013
CPX-0066	Product sample for the HP h9-1130	TPL2000108, TPL2000109	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0067	Product sample for the HP Photosmart 5510 e-ALL IN-ONE	TPL2000015	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0068	Product sample for the HP p7-1232	TPL2000100,TPL2000101	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0069	Product sample for the HP h8-1220	TPL2000014	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013

The state of the s				No. 7 to 200 All Company and All Company of the Com	
Exhibit No.	Canf. Des. Description	Bates No	Sponsoring Witness	Purpose	Date Admitted
CPX-0070	Product sample for the HP ENVY 14 series	N/A	D.I. D	V-0:	
CFX-00/0	Product sample for the PP ENV 1 14 series	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0071	Product sample for the HP Omni 120z series	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0072	Product sample for the HP Pavilion dm1z	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
Ony 0072	Product sample for the HP e-All-in-One Printer - C410a	N/A			
CPX-0073 CPX-0074	Product sample for the HP Pavilion Slimline s5xt series 1070	N/A	Dale Buscaino; Douglas Lum Dale Buscaino; Douglas Lum		1/7/2013
CPX-0075	Product sample for the HP 687097-001	TPL2000010	Dale Buscaino; Douglas Lum		1/7/2013
CPX-0076	Product sample for the HP 644491-001	TPL2000013	Dale Buscaino; Douglas Lum		1/7/2013
CPX-0077	Product sample for the FIP 636166-001	TPL2000022,TPL2000023	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0078	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0079	Product sample for the Kingston FCR-HS3	TPL2000090,TPL2000091	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0080	Product sample for the Kingston FCR-MLG3	TPL2000092,TPL2000093	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0081	Product sample for the Kingston FCR-HS219/1	TPL2000130,TPL2000131	Dale Buscaino; Douglas Lum	Infringement, importation	1/7/2013
CPX-0082	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0083	Product sample for the Rosewill RDCR-11002	TPL2000058,TPL2000059	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0084	Product sample for the Rosewill RCR-IM5001	TPL2000062,TPL2000063	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0085	Product sample for the Rosewill External - RSD- CR106	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0086	Product sample for the Rosewill RDCR-11004	TPL2000060,TPL2000061	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0087	Product sample for the Rosewill 74-in-1 Internal - RCR-AK-IM5002	N/A	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0088	Product sample for the Rosewill RCR-YJ-EX601	TPL2000024,TPL2000025	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0089	Product sample for the Rosewill RCR-IC002	TPL2000098,TPL2000099	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0090	Product sample for the Rosewill RDCR-12001	TPL2000056,TPL2000057	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013
CPX-0091	Product sample for the Rosewill RCR-IC001	TPL2000094,TPL2000095	Dale Buscaino: Douglas Lum	Infringement; importation	1/7/2013
CPX-0092	Product sample for the Rosewill RCR-AK-IM5002	TPL2000096,TPL2000097	Dale Buscaino; Douglas Lum	Infringement; importation	1/7/2013

Exhibit No. Cont Des.		Bates No	Sponsoring Witness	Purpose 💝	Date Admitted
CPX-0093	Product sample for the Seiko Epson PictureMate Charm Photo Printer	TPL2000026,TPL2000027	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0094	Product sample for the Seiko Epson WF-7510	TPL2000034,TPL2000035	Dale Buscaino: Douglas Lum	infringement; importation	1/7/2013
CPX-0095	Product sample for the Seiko Epson Stylus NX625	TPL2000004	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0096	Product sample for the Seiko Epson WorkForce 435	TPL2000005	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0097	Product sample for the Seiko Epson XP-400	TPL2000006	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0098	Product sample for the Seiko Epson Artisan 730	TPL2000019	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0099	Product sample for the Seiko Epson WorkForce 545	TPL2000038,TPL2000039	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0100	Product sample for the Seiko Epson Artisan 725 All-in-One Printer - Arctic Edition	N/A	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0101	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0102	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0103	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0104	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0105	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0106	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0107	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0108	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0109	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0110	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0111	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0112	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0113	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn .
CPX-0114	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0115	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Exhibit No.	Cont. Des.	Description	Bates No	Sponsoring Witness	Purpose	Date Admitted
CPX-0116		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0117		Product sample for the HP Slimline S5-1260	TPL2000105	Dale Buscaino; Douglas Lum	infringement; importation	1/7/2013
CPX-0118	С	Card Identification Demonstrative	N/A	Dale Buscaino	infringement	Admitted on 1/10/13; Moved to CDX list as CI
CPX-0119	С	Controller Mapping Demonstrative	N/A	Dale Buscaino	infringement	Admitted on I/I0/13; Moved to CDX list as CI
CPX-0120	С	SD and MMC data transfers Demonstrative	N/A	Dale Buscaino	infringement	Admitted on 1/10/13; Moved to CDX list as CI
CPX-0121	С	Shared signal lines Demonstrative	N/A	Dale Buscaino	infringement	Admitted on I/10/13; Moved to CDX list as Cl
CPX-0122		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0123		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0124		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0125		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0126		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0127		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0128		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0129		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0130		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0131		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0132		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0133		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0134		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0135		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0136		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0137		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0138		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Rehibit No	Conf. Des. Descripti	1002		Sponsoring Witness	Purpose	Date Admitted
CPX-0139	Withdraw			Withdrawn	Withdrawn	Withdrawn
CPX-0140	Withdraw	vn j	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0141	Withdraw	vn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0142	Withdraw	vn. ,	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0143	Withdraw	vn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0144	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0145	Withdrav	vn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0146	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0147	Withdray	ary ary	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0148	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0149	Withdray	wnn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0150	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0151	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0152	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0153	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0154	Withdray	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0155	Withdraw	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0156	Withdra	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0157	Withdra	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0158	Withdra	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0159	Withdra	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0160	Withdra	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CPX-0161	Withdra	wn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Exhibit No	of Dec. Description	The second secon	Sponsoring Witness	Purpose	Date Admitted	
CPX-0162	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CPX-0163	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	
CPX-0164	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn	

	Conf.					
Exhibit No.	Des.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0081	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0082	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0083	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0084	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0085	C_	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0086	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0087	c	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0088		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0089		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0090		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0091		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0092	ļ	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0093		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0094		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0095		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0096		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0097		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0098		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0099		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0100		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Conf. Exhibit No. Des.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0101	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0102	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0103	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0104	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0105	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0106	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0107	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0108	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0109	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0110	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0111	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0112	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0113	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0114	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0115	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0116	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0117	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0118	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0119	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0120	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn

Exhibit No.	Conf. Des.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0121		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0122		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0123		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0124		Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0125	С	Withdrawn	Withdrawn	Withdrawn	Withdrawn	Withdrawn
CDX-0126	С	Acer Ex. 2- 424 Acer AX1935 to Dale Buscaino's Initial Expert Report	TPL1043120-TPL1043159	Dale Buscaino	Infringement	1/10/2013
CDX-0127	С	Acer Ex, 3 -424 Acer AS7750 to Dale Buscaino's Initial Expert Report	TPL1043160-TPL1043196	Dale Buscaino	Infringement	1/10/2013
CDX-0128	c	Acer Ex. 4 - 443 Acer AX1935 to Dale Buscaino's Initial Expert Report	TPL1043197-TPL1043212	Dale Buscaino	Infringement	1/10/2013
CDX-0129	С	Acer Ex, 5 -443 Acer AS7750 to Dale Buscaino's Initial Expert Report	TPL1043213-TPL1043224	Dale Buscaino	Infringement	1/10/2013
CDX-0130	С	Acer Ex. 6-549 Acer AX1935 to Dale Buscaino's Initial Expert Report	TPL1043225-TPL1043252	Dale Buscaino	Infringement	1/10/2013
CDX-0131	С	Acer Ex. 7-549 Acer AS7750 to Dale Buscaino's Initial Expert Report	TPL1043253-TPL1043280	Dale Buscaino	Infringement	1/10/2013
CDX-0132	c	Acer Ex. 8- 623 Acer Aspire M3970 to Dale Buscaino's Initial Expert Report	TPL1043281-TPL1043294	Dale Buscaino	Infringement	1/10/2013
CDX-0133	С	Acer Ex. 9 -847 Acer AX1935 to Dale Buscaino's Initial Expert Report	TPL1043295-TPL1043315	Dale Buscaino	Infringement	1/10/2013
CDX-0134	С	Acer Ex. 10- 847 Acer AS7750 to Dale Buscaino's Initial Expert Report	TPL1043101-TPL1043119	Dale Buscaino	Infringement	1/10/2013
CDX-0135_	С	Acer Ex. 11 - Acer Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043316-TPL1043319	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0136	С	Amended Acer Exhibit 1 - Acer Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043220-TPL1043224	Dale Buscaino	Infringement	1/8/13 -Redacted per Motion in Limine Ruling 1/4/13
CDX-0137	С	Brother Ex. 1- Brother Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043325-TPL1043327	Dale Buscaino	Infringement	1/8/2013
CDX-0138	С	Brother Ex. 2 -424 Brother MFC-J6510DW to Dale Buscaino's Initial Expert Report	TPL1043328-TPL1043349	Dale Buscaino	Infringement	1/10/2013
CDX-0139	С	Brother Ex. 3- 443 Brother MFC-J6510DW to Dale Buscaino's Initial Expert Report	TPL1043350-TPL1043377	Dale Buscaino	Infringement	1/10/2013
CDX-0140	С	Brother Amended Exhibit 2 - 424 Brother MFC-J6510DW to Dale Buscaino's Initial Expert Report	TPL1043378-TPL1043399	Dale Buscaino	Infringement	Excluded 1/4/13

Exhibit No.	Conf. Des.		Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0141	С	Brother Amended Exhibit 3 - 443 Brother MFC-J6510DW to Dale Buscaino's Initial Expert Report	TPL1043400-TPL1043427	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0142	С	Canon Ex. I - Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043428-TPL1043430	Dale Buscaino	Infringement	1/8/2013
CDX-0143	С	Canon Ex. 2 -424 Canon PIXMA MG8220 to Dale Buscaino's Initial Expert Report	TPL1043431-TPL1043469	Dale Buscaino	Infringement	1/10/2013
CDX-0144	С	Canon Ex. 3 -443 Canon PIXMA MG8220 to Dale Buscaino's Initial Expert Report Dell Ex. 1 - 424 Dell 19in1 Long Bay Reader to Dale	TPL1043470-TPL1043499	Dale Buscaino	Infringement	1/10/2013
CDX-0145	С	Buscaino's Initial Expert Report Dell Ex. 2 - 424 Dell Vostro 3555 to Dale Buscaino's Initial	TPL1043500-TPL1043533	Dale Buscaino	Infringement	1/10/2013
CDX-0146	с	Expert Report	TPL1043534-TPL1043568	Dale Buscaino	Infringement	1/10/2013
CDX-0147	С	Dell Ex. 3 - 443 Dell 19in1 Long Bay Reader to Dale Buscaino's Initial Expert Report	TPL1043569-TPL1043581	Dale Buscaino	Infringement	1/10/2013
CDX-0148	С	Dell Ex. 4- 443 Dell Vostro 3555 to Dale Buscaino's Initial Expert Report	TPL1043582-TPL1043593	Dale Buscaino	Infringement	1/10/2013
CDX-0149	С	Dell Ex. 5 - 549 Dell 19in1 Long Bay Reader to Dale Buscaino's Initial Expert Report Dell Ex. 6 - 549 Dell Vostro 3555 to Dale Buscaino's Initial	TPL1043594-TPL1043620	Dale Buscaino	Infringement	1/10/2013
CDX-0150	С	Expert Report Dell Ex. 7- 623 Dell 19in1 Long Bay Reader to Dale	TPL1043621-TPL1043647	Dale Buscaino	Infringement	1/10/2013
CDX-0151	c	Buscaino's Initial Expert Report Dell Ex. 8 - 638 Dell 19in1 Long Bay Reader to Dale	TPL1043648-TPL1043665	Dale Buscaino	Infringement	1/10/2013
CDX-0152	С	Buscaino's Initial Expert Report Dell Ex. 9 - 847 Dell Vostro 3555 to Dale Buscaino's Initial	TPL1043666-TPL1043719	Dale Buscaino	Infringement	1/10/2013
CDX-0153	С	Expert Report	TPL1043720-TPL1043738	Dale Buscaino	Infringement	1/10/2013
CDX-0154	С	Dell Exhibit 10 to Dale Buscaino's Initial Expert Report Dell Amended Ex. 1 -424 Dell 19in1 Long Bay Reader to	TPL1043739-TPL1043750	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0155	С	Dale Buscaino's Initial Expert Report Dell Amended Ex. 3-443 Dell 19in1 Long Bay Reader to Dale	TPL1043751-TPL1043784	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0156	С	Buscaino's Initial Expert Report Dell Amended Ex. 5-549 Dell 19in1 Long Bay Reader to Dale	TPL1043785-TPL1043797	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0157		Buscaino's Initial Expert Report Dell Amended Ex. 7-623 Dell 19in1 Long Bay Reader to Dale	TPL1043798-TPL1043824	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0158	С	Buscaino's Initial Expert Report Dell Amended Ex. 8 -638 Dell 19in1 Long Bay Reader to	TPL1043825-TPL1043842	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0159	С	Dale Buscaino's Initial Expert Report Fujitsu Ex. 1 - Infringement Analysis Chart to Dale Buscaino's	TPL1043843-TPL1043896	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0160	c	Initial Expert Report	TPL1043897-TPL1043900	Dale Buscaino	Infringement	1/8/2013

Exhîbit No.	Conf. Des.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0161	С	Fujitsu Ex. 2 - 424 Fujitsu Lifebook S752 to Dale Buscaino's Initial Expert Report	TPL1043901-TPL1043911	Dale Buscaino	Infringement	1/10/2013
CDX-0162	С	Fujitsu Ex. 3 -443 Fujitsu Lifebook S752 to Dale Buscaino's Initial Expert Report	TPL1043912-TPL1043931	Dale Buscaino	Infringement	1/10/2013
CDX-0163	<u>c</u>	HiTi Ex. 1 -Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043932-TPL1043933	Dale Buscaino	Infringement	1/8/2013
CDX-0164	c	HiTi Ex. 2 - 424 HiTi P110S to Dale Buscaino's Initial Expert Report	TPL1043934-TPL1043976	Dale Buscaino	Infringement	1/10/2013
CDX-0165	c	HiTi Ex. 3 -443 HiTi P110S to Dale Buscaino's Initial Expert Report	TPL1043977-TPL1043988	Dale Buscaino	Infringement	1/10/2013
CDX-0166	c	HP Ex. 1 - Notebook Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043989-TPL1043996	Dale Buscaino	Infringement	1/8/2013
CDX-0167	c	HP Ex. 2- Printer Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1043997-TPL1043999	Dale Buscaino	Infringement	1/10/2013
CDX-0168	c	HP Ex. 3 -424 HP 630 to Dale Buscaino's Initial Expert Report	TPL1044000-TPL1044018	Dale Buscaino	Infringement	1/10/2013
CDX-0169	С	HP Ex. 4 -424 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044019-TPL1044040	Dale Buscaino	Infringement	1/10/2013
CDX-0170	c	HP Ex. 5 424 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044041-TPL1044080	Dale Buscaino	Infringement	1/10/2013
CDX-0171	С	HP Ex. 6 -424 HP Photosmart 5510 to Dale Buscaino's Initial Expert Report	TPL1044081-TPL1044116	Dale Buscaino	Infringement	1/10/2013
CDX-0172	c	HP Ex. 7 - 443 HP 630 to Dale Buscaino's Initial Expert Report	TPL1044117-TPL1044126	Dale Buscaino	Infringement	1/10/2013
CDX-0173	С	HP Ex. 8- 443 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044127-TPL1044143	Dale Buscaino	Infringement	1/10/2013
CDX-0174	c	HP Ex. 9 - 443 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044144-TPL1044158	Dale Buscaino	Infringement	1/10/2013
CDX-0175	c	HP Ex. 10 - 443 HP Photosmart 5510 to Dale Buscaino's Initial Expert Report	TPL1044159-TPL1044187	Dale Buscaino	Infringement	1/10/2013
CDX-0176	С	HP Ex. 11 -549 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044188-TPL1044219	Dale Buscaino	Infringement	1/10/2013
CDX-0177	С	HP Ex. 12 - 549 HP IDI1 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044220-TPL1044248	Dale Buscaino	Infringement	1/10/2013
CDX-0178	c	HP Ex. 15 - 847 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044249-TPL1044269	Dale Buscaino	Infringement	1/10/2013
CDX-0179	С	HP Amended Exhibit 4 - 424 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044270-TPL1044297	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0180	С	HP Amended Exhibit 5-424 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044298-TPL1044 <u>34</u> 0	Dale Buscaino	Infringement	Excluded 1/4/13

	Conf.				Various Contraction	5 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C
Exhibit No.	Des.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0181	с	HP Amended Exhibit 8 -443 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044341-TPL1044363	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0182	С	HP Amended Exhibit 9 - 443 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044364-TPL1044380	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0183	С	HP Amended Exhibit 11 - 549 HP 644491-001 Card Reader to Dale Buscaino's Initial Expert Report	TPL1044381-TPL1044418	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0184	С	HP Amended Exhibit 12 - 549 HP ID11 Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044419-TPL1044449	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0185	С	HP Amended Exhibit 15 - 847 HP IDI I Stargell Card Reader to Dale Buscaino's Initial Expert Report	TPL1044450-TPL1044472	Dale Buscaino	Infringement	Excluded 1/4/13
CDX-0186	С	Kingston Ex. 1 -Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1044473-TPL1044474	Dale Buscaino	Infringement	1/8/2013
CDX-0187	С	Kingston Ex. 2 - 424 Kingston FCR-HS219-1 to Dale Buscaino's Initial Expert Report	TPL1044475-TPL1044513	Dale Buscaino	Infringement	1/10/2013
CDX-0188	С	Kingston Ex. 3 - 443 Kingston FCR-HS219-1 to Dale Buscaino's Initial Expert Report	TPL1044514-TPL1044528	Dale Buscaino	Infringement	1/10/2013
CDX-0189	С	Kingston Ex. 4-623 Kingston FCR-HS219-1 to Dale Buscaino's Initial Expert Report	TPL1044529-TPL1044542	Dale Buscaino	Infringement	1/10/2013
CDX-0190	С	Rosewill Ex. 1 - Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1044543-TPL1044544	Dale Buscaino	Infringement	1/8/2013
CDX-0191	С	Rosewill Ex. 2 -424 Rosewill RCR-YJ-EX601 to Dale Buscaino's Initial Expert Report	TPL1044545-TPL1044561	Dale Buscaino	Infringement	1/10/2013
CDX-0192	С	Rosewill Ex, 3 - 443 Rosewill RCR-YJ-EX601 to Dale Buscaino's Initial Expert Report	TPL1044562-TPL1044572	Dale Buscaino	Infringement	1/10/2013
CDX-0193	С	Rosewill Ex. 4- 549 Rosewill RCR-YJ-EX601 to Dale Buscaino's Initial Expert Report	TPL1044573-TPL1044598	Dale Buscaino	Infringement	1/10/2013
CDX-0194	С	Rosewill Ex. 5 -623 Rosewill RCR-YJ-EX601 to Dale Buscaino's Initial Expert Report	TPL1044599-TPL1044615	Dale Buscaino	Infringement	1/10/2013
CDX-0195	С	Seiko Ex, 1 -Seiko Epson Infringement Analysis Chart to Dale Buscaino's Initial Expert Report	TPL1044616-TPL1044619	Dale Buscaino	Infringement	1/8/2013
CDX-0196	С	Seiko Ex. 2 - 424 Seiko Epson Artisan 730 to Dale Buscaino's Initial Expert Report	TPL1044620-TPL1044659	Dale Buscaino	Infringement	1/10/2013
CDX-0197	С	Seiko Ex. 3 -443 Seiko Epson Artisan 730 to Dale Buscaino's Initial Expert Report	TPL1044660-TPL1044692	Dale Buscaino	Infringement	1/10/2013
CDX-0198	С	Seiko Ex. 4 -549 Seiko Epson Artisan 730 to Dale Buscaino's Initial Expert Report	TPL1044693-TPL1044720	Dale Buscaino	Infringement	1/10/2013
CDX-0199	С	Demonstrative of Exhibit C to Dale Buscaino's Initial Expert Report with citations to Hearing Exhibits	N/A	Dale Buscaino	Domestic industry	1/7/2013
CDX-0200		Demonstrative Exhibit used in Cross-Examination of Dr. Wolfe	N/A	Dr. Wolfe	Infringement	1/8/2013

Exhibit No. De		Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0201	Demonstrative Exhibit used in Cross-Examination of Dr. Banerjee	N/A	Dr. Banerjee	Infringement / Validity	1/10/2013
CDX-0202	Demonstrative Exhibit used in Cross-Examination of Dr. McAlexander	N/A	Dr. McAlexander	Validity / Domestic Industry	1/10/2013
CDX-0203	Demonstrative Exhibit used in Cross-Examination of Dr. McAlexander	N/A	Dr. McAlexander	Validity / Domestic Industry	1/10/2013
CDX-0204	Demonstrative Exhibit used in Cross-Examination of Dr. McAlexander	N/A	Dr. McAlexander	Validity / Domestic Industry	1/10/2013
CDX-0205	TPL Complaint Exhibit 105-5 Sony VRD-MC6	TPL1023063-TPL1023084	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0206	TPL Complaint Exhibit 105-6 Sony VRD-MC6	TPL1023085-TPL1023096	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0207	TPL Complaint Exhibit 105-7 Sony VRD-MC6	TPL1023097-TPL1023117	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0208	TPL Complaint Exhibit 105-8 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP	TPL1023118-TPL1023151	Dale Buscaino; Dwayne Hannah	Domestic industry	1/7/2013
CDX-0209	TPL Complaint Exhibit 105-10 Addonics Internal SATA/USB DigiDrive AEIDDSAU / WP	TPL1023163-TPL1023181	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0210	TPL Complaint Exhibit 105-12 Addonics PCMCIA Flash DigiAdapter Extreme ADPMAF-X	TPL1023202-TPL1023213	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0211	TPL Complaint Exhibit 105-14 Addonics PCMCIA Flash DigiAdapter Extreme ADPMAF-X	TPL1023235-TPL1023256	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0212	TPL Complaint Exhibit 105-15 Addonics Pocket eSATA/USB DigiDrive AEPDDESU / WP	TPL1023257-TPL1023291	Dale Buscaino; Dwayne Hannah	Domestic industry	1/7/2013
CDX-0213	TPL Complaint Exhibit 105-16 Addonics Pocket eSATA/USB DigiDrive AEPDDESU / WP P	TPL1023292-TPL103305	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0214	TPL Complaint Exhibit 105-18 Addonics Pocket eSATA/USB DigiDrive AEPDDESU / WP	TPL1023326-TPL1023337	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0215	TPL Complaint Exhibit 105-19 Addonics Pocket eSATA/USB DigiDrive AEPDDESU / WP	TPL1023338-TPL1023359	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0216	TPL Complaint Exhibit 105-20 CMING - Digigear SD/SDHC/SDXC to High-Speed Extreme CF Type II SDXCF	TPL1023360-TPL1023372	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0217	TPL Complaint Exhibit 105-21 CMING - Digigear SD/SDHC/SDXC to High-Speed Extreme CF Type II SDXCF	TPL1023373-TPL1023393	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0218	TPL Complaint Exhibit 105-22 CompuApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023394-TPL1023436	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0219	TPL Complaint Exhibit 105-23 CompuApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023437-TPL1023458	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0220	TPL Complaint Exhibit 105-24 CompuApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023459-TPL1023470	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013

Conf. Exhibit No. Des.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0221	TPL Complaint Exhibit 105-25 CompuApps OmniFlash Card Reader UnoMas MS-UM100-1	TPL1023471-TPL1023491	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0222	TPL Complaint Exhibit 105-26 CompuApps OmniFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023492-TPL1023528	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0223	TPL Complaint Exhibit 105-27 CompuApps OmniFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023529-TPL1023541	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0224	TPL Complaint Exhibit 105-29 CompuApps OmniFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023561-TPL1023573	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0225	TPL Complaint Exhibit 105-30 CompuApps OmniFlash eSATA Kiosk Flash Media Card Reader xSil145-G-ES1	TPL1023574-TPL1023593	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0226	TPL Complaint Exhibit 105-31 CompuApps OmniFlash IDE Kiosk Flash Memory Card Reader xSil146-G	TPL1023594-TPL1023607	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0227	TPL Complaint Exhibit 105-33 CompuApps OmniFlash IDE Kiosk Flash Memory Card Reader xSil146-G	TPL1023627-TPL1023643	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0228	TPL Complaint Exhibit 105-34 CompuApps OmniFlash IDE741 Multislot Flash Card Reader/Writer 90C46D-LF	TPL1023644-TPL1023678	Dale Buscaino; Dwayne Hannah	Domestic industry	1/7/2013
CDX-0229	TPL Complaint Exhibit 105-35 CompuApps OmniFlash IDE741 Multislot Flash Card Reader/Writer 90C46D-LF	TPL1023679-TPL1023689	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0230	TPL Complaint Exhibit 105-36 CompuApps OmniFlash IDE741 Multislot Flash Card Reader/Writer 90C46D-LF	TPL1023690-TPL1023709	Dale Buscaino; Dwayne Hannah	Domestic industry	1/28/2013
CDX-0231	TPL Complaint Exhibit 105-41 Lexmark X5650	TPL1023723-TPL1023738	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0232	TPL Complaint Exhibit 105-42 Lexmark X5650	TPL1023739-TPL1023763	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0233	TPL Complaint Exhibit 105-43 Lexmark X5650	TPL1023764-TPL1023787	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0234	TPL Complaint Exhibit 105-44 Lexmark X5650	TPL1023788-TPL1023810	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0235	TPL Complaint Exhibit 105-45 Belkin PM00525-A	TPL1023811-TPL1023843	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0236	TPL Complaint Exhibit 105-46 Belkin PM00525-A	TPL1023844-TPL1023857	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0237	TPL Complaint Exhibit 105-47 Belkin PM00525-A	TPL1023858-TPL1023876	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0238	TPL Complaint Exhibit 105-48 Gearhead 23-in-1 Card Reade All-in-One CR4200	TPL1023877-TPL1023893	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0239	TPL Complaint Exhibit 105-49 Gearhead 23-in-1 Card Reade All-in-One CR4200	TPL1023894-TPL1023916	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0240	TPL Complaint Exhibit 105-50 Gearhead 58-in-1 Card Reade CR7400M	TPL1023917-TPL1023934	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013

Exhibit No.	Conf. Des.	Description	Bates Number	Sponsoring Witness	Purpose	Date Received
CDX-0241		TPL Complaint Exhibit 105-51 Gearhead 58-in-1 Card Reader CR7400M	TPL1023935-TPL1023958	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0242	776	TPL Complaint Exhibit 105-52 Gearhead 58-in-1 Card Reader CR7400M	TPL1023959-TPL1023980	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0243		TPL Complaint Exhibit 105-53 Lenovo 58-in-1 Card Reader CR7500H	TPL1023981-TPL1023992	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0244		TPL Complaint Exhibit 105-54 Lenovo H320-4041-1JU	TPL1023993-TPL1024009	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0245		TPL Complaint Exhibit 105-55 Lenovo H320-4041-1JU	TPL1024010-TPL1024033	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0246		TPL Complaint Exhibit 105-56 Lenovo IdeaPad Z560- 09144D	TPL1024034-TPL1024045	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0247		TPL Complaint Exhibit 105-57 Lenovo IdeaPad Z560- 09144D	TPL1024046-TPL1024066	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0248		TPL Complaint Exhibit 105-58 Lenovo IdeaPad Z560- 09144D	TPL1024067-TPL1024086	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0249		TPL Complaint Exhibit 105-59 Xi MTower 2P64X	TPL1024087-TPL1024130	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0250		TPL Complaint Exhibit 105-60 Xi MTower 2P64X	TPL1024131-TPL1024142	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0251		TPL Complaint Exhibit 105-61 Xi MTower 2P64X	TPL1024143-TPL1024166	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0252		TPL Complaint Exhibit 105-62 Xi MTower 2P64X	TPL1024167-TPL1024187	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0253		TPL Complaint Exhibit 105-63 Apple 13" Macbook Pro (2011)	TPL1024188-TPL1024198	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013
CDX-0254		TPL Complaint Exhibit 105-64 T Apple 13" Macbook Pro (2011)	TPL1024199-TPL1024214	Dale Buscaino; Dwayne Hannah	Domestic industry	1/9/2013

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **INITIAL DETERMINATION** has been served upon the following parties as indicated on **August 21**, **2013**.

Lisa R. Barton, Acting Secretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, DC 20436 On Behalf of Complainant Technology Properties Limited LLC: Anthony G. Simon, Esq.) Via Hand Delivery Via Express Delivery THE SIMON LAW FIRM PC) Via First Class Mail 800 Market St., Ste. 1700) Other: St. Louis, MO 63101 On Behalf of Respondent Hewlett-Packard Company: Marcia H. Sundeen, Esq.) Via Hand Delivery Via Express Delivery KENYON & KENYON LLP) Via First Class Mail 1500 K Street, NW) Other: _____ Washington, DC 20005 On Behalf of Respondent HiTi Digital Inc.:) Via Hand Delivery Jenny W. Chen, Esq. Via Express Delivery c/o Darrin A. Auito, Esq.) Via First Class Mail WESTERMAN HATTORI DANIELS & ADRIAN LLP 1250 Connecticut Avenue, NW, Suite 700) Other: Washington, DC 20036 On Behalf of Respondent Acer Inc.:)Xia Hand Delivery Eric C. Rusnak, Esq. Via Express Delivery **K&L GATES LLP**) Via First Class Mail 1601 K Street, NW Washington, DC 20006-1600) Other: Certificate of Service – Page 2

On Behalf of Respondent Brother Industries Ltd.:	
Joseph M. Potenza, Esq. BANNER & WITCOFF LTD 1100 13th Street, NW, Suite 1200 Washington, DC 20005	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Seiko Epson Corporation:	
Louis S. Mastriani, Esq. ADDUCI, MASTRIANI & SCHAUMBERG LLP 1133 Connecticut Avenue, NW, 12 th Floor Washington, DC 20036	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Canon Inc.:	
David M. Maiorana, Esq. JONES DAY 901 Lakeside Avenue Cleveland, OH 44114	() Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Kingston Technology Company, Inc.:	
Christine Yang, Esq. LAW OFFICES OF S.J. CHRISTINE YANG 17220 Newhope Street, Suites 101-103 Fountain Valley, CA 92708	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondents Newegg Inc. and Rosewill Inc.:	
Kent E. Baldauf, Esq. THE WEBB LAW FIRM 420 Ft. Duquesne Boulevard, Suite 1200 Pittsburgh, PA 15222	 () Via Hand Delivery () Via Express Delivery () Via First Class Mail () Other:
On Behalf of Respondent Dane Memory, S.A. (a/k/a Dane-Ele	<u>c</u>
Memory):	**
Jeffrey G. Jacobs, Esq. THE LAW OFFICE OF JEFFREY G. JACOBS PC 15770 Laguna Canyon Road, Suite 100 Irvine, CA 92618	 () Wia Hand Delivery () Via Express Delivery () Via First Class Mail () Other:

Inv. No. 337-TA-841

CERTAIN COMPUTERS AND COMPUTER PERIPHERAL DEVICES AND COMPONENTS THEREOF AND PRODUCTS CONTAINING THE SAME

Certificate of Service – Page 3

T		
Pu	h	10
1 u	W.	u

Lori Hofer, Library Services LEXIS-NEXIS 9473 Springboro Pike Miamisburg, OH 45342	() Yia Hand Delivery (Express Delivery (Via First Class Mail () Other:
Kenneth Clair FHOMSON WEST 1100 13 th Street, NW, Suite 200	() Via Hand Delivery() Via Express Delivery() Via First Class Mail
Washington DC 20005	() Other