UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN COMPUTING DEVICES UTILIZING INDEXED SEARCH SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1389

COMMISSION OPINION

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I. INTRODUCTION

On September 3, 2024, the presiding administrative law judge ("ALJ") issued an initial determination ("ID") (Order No. 18) in the above-identified investigation, granting in part respondents' motion for summary determination of noninfringement with respect to the asserted claims of U.S. Patent No. 8,498,977 ("the '977 patent"). Order No. 18 (Sept. 3, 2024).¹

Having considered the ID and the parties' submissions, the Commission has determined to review the ID and, on review, to affirm the ID's grant of summary determination of noninfringement of the '977 patent with modified and supplemented analysis. The Commission affirms, as explained herein, the ALJ's claim construction of the term "non-adjacent in at least one of the identified documents," which is recited in asserted claims 1, 2, 7, and 19 of the '977 patent. Based on this claim construction, the Commission also affirms the ID's finding of noninfringement and, thus, of no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337 ("section 337"), as to the '977 patent.

This opinion sets forth the Commission's reasoning in support of that determination.

II. BACKGROUND

A. Procedural History

On January 29, 2024, the Commission instituted this investigation under section 337 based on a complaint filed by X1 Discovery, Inc. of Pasadena, California ("Complainant"). *See* 89 Fed. Reg. 5574-75 (Jan. 29, 2024). The complaint, as amended, alleges violations of section

¹ The ALJ found that there are genuine issues of material fact regarding infringement of U.S. Patent No. 8,856,093 ("the '093 patent") and, therefore, denied summary determination of noninfringement of the '093 patent. *Id.* Accordingly, the ALJ's determination regarding the '093 patent is not part of the ID and this opinion does not address that patent. *See* 19 C.F.R. § 210.18 (f) (stating that a grant of summary determination shall constitute an initial determination).

337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain computing devices utilizing indexed search systems and components thereof by reason of the infringement of certain claims of the '977 patent and the '093 patent. *Id.* The complaint also alleges that a domestic industry exists. *Id.* The notice of investigation names seven respondents, including: ASUSTeK Computer Inc. of Taipei City, Taiwan; ASUS Computer International of Fremont, California; Acer Inc. of Xizhi, Taiwan; Acer America Corporation of San Jose, California; Dell Technologies Inc. and Dell Products, both of Round Rock, Texas; and Dell (Chengdu) Company Limited of Sichuan, China ("Dell Chengdu"). *Id.* The Office of Unfair Import Investigations is not participating in this investigation.

The Commission previously terminated the investigation as to respondent Dell Chengdu based on partial withdrawal of the complaint. Order No. 8 (May 6, 2024), *unreviewed by* Comm'n Notice (May 22, 2024).

The Commission also previously terminated the investigation as to claims 5, 8-11, 13, 15-16, and 20 of the '977 patent and claims 1-7, 11-12, 14-17, and 19 of the '093 patent based on partial withdrawal of the complaint. Order No. 15 (Aug. 27, 2024), *unreviewed by* Comm'n Notice (Sept. 23, 2024).

On August 5, 2024, respondents Acer Inc., Acer America Corporation, ASUSTek Computer Inc., ASUS Computer International, Dell Technologies Inc. and Dell Products (collectively, "Respondents") moved for summary determination of noninfringement as to all

remaining asserted claims.² On August 15, 2024, Complainant filed an opposition to the motion.³

On August 23, 2024, Respondents filed a motion to strike a portion of Complainant's opposition as being based on an untimely infringement theory. On September 3, 2024, the ALJ granted the motion to strike in part. Order No. 17 (Sept. 3, 2024).

On September 3, 2024, the ALJ issued the subject ID granting in part Respondents' motion for summary determination of noninfringement. Specifically, the ID finds that, based on the proper construction of the claim limitation "non-adjacent in at least one of the identified documents," there is no material issue of fact that the Respondents do not infringe the asserted claims of the '977 patent.

On September 9, 2024, Complainant filed a motion for partial reconsideration of the ID.⁴ On September 13, 2024, Respondents filed an opposition to the motion for partial reconsideration.⁵ On September 16, 2024, the ALJ denied Complainant's motion for partial reconsideration of the ID because the ID is before the Commission and the ALJ lacks authority to reconsider it. Order No. 21 (Sept. 16, 2024). On September 10, 2024, Complainant filed a petition for review of the subject ID.⁶ Complainant contends that the ID errs in its construction of the term "non-adjacent in at least one of the identified documents." Specifically, Complainant

² Respondents' Motion for Summary Determination (Aug. 5, 2024) ("Mot.").

³ Complainant's Memorandum in Opposition to Respondents' Motion for Summary Determination (Aug. 15, 2024) ("Opp'n").

⁴ Complainant's Motion for Partial Reconsideration of Order No. 18 (Sept. 9, 2024).

⁵ Respondents' Opposition to Complainant X1's Motion for Partial Reconsideration of Order No. 18 (Sept. 13, 2024).

⁶ Complainant's Petition for Review of the Initial Determination on Violation of Section 337 As To U.S. Patent No. 8,498,977 (Sept. 10, 2024) ("CPet.").

asserts that the ALJ incorrectly based the construction on prosecution disclaimer in a patent Complainant argues is "indirectly related" to the '977 patent. CPet. at 1. On September 17, 2024, Respondents filled a response arguing that the ID correctly construes the disputed term, and that Complainant has no infringement arguments under that proper construction.⁷

B. The Asserted Patents

The '977 patent and '093 patent (the "Asserted Patents")⁸ are related, share a specification and claim priority back to the same parent application, which issued as U.S. Patent No. 7,370,035. *See, e.g.*, '977 patent at 1.⁹ The Asserted Patents are both titled "Methods and Systems for Search Indexing" and identify William Gross and Steven Lee Colwell as the inventors. *Id*.

The Asserted Patents relate to techniques for searching and seek to improve on conventional computer or Web-based search systems (*e.g.*, Internet search engines or File Explorer searching), which the Asserted Patents characterize as being slow and offering limited filtering options. '977 patent at 1:35-45. The Asserted Patents disclose "incremental or reactive searching," which includes searching on a character-by-character basis. *Id.* at 2:12-24, 22:26-44; Complaint Appx. A Pt. 3 at 231 ('977 Prosecution History, Apr. 5, 2011 at 6); *see also* Mot. at 4-5. For example, if a user were to search for "Determination," the disclosed search method would execute thirteen searches, one for "D," one for "De," one for "Det" and so on until the full word,

⁷ Respondents' Response to Complainant X1's Petition for Review of the Initial Determination of No Violation of Section 337 as to U.S. Patent No. 8,498,977 (Sept. 17, 2024) ("RPet. Reply").

⁸ The '977 and '093 patents predate the March 16, 2013 enactment of the America Invents Act ("AIA") and, thus, must be considered under the pre-AIA statutes.

⁹ Since the specification is the same for both Asserted Patents, citations to only the '977 patent are used herein.

"Determination," was input and searched. *Id.* The disclosed search method provides real-time search results that can be used to quickly identify documents that contain the search terms and allow users to quickly refine any search query based on the results provided. *Id.* Further, the user can incrementally broaden the search results by deleting or backspacing over previously-entered characters such that the search is updated immediately and without the need for the user to click on a "search" button. *Id.* at 3:49-57. The various disclosed embodiments provide methods for searching, indexing, and presenting information that involve this incremental searching. *Id.* at 3:36-37.

Figure 2B, shown below, illustrates an example search process:

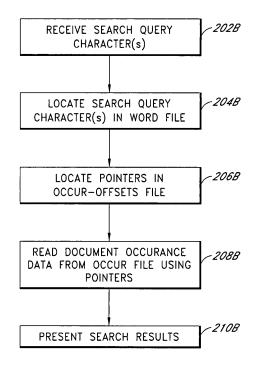


FIG. 2B

Id. at Fig. 2B, 3:15-16, 6:52-62. In this embodiment, initially, one or more search characters are received (**202B**). *Id.* at 6:52-62. Second, the search procedure locates the received character(s) in a words file (**204B**). *Id.* The "words" file is made up of "a list of the words that occur in the target files." *Id.* at 6:16-18. Next, in steps three and four (**206B** and **208B**), the search method in this embodiment determines how many occurrences of the character(s) exist. *Id.* at 6:55-59. Finally, in the last step (**210B**), the results are presented to the user. *Id.* at 6:59-60.

The claims of the Asserted Patents were amended during prosecution in order to gain allowance over prior art. Complaint Appx. A Pt. 3 at 227 ('977 Prosecution History, Apr. 5, 2011 Claim Amendments at 2); Complaint Appx. A Pt. 4 at 26 ('977 Prosecution History, Oct. 31, 2007 at 2). The issued claims of the '977 patent include added requirements, such as requiring that the search execute in a "plurality of documents <u>that are primarily textual, including</u> word processing documents and/or electronic mail" and "the first string and the second string are <u>nonadjacent in</u> at least one of the identified documents-<u>includes the first string and the second</u> string in non contiguous locations." Complaint Appx. A Pt. 4 at 26 ('977 Prosecution History, Dec. 21, 2011 at 2) (underlining to show amendment in original); Complaint Appx. A Pt. 4 at 75 ('977 Prosecution History, Mar. 8, 2013 at 2) (underlining and strikethrough to show amendment in original). The applicant stated in an interview summary accompanying the March 8, 2013 Applicant Remarks, that the prior art failed to teach or suggest "identifying documents that include both the first string and the second string." Complaint Appx. A Pt. 4 at 79-80 ('977 Prosecution History, March 8, 2013 Applicant Remarks at 6-7).

Complainant asserts infringement as to claims 1, 2, 7, and 19 of the '977 patent and claims 13 and 18 of the '093 patent. In the '977 patent, claims 1 and 19 are independent. In the '093 patent, both asserted claims, claims 13 and 18, are independent.

As relevant to the ID, independent claims 1 and 19 of the '977 patent are below (disputed

term in bold):

1. A computerized method of selectively executing a command, the method comprising:

providing a user interface comprising a first search field;

receiving a first string in the first search field from a user-controlled input device;

receiving a second string in the first search field from the user-controlled input device;

by determining that the first string comprises a command, selectively initiating execution of a command process associated with the command; and

by determining that the first string does not comprise a command, selectively initiating an incremental search of a plurality of documents that are primarily textual, including word processing documents and/or electronic mail, wherein the incremental search comprises updating search results as each successive character of the first string and second string is received respectively from the user-controlled input device, wherein updating the search results comprises:

identifying a first group of the plurality of documents including the first string,

identifying a second group of the plurality of documents including the second string, and

identifying one or more of the plurality of documents that are included in both of the first and second groups, wherein the first string and the second string are non-adjacent in at least one of the identified documents.

19. A search apparatus stored on a non-transitory computer readable medium, the search apparatus comprising instructions configured to be executed by a computing device in order to perform operations comprising:

receiving a first string in a first search field;

by determining that the first string comprises a command, selectively initiating execution of a command process associated with the command; and

by determining that the first string does not comprise a command

incrementally updating a first group of documents that has at least a first word that begins with the first string as each successive character of the first string is received in the first search field;

receiving a second string in the first search field, wherein the first and second strings are separated by a string separator character in the first search field;

in response to receiving the second string, incrementally updating a second group of documents that has at least a second word that begins with the second string as each successive character of the second string is received in the first search field;

incrementally identifying a set of one or more of the documents included in both the first group of documents and the second group of documents as each successive character of the first search string and the second search string is received respectively in the first

search field, wherein the first string and the second string are non-adjacent in at least one of the identified documents; and

displaying an indication of at least one of the identified documents.

'977 patent at claims 1, 19.

C. The Accused Products

The products at issue are Respondents' consumer electronics products that use certain software, Microsoft Windows and Microsoft 365, provided by non-party Microsoft Corporation. ID at 5-7. Specifically, Complainant alleges infringement based on two search features: (1) "Windows Search" and (2) "Microsoft 365 Search." *Id.* at 5. Respondents presented evidence, including testimony from their expert and a Microsoft engineer, that the accused software does not search the contents of documents. *Id.* at 7-8; Mot at 21-25 (citing *inter alia*, Mot., Ex. 5 (Mitzenmacher Rpt.); Mot., Ex. 6 (Christensen Dep.) at 99:17-19; Mot., Ex. 9 (Bederson Dep.) at 143:9-146:7, 162:3-15, 169:11-175:10, 175:22-177:16). Complainant did not provide any evidence that demonstrated Windows Search or Microsoft 365 Search searches the contents of documents. *Id.* at 17 (citing Opp'n at 22-24).

III. COMMISSION REVIEW OF THE ID

The Commission may review an ID either upon petition by one of the parties or on its own motion. *See* 19 C.F.R. §§ 210.43 & 210.44. The Commission will grant a petition for review, in whole or in part, where it appears:

(i) that a finding or conclusion of material fact is clearly erroneous;

(ii) that a legal conclusion is erroneous, without governing precedent, rule

or law, or constitutes an abuse of discretion; or

(iii) that the determination is one affecting Commission policy.

19 C.F.R. §§ 210.43(b)(1) & (d)(2). The Commission's review will encompass those issues for which at least one participating Commissioner has voted for review. *See id.* at § 210.43(d)(3). Any issue not raised in a petition for review is deemed to have been abandoned by the petitioning party and may be disregarded by the Commission unless it chooses to review the issue *sua sponte*. *See* 19 C.F.R. § 210.43(b)(2).

When the Commission reviews an initial determination, in whole or in part, it reviews the determination de novo. Certain Electronic Stud Finders, Metal Detectors and Electrical Scanners, Inv. No. 337-TA-1221, Comm'n Op. at 9 (Feb. 15, 2022) (citations omitted), aff'd, Zircon Corp. v. Int'l Trade Comm'n, 101 F.4th 817 (Fed. Cir. 2024). Upon review, the "Commission has 'all the powers which it would have in making the initial determination," except where the issues are limited on notice or by rule." Certain Electronic Devices, Including Streaming Players, Televisions, Set Top Boxes, Remote Controllers, and Components Thereof, Inv. No. 337-TA-1200, Comm'n Op. at 7 (Nov. 10, 2021) (citations omitted), aff'd, Roku, Inc. v. Int'l Trade Comm'n, 90 F.4th 1367 (Fed. Cir. 2024). With respect to the issues under review, "the Commission may affirm, reverse, modify, set aside or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge." 19 C.F.R. 210.45(c). The Commission also "may take no position on specific issues or portions of the initial determination," and "may make any finding or conclusions that in its judgment are proper based on the record in the proceeding." Id.; see also Beloit Corp. v. Valmet Oy, 742 F.2d 1421, 1423 (Fed. Cir. 1984).

IV. LEGAL STANDARDS

A. Summary Determination

A motion for summary determination will be granted if "pleadings and any depositions, answers to interrogatories, and admissions on file, together with affidavits, if any, show that

there is no genuine issue of material fact and that the moving party is entitled to summary determination as a matter of law." 19 C.F.R. § 210.18(b). Summary determination is analogous to summary judgment in the Federal district courts. As such, evidence is to be viewed in a light most favorable to the non-movant, and all reasonable inferences must be drawn in favor of the non-movant. *Anderson v. Liberty Lobby, Inc.*, 422 U.S. 242, 255 (1986) ("The evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor.") (citations omitted).

B. Claim Construction

Claim terms are normally construed according to their ordinary and customary meaning in the art, as understood by a person of ordinary skill in the art in the context of the entire patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006). Claim construction focuses mainly on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *Id.* at 1313-1317. If the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence may be considered. Extrinsic evidence consists of all evidence external to the patent and the prosecution history, and includes inventor testimony, expert testimony, and learned treatises, and it may be considered if a court deems it helpful in determining the true meaning of language used in the patent claims. *Id.* at 1317.

C. Infringement

Section 337 prohibits "the importation into the United States, the sale for importation, or the sale within the United States after importation . . . of articles that infringe a valid and enforceable United States patent" 19 U.S.C. § 1337(a)(1)(B). Direct infringement includes making, using, offering to sell, or selling a patented invention or importing a patented invention into the United States, without consent of the patent owner. 35 U.S.C. § 271(a).

To prove direct infringement, the plaintiff must establish by a preponderance of the evidence that one or more claims of the asserted patent read on the accused product or process, either literally or under the doctrine of equivalents. *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001). Each limitation in a patent claim is considered material and essential to an infringement determination. *See London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991). "Literal infringement of a claim exists when each of the claim limitations reads on, or in other words is found in, the accused device." *Allen Eng. Corp. v. Bartell Indus.*, 299 F.3d 1336, 1345 (Fed. Cir. 2002). If any claim limitation is found to be absent from the accused product or process, then there is no literal infringement. *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 141, 1247 (Fed. Cir. 2000).

V. ANALYSIS

The Commission affirms and adopts the ID's findings, conclusions, and supporting analysis that are not inconsistent with the Commission's opinion.

The single, overarching issue is whether the ALJ correctly construed the claim term "non-adjacent in at least one of the identified documents" recited in independent claims 1 and 19 of the '977 patent. Complainant argues that the ALJ's construction improperly limits the term because the intrinsic record allegedly supports a broader interpretation and the ALJ improperly applied disclaimer from a later-issued patent. Respondents argue that the ALJ correctly construed the disputed term as requiring, at a minimum, searching the content of a document, and that the applicant's statements during prosecution of a related patent narrowed the scope of the claim term. As explained herein, the Commission reviews and, on review, affirms the ID's grant of summary determination of noninfringement of the '977 patent with modified and supplemented analysis.

A. The Related '139 Patent

The ID finds prosecution history disclaimer in the prosecution history of U.S. Patent

No. 9,633,139 ("the '139 patent") and applies that disclaimer to the disputed term in the asserted

'977 patent. ID at 11-14. The following background details the relationship between the

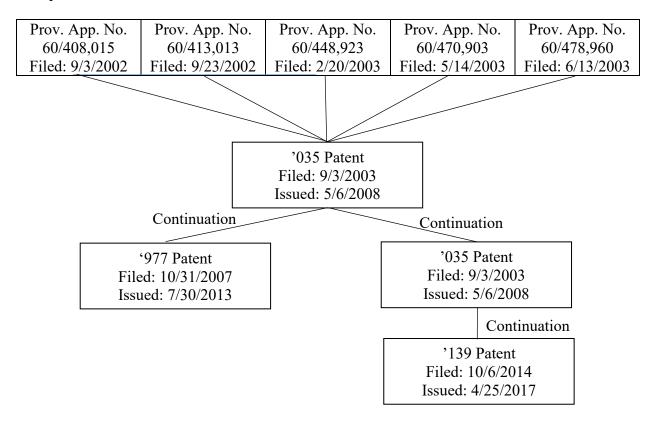
'977 patent and the '139 patent, as well as the '139 patent's relevant prosecution history.

1. Relationship Between '139 Patent and the '977 Patent

The asserted '977 patent and the '139 patent are undisputably related and share the same specification.¹⁰ See CPet.; see Opp'n.

The following chart compares the priority claims of the two Asserted Patents and the

'139 patent:



¹⁰ The only difference is found in non-substantive headings, *e.g.*, "BACKGROUND" versus "BACKGROUND OF THE INVENTION," "SUMMARY" versus "SUMMARY OF THE INVENTION," and "Field" versus "Field of the Invention." *Compare* '139 patent, cls. 1 and 2 *with* '977 patent, cls. 1 and 2.

All three patents claim priority to the same provisional application, App. No. 60/478,960.¹¹ Further, all three patents are continuations of App. No. 10/654,588, which issued as U.S. Pat. No. 7,370,035. The '139 patent is also a continuation of the asserted '093 patent. Accordingly, all three patents are continuations from common applications and share a specification.

As the ID correctly notes, the Federal Circuit has repeatedly held that applicant remarks on common terms are binding in related applications. *See, e.g., Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1343 (Fed. Cir. 2015) ("A statement made during prosecution of related patents may be properly considered in construing a term common to those patents, regardless of whether the statement pre- or post-dates the issuance of the particular patent at issue."); *Infinity Computer Prods., Inc. v. Oki Data Americas, Inc.*, 987 F.3d 1053, 1059 (Fed. Cir. 2021) (citing *Teva*); *MasterMine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1311 n.2 (Fed. Cir. 2017) (citing *Teva*); *One-E-Way, Inc. v. Int'l Trade Comm'n*, 859 F.3d 1059, 1068 (Fed. Cir. 2017) (citing *Teva*).

Accordingly, based on controlling precedent, the common terms between the '977, '093, and '139 patents must be construed in the same way. *See Capital Machine Co. v. Miller Veneers*, 524 F. App'x 644, 647-649 (Fed Cir. 2013) ("When construing claim in patents that derive from the same parent application and share common terms, 'we must interpret the claims consistently across all asserted patents."") (citing *NTP*, *Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005)). Further, both parties agreed that the common terms in the '977 and '093 patents, including the term "document," must be construed in the same way. Opp'n at 2, 20; Mot. at 21. Logically, it follows that common terms between the '977 and '139 patents must also be construed the same, and Complainants have not argued to the contrary.

¹¹ The '139 patent is also considered under the pre-AIA statutes.

The Commission therefore affirms the ID's finding that the '139 patent is related to the

'977 patent, and that its prosecution history is relevant to the construction of the term "non-

adjacent in at least one of the identified documents." ID at 11-14.

2. Prosecution History of the '139 Patent

During prosecution of the '139 patent, the pending claims included independent claim 2, which is similar to claim 1 of the '977 patent. *Compare* Mot., Ex. 8 (excerpted '139 Prosecution History, Nov. 5, 2015) at 2 *with* '977 patent at cl. 1. Then-pending claim 2 of the '139 patent, as reflected in the applicant's November 2015 Response to an Office Action, is shown below:

AMENDMENTS TO THE CLAIMS

1. (Canceled)

 (Previously Presented) A method of performing a search comprising: receiving a first partial search string in a first search field; receiving a second partial search string in the first search field; wherein the first and second partial search strings are separated by a string separator character in the first search field;

incrementally searching a set of documents in order to identify search results, wherein the incrementally searching comprises:

searching for a first one or more documents each including at least one string that corresponds to the first partial search string;

searching for a second one or more documents each including at least one string that corresponds to the second partial search string; and

updating the search results as each successive character of the first partial search string and the second partial search string is received respectively in the first search field by identifying one or more documents included in both the first one or more documents and the second one or more documents, wherein the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents.

Id. (relevant portion highlighted). The examiner rejected the pending claim under pre-AIA

35 U.S.C. §102(e) as unpatentable over U.S. Pat. Pub. No. 2002/0055981 to Spaey ("Spaey").

Id. (Applicant Remarks) at 8.

In response to the rejection, the applicant argued that "Spacy fails to teach or suggest

multiple individual elements of claim 2, as well as the combination of features of claim 2." Id.

(Applicant Remarks) at 8. The applicant made three separate arguments, which corresponded to

three different claim terms without overlap, as explained and shown below.

a. First Argument

First, the applicant argued that Spaey illustrates search terms in separate fields, so it fails

to teach or suggest first and second partial search strings in a first search field. Id. at 8.

The relevant claim language is bolded in the original below:

Spaey illustrates receiving search terms in separate fields (see Figure 9). Thus, Spaey fails to teach or suggest at least:

receiving a first partial search string in <u>a</u> first search field; receiving a second partial search string in <u>the</u> first search field; wherein the first and second partial search strings are separated by a string separator character in <u>the</u> first search field;

b. Second Argument

Second, the applicant argued Spaey does not teach or suggest that the Spaey software

locates a first set of documents, each including a string corresponding to a first search string,

then also locates a second set of documents, each including a string corresponding to a second

search string, and finally identifies any documents included in both sets of documents. Id. at 8-9.

The relevant claim language is bolded in the original below:

teach or suggest the particular search methodology recited in claim 2. In particular, the cited art fails to teach or suggest: incrementally searching a set of documents in order to identify search results, wherein the incrementally searching comprises: searching for a first one or more documents each including at least one string that corresponds to the first partial search string; searching for a second one or more documents each including at least one string that corresponds to the second partial search string; and updating the search results as each successive character of the first partial search string and the second partial search string is received respectively in the first search field by identifying one or more documents included in both the first one or more documents and the second one or more documents, wherein the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents as recited in claim 2. The Office Action indicates on page 3 that Spaey (¶¶ 157, 167, and Figures 8-9) teaches these features. Applicant respectfully disagrees. With

c. Third Argument

Third, the applicant argued that Spaey does not teach the requirement that "the first

partial search string and the second partial search string are non-adjacent in at least one of the

identified documents" because Spacy teaches searching metadata and has "no teaching or

suggestion of searching content of a document itself." Id. at 10.

The relevant claim language is highlighted in yellow below:

Additionally, Spaey, as well as the other art of record, fails to teach or suggest that "the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents," as recited in claim 2. The Office Action cites the same portions of Spaey as allegedly teaching this feature. However, no such teaching or suggestion is found in Spaey. In contrast, Spaey appears to search meta-data associated with a music file, such as artist, album, format, or length, according to search criteria entered into separate fields associated with these separate meta-data items. There is no teaching or suggestion of searching content of a document itself, such that the search results would include "the first partial search string and the second partial search string [are] non-adjacent in at least one of the identified documents," as recited in claim 2.

Id. at 8-10. The third argument is relevant to the disclaimer analysis and the construction of the disputed term in the '977 patent.

B. The ALJ Correctly Construed the Disputed Claim Term in the '977 Patent

The ALJ correctly construed the claim term "non-adjacent in at least one of the identified documents" as meaning "non-adjacent within the content of at least one of the identified documents." ID at 14. Under this claim construction, searching only metadata and not searching the content of the identified document does not meet the claim limitation. As explained below in Section VI.C., this construction is fatal to Complainant's infringement theory for the '977 patent. Thus, the Commission affirms that the ID correctly grants summary determination of noninfringement as to the '977 patent.

1. ID's Claim Construction

The parties' proposed constructions before the ALJ are shown below:

Claim Term	Complainant's Proposed	Respondents' Proposed
	Construction	Construction
"wherein the first string and	Plain and ordinary meaning:	"the search terms must be
the second string are non-	"two terms or characters that	located within the content of
adjacent in at least one of the	are not right next to each	the documents, rather than in
identified documents."	other in at least one of the	the file name or another
'977 patent at cls. 1, 19	identified documents"	attribute associated with the
		file."

Id.at 7-14.

The ID finds that the claim language and specification of the '977 patent alone do not support Respondents' proposed construction. *Id.* at 8. Specifically, the ID finds that the plain language of the limitation "non-adjacent in at least one of the identified documents" could refer to both the content of the document and its attributes (*e.g.*, metadata), since the attributes are a part of the file. *Id.* at 8. The ID also finds that the specification discloses that a single document "target" can include both "content information" and "attribute information," so the specification does not support requiring that only the content information is searched. *Id.* at 8-9 (citing '977 patent at 2:23-29); *see also id.* at 9. The ID next finds that the '977 patent's prosecution history also does not support Respondents' proposed construction because the applicant's amendments and arguments in the '977 patent's prosecution history do not distinguish the prior art based on searching the content of the document. *Id.* at 9-11.

In considering the applicant's remarks during the prosecution of the related '139 patent, however, the ID finds that applicant expressly disclaimed searching outside of a document's contents for the scope of the term "non-adjacent in at least one of the identified documents." *Id.* at 11 (citing Mot. at 19-20). As part of the analysis, the ID finds that then-pending independent claim 2 of the '139 patent is "remarkably similar" to claim 1 of the '977 patent, and that the last

limitation of the former is "effectively the same" as the disputed limitation of the latter. *Id.* at 11-12.

The ID also finds that "applicant argued *specifically* that 'the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents' was not taught in Spaey because Spaey searched metadata and had 'no teaching or suggestion of searching content of a document itself." *Id.* at 12-13 (citing Mot., Ex. 8 at *124, 126) (emphasis in original). The ID concludes that there was "a clear disclaimer that searching metadata associated with a file alone does not qualify as searching the content of a document itself as is required by 'wherein the first [partial search] string and the second [partial search] string are non-adjacent in at least one of the identified documents" in the '139 patent and "wherein the first string and the second string are non-adjacent in at least one of the identified documents" in the '977 patent. *Id.* at 13-14; *compare* Mot., Ex. 8 at 10 *with* '977 patent, cls. 1, 19.

The ID finds that Complainant offered no counter arguments to the facts and law "other than a suggestion that applications which come later are not binding on the interpretation of those that come earlier." *Id.* at 14 (citing Opp'n at 19-20). The ID notes that the Federal Circuit in *Teva* explicitly rejected that suggestion. *Id.* (citing *Teva*, 789 F.3d at 1343).

Accordingly, the ID concludes the disputed term "non-adjacent in at least one of the identified documents" recited in independent claims 1 and 19 of the '977 patent means non-adjacent within the content of at least one of the identified documents. *Id.*

2. Complainant's Petition for Review

Complainant argues that the disputed term should have its plain and ordinary meaning, and that the ID's claim construction analysis errs for three reasons. CPet. at 2-4. First, Complainant argues, Federal Circuit precedent does not support applying disclaimer from a later patent (*e.g.*, the '139 patent) to an earlier patent (*e.g.*, the '977 patent). *Id.* at 12-21. Second,

Complainant argues, there is no disclaimer in the '139 patent's prosecution history. *Id.* at 21-25. Third, Complainant contends that Respondents never argued that the '139 patent's prosecution history triggers disclaimer in the '977 patent, so that argument was waived. *Id.* at 25.

Complainant argues that the intrinsic record for the '977 patent, including the claims and specification, support construing the term "non-adjacent in at least one of the identified documents" according to its plain and ordinary meaning with no limitations. *Id.* at 5-9. Complainant further argues that the ID properly finds the claims and specification support a broader construction without limitation. *Id.*

Complainant further argues that the Federal Circuit and district courts have held that prosecution history disclaimer carries forward from a parent to child and/or descendant patents, but no Federal Circuit decision has applied disclaimer in the opposite direction from a child or descendant application to a parent. *Id.* at 2, 12-21. Complainant argues that the three main cases cited in the ID, *Thorner*, *Teva*, *Microsoft*, are inapposite and do not support the ID's disclaimer findings. *Id.* at 3, 15-18. Specifically, Complainant argues that *Thorner* simply states the standard for disclaimer but did not substantively address it, and that *Teva* and *Microsoft* do not discuss disclaimer at all. *Id.* at 15-17. Complainant also argues that no court has extended *Thorner*, *Teva*, *Microsoft*, or any other case the ID cites in its disclaimer analysis "to mean that a statement made during the prosecution of a later-filed patent in a separate priority chain applies with equal force to earlier issued claims and may be used to find disclaimer or, importantly, to construe claim terms in a manner that is inconsistent with the claims, specification, prosecution history, and plain meaning of the earlier issued claims." *Id.* at 18.

Complainant cites two unreported district court cases to support its argument that laterfiled applications cannot be relied on for disclaimer purposes. *Id.* at 18-21. Specifically,

Complainant contends that in *Oyster Optics v. Ciena Corp.*, the district court concluded that, although statements made during a subsequent patent prosecution may be "relevant" to the construction of a common term, they cannot be grounds for disclaimer. *Id.* at 18 (citing *Oyster Optics, LLC v. Ciena Corp.*, Case No. 4:17-cv-05920-JSW, 2020 WL 13891311, at *7-9 (N.D. Cal. Aug. 10, 2020)). Complainant further asserts that in *Oyster Optics v. Coriant*, the district court held that a disclaimer from the prosecution of a later-issued patent should not be imported into the previously issued patents, stating that it was "aware of no authority which permits a disclaimer to be imputed from *progeny to ancestor* when it is not, as *Microsoft* requires, 'a representation of [the patentee's] own understanding of the inventions disclosed in all [related] patents." *Id.* at 19 (citing *Oyster Optics, LLC v. Coriant America Inc.*, Case No. 2:16-CV-01302-JRG, 2018 WL 7019353, at *3-4 (E.D. Tex. Mar. 2, 2018) (emphasis in original)).

Complainant also argues there was no disclaimer in the '139 patent's prosecution history for three reasons. *Id.* at 4, 21-25. First, Complainant contends that the applicant was discussing "the use of non-adjacent metadata in *two separate search fields*, instead of non-adjacent metadata in *a single search field*, as required by the claim language." *Id.* at 4 (emphasis in original). Second, Complainant argues that because the applicant's statements are subject to multiple reasonable interpretations, the statements cannot trigger claim scope disclaimer. *Id.* at 21-24. Third, Complainant argues that there is no disclaimer due to claim differentiation because the issued dependent claims 7, 9, and 12 of the '139 patent require that the disputed term, which appears in the independent claim, include searching only metadata. *Id.* at 23-24.

Finally, Complainant argues that Respondents did not argue in their summary determination motion, prehearing brief, contentions, or any other submissions that the applicant's statements during prosecution of the '139 patent trigger disclaimer regarding the scope of the

'977 patent. *Id.* at 4, 25. Complainant further argues that Respondents themselves would be barred under the Ground Rules from making this argument at the hearing because it would have been waived. *Id.*

3. **Respondents' Response to Petition**

Respondents argue that the ID properly finds and applies disclaimer based on applicant's statements in the '139 patent's prosecution history. RPet. Reply at 1. Specifically, Respondents argue that: "(1) on the substance, the applicant's statements during the '139 patent's prosecution constitute clear and unmistakable disclaimer; (2) the disclaimer finding is in harmony with the additional limitations in the '139 patent's dependent claims; (3) the law supports applying disclaimer from a later patent to an earlier, related patent (there is no error applying the disclaimer in the '139 patent's prosecution history to the related '977 patent); and (4) the disclaimer issue was properly before the ALJ in the summary determination record." *Id.* at 5.

Regarding disclaimer, Respondents argue that the applicant made three separate arguments (*see supra* at Section VI.A.2.) to traverse the examiner's rejection over Spaey, each of which create independent bases to find disclaimer. *Id.* at 6-9. Respondents note that the ID and the parties address the third argument, where the applicant stated that Spaey provides "*no teaching or suggestion of searching content of a document itself*, such that the search results would include [that] 'the first partial search string and the second partial search string [are] non-adjacent in at least one of the identified documents,' as recited in claim 2." *Id.* at 8 (citing Mot., Ex. 5 (Mizenmacher Rpt.) at 10) (emphasis in original). Respondents also contend that, contrary to Complainant's assertions, there are not "at least multiple interpretations of the '139 prosecution history at issue." *Id.* at 9. Rather, Respondents argue Complainant conflates the three arguments applicant made before the examiner, each of which, according to Respondents, allegedly create independent disclaimer. *Id.*

Respondents also argue that, contrary to Complainant's contention, the disclaimer does not conflict with the scope of dependent claims 7, 9, and 12 of the '139 patent. *Id.* at 10-12 (citing CPet. at 23-24). Specifically, for each dependent claim, Respondents explain how the scope of the dependent claim is still valid and reduced from the independent claim, even with the disclaimer requirement that the content of documents must be searched. *Id.* Respondents also argue that Complainant waived its claim differentiation argument by not presenting it to the ALJ and instead arguing it for the first time in its petition for review. *Id.* at 10.

Respondents further argue that Complainant is wrong that there is no Federal Circuit case law stating that disclaimer from a later patent applies to an earlier-issued, related patent. *Id.* at 12-14. Respondents rely on, *inter alia*, *Capital Machine Co.*, where the Federal Circuit held that prosecution history disclaimer in a later application can be applied to an earlier, related application. *Id.* (citing *Capital Machine Co.*, 524 F. App'x at 647-649; *Baxter Healthcare Corp. v. Mylan Labys Ltd*, 346 F. Supp. 3d 643, 658-59 (D.N.J. 2016) ("Indeed, in *Capital Machine Co.*, the Federal Circuit determined that the patentee's 'disclaimer of [claim] scope during prosecution of some of the [later-issued] patents-in-suit' applied 'equally to limit the [claim term] in the other patents-in-suit,' including those that issued earlier.''); *Island Intellectual Prop.*, *LLC v. TD Ameritrade, Inc.*, No. 2:21-cv-00273, 2022 WL 1608044, at *5-7 (E.D. Tex. May 20, 2022) (citing *Capital Machine Co.* and applying prosecution history disclaimer to parent and sibling parents based on "the similar subject matter and claims, as well as the incorporation by reference of the [parent patent's] disclosure" by the other asserted patents.))."

Respondents also argue that they did not waive their disclaimer argument. *Id.* at 16-17. Specifically, Respondents note that the procedural schedule has no evidentiary deadlines related to claim construction. *Id.* at 16 (citing Order No. 6). Respondents also argue they provided

support for their proposed claim construction in their summary determination motion, and that Complainant's opposition to the motion specifically addressed "disclaimer." *Id.* at 16-17 (citing Mot. at 2, 17, 19-20; Opp'n at 13-14, 19-20). Respondents further note that the parties also briefed the issue in their pre-hearing briefs. *Id.* at 16 (citing EDIS Doc. ID 831020 at 18, 20-22; EDIS Doc. ID 831025 at 25-26). Respondents also argue that the ALJ has authority to construe the claims, which includes finding disclaimer in view of the record presented, even if the parties did not brief the issue.

Lastly, Respondents argue that the ID correctly construes the term regardless of the disclaimer because the '139 patent's prosecution history can properly inform the scope of the same claim term in the '977 patent. *Id.* at 1, 18-20. Respondents argue that the law and the intrinsic record compel the same claim construction finding regardless of the disclaimer doctrine. *Id.* at 18-20.

4. Analysis

The Commission affirms the ID's construction of the term, "non-adjacent in at least one of the identified documents" and the resulting finding that the '977 patent is not infringed. The Commission finds that the ALJ properly resolved the parties' dispute as to the meaning of the claim term after analyzing the intrinsic record, including the claims, the specification, and the prosecution history. *Personalized Media Commc'ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1345 (Fed. Cir. 2020); *see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) (holding that judges have a duty to resolve disputed claim terms that have "more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute"). However, the Commission modifies and supplements the ID's analysis as detailed below.

a. The Applicant Disclaimed Searching Outside of a Document's Contents in the '139 Patent's Prosecution History

The Commission affirms that there was a disclaimer in the '139 patent's prosecution history as to the proper scope of the limitation "the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents." ID at 11-14. Specifically, the applicant made it clear that searching the content of a document is required because searching metadata alone does not satisfy the limitation. *Id.* Also, the Commission agrees with Respondents that they did not waive the disclaimer issue. Respondents' summary determination motion provided their proposed claim construction and accompanying support and Complainant's opposition to the motion specifically addressed "disclaimer." RPet. Reply at 16-17 (citing Mot. at 2, 17, 19-20; Opp'n at 13-14, 19-20). The Commission further finds that the ALJ has the authority to construe the claims, which may include finding disclaimer or estoppel in view of the record presented, even if the ALJ's analysis and construction differs from the parties' arguments and proposed constructions. *Personalized Media*, 952 F.3d at 1345; *see also O2 Micro Int'l Ltd.*, 521 F.3d at 1361.

The Commission rejects Complainant's argument that there is no clear and unmistakable disclaimer regarding the disputed claim limitation. *See* CPet. at 21-23. Specifically, the Commission finds that Complainant mischaracterizes the prosecution history of the '139 patent when arguing that "the ID relied on a single paragraph" in which the applicant argued the disclosed invention (which uses a single search field) is distinguishable from Spaey (which searches using criteria "entered into separate fields"). *Id.* Rather, the applicant's statement that "[t]here is *no teaching or suggestion of searching content of a document itself*, such that the search results would include the 'first partial search string and the second partial search string [are] non-adjacent in at least one of the identified documents" is a clear disclaimer that directly

relates to the term, "non-adjacent in at least one of the identified documents." Mot., Ex. 8 at 10

(emphasis added).

As noted previously, the applicant made three separate and distinct arguments where each

argument corresponded to one of three specific claim terms without overlap, as shown below:

First argument (relevant claim language bolded in original):

Spaey illustrates receiving search terms in separate fields (see Figure 9). Thus,

Spaey fails to teach or suggest at least:

receiving a first partial search string in <u>a</u> first search field; receiving a second partial search string in <u>the</u> first search field; wherein the first and second partial search strings are separated by a string separator character in <u>the</u> first search field;

Second argument (relevant claim language bolded in original):

teach or suggest the particular search methodology recited in claim 2. In particular, the cited art fails to teach or suggest:

incrementally searching a set of documents in order to identify search results, wherein the incrementally searching comprises:

searching for a first one or more documents each including at least one string that corresponds to the first partial search string;

searching for a **second one or more documents** each including at least one string that corresponds to **the second partial search string**; and

updating the **search results** as each successive character of the first partial search string and the second partial search string is received respectively in the first search field by identifying **one or more documents included in both the first one or more documents and the second one or more documents**, wherein the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents

as recited in claim 2. The Office Action indicates on page 3 that Spaey (¶¶ 157, 167, and Figures 8-9) teaches these features. Applicant respectfully disagrees. With

Third argument (relevant claim language highlighted in yellow):

Additionally, Spaey, as well as the other art of record, fails to teach or suggest that "the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents," as recited in claim 2. The Office Action cites the same portions of Spaey as allegedly teaching this feature. However, no such teaching or suggestion is found in Spaey. In contrast, Spaey appears to search metadata associated with a music file, such as artist, album, format, or length, according to search criteria entered into separate fields associated with these separate meta-data items. There is no teaching or suggestion of searching content of a document itself, such that the search results would include "the first partial search string and the second partial search string [are] non-adjacent in at least one of the identified documents," as recited in claim 2.

Id. at 8-10.

The Commission finds that only the applicant's first argument contended that "Spaey illustrates receiving search terms in separate fields" and, therefore, "fails to teach or suggest" receiving two partial search strings in a single search field. Mot., Ex. 8 at 8; *cf.* CPet. at 22-23. The applicant's second argument, which focused on other pending claim terms, presented a different contention—that Spaey does not disclose "the particular search methodology" recited in then-pending claim 2. Mot., Ex. 8 at 9.

The applicant's third argument, which is separate and distinct from the first two arguments, clearly sought to distinguish Spaey based on the claim language "the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents." *Id.* at 10. This claim language relates to whether the metadata or the content of the document is searched and does not rely on whether the search terms are received from separate fields or not. *Id.* Accordingly, the only plausible interpretation of applicant's third argument is a clear and unmistakable disclaimer of searching metadata alone, and, thus, the correct

construction of "the first partial search string and the second partial search string are nonadjacent in at least one of the identified documents" requires, at a minimum, searching within the content of the document. ID at 12-14.

The Commission also rejects Complainant's additional assertion that the applicant's arguments are subject to multiple reasonable interpretations, and that, because it is unclear which argument, if any, prevailed upon the examiner, none can trigger claim scope disclaimer. CPet. at 23-25. Legally and factually, Complainant is incorrect.

The Federal Circuit has recognized that "[a]n applicant's argument that a prior art reference is distinguishable on a particular ground can serve as a disclaimer of claim scope *even if the applicant distinguishes the reference on other grounds as well.*" *SpeedTrack, Inc. v. Amazon.com*, 998 F.3d 1373, 1380 (Fed. Cir. 2021) (emphasis added) (citing *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1374 (Fed. Cir. 2007)). As such, even if applicant's first two arguments are considered separate grounds for distinguishing Spaey, that does not undercut the force of the applicant's third argument regarding the relevant claim language. Specifically, the applicant's third argument clearly and unequivocally states that Spaey does not teach "the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents" because Spaey teaches searching only metadata and has "no teaching or suggestion of searching content of a document itself." ID at 12-13 (citing Mot., Ex. 8 at *126).

In addition, as further explained below in Section V.B.4.c., the Commission finds that, even if there is no clear disclaimer, applicant's arguments during prosecution of the related '139 patent are nonetheless relevant intrinsic evidence and confirm that the ID correctly construes the disputed limitation to require searching the content of the document. *See Microsoft*

Corp. v. Multi-Tech Systems, Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004) ("a patentee's statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation") (citing *Laitram Corp. v. Morehouse Indus., Inc.*, 143 F.3d 1456, 1462 (Fed. Cir. 1998) ("The fact that an examiner placed no reliance on an applicant's statement distinguishing prior art does not mean that the statement is inconsequential for purposes of claim construction."); *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1438 (Fed. Cir. 1988) ("Regardless of the examiner's motives, arguments made during prosecution shed light on what the applicant meant by its various terms.")).

The rest of Complainant's arguments are similarly unavailing. Regarding Complainant's claim differentiation arguments for dependent claims 7, 9, and 12 of the '139 patent, the Commission finds that Complainant waived the argument by first presenting it in its petition for review of the summary determination ID. CPet. at 23-24; *Certain Artificial Eyelash Sys., Prods., & Components Thereof*, Inv. No. 337-TA-1226, Comm'n Op. at 62 (Oct. 24, 2022) (new argument raised for the first time in a petition for review is waived).

Even if the claim differentiation argument is considered, Complainant's argument fails for two reasons. First, "prosecution history disclaimer can overcome the presumption of claim differentiation." *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1097 (Fed. Cir. 2013); *Netcraft Corp. v. eBay, Inc.*, 549 F.3d 1394, 1400 n.1 (Fed. Cir. 2008) ("While claim differentiation may be helpful in some cases, it is just one of many tools used by courts in the analysis of claim terms."). Second, there is nothing inconsistent with the scope of the disclaimer and the relevant dependent claims of the '139 patent, which issued as claims 7, 9, and 12. CPet.

at 23-24. Claim 7^{12} of the '139 patent is narrower than independent claim 1 (which was thenpending claim 2 during prosecution) because it requires specific types of "documents." There is no evidence that the stated documents would not include searchable content. *See* Mot., Ex. 6 at 94:17-97:22 (Dr. Mitzenmacher opining that there are documents that include both images and text in the content). Claim 9^{13} requires searching content, and also requires that at least some of the documents being searched contain "name, path, size, item type, date modified, [and] date created" file fields. Consistent with the disclaimer, claim 9 does not exclude searching metadata in addition to the document content. That is, because the document content must be searched at a minimum, there is no conflict between the disclaimer and the narrowed scope of claim 9 that specifies which additional fields may be searched. *Compare id. with* ID at 14. Lastly, claim 12^{14} is not inconsistent with the disclaimer as it simply requires that the content search of claim 1 be limited to only one field, and that the incremental searching is performed on only the content of that single field. As such, none of these dependent claims are inconsistent with the disclaimer because all three have narrower scope than the independent claim, even with the disclaimer.

Accordingly, the Commission affirms the ID's finding that during prosecution of the '139 patent, the applicant disclaimed searching metadata alone such that searching the content of

¹² Claim 7 of the '139 patent recites: "The method of claim 1, wherein the documents comprise emails, text documents, contact information, appointment information, task information, music files, system files, photographs, and/or images." Mot., Ex. 3, cl. 7.

¹³ Claim 9 recites: "The method of claim 1, wherein at least some of the documents comprise at least the following file fields in which one or more of the first and second partial search strings may be located: name, path, size, item type, date modified, date created, or content." Mot., Ex. 3, cl. 9.

¹⁴ Claim 12 of the '139 patent recites: "The method of claim 1, wherein the search field corresponds to a single field of the documents and the incremental searching is performed only on content of the single field of the documents." Mot., Ex. 3, cl. 12.

a document is required to satisfy the limitation "wherein the first partial search string and the second partial search string are non-adjacent in at least one of the identified documents."

b. The '139 Patent's Disclaimer Applies to the Same Term in the Earlier-Issued '977 Patent

Federal Circuit precedent confirms that a disclaimer in the later-issued, related '139 patent's prosecution history applies to the same term in the earlier-issued asserted '977 patent. See Capital Machine Co., 524 F. App'x at 647-649 ("Because each patent-in-suit has clear and unmistakable prosecution history disclaimer in either a parent or a child, we interpret the term 'flitch' consistently across all the patents.). In Capital Machine Co., the plaintiff asserted six related patents: the '137 patent, the '995 patent, the '938 patent, the '619 patent, the '828 patent, and the '843 patent. Id. at 645. The Federal Circuit concluded that the prosecution histories for three of the patents—the '619 patent, the '938 patent, and the '187 patent—included applicant statements that amounted to prosecution history disclaimer regarding the claim term "flitch," which was common to all of the asserted patents. Id. at 648-649. The Court applied the disclaimer to the entire family of patents, and in doing so applied disclaimer from the *later* '938 and '619 patents to the *earlier* '137 and '995 patents. *Id.* at 649. Specifically, the Court stated, "[w]e have held that the prosecution history regarding a claim term is pertinent when interpreting the same term in both later-issued and earlier-issued patents in the same family." Id. (citing Microsoft, 357 F.3d at 1350). The Court also explained that prosecution history disclaimer can be applied where the applications at issue are not "directly related" through a parent-child relationship. Id. at 649, n.1 ("If the patents at issue are familial, but are not directly related, the question whether disclaimer applies will depend on the facts of the case.").

This interpretation of *Capital Machine Co.* is also confirmed by two district court cases. *See Baxter Healthcare Corp.*, 346 F. Supp. 3d at 658-59 ("Indeed, in *Capital Machine Co.*, the Federal Circuit determined that the patentee's 'disclaimer of [claim] scope during prosecution of some of the [later-issued] patents-in-suit' applied 'equally to limit the [claim term] in the other patents-in-suit,' including those that issued earlier."); *Island Intellectual Prop.*, 2022 WL 1608044, at *5-7 (citing *Capital Machine Co.* and applying prosecution history disclaimer to parent and sibling parents abased on "the similar subject matter and claims, as well as the incorporation by reference of the [parent patent's] disclosure" by the other asserted patents.)."

The Federal Circuit in *Capital Machine Co.* relies on *Microsoft*, which further supports the ID's application of disclaimer from the '139 patent to the '977 patent. *Capital Machine Co.*, 524 F. App'x at 649 (citing *Microsoft*, 357 F.3d at 1350); *see also* ID at 14 (citing *Teva*, 789 F.3d at 1343, which cites *Microsoft*, 357 F.3d at 1350). Specifically, the Court in *Microsoft* stated: "We have held that the prosecution history regarding a claim term is pertinent when interpreting the same term in both later-issued and earlier-issued patents in the same family." *Id.* The Court further held, "[W]e conclude that Multi-Tech's statements made during the prosecution of the '627 patent with regard to the scope of its inventions as disclosed in the common specification are relevant not only to the '627 and '532 patents, *but also to the earlier issued '649 patent.*" *Microsoft*, 357 F.3d at 1350 (emphasis added). Accordingly, there is ample Federal Circuit precedent to support the ID's application of disclaimer from the '139 parent to the '977 patent.

Complainant cites no compelling authority for its contention that the ALJ erred in applying disclaimer from a later patent to an earlier, related patent. CPet. at 14. Complainant

cites four Federal Circuit cases¹⁵ that are inapposite, one Federal Circuit case¹⁶ that supports applying disclaimer from the prosecution of the '139 patent to the '977 patent, and two nonbinding district court cases¹⁷ that fail to address the Federal Circuit's decision in *Capital Machine Co. Id.* at 18-21. Complainant incorrectly reasons, without support, that because "the '977 patent prosecution was no longer open when the applicant filed the '139 patent application, statements made during the prosecution of the '139 patent application could not have reflected how the examiner or the applicant understood the scope of the claims in the '977 patent at the time the '977 patent issued." *Id.* As discussed above, Federal Circuit precedent dictates the opposite conclusion.

Accordingly, the Commission affirms the ID's application of the prosecution history

disclaimer from the '139 patent to the nearly identical term in the asserted '977 patent.

c. Regardless of Disclaimer, Applicant's Statements During Prosecution of the '139 Patent Are Relevant and Support the ALJ's Construction of the Disputed Term in the '977 Patent

The Commission also finds that, even without disclaimer, applicant's statements in the '139 patent's prosecution history are relevant to and support the ALJ's construction of the

¹⁵ In three of the cases, the Federal Circuit applied disclaimer from a parent or ancestor application to a child application but did not say that disclaimer could not apply the other way around. *Cordis Corp. v. Boston Sci. Corp.*, 658 F.3d 1347, 1356 n.5 (Fed. Cir. 2011); *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1333 (Fed. Cir. 2003); *Augustine Med., Inc. v. Gaymar, Indus., Inc.*, 181 F.3d 1291, 1300 (Fed. Cir. 1999). In the fourth case, the Federal Circuit considered whether statements made during prosecution of a parent patent carried forward to a child patent but concluded the statements at issue were insufficient for disclaimer. *NTP, Inc. v. Rsch. in Motion, Ltd.*, 418 F.3d 1282, 1309 (Fed. Cir. 2005).

¹⁶ In *Verizon Services. Corp. v. Vonage Holdings Corp.*, the Federal Circuit applied disclaimer based on applicant's statements in the prosecution of a related application, even though the statements were made after the asserted patent issued. 503 F.3d 1295, 1305-07 (Fed. Cir. 2007).

¹⁷ Oyster Optics v. Ciena and Oyster Optics v. Coriant are not controlling and fail to cite Capital Machine Co., 524 F. App'x at 647-649.

disputed term "non-adjacent in at least one of the identified documents" to mean "non-adjacent within the content of at least one of the identified documents."

The Federal Circuit in *Teva* recognized that "[a] statement made during prosecution of related patents may be properly considered in construing a term common to those patents, regardless of whether the statement pre- or post-dates the issuance of the particular patent at issue." *Teva*, 789 F.3d at 1343 (citing *Microsoft*, 357 F.3d at 1350)). The Court has also found that, even without considering disclaimer, "the prosecution history provides persuasive evidence that informs the meaning of the disputed claim phrase and addresses an ambiguity otherwise left unresolved by the claims and specification." *Personalized Media*, 952 F.3d at 1345; *see also Iridescent Networks, Inc. v. AT&T Mobility, LLC*, 933 F.3d 1345, 1353 (Fed. Cir. 2019)

("[W]here there is no clear ordinary and customary meaning of a coined term of degree, we may look to the prosecution history for guidance without having to first find a clear and unmistakable disavowal."); *Ultravision Techs., LLC v. Govision, LLC*, No. 2022-1098, 2023 WL 2182285, at *4 (Fed. Cir. Feb. 23, 2023) ("The prosecution history is relevant for more than an evaluation of disclaimer—it provides additional context for evaluating how the term would be understood and how it was used in the patent.").

The Commission finds that the disputed term, "non-adjacent in at least one of the identified documents," does not have a clear meaning and is not specifically defined in the claims or specification of the '977 patent. Thus, it is especially appropriate to refer to the prosecution history of the '977 patent and other related patents, including the '139 patent. *See Phillips*, 415 F.3d at 1317 ("[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it

would otherwise be."); *see also Univ. of Mass. v. L'Oréal S.A.*, 36 F.4th 1374, 1379 (Fed. Cir. 2022) ("the claim language is not plain in the respect at issue and that the proper interpretation is determined by the specification and, most pointedly, by the prosecution history"). Several findings in the ID, which are not disputed by Complainant, also support the Commission's finding that the disputed term is not plain on its face, including:

- "The plain language of 'non-adjacent in at least one of the identified documents' ('977 patent) could refer to the content of the document but also its attributes (*e.g.*, metadata), since the attributes are a part of the file."
- "While these attributes [file name, file type, file modification date field, file size, and file path] are disclosed as searched using a separate field from the field assigned to document contents (*see* [Mot.] at 15 (citing '977 patent at 16:21-30), 16 (citing '977 patent at Fig. 4A, 15:12-45)), the claims at issue make no reference to different or multiple search fields (*see* '977 patent at cl. 1 (reciting only 'a first search field'), 19 (same))."

ID at 8-9; *see* CPet. at 11, 13-14 (citing ID's findings affirmatively). The ID's characterizations of the disputed term support finding that it is not clear as to whether the claim term requires that the content and/or attributes of a document are searched. *Id*. The Commission finds that the claim term does not specify *where "in* at least one of the identified documents" the search string must be found. '977 patent, cl. 1 (emphasis added).

The Commission further finds that it is unclear from the specification as to what "in" a document means. In the '977 patent's specification, the embodiments sometimes refer to a word or character string found "*with*" a document and other times refer to "words that occur *in* the target files." '977 patent at 5:20-23 ("In one example embodiment, for each word or character string found *with* a file or document, the index stores which fields of which documents or files contain that word or character string.") (emphasis added); 6:16-18 ("The fixed index additionally includes a 'words' file that comprises a list of the words that occur *in* the target files."). In one instance, the specification uses the term "in a document" to refer to searching in the content of a

document. *Id.* at 12:18-22 ("Relevancy can be determine using one or more techniques, such as whether an exact match is found for the search terms, how many times the search terms are found in a document, the spacing of search terms in a document from each other"). The specification also teaches that words "may appear *in* the target content *or* attributes" and that a user can search various fields, where a "main search field" may include the content of a document and an "attributes field" includes various types of metadata. *Id.* at 27:33-37 ("For example, the user can enter into the main search field and/or into one or more attribute search fields one or more alpha characters, numeric characters, words and/or phrases that the user thinks may appear in the target content or attributes."); Fig. 4C. Accordingly, the specification does not specifically define the meaning of "non-adjacent in at least one of the identified documents" and does not specify whether non-adjacent data is in the content or attributes.

Because the meaning of the disputed term is not plain from the claims or specification, the prosecution history is particularly useful to "inform[] the meaning of the disputed claim phrase and address[] an ambiguity otherwise left unresolved." *Univ. of Mass.*, 36 F.4th at 1382-1383 (citing *Personalized Media*, 952 F.3d at 1345; *Sound View Innovations, LLC v. Hulu, LLC*, 33 F.4th 1326, 1332-1335 (Fed. Cir. 2022)).

As discussed above, the '139 patent's prosecution history is relevant to the construction of the disputed term "non-adjacent in at least one of the identified documents" recited in the asserted claims of the '977 patent. In particular, the applicant's argument that, unlike Spaey, the claims of the '139 patent require searching the content of at least one of the identified documents and not only conducting a metadata search of attributes, is relevant to the construction, even if the argument does not rise to the level of finding "disclaimer."

Based on the preceding discussion, the Commission finds, on review, that the ID correctly construes the term "non-adjacent in at least one of the identified documents" recited in the asserted claims of the '977 patent.

C. Complainant Has No Infringement Arguments for the '977 Patent Under the ID's Correct Claim Construction

The ID finds, and Complainant's petition does not challenge, that there is no factual dispute that the accused features do not search document contents and, therefore, that there is no infringement under the ALJ's correct construction of the limitation "non-adjacent in at least one of the identified documents." ID at 15-18; CPet. 12. Specifically, Complainant states, "[b]ecause the ID's disclaimer ruling is contrary to Federal Circuit precedent, X1 is challenging only the disclaimer ruling in this Petition." CPet. at 12. Accordingly, Complainant does not separately challenge the noninfringement finding under the ID's construction. *Id.*

Because there is no material issue of fact regarding whether the accused features infringe the asserted claims of the '977 patent under the ID's construction, and because the ID's finding of noninfringement is supported by the evidence of record, including expert and fact witness testimony (*see* ID at 15-18), the Commission affirms the ID's grant of summary determination that Respondents do not infringe claims 1, 2, 7, and 19 of the '977 patent.

VI. CONCLUSION

The Commission has considered all of the other arguments by the parties regarding the '977 patent and the subject ID, and does not find them persuasive. Therefore, for the reasons set forth above, the Commission determines that Complainant has not established a violation of section 337 by Respondents with respect to claims 1, 2, 7, and 19 of the '977 patent because Respondents do not infringe those asserted claims. Accordingly, the'977 patent is terminated from the investigation with a finding of no violation of section 337.

By order of the Commission.

Nri/2B

Lisa R. Barton Secretary to the Commission

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