In the Matter of

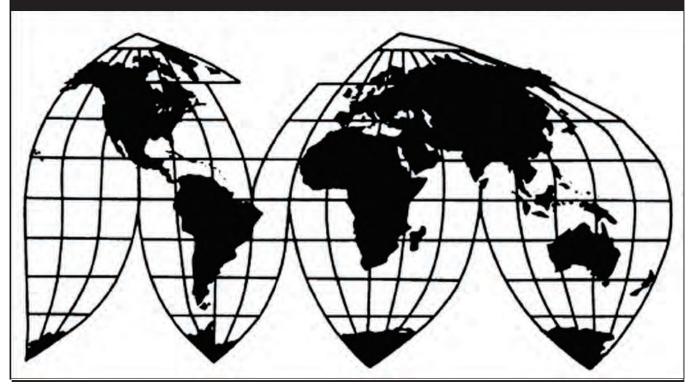
CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

337-TA-1130

Publication 5083

June 2020

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

David S. Johanson, Chairman Rhonda K. Schmidtlein, Commissioner Jason E. Kearns, Commissioner Randolph J. Stayin, Commissioner Amy A. Karpel, 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 BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

337-TA-1130



UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1130

NOTICE OF COMMISSION DECISION TO INSTITUTE A RESCISSION PROCEEDING AND TO GRANT A PETITION FOR RESCISSION OF A LIMITED EXCLUSION ORDER AND A CEASE AND DESIST ORDER; RESCISSION OF A LIMITED EXCLUSION ORDER AND A CEASE AND DESIST ORDER; TERMINATION OF RESCISSION PROCEEDING

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission ("Commission") has determined to institute a rescission proceeding in the above-captioned investigation and to grant a joint motion for rescission of the limited exclusion order ("LEO") and the cease and desist order ("CDO") previously issued in the investigation. The LEO and CDO are rescinded and the rescission proceeding is terminated.

FOR FURTHER INFORMATION CONTACT: Sidney A. Rosenzweig, Esq., 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 may be viewed on the Commission's electronic docket (EDIS) at <u>https://edis.usitc.gov</u>. For help accessing EDIS, please email <u>EDIS3Help@usitc.gov</u>. General information concerning the Commission may also be obtained by accessing its Internet server at <u>https://www.usitc.gov</u>. 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 September 5, 2018, based on a complaint filed by Heineken International B.V. and Heineken Supply Chain B.V., both of Amsterdam, The Netherlands; and Heineken USA Inc. of White Plains, New York (collectively, "Heineken"). 83 FR 45141, 45141-42 (Sept. 5, 2018). The complaint alleges a violation section 337 of the Tariff Act 1930, as amended, 19 U.S.C. 1337 ("section 337") in the importation into the United States, sale for importation, or sale in the United States after importation of certain beverage dispensing systems and components thereof that allegedly infringe claims 1-11 of U.S. Patent No. 7,188,751 ("the '751 patent"). *Id.* The notice of investigation names as respondents Anheuser-Busch InBev SA, and InBev Belgium NV both of Leuven, Belgium; and Anheuser-Busch, LLC of St. Louis, Missouri (collectively, "ABI"). *Id.* The Office of Unfair Import Investigations was not named as a party to this investigation. *Id.*

On March 11, 2020, the Commission terminated the investigation with a finding of violation of section 337 as to claims 1, 3, 7, and 10 of the '751 patent. 85 FR 15223, 15224 (Mar. 17, 2020). The Commission issued an LEO prohibiting the entry of infringing beverage dispensing systems and components thereof and a CDO directed to respondent Anheuser-Busch LLC. *Id.*

On May 4, 2020, Heineken and ABI filed a joint petition to rescind the limited exclusion order and the cease and desist order based on a settlement agreement. The petition contains confidential and non-confidential versions of the Global Settlement Agreement between the parties. On May 26, 2020, the parties supplemented their petition to state that there are no other agreements, written or oral, express or implied between the parties concerning the subject matter of the investigation. *See* 19 CFR 210.76(a)(3).

Having reviewed the petition, as supplemented, and determined that it complies with Commission rules, the Commission has determined to institute a rescission proceeding and to grant the petition. The LEO and the CDO are hereby rescinded.

The rescission proceeding is terminated.

The Commission vote for this determination took place on June 3, 2020.

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 Part 210 of the Commission's Rules of Practice and Procedure (19 CFR Part 210).

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: June 3, 2020

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served upon the following parties as indicated, on 6/3/2020.

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

On Behalf of Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc.:

Helena D. Kiepura, Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue NW Washington, DC 20004 Email: helena.kiepura@kirkland.com □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Email Notification of Availability for Download

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. **CALDWALADER, WICKERSHAM & TAFT LLP** 700 Sixth Street NW Washington, DC 20001 Email: <u>peter.moll@cwt.com</u> □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Email Notification of Availability for Download

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1130

RESCISSION OF REMEDIAL ORDERS

The Commission instituted this investigation on September 5, 2018, based on a complaint filed by Heineken International B.V. and Heineken Supply Chain B.V., both of Amsterdam, The Netherlands; and Heineken USA Inc. of White Plains, New York (collectively, "Heineken"). 83 FR 45141, 45141-42 (Sept. 5, 2018). The complaint alleges a violation section 337 of the Tariff Act 1930, as amended, 19 U.S.C. 1337 ("section 337") in the importation into the United States, sale for importation, or sale in the United States after importation of certain beverage dispensing systems and components thereof that allegedly infringe claims 1-11 of U.S. Patent No. 7,188,751 ("the '751 patent"). *Id.* The notice of investigation names as respondents Anheuser-Busch InBev SA, and InBev Belgium NV both of Leuven, Belgium; and Anheuser-Busch, LLC of St. Louis, Missouri (collectively, "ABI"). *Id.* The Office of Unfair Import Investigations was not named as a party to this investigation. *Id.*

On March 11, 2020, the Commission terminated the investigation with a finding of violation of section 337 as to claims 1, 3, 7, and 10 of the '751 patent. 85 FR 15223, 15224 (Mar. 17, 2020). The Commission issued a limited exclusion order ("LEO") prohibiting the

entry of infringing beverage dispensing systems and components thereof and a cease and desist order ("CDO") directed to respondent Anheuser-Busch LLC. *Id.*

On May 4, 2020, Heineken and ABI filed a joint petition to rescind the LEO and the CDO based on a settlement agreement. The petition contains confidential and non-confidential versions of the Global Settlement Agreement between the parties. No responses were filed. On May 26, 2020, the parties supplemented their petition to state that there are no other agreements, written or oral, express or implied between the parties concerning the subject matter of the investigation. *See* 19 CFR 210.76(a)(3).

Having reviewed the petition, as supplemented, and determined that it complies with Commission rules, the Commission has determined to institute a rescission proceeding and to grant the petition.

Accordingly, it is hereby ORDERED that:

- 1. The LEO issued in the above-captioned investigation is hereby rescinded.
- 2. The CDO issued in the above-captioned investigation is hereby rescinded.
- 3. The Secretary shall serve a copy of this order on the Secretary of the Treasury and all parties of record and publish notice thereof in the *Federal Register*

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: June 3, 2020

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER** has been served upon the following parties as indicated, on 6/3/2020.

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

<u>On Behalf of Complainants Heineken International B.V.,</u> <u>Heineken Supply Chain B.V., and Heineken USA Inc.:</u>

Helena D. Kiepura, Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue NW Washington, DC 20004 Email: helena.kiepura@kirkland.com □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Email Notification of Availability for Download

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. **CALDWALADER, WICKERSHAM & TAFT LLP** 700 Sixth Street NW Washington, DC 20001 Email: <u>peter.moll@cwt.com</u> □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Email Notification of Availability for Download

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1130

NOTICE OF THE COMMISSION'S FINAL DETERMINATION FINDING A VIOLATION OF SECTION 337; ISSUANCE OF A LIMITED EXCLUSION ORDER AND A CEASE AND DESIST ORDER; TERMINATION OF THE INVESTIGATION

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has found a violation of section 337 of the Tariff Act of 1930, as amended, in this investigation and has issued a limited exclusion order and a cease and desist order prohibiting importation of infringing beverage dispensing systems and components thereof.

FOR FURTHER INFORMATION CONTACT: Sidney A. Rosenzweig, Esq., Office of the General Counsel, U₁S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 708-2532. The public version of the complaint can be accessed on the Commission's electronic docket (EDIS) at <u>https://edis.usitc.gov</u>, and 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 SW., Washington, DC 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server (<u>https://www.usitc.gov</u>). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <u>https://edis.usitc.gov</u>. 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 September 5, 2018, based on a complaint filed by Heineken International B.V. and Heineken Supply Chain B.V., both of Amsterdam, The Netherlands; and Heineken USA Inc. of White Plains, New York (collectively, "Heineken"). 83 FR 45141, 45141-42 (Sept. 5, 2019). The complaint alleges a violation section 337 of the Tariff Act 1930, as amended, 19 U.S.C. 1337 ("section 337") in the importation into the United States, sale

for importation, or sale in the United States after importation of certain beverage dispensing systems and components thereof that allegedly infringe claims 1-11 of the '751 patent. *Id.* The notice of investigation names as respondents Anheuser-Busch InBev SA, and InBev Belgium NV, both of Leuven, Belgium; and Anheuser-Busch, LLC of St. Louis, Missouri (collectively, "ABI"). *Id.* The Office of Unfair Import Investigations was not named as a party to this investigation. *Id.*

On February 6, 2019, the presiding administrative law judge ("ALJ") granted Heineken's motion to partially terminate the investigation as to claims 2, 4-6, 8-9, and 11 of the '751 patent. Order No. 6 (Feb. 6, 2019), *not reviewed*, Notice (Mar. 7, 2019). Remaining within the investigation are claims 1, 3, 7, and 10 of the '751 patent. On March 26, 2019, the ALJ issued Order No. 14, the *Markman* Order, construing certain claim terms. The ALJ conducted the evidentiary hearing from April 16-18 and 23, 2019.

On September 5, 2019, the ALJ issued a final initial determination ("ID"), finding claims 1, 3, 7, and 10 infringed and not invalid, and thereby finding a violation of section 337 with respect to those claims. On September 19, 2019, the ALJ issued a Recommended Determination on Remedy and Bond ("RD"). The RD recommends that should the Commission find a violation of section 337, that the Commission issue a limited exclusion order, a cease and desist order, and impose a bond rate during the period of Presidential review in the amount of five percent of the entered value of infringing articles.

On September 18, 2019, ABI filed a petition for Commission review of aspects of the ID. That same day, Heineken filed a contingent petition for review. On September 26, 2019, the parties responded to each other's petitions.

On November 4, 2019, the Commission determined to review the ID in its entirety. Notice at 2 (Nov. 4, 2019) ("Notice of Review"), *published at* 84 Fed. Reg. 60452 (Nov. 8, 2019). The Commission solicited briefing on remedy, the public interest, and bonding, as well on specific issues concerning claim construction, infringement, invalidity, and the domestic industry requirement.

On November 18, 2019, the parties filed opening briefs in response to the Notice of Review. On November 26, 2019, the parties filed replies to each other's brief.

Having reviewed the record of the investigation, including the *Markman* Order, the final ID, and the parties' submissions to the ALJ and to the Commission, the Commission has found a violation of section 337. Specifically, the Commission finds that Heineken has demonstrated the existence of a domestic industry and that asserted claims 1, 3, 7, and 10 of the '751 patent are infringed and are not invalid.

The Commission has further determined that the appropriate remedy is: (1) a limited exclusion order prohibiting the entry of infringing beverage dispensing systems and components thereof; and (2) a cease and desist order directed to respondent Anheuser-Busch LLC. The Commission has determined that the public interest factors

enumerated in section 337(d) and (f), 19 U.S.C. § 1337(d), (f), do not preclude the issuance of the limited exclusion order or the cease and desist order. The Commission has determined that a bond in the amount of five (5) percent of the entered value of the imported beverage containers is required during the period of Presidential review. 19 U.S.C. § 1337(j)(3). Notwithstanding the foregoing, the exclusion order and the cease and desist order permit ABI to import beverage containers that are used as part of ABI's PureDraught system.

The investigation is terminated. The Commission's reasoning in support of its determinations is set forth more fully in its opinion. The Commission's orders and opinion were delivered to the President and the United States Trade Representative on the day of their issuance.

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 Part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: March 11, 2020

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served upon the following parties as indicated, on 3/11/2020.

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

<u>On Behalf of Complainants Heineken International B.V.,</u> <u>Heineken Supply Chain B.V., and Heineken USA Inc.:</u>

Helena D. Kiepura, Esq. KIRKLAND & ELLIS LLP 1301 Pennsylvania Avenue NW Washington, DC 20004 □ Via Hand Delivery
 ⊠ Via Express Delivery
 □ Via First Class Mail
 □ Other:

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. CALDWALADER, WICKERSHAM & TAFT LLP 700 Sixth Street NW Washington, DC 20001 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 □ Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1130

LIMITED EXCLUSION ORDER

The United States International Trade Commission ("Commission") has determined that there is a violation of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), in the unlawful importation, sale for importation, or sale within the United States after importation by Respondents Anheuser-Busch InBev S.A., Brouwerijplein 1, 3000 Leuven, Belgium; InBev Belgium N.V., Brouwerijplein 1, 3000 Leuven, Belgium; and Anheuser-Busch, LLC, One Busch Place, St. Louis, MO 63118 ("Respondents") of certain beverage dispensing systems and components thereof, including appliances, beverage containers, and disposable couplers, that infringe one or more of claims 1, 3, 7, and 10 of U.S. Patent No. 7,188,751 ("the Asserted Patent") in violation of Section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337).

Having reviewed the record in this investigation, including the written submissions of the parties, the Commission has made its determination on the issues of remedy, public interest, and bonding. The Commission has determined that the appropriate form of relief includes a limited exclusion order prohibiting the unlicensed entry of certain beverage dispensing systems and components thereof, including appliances, beverage containers, and disposable couplers, that are manufactured abroad by or on behalf of, or imported by or on behalf of, the Respondents or any of their affiliated companies, parents, subsidiaries, licensees, or other related business entities, or their successors or assigns.

The Commission has also determined that the public interest factors enumerated in 19 U.S.C. § 1337(d) do not preclude the issuance of the limited exclusion order, and that the bond during the Presidential review period shall be in the amount of five (5) percent of the entered value for each imported beverage container.

Accordingly, the Commission hereby **ORDERS** that:

- 1. Beverage dispensing systems and components thereof, including appliances, beverage containers, and disposable couplers, that infringe one or more of claims 1, 3, 7, and 10 of U.S. Patent No. 7,188,751 that are manufactured abroad by or on behalf of, or imported by or on behalf of, the Respondents or any of their affiliated companies, parents, subsidiaries, agents, or other related business entities, or their successors or assigns, are excluded from entry for consumption into the United States, entry for consumption from a foreign-trade zone, or withdrawal from a warehouse for consumption, for the remaining term of the patent, except under license of the patent owner or as provided by law, and except for beverage containers used as part of ABI's PureDraught system.
- 2. Notwithstanding paragraph 1 of this Order, the aforesaid beverage containers are entitled to entry into the United States for consumption, entry for consumption from a foreign trade zone, or withdrawal from a warehouse for consumption, under bond in the amount of five (5) percent of the entered value for each imported beverage container pursuant to subsection (j) of Section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337(j)), and the Presidential Memorandum for the United States Trade Representative of July 21, 2005 (70 Fed. Reg. 43,251), from the day after this Order is received by the United States Trade Representative, and until such time

as the United States Trade Representative notifies the Commission that this action is approved or disapproved but, in any event, not later than 60 days after the issuance of

receipt of this Order. No bond is required for entries of covered appliances and disposable couplers. All entries of covered products made pursuant to this paragraph are to be reported to U.S. Customs and Border Protection ("CBP"), in advance of the date of entry, pursuant to procedures CBP establishes.

- 3. At the discretion of CBP and pursuant to the procedures it establishes, persons seeking to import articles that are potentially subject to this Order may be required to certify that they are familiar with the terms of this Order, that they have made appropriate inquiry, and 1 thereupon state that, to the best of their knowledge and belief, the products being imported are not excluded from entry under paragraph 1 of this Order. At its discretion, CBP may require persons who have provided the certification described in this paragraph to furnish such records or analyses as are necessary to substantiate this certification.
- In accordance with 19 U.S.C. § 1337(1), the provisions of this Order shall not apply to 4. covered articles that are imported by or for the use of the United States, or imported for and to be used for, the United States with the authorization or consent of the Government.
- 5. The Commission may modify this Order in accordance with the procedures described in Rule 210.76 of the Commission's Rules of Practice and Procedure (19 C.F.R. §210.76).
- The Secretary shall serve copies of this Order upon each party of record in this 6. Investigation and upon the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and U.S. Customs and Border Protection.

7. Notice of this Order shall be published in the *Federal Register*.

By order of the Commission.

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Lisa R. Barton Secretary to the Commission

Issued: March 11, 2020

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER** has been served upon the following parties as indicated, on 3/11/2020.

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

<u>On Behalf of Complainants Heineken International B.V.,</u> <u>Heineken Supply Chain B.V., and Heineken USA Inc.:</u>

Helena D. Kiepura, Esq. KIRKLAND & ELLIS LLP 1301 Pennsylvania Avenue NW Washington, DC 20004

□ Via Hand Delivery
 ⊠ Via Express Delivery
 □ Via First Class Mail
 □ Other:

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. CALDWALADER, WICKERSHAM & TAFT LLP 700 Sixth Street NW Washington, DC 20001 □ Via Hand Delivery
 ☑ Via Express Delivery
 □ Via First Class Mail
 □ Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1130

CEASE AND DESIST ORDER

IT IS HEREBY ORDERED THAT Anheuser-Busch LLC of St. Louis, Missouri cease and desist from conducting any of the following activities in the United States: importing, selling, marketing, advertising, distributing, transferring (except for exportation), soliciting United States agents or distributors, and aiding or abetting other entities in the importation, sale for importation, sale after importation, transfer (except for exportation), or distribution of beverage dispensing systems and components thereof, including appliances, beverage containers, and disposable couplers, that infringe one or more of claims 1, 3, 7, and 10 of U.S. Patent No. 7,188,751 ("the Asserted Patent") in violation of Section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337).

I. Definitions

As used in this Order:

- (A) "Commission" shall mean the United States International Trade Commission.
- (B) "Complainants" shall mean Heineken International B.V., Tweede Weteringplantsoen
 21, 1017 ZD Amsterdam, The Netherlands; Heineken Supply Chain B.V., Tweede
 Weteringplantsoen 21, 1017 ZD Amsterdam, The Netherlands, and Heineken USA Inc.,
 360 Hamilton Avenue, Suite 1103, White Plains, NY 10601.

- (C) "Respondent" shall mean Anheuser-Busch, LLC, One Busch Place, St. Louis, MO 63118.
- (D) "Person" shall mean an individual, or any non-governmental partnership, firm, association, corporation, or other legal or business entity other than Respondent or its majority-owned or controlled subsidiaries, successors, or assigns.
- (E) "United States" shall mean the fifty States, the District of Columbia, and Puerto Rico.
- (F) The terms "import" and "importation" refer to importation for entry for consumption under the Customs laws of the United States.
- (G) The term "covered products" shall mean beverage dispensing systems and components thereof, including appliances, beverage containers, and disposable couplers, that infringe one or more of claims 1, 3, 7, and 10 of the Asserted Patent. Covered products shall not include articles for which a provision of law or license avoids liability for infringement of certain claims of the Asserted Patent.

II. Applicability

The provisions of this Cease and Desist Order shall apply to Respondent and to any of its principals, stockholders, officers, directors, employees, agents, licensees, distributors, controlled (whether by stock ownership or otherwise) and majority-owned business entities, successors, and assigns, and to each of them, insofar as they are engaging in conduct prohibited by Section III, *infra*, for, with, or otherwise on behalf of, Respondent.

III. Conduct Prohibited

The following conduct of Respondent in the United States is prohibited by this Order. For the remaining terms of the '751 Patent, the Respondent shall not:

(A) import or sell for importation into the United States covered products;

- (B) market, distribute, sell, or otherwise transfer (except for exportation), in the United
 States imported covered products;
- (C) advertise imported covered products;
- (D) solicit U.S. agents or distributors for imported covered products; or
- (E) aid or abet other entities in the importation, sale for importation, sale after importation, transfer, or distribution of covered products.

IV. Conduct Permitted

Notwithstanding any other provision of this Order, specific conduct otherwise prohibited by the terms of this Order shall be permitted if: (1) in a written instrument, the owner of the relevant Asserted Patent authorizes or licenses such specific conduct, (2) such specific conduct is related to the importation or sale of covered products by or for the United States as described in Section 337(1) of the Tariff Act of 1930 (19 U.S.C. § 1337(1)), or (3) such specific conduct relates to beverage containers used as part of ABI's PureDraught system.

V. Reporting

For purposes of this requirement, the reporting periods shall commence on January 1 of each year and shall end on the subsequent December 31. The first report required under this section shall cover the period from the date of issuance of this Order through December 31, 2020. This reporting requirement shall continue in force until such time as Respondent has truthfully reported, in two consecutive timely filed reports, that it has no inventory of covered products in the United States.

Within thirty (30) days of the last day of the reporting period, Respondent shall report to the Commission: (a) the quantity in units and the value in dollars of covered products that it has (i) imported and/or (ii) sold in the United States after importation during the reporting period, and (b) the quantity in units and value in dollars of reported covered products that remain in

inventory in the United States at the end of the reporting period.

When filing written submissions, Respondent must file the original document electronically on or before the deadlines stated above and submit eight (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-1130") in a prominent place on the cover pages and/or the first page. (*See* Handbook for Electronic Filing Procedures,

https://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). If Respondent desires to submit a document to the Commission in confidence, it must file the original and a public version of the original with the Office of the Secretary and must serve a copy of the confidential version on Complainants' counsel.¹

Any failure to make the required report or the filing of any false or inaccurate report shall constitute a violation of this Order, and the submission of a false or inaccurate report may be referred to the U.S. Department of Justice as a possible criminal violation of 18 U.S.C. § 1001.

VI. Record-Keeping and Inspection

(A) For the purpose of securing compliance with this Order, Respondent shall retain any and all records relating to the sale, offer for sale, marketing, or distribution in the United States of covered products, made and received in the usual and ordinary course of business, whether in detail or in summary form, for a period of three (3) years from the close of the fiscal year to which they pertain.

¹ Complainant must file a letter with the Secretary identifying the attorney to receive reports and bond information associated with this Order. The designated attorney must be on the protective order entered in the investigation.

(B) For the purposes of determining or securing compliance with this Order and for no other purpose, subject to any privilege recognized by the federal courts of the United States, and upon reasonable written notice by the Commission or its staff, duly authorized representatives of the Commission shall be permitted access and the right to inspect and copy, in Respondent' principal offices during office hours, and in the presence of counsel or other representatives if Respondent so chooses, all books, ledgers, accounts, correspondence, memoranda, and other records and documents, in detail and in summary form, that must be retained under subparagraph VI(A) of this Order.

VII. Service of Cease and Desist Order

Respondent is ordered and directed to:

- (A) Serve, within fifteen (15) days after the effective date of this Order, a copy of this
 Order upon each of its respective officers, directors, managing agents, agents, and
 employees who have any responsibility for the importation, marketing, distribution, or
 sale of imported covered products in the United States;
- (B) Serve, within fifteen (15) days after the succession of any persons referred to in subparagraph VII(A) of this Order, a copy of the order upon each successor; and
- (C) Maintain such records as will show the name, title, and address of each person upon whom the order has been served, as described in subparagraphs VII(A) and VII(B) of this Order, together with the date on which service was made.

The obligations set forth in subparagraphs VII(B) and VII(C) shall remain in effect until the expiration date of the Asserted Patent.

VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to Sections V-VI of this Order should be made in accordance with Section 201.6 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 201.6). For all reports for which confidential treatment is sought, Respondents must provide a public version of such report with confidential information redacted.

IX. Enforcement

Violation of this Order may result in any of the actions specified in Section 210.75 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.75), including an action for civil penalties under Section 337(f) of the Tariff Act of 1930 (19 U.S.C. § 1337(f)), as well as any other action that the Commission deems appropriate. In determining whether Respondent is in violation of this Order, the Commission may infer facts adverse to Respondent if it fails to provide adequate or timely information.

X. Modification

The Commission may amend this Order on its own motion or in accordance with the procedure described in Section 210.76 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.76).

XI. Bonding

The conduct prohibited by Section III of this Order may be continued during the sixty day period in which this Order is under review by the United States Trade Representative, as delegated by the President (70 Fed. Reg. 43,251 (Jul. 21, 2005)) subject to the Respondent's posting of a bond in the amount of five (5) percent of the entered value for each imported beverage container. This bond provision does not apply to conduct that is otherwise permitted

by Section IV of this Order. Beverage containers imported on or after the date of issuance of this Order are subject to the entry bond set forth in the exclusion order issued by the Commission, and are not subject to this bond provision.

The bond is to be posted in accordance with the procedures established by the Commission for the posting of bonds by complainants in connection with the issuance of temporary exclusion orders. *See* 19 C.F.R. § 210.68. The bond and any accompanying documentation are to be provided to and approved by the Commission prior to the commencement of conduct that is otherwise prohibited by Section III of this Order. Upon the Secretary's acceptance of the bond, (a) the Secretary will serve an acceptance letter on all parties, and (b) Respondent must serve a copy of the bond and accompanying documentation on Complainants' counsel.²

The bond is to be forfeited in the event that the United States Trade Representative approves this Order (or does not disapprove it within the review period), unless (i) the U.S. Court of Appeals for the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or (ii) Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission.

This bond is to be released in the event the United States Trade Representative disapproves this Order and no subsequent order is issued by the Commission and approved (or not disapproved) by the United States Trade Representative, upon service on Respondent of an order issued by the Commission based upon application therefore made by Respondent to the Commission.

² See Footnote 1.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: March 11, 2020

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER** has been served upon the following parties as indicated, on 3/11/2020.

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

On Behalf of Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc.:

Helena D. Kiepura, Esq. KIRKLAND & ELLIS LLP 1301 Pennsylvania Avenue NW Washington, DC 20004 □ Via Hand Delivery
 ☑ Via Express Delivery
 □ Via First Class Mail
 □ Other:

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. CALDWALADER, WICKERSHAM & TAFT LLP 700 Sixth Street NW Washington, DC 20001 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 □ Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, DC

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1130

COMMISSION OPINION

On Commission review of the presiding administrative law judge's ("ALJ") final initial determination ("ID"), the Commission has determined that there has been a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, with respect to claims 1, 3, 7, and 10 of asserted U.S. Patent No. 7,188,751 ("the '751 patent"). The Commission has determined to issue a limited exclusion order and a cease and desist order. This Opinion sets forth the Commission's reasoning in support of its determination. All of the ALJ's findings not inconsistent with this opinion are hereby affirmed and adopted.

I. BACKGROUND

A. <u>Procedural History</u>

The Commission instituted this investigation on September 5, 2018, based on a complaint filed by Heineken International B.V. and Heineken Supply Chain B.V., both of Amsterdam, The Netherlands; and Heineken USA Inc. of White Plains, New York (collectively, "Heineken"). 83 Fed. Reg. 45141, 45141-42 (Sept. 5, 2018). The complaint alleges a violation of 19 U.S.C. § 1337 in the importation into the United States, sale for importation, or sale in the United States after importation of certain beverage dispensing systems and components thereof that allegedly infringe claims 1-11 of U.S. Patent No. 7,188,751 ("the '751 patent"). *Id.* The notice of investigation

names as respondents Anheuser-Busch InBev SA, and InBev Belgium NV, both of Leuven, Belgium; and Anheuser-Busch, LLC of St. Louis, Missouri (collectively, "ABI"). *Id*. The Office of Unfair Import Investigations was not named as a party to this investigation. *Id*.

On February 6, 2019, the ALJ granted Heineken's motion to partially terminate the investigation as to claims 2, 4-6, 8, 9, and 11 of the '751 patent. Order No. 6 (Feb. 6, 2019), *not reviewed*, Notice (Mar. 7, 2019). Remaining within the investigation are claims 1, 3, 7, and 10 of the '751 patent. On March 26, 2019, the ALJ issued Order No. 14, the *Markman* Order, construing certain claim terms. The ALJ conducted the evidentiary hearing from April 16-18 and 23, 2019.

On September 5, 2019, the ALJ issued the final ID, finding claims 1, 3, 7, and 10 infringed and not invalid, and thereby finding a violation of section 337. On September 19, 2019, the ALJ issued a Recommended Determination on Remedy and Bond ("RD"). The RD recommends that if the Commission finds a violation of section 337, the Commission should issue a limited exclusion order, cease and desist orders, and impose a bond during the period of Presidential review in the amount of five percent of the entered value of infringing articles. The Commission received no post-RD submissions concerning the public interest.

On September 18, 2019, ABI filed a petition for Commission review of the ID.¹ That same day, Heineken filed a contingent petition for review.² On September 26, 2019, the parties responded to each other's petitions.³

¹ Respondents' Pet. for Comm'n Rev. of Initial Determination (Sept. 19, 2019) ("ABI Pet.").

² Complainants' Contingent Pet. for Rev. of the Initial Determination (Sept. 19, 2019) ("Heineken Pet.").

³ Complainants' Opp'n to Respondents' Pet. for Comm'n Rev. of the Final Initial Determination (Sept. 26, 2019) ("Heineken Resp. Pet."); Respondents' Reply to Complainants' Contingent Pet. for Comm'n Rev. of Initial Determination (Sept. 26, 2019) ("ABI Resp. Pet.").

On November 4, 2019, the Commission determined to review the ID in its entirety. Notice

at 2 (Nov. 4, 2019) ("Notice of Review"), published at 84 Fed. Reg. 60452 (Nov. 8, 2019). The

Commission solicited briefing on remedy, the public interest, and bonding, as well as on specific

issues concerning claim construction, infringement, invalidity, and the domestic industry

requirement. The Commission's questions on the issues under review were as follows:

(1) If the Commission were to find that the "operating element" limitation of claims 1 and 7 should be construed as a means-plus-function claim limitation, and if the Commission were to adopt Heineken's recited function and corresponding structure as set forth on pages 12-13 of Claim Chart No. 1 in Order No. 14:

Whether the accused products and domestic industry products practice that limitation.

The parties are not to provide further briefing as to the propriety of such a construction, or to advocate alternative claim constructions. The existing record is adequate as to the parties' positions on these issues.

- (2) Whether, for purposes of contributory infringement under 35 U.S.C. 271(c), the accused NOVA couplers or the NOVA appliances are 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 noninfringing use.
- (3) Whether claims 1 and 7 of the '751 patent are obvious in view of Figures 17-20 and the associated written description in Jeans (RX-658) (*see* ABI Pet. for Comm'n Rev. at 50-54) when combined with Timmermans (RX-838), van der Meer (RX-837) or Grill (RX-312).
- (4) Whether Heineken demonstrated significant investment in plant and equipment or significant employment of labor or capital, *see* 19 U.S.C. 1337(a)(3)(A), (B), in an appropriate context, in view of Federal Circuit and Commission precedent concerning such context (including but not limited to *Certain Carburetors and Products Containing Such Carburetors*, Inv. No. 337-1123, Comm'n Op. (Oct. 28, 2019) (public version)). For any context you argue is appropriate, please address the evidence in the record that permits an analysis within that context.

Notice of Review at 2-3.

On November 18, 2019, the parties filed opening briefs in response to the Notice of Review.⁴ On November 26, 2019, the parties filed replies to each other's brief.⁵

B. <u>Patent at Issue</u>

The '751 patent issued on March 13, 2007 from a PCT patent application filed on May 31, 2001, claiming priority to a Dutch application filed on May 31, 2000. The *Markman* Order discusses the background of the invention, the asserted claims and the file history. Order No. 14 at 3-11. In short, the patent is directed to a tabletop beer dispenser in which the entire beer line from the mini-keg to the outlet end of the dispenser is disposable. '751 patent col. 2 lines 13-23. The disposable line includes a shut-off valve that is ordinarily in the closed position. *Id.* col. 2 lines 43-52. Because the line is closed, there is no spillage when a new mini-keg is attached to a new dispenser line. *Id.*

Claim 1 is representative, and is reprinted in its entirety below. Because the claim as issued is a single undifferentiated paragraph, the Commission has added line breaks and indentation for clarity, and italics for some of the claim language in dispute:

- 1. Drink dispenser assembly (1,25) comprising:
 - a dispenser device (2,37) provided with a dispensing head (18,29) comprising an at least partially flexible dispensing line (17,28), and a container (7,27) containing carbonated drink, connected during use to the dispensing line (17,28) which has a coupling element at an outlet end for connection to the dispensing head (18,29), characterised in that the coupling element comprises a *shut-off valve* (19,32) made of *rigid* material that is selectively openable and closable after placing

⁴ Complainants' Resp. to the Commission's Notice and Request for Written Submissions (Nov. 18, 2019) ("Heineken Br."); Respondents' Initial Brief Regarding the Commission's Notice to Review the Initial Determination in Its Entirety (Nov. 18, 2019) ("ABI Br.").

⁵ Complainants' Resp. to ABI's Submission Regarding the Commission's Notice and Questions (Nov. 26, 2019) ("Heineken Reply Br."); Respondents' Responsive Brief Regarding the Commission's Notice to Review the Initial Determination in Its Entirety (Nov. 26, 2019) ("ABI Reply Br.").

the outlet end of the dispensing line (17,28) into the dispensing head (18,29),

the dispensing head (18,29) comprising a knob or handle and an *operating element* (45,98) connected to said knob or handle *by means of which the shut-off valve* (19,32) *is detachably connectable for opening and closing of the shut off valve by moving the knob or handle*,

wherein the shut-off valve is freely movable with the flexible tube upon placement and removal of the valve into and from the dispensing head and is fixed in position by being releasably attached to the dispensing head, and

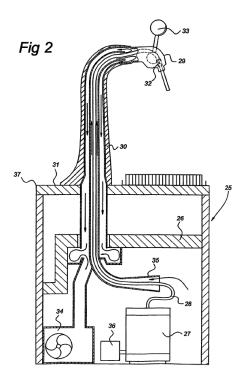
wherein the shut-off valve is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container.

'751 patent col. 11 lines 5-26.

The reference characters, while not limiting, MPEP § 608.01(m) (9th ed. Rev. Aug. 2017);

accord MPEP § 608.01(m) (7th ed. Rev. 1 Feb. 2000), generally correspond to what is shown in

Figure 1 and Figure 2, respectively, *i.e.*, (**Fig. 1 reference, Fig. 2 reference**). Figure 2 is reprinted below:



'751 patent, Fig 2.

Walking through the language of claim 1 itself, in this figure, drink dispenser assembly **25** comprises a dispenser device **37**. '751 patent col. 11 lines 5-6. The dispenser device has: dispensing head **29**, a container with a carbonated beverage **27** (generally beer), and a flexible dispensing line **28**. *Id.* col. 11 lines 6-7. Importantly, as shown in Figure 2 of the '751 patent, and more clearly in Figure 5 of the '751 patent, the dispensing line runs all the way from the beverage container through and out of the head. In that way, when the beer container is changed, the dispensing line is also changed, so that the line does not need to be cleaned. *Id.* col. 2 lines 9-12, 63-67, col. 8 lines 22-25. The flexible dispensing line has a built-in shut off valve that rests in the dispensing head. *See, e.g., id.* col. 2 lines 17-23, col. 5 lines 52-55, col. 11 lines 9-15, 20-23.

Claim 7 is similar to claim $1.^6$ Claim 3, which depends from claim 1, adds the limitation that the outlet from the dispensing line is downstream from the shut-off valve, *i.e.*, that the shut-off valve is not at the end, consistent with what is shown in Figure 2. Claim 10, which depends from claim 7, includes the additional requirement that the shut-off valve is connected to the dispensing line at a relatively rigid tube section (**41**) of the dispensing line, as shown in Figure 5. *See* '751 patent col. 4 lines 28-33, col. 7 lines 5-11.

⁶ As originally drafted, claim 7 (application claim 84) covered a bottle with a tube and shut-off valve, with an intended use for being inserted into a beer dispensing appliance. CX-33, at HEIA-ITC-320. As originally drafted, claim 7 did not cover the appliance or the dispensing head. As a result of a number of amendments in the prosecution history, claim 7 converged toward claim 1 (application claim 53), which was always directed to an appliance with a dispensing head that also includes the bottle, tube, and shut-off valve.

JXM-2, the file history as numbered for the *Markman* proceeding, was renumbered as CX-33 for the trial, with two sets of Bates numbers on each page. The *Markman* numbering (HEIA-ITC) is used herein.

II. ANALYSIS

Subject to the analysis below, the Commission affirms and adopts all of the ID's findings, including the ID's findings that ABI waived a number of arguments over the course of this investigation.

A. <u>Claim Construction</u>

Order No. 14 construed six claim terms, *see* Order No. 14 Claim Chart No. 1, two of which are called into question by ABI's petition: "shut-off valve," and "operating element . . . by means of which the shut-off valve (**19**, **32**) is detachably connectable for opening and closing of the shut-off valve." *See* '751 patent col. 11 lines 12, 16-19 (claim 1); *id*. col. 12 lines 17, 21-24 (claim 7). The Commission has determined to affirm the ID's claim constructions, including the constructions of "shut-off valve" and "operating element . . . by means of which the shut-off valve" and "operating element . . . by means of which the shut-off valve."

1. "Shut-off valve"

ABI proposed that the term "shut-off valve" be construed as a "valve comprising an outer and an inner sleeve, said valve opened and closed by linear movement." Order No. 14, Claim Chart No. 1, at 1. ABI based this narrow limitation upon the examiner's restriction requirement as to Species C, as shown in Figures 11-13. Order No. 14, Claim Chart No. 1, at 5-12. The ALJ agreed instead with Heineken that "shut-off valve" in claims 1 and 7 should be afforded its plain and ordinary meaning, which is a valve to open and close flow. Order No. 14, Claim Chart No. 1, at 1-12. In particular, the ALJ found that the restriction requirement was insufficiently clear to constitute prosecution disavowal. *Id.* at 5-12.

As to the "shut-off valve," in addition to the reasoning provided in Order No. 14 and the ID, the Commission finds as follows. The ALJ properly found that *Plantronics, Inc. v. Aliph, Inc.*, 724 F.3d 1343, 1350 (Fed. Cir. 2013) is controlling. As here, in that case, the examiner found multiple

"distinct inventions in the figures of the" patent application "without providing any reasons why in its view the application presented differing inventions." *Id.* at 1351. Likewise, in that case:

Neither the PTO nor [the applicant] made any particular remarks regarding the differences (*e.g.*, in structure) of what the PTO found to be different inventions, and while [the applicant] elected without traverse the invention of Figures 1A and 1B, [the applicant] did disagree with the PTO's comments on claim 11 when it responded that claim 11 is a generic claim that read on all the embodiments illustrated in the application. *This exchange with the PTO thus does not amount to anything clear or unambiguous to disclaim claim scope otherwise encompassed by the broadly drafted claims*.

Id. (emphasis added). ABI's arguments fall far short of the clear disavowal required by Federal Circuit precedent.

In the present case, the examiner characterized A-C as "species" and D-H as "subspecies." CX-033 at HEIA-ITC-0308. The examiner failed to explain the difference between a species and a subspecies, or to explain from which species (A-C), if any, each subspecies (D-H) depends. Likewise, the examiner never explained the several species, other than to apportion each figure in the patent to one, and only one, species, *id.*, and to apportion each claim to one, and only one, species. *Id.* at .0309. The examiner found most of the patent claims—including application claims 53, 64, 84 and 92, which issued as the claims asserted in this investigation—to correspond to species B, which, in turn, the examiner associated with Figure 2. *Id.* This restriction requirement is unusual, given that the asserted patent claims include reference characters with parallel citations to Figures 1 *and* 2.⁷

In the proceedings that followed, the applicant explained for application claim 53 (claim 1): "Assembly with a shut-off valve which can be closed when placed into and removed from the

⁷ Although such reference characters are not limiting, MPEP § 608.01(m) (9th ed. Rev. Aug. 2017); *accord* MPEP § 608.01(m) (7th ed. Rev. 1 Feb. 2000), they provide guidance as to specification support corresponding to Figures 1 and 2.

dispensing head. This is the generic principle by which no beer is spilled when exchanging the dispensing line (**17**, **28**). It reads on Figures 1-5, 9 and 10, and 11-13 and hence on Species A, B, C and H and is to this extent a generic claim." CX-033, at HEIA-ITC-0334. For application claim 64 (claim 3), the applicant explained: "Claims an outflow tube (**41**) at the end of the valve, shown in Figures 1-3 and 5-13, hence relevant to Species A, B, C, D, E, F, G and H." *Id.* at .0335. The applicant stated that application "[c]laims 84-95 relate to the beer container." *Id.* at .0337. For application claim 84 (claim 7), the applicant stated: "Corresponds to claim 53, relevant to Species A, B, C, and H." *Id.* For application claim 92 (claim 10), the applicant stated: "Corresponds to claim 54, relevant to Species A, B, C, D, E, F, G and H." *Id.* at .0338.

The Commission finds that ABI's attempt to distinguish *Plantronics* is unavailing. ABI Pet. 19, 23-24. Heineken's statements in the prosecution history fail to provide clear disavowal. ABI also argues that the limitations added as part of the prosecution history toward the end of claims 1 and 7 are directed to the embodiment shown in Figures 11-13. ABI Pet. 25-26. ABI's arguments are not adequately supported by the '751 patent. Figures 6a and 6b and Figures 7a and 7b also show the shut-off valve for the embodiments shown in Figures 1 and 2, and ABI fails to demonstrate why the added limitations should be construed to read only upon the embodiment of Figures 11-13. In any event, the added limitations of claims 1 and 7—including the wherein clauses at the end of each claim—do not clearly and unmistakably direct a person of ordinary skill in the art to Figures 11-13.

ABI also relies upon a related divisional application that issued as U.S. Patent No. 7,032,781. The claims there merely include a limitation for a hollow column on top of which the dispensing head is located, *i.e.*, the tap must be elevated on top of the unit, and not on the front of

the unit (as in Figures 1 and 11). The Commission fails to find clear disavowal based upon the divisional claims.

ABI's final claim-construction related argument is that the ALJ improperly recast the "shutoff valve" limitation to exclude pinch valves in the prior art from being invalidating. ABI Pet. 30-32; 43-48. In particular, ABI contends that the ALJ went from a plain meaning approach in which any shut-off valve will suffice for claim construction, to a narrower approach in connection with invalidity and the prior art. ABI's characterization is incorrect. The claim language here does not merely require a shut-off valve, but requires that, *inter alia*, the shut-off valve is "freely movable with the flexible tube upon placement and removal of the valve into and from the dispensing head," and that "the shut-off valve is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container." The prosecution history explains that the valve is a discrete part attached to the hose, and that an open hose that can be pinched after insertion into a dispenser is not within the scope of the claims or the invention. CX-033C, at HEIA-ITC-364 to -367; see also id. at -393 to -396. In some of the prior art of record here, the supposed "shut-off valve" is nothing more than a section of the flexible tube, which is pinched closed by the dispensing head. See ID at 102-117. In contrast, the claim language itself is clear that the valve must be integrated into the tube, and we agree with the ALJ that an open tube is not a shut-off valve and is not "made of rigid material" as required by the asserted claims. ID at 111; see '751 patent col. 11 lines 12-13 (claim 1), col. 12 lines 17-18 (claim 7).

2. "Operating element . . . by means of which the shut-off valve (19, 32) is detachably connectable for opening and closing of the shut-off valve"

Order No. 14 also addresses the language in claims 1 and 7, "operating element . . . by means of which the shut-off valve (**19, 32**) is detachably connectable for opening and closing of the shut off valve by moving the knob or handle." The ALJ agreed with Heineken that this

language would not be treated as means-plus-function, and would be afforded its plain and ordinary meaning. Order No. 14, Claim Chart No. 1 at 12-14. ABI, in contrast, argued that claim language recited function, and added a functional limitation that the "shutoff valve opens and closes via linear movement." Order No. 14, Claim Chart No. 1, at 13. The Commission has determined to affirm the ID's findings, which fully address the parties' claim construction and associated arguments. Accordingly, the Commission does not make any findings supplemental to, or alternative to, the findings in the *Markman* Order and the ID.

B. Infringement and the Scope of Section 337

1. Infringement

The Commission affirms, as modified below, the ID's findings of direct infringement by ABI and the ID's findings of direct infringement by ABI's customers (which is a predicate to Heineken's claim of indirect infringement by ABI). In addition, the Commission affirms the ID's inducement findings, and reverses the ID's findings of no contributory infringement by ABI.

a) Direct Infringement

Direct infringement by ABI has been demonstrated in this case in view of the preponderance of evidence showing ABI's use of the patented invention in the United States as proscribed by 35 U.S.C. § 271(a), and the Commission adopts and affirms those findings. *See* ID at 70-71. Specifically, ABI combined in the United States the imported components that comprise the NOVA system, *i.e.*, the NOVA appliance, the NOVA keg, and the NOVA coupler, and when assembled the NOVA system satisfied all the limitations of the asserted claims. The evidence also shows that ABI employees in the United States use the complete NOVA system within the scope of their employment. *See id*.

As discussed below in connection with the scope of section 337, ABI makes certain arguments contending that there can be no violation of section 337 as to ABI's importations and sale of the components of the NOVA system, as these have not been imported or sold as an assembled combination. ABI Pet. 33-37. It is unnecessary for the Commission to decide the question of whether ABI's importation and/or sale of the individual components of the NOVA system, uncombined with the other NOVA components, constitutes direct infringement under section 271(a). It is enough, as discussed above, that a violation of section 337 has been shown in this investigation as a result of ABI's direct infringement based on use of the complete NOVA system, ABI's inducement of its customers' direct infringement, and, as discussed below, ABI's contribution to its customers' direct infringement.

As to direct infringement by ABI's customers (which is a predicate to Heineken's claim of indirect infringement by ABI), the Commission affirms the ID's finding of use of the infringing products by customers in the United States. *See* ID at 76-82. The Commission supplements the ID's analysis with the following discussion. Although direct infringement must be shown as a predicate for indirect infringement, specific direct examples of direct infringement are not always required. For example, the sale of disassembled products can suffice to demonstrate direct infringement by customers where there is no indication that the products can be combined into a non-infringing configuration. *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1362 (Fed. Cir. 2006). Similarly, it is well-established that circumstantial evidence can be used to demonstrate direct infringement. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1318 (Fed. Cir. 2009) (citing *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2 1261 (Fed. Cir. 1986)).

Although ABI relies upon *ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1313 (Fed. Cir. 2007), as to circumstantial evidence, ABI Pet. 39, ABI's reading of *ACCO* cannot stand

in view of *Lucent*. In particular, *Lucent* clarified that in *ACCO*, the accused products could be used in a non-infringing way. *Lucent*, 580 F.3d at 1318-19. Here, the Commission finds, for the reasons set forth in the ID, that Heineken has demonstrated specific examples of direct infringement (use of the complete NOVA system) by ABI's employees and by ABI's customers. ID at 70-72. The Commission further finds that, even if Heineken had not demonstrated specific acts of direct infringement by customers, the Commission finds that Heineken demonstrated circumstantial evidence of customer direct infringement, by a preponderance of the evidence, based upon ABI's undisputed sales and distribution, instructions to infringe, and lack of any non-infringing combinations of the accused NOVA system components.

b) Contributory Infringement

The Commission solicited further briefing on contributory infringement, and on review, the Commission reverses the ID's findings of no contributory infringement by ABI. ID at 82-85.

The Commission finds that there is no substantial noninfringing use for the NOVA appliance. Claims 1 and 7 of the '751 patent contain limitations for a container containing a "carbonated drink," '751 patent col. 11 line 8 (claim 1), col. 12 line 12 (claim 7). ABI argues that the NOVA keg can be filled with non-carbonated products and that the use of the NOVA system to dispense non-carbonated beverages could not infringe the asserted claims. ABI Br. 24. ABI asserts that the NOVA appliance was **[[REDACTED]]** during its development. *Id.* at 24.

Under prevailing law, "non-infringing uses are substantial when they are not unusual, farfetched, illusory, impractical, occasional, aberrant, or experimental." *Vita–Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1327 (Fed.Cir.2009). In the present case, although ABI may have "explored putting **[[REDACTED]]** in BIB [bottle-in-bottle] kegs," ABI Br. 24 (quoting Tr. at 783:21-784:4), there is no evidence that ABI ever actually did so. Heineken bears the burden of proving infringement, but once it asserted that the accused NOVA components have no substantial

noninfringing uses because these components are designed to be used together as part of an infringing system, *see* Heineken Post-Hearing Br. 18, the burden of production shifted to ABI to introduce "some evidence that end-users actually assembled the [accused products] in a non-infringing way." *Golden Blount*, 438 F.3d at 1363-64. ABI's argument here is far-fetched and illusory. *See* Heineken Br. 14-15. ABI offers no evidence to show that any ABI customer has ever used the NOVA appliance in such a non-infringing manner. Indeed, the ID recognizes at page 83 note 35 "the abstract and hypothetical nature" of the testimony ABI offered to support its argument that ABI had planned to [[**REDACTED**]] for its BiB kegs.

The NOVA coupler also has no substantial noninfringing uses. The coupler consists of a flexible tube with a yellow hard-plastic butterfly attachment at one end (that clamps onto the NOVA keg) and a hard plastic valve and dispenser at the other end. *See, e.g.*, CX-645C at .0016. ABI argues that it has a noninfringing system that uses the same valve. ABI Br. 25. But the accused coupler is not just the valve, but the tube and the keg-attachment. The record contains no evidence as to a use of the coupler as a whole by anyone other than a NOVA system user. Moreover, even if there were some hypothetical use (based upon ABI's expert's computer model whether it was technically possible to use the NOVA valve with an unaccused ABI Eiffel Tower Product, *see* ABI Reply Br. 16), that use is experimental and non-cognizable. As with the NOVA appliance, the record demonstrates a lack of a substantial noninfringing use of a NOVA coupler.

Because ABI sold or imported into the United States a component of a patented combination constituting a material part of the invention (indeed, two components), knowing the same to be especially made or especially adapted for use in an infringement of the asserted patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, ABI is liable as a contributory infringer. 35 U.S.C. § 271(c).

2. The Scope of Section 337

ABI's petition argues that ABI's components, which are imported separately into the United States—*i.e.*, the NOVA, the keg, and the coupler—are not "articles that—infringe" given that they are not combined into an entire infringing apparatus until they are in the United States.⁸ ABI argues about the meaning of "articles that—infringe" under section 337 especially in view of *Suprema, Inc. v. International Trade Commission*, 796 F.3d 1338 (Fed. Cir. 2015) (en banc). ABI Pet. 33-37. ABI thus calls into question the scope of Commission authority under section 337 as to components imported separately, which are later combined into the complete NOVA system in the United States and used by ABI employees and customers to dispense beer.⁹

The Commission finds that to the extent that ABI's arguments deal with a time-ofimportation requirement for section 337, the United States Court of Appeals for the Federal Circuit in *Suprema, Inc. v. International Trade Commission*, 796 F.3d 1338 (Fed. Cir. 2015) (en banc), repudiated a time-of-importation requirement. *See also Comcast Corp. v. Int'l Trade Comm'n*, ---F.3d ----, 2020 WL 989165, at *5 (Fed. Cir. Mar. 2, 2020) ("The Commission correctly held that Section 337 applies to articles that infringe after importation."). Accordingly, ABI's attempt to

⁸ But see ID at 64-66 (noting ABI's conflicting position in Certain Blow-Molded Bag-in-Container Devices, Associated Components, and End Products Containing or Using Same, Inv. No. 337-TA-1115).

⁹ ABI also argues that, under *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518 (1972), there is no liability for direct infringement where the imported product is imported as separate components. But *Deepsouth* involved whether the *export* of components that could be assembled to make an infringing device in less than one hour constituted an infringing act of "making" within the United States. *Id.* at 524. It has nothing to do with "articles that—infringe" in Section 337(a)(1)(B)(i), a term that the Federal Circuit concluded in *Suprema* lacks an understood meaning under 35 U.S.C. § 271 and can encompass articles that will be used to directly infringe after importation. *Suprema*, 796 F.3d at 1348-49.

preclude a violation determination based on the argument that infringement does not occur at the time of importation has been rejected by controlling Federal Circuit precedent.

The Commission finds a violation of section 337 based on ABI's direct infringement, ABI's inducement of its customer's direct infringement, and ABI's contributory infringement of its customers' direct infringement. First, as to a violation based on ABI's direct infringement, as explained above, ABI has itself used the NOVA system in the United States, in violation of 35 U.S.C. § 271(a), when its employees dispensed beer from a NOVA system assembled from the imported components. The imported NOVA components when combined together satisfy all the limitations of the asserted apparatus claims. We therefore find under the facts of this investigation that the imported components of the infringing NOVA systems constitute "articles that—infringe" based on ABI's post-importation direct infringement.

Second, ABI is also in violation of section 337 based on its indirect infringement. ABI has induced its customers' direct infringement by supplying those customers with the NOVA components (the appliance, the coupler, and the keg), and instructing them to assemble and use the complete NOVA system, in violation of 35 U.S.C. § 271(b), and ABI has contributed to its customers' direct infringement by supplying the NOVA couplers and appliances in violation of 35 U.S.C. § 271(c). These acts under 35 U.S.C. § 271(b)-(c) are within the scope of Commission authority. *See Suprema*, 796 F.3d at 1348-53; *Comcast*, 2020 WL 989165, at *4-5.

C. <u>Invalidity</u>

The prior art comprises certain "primary" references, each of which meets most claim limitations, along with certain "secondary" references that are alleged to provide the remaining limitations (particularly, the claimed "shut-off valve"). The primary references are Timmermans

(RX-838), van der Meer (RX-837) and Grill (RX-312),¹⁰ and the secondary references are Jeans (RX-658) and deCler (RX-814).¹¹ ABI's obviousness defense is based on the combination of one primary reference with one secondary reference. The Commission affirms all of the ID's findings, including the ID's findings as to waiver of arguments by the parties. The Commission solicited further briefing as to obviousness in view of Jeans, combined with one or more primary references. On review, the Commission has determined to affirm and adopt the ID's findings.

D. <u>Domestic Industry</u>

The domestic industry requirement for a violation of section 337(a)(1)(B) is set forth by

statute:

(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.

19 U.S.C. § 1337(a)(2)-(3). These statutory requirements consist of investments in particular

assets or activities and a showing that these investments and activities relate to the articles

protected by the intellectual property rights. InterDigital Comm'cns, LLC v. ITC, 707 F.3d 1295,

¹⁰ Timmermans (PCT Patent Application No. WO 99/11563) and van der Meer (PCT Patent Application No. WO/99/11561) are related patent applications, both published on March 11, 1999. Grill is a United States Patent, No. 5,979,713, which issued on November 9, 1999.

¹¹ Jeans is a European Patent Application, No. 87304166.9, published on November 19, 1987. deCler is a United States Patent, No. 5,639,064, which issued on June 17, 1997.

1298 (Fed. Cir. 2013); see Certain Stringed Musical Instruments and Components Thereof ("Certain Stringed Musical Instruments"), Inv. No. 337-TA-586, USITC Pub. No. 4120 (Dec. 2009), Comm'n Op. at 13 (May 16, 2008). The ID conducted a detailed analysis of the record and parties' arguments and found that Heineken had demonstrated the existence of a domestic industry in this investigation based upon "significant investment in plant and equipment" or "significant employment of labor or capital" by its domestic licensee, Hopsy. ID at 167-205.

The Commission has clarified in the past that its decisions as to the existence of a domestic industry are not based on the amount of an investment divorced from the circumstances of a particular case. Rather, the Commission evaluates the significance or substantiality of domestic industry expenditures "based on a proper contextual analysis in the relevant timeframe such as in the context of" the complainant's or its licensee's "operations, the marketplace, or the industry in question." Certain Solid State Storage Drives, Stacked Electronics Components, and Products Containing Same, Inv. No. 337-TA-1097, Comm'n Op., 2018 WL 4300500, at *18 (June 29, 2018) ("Solid State Storage Drives"). The Commission has also explained that this contextual analysis can reflect "a number of factors and approaches." Certain Magnetic Data Storage Tapes and Cartridges Containing the Same, Inv. No. 337-TA-1012, Comm'n Op., 2018 WL 8648372, at *75 (Apr. 2, 2018). The Commission recently addressed this issue in *Certain* Carburetors and Products Containing Such Carburetors, Inv. No. 337-1123, Comm'n Op. 20-21 (Oct. 28, 2019) (public version) ("Carburetors"). In investigations involving an asserted domestic industry that also used imported components, the Commission has relied on valueadded calculations as one approach in assessing whether the economic prong was satisfied. See id. at 18-19; see also, e.g., Solid State Storage Drives, 2018 WL 4300500, at *19; Certain Male

Prophylactic Devices, Inv. No. 337-TA-546, Comm'n Op., 2007 WL 9772268, at *25 (Aug. 1, 2007).

ABI has argued in this investigation that the ID impermissibly looks at significance in the context of Hopsy, as opposed to in some broader industry. ABI Pet. 63-71, 81-83. ABI alternatively contends that the appropriate context should consider the overall investments in the SUBs and Torps (made by Heineken overseas), should be considered more generally as part of Heineken's business ([[**REDACTED**]]), should be considered in the context of the home-brew industry (in which ABI has invested substantially more than Hopsy), or in the context of the craft beer industry (which would be vastly larger than Hopsy, and regarding which Heineken failed to present evidence). *Id.* at 63-71, 81-83. The Commission solicited further briefing regarding the appropriate contextual analysis. Notice of Review at 3.

Heineken explains that Hopsy is a "small and growing business" and that the domestic industry is significant in the context of Hopsy's business (as opposed to Heineken's). Heineken Br. 36-39. To that end, Heineken explains that "the ALJ was correct to reject ABI's invitation that Hopsy's investments be considered in the context of Heineken and ABI—which are part of the 'big beer' industry Hopsy seeks to disrupt—and rather to analyze them in the context of 'the home draft market, [which] remains relatively small and emerging." Heineken Br. 41-42 (quoting ID at 205) (modification in original). Heineken also contends that the record evidence regarding domestic value added by Hopsy provided appropriate context for finding the economic prong to be met. *Id.* at 39-41. ABI counters that the "decision by Heineken and its expert Carla Mulhern to artificially focus solely on Hopsy is not a domestic industry analysis but a tautology with a foregone

conclusion—investments by a company relating to the only product it sells will be significant to that company." ABI Br. 35.

As an initial matter, the Commission adopts the ID's reasoning and conclusions on a number of issues, specifically that: (1) Hopsy is not a "mere importer"; ID at 176-182, (2) Hopsy's financial information is mostly reliable, but that the "one-time adjustment" figure is not adequately supported, ID at 189-192; (3) Hopsy's allocation methodology is reasonable, ID at 192-197, and Hopsy's investments related to rent and other indirect costs are appropriately included under section 337(a)(3)(A), ID at 198; and (4) Hopsy is not Heneken's "alter ego," ID at 203-204. The Commission adopts the ID's finding that Hopsy's investments in plant and equipment were **\$[[REDACTED]]** exclusive of sales and marketing. ID at 198. The Commission further adopts the ID's finding that Hopsy's employment of labor and capital totaled approximately **\$[[REDACTED]]** exclusive of sales and marketing. ID at 199. What remains is to determine whether these amounts are significant in an appropriate context. The Commission notes that, contrary to ABI's arguments, the fact that Hopsy is a small entity compared to Heineken or ABI does not, in the context of the industry in which it operates (the home-draft beer industry), prevent it from qualifying as a domestic industry under section 337.

The facts presented here show a domestic producer that imports under license components of a system (including the appliance) and then adds value in the United States through both services and additional inputs, in particular the beer that is almost entirely domestically sourced (*see* ID at 178).¹² In such a situation, a domestic value-added analysis is an appropriate context. As the Commission recently noted in *Carburetors*, the Commission has "sought to place the value of

¹² We note that it is appropriate to consider the value of the domestically sourced beer at least because a "carbonated drink" is an element of all the asserted claims.

domestic investments in the context of the relevant marketplace, such as by comparing a complainant's domestic expenditures to its foreign expenditures or considering the value added to the product from a complainant's activities in the United States." *Carburetors* at 18; *see also, e.g., Solid State Storage Drives*, 2018 WL 4300500 at *6 n.6 & *21.

The ID credited evidence showing that the value added by Hopsy was (1) about 20 percent for a typical initial shipment of one SUB and two Torps, (2) 85 percent for a four-TORP refill, and (3) about 68 percent for an average first-year annual subscription. ID at 180. The ID also noted that the domestic value-added grows over time due to the higher value added for the Torp container compared to the SUB appliance. *Id.*_The Commission adopts the ID's findings with respect to domestic value added. The ID further finds, based on this range of value added, that Hopsy's investments in plant and equipment and its employment of labor and capital are significant within the meaning of the statute. Based on the analysis above, the Commission finds that Heineken has demonstrated the existence of a domestic industry under subparagraphs 1337(a)(3)(A) and (a)(3)(B).

E. <u>The Admissibility of Dr. Slocum's Testimony</u>

Heineken argued in its petition for Commission review of the ID that if the Commission reviews the ID that the Commission review the ALJ's failure to exclude the testimony of ABI's expert Dr. Alexander Slocum, a tenured professor of precision machine design at MIT. Heineken Pet. 4-8. In the *Markman* order, the ALJ adopted Heinkein's proposed level of ordinary skill in the art for the '751 patent, as "at least four (4) years of research and/or industry work experience in the field of carbonated beverage dispensing systems, particularly with beer." ID at 20. ABI's proposed level was "(1) at least a Master's degree in mechanical engineer[ing] or product design, and/or (2) four years of relevant experience designing fluid dispensing devices." *Id.* at 21.

By the time of the hearing, it became clear that although Dr. Slocum has extensive experience in machine design (including certain beverage dispenser design), he did not have at least four years of "research" or "industry work experience" in "the field of carbonated beverage dispensing systems, particularly with beer," as required by Heineken's level of skill in the art, which the ALJ adopted. Heineken sought to strike Dr. Slocum's testimony, and the ALJ denied that motion at pages 20-24 of the ID. Heineken contends that the denial was error and that the ALJ improperly re-defined the level of skill in the art. Heineken Pet. 5-7.

Heineken recognizes that the test for ordinary skill is "based on a theoretical person and not based on a particular individual." Heineken Pet. 6. Heineken argues that this distinction is fatal to the ALJ's admission of Dr. Slocum's testimony. *Id.* The parties dispute whether the ID actually changes the level of skill in the art to excuse Dr. Slocum's specific experience in the carbonated beverage field.

Whether to exclude a witness's testimony is an act of judicial discretion, and, in the federal courts, would be reviewed for abuse of that discretion. *See, e.g., Suffolk Techs., LLC v. AOL Inc.,* 752 F.3d 1358, 1366 (Fed. Cir. 2014). The Commission finds that the ALJ did not abuse her discretion in determining not to strike Dr. Slocum's testimony. The Commission nonetheless recognizes the attenuated connection between Dr. Slocum's background and the level of skill set by the ALJ here in the *Markman* order, *see* Tr. 873:11-879:4 (public). The Commission finds that the deficiencies alleged by Heineken go to weight as opposed to the admissibility of Dr. Slocum's testimony. *See, e.g., ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.,* 694 F.3d 1312, 1333 (Fed. Cir. 2012); *i4i Ltd. P'ship v. Microsoft Corp.,* 598 F.3d 831, 852 (Fed. Cir. 2010); *Liquid Dynamics Corp. v. Vaughan Co.,* 449 F.3d 1209, 1221 (Fed. Cir. 2006). Having examined the record of the investigation, including the findings of fact made in the ID, the Commission finds that

the ALJ's and the Commission's findings—in particular that the patent claims are infringed and not invalid—are unaffected by Heineken's arguments.

III. REMEDY, THE PUBLIC INTEREST, AND BONDING

The Commission finds a violation of section 337 based upon the infringement of claims 1, 3, 7, and 10 of the '751 patent. Heineken seeks a limited exclusion order as to the subject products and a cease and desist order as to respondent Anheuser-Busch LLC. The ALJ issued a recommended determination ("RD") on remedy and bonding on September 19, 2019, separate from the ID. The RD recommends the issuance of a limited exclusion order, a cease and desist order against Anheuser-Busch LLC, and a bond in the amount of five percent of the entered value during the period of Presidential review.

A. <u>Remedy and the Public Interest</u>

1. Limited Exclusion Order

Upon finding a violation of section 337, the statute provides that the Commission "shall direct that the articles concerned, imported by any person violating the provision of this section, be excluded from entry into the United States, unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry." 19 U.S.C. § 1337(d)(1); *see Spansion, Inc. v. ITC*, 629 F.3d 1331, 1359-60 (Fed. Cir. 2010). Moreover, the Commission has "broad discretion in selecting the form, scope, and extent of the remedy." *Viscofan, S.A. v. U.S. Int'l Trade Comm'n*, 787 F.2d 544, 548 (Fed. Cir. 1986).

ABI asserted here that "any LEO should apply to ABI alone and not to unnamed third parties, such as [[**REDACTED**]]," the manufacturers of the NOVA coupler

and the NOVA appliance, respectively. RD at 6 (footnote omitted). The RD finds that although "the LEO should not name such non-parties consistent with settled law . . . the NOVA coupler [[**REDACTED**]] produces and imports, and the NOVA appliance [[**REDACTED**]] manufactures and ships, are done so on behalf of ABI." RD at 6. The Commission affirms the RD's findings that the importation of NOVA couplers by [[**REDACTED**]] is on behalf of ABI and that the importation of NOVA appliances by [[**REDACTED**]] is also on behalf of ABI. *Id.* at 6-7. The Commission agrees with the RD's analysis that a limited exclusion order is appropriate, that it extends to persons acting on behalf of ABI, and that persons acting on ABI's behalf do not need to be named expressly in the exclusion order.¹³ *Certain Digital Video Receivers*, Comm'n Op. at 36-37, *aff'd sub nom. Comcast*, --- F.3d ----, 2020 WL 989165, at *6. Accordingly, infringing components of the NOVA system that are imported by or on behalf of ABI, but are manufactured by other parties, such as [[**REDACTED**]] and [[**REDACTED**]] are prohibited from entry.

Heineken here proposed, and the RD recommends, the inclusion of a certification provision for "the NOVA kegs only, to allow the importation of NOVA kegs to be used with a product other than the NOVA System." RD at 8. Heineken, however, did not include such a provision in its proposed limited exclusion order. The Commission finds that such a provision is warranted especially in view of the fact that the NOVA kegs (unlike the other components) have substantial

(continued on next page)

¹³ The Commission has previously found that "importer" is not limited merely to importers of record and those who physically carry articles into the United States. *See, e.g., Certain Digital Video Receivers and Hardware and Software Components Thereof,* Inv. No. 337-TA-1001, Initial Determination at 10-13 (June 26, 2017) (public version), *aff'd*, Comm'n Op. at 10 (Dec. 6, 2017) (public version) ("*Digital Video Receivers*"), *aff'd sub nom Comcast Corp. v. ITC, ---* F.3d ----, 2020 WL 989165, at *5-*6 (Fed. Cir. Mar. 2, 2020). ABI stipulated here that the Commission has *in rem* jurisdiction and that the importation requirement is satisfied. ID at 8. The Commission finds that this stipulation precludes ABI from challenging the importations at issue in this investigation. Nonetheless, the text of this Opinion addresses and refutes ABI's arguments on the merits, as though ABI had not so stipulated..

noninfringing uses. *See generally* Heineken Post-Hearing Br. 71; ID at 82-83. The Commission finds that its standard certification provision is adequate, *see, e.g., Certain Network Devices, Related Software and Components Thereof (1)*, Inv. No. 337-TA-944, Comm'n Op. 53 n.19 (July 26, 2016), and that ABI can certify that the imported NOVA kegs will be used only with ABI's PureDraught system. To the extent that any other noninfringing uses of the NOVA kegs develop, ABI can seek a determination as to the importation of the NOVA kegs for those other purposes.¹⁴ *See* 19 U.S.C. § 1337(k) (modification proceeding); 19 C.F.R. § 210.76 (same); *id.* § 210.79 (advisory opinions).

ABI also argues that "the exclusion of just one component, such as the coupler, is sufficient to prevent the creation and use of the Accused Product." ABI Br. 45; ABI Reply Br. 40. To the extent that, by its request, ABI seeks to import its accused kegs for noninfringing purposes, the limited exclusion order permits it, subject to ABI's certification that the kegs will not be used by ABI or its customers as part of a NOVA system. The Commission finds that relief should not be narrowly limited to the couplers, which are only one part of ABI's infringing NOVA system.

ABI makes one additional argument that warrants a response. ABI asserts that "it would manifestly exceed the statutory authority granted by Congress in Section 337 for past acts of infringement to be the predicate for a prospective ITC remedy." ABI Br. 43. ABI bases this argument in part on the ID's findings of no contributory infringement (which we have reversed) and

¹⁴ The standard certification provision, as here, authorizes Customs to have an importer certify that "the products being imported are not excluded from entry under" the terms of the exclusion order. The standard certification provision in exclusion orders "does not allow an importer simply to certify that it is not violating the exclusion order." *Certain Network Devices, Related Software and Components Thereof (II)*, Inv. No. 337-TA-945, Comm'n Op. at 123 n.73 (June 1, 2017) (public version). Rather, the Commission directs that CBP only accept "a certification that the goods have been previously determined by CBP or the Commission not to violate the exclusion order." *Id.*

based on alleged inadequacies in the ID's findings concerning inducement of infringement. *Id.* at 44. We reject ABI's argument. We have found direct and indirect infringement by ABI under 35 U.S.C. § 271(a), (b), and (c). "Section 337 declares certain activities related to importation to be unlawful trade acts and directs the Commission generally to grant prospective relief if it has found an unlawful trade act to have occurred." *Suprema, Inc. v. Int'l Trade Comm'n*, 796 F.3d 1338, 1345 (Fed. Cir. 2015) (en banc). That is all that has happened in this investigation: the unlawful trade acts have occurred, and the Commission has granted prospective relief.

2. Cease and Desist Orders

Under section 337(f)(1), the Commission has the discretion to issue a cease and desist order in "addition to, or in lieu of" an exclusion order. 19 U.S.C. § 1337(f)(1). Cease and desist orders are generally issued when, with respect to the imported infringing products, respondents maintain commercially significant inventories in the United States or have significant domestic operations that could undercut the remedy provided by an exclusion order. *See, e.g., Certain Table Saws Incorporating Active Injury Mitigation Technology and Components Thereof*, Inv. No. 337-TA-965, Comm'n Op. at 4-6 (Feb. 1, 2017) (public version) ("*Table Saws*"); *Certain Protective Cases and Components Thereof*, Inv. No. 337-TA-780, Comm'n Op. at 28 (Nov. 19, 2012) (citing *Certain Laser Bar Code Scanners and Scan Engines, Components Thereof and Products Containing Same*, Inv. No. 337-TA-551, Comm'n Op. at 22 (June 14, 2007)).¹⁵

¹⁵ The Commissioners have adopted different approaches to analyzing when it is appropriate to issue cease and desist orders. In particular, Commissioner Schmidtlein has explained that she does not believe that a commercially significant inventory is a prerequisite for obtaining a cease and desist order, as explained, for example, in the Commission Opinion in *Table Saws* at 6-7 n. 2. There is no disagreement in the present investigation, however, as to the appropriateness of the issuance of a cease and desist order in the present investigation.

The RD recommends the issuance of a cease and desist order. RD at 9-11. The RD finds that ABI maintains a commercially significant domestic inventory of appliances

([[REDACTED]]), couplers ([[REDACTED]]), and NOVA kegs ([[REDACTED]]). Id. at 10-

11. Heineken seeks a cease and desist order only as to respondent Anheuser-Busch LLC, the entity that maintains the inventory. Heineken Br. 46. The Commission finds that issuance of a cease and desist order as to Anheuser-Busch LLC is appropriate.

3. Public Interest

The Commission finds that this investigation does not implicate the Commission's public interest considerations. The Commission finds no evidence that raises concerns regarding "the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers." 19 U.S.C. § 1337(d)(1), (f)(1). No non-parties filed public interest submissions in response to the Commission's notice requesting comments. ABI argues that there are certain environmental benefits to its accused kegs. ABI Br. 49. ABI's arguments are unsubstantiated and fail to demonstrate that the remedial orders discussed above should not issue.

B. Bonding

During the period of Presidential review, imported articles otherwise subject to a remedial order are entitled to conditional entry under bond, pursuant to section 337(j)(3). 19 U.S.C. § 1337(j)(3). The amount of bond is specified by the Commission and must be an amount sufficient to protect the complainant from any injury. *Id.* "The Commission typically sets the bond based on the price differential between the imported infringing product and the domestic industry article or based on a reasonable royalty. However, where the available pricing or royalty information is inadequate, the bond may be set at one hundred (100) percent of the

entered value of the infringing product." *Certain Loom Kits for Creating Linked Articles*, Inv. No. 337-TA-923, Comm'n Op., 2015 WL 5000874, *11 (citations omitted). Heineken proposed, and the RD recommends, a bond based on a reasonable royalty of five percent per imported NOVA keg to be imposed during the period of Presidential review. RD at 11-13. ABI proposes that bond be set at an amount about one-tenth of what the ALJ recommends as to the NOVA kegs. ABI Br. 48-49. Heineken has failed to seek or demonstrate any entitlement to bond as to couplers or appliances. Heineken Br. 47 (seeking bond only as to the kegs).

The Commission has determined to set the bond in the amount of five percent of the entered value of the NOVA kegs during the period of Presidential review for the reasons set forth in the RD.

III. CONCLUSION

The Commission finds a violation of section 337 based upon importation and sale after importation of articles that infringe claims 1, 3, 7, and 10 of the '751 patent. We have determined that the appropriate remedy is a limited exclusion order and a cease and desist order directed to Anheuser-Busch LLC. We have determined that the bond amount during the period of Presidential review should be five percent of the entered value of the imported NOVA kegs.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: March 26, 2020

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **OPINION** has been served upon the following parties as indicated, on 3/26/2020.

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

<u>On Behalf of Complainants Heineken International B.V.,</u> <u>Heineken Supply Chain B.V., and Heineken USA Inc.:</u>

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 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Email Notification of Availability for Download

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

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 □ Via Express Delivery
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UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C. 20436

In the Matter of CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Investigation No. 337-TA-1130

NOTICE OF COMMISSION DECISION TO REVIEW A FINAL INITIAL DETERMINATION IN ITS ENTIRETY; SCHEDULE FOR FILING WRITTEN SUBMISSIONS ON THE ISSUES UNDER REVIEW AND ON REMEDY, THE PUBLIC INTEREST, AND BONDING

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the Commission has determined to review the presiding administrative law judge's ("ALJ's") final initial determination ("ID" or "final ID") finding a violation of section 337 of the Tariff Act of 1930, as amended, with respect to U.S. Patent No. 7,188,751 ("the '751 patent"). The Commission requests briefing from the parties on certain issues under review, as set forth in this notice. The Commission also requests briefing from the parties, interested persons, and government agencies on the issues of remedy, the public interest, and bonding.

FOR FURTHER INFORMATION CONTACT: Sidney A. Rosenzweig, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 708-2532. The public version of the complaint can be accessed on the Commission's electronic docket (EDIS) at <u>https://edis.usitc.gov</u>, and 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 SW., Washington, DC 20436, telephone (202) 205-2000.

General information concerning the Commission may also be obtained by accessing its Internet server (<u>https://www.usitc.gov</u>). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <u>https://edis.usitc.gov</u>. 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 September 5, 2018, based on a complaint filed by Heineken International B.V. and Heineken Supply Chain B.V., both of Amsterdam, The Netherlands; and Heineken USA

Inc. of White Plains, New York (collectively, "Heineken"). 83 FR 45141, 45141-42 (Sept. 5, 2019). The complaint alleges a violation of 19 U.S.C. 1337 in the importation into the United States, sale for importation, or sale in the United States after importation of certain beverage dispensing systems and components thereof that allegedly infringe claims 1-11 of the '751 patent. *Id.* The notice of investigation names as respondents Anheuser-Busch InBev SA, and InBev Belgium NV, both of Leuven, Belgium; and Anheuser-Busch, LLC of St. Louis, Missouri (collectively, "ABI"). *Id.* The Office of Unfair Import Investigations was not named as a party to this investigation. *Id.*

On February 6, 2019, the ALJ granted Heineken's motion to partially terminate the investigation as to claims 2, 4-6, 8-9, and 11 of the '751 patent. Order No. 6 (Feb. 6, 2019), *not reviewed*, Notice (Mar. 7, 2019). Remaining within the investigation are claims 1, 3, 7, and 10 of the '751 patent. On March 26, 2019, the ALJ issued Order No. 14, the *Markman* Order, construing certain claim terms. The ALJ conducted the evidentiary hearing from April 16-18 and 23, 2019.

On September 5, 2019, the ALJ issued the subject final ID, finding claims 1, 3, 7, and 10 infringed and not invalid, and thereby finding a violation of section 337. On September 19, 2019, the ALJ issued a Recommended Determination on Remedy and Bond ("RD"). The RD recommends that should the Commission find a violation of section 337, that the Commission issue a limited exclusion order, cease and desist orders, and impose a bond rate during the period of Presidential review in the amount of 5% of the entered value of infringing articles.

On September 18, 2019, ABI filed a petition for Commission review of the ID. That same day, Heineken filed a contingent petition for review. On September 26, 2019, the parties responded to each other's petitions.

Having reviewed the record of the investigation, including Order No. 14, the final ID, and the parties' submissions to the ALJ and to the Commission, the Commission has determined to review the ID in its entirety.

In connection with its review, the Commission requests responses to the following questions. The parties are requested to brief their positions with reference to the applicable law and the existing evidentiary record.^[1]

(1) If the Commission were to find that the "operating element" limitation of claims 1 and 7 should be construed as a means-plus-function claim limitation,

^[1] In reviewing the ID, and in seeking briefing on these issues, the Commission has not determined to excuse any party's noncompliance with Commission rules and the ALJ's procedural requirements, including requirements to present issues in pre-hearing and post-hearing submissions. *See, e.g.*, Order No. 3 (Sept. 11, 2018) (ground rules). The Commission may, for example, decline to disturb certain findings in the final ID upon finding that issue was not presented in a timely manner to the ALJ.

and if the Commission were to adopt Heineken's recited function and corresponding structure as set forth on pages 12-13 of Claim Chart No. 1 in Order No. 14:

Whether the accused products and domestic industry products practice that limitation.

The parties are not to provide further briefing as to the propriety of such a construction, or to advocate alternative claim constructions. The existing record is adequate as to the parties' positions on these issues.

- (2) Whether, for purposes of contributory infringement under 35 U.S.C. 271(c), the accused NOVA couplers or the NOVA appliances are 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 noninfringing use.
- (3) Whether claims 1 and 7 of the '751 patent are obvious in view of Figures 17-20 and the associated written description in Jeans (RX-658) (*see* ABI Pet. for Comm'n Rev. at 50-54) when combined with Timmermans (RX-838), van der Meer (RX-837) or Grill (RX-312).
- (4) Whether Heineken demonstrated significant investment in plant and equipment or significant employment of labor or capital, *see* 19 U.S.C. 1337(a)(3)(A), (B), in an appropriate context, in view of Federal Circuit and Commission precedent concerning such context (including but not limited to *Certain Carburetors and Products Containing Such Carburetors*, Inv. No. 337-1123, Comm'n Op. (Oct. 28, 2019) (public version)). For any context you argue is appropriate, please address the evidence in the record that permits an analysis within that context.

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 a cease and desist order that could result in the respondent 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. at 7-10 (Dec. 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 order 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 FR 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 and prescribed by the Secretary of the Treasury. 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 limited to the enumerated questions above. The parties' opening submissions should not exceed 50 pages, and their reply submissions should not exceed 40 pages. 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. Complainants are requested to submit proposed remedial orders for the Commission's consideration. Complainants are also requested to state the date that the asserted patents expire and the HTSUS numbers under which the accused products are imported, and provide identification information for all known importers of the subject articles. Initial written submissions and proposed remedial orders must be filed no later than close of business on Monday, November 18, 2019. Reply submissions must be filed no later than the close of business on Tuesday, November 26, 2019. 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 CFR 210.4(f)). Submissions should refer to the investigation number (Inv. No. 337-TA-1130) in a prominent place on the cover page and/or the first page. (See Handbook for Electronic Filing Procedures,

<u>https://www.usitc.gov/documents/handbook_on_filing_procedures.pdf</u>). Persons with questions regarding filing should contact the Secretary at (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 CFR 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. All information, including confidential business information and documents for which confidential treatment is properly sought, submitted to the Commission for purposes of this investigation may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel,^[2] solely for cybersecurity purposes. All nonconfidential 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 Part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: November 4, 2019

^[2] All contract personnel will sign appropriate nondisclosure agreements.

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served upon the following parties as indicated, on 11/4/2019.

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

<u>On Behalf of Complainants Heineken International B.V.,</u> <u>Heineken Supply Chain B.V., and Heineken USA Inc.:</u>

Helena D. Kiepura, Esq. KIRKLAND & ELLIS LLP 1301 Pennsylvania Avenue NW Washington, DC 20004

□ Via Hand Delivery
 □ Via Express Delivery
 ⊠ Via First Class Mail
 □ Other:

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. CALDWALADER, WICKERSHAM & TAFT LLP 700 Sixth Street NW Washington, DC 20001

□ Via Hand Delivery
 □ Via Express Delivery
 ⊠ Via First Class Mail
 □ Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Inv. No. 337-TA-1130

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

Administrative Law Judge MaryJoan McNamara

(September 5, 2019)

Appearances:

For the Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc.:

Paul F. Brinkman, Esq.; Michael A. Pearson, Esq.; Nathan Mammen, Esq.; Helena D. Kiepura, Esq.; Nichole DeJulio, Esq.; Emily M. Kustina, Esq.; Christine Rea, Esq.; and Benjamin J. Behrendt, Esq. of Kirkland & Ellis LLP, Washington, DC.

Joseph A. Loy, Esq.; Nathaniel DeLucia, Esq.; and Charanya Viswanathan, Esq. of Kirkland & Ellis LLP, New York, NY.

For the Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Sturgis M. Sobin, Esq. and Daniel Valencia of Covington & Burling LLP, Washington, DC.

SELECTED SUMMARY FINDINGS

Pursuant to the Notice of Investigation, 83 Fed. Reg. 45141, dated September 5, 2018, this is the Initial Determination ("ID") of the Investigation in the Matter of Certain Beverage Dispensing Systems and Components Thereof, United States International Trade Commission Investigation No. 337-TA-1130. See 19 C.F.R. § 210.42(a).

It is a finding of this ID that Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc. (collectively, "Complainants" or "Heineken") have proven by a preponderance of evidence that Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC (collectively, "Respondents" or "ABI") have violated subsection (b) of Section 337 of the Tariff Act of 1930, in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain beverage dispensing systems and components thereof.

It is a finding of this ID that ABI has infringed asserted claims 1, 3, 7, and 10 of U.S. Patent No. 7,188,751 ("the '751 patent"). It is also a finding of this ID that the asserted claims of the '751 patent are valid.

It is a finding of this ID that one or more of Heineken's domestic industry products have satisfied the technical industry prong of the domestic industry requirement for the '751 patent. It is also a finding of this ID that Heinken has satisfied the economic prong of the domestic industry requirement under Section 337(a)(3)(A) and (B).

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ABBREVIATIONS

The following shorthand references to the parties, related U.S. agencies, and related proceedings are used in this Initial Determination:

Complainants or Heineken	Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc., collectively
Respondents or ABI	Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V. and Anheuser-Busch, LLC, collectively
CBP	U.S. Customs and Border Protection
USPTO or PTO	U.S. Patent and Trademark Office
РТАВ	Patent Trial and Appeal Board

The following abbreviations for pleadings, exhibits, briefs, transcripts, and Orders are used in this Initial Determination:

Compl.	Complaint
Resp.	Response of Respondents to the Notice of Investigation and Complaint Under Section 337 of the Tariff Act of 1930, as Amended
сх	Complainants' exhibit
CDX	Complainants' demonstrative exhibit
CPX	Complainants' physical exhibit
CPBr.	Complainants' Pre-Hearing Brief
CBr.	Complainants' Initial Post-Hearing Brieft
CRBr.	Complainants' Post-Hearing Reply Brief
CPSt.	Complainants' Pre-Hearing Statement

¹ This is Complainants' Corrected Initial Post-Hearing Brief.

JX	Joint exhibit
RX	Respondents' exhibit
RDX	Respondents' demonstrative exhibit
RPX	Respondents' physical exhibit
RPBr.	Respondents' Pre-Hearing Brief
RBr.	Respondents' Initial Post-Hearing Brief
RRBr.	Respondents' Post-Hearing Reply Brief
RPSt.	Respondents' Pre-Hearing Statement
Tr.	Evidentiary hearing transcript
Dep. Tr.	Deposition transcript
COMBr.	Complainants' Opening Markman Brief
ROMBr.	Respondents' Opening Markman Brief
CSMBr.	Complainants' Supplemental Markman Brief
RSMBr.	Respondents' Supplemental Markman Brief
Joint CC Chart	Revised Joint Claim Construction List (Doc. ID No. 670602 (Mar. 20, 2018))
Markman Order	Order No. 14 (Mar. 26, 2019)

The following shorthand references to certain products and patents at issue are used in this Initial Determination:

'751 patent	U.S. Patent No. 7,188,751
Asserted Patent	'751 patent
NOVA System	ABI's NOVA System, versions 3 and 4, collectively

Accused 751 Products or Accused NOVA System Products

751 DI Products or DI Products Heineken's SUB and Blade, collectively

1. SUMMARY OF FINDINGS

A summary of this decision's finding is provided below.

Products	Patent	Claims	Determination
Accused Products	'751 patent	1, 3, 7, and 10	Violation: Valid and asserted claims 1, 3, 7, and 10 of the '751 patent have been found to be infringed by the accused NOVA System.
DI Products	'751 patent	1, 3, 7, and 10	Satisfied: The Blade and SUB have been found to practice claims 1, 3, 7, and 10 of the '751 patent. It has also been found that the economic prong has been satisfied under Sections 337(a)(3)(A) and (B).

Table	No.	1:	Summary	of Findings
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II. BACKGROUND

A. Institution and Selected Procedural History

On August 2, 2018, Heineken International B.V., Heineken Supply Chain B.V.,² and

Heineken USA Inc. filed a complaint ("Complaint") under Section 337 of the Tariff Act of 1930,

as amended, 19 U.S.C. § 1337, alleging infringement of claims 1-11 of U.S. Patent No.

7,188,751 (CX-0012, hereafter "the '751 patent"). (See, e.g., Doc. ID No. 651909, Compl. at ¶ 3

² This entity was formerly known as Heineken Technical Services B.V. (See Compl. at ¶ 1; see also id. at Ex. 3 (official document formalizing name change).).

(Aug. 2, 2018).).

The Commission instituted this Investigation pursuant to subsection (b) of Section 337 of the Tariff Act of 1930, as amended, on September 5, 2018. 83 Fed. Reg. 45141 (Sept. 5, 2018).

The Notice of Investigation ("NOI") names as complainants: Complainants Heineken International B.V. of Amsterdam, The Netherlands; Heineken Supply Chain B.V. of Amsterdam, The Netherlands; and Heineken USA Inc. of White Plains, New York (collectively, "Complainants" or "Heineken"). *Id.* The NOI names as respondents: Anheuser-Busch InBev S.A. of Leuven, Belgium; InBev Belgium N.V. of Leuven, Belgium; and Anheuser-Busch, LLC of St. Louis, Missouri (collectively, "Respondents" or "ABI," and with Complainants, the "Parties"). *Id.* at 45142-43.

On September 19, 2018, ABI filed a response to the Complaint and NOI ("Response"). (Doc. ID No. 656237 (Sept. 19, 2018).). In its Response, ABI identified five (5) affirmative defenses ("ABI's Affirmative Defenses"). (Resp. at 10-14.).

As the result of an Initial Determination ("ID") granting Heineken's partial termination of this Investigation against ABI with respect to certain asserted claims, the four (4) claims remaining that are the subject of this decision are claims 1, 3, 7, and 10 of the '751 patent. (See Order No. 6 (Feb. 5, 2019).).

On December 19, 2018, the Parties filed a joint *Markman* hearing proposal. (Doc. ID No. 664647 (Dec. 19, 2018).). The Parties agreed that early resolution of the claim construction disputes in this Investigation was desirable and that a *Markman* hearing would be beneficial. (*Id.* at 1.). Thus, a *Markman* hearing was held on February 14, 2019. (*See* Doc. ID Nos. 666165 (Feb. 6, 2019), 667309 (Feb. 19, 2019), 667306 (Feb. 19, 2019).). On March 26, 2019, a

Markman Order issued that construed the claim terms in dispute.³ (Order No. 14 ("Markman Order") (Mar. 26, 2019).).

Heineken filed two (2) motions in limine ("MILs"). (Motion Docket Nos. 1130-008

(Mar. 13, 2019), 1130-009 (Mar. 13, 2019).). ABI filed three (3) MILs. (Motion Docket Nos.

1130-003 (Feb. 8, 2019), 1130-010 (Mar. 13, 2019), 1130-011 (Mar. 13, 2019).).

Heineken's and ABI's MILs, and the rulings on these motions, are summarized in Table Nos. 2 and 3 below.

MIL No.	Issue	Ruling
MIL No. 1 (Motion Docket No. 1130-008), filed on March 13, 2019	MIL to exclude ABI's untimely invalidity arguments and to strike portions of ABI's pre- hearing brief regarding the same	Denied. (Order No. 21 at 3 (Apr. 11, 2019).).
MIL No. 2 (Motion Docket No. 1130-009), filed on March 13, 2019	MIL to preclude untimely exhibits with respect to a new list of exhibits produced with ABI's Pre- Hearing Statement	Granted during a teleconference held on April 5, 2019 ("April 5, 2019 Teleconference"). (Doc. ID No. 672990 at 41:21-42:10, 54:7-10 (Apr. 12, 2019) (Transcript of April 5, 2019 Teleconference).).
		"Heineken describes certain exhibits that it says were first disclosed with ABI's prehearing brief or statement, and it includes 59 new exhibits that were provided after the deadline of February 22 to exchange them. Apparently, according to Heineken, ABI simply provided a zip link to documents that it had not previously providedABI filed its response and objection on

Table No. 2: Heineken's MI	Ls
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³ The Parties did not agree on the construction of any claim terms. (See, e.g., Doc. ID No. 670602 (Revised Joint Claim Construction List) (Mar. 20, 2018).).

MIL No.	Issue	Ruling
		March 22, 2019." ABI withdrew 44 of the 59 exhibits to which Heineken objected. That part of ABI's motion was, therefore, moot. The remaining 14 exhibits that ABI did not produce until January 11, 2019 were stricken as having been produced too late.

Table No. 3: ABI's MILs

MIL No.	Issue	Ruling
MIL No. 1 (Motion Docket No. 1130-003), filed on February 8, 2019	MIL to strike Heineken's reliance on improperly disclosed lay opinions and to compel improperly withheld documents with respect to communications and other evidence between Kirkland and Hopsy's brewery partners ⁴	Denied without prejudice during the April 5, 2019 Teleconference. (Doc. ID No. 672990 at 69:19-21.).
MIL No. 2 (Motion Docket No. 1130-010), filed on March 13, 2019	MIL to exclude evidence and argument with respect to the Heineken Blade	Denied without prejudice during the April 5, 2019 Teleconference. (Doc. ID No. 672990 at 79:1-5.).
MIL No. 3 (Motion Docket No. 1130-011), filed on March 13, 2019	MIL to preclude Heineken and Carla Mulhern's reliance on unsupported statements of Sebastien Tron	Denied without prejudice during the April 5, 2019 Teleconference. (Doc. ID No. 672990 at 83:5-6.).

The evidentiary hearing ("Hearing") was held on April 16-19, 23, 2019. (See Doc. ID

No. 66366 at App. A (Feb. 9, 2019); Order No. 18 (Apr. 1, 2019).). During and immediately

⁴ ABI's MIL No. 1 was originally filed as a motion to strike. (Motion Docket No. 1130-003 (Feb. 8, 2019).). On February 27, 2019, ABI was notified that this MTS would be treated as its first MIL. (See Order No. 11 (Feb. 27, 2019).).

after the Hearing, ABI filed four (4) motions to strike ("MTSs") evidence presented during the

Hearing. ABI's MTSs, and rulings on these motions, are summarized in Table No. 4 below.

Motion	Issue	Ruling
Motion Docket No. 1130-014, filed on April 17, 2019	ABI's MTS undisclosed and untimely hearing testimony with respect to hearing testimony of Jeroen Otto	Granted in-part during the Hearing. (Tr. 1274:2-21, 1275:5-16 (Apr. 23, 2019).). ABI moved to strike untimely Hearing testimony given by Mr. Jeroen Otto's at page 107, lines 8 to 18 of the Hearing Transcript. The testimony ABI sought to strike testimony concerned a visit Mr. Otto made to a bar in Washington D.C. the first weekend of the Hearing, to confirm use of ABI's NOVA system in the U.S. The testimony was post- discovery testimony and was stricken. No other information about the topic was stricken.
Motion Docket No. 1130-015, filed on April 18, 2019	ABI's MTS undisclosed and untimely hearing testimony regarding blow molding	Denied during the Hearing. (Tr. 1275:17-1276:25 (Apr. 23, 2019).).
Motion Docket No. 1130-016, filed on April 25, 2019	ABI's MTS testimony of James Carmichael outside of scope of his report	Denied. (Order No. 22 at 1, 4 (Aug. 26, 2019).).
Motion Docket No. 1130-017, filed on April 30, 2019	ABI's MTS testimony of James Carmichael outside of scope of his expertise	Granted. (Order No. 22 at 4, 10-11 (Aug. 26, 2019).). "[T]he following Carmichael Hearing testimony that ABI has moved be stricken, that is Hr. Tr. at 1451:12-21, 1457:24-1458:10, and 1459:9-13; and Hr. Tr. at 1443:16-1444:5, and 1449:15- 50:17, is stricken." (<i>Id.</i> at 10-11.).

Table No. 4: ABI's MTSs

B. The Parties

1. Complainants Heineken International B.V, Heineken Supply Chain B.V., and Heineken USA Inc.

Heineken International B.V. is a Dutch operating company based in Amsterdam that

provides management and guidance to Heineken's global subsidiaries. (See, e.g., Compl. at

13.). Heineken Supply Chain, B.V. is a Dutch operating company based in Amsterdam that

provides R&D for Heineken's technical innovations, and is the owner of the Asserted Patent.

(Id.). Heineken USA Inc. is a New York corporation with a principal place of business in White

Plains, New York, that provides training and support to Heineken's U.S. customers and markets.

(Id.). All of the complainants are indirect subsidiaries of Heineken N.V., a publicly traded Dutch

company. (Id.).

Heineken described itself and its products as follows:

Heineken was founded in 1864 by Gerard Heineken and has grown to become Europe's number one brewer and the second largest brewer in the world, behind Proposed Respondents. Heineken has more than 80,000 employees, a presence in more than 70 countries and its brands are sold in more than 190 countries.

Heineken's unique flavor is derived from the Heineken A-yeast developed in 1886 and carefully guarded thereafter, beginning a long-standing practice of innovation and intellectual property protection. Among Heineken's more recent innovations are systems to bring the brewery-fresh taste of draft beer to traditionally non-draft beer outlets and even into consumers' homes.

(Id. at ¶¶ 6, 8.).

2. Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC

Anheuser-Busch InBev S.A. is publicly traded, a Belgian corporation, and headquartered in Leuven, Belgium. (Resp. at ¶ 15.). InBev Belgium N.V. is a Belgian entity. (*Id.*). Anheuser-Busch LLC is a Missouri Limited Liability Company headquartered in St. Louis, Missouri. (*Id.*). ABI described itself and its products as follows:

Founded in St. Louis in 1852, Anheuser-Busch is the largest brewer in the U.S. with a heritage of 167 years and iconic brands including Budweiser, Bud Light, Michelob Ultra, and Busch. Budweiser is promoted by the famous Clydesdales. Anheuser-Busch beers are brewed in 12 breweries across the U.S. (Missouri, New Jersey, New York, California, Florida, Texas, Ohio, New Hampshire, Virginia, Colorado, and Georgia.) Anheuser-Busch's St. Louis brewery, that opened in 1852, is a National Historic Landmark. Anheuser-Busch, through its wholly owned subsidiaries, also brews specialty craft beers such as Goose Island, Devil's Backbone, Elysian, Blue Point, 10 Barrel, Golden Road, Breckenridge, Four Peaks, Karbach, and Wicked Weed at breweries located in New York, Virginia, North Carolina, Texas, Colorado, Arizona, California, Oregon, Illinois, and Washington.

ABI was formed in November 2008 by the merger of Anheuser-Busch and InBev. InBev has a brewing heritage dating back to 1366, when Den Hoorn Brouwerij was founded in Leuven, Belgium. ABI is currently the world's largest brewer and one of the world's top 5 consumer products companies. InBev's beer brands include Stella Artois, Becks, Corona and other world renowned brands. These brands (with the exception of Corona) are imported and sold in the U.S. by Anheuser-Busch. ABI is the leader of innovation in the brewing industry.

(RPBr. at 2.).

III. JURISDICTION, IMPORTATION, AND STANDING

A. The Commission Has Jurisdiction

To have the authority 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, Comm'n Opinion, 215

U.S.P.Q. 229, 231 (U.S.I.T.C. 1981). For the reasons discussed below, the facts support a

finding that the Commission has jurisdiction over this Investigation.

1. Subject Matter Jurisdiction

The Commission has subject matter jurisdiction over this Investigation because Heineken

alleged that ABI has violated 19 U.S.C. §1337(a)(1)(B). See Amgen v. U. S. Int'l Trade

Comm'n, 902 F.2d 1532, 1536 (Fed. Cir. 1990). Since the inception of this Investigation, ABI

did not contest that the Commission has subject matter jurisdiction. (See Resp. at ¶ 28.).

2. Personal Jurisdiction

ABI stipulated that the Commission has personal jurisdiction over Respondents. (Doc. ID No. 673003 (Apr. 13, 2019).). Moreover, ABI appeared and responded to the Complaint and NOI, and fully participated in this Investigation, which included participating in discovery and the Hearing, and by filing motions. Thus, the Commission has personal jurisdiction over ABI. *See, e.g., Certain Microfluidic Devices* (*"Microfluidic Devices"*), Inv. No. 337-TA-1068, Initial Determination, 2018 WL 5279172, at *16 (Sept. 20, 2018); *Certain Windshield Wiper Devices and Components Thereof* (*"Wiper Devices"*), Inv. No. 337-TA-881, Initial Determination at 5 (May 8, 2014) (unreviewed in relevant-part) (Doc. ID No. 534255).

3. In Rem Jurisdiction

Section 337(a)(1)(B) applies to the "[t]he 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). A single instance of importation is sufficient to satisfy the importation requirement of Section 337. *Certain Optical Disc Drives, Components Thereof, and Prods. Containing the Same*, Inv. No. 337-TA-897, Order No. 101 at 3 (Sept. 22, 2014) (citations omitted) (EDIS Doc. 543438).

ABI stipulated that the Commission has *in rem* jurisdiction and that the importation requirement is satisfied. (Doc. ID No. 673003 (Apr. 13, 2019); *see also* CX-0122 at ¶ 15.). Thus, evidence presented in this Investigation establishes that the Commission has *in rem* jurisdiction over the Accused Products, i.e., versions 3 and 4 of ABI's NOVA System. *See, e.g.*, *Wiper Devices*, Inv. No. 337-TA-881, Initial Determination at 5 (*in rem* jurisdiction exists when importation requirement is satisfied).

B. Heineken Has Standing in the Commission

Jurisdiction also requires standing. See SiRF Technology, Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1326 (Fed. Cir. 2016) (standing to bring an infringement suit is the same under Commission Rules as it would be in a Federal District Court case); Certain Optical Disc Drives, Components Thereof and Prods. Containing Same, Inv. No. 337-TA897, Opinion Remanding the Investigation at 4 (Jan. 7, 2015). Commission Rule 210.12 requires that intellectual-property based complaints filed by a private complainant "include a showing that at least one complainant is the exclusive license of the subject intellectual property." 19 C.F.R. § 210.12(a)(7).

Heineken has standing to bring suit for infringement under Section 337 because Heineken Supply Chain B.V. owns by assignment the full right, title and interest in the '751 patent. (See Compl. at Exs. 2 (assignment of the '751 patent from inventors to Heineken Technical Services B.V.), 3 (document formalizing name change of Heineken Technical Services B.V. to Heineken Supply Chain B.V.).).

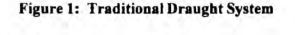
IV. THE ASSERTED PATENT

A. Overview of the Technology

The technology claimed in the '751 patent involves beverage dispensers, and specifically, beverage dispensers for dispensing carbonated beverages such as beer. (CX-0012 at Abstract, 2:24-35.). Beer is typically supplied for consumption in one of two ways. (Technology Stipulation at 1 (Doc. ID No. 666386 (Feb. 8, 2019)).). A consumer can purchase beer in bottles or cans, which are filled by a brewery and generally intended for single serving use. (*Id.*). A consumer can also consume beer at bars and restaurants, often in the form of draught (or draft) beer. (*Id.*).

Draught beer is beer served from a large container, commonly referred to as a keg, which

holds many servings of beer. (*Id.*). Draught beer is typically served by the glass, the dispensing of which is usually controlled by a bartender via a tap handle at a tap head. (*Id.*). A standard system for dispensing draught beer is depicted in Figure 1 below:





(Id. at 2; see also CMBr. at 3 (citing CXM-0001).).

In order to extract beer from the keg, the keg is tapped by attaching a keg coupler, which engages a value on the keg. (Technology Stip. at 2.). The keg coupler permits pressurized carbon dioxide (CO₂) gas to enter the keg via a CO₂ line and CO₂ tank, the pressure of which is regulated by a CO₂ regulator. (*Id.*). As pressurized CO₂ enters the keg, it pushes the beer out of the keg and into the beer line, through a tower, and up to the point of the faucet or tap head. (*Id.*). Pulling the handle connected to the tap head allows the beer to flow through the faucet and into a glass for serving. (*Id.*).

Because beer is fermented and contains yeast, the lines that transport beer from the kegs

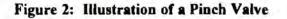
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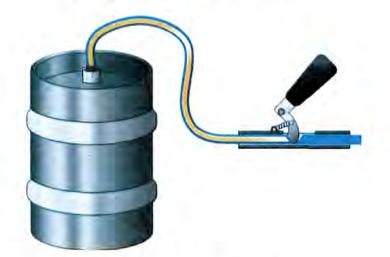
to the tap must be cleaned regularly, in order to avoid microbiological growths that can, among other things, negatively affect the taste of the beer. (CMBr. at 4.). According to Heineken, cleaning beer lines is costly, both in time spent and beer lost. (*Id.*). Each time the lines are cleaned, the beer that is present in the lines, which can sometimes extend over long distances (e.g., to the basement of a bar where kegs are often stored), must be discarded. (*Id.*).

In the 1990s, smaller, "countertop" beverage dispensers were being designed that could be used to dispense draught beer for consumption either at home or at smaller bars and restaurants without existing draught systems. (Technology Stip. at 2-3.). Rather than using the traditional setup with large, permanent lines connecting kegs to the tap, these devices either eliminated the line between the keg and the tap or used a much shorter line than those used in traditional draught systems. (*Id.*).

All of these devices, however, still required a method to control the flow of beer from the container to ensure the beer reaches the glass with the proper carbonation. (CMBr. at 5.). One method that was used in some of these designs was a "pinch tube." (*Id.*). In these devices, the beer line led from the keg to the tap head, and a mechanism in the tap head pinched the end of the tube closed until the tap handle was pulled. (*Id.*).

PUBLIC VERSION





(CDX-5014 (introduced during Peter Wolski's testimony).).5

The depicted design had several downsides, such as incomplete sealing of the beer line, which would lead to leakage and loss of carbonation. (*Id.*). Another method involved attaching a disposable beer line to a permanent valve in the tap head. (*Id.* at 6.). Even though this design eliminated the need to clean a long line, the valve still required cleaning because it would come into contact with beer. (*Id.*).

The inventors of the '751 patent set out to develop a new draught delivery system with a

disposable line that preserves beer quality and freshness. (Id.).

To this end the drink dispenser assembly according to the invention is characterised in that the coupling element comprises a shut-off valve that can be closed when placing the outlet end of the dispensing line into the dispensing head and, respectively, removing the outlet end of the dispensing line from the dispensing head.

Because the coupling element of the dispensing line, which can be placed in an

⁵ When he testified during the Hearing on April 17, 2019 and April 19, 2019, Mr. Peter Wolski was the President of Highland Consulting. (CPSt. at Ex. 1.). Heineken identified Mr. Wolski as an expert to testify about the technology of the '751 patent, the background technology, infringement of the Accused 751 Products (i.e., versions 3 and 4 of the NOVA System), Heineken's domestic industry, and validity and enforceability of the '751 patent, including objective evidence of non-obviousness. (*Id.* at 3.).

unambiguous position in the dispensing head, is provided with a shut-off valve, controlled dispensing of the drink can be obtained. Especially if the drink is carbonated drink, such as beer, undesired frothing can be counteracted by this means. Furthermore, in contrast to the known flexible dispensing line, the flow characteristics through the dispensing line according to the invention can be adjusted by sizing the dimensions and the stroke of the shut-off valve. Tap feel, the flow rate and the type of jet of drink can be accurately adjusted by this means.

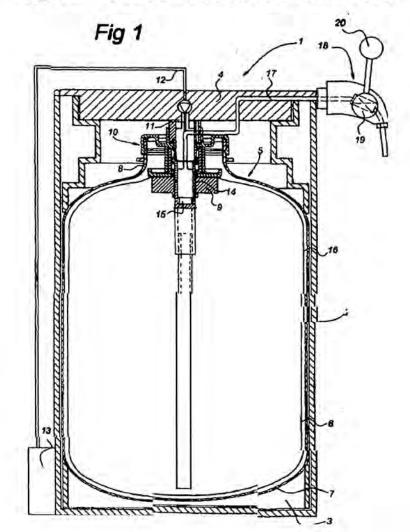
(CX-0012 at 2:17-34.).

B. Overview of U.S. Patent No. 7,188,751 ("the '751 Patent")

The '751 patent, titled "Drink Dispenser Assembly and Container for Drink and Drink Dispensing Line," was filed on May 30, 2003, as U.S. Patent Application Serial No. 10/296,986 ("the '986 application"). (CX-0012 at (21), (22), (54).). The '986 application issued as the '751 patent on March 13, 2007, and names Guido Petrus Johannes van der Klaauw, Bart Jan Bax, and Marius Corstiaan van Duuren as the inventors. (*Id.* at (10), (45), (75).). The '751 patent claims priority to Netherlands Application No. 1015368, filed May 31, 2000, and PCT/NL/01/00423, filed May 31, 2001. (*Id.* at (30), (86).).

The asserted claims of the '751 patent are apparatus claims generally directed toward a beverage dispenser and its constituent components. (CX-0012 at Abstract.). The disclosed beverage dispenser involves the use of a partially flexible, disposable dispensing line that also maintains the carbonated beverage in its desired state more effectively than the prior art. (CMBr. at 6.). Specifically, the device includes a disposable beer line having a flexible tube (to ease connecting the beer line from the keg to the dispensing head) in combination with a shut-off valve located near the end of the tube farthest from the keg and closest to the glass, and coupled with the tap of the dispensing device to open and close the valve to dispense, and stop dispensing, a beverage, without the permanent elements of the tap coming into contact with the beer. (*Id.*).

One of the embodiments disclosed in the '751 patent is illustrated below in Figure 3, which is Figure 1 of the '751 patent.





(CX-0012 at Fig. 1.).

In this embodiment, a keg ("outer, rigid container 7") containing a carbonated drink such as beer is placed in the dispensing device 2. (*Id.* at 5:35-36.). The keg is tapped at "dispensing head 10," which is also connected to a "flexible dispensing line 17." (*Id.* at 5:50-52.). The dispensing line can be "at least partially of flexible construction." (*Id.* at 2:60-62.). The '751

PUBLIC VERSION

patent teaches that "[i]t is preferable to make the dispensing line of flexible plastic so that this constitutes a disposable or semi-disposable line that is thrown away after it has been used once or a number of times." (*Id.* at 2:63-67.). "The dispensing line 17 has a shut-off value 19 close to an outlet end." (*Id.* at 5:52-55.).

The '751 patent discloses that "[t]he shut-off valve can be a normally closed shut-off valve, such as a slit valve in the flexible hose, that can be opened by compression by the tap handle, a separate plastic shutoff valve with a closed equilibrium position, a spring-loaded (ball) valve or an electromagnetic valve." (*Id.* at 3:5-9.). Alternatively, the shut-off valve may also "comprise a tap or valve known per se," "a 'can' shut-off valve," or may "comprise[] a first sleeve and a second sleeve." (*Id.* at 3:9-13, 3:51-52, 4:7-13.). The "shut-off valve 19 is removably fitted in the dispensing head 18 and is in a normally closed position." (*Id.* at 5:52-55.). There is also an "outlet end of the dispensing line that is located downstream of the shut-off valve" that "can consist of a relatively rigid plastic section," and is placed into the dispensing head of the drink dispensing device. (*Id.* at 4:27-29.).

When pressure is applied to the keg via a pressure line 12, beer is driven out of the keg and "into the flexible line 17, against the shut-off valve 19." (*Id.* at 5:56-61.). Once the system has been pressurized, beer is dispensed by operating a handle that opens the shut-off valve. (*Id.* at 5:61-64 ("[b]y operating a handle 20, the shut-off valve 19, which is an integral part of the dispensing line 17, can be opened" to dispense a serving of beer").). Unlike traditional draught systems in which beer comes into contact with the dispensing head, the '751 patent avoids having beer contact the dispensing head, and instead sends the beer through the "outlet end of the dispensing line that is located downstream of the shut-off valve" that "can consist of a relatively rigid plastic section." (*Id.* at 4:27-29.). PUBLIC VERSION

When a keg has been emptied and is ready to be replaced with a full keg, "the container 7 and the flexible dispensing line 17 with the closed shut-off valve 19, which are connected thereto, are removed." (*Id.* at 5:64-6:2.). Removing the keg, flexible dispensing line, and closed shut-off valve all at once, without having to disassemble them, minimizes leakage of beer onto the elements of the drink dispensing device that are not normally in contact with beer. Because "[t]he shut-off valve is closed when the empty or partially empty pack is removed from the dispenser device and leakage of drink, present in the flexible dispensing line, from the dispensing line is prevented. As a result a favorable microbiological environment is maintained and the need for frequent cleaning of the dispenser device decreases." (*Id.* at 2:45-51.). It is also not necessary to clean the elements that do come into contact with beer—the flexible dispensing line, shut-off valve, and outlet end of the shut-off valve 19 can have been made for once-only use and thrown away or recycled after use").). Because beer only comes into contact with the disposable elements of the drink dispenser of the '751 patent, it "requires very little maintenance, requires little cleaning and provides a hygienic environment." (*Id.* at 2:13-16.).

V. THE PRODUCTS AT ISSUE

A. ABI's Accused Products

Heineken alleged that ABI's NOVA System, versions 3 and 4 (collectively, "NOVA System"), infringe claims 1-11 of the '751 patent. (See, e.g., CPBr. at 9 n.1; CBr. at 7 n.1; Compl. at ¶ 16.).

According to ABI, it began the development of the NOVA System in or around (RPBr. at 9.). ABI internally referred to the undertaking as

(Id.). The first version of the NOVA System, a prototype known as , was

		(Id.). The
second version of the NOVA System,	was also a prototype and used the	(<i>Id.</i>).
For the version, ABI switched to	147	

(Id.). The

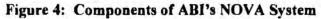
entailed a

. (Id.).

primarily developed

The NOVA System counter-top dispenser ("CTD") is a self-contained unit designed for use in smaller bars and restaurants to dispense draft beer from a 12L keg. (*Id.*). It has three main components: (i) a NOVA appliance; (ii) a plastic keg, i.e., bottle-in bottle ("BiB"); and (iii) a disposable coupler.





(CX-0645C.0012.).

The NOVA appliance contains a refrigeration system designed to keep the beer stored within a certain temperature (RPBr. at 10.). The NOVA appliance dispenses beer from the interior of the keg through a beer line and out of a beer valve, which prevents or permits the flow of beer.⁶ (*Id.* at 11.). The beer valve is part of the disposable coupler that consists of the butterfly connector, beer tube, and beer valve. (*Id.*). The yellow portion of the disposable coupler attaches to the top of the keg, while the black portion of the disposable coupler includes a valve and spout that fit in the dispensing head, located in the door of the NOVA appliance behind the handle. (*See, e.g.*, CX-0645C.0025, 0027.).

In response to discovery requests, ABI clearly confirmed that Versions 3 and 4 of the NOVA System are commercialized in the United States. (CX-0486C at Interrog. No. 11.). Moreover, Mr. Stijn Vanderkerckhove,⁹ ABI's corporate designee, unequivocally testified that

(See id. at 41:8-42:2.).

⁶ Version 3 of the NOVA System included a red, plastic stopper that was inserted into the with the valve. (CX-1556C (Dirx Dep. Tr.) at 44:11-15.).

⁷ When he testified during the Hearing on April 18, 2019, Mr. Lieven Dirx was an Innovation Draft Specialist in ABI's Innovation and Technology Center. (Tr. (Dirx) at 781:3-9.). Mr. Dirx explained that as an Innovation Draft Specialist, he "guide[s] or manage[s] the development of draft dispensing appliances." (*Id.* at 781:10-13.). ABI identified Mr. Dirx as a fact witness to testify about, *inter alia*, importation, sales, use, inventories, instructions to customers, and technical details regarding the NOVA System. (RPSt. at 2.).

⁸ When she provided her deposition testimony on December 14, 2018, Ms. Lauren Machens was the Global Manager of Platform Commercialization at ABI. (RPSt. at 2.). ABI identified Ms. Machens as a fact witness to testify about the servicing, repair, operation, and training related to the NOVA System. (*Id.*).

⁹ ABI identified Mr. Stijn Vanderkerckhove as a corporate designee. (CX-0004C (Stijn Vanderkerckhove Dep. Tr.) at 10:17-20.). His deposition was held on December 5, 2018.

(Id.;

CX-0004C (Vanderkerckhove Dep. Tr.) at 77:14-22 (emphases added); see also CX-0005C (Dirx Dep Tr.) at 72:8-10; CX-0002C (Nathaniel Davis Dep. Tr.)¹⁰ at 111:4-8.).

For the reasons discussed above, both versions of the NOVA System, i.e., version3 and 4, have been accused in this Investigation, and are analyzed in this ID for purposes of infringement.

B. Heineken's DI Products

Heineken asserted that the following DI Products practice one or more claims of the Asserted Patent: (1) the SUB; and (2) the Blade. (See, e.g., CPBr. at 10; CBr. at 8 Compl. at

1 35.).

The SUB, shown on the left in Figure 5 below, chills and dispenses draught beer from two (2) liter kegs (Torps) in the convenience of one's home. (Tr. (Jeroen Otto)¹¹ 87:1-13; CPX-0004-5, 0008, 0010-13.). The Blade, shown on the right in Figure 5 below, is a countertop draught beer system that uses eight (8) liter kegs and brings draught beer into traditionally non-

¹⁰ When he provided his deposition testimony on November 28, 2018, Mr. Nathaniel Davis was employed by Bedford Systems, LLC, which Mr. Davis described as "a joint venture between Anheuser-Busch and Kurig Green Mountain." (CX-0002C (Davis Dep. Tr.) at 4:15-25.).

¹¹ When he testified during the Hearing on April 16, 2019, Mr. Jeroen Otto was Heineken's Manager, Global Commerce Innovation. (CPSt. at 1.). Heineken identified Mr. Otto as a fact witness to testify about the development and features of the UD products, and Heineken's relationship with its licensee, Hopsy, Inc. (*Id.*).

draught beer outlets. (CPX-0001-2; RX-2699C (Cormac McCarthy Dep. Tr.)¹² at 14:3-12.).

Figure 5: Heineken's DI Products



(CPBr. at 10; CBr. at 8.).

VI. PERSON OF ORDINARY SKILL IN THE ART¹³

A. Definition of a Person of Ordinary Skill in the Art

The Markman Order contains a definition that a "person of ordinary skill in the art" would have "at least four (4) years of research and/or industry work experience in the field of carbonated beverage dispensing systems, particularly with beer." (Markman Order at 20.). This was the definition for which Heineken argued in its Markman Brief. (CMBr. at 12.). ABI proposed a different definition. ABI's proposed definition was an individual who would have:

(Id.

at 11:24-12:2.).

¹³ The legal standard for the level of ordinary skill in the art can be found in the *Markman* Order. (See Markman Order at 19-20.).

¹² When he provided his deposition testimony on December 5, 2018, Mr. Cormac McCarthy's title was Project Manager Blade at Heincken. (RX-2699C at (Cormac Dep. Tr.) at 10:14-24, 11:14-15.). Heineken identified Mr. Cormac as a corporate designee. (Id. at 10:14-24.). As Project Manager Blade, his responsibilities entailed (Id. at 11:20-23.). This included

"(1) at least a Master's degree in mechanical engineer or product design, and/or (2) four years of relevant experience designing fluid dispensing devices." (RMBr. at 11.).¹⁴ The difference between the two (2) definitions, at least in part, turned on "design" experience versus "work experience" with dispensing systems.

The '751 patent specification states that the drink dispenser device, the container and the dispensing line are "suitable for dispensing all types of drink, but are particularly suitable for dispensing carbonated drink, such as beer." (CX-0012 2:36-39.). The claims of the '751 patent cite to "carbonated drink" (CX-0012 at claims 1, 6-7.).

In its *Markman* Brief, Heineken argued that its definition of a person of ordinary skill in the art should be adopted because it includes experience in the carbonated beverage dispensing systems, particularly with beer, because the '751 patent provides benefits unique to carbonated beverages, such as beer, including proper carbonation and a "favourable microbiological environment." (*Markman* Order at 19; *see also* CMBr. at 12 (other citations omitted).). This argument was persuasive initially. It was the definition that was adopted in the *Markman* Order, in part because Heineken's definition was more specific and included "work experience in the field of carbonated beverage dispensing systems, particularly with beer." (*Markman* Order at 19-20.). However, that definition of a "person of ordinary skill" was selected before all of the Dr. Alexander Slocum, ABI's expert witness, experience had been disclosed. In this instance, ABI did not fully tie the scope and direct connection that Dr. Slocum's experience in the field of mechanical engineering and physics had to the design of beverage dispensers was which his

¹⁴ ABI's definition noted that "Professor Slocum agrees with this definition." (RXM-0008 at ¶¶ 12-13.).

Curriculum Vitae had broadly identified. 15

Both during the Hearing and in its briefing, Heineken objected to Dr. Alexander Slocum as an expert witness. (*See* e.g. Tr. at 52:22-53:25; Tr. at 869:1-879:20.). Hewing to the *Markman* Order definition, Heineken argued that Dr. Slocum does not meet the definition of a person of ordinary skill in the art because he lacked specific *work experience* in the field of carbonated beverages, including beer. (CRBr. at 5-6; *see also* Tr. at 52:22-53:23.).

However, during the Hearing, Dr. Slocum testified that as a Professor at the Massachusetts Institute of Technology ("MIT"), with a Chair in Mechanical Engineering, and with all three (3) of his degrees, including Ph.D. issued by MIT, he focuses on the design of instruments and machines. Dr. Slocum explained the scope of his extensive experience and the work he has either conducted or overseen with respect to field of carbonated beverages, including beer within his larger field of expertise. (Tr. (Slocum) at 851:25-852:7.). For example, Dr. Slocum testified that he teaches "Precision Machine Design" and the design of fluid dispensing systems, and is familiar with the physics of fluid flow and valves. (*See* generally, Tr. (Slocum) at 853:21-854:17; 877:24-878:6.). More specifically, Dr. Slocum testified:

Q. Do you teach any design courses at MIT?

A. Yes, over the years I've consistently taught one called Precision Machine Design. I've also taught for over a decade the Introduction to Design class that all sophomores take that's 2. 007. ... So but my focus is design of machinery and also design of machine elements and the use of machine elements, everything from bearings to pneumatic pistons to motors to hydraulic systems. It's all fun, it's all

¹³ In sum, the *Markman* Order was based upon insufficient information that was then rectified during the Hearing by a short *voir dire* in which Dr. Slocum expanded upon his extensive experience in the design and construction of valves. Dr. Slocum also testified to the industry-related work he has performed or the courses he has taught that deal with the mechanics related to carbonated beverages. (*See* Dr. Slocum's *Curriculum Vitae* at RX-0685; *see also* Tr. (Slocum) at 869:1-879:20.).

mechanical.

Q. Do any of these classes deal with the design of fluid dispensing systems?

A. In particular, my medical design class, I design a lot of things from the application and introduction of medicants, handling of blood, which is a particularly gassy fluid, you have to be very careful that you don't cause an embolism or stroke, which is very bad. And also in the semiconductor industry, valves for the photoresist handling, all the way up to oil and gas industry for fracking tools, for example, and drill bits.

(Tr. (Slocum) at 853:20-24, 853:2-5.).

Dr. Slocum also described a seminal book he authored that is entitled "Fundamentals of

Design," which includes a chapter on fluid system design that is directly applicable to beverage

dispensing systems. (Tr. (Slocum) at 856:5-6, 856:17-857:5.).

Q. Does the Precision Machine Design book cover fluid system design?

A. It does. There's a lot in there on fluid bearings, lubrication of systems. Any machine -- or many machines inherently need fluids for lubrication or your handling of process fluid.

Q. Does it also have chapters that cover valves?

A. Yeah, handling of a fluid, there's a couple of fundamental pieces. You have pumps that create pressure in the fluid, then you have lines that take the fluid where you want it. And then you have valves that do the logic or the control of what the fluid is going to do. And then you have seals. Very important, seals, because you don't want to leak fluid around and make a mess.

Q. Would these teachings be relevant to the beer technologies?

A. I believe so. They're relevant to any system that uses fluids. You -- you have to control what the fluid is doing and make it do what you want to do, and you don't want to make a mess.

(Tr. (Slocum) at 856:17-857:11.).

Dr. Slocum also testified that he is familiar with the mechanical designs that would be

used in beer dispensing systems:

Q. (Judge McNamara). Let me just ask you this to cut to the chase. You are

familiar with the kinds of mechanical designs that would go into a beer dispensing system, are you not? They are basic principles?

A. Absolutely, ma'am.

Q. And you are familiar with the types of liquids that are used in a beer dispensing system?

A. Absolutely, ma'am.

Q. They're common elements that would be used in a multiplicity of different types of designs?

A. That is correct.

Q. Is there anything unusual about a beer dispensing fluid that wouldn't fall under mechanical engineering as you've been teaching it for so many years?

A. No, ma'am.

(Tr. (Slocum) at 871:6-23 (questions asked by Judge McNamara).).

Dr. Slocum's extensive knowledge of and experience in mechanical design and fluid flow design is applicable to all fluids, including beer. Contrary to the definitions of a person of ordinary skill adopted in the *Markman* Order, this decision finds that Dr. Slocum is qualified as an expert, or as a person of ordinary skill in the art at the time of the invention, because of his extensive mechanical engineering experience, which includes an emphasis on machine design and fluid flow and design.

VII. U.S. PATENT NO. 7,188,751

A. Direct Infringement

1. Legal Standard: Literal Infringement

"Determination of infringement is a two-step process which consists of determining the scope of the asserted claim (claim construction) and then comparing the accused product . . . to the claim as construed." *Certain Sucralose, Sweeteners Containing Sucralose, and Related Intermediate Compounds Thereof*, Inv. No. 337-TA-604, Comm'n Opinion at 36 (U.S.I.T.C., April 28, 2009) (citing Litton Sys., Inc. v. Honeywell, Inc., 140 F.3d 1449, 1454 (Fed. Cir. 1998)).

An accused device literally infringes a patent claim if it contains each limitation recited in the claim exactly. *Litton*, 140 F.3d at 1454. 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). In a Section 337 investigation, the complainant bears the burden of proving infringement of the asserted patent claims by a preponderance of the evidence. *Enercon GmbH v. Int'l Trade Comm'n*, 151 F.3d 1376, 1384 (Fed. Cir. 1998). If any claim limitation is absent, there is no literal infringement of that claim as a matter of law. *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000).

2. Infringement Overview

Heineken accused ABI of directly infringing claims 1, 3, 7, and 10 of the '751 patent. (CPBr. at 15; CBr. at 11.). For the reasons summarized directly below, and discussed in more detail in Sections VII.A.3-5 below, Heineken has met its burden and proven that the NOVA System practices claims 1, 3, 7, and 10.

As an initial matter, in its Pre-Hearing Brief, ABI only disputed three (3) limitations of independent claims 1 and 7, from which claims 3 and 10 depend, respectively. (RPBr. at 21, 25.). Specifically, ABI contended that the NOVA System does not include: (i) a shut-off valve, "as that term is used in the '751 Patent"; (ii) "the structures required by the means-plus-function limitations" of claims 1 and 7; and (iii) a "freely movable" shut-off valve. (*Id.*). ABI did not separately contest non-infringement of the NOVA System of claims 3 and 10 based on the additional limitations recited in those claims.

As a result, any argument regarding any other limitations recited in independent claims 1

and 7, and the additional limitations recited in dependent claims 3 and 10, is deemed abandoned or withdrawn under Ground Rule 7.2.

Moreover, the merits of ABI's three arguments were contingent on construing the terms "shut-off valve," "by means of which the shut-off valve (19, 32) is detachably connectable for opening and closing of the shut off valve by moving the knob or handle," and "freely movable shut-off valve," as ABI proposed during the *Markman* proceedings. However, none of ABI's proposed constructions were adopted. Instead, given the disclosures in the intrinsic evidence, each term was given its plain and ordinary meaning. (*See Markman* Order, App. A at 1, 12; *see also* n.21, 23-25, 27, *infra.*).¹⁶

ABI did not raise these arguments again in its post-hearing briefing. Thus, ABI has waived these arguments pursuant to Ground Rule 10.1.

ABI's main post-hearing grounds for its non-infringement arguments are based on allegations that Heineken failed to prove direct infringement under 35 U.S.C. § 271(a) because the NOVA System has never been *imported or sold together*, and that there is no evidence that ABI itself *uses* the NOVA System. (RRBr. at 11.).

As an initial matter, ABI did not set forth such non-infringement contentions in its Pre-Hearing Brief. Accordingly, these contentions are deemed waived pursuant to Ground Rule

¹⁶ "ABI's proposed construction [for 'shut-off valve'] is not supported by the intrinsic evidence. The '751 patent makes clear that the shut-off valve is not limited to a linear valve made of sleeves. It teaches a variety of shut-off valves...." (Markman Order, App. A at 2 (citation omitted).).

With respect to the "by means of" term, "[t]he '751 patent uses the phrase "by means of" to describe the relationship between the operating element and the shut-off valve, not as a substitute for structure." (Id. at 12 (citation omitted).).

7.2.17

Moreover, as discussed in more detail in Section VII.A.5, *infra*, ABI's contentions are not consistent with the ITC's mandate, which is to protect domestic industry by preventing the importation of products that, *inter alia*, infringe one or more valid U.S. patents. *See* 19 U.S.C. § 1337. Requiring such products to be imported "fully assembled," "together," or at the same time such that they are infringing at the time of importation, as ABI asserted, permits an "unassembled" version of an otherwise infringing product an improper end-run around the Commission's ability to carry out its directive under Section 337. *Suprema*, 796 F.3d at 1352 (in the context of induced infringement, noting that "the practical consequence would be an open invitation to foreign entities... to circumvent Section 337 by importing articles in a state requiring post-importation combination or modification before direct infringement could be shown").

Additionally, Heineken presented evidence and elicited testimony that demonstrates that ABI imported and sold the main components of the NOVA System in the United States. Evidence adduced in this Investigation also establishes that ABI uses the NOVA System in the United States.

¹⁷ In its Pre-Hearing Brief, in the context of jurisdiction, ABI asserted that: (i) "[b]ecause ABI was not importing the accused product at the time the Commission instituted this Investigation, the Commission lacks jurisdiction over the present Investigation"; and (ii) "Heineken has not proven that the Nova system as a whole has been imported at the time of the Complaint or thereafter, and has not proven that ABI is the entity that has carried out such importation, and therefore the ITC does not have jurisdiction over the Nova system." (RPBr. at 16.). As noted in Section III.A above, ABI subsequently stipulated that the Commission has *in rem* and *in personam* jurisdiction, and that the importation requirement is satisfied. (Doc. ID No. 673003 (Apr. 13, 2019); Section III.A.).

The NOVA System Version 4 Practices Claims 1, 3, 7, and 10 of the '751 Patent¹⁸

a) Claim 1

i. 1[Pre]: "Drink dispenser assembly (1, 25) comprising"

The NOVA System is a drink dispenser assembly, which ABI did not dispute in its Pre-Hearing Brief or during the Hearing. (Tr. (Wolski) at 393:20-394:8; CDX-5043; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). Thus, any argument on this issue is deemed waived pursuant to Ground Rules 7.2 and 10.1.

ABI described the NOVA System as a "countertop draught unit" to "serve proper draught beer." (CX-1115.0002.). Moreover, several witnesses, including ABI's fact witnesses, Messrs. Daniel Ingram,¹⁹ Jason Garrison,²⁰ and Nathaniel Davis, testified that they poured beer from the NOVA System. (Tr. (Ingram) at 697:3-20; CX-0003C (Garrison Dep. Tr.) at 68:4-7; CX-0002C (Davis Dep. Tr.) at 112:16-19; CX-0004C (Vanderkerckhove Dep. Tr.) at 25:11-12.).

For these reasons, Heineken has proven by a preponderance of evidence that the NOVA System meets the preamble of claim 1 of the '751 patent.

ii. 1[a]: "a dispenser device (2, 37) provided with a dispensing head (18, 29)"

Heineken's expert, Mr. Wolski, presented uncontested testimony that the NOVA System

¹⁸ The images and evidence in this section depicted and cited for each of the below limitations represent version 4 of the NOVA System.

¹⁹ When he testified during the Hearing on April 18, 2019, Mr. Daniel Ingram was the Global Manager of Trade Innovation at ABI. (RPSt. at 2.). ABI identified Mr. Ingram as a fact witness to testify about ABI's business plan, importation, inventory, pricing, licenses, and sales strategy related to the NOVA System. (*Id*).

²⁰ When he provided his deposition testimony on November 20, 2018, Mr. Jason Garrison was employed by Anheuser-Busch, North America. (CX-0003C (Garrison Dep. Tr.) at 5:21-6:5.). ABI designated him as a 30(b)(6) witness to testify on behalf of ABI. (See, e.g., id. at 33:15-18, 35:4-8.).

comprises a dispenser device with a dispensing head. (Tr. (Wolski) at 394:9-395:17, 398:13-16; CDX-5044C; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX- 0007C; RPX-0010C.). Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

Portions of the dispensing head, without the handle, are shown below in Figure 6.



Figure 6: NOVA Dispensing Head Without Handle

(CX-1206; CPX-0016; *see also* Tr. (Wolski) at 394:9-395:17, 398:13-16; CPX-0018; RPX-0006; CDX-5044C; CX-0351C.0001.).

Heineken established that

. (Tr. (Wolski) at 394:9-395:17,

398:13-16; CPX-0016; CPX-0018; CPX-0021-0022; RPX-0006C; RPX-0010C.).

Accordingly, Heineken has proven by a preponderance of evidence that the NOVA

System meets limitation 1[a] of claim 1 of the '751 patent.

iii. 1[b]: "comprising an at least partially flexible²¹ dispensing line (17, 28)"

Mr. Wolski offered testimony, which ABI did not dispute in its Pre-Hearing Brief or

²¹ The term "partially flexible" was given its plain and ordinary meaning, which is "at least a portion of

during the Hearing, that confirms that the NOVA System's disposable coupler comprises at least a partially flexible dispensing line. (Tr. (Wolski) at 398:17-400:20; *Markman* Order, App. A at 19-20; CDX-5045C-5047C; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

(Tr. (Wolski) at 398:17-400:20;

CPX-0021-0022; RPX-0010C.). The NOVA System's disposable coupler is shown below in Figure 7.



Figure 7: NOVA System's Disposable Coupler

(CX-1207; CPX-0022; see also CPX-0020-0021; RPX-0010.).

the item described is flexible." (Markman Order, App. A at 19-20.).

Figure 8: Illustration Depicting Components of NOVA System's

(CX-0645C.0016; see also Tr. (Wolski) at 398:17-400:20; CPX-0021-0022; RPX-0010C; CDX-5045C.).

As Mr. Wolski testified, at least a portion of the dispensing line, which includes the

, is flexible. (Tr. (Wolski) at 398:17-400:20;

CPX-0021-0022; RPX-00l0C.).

Accordingly, Heineken has proven by a preponderance of evidence that the NOVA System meets limitation 1[b] of claim 1 of the '751 patent.

iv. 1[c]: "a container (7, 27) containing carbonated drink" The NOVA System includes a container containing carbonated drink. (Tr. (Wolski) at 400:21-401:5; CDX-5048; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C; *see also* CX-0020.0002.). ABI did not dispute this in its Pre-Hearing Brief or during the Hearing. ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

ABI's fact witness, Mr. Ingram, confirmed that the NOVA System dispenses Stella Artois beer from a keg designed to fit into the NOVA system.

); see also

CX-0004C (Vanderkerckhove Dep. Tr.) at 25:11-14.).

For the reasons discussed above, Heineken has proven by a preponderance of evidence that the NOVA System meets limitation 1[c] of claim 1 of the '751 patent.

v. 1[d]: "connected during use to the dispensing line (17, 28) which has a coupling element at an outlet end for connection to the dispensing head (18, 29)"

Mr. Wolski confirmed that when in use, the NOVA System's keg is connected to the dispensing line, which has a coupling element at an outlet end for connection to the dispensing head. (Tr. (Wolski) at 401:6-402:16; CDX-5049-5050; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not dispute this in its Pre-Hearing or during the Hearing. Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

Figure 9: NOVA System's

(CX-0645C.0016; CDC-5045C.).

Figure 10: Insertion of

into NOVA System's Keg

(CX-0645C.0027; CDX-5036C; see also CX-0133C.0012 (NOVA System's manual describing the same process).).

At its outlet end, the NOVA System's disposable coupler has a coupling element for connection to the dispensing head. (Tr. (Wolski) at 388:1-5, 401:6-402:16; CPX-0021-0022; RPX-0010C.). The outlet end of the disposable coupler is the end opposite the butterfly connector and includes the beer valve of the NOVA System's dispensing line. (CX-0645C.0016; Tr. (Wolski) at 401:6-402:16; CPX-0021-0022; RPX-0010C.). 810:25; CX-0004C (Vanderkerckhove Dep. Tr.) at 132:19-133:4, 141:18-20, 142:19-25; CPX-0016; CPX-0018; CPX-0021-0022; RPX-0006C; RPX-0010C.). The barrel (sometimes referred to as a cradle that is part of the dispensing head) is shown in the pictures of Figure 11 below.

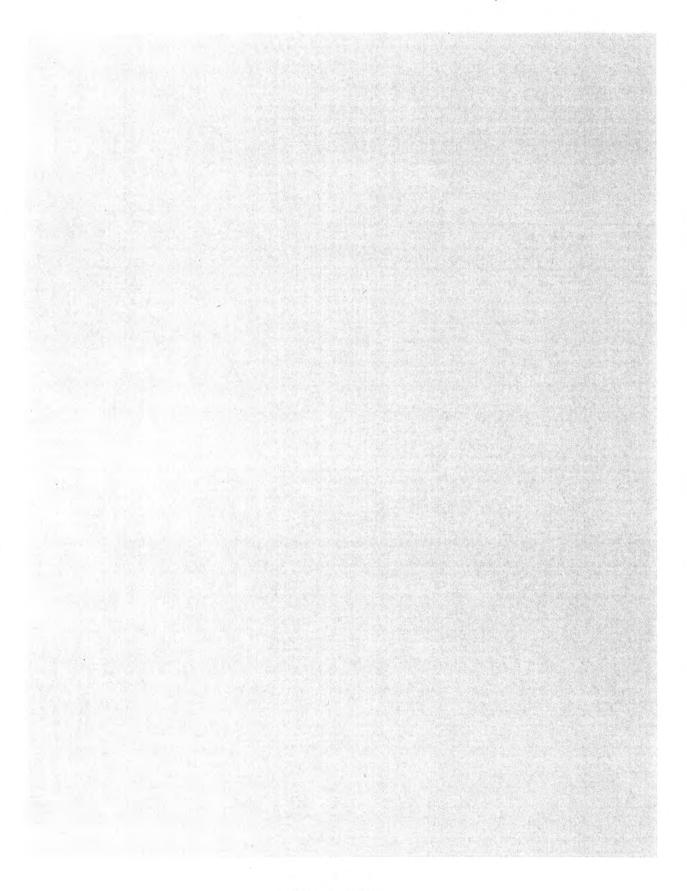
Figure 11: Barrel of NOVA System's Dispensing Head





(CX-1208; CX-1209; CPX-0016; CPX-0018; RPX-0010C; CDX-5050; Tr. (Wolski) at 401:16-402:9.).

As Heineken's expert, Mr. Wolski, and ABI's fact witness, Mr. Dirx, explained,



(CX-1206; CX-1207; CX-1208; CPX-0016; CPX-0018; CPX-0021-0022; RPX-0006C; RPX-0010C; CDX-5050; Tr. (Wolski) at 401:16-402:91.).

Figure 14: Dispensing Line and Dispensing Head Coupled Together



(CX-1195; CPX-0016; CPX-0018; CPX-0021-0022; RPX-0006C; RPX-0010C; CDX-5051; Tr. (Wolski) at 401:16-402:9.).

For the foregoing reasons, Heineken has proven by a preponderance of evidence that the

NOVA System meets limitation 1[d] of claim 1 of the '751 patent.

vi. 1/e]: "characterised in that the coupling element comprises a shut-off valve (19, 32)²² made of rigid material that is selectively openable and closable after placing the outlet end of the dispensing line (17, 28) into the dispensing head (18, 29)"

The NOVA System's coupling element comprises a shut-off valve. (Tr. (Wolski) at

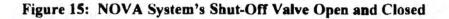
402:17-403:24; CDX-5052-5054.). ABI did not dispute this aspect of the claim limitation in its Pre-Hearing Brief or during the Hearing. Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

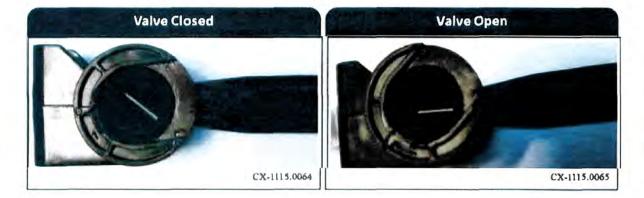
²² The term "shut-off valve" was given its "[p]lain and ordinary meaning, which is a valve to open and close flow." (*Markman* Order, App. A at 1.). This construction does not limit the term to an embodiment disclosed in the '751 patent, i.e., "a linear valve made of sleeves." (*Id.* at 2.).

The coupling element at the outlet end of the dispensing line includes the beer valve. (Tr. (Wolski) at 402:17-403:24; CPX-0021-0022; RPX-0010C.). The beer valve is a shut-off valve because the beer valve is a valve to open and close flow, as shown below in Figure 15. (Tr. (Wolski) at 402:17-403:24; CPX-0021-0022; RPX-0010C; *see also* CX-0007C (

The shut-off valve of the NOVA System's disposable coupler is shown

below in its open and closed positions.





(CX-1115.0064; CX-1115.0065; CPX-0021-0022; RPX-0010C; CDX-5052-5054; Tr. (Wolski) at 402:17-403:24.).

As the evidence demonstrates, the NOVA System's shut-off valve is made of rigid material that is selectively openable and closable after placing the outlet end of the dispensing line into the dispensing head. (Tr. (Wolski) at 403:25-408:15; CDX-5055C-5059; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). Mr. Wolski physically examined the NOVA System's shut-off valve and confirmed that the valve is stiff, and not flexible or pliant. (Tr. (Wolski) at 403:25-408:15.). ABI's fact witness, Ms. Machens, also testified that the NOVA System's beer valve is a " (CX-0007C (Machens Dep. Tr.) at 30:25-31:6.).

(Tr. (Wolski) at 404:4-405:25 (emphases added).).

Based on this corroborating evidence, Mr. Wolski explained that parts or items 1a, 2, and 3 constitute the valve mechanism. (*Id.*). In one of the engineering documents Mr. Wolski reviewed, these items are described as the as shown below in Figure 16. The engineering document also identifies

Figure 16: Engineering Document Showing Material Composition of NOVA System's Valve

(CDX-5056C; CX-0063C.0003.).

The only rebuttal argument ABI raised was that because the NOVA valve purportedly includes a flexible seal (item 1b above) to avoid leaking, the valve has rigid *and* non-rigid parts, and thus does not satisfy the "rigid material" limitation. (RRBr. at 24 (citations omitted).). To the contrary, as Mr. Wolski testified, a person skilled in the art would not have evaluated the seal *inside* the valve to determine if the *valve* itself is made of rigid material. (Tr. (Wolski) at 406:15-21.). Thus, ABI's argument is unpersuasive.

Moreover, evidence adduced in this Investigation supports Mr. Wolski's opinion that the NOVA System's valve is selectively openable and closable after the valve has been placed in the dispensing head of the NOVA System. (Tr. (Wolski) at 407:2-25; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not contest this aspect of the claim limitation in its Pre-Hearing Brief or during the Hearing. Thus, ABI had waived any

argument on this issue pursuant to Ground Rules 7.2 and 10.1.

Figure 17: Photographs Showing

(CBr. at 26 (citing CPX-0016; CPX-0018; RPX-0006C).).

Accordingly, Heineken has proven by a preponderance of evidence that the NOVA

System meets limitation 1[e] of claim 1 of the '751 patent.

vii. 1[f]: "the dispensing head (18, 29) comprising a knob or handle and an operating element (45, 98) connected to said knob or handle by means of which the shut-off valve (19, 32) is detachably connectable for opening and closing of the shut off valve by moving the knob or handle,²³ wherein the shut-off valve is freely movable with the flexible²⁴ tube upon placement and removal of the valve into and from the dispensing head²⁵ and is fixed in position by being releasably attached to the dispensing head"

The NOVA System includes a dispensing head with a handle. (Tr. (Wolski) at 409:1-12; CDX-5060C; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not dispute this aspect of the claim limitation in its Pre-Hearing Brief or during the Hearing. Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

ABI documents show that the dispensing head of the NOVA System includes a handle, an example of which is depicted below in Figure 18.

²³ The phrase "by means of which the shut-off valve (19, 32) is detachably connectable for opening and closing of the shut off valve by moving the knob or handle" was given its plain and ordinary meaning. (*Markman* Order, App. A at 12.).

²⁴ The term "flexible" was given its "[p]lain and ordinary meaning, which is capable of being bent repeatedly without injury or damage." (*Markman* Order, App. A at 19.).

²⁵ The phrase "the shut-off valve is freely mov[e]able with the flexible tube upon placement and removal of the valve into and from the dispensing head" was given its plain and ordinary meaning. (*Markman* Order, App. A at 15.).

Figure 18: Annotated Drawing of Nova System's Handle

(CDX-5060C (citing CX-0351C.0001); Tr. (Wolski) at 409:1-12; Tr. (Dirx) at 832:2-4; CX-0075C (CAD drawing depicting the NOVA V4 design); CX-0005C (Dirx Dep. Tr.) at 172:8-14.).

The NOVA System's dispensing head also includes an operating element connected to the dispensing head's handle. (Tr. (Wolski) at 409:13-410:1; CDX-5061; CPX-0016; CPX-0018; RPX-0006.). ABI did not contest this aspect of the claim limitation in its Pre-Hearing Brief or during the Hearing. Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

Mr. Wolski testified that the operating element includes at least the barrel of the NOVA System. (Tr. (Wolski) at 409:13-410:1; CPX-0016; CPX-0018; RPX-0006C.).

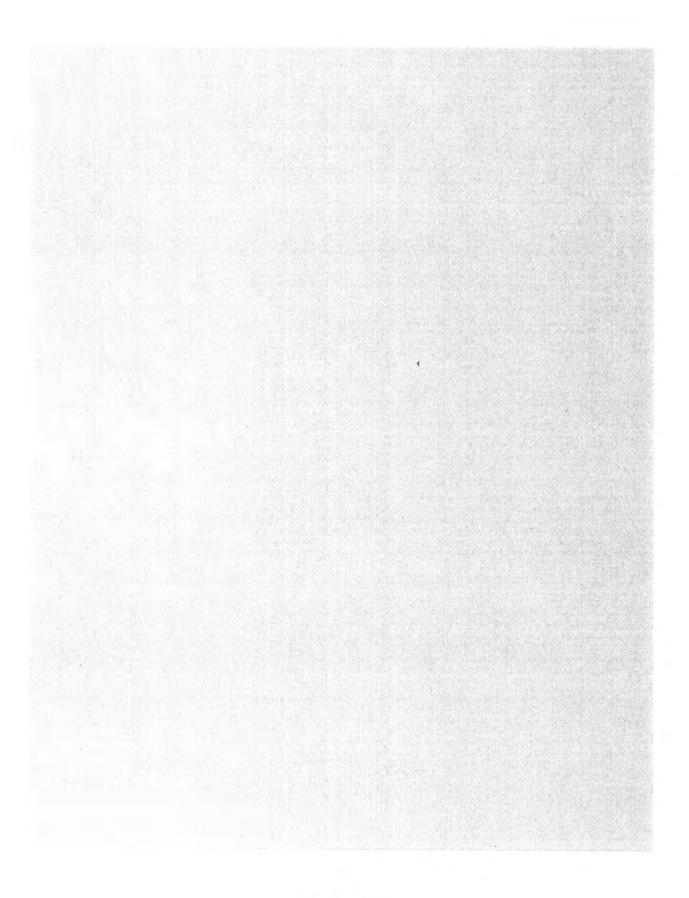


Figure 19: Photograph Showing NOVA System's

(CX-1199.0001 (annotated); CPX-0016; CPX-0018; RPX-0006; CDX-5061; Tr. (Wolski) at 409:13-410:1.).

. (Tr. (Wolski) at 410:2-

411:17; *Markman* Order, App. A at 12 12; CDX-5062-5064; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not dispute this aspect of the claim limitation in its Pre-Hearing Brief or during the Hearing. Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.



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RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not dispute this aspect of the claim limitation in its Pre-Hearing Brief or during the Hearing. Thus, any argument on this issue is deemed waived under Ground Rules 7.2 and 10.1.

Moreover, as discussed above in Section VII.A.3(vii),

, which ABI did not dispute.

(See Section VII.A.3(vii), supra; Tr. (Wolski) at 410:2-411:17; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.).

Additionally, as shown below in Figure 21, Heineken presented compelling argument and evidence that the shut-off value is freely movable with the flexible tube upon placement and removal of the value into and from the dispensing head and is fixed in position by being releasably attached to the dispensing head. Based on ABI documents, Mr. Wolski provided the following testimony:

(Tr. (Wolski) at 411:18-412:22; CX-0645C.0016; *Markman* Order, App. A at 12; CDX-5065C-5068; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.).

Figure 21: ABI Document Showing (CX-0645C.0016)

(CX-0645C.0016.).

For these reasons, Heineken has proven by a preponderance of evidence that the NOVA System meets limitation 1[f] of claim 1 of the '751 patent.

viii. 1/g/: "wherein the shut-off valve is fixedly attached²⁶ to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container"

The NOVA System's shut-off valve is fixedly attached to an outflow end of the flexible

²⁶ The term "fixedly attached" was given its "[p]lain and ordinary meaning, which is securely fastened." (*Markman* Order, App. A at 18.).

tube and is removable from the dispensing device upon replacement of the container. (Tr. (Wolski) at 413:1-415:1; CDX-5069C-5071C; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not dispute this in its Pre-Hearing Brief or during the Hearing. Thus, any argument on this issue is deemed waived under Ground Rules 7.2 and 10.1.

The NOVA System's disposable coupler includes a beer valve fixedly attached to the outlet end of the flexible tube. (Tr. (Wolski) at 413:1-415:1; see also CX-1630C; CX-1207.0001.).

Moreover, Heineken's expert, Mr.

Wolski, could not detach the flexible tube from the shut-off valve when he attempted to pull or disconnect the two components upon physical inspection. (Tr. (Wolski) at 413:19-414:12.).

For the reasons discussed above, Heineken has proven by a preponderance of evidence that the NOVA System meets limitation 1[g] of claim 1 of the '751 patent.

- b) Claim 3
 - i. "Drink dispenser assembly (1, 25) according to claim 1, characterised in that the dispensing line (28) is provided with an outlet section (41, 103) located downstream of the shut-off valve (19, 32)."

The NOVA System is a drink dispenser assembly according to claim 1, as discussed above in Section VII.A.3(a). The NOVA System's dispensing line has with an outlet section located downstream of the shut-off valve. (Tr. (Wolski) at 415:11-416:18; CDX-5074C; CPX- 0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not dispute this in its Pre-Hearing Brief or during the Hearing. Thus, ABI has waived any argument on this issue pursuant to Ground Rules 7.2 and 10.1.

As described above in Section VII.A.3(a), the NOVA System's disposable coupler is a dispensing line. The dispensing line includes an outlet section circled in red below in Figure 22. (Tr. (Wolski) at 415:11-416:18).



Figure 22: NOVA System's Dispensing Line

(CX-1207 (annotated); CPX-0021-22; RPX-0010C; CDX-5074C.).

The outlet section is where the carbonated drink leaves the dispensing line. (Tr. (Wolski) at 415:11-416:18; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). This section is positioned downswream of the beer valve because the flow of beer commences at the keg and concludes at the outlet section. (Tr. (Wolski) at 415:11-416:18; CPX-0016; CPX-0018-0019; CPX0021-0022; RPX-0006C; RPX-0007C; RPX-0010C; CX-0004C (Vanderkerckhove Dep. Tr.) at 140:22-24 ("Q.

.").).

Accordingly, Heineken has proven by a preponderance of evidence that the NOVA

System meets the additional limitation recited in claim 3 of the '751 patent.

c) Claim 7

Although there are some differences between claims 1 and 7, the claim limitations recited

in claim 7 are contained in those disclosed in claim 1, as shown in Table No. 5 below. (Tr.

(Wolski) at 416:19-422:14; CDX-5075-5084.).

Claim 1	Corresponding Limitation in Claim 7
1[Pre]: Drink dispenser assembly (1, 25) comprising	
1[a]: a dispenser device (2, 37) provided with a dispensing head (18, 29)	7[b]: dispensing head of a drink dispenser device
1[b]: comprising an at least partially flexible dispensing line (17, 28)	7[a]: having an at least partially flexible dispensing line (17, 28)
1[c]: a container (7, 27) containing carbonated drink	7[Pre]: Container (7, 27) provided with a carbonated drink
1[d]: connected during use to the dispensing line (17, 28) which has a coupling element at an outlet end for connection to the dispensing head (18, 29)	7[b]: which is connectable to the container and has a coupling element close to one end for connection to a dispensing head of a drink dispenser device
1[e]: characterised in that the coupling element comprises a shut-off valve (19, 32) made of rigid material that is selectively openable and closable after placing the outlet end of the dispensing line (17, 28) into the dispensing head (18, 29)	7[c]: characterised in that the coupling element comprises a shut-off valve (19, 32) made of rigid material which is openable and closable after placing the end of the dispensing line (28) into the dispensing head (18, 29)
1[f]: the dispensing head (18, 29) comprising a knob or handle and an operating element (45, 98) connected to said knob or handle by means of which the shut-off valve (19, 32) is detachably connectable for opening and	7[d]: the dispensing head (18, 29) comprising a knob or handle and an operating element (45, 98) connected to said knob or handle by means of which the shut-off valve (19, 32) is detachably connectable for opening and

Table No. 5: Claim Limitations of Claims 1 and 7

Claim 1	Corresponding Limitation in Claim 7
closing of the shut off valve by moving the knob or handle, wherein the shut-off valve is freely movable with the flexible tube upon placement and removal of the valve into and from the dispensing head and is fixed in position by being releasably attached to the dispensing head	closing of the shut off valve by moving the knob or handle, wherein the shut-off valve is freely moveable with the flexible tube upon placement and removal of the valve into and from the dispensing head and is fixed in position by being releasably attached to the dispensing head
1[g]: wherein the shut-off valve is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container	

Therefore, the differences are inconsequential for the following reasons and do not require a separate limitation-by-limitation analysis.

First, claim 7 does not include the preamble and claim limitation [1g] of claim 1, i.e., "[a] drink assembly comprising," and "wherein the shut-off value is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container," respectively.

Second, the coupling element recited in limitation [7b] of claim 7 is "close to one end," rather than "at an outlet end," as recited in limitation [1d] of claim 1. (Tr. (Wolski) at 418:14-16.). However, as Mr. Wolski confirmed, the coupling element "at an outlet end" satisfies the claim limitation of the coupling element "close to one end." (*Id.* at 418:19-419:4.).

Third, the "at least partially flexible dispensing line" of limitation [7a] of claim 7 is "connectable to the container," as opposed to the container "connected during use to the dispensing line" recited in limitation [1d] of claim 1. (*Id.* at 417:25-418:1.). As discussed in Section VII.A.3(v), the "at least partially flexible dispensing line" of claim 7 is connectable to the container. (*See also id.* at 418:2-12.). In its Pre-Hearing and Post-Hearing Briefs aside from relying on the non-infringement contentions ABI raised with regard to claim 1, ABI did not present any separate rebuttal arguments against claim 7. (CPBr. at 25.). Thus, ABI has waived any additional argument on this issue pursuant to Ground Rules 7.2 and 10.1.

For these reasons, Heineken has proven by a preponderance of evidence that the NOVA System meets the limitations recited in claim 7 of the '751 patent.

d) Claim 10

i. "Container (7, 27) according to claim 7, characterised in that the dispensing line (17, 28) is provided at the outlet end with a relatively rigid²⁷ tube section (41) with the shutoff valve (19, 32) connected thereto."

For the reasons discussed above in Section VII.A.3(c), the NOVA System meets claim 7. The NOVA System's disposable dispensing line also has an outlet end, which is the end where beer is dispensed from the NOVA System. (Tr. (Wolski) at 422:15-424:12; *Markman* Order, App. A at 23; CDX-5087C; CX-1207.0001; CPX-0016; CPX-0018-0019; CPX-0021-0022; RPX-0006C; RPX-0007C; RPX-0010C.). ABI did not dispute this in its Pre-Hearing Brief or during the Hearing. Thus, any argument on this issue is deemed waived under Ground Rules 7.2 and 10.1.

The outlet end has a "relatively rigid tube section" made of black plastic connected to the shut-off valve. (Tr. (Wolski) at 422:15-424:12; CDX-5058C.). The "relatively rigid tube section" with the shut-off valve connected thereto is circled in red below in Figure 23.

²⁷ The term "relatively rigid" was given its plain and ordinary meaning, "which is a section of tube that is relatively not flexible or pliant; stiff relative to another part of the tube." (*Markman* Order, App. A at 23.).

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Figure 23: NOVA System's Dispensing Line



(CX-1207 (annotated); CPX-0021-22; RPX-0010C; CDX-5085C-5087C; Tr. (Wolski) at 422:15-424:12.).

Mr. Wolski confirmed that the circled black plastic tube section is relatively stiff, not flexible or pliant, especially when compared to the clear tube portion of the NOVA System's dispensing line. (Tr. (Wolski) at 424:3-9; CDX-5058C; CPX-0021-0022; RPX-0010C.). Specifically, and as Mr. Wolski explicated above in in Section VII.A.3(a)(vi), the black plastic tube section is made of a " (Tr.

(Wolski) at 422:15-424:12; CX-1630C; CX-0065C.0001; CPX-0021-0022; RPX-0010C.).

For the foregoing reasons, Heineken has proven by a preponderance of evidence that the NOVA System meets the additional limitation recited in claim 10 of the '751 patent.

4. The NOVA System Version 3 Practices Claims 1, 3, 7, and 10 of the '751 Patent

For the first time during the Hearing, ABI argued that Heineken did not prove infringement because, according to ABI: (1) the NOVA System version 4 is the only accused product in this Investigation; (2) the NOVA System version 3 is not a NOVA product; (3) the NOVA System version 3 was not part of the Complaint or Heineken's infringement contentions; and (4) Heineken has failed to prove infringement because it used both versions 3 and 4 of the

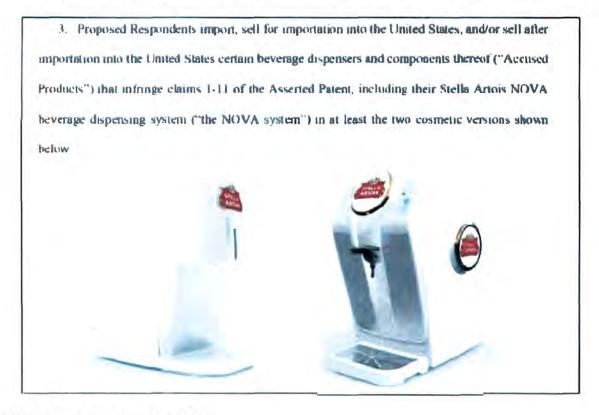
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NOVA System when Heineken presented evidence of infringement. (See Tr. (Wolski) at 389:12-17, 390:9-13, 390:23-391:5, 395:20-396:7.). ABI's belated assertions are flawed for the following reasons.

First, ABI's argument that version 3 is not a NOVA product and is not an accused product in this Investigation belies the allegations Heineken specified in: (i) the third paragraph of its Complaint, (ii) the stated scope of the NOI; and (iii) the allegations set forth in Mr. Wolski's expert report. To begin with, Heineken specifically asserted the '751 patent against versions 3 and 4 of the NOVA System in the Complaint. The image on the right in Figure 24 below is version 3, and the image on the left is version 4. (CX-0486C at Interrog. No. 11; CX-0008C (Marc Thorpe Dep. Tr.)²⁸ at 28:14-20; CX-0005C (Dirx) at 72:8-16.).

²⁸ At the time of his deposition, Mr. Marc Thorpe was the manager and sole owner of Marc Thorpe Design. (CX-0008C (Thorpe Dep. Tr.) at 5:13-15, 5:24-6:5.). ABI retained Mr. Thorpe to assist with the design of the NOVA System. (*Id.* at 14:22-25, 88:23-89:11; *see also* Tr. (Dirx) at 789:5-14.).

Figure 24: Excerpt from Complaint Showing Both Versions of NOVA System



(CBr. at 33 (citing Compl. at ¶3).).

Additionally, Exhibit 8 to Heineken's Complaint contained close to 100 pages of infringement charts that included citations to versions 3 and 4 of the NOVA System. (Compl. at Ex. 8 n.1 ("While there appear to be two cosmetic versions of the NOVA appliance in the marketplace, on information and belief they do not differ in any respect relevant to infringement of Heineken's '751 Patent. Both versions are referred to interchangeably herein as the NOVA system.").). Moreover, the NOI defines the scope of the investigation as "drink dispensing systems that include a dispenser, a replaceable dispensing line, and a beverage container." (NOI at 2.). Mr. Wolski's opening expert report also addressed versions 3 and 4. (Doc. ID No. 673002 at 32). Tellingly, ABI has represented the "CTD version 3" as a "NOVA," as seen in its

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publically available YouTube training video. (CX-1102; CX-1103; CX-1105; see also Tr. (Ingram) at 762:5-14, 764:7-16; Section VII.B.3.).

Second, ABI's allegation that Heineken has not proven infringement because of Heineken's reliance on evidence from both versions 3 and 4 is also erroneous. Although Heineken presented evidence from both versions of the NOVA System during the Hearing, Heineken offered evidence for at least version 4 for each and every limitation recited in claims 1, 3, 7, and 10 of the '751 patent. For instance, Mr. Wolski testified that he physically analyzed the version 4 model of the NOVA System. (Tr. (Wolski) at 388:17-389:5.). Additionally, all of the evidence cited in Section VII.A.3 above is to version 4 of the NOVA System. (*See* Section VII.A.3, *supra*.).

Mr. Wolski's opinion that version 3 of the NOVA System infringes the '751 patent is based on his analysis of the version 4 model and ABI's repeated statements in discovery that there are no meaningful differences between versions 3 and 4 of the NOVA. ABI's employee, Mr. Vanderkerckhove, who was involved with the NOVA project until production began, explicitly confirmed that versions 3 and 4 of the NOVA System are "*identical* in technical function." (CX-0004C (Vanderkerckhove Dep. Tr.) at 77:17-22 (emphasis added) ("Q. So is the

(CX-0004C (Vanderkerckhove Dep. Tr.) at 71:2-11.). 29

(CX-0322C.).

Based on ABI's admissions regarding the technical similarities between the two versions, and the unequivocal record that both versions were accused products in this case, Heineken demonstrated that both version 3 and version 4 of the NOVA System have been accused in this Investigation and practice claims 1, 3, 7, and 10 of the '751 patent.

²⁹ In view of so much evidence that ABI must have known did not support its position, including from its own witness and documents, it surprising that ABI even mounted an argument on this issue.

5. Heineken Has Proven Direct Infringement by Importation, Domestic Sale, and Use

a) Direct Infringement by Importation

For the first time in its post-hearing briefing, ABI contended that there is no infringement because the components alleged to comprise the NOVA System, i.e., the appliance (or dispensing device), keg (or container), and beer line, have never been imported together or in a fully assembled state. (RRBr. at 15-16.). By doing so, ABI raised two questions with regard to "articles that infringe," as recited in Section 337: (i) whether products that directly infringe *after importation* qualifies as such "articles"; and (ii) whether components of an otherwise infringing article must be *imported together or assembled* such that the article infringes at the time of importation. The Commission and Federal Circuit have issued conflicting opinions on these issues.

In Certain Electronic Devices with Image Processing Systems, Components Thereof, and Associated Software ("Certain Electronic Devices"), Inv. No. 337-TA-724, USITC Pub. No. 4374, Comm'n Op. (Feb. 2013), the Commission held that it **lacked** authority to exclude articles that do not infringe at the time of importation, despite the fact that the importer directly infringed by using the articles after importation. *Id.* The Commission interpreted "articles that infringe" to refer to the articles at the time of importation, and interpreted "infringe" to be defined by the patent statute as including both direct infringement and the two types of indirect infringement. *Id.* at 13-19. Based upon its interpretation, the Commission found that "Apple does not import an article that meets every limitation of [the asserted] claim" because "the data that [the accused product] relies upon for infringement of [the asserted] claim ... is created in the United States." Id. at 14.30

However, contrary to the Commission's opinion in Certain Electronic Devices, in

Suprema, Inc. v. International Trade Commission, 796 F.3d 1338 (Fed. Cir. 2015) (en banc), the

Federal Circuit held that the Commission's had authority to exclude articles that do not infringe

at the time of importation where the importer induced direct infringement of a third party who

used the articles after importation. Id. In the context of induced infringement, the Federal

Circuit explained that:

Liability for inducement nevertheless attaches as of the time of the inducing activity, provided that direct infringement *eventually* occurs. *Standard Oil*, 754 F.2d at 348. The Commission's interpretation recognizes that the acts necessary for induced infringement, *including acts of direct infringement, may not occur simultaneously at the time of importation*. In many cases, such acts cannot occur at the time of importation. In that context, the Commission's interpretation that Section 337 grants it authority to prevent importation of articles that have been part of inducement as an unfair trade act is consistent with the statutory phrase "articles that infringe."

The Commission's interpretation is also consistent with the text of Section 337 as a whole. See Holder, 132 S.Ct. at 2017 (finding an agency's interpretation consistent with statute's text, and thus reasonable). Section 337 contemplates that infringement may occur after importation. The statute defines as unlawful "the sale within the United States after importation ... of articles that—(i) infringe" § 337(a)(1)(B)(i). The statute thus distinguishes the unfair trade act of importation from infringement by defining as unfair the importation of an article that will infringe, i.e., be sold, "after importation." Id. Section 337(a)(1)(B)'s "sale ... after importation" language confirms that the Commission is permitted to focus on post-importation activity to identify the completion of infringement.

Id. at 1349 (emphases added).

Consistent with the Federal Circuit's interpretation of the Commission's authority in

Suprema, the Commission held in a subsequent opinion, in which it modified a limited exclusion

³⁰ In other words, an aspect of the accused product necessary for a finding of infringement was never imported into the U.S. That is not the case here. As discussed below, Heineken presented evidence that each component of the NOVA System has been imported into the U.S.

order ("LEO"), that fully assembled products that infringe after importation were included in the LEO. Certain Marine Sonar Imagining Devices, Including Downscan and Sidescan Devices, Products Containing the Same, and Components Thereof ("Certain Sonar Imagining Devices"), Inv. No. 337-TA-921, Comm'n Op. Modifying a Limited Exclusion Order at 4 (Aug. 20, 2016)("Marine Sonar Devices"). Specifically, the Commission found that the accused marine sonar imaging devices directly infringed the asserted claims of the asserted patents. Id. at 2. The Commission also found that the importation of certain components, including "standalone transducers," did not constitute indirect infringement of the asserted patents. Id. Paragraph 4 of the LEO recited a carve-out provision, which stated that the paragraph reciting the exclusion provision did not apply to the components, such as the "standalone transducers," that the Commission specifically found did not indirectly infringe the subject claims. Id.

The complainant in *Marine Sonar Devices* later filed a petition for modification of the LEO. *Id.* at 3. In its petition, the complainant requested that "the Commission modify the LEO in order to clarify that components of the excluded marine sonar imaging devices, including 'standalone transducers,' are subject to exclusion when the components are intended to be included in a *fully assembled* (also referred to as *fully 'kitted'*) infringing product *after* importation." *Id.* (emphases added). The complainant "argue[d] that modification of the LEO 'is necessary in order to *give effect* to the Commission's infringement ruling and concomitant order that covered [certain] products be excluded from entry' in view of a change in [Respondents'] importation practice." *Id.* (emphasis added). In granting the complainant's petition and modifying the LEO, the Commission explained that its "infringement finding *includes* components that are imported for the purposes of *assembling or 'kitting' the infringing device*" and thus held that these components were included in the scope of the exclusion

provision of the LEO. Id. at 4 (emphases added).

Although the law is not settled on whether "articles that infringe" include products that

directly infringe after importation, and/or components of an infringing product that are imported

separately, the Federal Circuit's rationale behind its ruling in Suprema is instructive. For

example, the Federal Circuit repeatedly referenced the Commission's broad jurisdictional scope

to thwart all forms of unfair practice.

The legislative history consistently evidences Congressional intent to vest the Commission with broad enforcement authority to remedy unfair trade acts.... The United States Tariff Commission ("Tariff Commission"), the predecessor to the Commission, was established in 1916. Pub.L. No. 64–271, 39 Stat. 795 (1916). From its creation, a fundamental purpose of the Tariff Commission was to prevent a diverse array of unfair methods of competition in the importation of goods. Recognizing the challenges posed by the wide array of unfair methods of competition, Congress emphasized the broad scope of the enforcement powers granted to the Tariff Commission when it passed the 1922 Tariff Act. With respect to Section 316 of the 1922 Tariff Act, the precursor to Section 337, Congress explained that the "provision relating to *unfair methods of competition* in the importation of goods," was "broad enough to prevent *every type and form* of unfair practice...." S.Rep. No. 67–595, at 3 (1922) (emphasis added).

In the Tariff Act of 1930, Congress superseded Section 316 with Section 337, but did not alter the Tariff Commission's broad authority to address every type and form of unfair trade practice. See Pub.L. No. 71–361, 46 Stat. 590 (1930). Section 337 "provides broadly for action by the Tariff Commission in cases involving 'unfair methods of competition and unfair acts in the importation of articles' but does not define those terms nor set up a definite standard." In re Von Clemm, 43 C.C.P.A. 56, 229 F.2d 441, 443 (1955). When Congress used the words "unfair methods of competition and unfair acts in the importation of articles," that language is "broad and inclusive and should not be limited to, or by, *technical definitions* of those types of acts." Id. at 444 (emphasis added).

Suprema, 796 F.3d at 1350 (emphases in original).

The Federal Circuit also clarified that the 1988 amendments to Section 337 intended to

augment the Commission's authority, rather than diminish it, as the Federal Circuit had found

the panel's underlying opinion had done.

Congress amended Section 337 in 1988, removing the requirement that a complainant must show injury to domestic industry before a violation is found. Omnibus Trade and Competitiveness Act of 1988, Pub.L. No. 100-418, 102 Stat. 1107 (1988) (codified at Section 337(a)(2)-(3)). As a part of this effort, the 1988 Act inserted the phrase "articles that infringe." *Id.* Congress declared its purpose to *enhance* Commission authority. The "fundamental purpose" of the 1988 amendment was to "*strengthen* the effectiveness of section 337" against the "importation of articles which infringe U.S. intellectual property rights." H.R.Rep. No. 100-40, pt. 1, at 155 (1987); *see also* H.R.Rep. No. 100-576, at 112 (1988) (Congressional finding that the amendments to Section 337 "make it a more effective remedy for the protection of United States intellectual property rights"). The Commission's interpretation is consistent with Congress' longstanding, broad policy, and with its broadening purpose in 1988.

The technical interpretation adopted by the panel *weakens* the Commission's overall ability to prevent unfair trade acts involving infringement of a U.S. patent. The panel's interpretation of Section 337 would eliminate relief for a distinct unfair trade act and induced infringement. There is no basis for curtailing the Commission's gap-filling authority in that way.

Id. at 1351-52 (emphases added).31

The Federal Circuit explained that the "practical consequence" of the panel's holding

"would be an open invitation to foreign entities (which might for various reasons not be subject

to a district court injunction) to circumvent Section 337 by importing articles in a state

requiring post-importation combination or modification before direct infringement could be

shown. Id. at 1352 (emphasis added). ABI appears to be doing the same here. As discussed

above in Section VII.A.3, the main three (3) components of the NOVA System must be used

together in order to dispense beer in a manner that infringes the asserted claims of the '751

³¹ In the underlying opinion, a majority of the panel "concluded that the Commission lacks authority under Section 337 to issue an exclusion order predicated on induced infringement because such imports are not in an infringing state upon importation." Suprema, 796 F.3d at 1344 (citing Suprema, Inc. v. Int'l Trade Comm'n, 742 F.3d 1350, 1357 (Fed. Cir. 2013)). The Court reasoned that "Section 337's language, 'articles that infringe,' is a temporal requirement and that infringement must be measured at the time of importation." Id. (citing Suprema, 742 F.3d at 1363).

patent. (See, e.g., CX-0645C.0012.).

As the Federal Circuit expressed, limiting "articles

that infringe" to products that literally infringe, at the time of importation, *permits importers to bypass the Commission's jurisdiction by importing the components of an infringing product separately*. Such a result in inconsistent with the Commission's directive, that is to stop all unfair trade acts. *Suprema*, 796 F.3d at 1350-51 (citing S.Rep. No. 67-595, at 3 (1922); H.R.Rep. No. 100-40, pt. I, at 155 (1987); H.R.Rep. No. 100-576, at 112 (1988)).).

Accordingly, the Federal Circuit's well-reasoned interpretation of the meaning of "articles that infringe" defined in *Suprema* covers: (i) products that directly infringe *after importation*; and (ii) infringing products whose components are not *imported together or assembled* at the time of importation. Based upon this understanding, Heineken presented evidence and elicited testimony demonstrating that ABI imports the NOVA System into the United States.

For example, ABI's fact witness, Mr. Ingram, in a declaration ("1115 Declaration") he signed on May 15, 2018 in support of ABI's assertion of a domestic industry in Investigation No. 337-TA-1115 ("1115 Investigation"), explicitly stated that "Anheuser-Busch orders, ships and *imports the NOVA System into the U.S.* for sale to its U.S. customers." (CX-0122 at ¶ 15 (May 15, 2018) (emphasis added).). Consistent with Mr. Ingram's statement in his 1115 Declaration, ABI also provided the following supplemental response to Interrogatory No. 11 approximately three (3) weeks before the close of fact discovery on December 28, 2018:

(CX-0486C at Interrog. No. 11 (Dec. 7, 2018) (emphasis added).).

During both the Hearing and his deposition, Mr. Ingram confirmed that "the NOVA System" to which he was referring in his 1115 Declaration was the appliance, keg, and beer line that make up the NOVA System. (Tr. (Ingram) at 755:22-756:6 ("When I refer to a NOVA system, I am referring to the three distinct components that's required to make it work.... Generally, that's the appliance, that's the keg and that's the beer line, yes."); CX-0001C (Ingram Dep. Tr.) at 167:14-168:3).).

. (CX-0486C at

Interrog. No. 98 (Dec. 7, 2018); see also Tr. (Ingram) at 773:18-21.).

(Tr. (Ingram) at 710:6-18 (emphases added).).

Mr. Ingram also testified that "in 2018, 708:25-709:4; see also id. at 708:14-18 ("in 2018, " (Id.

'). Mr. Ingram's statement in the 1115 Declaration, a sworn representation to the ITC that served ABI's purpose for establishing the requisite domestic industry in the 1115 Investigation. (CX-0122 at ¶ 15 (May 15, 2018); see also Doc. ID No. 643558 (1115 Complaint) at ¶ 80 ("The ABI Products also include the (i) NOVA Bottle and appliance for dispensing beer ('NOVA System'), currently imported into and sold in the United States'') (emphasis added).). Mr. Ingram and ABI cannot use importation of the NOVA System as a sword in the 1115 Investigation and a shield here. Thus, this testimony has been given little, if any, evidentiary weight.

ABI's basis for this belated argument is that the '751 patent is a "combination patent," which ABI also did not raise in its Pre-Hearing Brief. (RRBr. at 14-15.). ABI relied upon *Deepsouth Pkg. Co. v. Laithram Corp.*, 406 U.S. 518 (1972), in which the Supreme Court held that "a patent on a combination is a patent on the assembled or functioning whole, not on the separate parts." *Deepsouth Pkg. Co.*, 406 U.S. at 528 (citation omitted). ABI's contention is a red herring and inapplicable here.

As an initial matter, a "combination patent" specifically refers to a patent claiming an invention that combines elements from multiple patented items. *See, e.g., Deepsouth*, 406 U.S. at 520-21 (quoting *Prouty v. Ruggles*, 16 Pet. 336, 341, 10 L.Ed. 985 (1842). If existing patents can be combined into an entirely novel and nonobvious use, the combination of these patents can itself be patented. *See, e.g., Technical Tape Corp. v. Minnesota Mining & Mfg. Co.*, 247 F.2d 343, 347 (2nd Cir. 1957) ("A novel combination of old elements which cooperate with each other so as to produce a new and useful result is patentable."). The patent at issue in *Deepsouth* involved such patents, and the Supreme Court's holding addressed infringement in that specific context. *Deepsouth*, 406 U.S. at 520, 525 (noting that the asserted patents are "combination patents" and that "a combination patent protects only the combination"). Nothing in *Deepsouth* supports ABI's proposition that all three components of the NOVA System must be imported together or in an assembled state at the time of importation.

ABI also cited Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316 (Fed. Cir. 2001) and quoted the Federal Circuit's holding that a "device ... capable of being modified to operate in an infringing manner is not sufficient, by itself, to support a finding of infringement." Id. at 1330. In addition, ABI relied upon Nazomi Communications, Inc. v. Nokia Corp., 739 F.3d 1339 (Fed. Cir. 2014) for the proposition that there could not infringement, where the accused products "were not, without further steps, 'presently "structured" . . . to infringe' when sold." *Id.* at 1346 (citation omitted). Like *Deepsouth*, these cases do not involve any issues regarding the importation requirement in Section 337 investigations. Thus, they are inapposite. ABI's argument that there is no infringement based upon belated introduced theory has no merit based upon the substantive case precedent and its own evidence.

For the foregoing reasons, Heineken has proven by a preponderance of evidence that ABI directly infringed the '751 patent by importing the NOVA System into the United States.

b) Direct Infringement by Domestic Sale

Heineken presented incontrovertible evidence that ABI sells the NOVA System in the U.S. For instance, Mr. Ingram declared under penalty of perjury that "[i]n August or September, 2015, ABI began selling the NOVA System in key cities in the United States" and that "Anheuser-Busch orders, ships and imports the NOVA System into the U.S. for sale to its U.S. customers." (CX-0122 ¶¶ at 14 and 15.).

Moreover, during discovery in this Investigation, ABI confirmed that it sells the NOVA^{*} System. (CX-0451C at Interrog. No. 9.). Mr. Ingram testified that ABI's sales representatives

ABI argued that it '

' (RRBr.

at 15 (citing Tr. (Ingram) at 705:14) (other citations omitted)).). However, the rest of Mr.

Ingram's testimony on this point contradicts ABI's argument and reflects that the NOVA appliance is still available to customers.

(Tr. (Ingram) at 705:12-706:6 (emphasis added).).

Thus, the evidence demonstrates that ABI continues to sell the NOVA appliance to those who express interest. Furthermore, as of November 28, 2018,³² Mr. Ingram confirmed that ABI

(Tr. (Ingram) at 767:13-768:6; see also CX-0003C (Garrison Dep. Tr.) at 54:14-25, 130:25-131:23; CPX-0023; CX-0007C (Machens Dep. Tr.) at 73:21-74:21; CX-0908C.).

ABI also continues to sell the NOVA kegs. (Tr. (Ingram) at 720:22-25, 768:12-19; CX-

³² This was the date of

0486C at Interrog. No. 2; CX-0909C; CX-0910C; CX-0003C (Garrison Dep. Tr.) at 44:9-15, 51:18-52:5, 102:16-104:2, 143:2-16, 143:22-144:13, 149:24-25, 150:5-10; CPX-0023; CX-0007C (Machens Dep. Tr.) at 75:18-76:3.). Mr. Ingram confirmed that ABI

(Tr. (Ingram) at 770:6-

8 ("Q. And as of December 2018,

.). Additionally, as of the close of fact discovery, ABI continued to

(Tr. (Ingram) at

770:9-11); CX-0486C at Interrog. No. 2; CX-0001C (Ingram Dep. Tr.) at 46:23-47:9; see also CX-0003C (Garrison Dep. Tr.) at 43:3-12, 44:5-8, 44:9-15, 52:19-53:2, 59:7-12, 102:16-104:2; CX-0007C (Machens Dep. Tr.) at 74:22-75:13.).

For these reasons, Heineken has proven that ABI directly infringed the '751 patent by selling the NOVA System in the United States.

c) Direct Infringement by Use

Evidence adduced in this Investigation reflects that ABI employees have used the NOVA System in the United States.

was (CX-0001C (Ingram Dep. Tr.) at 130:13-21.). Other ABI employees provided testimony that corroborated the continuing use of the NOVA System in the United States.

Marc Thorpe, whom ABI retained to assist with the design of the NOVA System, confirmed that a photograph on the website of one of his interns showed Mr. Thorpe pouring a beer using the NOVA System during a launch event in New York City. (CX-0008C (Thorpe Dep. Tr.) at 93:6-17; *see also id.* at 14:22-25, 88:23-89:11.).

Additionally, video evidence of use of version 3 of the NOVA System was shown during the Hearing. ABI filmed the training videos, CX-1102, CX-1103, and CX-1105, in the United States. (CX-0007C (Machens Dep. Tr.) at 99:18-100:6, 100:10-18, 100:24-102:6, 102:11-105:5; CX-1102; CX-1103; CX-1105.). In these training videos, an ABI employee demonstrated the functionality and operation of the NOVA System in St. Louis, MO, which included assembling and disassembling the components of the NOVA System. (CX-0007C (Machens Dep. Tr.) at 99:18-105:5 ("Q. And are these the training videos you were referring to earlier in your deposition for the NOVA? A. Yes."); CX-1105.).

Accordingly, Heineken has proven that ABI directly infringed the '751 patent by using the NOVA System in the United States.

B. Indirect Infringement

- 1. Legal Standards
 - a) Induced Infringement

"Whoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b). A patentee asserting a claim of inducement must show (i) that there has been direct infringement and (ii) that the alleged infringer "knowingly induced infringement and possessed specific intent to encourage another's infringement." *Minnesota Mining & Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1304-05 (Fed. Cir. 2002). With respect to the direct infringement requirement, the patentee "must either point to specific instances of direct infringement or show that the accused device necessarily infringes the patent in suit." *ACCO Brands, Inc. v. ABA Locks Mfrs. Co., Ltd.*, 501 F.3d 1307, 1313 (Fed. Cir. 2007) (citation omitted). This requirement may be shown by circumstantial evidence. *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1326 (Fed. Cir. 2009). "[A] finding of infringement can rest on as little as one instance of the claimed method being performed during the pertinent time period." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1317 (Fed. Cir. 2009); *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1364 (Fed. Cir. 2012) (citing *Lucent Techs.*, 580 F.3d at 1317).).

The specific intent requirement for inducement necessitates a showing that the alleged infringer was aware of the patent, induced direct infringement, and that he knew that his actions would induce actual direct infringement. *Commil USA, LLC v. Cisco Sys., Inc.,* 720 F.3d 1361, 1367 (Fed. Cir. 2013), *aff'd and vacated in part on other grounds*, 135 S. Ct. 1920, 1926-28

(2015); Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068-70 (2011). Specific intent can be shown by, for example: (1) changes in importation practices effectuated to shift infringement liability; (2) the infringer's copying of patented technology; and (3) the infringer's willful blindness of the underlying direct infringement. Certain Network Devices, Related Software and Components Thereof (1), Inv. No. 337-TA-944, Initial Determination at 82; see also Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 1920, 1924-25 (2015) ("It was not only knowledge of the existence of [the asserted] patent that led the Court to affirm the liability finding but also it was the fact that [the accused infringer] copied 'all but the cosmetic features of the [patented product],' demonstrating [the accused infringer] kn[ew] it would be causing customers to infringe [the asserted] patent.") (quoting Global-Tech, 131 S. Ct. at 2071).).

Willful blindness, which also constitutes "knowledge," has two basic requirements: "(1) the defendant must subjectively believe that there is a high probability that a fact exists"; and "(2) the defendant must take deliberate actions to avoid learning of that fact." *Global-Tech*, 131 S. Ct. at 2070. The intent to induce infringement may be proven with circumstantial or direct evidence and may be inferred from all the circumstances. *Commil*, 720 F.3d at 1366; *Global-Tech*, 131 *Tech*, 131 S. Ct. 2071-72.

The Federal Circuit has upheld the Commission's authority to cover "goods that were used by an importer to directly infringe post-importation as a result of the seller's inducement." Suprema, 796 F.3d at 1352-53.

b) Contributory Infringement

35 U.S.C. § 271(c) sets forth the rules for contributory infringement:

Whoever offers to sell or sells within the United States or imports into the United 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 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 noninfringing use, shall be liable as a contributory infringer.

35 U.S.C. § 271(c).

Specifically, with respect to Section 337 investigations, the Federal Circuit has held that "to prevail on contributory infringement in a Section 337 case, the complainant must show inter alia: (1) there is an act of direct infringement in violation of Section 337; (2) the accused device has no substantial non-infringing uses; and (3) the accused infringer imported, sold for importation, or sold after importation within the United States, the accused components that contributed to another's direct infringement." *Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1353 (Fed. Cir. 2010). "[N]on-infringing uses are substantial when they are not unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental." *Vita-Mix*, 581 F.3d at 1327. To determine whether a use is substantial, an Administrative Law Judge may evaluate "the use's frequency,... the use⁴s practicality, the invention's intended purpose, and the intended market." *i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831, 851 (Fed. Cir. 2010). Section 271(c) also requires knowledge of the existence of the patent that is infringed. *Global-Tech*, 131 S. Ct. at 2068.

To satisfy the contributory infringement's knowledge requirement, it is necessary to establish that "the accused contributory infringer knows that its component is included in a combination that is patented and infringing[,]" which requires knowledge of the patent. *Global-Tech*, 131 S. Ct. at 2068. In addition, the Federal Circuit has held that it is not sufficient to know of the patent and the relevant acts, but must also know that "these acts constituted infringement." *Fujitsu Ltd. v. LG Elecs.*, 620 F.3d 1321, 1320 (Fed. Cir. 2010). For purposes of contributory infringement, knowledge is inferred when the article at issue has no substantial non-infringing uses. See Certain Semiconductor Chips with Minimized Chip Package Size and Prods. Containing Same, Inv. No. 337-TA-605, Comm'n Op., 2009 WL 8144934, at *28 (June 3, 2009).

Where infringement allegations address a "separate and distinct" feature of a product, the contributory infringement analysis (for example, with respect to the existence of non-infringing uses) may address the particular feature in question rather than the product as a whole. *See i4i Partnership v. Microsoft Corp.*, 598 F.3d 831, 849 (Fed. Cir. 2010); *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1320-21 (Fed. Cir. 2009); *Ricoh Co. Ltd. v. Quanta Comput. Inc.*, 550 F.3d 1325, 1338 (Fed. Cir. 2008).

2. Indirect Infringement Overview

Heineken alleged that in addition to direct infringement under 35 U.S.C. § 271(a), ABI infringed indirectly pursuant to 35 U.S.C. § 271(b) and (c). (CBr. at 14.).

In sum, Heineken offered sufficient evidence demonstrating that ABI induced infringement and continued to induce infringement of claims 1, 3, 7, and 10 of the '751 patent. by showing direct infringement and that ABI "knowingly induced infringement and possessed specific intent to encourage another's infringement." *Minnesota Mining*, 303 F.3d at 1304-05.

To the contrary, with respect to contributory infringement, ABI provided compelling evidence that certain components of the accused NOVA System have substantial non-infringing uses. Accordingly, Heineken failed to prove that ABI contributed to the infringement of the asserted claims of the '751 patent.

3. ABI Induced Infringement of Claims 1, 3, 7, and 10 of the '751 Patent Heineken presented evidence that demonstrated at least one instance of direct infringement of the asserted claims of the '751 patent. Lucent Techs., 580 F.3d at 1317; Toshiba Corp., 681 F.3d at 1364. For example, Mr. Thorpe testified to "a NOVA being used" in New York "maybe a month or two" before his deposition on November 15, 2018, more than three (3) months after ABI received the Complaint in this investigation on August 2, 2018.

Q. Have you even seen a Nova machine in use in a bar or restaurant?

- A. Yes.
- Q. When?
- A. JFK about maybe a month or two ago.
- Q. The airport, Kennedy Airport in New York?
- A. Kennedy Airport, yes, there was a Nova there being used.

(CX-0008C (Thorpe Dep. Tr.) at 87:5-13; see also id. at 87:22-88:11 (testifying to barber shop in New York City "that has one in use").).

ABI's fact witness, Mr. Garrison, also testified to use of the NOVA in bars and restaurants in the United States. (*See* CX-0003C (Garrison Dep. Tr.) at 76:8-18 ("Q. Have you ever observed a third party pour beer from a NOVA system? ... A. ... I've seen bartenders use them.").). Because the NOVA System has been found to infringe the asserted apparatus claims, Messrs. Garrison and Thorpe's testimony confirming their observation of actual use of the NOVA System by third-parties supports a finding of the underlying direct infringement of claims 1, 3, 7, and 10 of the '751 patent.

ABI asserted that the deposition testimony quoted above is "vague" and merely "speculate[s] that a NOVA *may* have been used in New York," neither of which is not supported by the evidence. (RRBr. at 19 (emphasis in original).). This is a complete misreading and misstatement of the evidence.

To the contrary, the evidence weighs in favor of Heineken for the following reasons.

First, two (2) witnesses, both of whom are associated with ABI, were asked whether they had seen a NOVA System in use. Both confirmed that they had with specificity with respect to when and where. Second, at the time of their depositions, Messrs. Thorpe and Garrison were each in a position to provide accurate and credible testimony whether they had observed third-party use of the NOVA System. Mr. Garrison was an *ABI employee* whom ABI designated as a 30(b)(6) witness to testify on its behalf. (CX-0003C (Garrison Dep. Tr.) at 5:21-6:5, 33:15-18, 35:4-8; *see also* n.20, *supra*.). Mr. Thorpe assisted with the *design* of the NOVA System. (CX-0008C (Thorpe Dep. Tr.) at 14:22-25, 88:23-89:11.). Thus, there is no plausible basis for questioning their testimonies.

Furthermore, there is no dispute that ABI had knowledge of the '751 patent since at least August 2, 2018, the date that Heineken filed the Complaint in this Investigation. (See CX-0451C at Interrog. No. 19.). See, e.g., Certain Beverage Brewing Capsules, Components Thereof, and Prods. Containing the Same ("Certain Beverage Brewing Capsules"), Inv. No. 337-TA-929, Comm'n Op., 2016 WL 9751230, at *10 (Apr. 6, 2016) (finding knowledge requirement for induced and contributory infringement satisfied based on service of the complaint); Certain Microfludic Devices, Inv. No. 337-TA-1068, ID at 117-18 (Sept. 20, 2018) (unreviewed in relevant-part); Certain Semiconductor Chips and Prods. Containing Same, Inv. No. 337-TA-753, Initial Determination at 65 (Mar. 2, 2012) (unreviewed in relevant-part) ("Respondents" knowledge of the Asserted Patents cannot be disputed since they have had notice since at least December of 2010, when the Complaint in this Investigation was filed.").

In addition, particularly in light of the multiple pages of claim charts Heineken provided with its Complaint that detailed how ABI's NOVA System practices the asserted claims of the '751 patent, ABI knew at least by the filing of the Complaint that the NOVA System in the United States infringed the '751 patent, or that Heineken was alleging the same. (Compl. at Ex. 8.).

Moreover, evidence adduced in this Investigation establishes that ABI induced and continues to induce third-party infringement of Heineken's patent. ABI's inducing acts include advertising an infringing use and instructing how to engage in an infringing use. For instance, ABI's training videos have been available publicly on the internet long after institution of this investigation. (Tr. (Ingram) at 761:23-25; CX-1102; CX-1103; CX-1105.). Although ABI argued that those training videos are not for the NOVA System because they depict version 3 of the device, Mr. Ingram unequivocally testified that "AB used [these videos] for training people on how to use the *NOVA system*." (Tr. (Ingram) at 763:16-18 (emphasis added); *see also id.* at 762:1-14.). Mr. Ingram did not distinguish between versions 3 and 4, for good reason: there is little more than a stylistic difference between the two (2) versions.

Ms. Machens confirmed that an instructional manual comes with every NOVA System, which instructs how to connect and disconnect the NOVA's appliance, keg, and disposable coupler and pour a beer from the NOVA System. (CX-0133C.0002, 0011-0013, 0017; CX-0007C (Machens Dep. Tr.) at 84:9-18, 84:22-85:3.). Ms. Machens also testified that ABI contributed to the content of the instructional manual. (CX-0007C (Machens Dep. Tr.) at 84:9-18, see also Doc. ID No. 643558 (Ex. 29 (public version) to ABI's Complaint in Inv. No. 337-TA-1115) (ABI's Global Director of Innovation and Development declaring that "[o]ur customers routinely follow these instructions [in the NOVA operation manual] in coupling the NOVA [b]ottle to the NOVA [a]ppliance to dispense beer").). Moreover, ABI also has provided additional training materials to end users. (*See, e.g.*, CX-0095C; CX-0097C; CX-0133C; CX-0645C; Tr. (Ingram) at 760:11-761:6; CX-0007C (Machens Dep. Tr.) at 83:22-84:2; CX-1102;

CX-1103; CX-1105; CPX-0024.).

Citing Mirror Worlds, LLC v. Apple Inc., 692 F.3d 1351 (Fed. Cir. 2012), ABI argued that Heineken's "speculation" of direct infringement through "user manuals describing the various accused features," "software reviews," and "surveys" was "considered but rejected" by the Federal Circuit. (RRBr. at 19 (citing Mirror Worlds, 692 F.3d at 1360).). ABI's reliance on Mirror Worlds for this proposition is misplaced.

The patent at issue in *Mirror Worlds* was drawn to a method of organizing documents in a computer. *Mirror Worlds*, 692 F.3d at 1358. At a minimum, plaintiff Mirror Worlds needed to demonstrate that Apple customers who used Spotlight, one of the accused features embedded in Apple's accused operating systems, performed the following steps: (i) searched in Spotlight; (ii) received data units from other computer systems (such as received emails); (iii) generated data units (such as sent emails); and (iv) generated a substream (i.e., "time-ordered" search results).³³ *Id.* at 1360.

In that context, the Federal Circuit in Mirror Worlds reiterated that:

It is well settled that excerpts from user manuals as evidence of underlying direct infringement by third parties of products that can be used in a non-infringing manner are by themselves insufficient to show the predicate acts necessary for inducement of infringement. When manuals only teach "customers each step of the claimed method in isolation," but not "all the steps of the claimed method together," the manuals alone cannot support infringement. Such a manual does not show that all of the steps were performed together.

Id. (emphases added) (internal citations omitted) (citing and quoting E-Pass Techs., Inc. v. 3Com Corp., 473 F.3d 1213, 1222 (Fed. Cir. 2007).

³³ The patents at issue in *Mirror Worlds* "are generally directed to searching, displaying, and archiving computer files. The specification discloses a 'document streaming' operating system that, unlike traditional operating systems, identifies documents with a time stamp instead of a file name and maintains them in chronologically ordered 'streams.' 'Every document created and every document sen[t] to a person or entity is stored in a main stream.'" *Mirror Worlds*, 692 F.3d at 1354 (citation omitted).

Here, Heineken elicited credible testimony from deponents, who had intimate knowledge of the NOVA System, and who confirmed without hesitation that they had witnessed the *actual* use of the NOVA System by third-parties. Moreover, in contrast to the manuals upon which Mirror Worlds relied, the ABI training videos and manuals Heineken presented teach ABI's customers to assemble and use the NOVA System in a manner that infringes the asserted *apparatus* claims of the '751 patent. (*See* Section VII.A.3, *supra* (infringement analysis of claim 1 based on, *inter alia*, ABI manual); CX-1102; CX-1103; CX-1105; CX-0133C.0002, 0011-0013, 0017; CX-0095C; CX-0097C; CX-0133C; CX-0645C.). Thus, *Mirror Worlds* is inapposite here.

ABI also relied on *Mirror Worlds* for its contention that "[1]ike the *Mirror Worlds* patentee," Heineken has fallen short of meeting its burden because Heineken "has not provided any customer-use testimony" that "could have substantiated (or disproven) its assertions." (RRBr. at 20.). However, the decision and discussion in *Mirror Worlds* does not support ABI's argument that Heineken was required to present such "customer-use testimony." Tellingly, the Federal Circuit in *Mirror Worlds* noted the lack of trial testimony from Apple customers because Mirror Worlds relied upon manuals and reviews that taught each step of the claimed method *in isolation*. *Mirror Worlds*, 692 F.3d at 1360-61. The Court found that without testimony from customers of "actually using each step of the method claims or tying together the various manuals, reviews, and surveys as evidence of actual use of the claimed method," Mirror Worlds failed to show underlying direct infringement, which is not the case here *Id.* at 1360-61.

Additionally, ABI cited ACCO Brands, Inc. v. ABA Locks Mfrs. Co., 501 F.3d 1307 (Fed. Cir. 2007) in support of its claim that because "Heineken never bothered to investigate these supposed acts of underlying infringement by issuing subpoenas and taking discovery from these

alleged third party users," Heineken failed to point to specific instances of direct infringement. (RRBr. at 19 (citing ACCO, 501 F.3d at 1313).). ACCO in not applicable for the following reasons.

The patents-in-suit in *ACCO* were directed to locking systems. *ACCO*, 501 F.3d at 1310. Based on the adopted construction of the claimed "pin" limitation, the accused key lock could be operated in two ways, one that infringed and one that did not. In support of its assertion of direct infringement, plaintiff ACCO pointed to: (1) expert testimony that users would use the claimed lock "in an infringing manner at least some of the time because that configuration is the most natural and intuitive way to use the lock"; and (2) "a set of instructions provided in ABA's key lock product that described the infringing method ('the ABA hang card')." *Id.* at 1312.³⁴

The Court concluded that "ACCO failed to point to specific instances of direct

infringement," explaining that:

The sole witness at trial who testified to having used the lock in an infringing manner was ACCO's expert, Dr. Dornfeld. However, the record contains no evidence of actual users having operated the lock in an infringing manner. ACCO proffered no witness testimony of actual Belkin key lock users, or surveys of Belkin's customers, that would indicate that a user, aside from the expert retained for this particular litigation, directly infringed the [asserted] patent. Moreover, we are not persuaded by ACCO's assertion that Dr. Dornfeld's testimony combined with the ABA hang card provides substantial evidence of direct infringement. The record indicates that Belkin key lock users received instructions describing the noninfringing press-to-lock method and thus provides no basis for concluding that Belkin key lock users directly infringed the patent. Furthermore, Belkin did not provide the ABA hang card to purchasers.

Id. at 1313 (emphases added).

Here, in sum, it has been determined that use of the NOVA System in the manner taught

³⁴ The defendants in ACCO were ABA Locks Manufacturer Co., Ltd. and Belkin. ACCO, 501 F.3d at 1310.

by ABI in training videos and manuals infringe the asserted claims of the '751 patent. (*See* Sections VII.A.3-4, *supra.*). ABI's fact witness and the designer of the NOVA System, whom ABI retained, testified that they each have seen third-part use of the NOVA System. (CX-0008C (Thorpe Dep. Tr.) at 87:5-13, 87:22-88:11; CX-0003C (Garrison Dep. Tr.) at 76:8-18.). ABI's employee, Ms. Machens, also confirmed that the NOVA instruction manual "came with every NOVA appliance." (CX-0007C (Machens Dep. Tr.) at 84:9-18, 84:22-85:3.).

For these reasons, the weight of the documentary evidence with the testimony Heineken offered demonstrate and prove that ABI induced and continues to induce infringement of the Heineken's '751 patent both before and after the institution of this Investigation.

4. ABI Did Not Contribute to the Infringement of Claims 1, 3, 7, and 10 of the '751 Patent

As explained in Section VII.B.3 above in connection with inducement, ABI had the requisite knowledge for contributory infringement at least by the date of the institution of this Investigation. (*See* Section VII.B.3, *supra*.). Heineken also presented evidence of the direct infringement of its paten by ABI's customers. (*See id.*). However, with respect to contributory infringement, ABI established that certain components of the NOVA System have substantial non-infringing uses.

For example, Mr. Ingram testified that the 12-liter BiB kegs work with ABI's PureDraught system.

Q. Are these bottle-in-bottles used with any products other than the NOVA?

A. Yes.

Q. And which ones?

A. So this bottle, which is a 12 liter size, this is the size that would fit into a NOVA appliance. This size and also a larger size, an 18 liter size, are available and deployed in what we call our PureDraught system.

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* * *

Q. Is the NOVA the only apparatus that would use these 12 liter bottles?

A. No.

Q. As of the close of fact discovery, do you know which other devices would use these bottles?

A. So our PureDraught system, which I described earlier, is deploying these same one-way kegs into existing draft systems using a durable keg coupler, so a very different coupler than the one we've discussed.

(Tr. (Ingram) at 703:6-14, 721:1-10; see also id. at 814:5-7.).35

Mr. Ingram also confirmed that other ABI products, including the Eiffel Tower, use the

same rotational valve developed for the CTD. (Id. at 789:21-790:1.). In addition, Mr. Dirx

explained that the Eiffel Tower is compatible with BiB beer lines. (Tr. (Dirx) at 790:4-13,

828:13-19; see also Tr. (Wolski) at 488:8-13.). See, e.g., In re Bill of Lading Transmission and

Processing System Patent Litigation, 681 F.3d 1323, 1337 (Fed. Cir. 2012) ("In the context of a

claim of contributory infringement under § 271(c), a substantial non-infringing use is any use

that is 'not unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental."")

(quoting Vita-Mix Corp. v. Basic Holdings, Inc., 581 F.3d 1317, 1327-29 (Fed. Cir. 2009)).

Heineken argued that none of the NOVA System's components has a substantial noninfringing use because: (i) the "NOVA System uses only the NOVA appliance, keg, and keg coupler *designed for it*" (Tr. (Ingram) at 693:19-694:11) (emphasis added); (ii) the "NOVA's

(RRBr. at 21

³⁵ With respect to the BiB kegs. ABI also asserted that the kegs '

⁽emphasis added).). As ABI noted, independent claims 1 and 7 recite a "carbonated drink." (CX-0012 at claims 1, 7.). However, the only evidence that ABI offered to support this claim is speculative testimony from ABI employees that ABI has "considered" and "explored" using products other than beer with the BiB kegs. (Tr. (Ingram) at 691:21-692:8, 741:8-12; Tr. (Dirx) at 783:21-784:4.). Given the abstract and hypothetical nature of Mr. Ingram's and Mr. Dirx's testimonies, they have been given little evidentiary weight.

(Tr. (Dirx) at 827:6-8, 827:20-828:1.). In other words,

Heineken contended that the NOVA components—*as combined*—have no substantial noninfringing uses.

Heineken's argument ignores the express language of 35 U.S.C. § 271(c), which makes a party liable for contributory infringement if it "offers to sell or sells . . . a component of a *patented* . . . combination . . . , knowing the same *[i.e., 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 noninfringing use[.]" 35 U.S.C. § 271(c) (emphases added). Thus, Heineken's contention that the combination of the NOVA System's three (3) components has no substantial non-infringing uses misses the mark.³⁶ *In re Bill of Lading*, 681 F.3d at 1338 (rejecting the premise that an Accused Product, when used in an infringing configuration, no longer has non-infringing uses). As discussed above, ABI presented persuasive testimony that certain *components* of the accused NOVA System, that is the NOVA keg, NOVA valve (which is part of the NOVA disposable coupler), and NOVA beer line, can be and are used in other ABI products in a non-infringing manner.

For the forgoing reasons, evidence and testimony adduced in this Investigation support a finding that components of ABI's NOVA System have substantial non-infringing uses.

³⁶ See Deere & Co. v. AGCO Corp., CA No. 18-827-CFC, 2019 WL 668492, at *8 (D. Del. Feb. 19, 2019) (rejecting patentee's argument that "whether the accused products have noninfringing uses independent from each other is 'irrelevant'" because the accused product is defined as the "combination" of components, and holding that the patentee's "failure to allege that those products (i.e., components) have no substantial noninfringing use nullifies its claims for contributory infringement") (emphasis added).

Accordingly, Heineken failed to meet its burden of proving that ABI contributed to the infringement of claims 1, 3, 7, and 10 of the '751 patent.

C. Technical Prong of Domestic Industry

1. Legal Standard

A complainant in a patent-based Section 337 investigation must demonstrate that it is practicing or exploiting the patents at issue. See 19 U.S.C. § 1337(a)(2) and (3); Certain Microsphere Adhesives, Process for Making Same, and Prods. Containing Same, Including Self-Stick Repositionable Notes, Inv. No. 337-TA-366, Comm'n Op. at 8, Pub. No. 2949 (U.S.I.T.C. Jan. 16, 1996) ("Microsphere Adhesives"). "In order to satisfy the technical prong of the domestic industry requirement, it is sufficient to show that the domestic industry practices any claim of that patent, not necessarily an asserted claim of that patent." Certain Ammonium Octamolybdate Isomers ("Certain Isomers"), Inv. No. 337-TA-477, Comm'n Op. at 55 (U.S.I.T.C. Jan. 5, 2004).

The test for claim coverage for the purposes of the technical prong of the domestic industry requirement is the same as that for infringement. *Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109, 1990 WL 710463 (U.S.I.T.C. May 21, 1990), *aff'd*, Views of the Commission at 22 (October 31, 1990) ("*Doxorubicin*"). "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*. The technical prong of the domestic industry can be satisfied either literally or under the doctrine of equivalents. *Certain Dynamic Sequential Gradient Devices and Component Parts Thereof*, Inv. No. 337-TA-335, Initial Determination at 44, Pub. No. 2575 (U.S.I.T.C. Nov. 1992).

2. Heineken's/Hopsy's DI Products Literally Practice One or More Claims of the '751 Patent

Heineken asserted that its DI Products, the SUB and Blade, shown below in Figure 26, literally practice claims 1, 3, 7, and 10 of the '751 patent. (CBr. at 34-50.). This decision adopts Heineken's position that, heading into the Hearing, ABI's only remaining³⁷ technical prong rebuttal argument was that the SUB and Blade do not practice the '751 patent because their valves are allegedly not made of rigid material. (*See* CBr. at 35 citing RPBr. at 26.). However, this argument appeared only in ABI's Pre-Hearing Brief. (RPBr. at 26.). Neither ABI's Initial Post-Hearing Brief nor ABI's Reply Post-Hearing Brief mentions Heineken's technical prong of domestic industry positions, let alone addresses them with counter-arguments. (*See* RRBr. at 24-26 (addressing economic prong but not technical prong of domestic industry).). Moreover, as Heineken correctly argued, during the Hearing, ABI's expert appears to have renounced ABI's pre-Hearing argument that valves in the DI Products were allegedly not made of rigid material. (Tr. (Slocum) at 1127:7-1128:2 ("And I had my original report where I said it's deforming, so therefore you can consider flexible. And then the Court said [rigid means] plain and ordinary meaning. So I dialed back from the heavier math portion and I said, okay, and then I can agree with what Mr. Wolski said, under that definition, you can call it rigid.").).

Consequently, ABI has waived technical prong counter-arguments pursuant to Ground Rule 10.1.

³⁷ ABI also argued in its Pre-Hearing Brief that the SUB and Blade did not contain the structural requirements of the alleged means-plus-function portions of claim 1 of the '751 patent. (RPBr. at 31-32.). However, ABI's attempt to construe terms in claim 1 as requiring means-plus-function treatment was rejected in the *Markman* Order claim construction ruling. (*Markman* Order at 12-15.).



Figure 26: Depiction of Hopsy DI Products (SUB (left) and Blade (right))

(CDX-5158 (introduced during Mr. Wolski's testimony).).

Nevertheless, Heineken still carries the burden of proving by a preponderance of the evidence that the SUB and Blade practice claims 1, 3, 7, and 10 of the '751 patent. However, in view of ABI's waiver of arguments with respect to Heineken's DI Products, and given the relative simplicity of Heineken's DI Products and the thoroughness of Heineken's briefing on this issue that is supported by the explicit and detailed testimony of Heineken's expert, Mr. Wolski, with respect to each DI claim, an extensive, detailed limitation-by-limitation analysis is not necessary. Instead, an overview detailing why Heineken satisfies the technical prong of domestic industry suffices because this decision has adopted in their entirety Heineken's arguments and conclusions, which are well-supported with evidence and lack rebuttal from ABI.

As described below, Heineken has proven by a preponderance of the evidence that the

SUB and the Blade practice claims 1, 3, 7, and 10 of the '751 patent.³⁸

a) Claim 1

The SUB and Blade are drink dispenser assemblies. (CX-0012 ('751 patent) at 11:5-26; CPX-0001-02; CPX-0005; CPX-0008; Tr. (Wolski) at 428:5-16, 452:16-22; CDX-5090-5091; CDX-5125; Tr. (Otto) at 85:17-25, 92:25-93:19.). As shown above in Figure 26, the SUB and Blade have dispensing heads, which comprise portions of the devices where beer exits by operation of handles. (Tr. (Wolski) at 428:17-25, 452:23- 453:7; CPX-0001; CPX-0005; CX-1117; CDX-5092; CDX-5126.). The SUB and Blade have disposable beer lines that dispense beer. (Tr. (Wolski) 429:1-430:3, 453:8-454:23; CPX-0013; CDX- 5093C; CPX-0012; CX-1111 at 3-4, 14-15; CDX-5127.). As Heineken noted without opposition, Mr. Wolski examined portions of the disposable beer lines in the SUB and Blade and found that they were flexible. (Tr. (Wolski) at 399:3-11, 427:18-22, 429:4-430:3, 454:10-12; CPX-0008; CPX-0013; CPX-0012.). In particular, Mr. Wolski testified in the context of the SUB that "we can see that the middle part, the tube, is flexible, so the entire line is at least partially flexible." (Tr. (Wolski) at 429:18-20; *see also* 453:8-454:12 (similar testimony in context of Blade).).

³⁸ The exact claim language at issue can be found *supra* in Section VII.A.3.

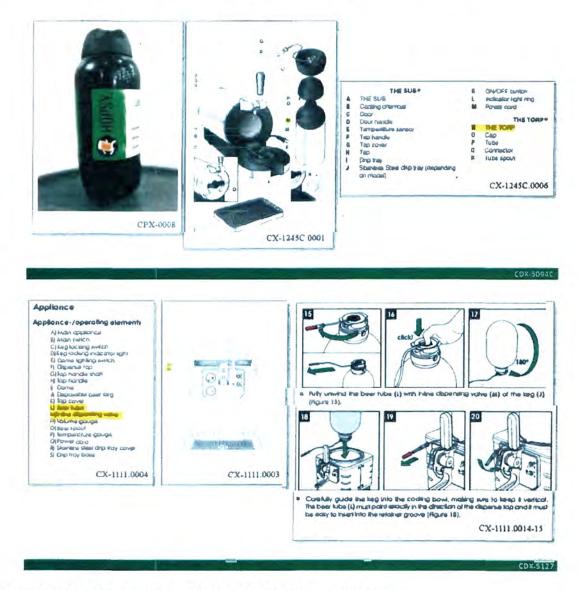
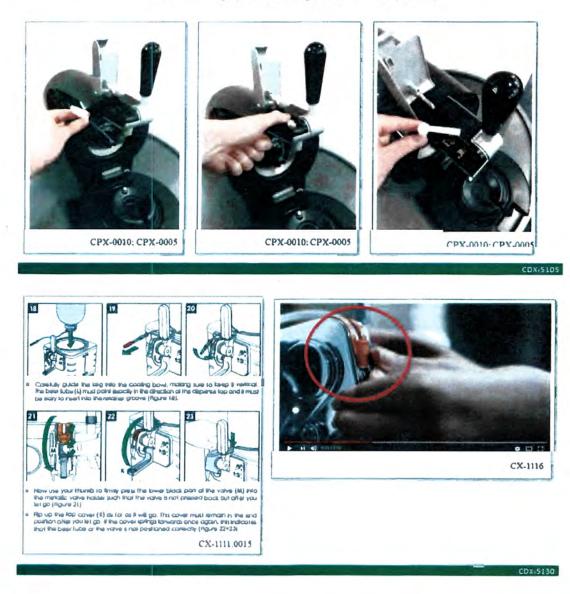


Figure 27: Depiction of Components Comprising Hopsy's SUB (up) and Blade (down), Including Dispensing Heads and Beers Lines Flexible In Part

(CDX-5094C, 5127 (introduced during Mr. Wolski's testimony).).

As Mr. Wolski testified, the SUB and Blade include containers holding carbonated drinks, specifically beer. (Tr. (Wolski) at 430:4-17, 454:24-455:9; Tr. (Otto) at 85:17-25; CPX-0008; CX-1245C at 1, 6; CDX-5094C; CPX- 0002; CX-1144; CDX-5128.). In Figure 27 above, a "Torp" is the container associated with the SUB DI Product, while the container associated with the Blade DI Product is described as a "keg." The disposable beer lines connect on one end to the containers during use and, at the other, outlet end, have coupling elements for connection to dispensing heads, as shown below in Figure 28. (Tr. (Wolski) at 430:18-431:15, 431:16-432:7, 455:10-456:12; CPX-0001-02; CPX-0005; CPX-0008; CPX-0010; CPX-0012; CDX-5095-96; CDX-5129-30; CX-1111 at 14-15; CX-1116-17.).

Figure 28: Depiction of Connecting/Removing the Outlet Ends of the Disposable Beer Lines in Hopsy's SUB (up) and Blade (down)

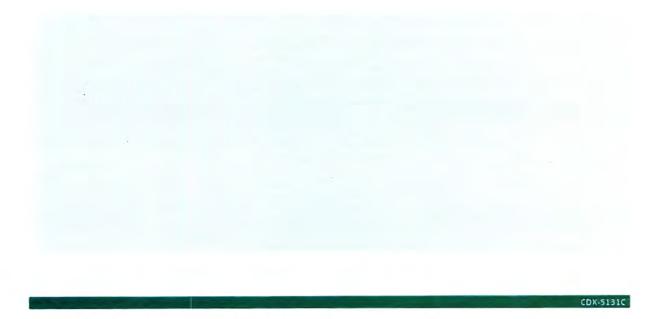


(CDX-5105, 5130 (introduced during Mr. Wolski's testimony).).

As Mr. Wolski testified, the disposable beer lines that couple to the dispensing heads in the SUB and Blade include shut-off valves, as shown below in Figure 29. (Tr. (Wolski) at 432:8-433:12, 456:13-457:11; CPX-0002; CPX-0005; CPX-0010; CDX-5097C; Tr. (Otto) at 88:6-8; CX-1054C; CX-1064C; CDX-5131C; CX-0977C.). The shut-off valves are made of a rigid, hard plastic material.³⁹ (Tr. (Wolski) at 433:13-434:11, 457:16-459:2; CPX-0002; CPX-0008; CDX-5132C-34C.). The shut-off valves are selectively openable and closeable after placing the outlet end of the lines into the dispensing heads. (Tr. (Wolski) at 435:3-23, 459:3-460:1; CPX-0001-2; CPX-0005; CPX-0010; CDX-5100; Tr. (Otto) at 87:1-88:8; CX-1111 at 30-31; CDX-5135.).

Figure 29: Depiction of the Shut-Off Valves in Hopsy's SUB (up) and Blade (down)

 ³⁹ For the SUB, the valves are made of (CX-1184; CX-1054C; Tr. (Wolski) at 434:19-435:2 ("We can see from the product description, it exhibits "); Tr. (Otto) at 91:11-92:2.). For the Blade, the shut-off valve is made of (Tr. (Wolski) at 457:21-24; Tr. (Otto) at 95:18-21; CX-0977C; CDX-5132C.). Specification sheets for those materials indicate they are stiff and are resistant to bending. (CX-1184; CX-1211; CDX-5133C-34C.).



(CDX-5097C, 5131C (introduced during Mr. Wolski's testimony).).

Mr. Wolski testified that the dispensing heads of the SUB and Blade comprise handles. (Tr. (Wolski) at 436:9-14, 460:12-16; CPX-0005; CDX-0005; CPX-0001; CX-1116; CX-1117; CX-1111 at 3-4; CDX-5136.). The SUB and Blade include operating elements connected to the handles, and the shut-off valves are detachably connectable to those operating elements, such that moving the handles activates the operating elements and opens and closes the shut-off valves. (Tr. (Wolski) at 436:15-438:14, 460:17-461:14, 461:15-462:17; CPX-0001-02; CPX-0005; CPX-0010; CDX-5103; CX-1116; CX-1117; CX-1111 at 29-31; CDX-5137; CDX-5138.). Snapping the shut-off valves into the operating elements connects them to the operating elements. (Tr. (Wolski) at 437:25-438:1; CX-1116; CDX-5138.). The attachments between the shut-off valves and the operating elements are releasable.⁴⁰ (Tr. (Wolski) at 437:25-438:1; CX-

⁴⁰ In the SUB, when the container needs to be changed, the shut-off valve of the disposable beer line can be snapped out of the dispensing head. (Tr. (Wolski) at 437:19-21, 438:2-14, 461:18-24; Tr. (Otto) at 87:18-23; CPX-0005; CPX-0010; CDX-5104.). When the Blade's container needs to be changed, the shut-off valve can be snapped out of the dispensing head. (Tr. (Wolski) at 461:18-24.).

1116; CDX-5138.).

As Mr. Wolski testified, the shut-off valves of the SUB and Blade are freely movable with the flexible, disposable beer line tubes upon placement and removal of the valves into and from the dispensing heads. (Tr. (Wolski) at 438:15-440:5, 462:18-463:23; CPX-0005; CPX-0010; CDX-5105-06; CX-1116; CPX-0002; CDX-5140-41.). Moreover, the shut-off valves are fixed in position by being releasably attached to the dispensing heads of the SUB and Blade. (*Id.*).

As Mr. Wolski testified, the shut-off valves of the SUB and Blade are also fixedly attached to outlet ends of the disposable beer line tubes, where beer exits during dispense. (Tr. (Wolski) at 440:6-441:11, 464:7-465:9; CDX-5107; CPX-0002; CPX-0010; CX-1245C.0001; CX-0977C; CDX-5142C.). As indicated above, the disposable beer line tubes, including their shut-off valves, are removable from the DI Products upon replacement of the beer containers. (Tr. (Wolski) at 440:24-441:8, 465:10-25; CPX-0005; CPX-0010; CDX-5108; Tr. (Otto) at 87:18-23; CX-1116; CX-1117; CX-1111 at 20; CDX-5143.).

Thus, Heineken has proven by a preponderance of the evidence that the DI Products practice claim 1 of the '751 patent.

b) Claim 3

Claim 3 depends from claim 1. Like claim 1, the DI Products satisfy claim 3. According to Mr. Wolski's explanation, this is because the SUB and Blade's disposable beer lines are provided with outlet sections located downstream of the shut-off valves, as shown below in Figure 30. (Tr. (Wolski) at 441:23-442:14, 442:19-21, 466:15-467:5; CX-1054C (annotated); CX-1188; CPX-0010; CX-0977C; CX-1116; CDX-5145C.). These outlet sections include outlets of the dispensing lines from which beer is dispensed. (Tr. (Wolski) at 442:10-12, 466:23467:2.). The outlet sections are located downstream of the shut-off valves such that beer flows from the containers and through the valves before reaching the outlet sections. (*Id.* at 442:13-14, 466:23-24.). ABI did not dispute this during the Hearing. ABI has waived this issued pursuant to Ground Rule 10.1.

Figure 30: Depiction of Outlet Sections in Hopsy's SUB (up) and Blade (down) Located Downstream of the Shut-Off Valves





(CDX-5110C, 5145C (introduced during Mr. Wolski's testimony).).

Thus, Heineken has proven by a preponderance of the evidence that the DI Products practice claim 3 of the '751 patent.

c) Claim 7

For the most part, the DI Products satisfy independent claim 7 for the same reasons that they satisfy independent claim 1, as set forth above. (Tr. (Wolski) at 442:22-450:7, 467:6-473:8; CDX-5111-5120; CDX-5146-5155.). Yet again, ABI did not dispute this at the Hearing. (CBr. at 44, 49.).

However, there are a few differences between claim 7 and claim 1. First, claim 7 lacks limitation 1[i]: "and wherein the shut-off valve is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container." Second, the coupling element of claim 7 is "close to one end," rather than "at an outlet end" as set forth in claim 1. Nevertheless, the coupling elements of the DI Products satisfy both limitations because according to Mr. Wolski's testimony, the elements are "at an outlet end" and "close to one end" of the disposable beer dispenser lines. (Tr. (Wolski) at 444:10-445:2, 468:19-469:5.). Third, the at least partially flexible dispensing line of claim 7 must be "connectable to the container" as opposed to the container being "connected during use to the dispensing line" as in claim 1. (Tr. (Wolski) at 467:24-468:7.). As indicated above in the context of claim 1, the dispensing lines of the DI Products are clearly connectable to the beer containers. (Tr. (Wolski) at 443:10-444:8.).

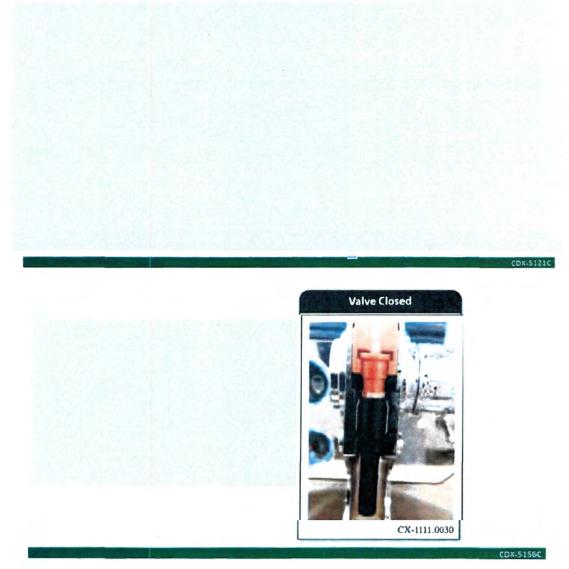
Thus, Heineken has proven by a preponderance of the evidence that the DI Products practice claim 7 of the '751 patent.

d) Claim 10

Claim 10 depends from claim 7. Like claim 7, claim 10 is satisfied by the DI Products. This is because, as Mr. Wolski testified and as shown below in Figure 31, the SUB and Blade have relatively rigid tube sections—the "tube spouts"—at their outlet ends. (Tr. (Wolski) at 450:20-451:13, 473:15-474:21; CPX-0010; CX-1054C; CX-1188; CDX-5121C; CX-1111 at

30.).

Figure 31: Depiction of Relatively Rigid "Tube Spouts" at the Outlet Ends of Hopsy's SUB (up) and Blade (down)



(CDX-5121C, 5156C (introduced during Mr. Wolski's testimony).).

Thus, Heineken has proven by a preponderance of the evidence that the DI Products practice claim 10 of the '751 patent.

D. Invalidity

1. Legal Standard: Obviousness

Under 35 U.S.C. § 103(a), a patent is valid unless "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made" to a person having ordinary skill in the art. 35 U.S.C. § 103(a). The ultimate question of obviousness is a question of law, but "it is well understood that there are factual issues underlying the ultimate obviousness decision." *Richardson-Vicks*, 122 F.3d 1476, 1479 (Fed. Cir. 1997) (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966)).

After claim construction, "[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, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) secondary considerations of non-obviousness." *Smiths Indus. Med. Sys., Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1354 (Fed. Cir. 1999) (citing *Graham*, 383 U.S. at 17).

The existence of secondary considerations of non-obviousness does not control the obviousness determination; a court must consider "the totality of the evidence" before reaching a decision on obviousness. *Richardson-Vicks*, 122 F.3d at 1483.

The Supreme Court clarified the obviousness inquiry in KSR Int'l Co. v. Teleflex Inc., 550 U.S. 389 (2007). The Supreme Court said:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would

improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. Sakraida and Anderson's-Black Rock are illustrative-a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

Following these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement. Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents. The diversity of inventive pursuits and of modern technology counsels against limiting the analysis in this way. In many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature, will drive design trends. Granting patent protection to advances that would occur in the ordinary course without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility.

KSR, 550 U.S. at 417-19.

The Federal Circuit has since held that when a patent challenger contends that a patent is invalid for obviousness based on a combination of several prior art references, "the burden falls on the patent challenger to show by clear and convincing evidence that a person of ordinary skill in the art would have had reason to attempt to make the composition or device, or carry out the claimed process, and would have had a reasonable expectation of success in doing so." *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1360 (Fed. Cir. 2007) (citations omitted).

The TSM⁴¹ test, flexibly applied, merely assures that the obviousness test proceeds on the basis of evidence--teachings, suggestions (a tellingly broad term), or motivations (an equally broad term)--that arise before the time of invention as the statute requires. As *KSR* requires, those teachings, suggestions, or motivations need not always be written references but may be found within the knowledge and creativity of ordinarily skilled artisans.

Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc., 520 F.3d 1358, 1365 (Fed. Cir. 2008).

2. Invalidity Overview

ABI asserted that the '751 patent is obvious over each of the primary references,

Timmermans (RX-0838), van der Meer (RX-0837), and Grill (RX-0312) (collectively, "Primary

References"), in view of either Jeans (RX-0658) or deCler (RX-0814) (collectively, "Secondary

References").42 (RBr. at 1-3, 53-61.). Specifically, ABI argued that the Primary References

teach every claim limitation but a shut-off valve made of "rigid material." (Id. at 2.). According

to ABI, a "simple substitution" of Jeans' slit, ball, or rotational valve, or deCler's piston valve,

satisfies this limitation of the asserted claims. (Id. at 2-3.).

As ABI pointed out, the Primary References were not disclosed to or considered by the

USPTO during the prosecution of the '751 patent. (Tr. (James Carmichael)43 at 1478:2-6,

1489:10-23; RBr. at 17.). The deCler reference was not disclosed to or considered by the

⁴¹ TSM is an acronym that stands for teaching, suggestion, motivation.

⁴² In its Pre-Hearing Brief, ABI also argued that the '751 patent is invalid under 35 U.S.C. § 112, ¶ 2. (RPBr. at 70-74.). ABI did not raise these arguments in its Initial Post-Hearing Brief. Thus, any argument on this issue is deemed waived under Ground Rule 10.1.

⁴³ When he testified during the Hearing on April 22, 2019, Mr. James Carmichael was the Managing Member of Carmichael IP, PLLC. (CPSt. at Ex. 3.). Heineken identified Mr. Carmichael as an expert to testify about certain USPTO procedures that pertain to the prosecution of patent applications. (*Id.* at 3.). Heineken also identified Mr. Carmichael as a rebuttal expert witness to testify about patent office procedures applicable to the prosecution of the *751 patent. (*Id.*).

USPTO.⁴⁴ (*Id.*). ABI correctly notes that its burden of proving invalidity may be "more easily carried" because each of ABI's obviousness combinations were not disclosed to and considered by the USPTO. *See, e.g, SIBIA Neuroscis., Inc. v. Caudus Pharm. Corp.*, 225 F.3d 1349, 1355-56 (Fed. Cir. 2000).

Nevertheless, ABI bears the burden of proving, by clear and convincing evidence, that: (1) the prior art combinations render obvious the invention claimed in the '751 patent; and (2) a person of ordinary skill in the art would have had a motivation to combine the prior art references. *See, e.g., PharmaStem*, 491 F.3d at 1360.

For each Primary Reference, ABI pointed to an open valve as disclosing the claimed "shut-off valve." (RBr. at 25-26, 35, 41-42.). For the reasons discussed below, an open tube by itself it not a "shut-off valve," as that term has been construed. (Tr. (Wolski) at 1177:9-10, 1173:21-22, 379:11-380:1.). Moreover, each of ABI's Primary References uses a pinch valve, which includes a pinching mechanism permanently located in the appliance that pinches a flexible tube. (RX-0838 at 43:13-36, Fig. 12; RX-0837 at 7:17-31, Fig. 7; RX-0312 at 6:51-61, Fig. 56.). As a result, each of the Primary References fails to disclose multiple limitations recited in the asserted claims. For example, they do not teach or disclose: (1) a shut-off valve that is freely movable with the flexible tube upon placement and removal from the dispensing head; (2) a shut-off valve that is detachably connectable to the operating element in the dispensing head; and (3) a shut-off valve that is fixedly attached to an outflow end of the flexible tube and removable from the dispensing device upon replacement of the container. (Tr. (Wolski) at 1172:22-1173:9.). Furthermore, because the Primary References each teach pinch valves, they

⁴⁴ Jeans is cited on the face of the '751 patent and was considered by the USPTO. (CX-0012 at (56) (EP02466052 A1).).

do not disclose shut-off valves made of rigid material, which ABI did not dispute. (RBr. at 26 (Timmermans), 34-35 (van der Meer), 42 (Grill).).

ABI relied on Secondary References Jeans and deCler in an attempt to remedy these deficiencies. (RBr. at 53-61.). However, each fails to teach the missing limitations. Like the dispensing devices disclosed in the Primary References, the embodiments ABI identified in Jeans are pinch valves and thus do not disclose shut-off valves made of rigid material. The valves described in Jeans also include pinching mechanisms that, like those disclosed in the Primary References, are not "freely movable," "detachably connectable," or "removable." The deCler reference does not teach a shut-off valve connected to a dispensing head that is also fixedly attached to an outflow end of the flexible tube and removable from the dispensing device upon replacement of the container.

Moreover, ABI failed to demonstrate that one of ordinary skill in the art at the time of the invention would have had a motivation to combine any of the Primary References with either Jeans or deCler. (See, e.g., Tr. (Wolski) 1188:19-1194:8, 1200:4-1203:21.).

Accordingly, for the reasons discussed below, claims 1, 3, 7, and 10 of the '751 patent are not rendered obvious by the combination of Timmermans, van der Meer, or Grill in view of either Jeans or deCler.⁴⁵

⁴⁵ All of Dr. Slocum's testimony regarding invalidity was carefully considered. However, for the reasons discussed in Sections VII.D.3-4 below, his opinions with respect to the Primary and Secondary References were not persuasive. For example, Dr. Slocum's opinions as to what constitutes the claimed "shut-off valve" in each of the Primary References fails to disclose the claimed "shut-off valve" that is a part of a "coupling element" that is connected to the "dispensing head," and is also "made of rigid material," "freely movable," "removable," and "fixedly attached," as required by independent claims 1 and 7. (See, e.g., Tr. (Slocum) at 930:4-932:6, 1004:12-23; see also CX-0012 at claims 1, 7.). Furthermore, with regard to Secondary Reference Jeans, Dr. Slocum's testimony as to a "shut-off valve made of rigid material" is unconvincing, given that the valves described in Figures 17-20 and Figures 21-24 depend on a pinching mechanism to pinch a flexible tube in order to control fluid flow. (See, e.g., Tr.

3. The Prior Art References Do Not Render Obvious Claims 1, 3, 7, and 10 of the '751 Patent

a) -Summary of Missing Claim Limitations

Each combination of Timmermans, van der Meer, and Grill in view of Jeans does not

disclose at least the following underlined limitations recited in independent claims 1 and 7 of the

'751 patent:

Claim 1	Corresponding Limitation in Claim 7
1[e]: characterised in that <u>the coupling</u>	7[c]: characterised in that <u>the coupling</u>
element comprises a shut-off valve (19, 32)	<u>element comprises a shut-off valve (19, 32)</u>
<u>made of rigid material</u> that is selectively	<u>made of rigid material</u> which is openable and
openable and closable after placing the outlet	closable after placing the end of the
end of the dispensing line (17, 28) into the	dispensing line (28) into the dispensing head
dispensing head (18, 29)	(18, 29)
1[f]: the dispensing head (18, 29) comprising	7[d]: the dispensing head (18, 29) comprising
a knob or handle and an operating element	a knob or handle and an operating element
(45, 98) connected to said knob or handle by	(45, 98) connected to said knob or handle by
means of which the shut-off valve (19, 32) is	means of which the shut-off valve (19, 32) is
detachably connectable for opening and	detachably connectable for opening and
closing of the shut off valve by moving the	closing of the shut off valve by moving the
knob or handle, wherein the shut-off valve is	knob or handle, wherein the shut-off valve is
freely movable with the flexible tube upon	freely moveable with the flexible tube upon
placement and removal of the valve into and	placement and removal of the valve into and
from the dispensing head and is fixed in	from the dispensing head and is fixed in
position by being releasably attached to the	position by being releasably attached to the
dispensing head	dispensing head
1[g]: wherein the shut-off value is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device	

Table No. 6: Missing Limitations of Timmermans, van der Meer, and Grill in View of Jeans

(Slocum) at 964:24-965:15, 965:16-967:2; see also RX-0658 at Figs. 17-24.). Similarly, Dr. Slocum's testimony of Secondary Reference deCler fails to include a convincing explanation of how the disclosed piston valve teaches the claimed "shut-off valve." (See, e.g., Tr. (Slocum) at 947:3:6-14, 948:24-949:6, 957:6-17.). The disclosed embodiments involve a quick-connect valve that does not include, *inter alia*, a dispending head, or a knob or handle that actuates the opening and closing of the valve, as recited in claims 1 and 7 of the '751 patent. (CX-0012 at claims 1, 7.).

Claim 1	Corresponding Limitation in Claim 7
upon replacement of the container	

Each combination of Timmermans, van der Meer, and Grill in view of deCler does not

disclose at least the following underlined limitations recited in independent claims 1 and 7 of the

'751 patent:

Claim 1	Corresponding Limitation in Claim 7
1[e]: characterised in that <u>the coupling</u>	7[c]: characterised in that <u>the coupling</u>
<u>element comprises a shut-off valve (19, 32)</u>	<u>element comprises a shut-off valve (19, 32)</u>
made of rigid material that is selectively	made of rigid material which is openable and
openable and closable after placing the outlet	closable after placing the end of the
end of the dispensing line (17, 28) into the	dispensing line (28) into the dispensing head
dispensing head (18, 29)	(18, 29)
1[f]: the dispensing head (18, 29) comprising	7[d]: the dispensing head (18, 29) comprising
a knob or handle and an operating element	a knob or handle and an operating element
(45, 98) connected to said knob or handle by	(45, 98) connected to said knob or handle by
means of which the shut-off valve (19, 32) is	means of which the shut-off valve (19, 32) is
detachably connectable for opening and	<u>detachably connectable</u> for opening and
closing of the shut off valve by moving the	closing of the shut off valve by moving the
knob or handle, wherein the shut-off valve is	knob or handle, wherein the shut-off valve is
freely movable with the flexible tube upon	<u>freely moveable with the flexible tube upon</u>
placement and removal of the valve into and	<u>placement and removal of the valve into and</u>
from the dispensing head and is fixed in	from the dispensing head and is fixed in
position by being releasably attached to the	position by being releasably attached to the
dispensing head	dispensing head
1[g]: wherein the shut-off value is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container	

Table No. 7: Missing Limitations of Timmermans, van der Meer, and Grill in View of deCler

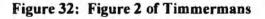
Each of the missing limitations are discussed below.

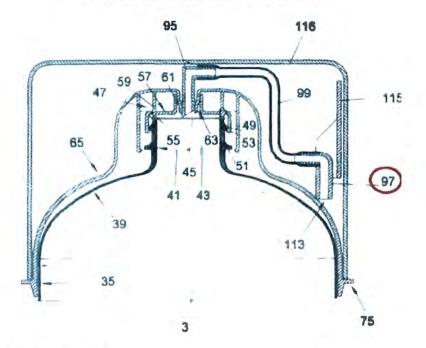
b) 1[e]/7[c]: "coupling element comprises a shut-off valve (19, 32) made of rigid material"

i. Primary References

The components in each Primary Reference that ABI alleged are the claimed coupling elements are not shut-off valves, but portions of pinch valves.

With regard to Timmermans, ABI identified "coupling part 97" as the "coupling element," shown below in Figure 32.⁴⁶ (RBr. at 25-26.).





(RX-0838 at Fig. 2 (annotated).).

Timmermans describes coupling part 97 as having a "knee shaped element" composed of two legs. (RX-0838.0024 at 22:7-11.). The first leg is typically horizontal and connects to the

⁴⁶ Limitations 1[d] and 7[b] of independent claims 1 and 7, respectively, require the "coupling element" to be: (i) "at an outlet end for connection to the dispensing head" (claim 1); and (ii) "close to one end for connection to a dispensing head of a drink dispenser" (claim 7). (CX-0012 at claims 1, 7.).

flexible dispensing line (connecting part 99); the second leg is typically vertical and "encloses a free dispensing opening 113." (*Id.*). As Heineken's expert, Mr. Wolski, testified, coupling part 97 is a tube. (Tr. (Wolski) at 1177:9-10; *see also id.* at 1173:21-22, 379:11-380:1.). The tube *alone* is not a shut-off valve that "open[s] and close[s] flow," as the term "shut-off valve" has been construed. It is at most a component of a pinch valve that, when placed in a pinching mechanism, is a component of a pinch valve that can open and close flow. (*See* Tr. (Wolski) at 1177:9-10; *see also id.* at 1173:21-22, 379:11-380:1.).

Shown in Figure 33 below, the dispensing line is pinched shut by a pinching element, "eccentric 133," which is connected to "handle 131." (RX-0838.0026 at 24:15-23; Tr. (Slocum) at 933:21-934:11.).

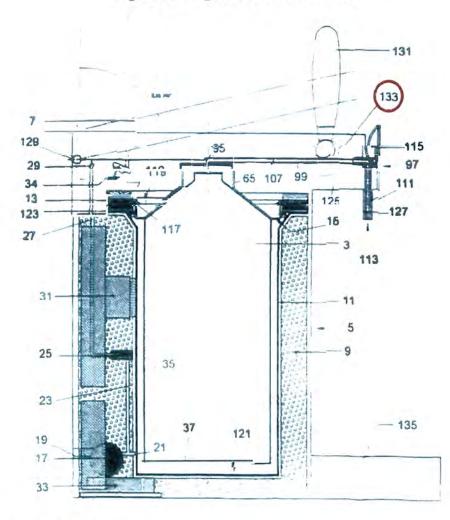


Figure 33: Figure 1 of Timmermans

(RX-0838 at Fig. 1 (annotated).).

By rotating the handle from its default, vertical position to its inclined position, "eccentric 133" unpinches the line, allowing fluid to flow. (*Id.* at 24:15-23.).

With respect to van der Meer, ABI contended that the "beverage delivery hose" is the claimed "shut-off valve." (RBr. at 34-35.). However, again, as Mr. Wolski emphasized, the beverage delivery hose itself is nothing more than a hose/tube. Like Timmermans' coupling part 97, van der Meer's beverage delivery hose *alone* is not a shut-off valve, but at most only a

portion of a pinch valve. (See Tr. (Wolski) at 1177:9-10; see also id. at 1173:21-22, 379:11-380:1.).

As shown below in Figure 34, van der Meer's beverage delivery hose (34) is opened or

pinched closed by an actuating handle (57) in the upper part (42) of the tapping device in

conjunction with the lower part (41) of the tapping device. (RX-0837.0005 at 3:17-22.). When

the upper part of the tapping device is "secured to the lower part," the hose is "clamped in place

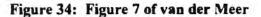
and at the same time ... pinched off." (RX-0837.0005 at 3:24-26; Tr. (Slocum) at 988:4-8.).

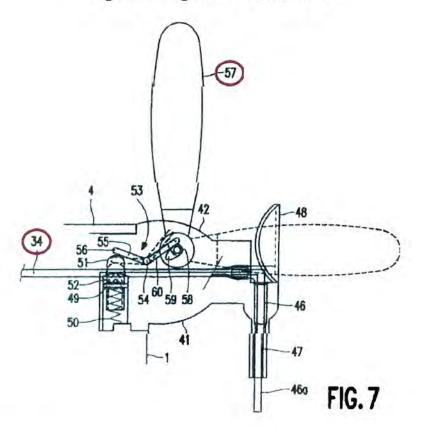
"When the actuating handle is opened[,] the hose is no longer pinched and the beverage flows

out through the hose " (RX-0837.0005 at 3:26-28; Tr. (Slocum) at 988:9-13.).

This shut-off mechanism comprises a clamping block 48, which is vertically movable against the force of a spring 50. The clamping block has two upright pressure pins 51 between which a hose clamp 52 formed by a V-shaped pressure member is interposed. The hose 34 extends over this V-shaped pressure member. The shut-off mechanism further comprises a lever 53, which is situated in the upper part 42 of the tapping device and which is pivotable about a pivot 54. At one side of the pivot this lever has a forked arm 55 whose ends 56 cooperate with the pressure pins 51 of the clamping block 49. At the other side of the pivot 54 the lever 53 has an arm 60. The upper part 42 of the tapping device comprises an actuation handle or tap 57, which is pivotable about a tap spindle 58. The tap spindle 58 carries an eccentric cam 59, which cooperates with the arm 60 of the lever. Fig. 7 shows in solid lines the situation in which the ends 56 of the forked arms 55 are just clear of the pressure pins 51, so that the spring 50 urges the clamping block 49 upward as far as possible and the hose 34 is pinched off completely by the hose clamp 52. When the tap 57 is turned clockwise the eccentric cam 59 is pressed against the arm 60 and the lever 53 is pivoted counter-clockwise. The ends 56 of the arm 55 press the pressure pins 51 and, consequently, the hose downward. As a result of this, the hose 34 is opened and the beverage can flow through the hose to the outlet pipe 46. When the tap is swung back the hose is pinched off immediately and the outflow ceases.

(RX-0837.0009-10 at 7:18-8:1.). ·





(Id. at Fig. 7 (annotated).).

With respect to Grill, ABI pointed to "delivery tube 20" as the "shut-off valve," as shown below in Figure 35. (RBr. at 41.). Specifically, ABI argued that "resilient flow control portion 38' of 'delivery tube 20' is a shut-off valve because it is the part of the dispensing line that is 'squeezed' when 'lever 86' is in the closed position. (*Id.*; Tr. (Slocum) at 1005:3-8.). Again, ABI's argument is misguided. As noted above with regard to the Timmermans and van der Meer references, delivery tube 20, including resilient flow control portion 38, is a *tube*, and is not itself a shut-off valve, but at most only a portion of a pinch valve that requires a pinching mechanism in order to prevent fluid flow. (*See* Tr. (Wolski) at 1177:9-10; *see also id.* at 1173:21-22, 379:11-380:1.).

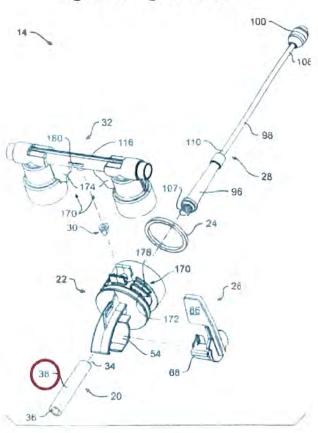


Figure 35: Figure 4 of Grill

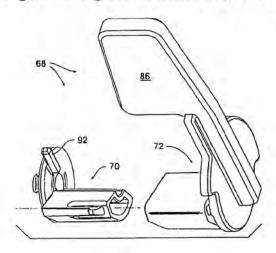
(RX-0312 at Fig. 4 (annotated).).

As shown below in Figure 36, Grill teaches "control valve means 26... for selectively compressing or not compressing the resilient flow control portion 38 of the delivery tube 20." (*Id.* at 6:9-12; *see also id.* at 2:14-35.). With regard to control valve means 26, Grill discloses that:

[T]he control valve means 26 preferably includes a lever assembly 68 having a first lever portion 70 and a second lever portion 72.... [T]he second lever portion 72 includes an integrally-formed cam 84 and a lever 86 or elongated handle.... The cam 84 has an eccentric cam lobe 88 rotatably movable therewith.... The lever 86 is operable to move the cam lobe 88 between a first (closed) angular position shown in FIG. 56 and a second (opened) angular position shown in FIG. 58.

(Id. at 6:10-50.).

Figure 36: Figures 22, 56 and 58 of Grill





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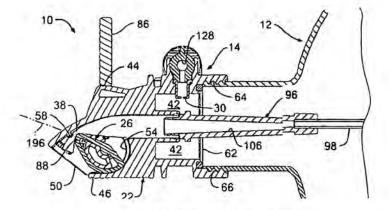


Fig. 56 (Closed Position)

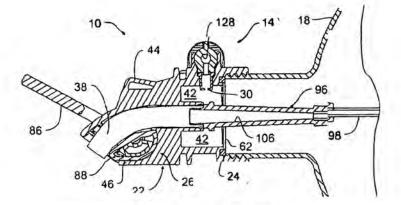


Fig. 58 (Open Position)

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(Id. at Figs. 22, 56, 58.).

In sum, each of the devices disclosed in Timmermans, van der Meer, and Grill requires a pinching mechanism to pinch the dispensing line/tube in order to stop fluid from flowing. Thus, the dispensing line/tube that ABI, and its expert, Dr. Slocum, identified as the shut-off valve by *itself*, *without* the pinching mechanism, cannot be a "shut-off valve" that "open[s] and close[s] flow." (See, e.g., Tr. (Slocum) at 930:4-932:6, 986:18-987:15, 1004:12-1005:8.).

Moreover, ABI did not contest that the purported "valves" disclosed in the Primary References are not made of "rigid material." (RBr. at 26, 35, 42.). Each reference discloses pinching a flexible tube, and flexible tubes by their very nature are not made of rigid material. (Tr. (Wolski) at 1175:18-1176:8; RX-0838 at 43:26-36, Fig. 12; RX-0837 at 7:17-23, Fig. 7; RX-0312 at Fig. 56, 6:56-61; CDX-5534-36.).

For the reasons discussed above, none of coupling elements ABI identified is the claimed "shut-off valve." Accordingly, the Primary References do not teach this claim limitation.

ii. Secondary References

Secondary References Jeans and deCler fail to remedy the deficiencies in the Primary References.

Although the embodiments in Jeans upon which ABI relied teach "shut-off valves" that "open and close flow," the "shut-off valves" taught by Jeans are pinch valves and as such, are not made of *rigid material*. (See, e.g., Tr. (Slocum) at 1016:12-17; Tr. (Wolski) at 1180:10-13.).

Similarly, the valve disclosed in deCler is a "shut-off valve" that "open[s] and close[s] flow." However, the "shut-off valve" taught by deCler does not meet the additional limitations of claims 1 and 7 that require the claimed shut-off valve to be a part of a coupling element at the dispensing end of a dispensing line for connection to a *dispensing head* (limitations 1[d] and

7[a]-[b]). (Tr. (Wolski) at 1195:1-8.).

Accordingly, none of the shut-off valves described in Jeans and deCler disclose the "shutoff valve" recited in and required by claims 1 and 7.

Each of the Jeans and deCler embodiments upon which ABI relied are addressed below.

(1) Jeans

Based upon three (3) embodiments disclosed in Jeans, ABI argued that Jeans teaches shut-off valves made of rigid material. (RBr. at 44-50.). ABI identified the embodiment illustrated in: (1) Figures 17-20 as disclosing a "normally-closed ball shut-off valve"; (2) Figures 21-24 as disclosing a "normally-closed slit shut-off valve"; and (iii) Figures 25 and 26 as disclosing a "normally-closed rotational valve." (*Id.* at 46-50.).

As an initial matter, ABI did not identify or discuss Figures 25 and 26 in its Pre-Hearing Brief. Thus, ABI has waived any argument on this issue pursuant to Ground Rule 7.2.

For the following reasons, the embodiments shown in Figures 17-20 and Figure 21-24 of Jeans, together with the pinching mechanism disclosed in Figures 2 and 3, are "shut-off valves," as the term "shut-off valve" has been construed. (*Markman* Order, App. A at 1.).

Figures 17-20 depict a ball shut-off valve, where a ball and seat in the flexible tube "form a closed valve." (RX-0658.0019-20.). The "ball 82" is pressed into "internal shoulder 80" of the tube, which blocks flow in "the normal unpinched condition." (RX-0658.0019.). This embodiment is illustrated below in Figure 37 (Figures 17 and 18 of Jeans).

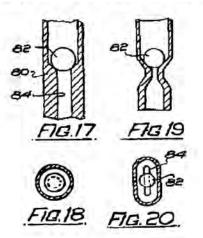


Figure 37: Figures 17-20 of Jeans Showing Ball Shut-Off Valve

(RX-0658 at Figs. 17-20.).

As depicted above in Figure 37 (Figures 19 and 20 of Jeans), "[w]hen the tube is pinched ... in the vicinity of the shoulder 80, the bore 84 as shown clearly in Fig. 20 takes up an elongated form so that whilst the ball 82 still rests on the shoulder 80, portions of the bore 84 project beyond the ball and therefore the valve is opened." (RX-0658.0020.). With the valve opened, "[c]oncentrate can now flow past the ball 82 into the bore 84 and out of the tube." (*Id.*). "When the pinching effect is removed, the tube returns" to its default closed position. (*Id.*).

Figures 21-24 of Jeans show a slit shut-off valve involve a tube with "internal shoulders 86 and 88," which "make line contact across the diameter of the tube . . . thereby preventing passage of concentrate through the tube." (RX-0658.0020.). As shown in Figure 38 below (Figures 23 and 24 of Jeans), by applying a compression (pinching) force "in the region of the shoulders 86 and 88" of the tube, the edges of the shoulders "take up curved form creating an aperture 90," which allows for the flow of concentrate. (*Id.*). "[W]hen the pinching force is removed, the tube returns" to its default closed position. (*Id.*).

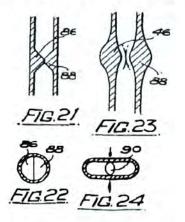
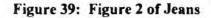
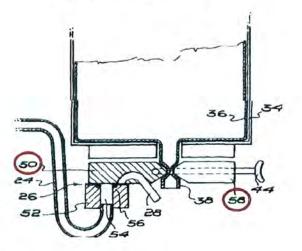


Figure 38: Figures 21-24 of Jeans Showing Slit Shut-Off Valve

(Id. at Figs. 21-24.).

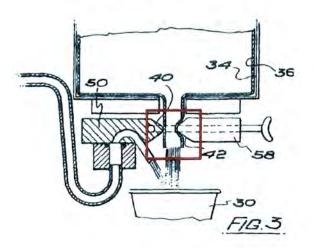
In order to actuate the "opening" of the ball/tube configuration (Figures 17-21) and slit/tube configuration (Figures 21-24) to permit fluid flow, Jeans teaches a pinching mechanism, which comprises "pinching members 40 and 42" that are "beveled faces of the movable block 50 and co-operating block 58." (RX-0658.0018.). Blocks 50 and 58 are depicted below in Figure 39.





(Id. at Fig. 2 (annotated).).

As shown below in Figure 45, button 44, which is connected to block 50, retracts block



50 when pressed, thereby "releas[ing] the pinch on tube 38." (RX-0658.0018.).

Figure 45: Figure 3 of Jeans

(Id. at 3 (annotated).).

Unlike the bare tubes ABI identified as the alleged shut-off valves in the Primary References, discussed above in Section VII.D.3(b), the valves taught by Jeans involve more than just tubes, and include additional features (i.e., ball in Figures 17-20, slit configuration in Figures 21-24) that control flow in their own capacity, i.e., prevent flow, in addition to being pinched by a pinching mechanism to allow flow. Therefore, the "shut-off valve" that "open[s] and close[s] flow" in the embodiment disclosed in: (i) Figures 17-20 is the combination of the ball, tube, *and* pinching mechanism; and (ii) Figures 21-24 is the combination of the tube configured with the slit *and* pinching mechanism.

However, these two embodiments in Jeans fail to teach the limitation because pinch valves are not made of rigid material. (Tr. (Wolski) at 1179:24-1180:13; CDX-5545-46; RX-0658 at Figs. 2, 7, 17-24.). As Mr. Wolski testified, these embodiments open and close flow by pinching a flexible tube, which ABI acknowledged for each of the Primary References, is not a

shut-off valve made of rigid material. (Tr. (Wolski) at 1179:24-1180:13; see also, e.g., RX-0658 at Figs. 17-24; RBr. at 2, 26, 35, 42.).

As Mr. Wolski noted, the addition of the ball 82 in the embodiment shown in Figures 17-20 does not make the flexible tube into a rigid valve. The embodiment is still opened and closed by pinching a flexible tube, and is thus not rigid. (Tr. (Wolski) at 1180:10-13.). ABI pointed to the "internal shoulders 86 and 88" of Jeans' normally closed pinch valve in Figures 21-24 and argued they are rigid. (RBr. at 48.). However, ABI then asserted that "[a]s shown in Figures 23 and 24, by applying a compression (pinching) force 'in the region of the shoulders 86 and 88,' the edges of the shoulders '*take up curved form creating an aperture 90*,' which allows for the flow of concentrate." (RBr. at 48 (emphasis added) (quoting RX-0658.0020).). By making such an assertion, ABI conceded that shoulders 86 and 88 of the tube, which it relied upon as allegedly being rigid, are in fact not rigid because they *deform* under a pinching force to open flow. (*Id.*). Accordingly, the valve shown in Figures 21-24 is also not rigid.

For the foregoing reasons, none of the embodiments ABI identified in Jeans teaches the claimed "shut-off valve."

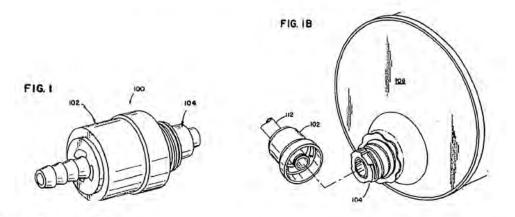
(2) deCler

ABI argued that deCler teaches a piston-type shut-off valve made of rigid material. (RBr. at 51-52; Tr. (Slocum) at 950:14-953:4; RX-0814.0007, 14, 17 at Figs. 3B, 13, 14, 19.). According to Dr. Slocum, the piston valve taught by deCler functions like the piston valve taught by the '751 patent. (Tr. (Slocum) at 950:10-956:2; RDX-1000.0066-69; RX-0814.0007; CX-0012.0007.).

Heineken's expert, Mr. Wolski, did not dispute that the valve disclosed in deCler is a piston valve or that the valve is made of rigid material. Rather, based on the additional

requirement of claims 1 and 7 that the coupling element, which comprises the shut-off valve, must be connected to the dispensing head of a dispensing device (limitations 1[d], 7[b]), Mr. Wolski testified that deCler lacks such a "coupling element." (Tr. (Wolski) at 1194:16-1195:8.). Specifically, Mr. Wolski explained that deCler only teaches that the insert valve assembly (102) and receptor valve assembly (104) can couple and uncouple to each other, and that the reference provides no teaching that its assembled valve can couple and uncouple to a dispensing head, as shown below in Figure 46. (*Id*; CDX-5572; RX-0814 at Figs. 1, 1b, 4:27-35.).

Figure 46: Figures 1 and 1b of deCler



⁽RX-0814 at Figs. 1, 1b.).

Mr. Wolski's testimony is persuasive. There is no teaching of the dispensing valve being coupled to a dispensing head in deCler. Thus, deCler fails to disclose the claimed "shut-off valve."

c) 1[f]/7[d]: "the shut-off valve (19, 32) is detachably connectable"; "the shut-off valve is freely movable with the flexible tube upon placement and removal of the valve into and from the dispensing head"

i. Primary References

None of the Primary References teaches or discloses these aspects of this claim limitation

because each alleged shut-off valve is not "detachably connectable" and not "freely movable with the flexible tube upon placement and removal of the valve into and from the dispensing head."

Because the pinching mechanism in each reference is permanently located in the tap head, the valve is not detachably connectable in any of the references. (Tr. (Wolski) at 1176:9-18; CDX-5537; RX-0312 at Fig. 56 (depicting a "control valve means 26" for compressing delivery tube 20); RX-0838 at Fig. 1 (disclosing a dispensing line that is pinched by "eccentric 133"); RX-0837 at Figs. 2, 7 (teaching a beverage delivery hose that is pinched by "actuating handle 57").). For the same reason, each of the valves disclosed in the Primary References is not freely movable with the dispensing line upon placement and removal of the valve into and from the dispensing head. (Tr. (Wolski) at 1176:19-1177:2; CDX-5538; RX-0312 at Fig. 56; RX-0838 at Fig. 1; RX-0837 at Fig. 2.).

Accordingly, the Primary References do not teach this claim limitation.

ii. Secondary References

Similarly, Jeans and deCler lack these elements of limitations 1[f] and 7[d].

First, the normally-closed pinch valve embodiments of Jeans do not teach or disclose a shut-off valve that is detachably connectable. As in ABI's Primary References, the pinching mechanisms 40 and 42 in both embodiments of Jeans' pinch valves are permanently located in the syrup dispensers and thus are neither "detachably connectable" to the operating element in the dispensing head nor "freely movable" with the flexible tube. (Tr. (Wolski) at 1180:14-20; CDX-5547; RX-0658.0001, Figs. 2, 7.).

Additionally, as discussed above in Section VII.D.3(b) with respect to limitations 1[e] and 7[c], deCler does not teach that its assembled value is detachably connectable to a dispensing head—it only teaches that the insert and receptor valve assemblies can couple and uncouple to each other. (Tr. (Wolski) at 1195:12-21; CDX-5573-74; RX-0814 at Figs. 1, 1b.).

Thus, the Secondary References do not sufficiently remedy the deficiencies of the Primary References.

d) 1[g]: "the shut-off valve is fixedly attached to an outflow end of the flexible tube and is removable from the dispensing device upon replacement of the container"

I. Primary References

None of the Primary References teaches or discloses this claim limitation because each reference's alleged shut-off valve is not fixedly attached to an outflow end of the flexible tube and is not removable from the dispensing device upon replacement of the container. Because the pinching mechanism in each reference is permanently located in the tap head, the entire valve is not fixedly attached to an outflow end of the flexible tube as required by the claim. (Tr. (Wolski) at 1177:11-20; CDX-5539; RX-0312 at Fig. 56; RX-0838 at Fig. 1; RX-0837 at Figs. 2, 7.). For the same reason, the shut-off valve taught in each Primary Reference is not removable from the dispensing device upon replacement of the container. (Tr. (Wolski) at 1177:11-20; CDX-5539; RX-0312 at Fig. 1; RX-0837 at Figs. 2, 7.).

ABI contended that the same flexible tube that is pinched shut comprises both a flexible tube and a shut-off valve fixedly attached to the remainder of the tube. (RBr. at 30 ("the pinched section of the dispensing line [of Timmermans] comprises a "shut-off valve", 38 (van der Meer's "pinched section of the dispensing line comprises a "shut-off valve"), 43 (in Grill, "resilient flow control portion 38," i.e., the shut-off valve, is part of 'delivery tube 20"").). ABI offered no support for the argument that a portion of the tube is, or even can be, fixedly attached to itself.

Accordingly, the Primary References do not teach this claim limitation.

ii. Secondary References

The Secondary References also do not teach this claim limitation.

As discussed above in Section VII.D.3(c), the pinching mechanism described in Jeans permanently resides in the syrup dispenser, such that the entire valve is: (i) not fixedly attached to an outflow end of the flexible tube (Tr. (Wolski) at 1181:10-15; CDX-5549; RX-0658 at Figs. 2, 7); and (ii) not removable from the dispensing device upon replacement of the container (Tr. (Wolski) at 1185:23-1186:6; CDX-5554.).

By not discussing the Jeans' pinching mechanism, ABI appears to suggest that the ball in Figures 17-20 alone is a shut-off valve and is "fixedly attached" to an outflow end of the flexible tube. (RBr. at 47-49.). However, as Mr. Wolski pointed out, this is only a portion of the shut-off valve.

[T]he valve just sitting there is not a shut-off valve. It's simply a closure at this point. There's no ability to actuate it into an open position. So all you have is a closed end, so it's normally closed, pinched open. All the valve is doing there is passively restricting flow. It needs some kind of actuating mechanism to open it so we don't have a shut-off valve.

(Tr. (Wolski) at 1181:25-1182:7; CDX-5550.)

The ball in Jeans suffers an additional problem meeting the claim limitation when viewed on its own. As Mr. Wolski noted, the ball is not fixedly attached to an outflow end of the flexible tube because it is "free to go wherever it wants." (Tr. (Wolski) at 1182:8-1183:2; CDX-5550-51.). Mr, Wolski explained that due to pressure, carbonation, and gravity, the ball would "sputter" and "dither back and forth" in a horizontal application such as in Timmermans, van der Meer, or Grill because "the pressure would try to push it up there, and then once it equalizes come back and sputter a little bit, then go back and come back." (Tr. (Wolski) at 1182:18-24.).

The deCler reference also does not meet this limitation because it does not teach or

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disclose a shut-off valve that is fixedly attached to an outflow end of a flexible tube. (Tr. (Wolski) at 1197:15-1198:10; CDX-5576-77; RX-0814 at 4:27-35.). The insert and receptor valve assemblies described in deCler are designed to uncouple from each other; because the pieces of the deCler valve can uncouple apart, it is not "fixedly attached" to an outflow end of a flexible tube. (Tr. (Wolski) at 1194:16-1195:8; CDX-5572; RX-0814 at Figs 1, 1b, 4:27-35.).

Furthermore, deCler specifically teaches that its quick-connect can either: (1) attach to a container (i.e., at the inlet end); or (2) attach to another quick-connect on another line (i.e., between two tubes). (Tr. (Wolski) at 1197:25-1198:5; CDX-5577.). The deCler reference does not disclose a quick connect located at the outlet end of a tube. (Tr. (Wolski) at 1197:25-1198:5; CDX-5577; RX-0814 at Figs. 1b, 1c.). The deCler reference also does not teach or disclose that its quick-connect valve is removable upon replacement of the container because only half of the valve at most is removable when the container is replaced. (Tr. (Wolski) at 1198:11-21; CDX-5578.).

For these reasons, the Secondary References do not sufficiently remedy the deficiencies of the Primary References.

4. ABI Failed to Demonstrate a Motivation to Combine the Primary and Secondary References

a) ABI Waived Its Motion to Combine Arguments

As a threshold matter, ABI is not be permitted to make arguments for a motivation to combine based on "hygiene" or "inadvertent spillage" because ABI waived those arguments by failing to disclose them in its Pre-Hearing Brief. (RPBr. at 46, 50, 56-59.).

First, ABI did not contend that "hygiene" or "inadvertent spillage" provided motivation to combine any of its primary references with Jeans or deCler prior to the Hearing. Rather, the sole motivation to combine any of its pairs of references raised in ABI's Pre-Hearing Brief is "because both references relate to valves and are related to art in liquid dispensing containers." (*Id.* at 46, 50, 56-59.). ABI did not include hygiene or inadvertent spillage as motivations to combine in its Pre-Hearing Brief. Thus, ABI waived or abandoned these arguments pursuant to Ground Rule 7.2.

Second, Dr. Slocum did not provide any motivation to combine any of ABI's primary references with Jeans or deCler in his expert reports or deposition. (Doc. ID No. 673080⁴⁷ (Slocum Expert Rpt.) at ¶¶ 138-144, 150-167 (no motivation disclosed); *see generally* Doc. ID No. 672055⁴⁸ at Exs. O1, O2, O19, O20, O29, O30 (invalidity charts attached to Slocum Expert Rpt.) (no motivations disclosed).). For the first time at the Hearing, Dr. Slocum testified that improved hygiene and avoiding spillage are "inherent" motivations to combine disclosed in Timmermans, van der Meer, Grill, Jeans, and deCler. (Tr. (Slocum) at 948:12-950:9, 1094:13-1096:15.3.). Therefore, his testimony regarding motivation to combine, upon which ABI relied, has been deemed stricken. (*See* G.R. 9.5.6 ("Expert witness testimony at the hearing shall be confined to the scope of the expert's report(s), and deposition testimony."); *Certain UV Curable Coatings for Optical Fibers. Coated Optical Fibers, & Prod. Containing Same*, Inv. No. 337-TA-1031, Order No. 41, 2017 WL 3277238, at *4 (July 20, 2017) (precluding respondents' expert from providing any reasoning or explanation not contained in their expert reports).

The only opinion related to a "motivation" to combine that Dr. Slocum disclosed during discovery is a list that includes any and every conceivable motivation to combine any prior art

⁴⁷ This is the public version of Dr. Slocum's opening expert report.

⁴⁸ This is the confidential version of Dr. Slocum's opening expert report.

reference related to the field of drink dispensers, none of which are associated to any specific

prior art combination ABI asserted.

Motivation to combine the Primary References with the Valve References, Dispenser References, and Coupling References or any combination thereof, is found, explicitly or *implicitly* in one or more of the following: the knowledge of one of ordinary skill in the art and/or his or her common sense approach to dispensing liquid; the prior art references themselves and/or the prior art as a whole, including interrelated teachings of multiple prior art references; the subject matter acknowledged as prior art in the '751 Patent; the nature of the problem to be solved and the existence of similar improvements in similar applications; design incentives and other market forces, including the advantages of creating a superior and more desirable product and the effects of demands known to the design community or present in the marketplace; the ability to implement the alleged invention as a *predictable* application and/or *variation* of prior art teaching; improvements in similar devices; the interrelated teachings of multiple prior art references: any needs or problems known in the field addressed by the '751 Patent; and the number of identified, predictable solutions to the problem addressed by these patents. In addition, the simultaneous (and/or prior) inventions described above (and elsewhere in these contentions), are evidence that motivation to combine the concepts described in the various prior art references did, in fact, exist, and they were, in fact, combined. A POSITA developing a beverage dispensing device incorporating a valve and a coupling element would look at other (1) beverage dispensing devices, (2) other valves on the market, (3) other couplers on the market. The references described below are broken into those categories. A POSITA would also look at medical devices, and other fluid flow devices.

(Slocum Expert Rpt. at ¶ 138 (emphases added).).

The Federal Circuit has "repeatedly explained that obviousness findings 'grounded in common sense must contain *explicit and clear reasoning* providing some rational underpinning why common sense compels a finding of obviousness." *In re Van Os*, 844 F.3d 1359, 1361 (Fed. Cir. 2017) (emphasis added) (quoting *Plantronics, Inc. v. Aliph, Inc.*, 724 F.3d 1343, 1354 (Fed. Cir. 2013) (internal quotation omitted)). Rejecting such conclusory assertions, the Federal Circuit has held that they are "inadequate to support a finding that there would have been a motivation to combine." *Id.*; *see also id.* ("*KSR* specifically instructs that when determining whether there would have been a motivation to combine." *Id.*; *see also id.* ("*KSR* specifically instructs that when determining

explicit."") (emphasis added) (quoting KSR Int'l Co., 550 U.S. at 418)).

Although the above quoted passage from Dr. Slocum's report is arguably more than a mere recitation that "common sense" or "common knowledge" of one skilled in the art would have led to certain combinations of references, his "reasoning" is far from "explicit" or "clear." *See, e.g., id.*; *Plantronics*, 724 F.3d 1354. The bolded text underscores the ambiguous and unclear nature of Dr. Slocum's opinion. For example, Dr. Slocum stated that a motion to combine can be found "implicitly," which in itself is vague. He also stated, *inter alia*, the following as other bases for a motion to combine: (i) "knowledge" and/or "common sense" of one of ordinary skill in the art; (ii) "interrelated teachings of multiple prior art references"; (iii) "subject matter acknowledged as prior art" and "the nature of the problem to be solved"; (iv) and "other market forces." (Slocum Expert Rpt. at ¶ 138.). Dr. Slocum did not explain *why* the "knowledge" or "common sense" of an ordinary artisan seeking to solve a problem would have resulted in the combinations ABI asserted. (*Id.*). Nor did he define, for instance, what he considered "interrelated teachings," "subject matter," "problem" or "other market forces." (*Id.*). Such a "reasoning" is not sufficiently clear to support a finding of a motion to combine. *In re Van Os*, 844 F.3d at 1361; *Plantronics*, 724 F.3d 1354.

ABI relied on the following statement in Dr. Slocum's report as evidence Dr. Slocum disclosed "hygiene" as a motivation to combine: "In the medical and semiconductor industries, extreme cleanliness is required as is often the case in the food and beverage industries." (Slocum Expert Rpt. at ¶ 92; Tr. (Slocum) at 1140:5-1141:2 (identifying the above sentence as the disclosure of "hygiene"); RBr. at 54 (citing Tr. (Slocum) at 1140:5-1141:2).) Dr. Slocum mentioned nothing specific about the necessary "hygiene" related to the specific '751 patent.

As Heineken pointed out, this statement is not related to a motivation to combine

argument. (CRBr. at 12.). Dr. Slocum made this statement in the context of the "Technical Background and State of the Art" section of his report for the proposition that fields other than carbonated beverages use valves. (Slocum Expert Rpt. at ¶ 92 ("Valves for opening, and closing, and controlling flow have applications in a wide variety of related fields.").). This sentence, and the rest of paragraph 92 for that matter, do not mention any prior art references, or explain any motivation to combine two very different prior art references.

Moreover, Dr. Slocum did not include "cleanliness" as a motivation in the conclusory laundry list provided in paragraph 138. Nor did ABI identify it as a motivation in its Pre-Hearing Brief.

Accordingly, ABI has waived any argument for a motivation to combine based on "hygiene" or "inadvertent spillage" under Ground Rule 7.2. Additionally, any testimony Dr. Slocum provided during the Hearing on this issue has been deemed stricken. (See G.R. 9.5.6.).

b) A Person of Ordinary Skill in the Art Would Not Have Been Motivated to Combine Jeans With Timmermans, van der Meer, or Grill

ABI's arguments on the motivation to combine certain of the prior art references also fail on their merits. This decision is adopting Mr. Wolski's and Heineken's explanation and testimony that explains why, at the time of the invention, a person of ordinary skill in the art would not have been motivated to combine Timmermans, van der Meer, or Grill with Jeans. (See Tr. (Wolski) at 1188:19-1194:8, 1200:4-1203:21.).

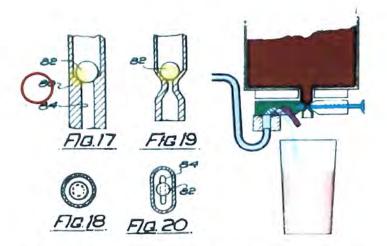
ABI proposed combining each of the Primary References, Timmermans, van der Meer, or Grill, with, *inter alia*, the following syrup dispensing embodiments from Jeans: (i) Figures 17-20, which depict a pinch valve with a ball; and (ii) Figures 21-24, which illustrate a normallyclosed pinch valve. (RBr. at 46-49.). ABI characterized Jeans as being "directed to the dispensing of carbonated beverages." (RBr. at 45). However, the embodiments ABI identified in Jeans are not involved in handling *carbonated fluids*. (*Id.* at 46-50.). To the contrary, the Jeans embodiments ABI sought to combine with the Primary References are portions of Jeans used to dispense *syrup*, which is neither *carbonated* nor a *beverage*. (RX-0658 at Figs. 17-20, 21-24 (showing pinch valves on syrup side); Tr. (Wolski) at 1162:1-9.). According to Mr. Wolski, who has extensive experience in the liquid dispenser industry, this distinction is significant.

As Mr. Wolski described it, the device Jeans teaches is a "post-mix" beverage dispenser, which creates the finished beverage directly in the consumer's cup when the beverage is dispensed by mixing a stream of carbonated water, i.e., the diluent, with a specific ratio of syrup/concentrate. (Tr. (Wolski) at 1161:3-21, 1164:8-1165:5, 1227:24-1228:4.). As Mr. Wolski testified, the valve mechanisms for the carbonated water device and the syrup device in Jeans are "managed differently" because of the different constraints associated with each type of fluid. (Tr. (Wolski) at 1161:13-14, 1228:13-17.). Mr. Wolski explained that a person of ordinary skill would not be motivated to combine a valve mechanism specifically designed for syrup with a carbonated beverage dispenser (especially one made for beer, which contains natural ingredients such as yeast) because it would cause frothing, undesired dispense, and leakage of carbonation, creating an unhygienic environment, which were all problems that the '751 patent intended to address. (*Id.* at 1182:12-1185:19.).

i. Jeans Figures 17-20

Mr. Wolski persuasively explained that one of ordinary skill would not have been motivated to combine Jeans' pinch valve shown in Figures 17-20 (Figure 47, below) with any of the primary references because doing so would be ineffective for purposes of dispensing a carbonated beverage such as beer. (Tr. (Wolski) at 1188:19-1189:10.). Jeans' pinch valves depicted in Figures 17-20 use a ball (highlighted in yellow, below) to block an opening within a vertically-oriented tube of a syrup dispenser of a post-mix beverage dispenser. As shown below in Figure 47, the tube in Jeans' Figure 17 is pinched at the cross-section labeled 80, which opens flow (Figures 19 and 20 of Jeans).

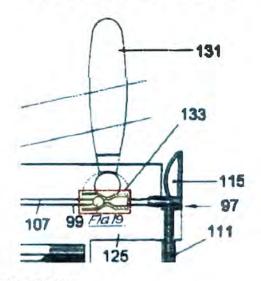
Figure 47: Figures 17-20 of Jeans



(RX-0658 at Figs. 17-20 (annotated); CDX-5520; Tr. (Wolski) at 1166:8-11.).

ABI's proposal entails putting into each of Timmermans, van der Meer, and Grill, Jeans' valve *on its side*, which would undermine the gravity-oriented nature of Jeans' ball design. (RBr. at 54-55 (Timmermans), 57-58 (van der Meer), 60-61 (Grill); RDX-1000.88-89.). For example, Dr. Slocum presented a replica illustrating ABI's proposed combination of Jeans' pinch-valve with Timmermans where Jeans' pinch-valve is oriented horizontally, as shown below in Figure 48.





(RDX-1000.88 (citing RX-0838.0070).).

As Mr. Wolski and Heineken pointed out, this would "simply not work in any of ABI's primary references because the ball disclosed in the Figs. 17-20 pinch valve is 'free to go wherever it wants." (CRBr. at 16; Tr. (Wolski) at 1182:8-1183:2; CDX-5550-51.). In a horizontal orientation such as that in each of the primary references, Mr Wolski explained that the ball would "sputter" and "dither back and forth" because "the pressure would try to push it up there, then once it equalizes come back and sputter a little bit, then go back and come back," causing undesired dispense and leakage of both gas and beer. (Tr. (Wolski) at 1182:18-24, 1183:13-23, 383:22-386:1; CDX-5551-53.).

Additionally, to satisfy the claims, the shut-off valve must be "freely movable with the flexible tube upon placement and removal of the valve into and from the dispensing head." (CX-0012 at claims 1, 7.). As Mr. Wolski explained the problem and why Jeans with other references does not satisfy this requirement: when the Jeans' valve depicted in Figures 17-20 is removed from the dispensing head of Grill, Timmermans, or van der Meer to replace the container, the

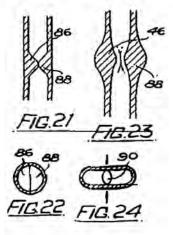
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pinching mechanism does not move with the dispensing line, and the ball, which is also not fixedly attached to the outflow end of the tube, rolls down the line towards its inlet end where the container is located. (CDX-5559; Tr. (Wolski) at 1183:24-1184:9.). According to Mr. Wolski's clear explanation, this allows beer to spill out the end of the tube, air to enter into the container, and carbonation to escape thereby defeating the purpose that the "freely movable" limitation solved in the '751 patent. (CDX-5559; Tr. (Wolski) at 1183:24-1184:9; *see also id.* at 1182:25-1183:2 ("These are notoriously bad situations in carbonated dispense and they are always avoided. So a POSA wouldn't have thought this to be possible, to be honest.").).

ii. Jeans Figures 21-24

Mr. Wolski offered persuasive testimony that at the time of the invention, a person of ordinary skill in the art would not have been motivated to combine the pinch valves shown in Figures 21-24 of Jeans with any of the Primary References. The valves shown below in Figure 49 are normally closed, and are only opened by pinching, as depicted below:

Figure 49: Figures 21-24 of Jeans



(RX-0658 at Figs. 21-24.).

In addition to opening via pinching, Mr. Wolski testified that this valve will also open (or

leak) if there is a pressurized, carbonated beverage such as beer pushing against it. (Tr. (Wolski) at 1184:13-19; CDX-5553.). Mr. Wolski offered the opinion that using one of these valves would result in leakage, frothing, and undesired dispensing issues, because of the pressure and carbonation of the beer. (Tr. (Wolski) at 1189:11-20; CDX-5560.).

ABI contended that because the '751 patent notes that a slit valve can be a shut-off valve, this necessarily means that the normally-closed pinch valve in Figures 21-24 in Jeans is the claimed shut-off valve. (RBr. at 46-49.). ABI's contention is both misguided and makes little sense. A slit valve can be a shut-off valve, but to be the *claimed* shut-off valve, it must have each of the claimed characteristics (e.g., not made of rigid material), which the embodiment shown in Figures 21-24 does not.

iii. The Primary References Teach Away from Jeans

The Primary References each identify problems and provide their own solutions that Jeans would frustrate. Grill is directed to improving a pinch valve by applying compressive forces to the tube in two directions, rather than one, to mitigate deformation caused by repeatedly pinching the same part of the tube in the same manner. (Tr. (Wolski) at 1191:5-9; CDX-5561-62; RX-0312 at 1:47-55.). Replacing Grill's improved pinch valve that has two (2) compressive forces with the pinch valves in Jeans that only uses one (1) compressive force would be "bringing it backwards to something that's worse." (Tr. (Wolski) at 1191:11-12.).

Similarly, according to Mr. Wolski, a person of skill in the art would not have been motivated to combine the normally close-valves of Jeans with Timmermans to achieve better "hygiene" or less "leakage;" because Timmermans already solved the "undesired dispense" problem by using a different, upstream solution. (*Id.* at 1193:2-13.). Specifically, Timmermans solved the problem of undesired dispensing during installation of a container of carbonated drink at the inlet end of the dispensing line. (*Id.* at 1191:20-1192:10, 1192:13-24; CDX-5564-65; RX-0838 at 1:24-34, 25:6-18, Figs. 2, 3.).

Timmermans "solution" requires the user to first pinch the flexible tube before the dispenser can pierce the seal of the beverage container, thus preventing undesired dispensing upon assembly, not removal. (Tr. (Wolski) at 1192:13-24; CDX-5565; RX-0838 at Figs. 2, 3.). van der Meer identifies substantially the same problem and solution as Timmermans, and for the same reasons, a person of ordinary skill in the art would not be motivated to change the end of Timmermans' pinch tube to be a normally closed pinch tube. (Tr. (Wolski) at 1193:2-1194:3; CDX-5567-68; RX-0837 at 3:29-30, 7:1-4.).

c) A Person of Ordinary Skill in the Art Would Not Have Been Motivated to Combine deCler With Timmermans, van der Meer, or Grill

According to Mr. Wolski, at the time of the invention, a person of ordinary skill in the art would not have been motivated to combine deCler with Timmermans, van der Meer, or Grill. Because the dispensing valve disclosed in deCler vents air into a container, Mr. Wolski testified that one of ordinary skill would not be motivated to use this valve with a beverage like beer. (Tr. (Wolski) at 1200:4-17; RX-0814 at 10:18-21 ("The preferred embodiment shown allows simultaneous venting of air into a container as liquid is being dispensed from the container.").). Mr. Wolski explained that if the container is full of beer, it would become flat and contaminated as atmospheric air enters. (Tr. (Wolski) at 1200:4-17.).

i. deCler Vents Air into the Container While Dispensing

ABI contended that only one embodiment of deCler, the quick-connect depicted in Figure 1B, would vent air into the container, and that the quick-connect depicted in Figure 1A would not. (RBr. at 50-51.). The specification and figures do not support ABI's understanding or

presentation of these embodiments. As Heineken pointed out, Figures 1A and 1B describe the same embodiment. The specification of deCler describes Figure 1 as showing "an embodiment of a *dispensing valve 100* in accordance with the principles of the present invention," and further explains that Figures 1A and 1B provide "a perspective view" of "the *dispensing valve 100*" shown in Figure 1. (RX-0814 at 3:5-15, 4:22-31.). The figure ABI relied on to argue that deCler discloses a "shut-off valve made of rigid material," i.e., Figure 13, refers to the same "dispensing valve 100" embodiment.⁴⁹ (RBr. at 52.). In the context of explaining Figure 13, deCler states that the valve, when open, "allows simultaneous venting of air into a container as liquid is being dispensed from the container." (RX-0814 at 10:18-21; RDX-1000.69.).

The deCler reference describes a "second embodiment" in Figures 15-19. (RX-0814 at 11:26-28.). However, that embodiment also discloses venting air. (RX-0814 at 12:10-14 (Referring to Fig. 19, "[t]he arrow E-E' which represents an air passage, similar to the air passage C--C' as shown in FIGS. 14, is also provided by the dispensing valve 100' for venting air while fluid is being dispensed.").).

Thus, deCler's valve is designed to "vent[] air into a container." (RX-0814 at 10:18-21; Tr. (Wolski) at 1200:4-17 (testifying that deCler teaches a valve designed to vent air).).

ii. The Primary References Teach Away from deCler

ABI proposed replacing Grill's improved pinch valve with deCler's dispensing valve, but as Mr. Wolski persuasively testified, no one of ordinary skill would make such a combination because deCler's dispensing valve would vent outside air back into Grill's container of beer.

⁴⁹ Heineken correctly noted that Dr. Slocum and ABI's reliance on Figure 13 to illustrate how fluid allegedly flows in deCler's valve is also incorrect. (RDX-1000.69 (Slocum demonstrative relying on Fig. 13); RBr. at 52 (same).). Figure 13 shows "the dispensing valve 100 in a *closed* position." (RX-0814 at 9:12-13 (emphasis added).).

(Tr. (Wolski) at 1202:6-14; CDX-5582.). Moreover, a person of ordinary skill would not be motivated to make the combination because deCler's two-part quick-connect dispensing valve is meant to be opened and closed by hand and not actuated by a knob or handle. (Tr. (Wolski) at 1194:16-25, 1196:12-18, 1202:15-20.). Neither reference teaches one of ordinary skill how Grill's tapping mechanism could actuate deCler's hand-twisted quick-connect dispensing valve. (*Id.* at 1202:17-23.).

ABI's proposed combination for Timmermans and deCler fails for similar reasons. As Mr. Wolski explained, replacing Timmermans' pinch valve with deCler's quick-connect dispensing valve would lead to the same hygienic issues identified above because of deCler's venting and because Timmermans also does not provide any teaching for opening and closing a hand-twistable quick-connect valve with a tapping mechanism. (*Id.* at 1202:24-1203:8.). The van der Meer and deCler combination that ABI through Dr. Slocum proposed fails for the same reasons as the Timmermans and deCler combination. (*Id.* at 1203:11-21.).

5. Secondary Considerations

An examination of secondary considerations of non-obviousness is not necessary because the asserted claims of the '751 patent have not been found to be obvious. However, in the event the Commission disagrees with this finding, provided below is a brief assessment which concludes that while Heineken offered evidence that demonstrated the commercial success of Hopsy's SUB/Torp DI Products,⁵⁰ Heineken failed to present evidence supporting its claims of copying and industry praise.

⁵⁰ The SUB is the appliance that chills and dispenses draught beer. The Torp refers to the two (2) liter kegs that are placed in the SUB. (Tr. (Otto) at 87:1-13; CPX-0004-5, 0008, 0010-13.).

The SUB's commercial success in the United States supports a finding that the '751 patent is not obvious. Heineken produced evidence showing that Hopsy rose from sales of the SUB in 2016 to almost by the end of 2017. (CX-1550C.0004-5 (Ex. 5); CX-1228C; CX-1262C; CDX-4031C.). Mr. Tron testified during his deposition that "

." (CX-0009C

(Tron Dep. Tr.) at 80:11-13.). During the Hearing, Mr. Tron explained that since switching from growlers to the SUB/Torp, Hopsy's customer retention has increased dramatically. According to Mr. Tron, Hopsy's customer repeat orders have risen from less than of Hopsy's customers who place a second order to more than . (Tr. (Tron) at 209:22-210:10.). Moreover, shortly after switching exclusively to the SUB/Torp DI products, Hopsy's (CX-1262C.0004.). Hopsy's sales and marketing successes appear to be a direct result of Hopsy's practice of the '751 patent through

Hopsy's SUB/Torp.51

With respect to copying, however, ABI engineers Lieven Dirx and Stijn Vandekerckhove provided persuasive testimony that ABI did not copy Heineken's claimed invention. They explained in detail ABI's independent development effort to create its (Tr. (Dirx) at 800:2-807:17, 808:24-809:22; RX-2716C.0055 (Vandekerckhove Dep. Tr.) at 199:8-202:14.).

Heineken's arguments, on the other hand, that ABI had copied the idea of a flexible tube with a shut-off valve embodied in the '751 patent with the NOVA System, were not convincing.

⁵¹ ABI argued that the accused NOVA System and Heineken's DI Products are not commercially successful. (RBr. at 62.). For the reasons discussed in Section IX.C-D (discussing economic prong), it is a finding of this decision that ABI's assertions are not supported by the evidence. (Section IX.C-D at pp. 170-71, 177-78.).

(CRBr. at 37-39.). For example, Heineken contended that prior to the NOVA System, ABI used a in each of its countertop appliances. (CRBr. at 37 (citing CX-0004C at 43:15-45:2; CX-0006C at 94:18-20; Tr. (Dirx) at 794:24-795:2, 820:25-821:2, 822:19-22).). According to Heineken, after it had commercialized products that used a disposable beer line with a flexible tube connected to a shut-off valve, ABI a

. (Id. (citing Tr. (Otto) 85:10-16, 97:10-98:10, 98:11-99:16;

CDX-2003-2004; CPX-0015).). The testimony on which Heineken relied confirms nothing more than the fact that ABI decided to use a shut-off valve with its NOVA System, rather than a

after Heineken marketed products that also incorporated a shut-off valve.

Heineken also pointed to a picture shown below in Figure 50 "comparing" Heineken's BeerTender with ABI's proposed flexible tube and shut-off valve for the NOVA System that appears to have been shown or discussed during a meeting between ABI and an outside firm it retained to develop the NOVA System. (CBr. at 37-38.).

Figure 50: Photograph of

(CX-0227.0005.).

This is not compelling evidence that ABI actually copied the invention claimed in the

'751 patent. The picture merely shows that ABI

, and that ABI

With regard to industry praise, through Jeroen Otto, Heineken attempted to introduce a document from a European brewing consortium that purportedly showed praise for Heineken's "David System," which Heineken asserted embodies the inventions claimed in the '751 patent. (CX-1158; Tr. (Otto) at 99:17-100:22; CRBr. at 36.). However, during the Hearing, Mr. Otto conceded that the purported benefits of the David System, which primarily related to the interchangeability of dispensing components,

device.⁵² (Tr. (Otto) at 167:11-168:5; see also id. at 163:18-166:3.). Thus, no nexus exists between any alleged praise and the '751 patent. In re Huai-Hung Kao, 639 F.3d 1057, 1074 (Fed. Cir. 2011) (explaining that a nexus must exist between any secondary consideration and the claims).

VIII. INEQUITABLE CONDUCT: ABI'S FIFTH AFFIRMATIVE DEFENSE

- A. ABI Has Not Proven by Clear and Convincing Evidence Its Fifth Affirmative Defense That Heineken Committed Inequitable Conduct During Prosecution of the '751 Patent
 - 1. The Legal Standard for Proof of Inequitable Conduct Is a High Bar to Overcome

Every individual who is involved with a patent application filing and prosecution has "a duty of candor and good faith" which includes a duty to disclose to the USPTO "all information *known to that individual* to be material to patentability." 37 C.F.R. § 1.56(a) ("Rule 56")

⁵² Mr. Otto explained that (Tr. (Otto) at 163:18-164:1.). He confirmed that

⁽Id. at 164:4-165:3.).

(emphasis added). The duty of disclosure exists from the date of the initial filing until the date of the issuance of the patent. MPEP § 2001.04.

This standard applies to every inventor named in an application; each attorney or agent who prepares an application; and "every other person who is substantively involved in the preparation or prosecution of the application..." (*Id.*, § 1.56 (c)(1), (2) and (3).). "If inequitable conduct occur[s] with respect to one or more claims of an application, the entire patent is unenforceable." *See Impax Labs, Inc. v. Aventis Pharm. Inc.*, 468 F.3d 1366, 1375 (Fed. Cir. 2006).

To prevail on a claim of inequitable conduct, "the accused infringer must prove that the patentee acted with the specific intent to deceive the PTO." *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290-91 (Fed. Cir. 2011) (en banc) (citing *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3rd 1357, 1366 (Fed. Cir. 2008) ("*Therasense*").). An accused infringer must prove that the applicant "misrepresented" or "omitted" *material* information with an intent to deceive the USPTO. *Therasense*, 649 F.3d at 1287 (emphasis added). While the *Therasense decision* emphasized that honesty at the USPTO is "essential," the Court also noted that because of the history of the previously low standards for proving materiality and intent, the two (2) required elements of an inequitable conduct claim, had resulted in several unintended consequences, "among them increased adjudication cost and complexity, reduced likelihood of settlement, burdened courts, strained PTO resources, increased PTO backlog, and impaired patent quality." *Id.* at 1290.

Noting as well that an "inequitable conduct" charge spawned antitrust and unfair competition claims, as well as claims for attorneys' fees, the *Therasense* Court also observed that, "[W]ith these far-reaching consequences, it is no wonder that charging inequitable conduct has become a common litigation tactic." *Id.* at 1289. Accordingly, the *Therasense* decision held that proving an intent to deceive requires clear and convincing evidence of: (1) knowledge of the withheld information; (2) knowledge that the withheld information was material; and (3) a deliberate decision to withhold the information. *Id.* at 1290.). In other words, both materiality and intent must be proven by clear and convincing evidence. *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1365 (Fed. Cir. 2008).). Moreover, "the specific intent must be the single most reasonable inference able to be drawn from the evidence." *Star Scientific*, 537 F.3d at 1360; *see also Cordis Corporation v. Boston Scientific Corporation*, 658 F.3d 1347, 1360 (Fed. Cir. 2011); "Materiality and intent are separate requirements, and intent to deceive cannot be found on materiality alone." *Cancer Research Tech. Ltd. v. Barr Labs, Inc.*, 625 F.3d, 724, 733 (Fed. Cir. 2010.).

Materiality exists if the USPTO "would not have allowed a claim had it been aware of the undisclosed prior art." *Therasense*, 649 F.3d at 1291. Information is considered material to patentability when it is "not cumulative to information already of record or being made of record in the application and (1) it establishes, by itself or in combination with other information, a *prima facie* case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in (i) opposing an argument of unpatentability relied on by the Office [PTO], or (ii) asserting an argument of patentability." (*Id.* § 1.56 (b)(1) and (b)(2); *see also Ohio Willow Wood Co. v. Alps, South, LLC,* 813 F.3d 1350, 1357 (Fed. Cir. 2016).). There is also a lower threshold for establishing materiality than for proving that a patent is invalid. "Information concealed from the PTO may be material even though it would not invalidate the patent." (*See also Larson Mfg. Co. of South Dakota, Inc. v. Aluminart Prods. Ltd.*, 559 F.3d 1317, 1327 (Fed. Cir. 2009) (quoting *Li Second Family Ltd. v. Toshiba Corp.*, 231 F.3d 1373, 1380 (Fed. Cir.

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2000).). "The legal standard for proof of inequitable conduct is a high bar to overcome." (CPBr. at 80 (citing Certain Radio Frequency Identification (RFID). Prods and Components Thereof, Inv. No. 337-TA-979, 2017 WL 3331733 at *48 (June 22, 2017).).

Therasense applies to inequitable conduct claims brought before the ITC. See In the Matter of Certain Static RAMs and Prods. Containing Same, USITC Inv. No. 337-TA-792, Remand Initial Determination on Validity and Unenforceability, 2013 WL 1154018 at *6-7 (Feb. 25, 2013.).

2. ABI's Allegation That Heineken Committed Inequitable Conduct By Failing to Disclose Certain European Patent References to the USPTO is Unsupported by Clear and Convincing Evidence

In its September 19, 2018 Response to the Complaint and NOI ("Response"), ABI alleged in its Fifth Affirmative Defense that the '751 patent⁵³ is unenforceable or invalid due to the "inequitable conduct of Heineken, the named inventors of the Asserted Patent, and Heineken's attorneys who prosecuted the applications to leading to the Asserted Patent." (ABI Resp. at 13 ¶ 13.).

Specifically, ABI claims that between March 14, 2006 and August 16, 2006, four (4) European Oppositions ("the Oppositions") were filed in the European Patent Office ("EPO") against EP 1284918 ("the $\stackrel{l}{\text{EP}}$ '918 patent") "which was and is assigned to Heineken and is a foreign counterpart to the Asserted Patent." (*See* ABI Resp. at 13 ¶ 15.). ABI notes that the Oppositions resulted in the requirement that Heineken add a limitation to the '918 patent that is not included in the '751 patent. (*See* ABI Resp. at 13 ¶ 17.). ABI also contends that the four (4) Oppositions that were ultimately filed in the EPO that challenged the EP '918 patent included at

⁵³ The '751 patent is RX-00004.

least 11 prior references, including WO99/11563 to Timmermans that was assigned to Heineken, were invalidating patents or they narrowed the claims of the EP '918 patent. According to ABI, these were "material" references that were neither cited during the prosecution of the '751 patent, nor disclosed to the USPTO in violation of the duty of candor. (*See* ABI Resp. at 13 ¶¶ 18-20 (citing 37 C.F.R. 1.56(a); *see also* RPBr. at 68.).

The references to which ABI refers that it says were among the challenges to the EPO proceedings and that were material to the '751 patent prosecution that Heineken failed to disclose to the USPTO include: Grill, Timmermans, van der Meer, Jeans, and deCler.⁵⁴ As Sections VII.D of this recommended decision explains and finds, none of these prior art references invalidate the '751 patent. It follows that they have been found here to be not material to the patentability of the '751 patent. While these same references may have been material to the European Patent Office Proceedings with respect to the EP '918 patent, they are not material to its U.S. counterpart, the '751 patent, which contains certain different claims and language. For example Exhibit A attached to this recommended contains a side-by-side comparison of the claim terms of the EP '918 patent and its U.S. counterpart, the '751 patent. Commissioner Stoll did not attempt an analysis of the comparisons between the two (2) patents. Commissioner Stoll relied upon Dr. Slocum for his "but for" materiality opinions, which as discussed below, have been rejected by this decision. (*See* n. 61.).

The ultimate finding that the '751 patent is not invalid because of inequitable conduct by Heineken or any of the individuals ABI accused of the same, is based upon the weight of the

⁵⁴ Grill is U.S. Patent No. 5,979,713 (RX-0822). Timmermans is U.S. WO99/11563 (R-0838). van der Meer is W099/11561 (RX-0837). Jeans is EP 0246052 (RX-0658). deCler is U.S. Patent No. 5,639,064 / (RX-0814).

evidence, and certain findings as a matter of law.

The most significant problem for ABI is that ABI's proof fails both with respect to both materiality and intent. Both elements are required for a finding of inequitable conduct that *Therasense* requires. *Therasense* at 1290. Even though as ABI argues, courts may infer intent to deceive based on indirect evidence when it is "the single most reasonable inference to be drawn from all the evidence," even the circumstantial evidence that was provided in this Investigation is not sufficient to draw a reasonable inference that individuals associated with Heineken, or the inventors and the attorneys involved in the prosecution of the '751 patent committed inequitable conduct. (*See* RPBr. at 69 (citing *Therasense*, 649 F.3d at 1290); *see also* RBr. at 69).).

3. The Manual of Patent Examining Procedure Excludes Corporations and Organizations from the Rule 56 Duty of Candor

If ABI's allegations relied only upon the notice pleading of its Response, or its subsequent allegations in its Pre-Hearing Brief where ABI reiterates that "Heineken" failed to disclose "but for material" information to the USPTO in violation of the duty of candor, then ABI's allegations could be dismissed without more. The Manual of Patent Examining Procedure ("MPEP") explains, "the duty belongs to individuals, not to organizations." (*See* MPEP 2001.1; *see also* RPBr. at 66, 69; RBr. at 2, 30, 70; *see also* Avid Identification Sys. Inc. v. Crystal Import Corp., 603 F.3d 967, 974 n.1 (Fed. Cir. 2010.).). ABI's expert on Rule 56, former

⁵⁵ ABI called former Commissioner or Patents, Mr. Robert Stoll to testify during the Hearing on April 23, 2019 as ABI's expert on Rule 56 and the practice and procedures at the USPTO and to offer opinions with respect to Heineken's alleged violation of Rule 56 by failing to submit "but-for material" prior art to the USPTO. (RPSt. at 4.). Commissioner Stoll is a partner in the law firm of Drinker, Biddle & Reath. (Tr. (Stoll) at 1355:16-21.). He currently serves on the Advisory Council to the Court of Appeals for the Federal Circuit. (RX-2075; Tr. 1361:7-10.). Commissioner Stoll worked for 29 years at the USPTO. (Tr. (Stoll) at 1359:17:21.) From October 2009 to December 2011, Commissioner. Stoll served as the

Carmichael,⁵⁶ both agreed that Rule 56 does not apply to corporations. (See Tr. (Stoll) at

1388:5-10; see also Tr. (Carmichael) at 1435:14-1436, 1499:5-10, CDX-3004.).

Commissioner for Patents. (1359:3:13.). From October 2007 to October 2009, Commissioner Stoll served as Dean of Training and Education at the USPTO. Among his other titles at the USPTO, Commissioner Stoll served from February 1996 to November 2002 as the Administrator of Legislative and International Affairs at the USPTO. (RPSt., Ex. C; RX-2075; see also Tr. (Stoll) at 1358:16-25.). In the latter capacity, Commissioner Stoll testified that "I was frequently negotiating with the trilateral offices, which include Japan and Europe, about harmonization of different procedures. In preparation for the AIA, American Invents Act, he was studying the procedures at the EPO and the JPO related to postgrant and trying to formulate the U.S.'s position on IPRs and postgrants and CBMs." (Tr. (Stoll) at 1359:17-25.).

During his Hearing Testimony, Commissioner Stoll testified that in preparation for his testimony in addition to the Compliant, the Exhibits thereto, he reviewed, *inter alia*, the '751 file history and patent, the opposition record, the file history of the EP'918 patent, and the file history of the EP '918 patent, and the issuance after opposition. (Tr. (Slocum) at 1363:10-15.). Commissioner Stoll also testified that he read, *inter alia*, the depositions of Andrew Patch (RX-2705C), Jeroen Otto (RX-2702C and RX-2703C), Bart Jan Bax (RX-2691C, and RX-2692C), Arie-Maarten Paauwe, (RX-2704C), the James Carmichael deposition, and he spoke with Dr. Slocum. (Tr. (Stoll) at 1363:15-22.).

It is important to note that Commissioner Stoll stated in his Opening Expert Report, which was withdrawn as an Exhibit, that he was not offering an opinion with respect to "intent," one of the requirements to prove inequitable conduct under *Therasense, supra*. However, Commissioner Stoll's Opening Expert Report was filed on EDIS as my request. (Doc. ID. No. 672054; the Withdrawn Exhibit was RX-2719C.).

⁵⁶ Heineken called Mr. James Thomas Carmichael to testify on April 23, 2019 as its rebuttal expert "on the procedures of the USPTO as it relates to the prosecution of patent applications." (CPSt. at 3.). These include "AIA post-grant proceedings at USPTO." Mr. Carmichael is an attorney in practice with his own law firm who served as a Principal at Miles and Stockbridge, Tysons Corners, VA, from 2002-2015, and as Managing Partner at Lyon & Lyon from 1999-2002. From 1996-1999, Mr. Carmichael served as an Examiner in Chief at the USPTO, and as an Administrative Patent Judge at PTAB. (CPSt., Ex. 3).

Heineken questioned Mr. Carmichael with respect to the European Patent proceedings and claim scope during the Hearing on April 23, 2019. On April 30, 2019, ABI filed a Motion to Strike certain testimony that Mr. Carmichael gave with respect to European Patent Proceedings and Claim Scope with respect to the '751 patent in this Investigation. (Motion Docket No. 1130-017, Motion at 2 (April 30, 2019).). Order No. 22 explains and found that Mr. Carmichael lacked the expertise to testify with respect to either topic, agreeing with ABI's Motion to Strike. Accordingly, Mr. Carmichael's Hearing testimony with respect to European Patent Proceedings, at Tr. at 1451:12-21, 1457:24-1458:10, and 1459:9-13, and his Claim Scope testimony at Tr. at 1443:16-1444:5, and 1449:15-50:17 were stricken pursuant to Fed. R. Evid. 702. (See Order No. 22 at 4-11 (Aug. 26, 2019).).

Similarly, to the extent that ABI attempted to implicate as an entity, the Nederlandsch Octrooibureau law firm ("NLO law firm" or "Nederlandsch law firm"), the Netherlands Patent and Trademark law firm that prosecuted Heineken's corresponding Dutch Patent, EP 1284918 ("the EP '918 Patent") to the '751 patent; and the American law firm of Young and Thompson that prosecuted the '751 patent and that had some communications with the Nederlandsch law firm while it was prosecuting the EP '918 patent, ABI's allegations are unavailing for the same reasons that ABI's allegations against Heineken fail. Rule 56 and its duty of disclosure "would not apply to a corporation or institution as such." (*See* CDX-3003 (citing MPEP § 2001.1 (8th ed., E8r5 (Aug. 2006).).

B. ABI Has Not Proven by Clear and Convincing Evidence That Certain Prior Art References Were "Material" to the '751 Patent

The '751 patent was filed as USSN 10/296,986 on December 2, 2002, as a U.S. national stage entry of PCT/NL01/00423, with an international filing date of May 31, 2001 and a priority date of May 31, 2000. (*See* RPBr. at 64-65 (citing RX-0183C.002).). The '751 Patent's European equivalent, EP 1284918 ("the EP '918 Patent"), is the European Patent Office's entry of the same Netherlands PCT application PCT/NL01/00423.⁵⁷ The EP '918 Patent was granted on November 16, 2005 as EP 1284918 B1 ("the EP '918 patent").⁵⁸ (RX-2071.0001.). While the EP '918 patent was making its way through the EPO proceedings, the '751 patent was being prosecuted in the USPTO. The applicants, or Heineken, retained attorneys at the U.S. law firm of Young and Thompson as their prosecuting attorneys in the United States before the USPTO,

57 RX-2070C.0001.

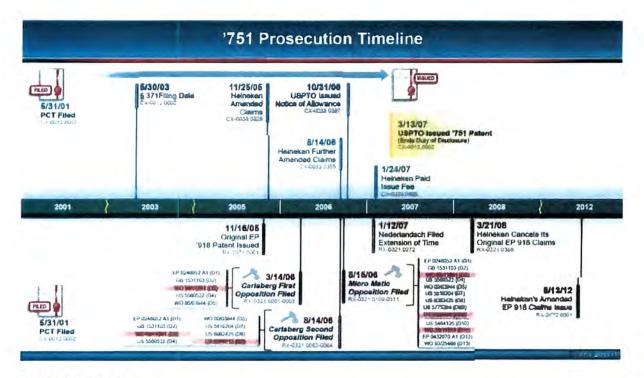
58 See, e.g., RX-2070C.0338.

including a then partner, Attorney Robert J. Patch.⁵⁹ (RPBr. at 65 (citing RX-0183C.0279); *see also* RBr. at 70 (citing CX-0012.0002; CX-0033.0279 (other citations omitted).). The Netherlands law firm that handled the prosecution of the EP '918 patent was the Nederlandsch law firm. At various times, according to documents, Mr. Bottema and Mr. van Westenbrugge were involved. (*See* RPBr. at 65; RBr. at RBr. at 70.). Also, from the documents, and primarily deposition testimony, much of which was shielded by attorney/client privilege, it is not entirely clear the extent of the roles that each attorney played or the extent of the communications between the Nederlandsch law firm and the Young and Thompson law firm. Similarly, the substance of communications between the Nederlandsch law firm and Heineken's employees was shielded also by the assertion of the attorney/client privilege. (Add here to me?).

Figure 51, below, reflects in brief, the significant proceedings that occurred starting with the filing on May 31, 2001 of the EP '918 patent, that is the '751 European counterpart, through the challenges or "Oppositions" that two (2) companies, Carlsberg and Micro Matic filed to the EP '918 patent application in the European Patent Office ("EPO").through the issuance of the '751 patent, and then finally the final proceedings in the EPO.

Figure 51: Timeline of the Prosecution of the EP '918 and U.S. '751 Patents

⁵⁹ Robert J. Patch was a patent lawyer and a partner at Young and Thompson during the EP '918 patent and the '751 patent prosecution. (See RX-2705C (Patch Dep. Tr.) at 27:2-20, 12:2-20.). He is deceased. His son, Andrew Patch, also is an attorney at Young and Thompson. He also was involved in the EP '918 patent and the '751 patent prosecutions although the extent of his involvement was unclear from his deposition. Mr. Patch was deposed in this Investigation on behalf of Young and Thompson, and to their practices and procedures, generally, and the documents they had with respect to the EP '918 patent and the '751 patent prosecutions. (See RX-2705C (Patch Dep. Tr.) at 12:2-20.). ABI did not accuse Mr. Andrew Patch of violating Rule 56 in either its Pre-Hearing Brief or its Post-Hearing Brief. Accordingly, ABI has waived the right pursuant to Ground Rules 7.2 and 10.1 to advance any arguments on appeal with respect to Mr. Andrew Patch in relation to a duty of candor under Rule 56 and to any alleged violation thereof.



⁽RDX-4000.0011.).

ABI contends that because the '751 patent and EP '918 Patent are related, references disclosed to the EPO during the prosecution of the EP '918 Patent were required to be disclosed to the USPTO. (RPBr. at 66 (citing *Therasense*, at 1291.). The EP '918 Patent was opposed in the EPO by Carlsberg Breweries A/S ("Carlsberg") and Micro Matic A/S ("Micro Matic"). (*See* RPBR. at 67 citing RX-2070C.0369; RX-2070C.0399R; RX-2070C.0446.).), Carlsberg filed two (2) Oppositions to the EP '918 patent application in the EPO. The first of these was filed on March 14, 2006 while Carlberg filed its second Opposition on August 14, 2006. (*See* RX-2070C.0369; RX-0321.001 and 0062)). Micro Matic filed its opposition on August 15, 2006. (*See* RX-0321.0109; RX-2070C.0446.).

The application that led to the grant of the '751 patent was still undergoing patent prosecution in the United States, a process which lasted for more than seven (7) months after Carlsberg filed its first Opposition in the EPO. Similarly, the '751 patent continued in

prosecution for more than six (6) after the second Carlsberg and Micro Matic Oppositions were filed. (See RPBr. at 66 (citing RX-2070C.0369; RX-2070C.0399R; RX-2070C.0446; RX-0183C.0403-405).).

According to ABI's narrative, because the Nederlandsch law firm responded to the Carlsberg and Micro Matic Oppositions, it follows that Heineken was also aware of the Oppositions. That much is undisputed. However, as reflected in the Timeline in Figure 51, above, according to ABI's narrative, knowing that the Oppositions in the EPO would be problematic for the fate of the prosecution of Heineken's '751 patent in the United States, Heineken, through the Nederlandsch law firm, specifically sought to slow down the EPO Opposition Proceedings by seeking an extension of time in the EPO to respond to the Carlsberg and Micro Matic Oppositions. (RBr. at 70.). Accordingly, Mr. Bottema, on behalf of the Nederlandsch law firm, filed a 30 page extension request brief in the EPO for Heineken on January 12, 2007, just 10 weeks before the '751 patent issued on March 13, 2007, and just 10 weeks after the USPTO had already issued its October 31, 2006 "Notice of Allowance" of the '751 patent. (*See*, RX-0321.0312, CX-0033.087; CX-0012.0002.).

After the EPO received the Carlsberg and Micro Matic Oppositions, the EPO found Heineken's original EP '918 claims to be invalid. (*See* RPBr. at 70 (citing RX-2070C.0129-0135 RX-2070C.0129-0135).). The EPO identified four (4) of the prior art references that Carlsberg and Micro Matic submitted, that is references that the EPO identified as D1, D5, D6, D6b, as "prejudic[ing]" the validity of the original claims." (*See* RPBr. at 70 (citing RX-2070C.1234-1235).). The EPO's rejection of the original EP '918 patent was based in part on the following four references: (1) Grill (US 5,979,713), also identified as "D6" in the EPO rejection; (2) Timmermans (W099/11563) also identified at "D11" in the EPO rejection; (3) van der Meer (W099/11569) also identified as "D3" in the EPO rejection, and deCler (US 5,775,364) also identified as (D6b) in the EPO rejection. (*See* CX-0012; RDX-4000.8; RX-2070C.1242-1255.). These four (4) references, along with seven (7) others of the original 14 that were presented to the EPO to invalidate Heineken's European EP '918 patent, were not submitted to the USPTO. (RPBr. at 71 (citing RX-0603C, Slocum Opening Expert Report, Section XI; RBr. at 72.).

It is unnecessary to discuss in any greater detail the remaining proceedings in the EPO. The point is that some of the same references the EPO found invalidated the EP '918 patent before Heineken amended certain claims, are the primary references upon which ABI relies, whether alone or in combination (along with Jean), to invalidate the '751 patent. (RPBr. at 70-71.)

ABI argued that Grill, Timmermans, van der Meer, deCler references in conjunction with the testimony of its expert, Dr. Slocum, that these references are "but-for material" to the EP '918 patent based on the EPO's findings, and they were also "but-for material" to the '751 patent. (RBr. at 70-71.). ABI contended that if Heineken and its law firm had disclosed the Grill, Timmermans, deCler and van der Meer references to the USPTO, the '751 patent would not have issued.

However, even ABI's own expert, Commissioner Stoll did not perform his own "materiality" comparative analysis of the EP '918 claims with the claims of the '751 patent or of the prior art references upon which ABI relies. (Tr. (Stoll) at 1408 at 12:15.). Commissioner Stoll relied solely upon Dr. Slocum's analysis and opinions for the "but for materiality" requirement and whether or not the prior art was cumulative. (Tr. (Stoll) at 1403:9-2; 1410:2-9.). As noted in the invalidity discussions, Dr. Slocum's opinions have been rejected. Moreover, if Exhibit A is examined, the '751 patent was allowed based on entirely different language in claim 1 than appeared at some stage in EP '918. The claim terms prosecuted in the USPTO were different than those in EPO.

ABI hotly disagreed with Heineken and its expert Mr. Wolski that the four (4) references that ABI claims are "but for material" are "cumulative" of other patents referenced in the '751 patent. (*See* RBr. at 72-73 (citations omitted).). This argument about whether the identified prior art references are "cumulative" is discussed in more detail in Section XVIII.C.2, below.

It is unnecessary here to discuss in detail why ABI's arguments, and much of Dr. FMeer, and deCler, alone or in combination, are not obvious over the '751 patent. The analysis of those proposed, prior art invalidity references, together with corresponding references to Dr. Slocum's and Mr. Wolski's testimony are discussed and explained in Sections VII.D.3.

Because this decision finds that Grill, Timmermans, van der Meer, deCler or Jean, whether alone or in combination, do not invalidate the '751 patent, they are not material to its patentability either under Rule 56 or under *Therasense*, and the other case precedent that applies to make a finding of inequitable conduct.

Accordingly, ABI has not proven by clear and convincing evidence that the USPTO "would not have allowed a claim had it been aware of the undisclosed prior art." *Therasense*, 649 F.3d at 1291. Because ABI has not proven the "but for" materiality of the identified prior art references, ABI's defense of inequitable conduct fails.

Even if this finding with respect to the materiality of the Grill, Timmermans, van der Meer, deCler or Jean were to be overturned on appeal, ABI's defense of inequitable conduct would fail. ABI failed to provide sufficient evidence to prove that the individuals ABI accused of violating their duty of candor pursuant to Rule 56 had the "intent to deceive" the USPTO, let alone know who was prosecuting the U.S. '751 patent.

C. ABI Did Not Prove by Clear and Convincing Evidence That the Named Inventors of the '751 Patent or Those Individuals Who Were Involved in the Prosecution of the '751 Patent Had an "Intent to Deceive" the USPTO

ABI has leveled the accusations of the "intent to deceive" the USPTO in violation of Rule 56 at several individuals or entities: (1) two of the named inventors⁶⁰ of the '751 patent, Bart Jan Bax, and Marius Corstiaan van Duuren; (2) the Nederlandsch Octrooibureau law firm ("NLO") and one of its partners, Mr. Hans Bottema, who variously represented Heineken during prosecution of the EP '918 patent; (3) the American law firm of Young and Thompson, and one of its then partners, Robert J. Patch; and (4) Heineken employees described as involved in its intellectual property management, including

(RPBr. at 65.). ABI had virtually no evidence to support its

claim that the individuals who it accused of a violation of Rule 56 had the "intent to deceive."

There was no direct evidence of their states of mind that could be weighed for credibility. Most

of the evidence that exists came from hearsay in deposition transcripts by individuals who had no

(See RX-

is taken from the

(See RX-

second day of the deposition of Mr. Jan Bax. (See RX-2692C (Bax Dep. Tr.) (Dec. 14, 2018)) ("Bax Dep. Tr. 2").). Specifically, Mr. Bax testified that

291C.0024 (Bax Dep. Tr. (Dec. 13. 2018)) at 93:9-94:23.). The only information that

2692C.0012 (Bax Dep. Tr. 2) at 169:1-25.). Mr. Bax did not know

⁶⁰ ABJ did not accuse the third named inventor of the '751 patent, Guido Petrus Johannes van der Klaauw, of intent to deceive the USPTO. (*See* RPBr. at 65.). It appears that Mr. van der Klaauw was not deposed; he did not testify during the Hearing. According to the testimony of Bart Jan Bax. one of the other named inventors of the '751 patent who was deposed,

⁽Id.). Because ABI produced no direct evidence during the Hearing that Mr. van der Klauux even know of the Rule 56 duty of candor or breached it, ABI has waived its right to discuss this issue or appeal this issue under Ground Rule 10.1.

involvement in the patent prosecution proceedings either in the EPO or in the USPTO. Neither Commissioner Stoll nor Mr. Carmichael either offered opinions on "intent." They had no basis for doing so.

1. ABI Failed to Produce Evidence that Heineken Employees, Mr. van Karnebeek, Mr. van der Linden, Mr. Parson, or the Named Inventor Guido Petrus Johannes van der Klaauw, Violated Rule 56

ABI initially tied its claim that "Heineken" knew of the European Patent Opposition filings to specific individuals in its Pre-Hearing Brief. (RPBr. at 65.). With respect to those three (3) individuals who ostensibly part of the patent management team at Heineken that ABI accused as having the "intent to deceive" the USPTO, at least initially, ABI offered little evidence, circumstantial or direct, that Heineken's supposed intellectual property management members, Mr. van Karnebeek,⁶¹ Mr. van der Linden and Mr. Parson had knowledge either about about the EPO EP '918 patent prosecution proceedings patent prosecution. (*See* RPBr. at 65.).

None of these individuals appears to have been deposed. (See Complainants' Submission of Final Post-Hearing Exhibit List, Doc. ID No. 675767 (May 13, 2019); see also Respondents' Submission of Final Post-Hearing Exhibit List, Doc. ID No. 675777 (May 14, 2019).). None of these individuals testified during the Hearing.

Among the few pieces of evidence that tie *any* of the individuals to their possible knowledge of the European patent prosecution or the U.S. '751 patent prosecution is contained in

⁶¹ In his December 14. 2018 Deposition. Mr. van Duuren. one of the '751 patent inventors, testified that in (RX-2713C.0026 (van Duuren Dep. Tr.) at 74:16-75:9.). Mr. van Duuren testified (Id.). Beyond that, Mr. van Duuren did not mention Mr.

(RX-2713C.0027 (van Duuren Dep. Tr.) at 79:2-22.). Mr. van Karnebeek was not deposed and did not testify during the Hearing. the Andrew Patch deposition designations (RX-2705C (Patch Dep. Tr.), and secondarily, in the deposition designations of the two (2) of the named inventors on both patents, Mr. Bax and Mr. van Duuren (RX-2691C and 2692C (Bax Dep. Tr.) and RX-2716C (van Duuren Dep. Tr.) and in the deposition of Mr. Otto (RX-2702C and 2703C).

Mr. Patch's testimony with respect to when and with whom he or his firm, Young and

Thompson, communicated at Heineken, if at all was general and non-specific.

Q. Did you ever contact anyone at Heineken in relation to the patent litigation matters that you referenced earlier?

Mr. Mammen: Same guidance. Don't reveal any substantive communications.

A. Right. There were communications with Heineken personnel in connection the litigation. I don't recall how ---who initiated them.

Q. So in litigation matters, you communicated directly with Heineken, correct?

A. To some extent I believe, yes.

Q. And in prosecution matters, you communicated with this firm, Nederlandsch?

A. That's what I under—I mean that's what I recall. I don't recall communicating directly with Heineken in prosecution matters.

Q. Did the firm communicate directly with Heineken directly in any prosecution matters?

A. Not so far as I am aware.

(See RX-2705C.0011 (Patch Dep. Tr.) at 31:5-24.).

Thus, although the Young and Thompson law firm prosecuted some U.S. patents for

Heineken, including the '751 patent, at least to the extent Mr. Patch was able to remember Mr.

Patch did not mention

(See RX-2705C.0014, 0014 (Patch Dep. Tr.) at

46:3-47:1.).⁶² The only person Mr. Patch specifically identified with whom he had communicated during the prosecution of the '751 patent was Mr. Bottema, the lawyer from the Nederlandsch firm who was communicating with Young and Thompson as it prosecuted the '751 patent prosecution. (RBr. at 69-71).

Mr. van der Linden's name was mentioned only twice during Jereon Otto's deposition testimony. (RX-2702C and RX-2703C.). Mr. Otto was asked a series of questions about who coordinated the patent strategy at Heineken. All Mr. Otto knew was

, had

but he did not

(Id. (Otto Dep.

(RX-2702C, Otto Dep. Tr. at 61:8), Mr. Otto

knew that

Tr.) at 61:23-25); and more generally at 61:22-67:3.). However, Mr. Otto could not name the

(Id. (Otto

Dep. Tr.) at 63:18-22; 64:12:16.). Mr. Otto did not know

(Id. (Otto Dep. Tr.) at 68:20-23.).

Similarly, Mr. van Karnebeek's name is mentioned approximately twice during Mr. van Duuren's deposition when he testified

(RX-2713C.0026 (van

⁶² Heineken repeatedly asserted its attorney-client privilege throughout Mr. Patch's deposition. Mr. Patch was repeatedly advised throughout his deposition not to reveal attorney/client communications, and he accepted that instruction. (See Patch Dep. Tr. generally). As a result, Mr. Patch was advised by Heineken's attorney "You can discuss the number of times, if you know, but don't reveal any substance of communications." (Patch Dep. Tr. at 41:1-3.).

Duuren Dep. Tr.) at 74:16-75:9; see also n. 61.).

Mr. Parson's name came up only once: in the deposition testimony that Mr. Otto gave and in no others. Mr. Otto was asked whether

work." (Rx-2073C (Otto Dep. Tr. at 388:18.). Mr. Otto answered

(Id. at 338:22-24.).

Even Mr. Otto did not know who the

(Id. at 355:8; 360:15-25;

363:24-364:1-12; 375:22-23; 376:2-22; 377:3-5.).

Mr. Patch's testimony taken together with the testimonies of Mr. Otto and Mr. van Duuren thoroughly undermines ABI's efforts to impute "intent" to deceive the USPTO, let alone that the three (3) Heineken employees ABI accused, Mr. van Karnebeek, Mr. van der Linden, or Mr. Parson, even know of the Rule 56 duty of candor or that they violated Rule 56. (RPB at 65.). ABI did not produce clear and convincing evidence of their violation of Rule 56, let alone of supported circumstantial evidence of their "intent to deceive the USPTO.

Heineken failed to state or argue in its Initial Post-Hearing Brief that any of the three (3) individuals violated Rule 56 and the duty of candor to the USPTO. Clearly, some persons in management at Heineken must have known of the prosecution of the '751 patent. However, it does not appear to have been any of the three (3) individuals whom ABI named in its Pre-Hearing Brief. (See RPBr. at 65.).

Therefore, Heineken has waived the right to raise any arguments on appeal with respect to these individuals and their alleged knowledge of Rule 56, or their alleged violation of the same pursuant to Ground Rule 10.1.

2. ABI Failed to Produce Clear and Convincing Evidence that the Named Inventors of the '751 Patent, Guido Petrus Johannes van der Klaauw, Bart Jan Bax or Marius Corstiaan van Duuren, Violated Rule 56

Two (2) of the named inventors of the '751 patent, Mr. Bart Jan Bax and Mr. Marius Corstiaan van Duuren were deposed. As noted above, the third-named inventor, Guido Petrus Johannes van der Klaauw was not deposed, and had left Heineken's employ sometime between 2000 and 2004. Despite ABI's attempts to tie knowledge of the European Patent Proceedings to them, or that they knew of their Rule 56 duty of candor to the USPTO, ABI's evidence is thin to non-existent.

During his deposition, Mr. Bax did not know who the

(See RX-2692C.0014 (Bax Dep. Tr. 2) at 175:17-19, 176:25-177:24.). When he was asked if he brought any information about the EPO Oppositions to the attention of the U.S. Patent Attorney, Mr. Bax was clear that he

(Id. at 179:2-24, 180:18-

183:9.).

ABI's Post-Hearing Brief mischaracterizes the testimony that Mr. Bax gave during his deposition on December 14, 2018 when he testified as one of Heineken's corporate designees. (RBr. at 75-76.). ABI claimed that Mr. Bax testified that that "Heineken" was "knowledgeable" about the European Oppositions and "therefore, Heineken knew of the references brought by Carlsberg and Micro Matic." (RBr. at 75 (citing RX2692C.0013-14 at 178:18-179:1).). Mr. Bax

never mentioned by name the specific European Oppositions brought by Carlsberg and Micro Matic that ABI mentions in its Post-Hearing Brief. Moreover, in addition to testifying that to his knowledge, legal matters were left to the Nederlandsch law firm, Mr. Bax was asked "

(RX2692C.0013, (Bax Dep. Tr.) at 178:18-20.).

' (Id. at 178:21-23.).

Without more than this testimony, ABI's tenuous evidence does not rise to even a circumstantial inference that Mr. Bax "had knowledge of the withheld information; (2) knowledge that the withheld information was material; and (3) a deliberate decision to withhold the information." *Therasense* at 1290.

Moreover, curiously, in its Post-Hearing Brief, ABI did not cite to any other testimony that Mr. Bax gave that would even suggest he knew or had information that was withheld from the USPTO. (See RX-2691C and RX-2692C (Bax Dep. Tr.) generally.). ABI appears to have dropped its argument that Mr. Bax violated Rule 56 since its only mention of him is in the cursory statement that "Heineken" had knowledge" of the European Oppositions, but nothing about Mr. Bax's allegedly specific knowledge of Rule 56 or of any of his obligations thereunder.

Accordingly, ABI has failed to prove by clear and convincing evidence that Mr. Bax had knowledge that was material to the '751 patent or that he deliberately withheld that information from anyone, let alone the USPTO. There is no evidence of Mr. Bax's "intent to deceive" the USPTO let alone any argument or evidence of the same in ABI's Post-Hearing Brief. (*See* RBr. at 75.). Therefore, ABI has waived the right pursuant to Ground Rule 10.1 to raise any arguments on appeal with respect to Mr. Bax and his alleged knowledge of Rule 56, or his alleged violation of the same.

ABI also imputes certain knowledge to Mr. van Duuren, another of the named inventors who had a duty of candor to the USPTO. (RBr. at 75 (citing 37 C.F.R. § 1.56(c).). ABI's allegations against Mr. van Duuren are more extensive than those made against Mr. Bax. ABI states: "[T]he weight of the evidence indicates that Mr. van Duuren was aware of the oppositions and the single most reasonable inference to be drawn from all the evidence is that Mr. van Duuren intended to deceive the USPTO." (*Id.*). To support that statement, ABI says that Mr. van Duuren testified to his

(Id. (citing RX-2713C.0026 at 76:16-25, .0027 at 78:24-79:12.)).

Unfortunately, yet again, ABI mischaracterized Mr. van Duuren's deposition testimony. None of the testimony to which ABI cites comes even close to testimony that implies, let alone states directly, that Mr. van Duuren was aware of the EP '918 patent, the European Opposition Proceedings or a United States Rule 56 requirement. In fact, Mr. van Duuren testified clearly that he

(See n. 65, infra.). Mr. van Duuren testified he did not have a

He described his role as

(See RX-2713C (van Duuren Dep.

Tr.) at 226:1-12). However, Mr. van Duuren's deposition testimony that ABI relies on to impute knowledge to Mr. van Duuren was his

, and nothing to do with the EP '918 patent, per

se, or the European Opposition proceedings. (See RX-2713C.0027 at 77:2-80:24; id. at

2713.0026 at 75:13-22.).

There is a more problematic ABI mischaracterization of Mr. van Duuren's testimony. As Heineken rightly states in its Post-Hearing Reply Brief: "[W]ith respect to Mr. van Duuren, ABI offers only a conclusory statement that he intended to deceive the USPTO, without further explanation." (CRBr. at 48 (citing RBr. at 74-75.).

In fact, as Heineken notes, Mr. van Duuren testified explicitly during this deposition that until ABI

(CBr. at 48 (citing RX-2713C at 221:20-23, 222:8-11, 223:16-224:3,

225:18-25.). Similarly, Mr. van Duuren also testified during his deposition

(RX-2713 at 227:7-

21).⁶³ ABI then attempted to use Commissioner Stoll's somewhat speculative opinion that "it is unlikely that a person working with Heineken's patent strategy would not be informed of an opposition" to support its argument. (RBr. at 76 (citing Tr. (Stoll) at 1397:17-1398:17).).

ABI's argument distorted Mr. van Duuren's deposition testimony in an apparent effort to weave a speculative claim that would support an otherwise unsupported conclusion about Mr. van Duuren's knowledge and "intent." In sum, there is no direct and virtually no supported circumstantial evidence that Mr. van Durren was involved in or knew of the European Opposition Proceedings, let alone know who should have or might have disclosed them to Heineken's U.S. attorneys or the USPTO, notwithstanding Mr. Stoll's speculative opinion.

Accordingly, ABI has failed to prove by clear and convincing evidence that Mr. van Duuren had knowledge that was material to the '751 patent or that he deliberately withheld that

⁶³ It does not appear that Mr. van Duuren was asked if he had seen any of the other prior art references.

information from the USPTO. There is no evidence of Mr. van Duuren's "intent to deceive" the USPTO under Rule 56.

3. ABI Did Not Prove by Clear and Convincing Evidence that Mr. Hans Bottema of the Nederlandsch Law Firm Violated Rule 56

There is no dispute that Mr. Hans Bottema and his law firm, NLO or the Nederlandsch law firm, handled the prosecution of the EP '918 patent and the European Patent Opposition Proceedings. Heineken's and ABI's dispute with respect to Mr. Bottema's involvement concerns *when* he became involved in those proceedings, and what he knew. (*See* CX-0012.0002; CX-0033.0279.). The fact that Mr. Bottema was subject to Rule 56 is to be found in MPEP 2001.06(a), which states "Foreign patent attorneys representing applicants for U.S. patents through local correspondent firms surely must be held to the same standards of conduct which apply to their American counterparts." MPEP 2001.06(a) Prior Art Cited in Foreign Applications [R-08.2012].

The timeline in Figure 51 describes the dates when different activities occurred during the prosecution of the EP '918 patent and the EPO Opposition Proceedings. Because Mr. Bottema was not deposed and he did not testify during the Hearing, *what* he knew and *when* he knew it had to be drawn from documents, and to a certain extent, from the testimony of percipient witnesses who had direct contact with Mr. Bottema.⁶⁴ 'At best, any conclusion that

⁶⁴ While Commissioner Stoll and Mr. Carmichael undoubtedly testified in good faith, decision relies limitedly upon their testimony except to the extent they explained the application of Rule 56. As noted above, I found that any explanation or observations that Mr. Carmichael gave with respect to the EPO EP '918 patent prosecution and the EPO Opposition proceedings were beyond the scope of his expertise based upon his *Curriculum Vita* and his own description of his expertise and the purpose for which he was retained to give testimony. (*See* Order No. 22.). While Commissioner Stoll may have had more exposure to EPO policy at one time in his career, a great deal of his testimony was opinion testimony that relied on Dr. Slocum's testimony of "but for" materiality. Moreover, notwithstanding Commissioner's testimony about how he learned about Mr. Bottema's involvement, it appears he testified beyond the

might be drawn with respect to Mr. Botttema's "intent to deceive" would have to be based on documents and other circumstantial evidence. However, there is not enough circumstantial evidence with respect to Mr. Bottema's state of mind to withstand scrutiny under *Therasense*. As Heineken notes, the Federal Circuit requires that an individual not only *know* of a reference at the relevant time, they also must appreciate that the reference is material to patentability. (CRBr. at 46 (citing *Therasense*, 649 F.3d at 1290 ("In other words, the accused infringer must prove by clear and convincing evidence that the applicant knew of the reference, *knew that it was material*, and made a deliberate decision to withhold it.") (emphasis in original).).

Among the several arguments ABI made with respect to Mr. Bottema's "intent to deceive" is that the Nederlandsch law firm filed a two-month extension of time for Heineken to file a response to the EPO oppositions in order to ensure that Heineken would not need to go on the record regarding the references until after the '751 patent issued. (*See* CRBr. at 48 (citing RBr. at 75.). However, the request for extension was filed on January 12, 2007 by Mr. van Westenbrugge of the Nederlandsch law firm, and not by Mr. Bottema. (*See* RX-0321.0272.).

scope of his Opening Expert Report and his deposition testimony. (Tr. (Stoll) at 1374:3-10.).

Moreover, to the extent that Commissioner Stoll relied upon Dr. Slocum for opinions of those prior art references, that testimony was problematic. Commissioner Stoll said that Dr. Slocum said that the claims of the EP '918 patent and the '751 patent "were not patentably distinct." (Tr. (Stoll) at 1375care8-9.). Commissioner Stoll had no opinion of his own with respect to the claims or claim scope, but testified "Dr. Slocum said that the references (referring to Grill, Timmerman, van der Meer and deCler) were noncumulative and "but-for material" to the claims." (Tr. (Stoll) at 1410:2-9.). Moreover, Dr. Stoll testified that he did not discuss with Dr. Slocum "that detail" with respect to the combinations of the references upon which Dr. Slocum relied. (Tr. (Stoll) at 1422:1-4; *id.* at 1423:1-10.). That was troubling because Dr. Slocum provided extensive testimony on the materiality of the prior art references upon which ABI has relied have been found to not invalidate the '751 patent. As Exhibit A attached to this recommended decision reflects, a distinguishing feature of the '751 patent that lead to its allowance was the language "wherein the shut-off valve is freely movable with the flexible tube upon placement and removal of the valve into and from the dispensing head and is fixed in position by being releasably attached to the dispensing head." (See CX-0033.0392.).

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As Heineken also notes, ABI did not depose Mr. Westenbrugge, to find out why the extension was filed or to obtain direct evidence whether Mr. Bottema had had knowledge of or role in the filing of the extension. (CRBr. at 48.). Heineken argued, with some justification, that "[T]he "single most reasonable inference" in seeking an extension is that the attorney needed more time to meet the deadline, not an intent to deceive the USPTO. *Therasense, Inc.*, 649 F.3d at 1290. Moreover, Heineken also argued persuasively that the EPO made its first non-binding decision concerning the EP '918 patent on November 19, 2007, more than eight (8) months after the '751 patent issued. (CRBr. at 47.). Consequently, any knowledge acquired from this decision "is not relevant to Rule 56." (Id. (citing Tr. (Carmichael) at 1458:4-18; CDX-3016; Tr. (Stoll) at 1405:8-1408:6 (CDX-8000; RX-0617); *see also Star Scientific Inc.*, 537 F3d. at 1370 n.10.).

ABI also argued that Mr. Bottema must have known about the prior art references because his "firm" was involved in the Opposition proceedings. (RBr. at 72.). ABI attributes knowledge to Mr. Bottema that only circumstantial evidence, his contacts with the Young and Thompson law firm, suggests he had. ABI *imputes* substantive knowledge to Mr. Bottema that record evidence fails to disclose. The documentary evidence is that prior to issuance of the '751 Patent, a different attorney, Mr. Andries van Westenbrugge, worked on the opposition. (*See* CX-0012.002; RX-0321.0001-0003; RX-0321.0272.). Heineken argued, accurately, that the Federal Circuit has held that an organization's knowledge of a reference should not be imputed to individuals within that organization. (CRBr. at 44 (citing*Nordberg, Inc. v. Telsmith, Inc.*, 82 F.3d 394, 396 (Fed. Cir. 1996) (copy of allegedly material prior art present in corporation's files not sufficient to show knowledge by corporation's employee).). ABI speculates that because Mr. Bottema later became involved in the European Opposition proceedings, he must have been involved from the start. (*See* RBr. at 72-73.). That theory is unsupported with sufficient facts. It appears that ABI chose not to test its theory in discovery by deposing Mr. Bottema.

A stronger counter-argument Heineken made is that Mr. Bottema did not believe that the references, when he did learn of them, were material to patentability. (CRBr.at 48.). Heineken argues that the only evidence that Mr. Bottema had of the Grill, Timmermans, van der Meer, Jeans or the deCler references, is the thirty-page brief that Mr. Bottema filed with the EPO that explains why each of ABI's alleged obviousness references were not material to the patentability of any claim of the EP '918 patent. That may or may not be true since Mr. Patch testified that There is

not much other specific information about the extent of Mr. Bottema's involvement or knowledge.

However, it is important to note that Mr. Botterna filed his brief on March 30, 2007, some 18 days after the '751 patent issued on March 13, 2007. (*See* CRBr. at 46; *see also* CX-0531C.1151-85; RX-0321.0313-0341). Since Mr. Botterna filed his brief *after* the March 13, 2007 issuance of the '751 patent, his duty of disclosure had ended. (*See* MPEP § 2001.04.). Heineken argued, with some merit, that if Mr. Botterna did not believe the Grill, Timmermans, Jeans or van der Meer references were material to the EP '918 patent, he undoubtedly did not believe they were material to the '751 Patent at issue in this investigation. (*See* CRBr. at 45 (citing RX-0321.0312-0341; CDX-8000; RX-0617 (other citations omitted).).

Even when asked, Commissioner Stoll admitted during the Hearing that it was possible that Mr. Bottema "had a reasonable believe" that prior art was not material to the EP '918 patent:

Q. You would agree it's entirely possible that when Heineken filed that response, when Mr. Bottema filed that response for Heineken, Heineken –or Mr. Bottema could have had a

reasonable belief that the references were not material to that European '918 patent;

correct?

It's possible.

(Tr. (Stoll) at 1407:22-2.).

Perhaps the strongest argument that Heineken made in response to ABI's inequitable conduct arguments (other than the lack of materiality of the prior art references which is discussed in the Invalidity Sections VII.D, *supra.*), is that Grill, Timmermans, van der Meer and deCler are cumulative to prior art of record in the "751 patent. (CRBr. at 46 (citing Tr. (Wolski) at 1205:171206:23; CDX-5588-5590).). As Rule 1.56 (b) states: "(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application." In *Regeneron Pharm., Inc. v. Merus N.V.*, 864 F.3d 1343, 1350 (Fed. Cir. 2017) the Federal Circuit defined a reference as "cumulative" when it "teaches no more than what a reasonable examiner would consider to be taught by the prior art already before the PTO") (quoting *Regents of the Univ. of Calif. v. Eli Lilly & Co.*, 119 F.3d 1559, 1575 (Fed. Cir. 1997) (which found a certain piece of prior art cumulative when the subject matter relevant to the examination is taught by other prior art noted by the examiner as relevant). In other words, if the prior art references are cumulative, they are not material, and therefore, a duty to disclose them does not exist.

Mr. Wolski, Heineken's expert, explained that Grill, Timmermans, and van der Meer all pertain to beverage dispensing systems that use a pinch valve, while Grill is directed specifically to improving a pinch valve. (CRBr. at 46 (citing Tr. (Wolski) at 1205:17-1206:6; CDX-5588).). As Mr. Wolski persuasively testified, a pinch valve was not only disclosed by the Timp reference (PCT/NL 99/00454) provided to the USPTO during prosecution; it also was the subject of almost a column of discussion and criticism in the '751 patent specification. (See CRBr. at 46 (citing CX-0033.0192; CX-0012 at 1:12-2:7; Tr. (Wolski) at 1205:17-1206:6; CDX-5588).).

Mr. Wolski testified with respect to deCler that ABI relied on it wrongly for its teaching of a linear-type poppet or piston valve. (*See* CRBr. at 46 (citing Tr. (Wolski) at 1206:13-15).). However, as Mr. Wolski also testified, deCler is cumulative of Clark (U.S. Patent No. 5,560,522), De Boer (U.S. Patent No. 3,325,053), and Plester (U.S. Patent No. 5,058,780), all of which disclose a linear-type poppet or piston valve that type of valve that were disclosed to the USPTO during the prosecution of the '751 Patent. (*Id.* (citing Tr. (Wolski) at 1206:7-15; CDX-5589).). Given these disclosures, and argument, it is a supported finding that none of the references upon which ABI relied to prove that Mr. Bottema violated Rule 56 were "material to patentability." Thus, Mr. Bottema had no duty of candor to disclose them and he did not violate Rule 56.

Based upon the evidence and the reasoning provided, ABI has not proven by clear and convincing evidence that Mr. Bottema "acted 'knowingly and deliberately" to deceive the USPTO" during prosecution of the '751 patent. Similarly, there is not enough evidence to support a finding that "the most reasonable inference" required by *Therasasense* was that Mr. Bottema had "an intent to deceive" the USPTO. *Certain Radio Frequency Identification (RFID) Prods. & Components Thereof*, ID, 2017 WL 3331737, at *159.

Without a finding of "intent to deceive" by any of the individuals whom ABI accused of inequitable conduct, one of the requirements of *Therasense*, ABI's Fifth Affirmative Defense fails as a matter of law.

Finally, there is one last issue. Notwithstanding the file documents from the EPO EP '918 patent and the patent file, neither Commissioner Stoll nor Mr. Carmichael had current expertise with respect to the European Opposition Proceedings, and what they meant. All they had were time lines and documents which on their face enabled the construction of a time line, but not much more. Heineken argued, justifiably none of the witnesses testified about the differences between U.S. and European patent law and procedure and ABI did not address this (CRBr. at 47 (citing *Heidelberger Druckmaschinen* AG v. *Hantscho Commerical Prods., Inc.,* 21 F.3d 1068, 1072 n.2 (Fed. Cir. 1994)(finding that the "weight that the district court appeared to place on the European examiner's rejection was not appropriate" when it found the patent obvious because theories and laws of patentability and examination practices vary from country to country).).

IX. DOMESTIC INDUSTRY REQUIREMENT: ECONOMIC PRONG

A. Legal Standard

The Commission may only find a violation of Section 337 "if an industry in the United States relating to the articles protected by the patent ... exists or is in the process of being established." 19 U.S.C. § 1337(a)(2) (emphases added). Typically, a complainant must show that a domestic industry existed at the time the complaint was filed. See Motiva LLC v. Int'l Trade Comm'n, 716 F.3d 596, 601 n.6 (Fed. Cir. 2013).

The domestic industry requirement consists of a "technical prong" and an "economic prong." See, e.g., Certain Elec. Devices, Including Wireless Comme 'n Devices, Portable Music & Data Processing Devices, & Tablet Computs., Inv. No. 337-TA-794, Order No. 88, 2012 WL 2484219, at *3 (June 6, 2012); Certain Unified Comme 'ns Sys., Prods. Used with Such Sys., and Components Thereof, Inv. No. 337-TA-598, Order No. 9 at 2 (Sept. 5, 2007) ("Communications Systems"). A complainant satisfies the "technical prong" of the domestic industry requirement when it proves that its activities relate to an article "protected by the patent." See Communications Systems, Order No. 9 at 2. A complainant satisfies the "economic prong" of the domestic industry requirement when it demonstrates that the economic activities set forth in

subsections (A), (B), and/or (C) of Section 337(a)(3) have taken place or are taking place with

respect to the protected articles. See id.

Subsection 337(a)(3) states that:

(3) For purposes of paragraph (2), and 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).

Because the criteria are listed in the disjunctive, satisfaction of any one of them will be sufficient to meet the economic prong of the domestic industry requirement. *Certain Integrated Circuits, Chipsets and Prods. Containing Same*, Inv. No. 337-TA-428, Order No. 10, Initial Determination (May 4, 2000) ("*Integrated Circuits*") (unreviewed). Establishment of the "economic prong" is not dependent on any "minimum monetary expenditure" and there is no need for a complainant "to define the industry itself in absolute mathematical terms." *Certain Stringed Musical Instruments and Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. at 25-26 (May 16, 2008) ("*Stringed Instruments*"). However, a complainant must substantiate the nature and the significance of its activities with respect to the articles protected by the patent at issue. *Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Comm'n Op. at 30 (Feb. 17, 2011) ("*Imaging Devices*").

The Commission has interpreted Sections 337(a)(3)(A) and (B) to concern "investments in plant and equipment and labor and capital with respect to the *articles* protected by the patent." Certain Ground Fault Circuit Interrupters and Prods. Containing Same, Inv. No. 337-TA-739, 2012 WL 2394435, at *50, Comm'n Op. at 78 (June 8, 2012) ("Circuit Interrupters") (emphasis in original) (quoting 19 U.S.C. §§ 1337(a)(3)(A), (B)).

When a complainant proceeds under Section 337(a)(3)(C), it is not sufficient for the "substantial investment" under subsection (C) to merely relate to articles protected by the asserted patents. Rather, "the complainant must establish that there is a nexus between the claimed investment and asserted patent regardless of whether the domestic- industry showing is based on licensing, engineering, research and development." *Certain Integrated Circuit Chips & Prods. Containing*, Inv. No. 337-TA-845, Final Initial Determination, 2013 WL 3463385, at *14 (June 7, 2013).

In addition, the Commission has stated that investments in plant and equipment or labor and capital that relate to engineering and research and development ("R&D") (that are expressly identified under subsection (C)), are properly considered under subsections (A) and (B):

The statutory text of section 337 does not limit sections 337(a)(3)(A) and (B) to investments related to manufacturing or any other type of industry. It only requires that the domestic investments in plant and equipment, and employment of labor or capital be "with respect to the articles protected by the patent." 19 U.S.C. § 1337(a)(3). Moreover, even though subsection (C) expressly identifies "engineering" and "research and development" as exemplary investments in the "exploitation" of the patent, that language does not unambiguously narrow subsections (A) and (B) to exclude those same types of investments.

Certain Solid State Storage Drives, Stacked Elecs. Components, and Prods. Containing Same, Inv. No. 337-TA-1097, Comm'n Op. at 8 (June 29, 2018) ("Storage Drives"); see also, e.g., Certain Marine Sonar Imaging Devices, Including Downscan and Sidescan Devices, Prods. Containing the Same, and Components Thereof, Inv. No. 337-TA-921, Comm'n Op. at 57-64 (Jan. 6, 2016) ("Sonar Imaging Devices"). There is no mathematical threshold test or a "rigid formula" for determining whether a domestic industry exists. *Certain Male Prophylactic Devices, Inc.*, Inv. No. 337-TA-292, Comm'n Op. at 39, USITC Pub. 2390 (June 1991) ("*Male Prophylactic Devices*"). However, to determine whether investments are "significant" or "substantial," the actual amounts of a complainant's investments or a quantitative analysis must be performed. *Lelo Inc. v. Int'l Trade Comm'n*, 786 F.3d 879, 883-84 (Fed. Cir. 2015). Even after *Lelo*, which requires some quantification of a complainant's investments, there is still no bright line as to a threshold amount that might satisfy an economic industry requirement.

It is the complainant's burden to show by a preponderance of evidence that each prong of the domestic industry requirement is satisfied. *Certain Prods. Containing Interactive Program Guide and Parental Control Tech.*, Inv. No. 337-TA-845, Final Initial Determination, 2013 WL 3463385, at *14 (June 7, 2013.). Moreover, the Commission makes its determination by "an examination of the facts in each investigation, the article of commerce, and the realities of the marketplace." *Male Prophylactic Devices*, Comm'n Op. at 39 (quoting *Certain Double Sided-Floppy Disk Drives and Components Thereof*, Inv. No. 337-TA-215, Comm'n Op. at 17, USITC Pub. 1859 (May 1986)).

B. Overview of the Parties' Positions

Heineken argued that it has satisfied the economic prong of the domestic industry requirement through domestic investments in plant and equipment (Section 337(a)(3)(A)) and labor and capital (Section 337(a)(3)(B)) made by its licensee, Hopsy, ⁶⁵ in the SUB and Blade DI

⁶⁵ The Commission has held that "the domestic industry inquiry under Section 337 is not limited to the activities of the patent holder, but also involved the activities of any licensees." *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376 (Commission Op. on Remand at 7, USITC Pub. 3072 (Nov. 1997) (internal citations omitted); *Certain Products Having Laminated*

Products ("DI Investments").66	(CBr. at 50.). According to Heineke	en's economic expe	ert, Carla
Mulhern, ⁶⁷ during a nineteen (1	9) month period spanning January 2	017 through July 2	018, and
ending shortly before the filing	of the Complaint, Hopsy's DI Inves	tments totaled	in
plant and equipment and	in labor and capital, or	in all, as shown below	
in Table No. 8. (Tr. (Mulhern)	at 519:13-520:16.). Excluding sales	s and marketing act	tivities,
Ms. Mulhern estimates that Hop	osy's DI Investments during that tim	e totaled	of plant

⁶⁶ Heineken did not argue that it has satisfied the economic prong of the domestic industry requirement through domestic investments in the '751 patent's exploitation under Section 337(a)(3)(C). (See CBr. at 50.). Heineken did not argue that it was in the process of establishing a domestic industry. (See RRBr. at 26 n.5 (citing Opp. to ABI's Motion in Limine No. 2 at 6 n.1 (Doc. ID No. 671064 (Mar. 22, 2019)) (Heineken "has never sought to meet the domestic industry requirement under 'in the process,' nor were such allegations even within the scope of the investigation as-instituted.")), 47 (same assertion).).

⁶⁷ When she testified during the Hearing on Wednesday, April 17, 2019, Carla Mulhern was a Managing Principal at the Analysis Group, an economic and financial and strategy consulting firm. (Tr. (Mulhern) at 511:1-14.). Ms. Mulhern testified on behalf of Heineken "to offer economic opinions and testimony related to certain economic issues arising in the context of this investigation, including economic prong of the domestic industry requirement, the amount and significance of Respondents' inventories of the accused product, products, and the appropriate amount of bond." (*Id.*). Ms. Mulhern has a "bachelor's degree in mathematics and a master's degree in economics." (*Id.* at 513:6-7.).

Packaging and Components Thereof, Inv. No. 337-TA-874, Comm'n Op. at 15 (Sept. 3, 2013)("a licensor may rely upon a licensee's domestic activities and investments") (other citations omitted)).). Moreover, Commission decisions have held that the economic prong of the domestic industry requirement can "be established where a complainant bases its claim exclusively on the activities of a contractor/licensee." Certain Male Prophylactic Devices, Inv. No. 337-TA-546, Order No. 22 at 7 (Mar. 15, 2006) (citing Certain Methods of Making Carbonated Candy Prods., Inv. No. 337-TA-992, ID at 142 (Dec. 8, 1989) (unreviewed in relevant part) (finding that existence of a domestic industry based on a long-term, domestic production of candy by a contractor/licensee using the patented process); Certain Silicon-on-Insulator Wafers, Inv. No. 337-TA-1025, ID at 16 (Feb. 8, 2017)(unreviewed)(finding that economic domestic industry found where NPE relied solely upon the investments of its licensee.); see also Commission Rule 210.12, 19 C.F.R. § 210.12(a)(7). Rule 210.12(a)(9)(iii)-(iv) requires "an identification of each licensee under each involved U.S. patent" as well as "a copy of each license agreement(if any) for each involved U.S. patent that Complainant relies upon ..., to support its contention that a domestic industry as defined in section 337(a)(3) exists or is in the process of being established as a result of the domestic activities of one or more licensees." 19 C.F.R. § 210.12(a)(9)(iii)-(iv).). The "License Agreement" between Heineken and Hopsy is dated December 1, 2016, and attached as Confidential Exhibit 19 to the Complaint; see also CX-1230C ("License Agreement").

and equipment and of labor and capital, or in all. (*Id.*). Based upon Ms. Mulhern's analysis, Heineken argued that, at the time of the filing of its Complaint,⁶⁸ Hopsy's DI Investments in the United States at least with respect to Sections (a)(3)(A) and (a)(3)(B) were significant. (CBr. at 50.).

Table No. 8: Depiction of Hopsy's DI Investments Under Section 337(a)(3)(A) and (B)(figures presented inof U.S. dollars)

Hopsy DI Total	2017 -	Jan July 2018	Total
Plant and Equipment			
Labor and Capital			
Total DI			
Hopsy DI Sales & Marketing			
Plant and Equipment			
Labor and Capital			
Total DI			
Hopsy DI Total Excl. Sales & Marketing	4		
Plant and Equipment			
Labor and Capital			
Total DI			

(CDX-4003C (introduced during Ms. Mulhern's the testimony).).

ABI sought to undermine Heineken's DI proof through at least six (6) different

arguments. First, ABI portrayed Hopsy as a mere importer. (RRBr. at 24-25; see also Section

IX.D., infra.). ABI argued that Hopsy's SUB and Torp, and one of the products that Hopsy

invested in for

. the Blade, were designed either in

(Id.). ABI also noted that the SUB and the TORP were

⁶⁸ "We also affirm the Commission's use of the date of the filing 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." *Motiva, LLC v. Int'l Trade Comm'n*, 716 F.3d 596, 601 n.6 (Fed. Cir. 2013).

(Id.). Similarly, ABl asserted that the tubing used as part of the beer dispensing mechanisms in the SUB and TORP were manufactured

(*Id.*). Yet, ABI mischaracterized Hopsy's domestic operations and failed to rebut Heineken's evidence, presented by Ms. Mulhern that demonstrated how Hopsy's craft beer subscription-based business model added disproportionate value to the U.S. marketplace over time. (Tr. (Mulhern) at 581:19-582:1; CX-1550C at 33; CX-1232C at 37.).

Second, ABI generally questioned the reliability of Hopsy's financial data. (Id. at 25.).

To quote ABI, Heineken's analysis rested on "demonstrably unreliable inputs," including the

aggregate financial information provided by Hopsy."

. .

(*Id.* at 25.). Indeed, ABI and its economic expert, Christopher Martinez,⁶⁹ argued that much of the documentation and testimony provided by Sebastien Tron,⁷⁰ Hopsy's CEO, and Ms. Mulhern were unreliable. (Tr. (Martinez) at 1286:3-8 ("there's questions about the inputs, the financial aggregate data. And there's also questions about the diligence that Ms. Mulhern went to verify or provide some support for, for instance, the inputs that Mr. Tron provides.").). Yet, ABI failed

⁶⁹ When he testified during the Hearing on Tuesday, April 23, 2019, Christopher Anthony Martinez was "founding member and managing partner of a firm called StoneTurn Group," a "forensic accounting and economic consulting firm." (Tr. (Martinez) at 1278:13-16.). "Mr. Martinez graduated from Stanford University with a Bachelor of Arts in Economics, and obtained a Master's Degree in Business Administration from the University of California—Los Angeles." (RPSt. at 2.). Mr. Martinez testified "regarding the absence of a domestic industry for the alleged Domestic Industry Products." (*Id.* at 3.). It should be noted that Mr. Martinez did not have access to all of the documents Hopsy produced to ABI with respect to the economic prong. (Tr. (Martinez) at 1347:11-19.). Mr. Martinez had "no firsthand knowledge of the entirety of the production" that ABI provided. (*See* Tr. (Martinez) at 1349:1-25.).

⁷⁰ When he testified during the Hearing on Wednesday, April 17, 2019, Sebastien Tron was the cofounder and CEO of Hopsy. (Tr. (Tron) at 180:23-24.). Mr. Tron attended business school at the University of California, Berkeley. (*Id.* at 183:20-22.). Mr. Tron testified on behalf of Heineken about "Hopsy's business and domestic investments relating to the domestic industry products." (CPSt. at 1.).

to rebut evidence that Hopsy's financial data was subject to some, quality controls, such as oversight by , and, starting in mid-2017, head of finance, LeAnn Turner. (Tr. (Tron) at 221:3-222:21, 279:19-24, 280:14-281:1, 361:21-362:18.).

Third, ABI challenged Mr. Tron's credibility and his representations with respect to Hopsy's allocation of company resources between investments related to DI Products versus growlers (Hopsy's sole non-DI product) from 2016 to 2018. (RRBr. at 25 ("allocations provided by Hopsy CEO Sebastien Tron off the top of his head at his deposition").).⁷¹ As described below, it is a finding of this decision that Mr. Tron's allocations are reasonable and not markedly different in 2017 and 2018 from percentages generated by a conventional sales-based allocation.

Fourth, against the weight of Commission precedent, ABI sought to exclude from subprong (A) of the domestic industry analysis certain qualifying domestic investments, such as "rent expenses () and other indirect costs such as utilities and phone, office furniture, and office supplies .)." (*Id.* at 39.). For obvious reasons, with more explanation below, ABI was not successful.

Fifth, under subprong (a)(3)(B), ABI sought exclusion of two of Hopsy's capital investments as unreliable, investments; and (2) a explained below, the former was sufficiently reliable and included in the DI analysis,

(See Tr.

⁷¹ Generally, I found Mr. Tron to be a credible and engaging witness, and his testimony supported by direct evidence.

(Martinez) at 1294:10-19.). 72

Sixth, for purposes of assessing significance under sub prongs Sections 337(a)(3)(A) and (B), ABI did not evaluate all of Hopsy's qualifying domestic investments as a start-up in the context of the emerging home-draft industry in the United States. Instead, without legal justification, ABI compared only certain of Hopsy's domestic investments (particularly, capital expenditures) to the worldwide capital investments that Heineken has made in its DI Products and against the investments ABI made in its Accused Products. (*See* Tr. (Martinez) at 1284:8-1285:13 ("I believe that it is important to compare the capital expenditures made by Hopsy relative to other capital expenditures made by parties that have an impact on the domestic industry products. ... one might compare them to Heineken's budgeted spend on

that were used by Hopsy. ... Ms. Mulhern

improperly compares Hopsy to itself and measures significance based on Hopsy compared to itself. I don't find that compelling or appropriate from an economic perspective.").).

ABI's analysis fails because it was incomplete (capital investments only) and involved a domestic versus international comparison not required by the Commission. Moreover, as billion dollar companies, ABI's and Heineken's capital expenditures world-wide, and ABI's expenditures for its U.S. domestic industry of course dwarf Hopsy's expenditures. ⁷³ World-wide expenditures versus Hopsy's 100% domestic expenditures, both of which Ms. Mulhem considered, is not a meaningful comparison in this instance. (*See* e.g. Tr. (Mulhem) at 614:1-

⁷² "CapEx" stands for capital expenditures.

⁷³ For example, Mr. Martinez and ABI tried, unsuccessfully to compare Hopsy's U.S. expenditures against ABI's U.S. expenditures, and Heineken's world-wide expenditures. (*See* e.g. RDX-3000.12C; RDX-3000.14C, and RDX-3000.15C, and the Exs. cited.).

615:20.). Hopsy's DI Investments are "significant" not only in the context of a start-up like Hopsy, but also in the context of investments Heineken and Hopsy have made in the U.S. or world-wide with respect to the nascent and emerging home-draft beer industry. The comparison that ABI tried to make between Hopsy as a "domestic industry" and ABI's and Heineken's investments did not work because the world-wide and U.S. investments both companies make are not only on a much larger scale, they encompass far more than the craft beer industry that Hopsy serves exclusively. (*See* e.g. RDX-3000.12C; RDX-3000.14C, and RDX-3000.15C, and the Exs. cited; Tr. (Mulhern) at 614:1-615:20.).

A corollary argument ABI made is that

(See Tr. (Tron) at 200:9-15.).

In short, while ABI launched a plethora of challenges to Heineken's domestic industry case, none was particularly successful. Based on the weight of the evidence, Heineken has satisfied the economic prong of domestic industry by a preponderance of the evidence with respect to Sections 337 (a)(3)(A) and (a.)(3)(B).

C. Hopsy is a Start-up Company Founded in 2015

Hopsy is a small, start-up company founded in California but now headquartered in New

York City that according to its founder, Sebastian Tron, brings the taproom⁷⁴ experience to the living room (also described as the "home-draft market"). (Tr. (Tron) at 188:12-13, 230:7-231:8.). According to Mr. Tron, Hopsy is "an online marketplace that allows breweries, mostly craft breweries, to sell beer directly to consumers online at scale." (*Id.* at 181:8-10.). After researching this entrepreneurial idea for nine (9) months, Mr. Tron incorporated Hopsy in March 2015. (*Id.* at 187:4-16.). Shortly thereafter, he "onboarded two cofounders who I had met at Nakedwines.com, which is a wine direct to consumer platform, Andrew Perroy and David Bodie Paden." (*Id.* at 187:16-19.).

Mr. Tron started Hopsy by selling growlers⁷⁵ of beer directly to consumers. (*Id.* at 187:12-19.). However, according to Mr. Tron, growlers have drawbacks, including "after you open them, they get flat within 24 hours." (*Id.* at 191:21-192:2.). Growlers are also made of glass and thus costly to transport and prone to breakage. (*Id.*).

Eager for an alternative to growlers, Hopsy enlisted to research companies offering home-draft systems and to build a list of potential partners who could . During its start-up phase, Mr. Tron spoke with

several companies on the list, including Heineken. (*Id.* at 189:20-191:17, 195:4-198:7; CX-1124C; CX-1230C; CX-1256C at 3.). According to Mr. Tron, Hopsy settled on Heineken's SUB system because "it's the best device out there to accomplish what we want to do, which is bring the taproom to the living room" and "Heineken was pretty quick to respond and move forward."

⁷⁴ According to Mr. Tron a taproom is a "place at brewery where you can go and enjoy a fresh beer of draft beer. So you go to the brewery, you have a really nice glass of draft beer, fresh beer." (Tr. (Tron) at 184:3-7.).

⁷⁵ According to Mr. Tron, "growlers are glass jugs, so it's usually a glass jug that people use, people who like craft beer use to go to the local brewery and get a refill of beer." (Tr. (Tron) at 184:22-24.).

(Tr. (Tron) at 195:13-19.). In

' (Id. at 196:14-18.). The

in December 2016, Heineken and Hopsy entered into a license agreement with respect to the '751 patent. (Id.; CX-1230C (License Agreement).).

After signing the license agreement with Heineken, Hopsy shifted its focus to building a sales strategy and a supply chain for the SUB and its removable beer container, the Torp. (Tr. (Tron) at 274:3-276:6, 286:7-15.). Hopsy's SUB sales grew from approximately SUBs and

Torps sold in 2016 to almostSUBs andTorps sold in 2017. (Tr. (Tron) at275:23-276:6; CX-1550C at 4-5; CX-1228C; CX-1262C; CDX-4031C.). Nevertheless, Hopsy'sgrowler business also continued to grow from 2016 to 2017, rising from sales of aboutunits in 2016 to roughlyunits in 2016 to roughlyunits in 2016 to roughlyunits in 2017, before trailing off to aboutunits duringthe first half of 2018. (*Id.*). Mr. Tron characterized this trend as keeping the growlers on "auto-pilot" to serve as a source of revenue as Hopsy directed an outsized portion of its effort to set upthe supply chain for the SUB and Torp.⁷⁶ (CBr. at 52; Tr. (Tron) at 274:3-276:6, 286:7-15.).

Hopsy sold its last growler in April 2018, thereby completing its transition to an appliance-based business model as it intended. (Tr. (Tron) at 276:16-18, 277:5-17; CX-1550C at

⁷⁶ ABI challenged this characterization and Mr. Tron's allocation of Hopsy's investments as to growlers and to the DI Products for January 2018 through April 2018. (RRBr. at 38.). ABI argued that "the growlers had to be processed by Hopsy personnel and delivered to consumers' homes in Hopsy vehicles driven by Hopsy personnel. There is no reason why these and other expenses should have been arbitrarily limited to "(*Id.*). Yet, as explained below, ABI's argument draws a distinction without a material difference because. during that time period, DI Products accounted for about of the units Hopsy sold and nearly of Hopsy's net revenue. (CDX-4009C; CX-0009C; CX-1226C; CX-1228C; CX-1262C; CX-1270C; CX-1271C; CX-1274C; CX-1275C.).

4-5; CX-1228C; CX-1262C; CDX-4031C.). In the first half of 2018, Hopsy sold approximately SUB units and Torp units, both improvements over the sales of these products made during the first half of 2017.⁷⁷ (CDX-4031C; CX-1228C; CX-1262C.). In May 2018, Hopsy also began selling Heineken's other DI product, the Blade appliance, on the which is '(Tr. (Tron) at 260:20-24, 261:14-15.). Hopsy stopped selling the Blade in

' (Id. at 263:3-5.). Consequently, since

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(Id.).

D. Hopsy Is Not A Mere Importer as ABI Suggests

ABI attempted to portray Hopsy as a *de facto* importer that, for the most part, has a business model involving buying goods abroad and selling them here, with "limited long-term

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⁷⁸ ABI attempted to use Hopsy's investments related to the Blade, which were included by Ms. Mulhern in her economic analysis but then downplayed by Ms. Mulhern at the Hearing, as an example of Heineken's purportedly weak domestic industry case. (RRBr. at 39.). However, as explained below, this line of argument is a red herring because the evidence shows that the Blade investments Hopsy made account for a small portion of the overall DI Investments, and at most, approximately 1% of the total DI Investments. (Tr. (Tron) at 262:6-8, 269:20-270:5, 278:6-279:9; Tr. (Mulhern) at 530:4-531:4, 534:7-14, 563:7-564:3.). In other words, Hopsy's investments in the Blade are not material to the DI analysis. investments in the U.S." (RRBr. at 40). ABI's argument harkens back to Schaper

Manufacturing Co. v. Int'l Trade Comm'n, in which the Commission explained that "Congress did not mean to protect American importers ... 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 1368, 1373 (Fed. Cir. 1983). As the Commission elaborated:

The entire manufacturing of the toy vehicles occurs in Hong Kong, as does most of the packaging and quality control. Schaper purchases from Kader the toy vehicles, the great bulk of which are already packaged for sale in blister packs, and imports them into the United States. Those that are not already in blister packs are imported in plastic bags, which are then placed in some of the boxes containing accessories. Schaper's inspection activities upon receipt in this country appear to involve ordinary sampling techniques.

(*Id.* at 1372.). In Schaper, the Commission distinguished other investigations in which it had recognized the existence of a domestic industry. For example, in an investigation involving imported cube puzzles, the Commission found that "quality control, repair and packaging" in the U.S. sufficed to establish a domestic industry, in part because "half of the puzzle's value was added by Ideal's United States activities." (*Id.* at (citing *Certain Cube Puzzles*, USITC Pub. 1334 (Jan. 1983)).). Likewise, in two (2) other investigations, the Commission recognized a domestic industry where the evidence established "substantial domestic repair and installation activities necessarily associated with imported stoves ... and frequent domestic product servicing under warranties as well as some domestic production" pertaining to spray pumps. (*Id.* at (citing *Certain Airtight Cast Iron Stoves*, USITC Pub. 1126 (Jan. 1981) and *Certain Airless Paint Spray Pumps and Components Thereof*, USITC Pub. 1199 (Nov. 1981)).).

As shown below in Figure 52, while Hopsy imports the SUB dispensers and empty Torp beer containers, it does not import and sell only finished goods like the complainant in *Schaper*. Instead, as explained in more detail below in the context of product assembly, Hopsy's business model relies upon domestic labor for the filling and completion of the Torp beer containers it sells and domestic beer production by its craft-beer partners to drive usage of its products by consumers. (Tr. (Mulhern) at 581:19-582:1; CX-1550C at 33; CX-1232C at 37.).

Figure 52: Depiction of Hopsy's Craft Beer Distribution Operation



(CDX-4006 (introduced during Ms. Mulhem's testimony).).

Approximately of the beer Hopsy uses to fill Torps is supplied by domestic breweries, with of that beer considered "craft beer." (Tr. (Mulhern) at 581:19-582:1; CX-1550C at 33; CX-1232C at 37.). Hopsy has partnered with approximately domestic craft breweries, increasing sales and exposure for those breweries. (CBr. at 66; Tr. (Tron) at 185:8-186:18, 204:7-10; Tr. (Mulhern) at 617:2-618:11; CDX-4024C; CX-0965C; CX-0964C; CX-1293C.). In this way, Hopsy's business model is designed, according to Mr. Tron, to foster not just consumption but growth in the U.S. marketplace. (*See* Tr. (Tron) at 203:4-7 (" That's what we do fundamentally.").). Hopsy makes money

(Id. at 203:8-24.).

In light of Hopsy's domestically-facing business model, Ms. Mulhern conducted a valueadd analysis⁷⁹ that reflects and substantiates how Hopsy's domestic activities add significant value to the SUB/Torp in the U.S. relative to the value contributed by overseas components. (Tr. (Mulhern) at 577:14-25.). According to Commission precedent, a value-added analysis is a useful tool for evaluating whether a domestic industry exists. *See, e.g., Certain Woodworking Machs. ("Certain Woodworking Machines")*, Inv. No. 337-TA-174, USITC Pub. No. 1979, Initial Determination (Pub. Version), at 30 (May 1987) ("[although] a portion of [complainant's product] [was] manufactured in Brazil, between 30 and 40 percent of the dollar value of the machine [was] produced in the United States.").

In this Investigation, given that the are manufactured abroad, Ms. Mulhern "wanted to explicitly consider how important those investments are relative to the investments that Hopsy makes in the United States with respect to the other kind of activities in terms of filling the TORPs and packaging and delivering them." (Tr. (Mulhern) at 578:7-13.). To this end, Ms. Mulhern testified that she:

... used Hopsy cost of goods sold information to ... analyze the costs of the SUB and the cost of the TORP, as well as all the other costs that Hopsy incurs in putting

⁷⁹ As Ms. Mulhern explained, "one way to think about this is the value added in the United States relative to the value contributed by overseas components. I understand from -- that this is especially relevant in cases where a product is manufactured both partially in the United States and partially overseas Hopsy incurs [costs] associated with buying the SUBs and TORPs from in the case of the SUB from in the case of the TORP from So by including those costs in the denominator, I am considering the relative value of the Hopsy U.S. activities relative to those overseas activities of those third parties." (Tr. (Mulhern) at 578:1-579:3.).

together its SUB and TORP system. I looked at cost data monthly and then I looked for the period January to May 2018. And I looked at an average. Then I also for each cost in column 2 there, I assign a percentage, based on the share of that activity or the share of that cost or value that's contributed from outside the United States versus in the U.S.

(*Id.* at 580:13-23 (referencing CX-4023C).). Costs occurring outside the U.S. include
"the SUB in row 1 and the TORP, various components of the TORP, in rows 7 through
10, including the ..." (*Id.* at 581:8-10 (referencing CX-

4023C).). Costs occurring inside the U.S. include "the filling costs for the product, as well as in rows 11 and 12, the labels that Mr. Tron testified about. In row 18, it would also include the beer. And in row 19, it includes the shipping materials and the costs associated with Hopsy's labor for that pick and pack function." (*Id.* at 581:13-18 (referencing CX-4023C).).

Hopsy configures its product offerings in a few different ways, so Ms. Mulhern considered a range of options in her analysis. (*Id.* at 579:8-11.). As shown below in Table 9, Ms. Mulhern found that the value added in the U.S. for a typical shipment of one SUB and two (2) Torps is only approximately 20%. (Tr. (Mulhern) at 582:2-6; CDX-4022C-4023C; CX-1550C at 32-33.). According Ms. Mulhern, for a four-TORP refill, the value-added calculation jumps to 85%. (*Id.*). For an (of a SUB and two Torps,

plus 7.5 four-Torp refills), the domestic value-add is approximately 68%, and this number grows over time given the relatively higher domestic value-add for the Torp container versus the SUB appliance. (Tr. (Mulhern) at 577:14-582:13; CDX-4022C; CX-1228C; CX-1232C; CX-1550C at 32-33; Tr. (Tron) at 208:24-209:7). The latter two valued-added calculations of 85% and 68% weight in favor of Heineken establishing a domestic industry, particularly in light of the 30% to 40% value-added calculations found to suffice in *Certain Woodworking Machines*.

Table No. 9: Depiction of Ms. Mulhern's Value-Added Analysis (figures presented in U.S. dollars)

SUB + 2 TORPs	Hopsy Cost	Percent of Costs
U.S.		19.8%
O.U.S.		80.2%
Total	11)) enverterenten open en e	100.0%

4 TORPS	
U.S.	85.0%
0.U.S.	15.0%
Total	100.0%

Average First Year Annual Subsc	ription
U.S.	68.0%
0.U.S.	32.0%
Total	100.0%

(CDX-4022C (introduced during Ms. Mulhern's testimony).).

These percentages, in conjunction with Mr. Tron's testimony about Hopsy's business model, confirm that Hopsy's success as a company is inextricably linked to the creation of value in the U.S. marketplace over time. For example, Mr. Tron testified:

(Tr. (Tron) at 219:20-220:4.).

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In other words, Hopsy strives to 80

(See id. at 210:2-1(

was

. So we had

means

, we have now

which

After

').). In so

(Tr.

doing, as explained above, Hopsy benefits not only itself, but the U.S. craft beer marketplacebecauseof the beer used to fill Torps comes from Hopsy's domestic brewery partners. (Seeid. at 209:18-18 ("""); Tr. (Mulhern) at

581:19-582:1; CX-1550C at 33; CX-1232C at 37.).

E. Hopsy's Domestic Investments in the DI Products

Hopsy has made several domestic investments related to the DI Products that, as shown above in Table No. 8, Ms. Mulhern has parsed by (1) time periods (2017 in its entirety and, separately, January 2018 to July 2018) and (2) purportedly qualifying investments under Section 337(a)(3)(A) (plant and equipment) and (B) (labor and capital).

In terms of plant and equipment used therein, Hopsy started with leased facilities in California (for Richmond, California facility), and within approximately years, also leased facilities in Illinois (), and New York (), as shown below in Figure 53. (Tr. (Tron) at 230:7-231:8, 236:2-10; Tr. (Mulhern) at 534:15-21.). In terms of labor and capital investments, and for the purposes of categorizing all investments by job function,⁸¹

⁽Tron) at 209:12-17.).

⁸¹ "It is a cornerstone of domestic industry law under section 337 that sales and marketing activities alone are insufficient to satisfy the economic prong." Certain Solid State Storage Drives, Stacked Electronics Components, and Products Containing Same, Inv. No. 337-TA-1097, ID at 11 (U.S.I.T.C. May 11, 2018) (citing Certain Kinesiotherapy Devices and Components Thereof, Inv. No. 337-TA-823, Comm'n Op. at 29 n.8 (U.S.I.T.C. July 12, 2013), rev'd on other grounds sub nom. Lelo, 786 F.3d 879).

Hopsy's activities that occurred at its U.S. facilities include: (1) product assembly; (2) operations and customer support; (3) product development; (4) sales and marketing activities; and (5) other support functions. (Tr. (Mulhern) at 537:8-15.). Hopsy also filled Torps at the facilities run by its domestic brewery partners. (Tr. (Tron) at 230:7-231:8, 236:2-10; Tr. (Mulhern) at 534:15-21.). Each of these domestic investments is addressed in turn. **Figure 53:**

(CDX-4007C (introduced during the testimony of Ms. Mulhern).).

As indicated below in Figure 54, Torp beer containers are the focus of Hopsy's domestic product assembly activities considered by Ms. Mulhern. (*See* Section V.B. for description of Torp.). Hopsy's activities included filling Torps with craft beer from brewery partners. (Tr. (Tron) at 248:20-255:23; Tr. (Mulhern) at 537:8-24; CDX-4008 at 2C.). Hopsy then prints and placed labels on the Torps. (*Id.*). Approximately Hopsy employees (the "Ops Team") performed these tasks, which were largely manual and completed individually for each Torp sold. (Tr. (Tron) at 231:24-233:20, 249:8-251:5, 255:9-23.). Hopsy employees clean filing

equipment at least

(Id. at 233:9-235:6, 239:22-

240:13; Tr. (Mulhern) at 537:16-24.). Moreover, in the U.S., Hopsy tests filled Torps in-

house using Hopsy employees, and

(Id.).

Figure 54: Depiction of Hopsy's Domestic Product Assembly Investments

Hopsy Domestic Industry Activities

Product Assembly

- · Filling
- · Placement of cap and beer tube
- · Labeling
- Quality assurance
- Operations and Customer Support
- Product Development
- Other Support Functions
- Sales and Marketing

Sources: CX-0009C; CX-0032C; CX-1225C; CX-1232C; CX-1234C; CX-1237C; CX-1242C; CX-1243C; CX-1248C; CX-1249C; CX-1253C; CX-1254C; CX-1256C; CX-1257C; CX-1262C; CX-1267C; CX-1268C; RX-2701C

(CDX-4008C at 2C (introduced during Ms. Mulhern's testimony).).

As part of Hopsy's domestic operations and customer support, Ms. Mulhern considered that Hopsy's Ops Team stored the filled and assembled Torps in its as shown below in Figure 55. (Tr. (Tron) at 258:7-19; Tr. (Mulhern) at 537:25-538:7; CDX-4008 at 3C; CX-1270C.). Hopsy's Ops Team also matched Torps to orders, and packaged Torps into boxes. The Ops Teams then organized and prepared the boxes for pickup and performed quality assurance testing on the shipments. (Tr. (Tron) at 233:9-20, 235:7-20, 258:24-259:5, 259:13-260:19; Tr. (Mulhern) at 537:25-538:7.).

Additionally, Hopsy employs a -person customer experience team that works with Hopsy's customers on sales and quality assurance, and provided technical support. (Tr. (Tron) at 188:10-16, 207:24-208:13, 268:11-19; Tr. (Mulhern) at 533:21-534:5, 537:25-538:7; CX-1270C.). Hopsy also maintains a website it developed to, among other things, create customized beer profiles and curate monthly beer selections for Hopsy club members.⁸² (*Id.*).

Figure 55: Depiction of Hopsy's Domestic Operations and Customer Support

Hopsy Domestic Industry Activities

- Product Assembly
- Operations and Customer Support
 - of Torps
 - "Pick and pack"
 - Managing customer experience and subscription
 - Troubleshooting
- Product Development
- Other Support Functions
- Sales and Marketing

Schartzer, CX-420997, CX-0032C; CX-1236C, CX-1232C, CX-1244C; CX-1243C, CX-1243C; CX-1248C, CX-1249C, CX-1259C; CX-1256C; CX-1256C; CX-1257C, CX-1267C; CX-1266C; RX-2701C.

(CDX-4008C at 3C (introduced during Ms. Mulhern's testimony).).

⁸² of our customers sign up for a subscription club service, and then they will receive every month, they receive between four and six TORPs of beer delivered to their home.... So we have over of our customers sign up for the club service [aka "subscription service"] when they join Hopsy. So is in the club." (Tr. (Tron) at 208:4-23.).

As shown below in Figure 56, Ms. Mulhern also considered that Hopsy invested domestically in product development. Hopsy hired who were knowledgeable about beer packaging before Hopsy launched the SUB and Torp combination. (Tr. (Tron) at 195:4-12, 254:1-255:2; Tr. (Mulhern) at 538:13-539:2; CDX-4008 at 4C.). Hopsy also hired a

to assist with: (1) the development of a clip to improve

and (2) the creation of a customized Hopsy cap to protect the Torp's beer tube during shipping.⁸³ (*Id.*).

⁸³ Figure 56 references a investment made as of December 2018, well after Heineken filed the Complaint and thus outside the timeframe of relevance for a typical domestic industry analysis. This investment by Honsy relates to down payments totaling toward g

⁽Tr. (Tron) at 304:15-305:18; Tr. (Otto) at 104:24-105:13, 128:4-7); Motiva, LLC v. Int'l Trade Comm'n, 716 F.3d 596, 601 n.6 (Fed. Cir. 2013) ("We also affirm the Commission's use of the date of the filing 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."). Importantly, Ms. Mulhern did not include these investments in her domestic industry analysis. (Tr. (Mulhern) at 543:19-22 ("Q. Did you include any of those deposits in your calculation of the DI investments? A. No, actually, I didn't. I mean, I conservatively left those out.").).

Figure 56: Depiction of Hopsy's Domestic Product Development



(CDX-4008C at 4C (introduced during the testimony of Ms. Mulhern).).

As referenced below in Figure 57, Hopsy also employed a corporate team whose members wore many other "hats." (CX-1270C; Tr. (Tron) at 271:13-21, 232:20-233:20, 249:1-7, 256:3-257:3.). This corporate team provided a variety of support functions, including accounting and finance, legal, human resources, and IT support. (Tr. (Tron) at 273:9-20; Tr. (Mulhern) at 544:8-17; CDX-4008 at 5C.).

Figure 57: Depiction of Hopsy's Domestic Support Functions



(CDX-4008C at 5C (introduced during Ms. Mulhern's testimony).).

 Finally, most recently Hopsy has employed a
 dedicated sales and marketing

 team. (Tr. (Tron) at 232:13-19, 269:16-19; Tr. (Mulhern) at 544:20-545:4; CX-0009C at 119:11

 120:4; CX-1257C at 10; CX-1253C at 8; CX-1262C at 14-15; CX-1270C.). In 2017, Hopsy

 employed a team to sell the SUB to
 customers.⁸⁴ (Tr. (Tron) at 269:20-270:5, 272:10

 19; Tr. (Mulhern) at 568:4-570:12; CX-0009C at 274:9-21; CX-1275C.).

⁸⁴ For several months in 2018, Hopsy employed salespeople to sell the Blade. (Tr. (Tron) at 269:20-270:5, 272:10-19; Tr. (Mulhern) at 568:4-570:12; CX-0009C at 274:9-21; CX-1275C.).
However, as explained above, Hopsy stopped selling the Blade in (Tr. (Tron) at 263:3-5.).
According to Mr. Tron, Hopsy "canceled this department after we made the decision to stop the Blade, so they are no longer with the company, they were (Tr. (Tron) at 270:3-5.). As explained above, Blade investments Hopsy made are not material to this DI analysis because they account for, at most, approximately 1% of the all DI Investments. (Tr. (Tron) at 262:6-8, 269:20-270:5, 278:6-279:9; Tr. (Mulhern) at 530:4-531:4, 534:7-14, 563:7-564:3.).

F. Hopsy's Financial Information is Largely Reliable

As discussed in detail below, ABI raised a legitimate argument about the

. (RRBr. at 29-34.). For

example, ABI asserted that "Hopsy's financials

(*Id.* at 30 (citing Tr. (Martinez) at 1290:8-18).). As shown below in Figure 58, ABI also questioned Hopsy's "Unspecified CapEx"⁸⁵ entry in the amount of from the first half of 2017, when Mr. Tron

(Tr. (Mulhern) at 645:12-25; CDX-4039C (listing Unspecified

CapEx in row [3]); Tr. (Tron) at 280:14-281:1.).	Similarly, as shown below in Figu	re 58, ABI
questioned an operating expense described as "	" of	that Mr.
Tron described as	³⁸⁶ (CDX-4039	OC at row

[12]; CDX-4045C at row [17].). According to ABI, use of the

figures in domestic industry calculations is particularly problematic because of *Heineken*'s lack of documentary support for Mr. Tron's accounting numbers, especially given Mr. Tron's testimony that his numbers are supported by "invoices we have in our payment systems" that were not produced during discovery in this Investigation. (Tr. (Tron) at 339:20-340:7; RRBr. at

(Tr. (Tron) at 280:8-13.).

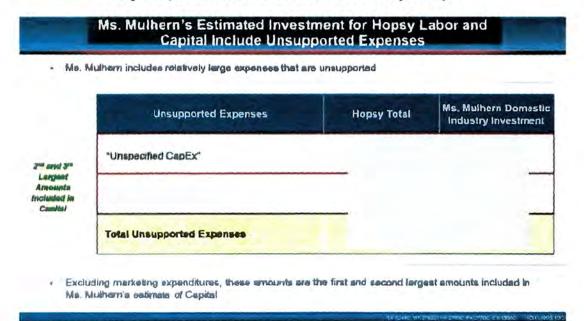
⁸⁶ Mr. Tron explained that this was "a

(Tr. (Tron) at 282:22-283:4.).

⁸⁵ Mr. Tron explained that "[w]hat we record as CapEx are one of expenses, one of investment that we do to grow our business and that benefit the business on the long term.

31-33.). However, the fact that Hopsy was controlling its own financials, notwithstanding its possible start-up mistakes, suggests the degree to which Hopsy truly is distinct from Heineken, and running its own business.

Figure 58: ABI's Depiction of Two Purportedly Unreliable Investment Amounts Relied Upon by Heineken in Its Domestic Industry Analysis



(RDX-3000 at 19C (introduced during Mr. Martinez's testimony).).

It is troubling that ABI did not receive these invoices during discovery. Yet, the absence of underlying invoices does not mean that the record lacks sufficient evidence of the reliability of Hopsy's accounting numbers that Ms. Mulhern relied upon. (*See, e.g.*, Tr. (Mulhern) at 643:15-17 ("I had information about this adjustment in Mr. Tron's deposition, and Mr. Tron testified about it yesterday or the day before.").). Mr. Tron testified that he and Ms. Turner, Hopsy's CFO, worked together to comb Hopsy's financial data and assemble that data into the spreadsheets that Hopsy produced during discovery. (Tr. (Tron) at 279:10-280:23; CX-1271C (Hopsy aggregate capital expenditures, operating expenses, and payroll for 2016-2018); CX- 1275C (Hopsy employee list as of July 1, 2018 extracted from payroll software _____); CX-1270C (Hopsy employee list from ______as of October 1, 2018).). Additional oversight of Hopsy's financial data came from Mr. Tron's reports to Hopsy's investors and its Board. (Tr. (Tron) at 221:3-222:21, 280:14-281:1.). Mr. Tron also testified that Hopsy used a

in the context of

for the purpose

. (Tr. (Tron) at 361:21-362:18.).

ABI nevertheless raised some valid points about the reliability of certain entries in Hopsy's financial data. With respect to the " ." Mr. Tron testified that this figure reflects (Tr. (Tron) at 282:2-284:25.). Based on the advice of its CPA, Hopsy categorized this payment as an operating expenditure, although Hopsy would normally have categorized an expense of this type as a cost of goods sold. (Tr. (Tron) at 282:2-284:25.). Yet, Mr. Martinez pointed out that

(Tr. (Martinez) at

1294:10-19 ("And quite honestly, the question on the

that

Instead,

to be answered, begs to be answered.").

Hopsy, through Mr. Tron,

. (CBr. at 63

(citing Tr. (Mulhern) at 520:17-524:1; CDX-4004C).).

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(Tr. (Martinez) at 1286:11-19; Tr. (Mulhern) at 640:13-23.).

(Tr. (Tron) at 280:14-281:11.). Moreover, Ms. Mulhern explained that she counted the DI portion of those capital expenditures (only 50% because they occurred in 2017) as "capital" rather than breaking the expenses up into separate categories (i.e., plant, equipment, labor, or capital). (Tr. (Tron) at 279:10-281:11; Tr. (Mulhern) at 572:3-573:17.).

In short, for the reasons articulated above, Hopsy adequately accounted for the "unspecified CapEx" figure but not the """" "figure used in Heineken's domestic industry calculations.

G. Heineken's Allocation Methodology is Reasonable

Heineken relied on Mr. Tron's testimony to break from convention and justify a nonsales-based allocation method for domestic industry investments. Mr. Tron testified that, before May 2018, Hopsy split its business between the SUB DI Product, including the Torp container, and essentially one other product, its growlers. (Tr. (Tron) at 273:9-277:17; CX-1271C; CDX-4031C; CX-1228C; CX-1262C; see also CX-0009C at 222:3-224:12.). According to Mr. Tron, in 2016, Hopsy's business activities were directed to growlers and ______to the SUB/Torp. (Tr. (Tron) at 273:9-277:17; see also CX-0009C at 172:16-175:18, 222:3-224:13.). In 2017, Hopsy's activities were devoted to the SUB/Torp and to growlers. (*Id.*). From January to April 2018, the split was SUB/Torp to growlers, and starting in May 2018, it was SUB/Torp, with around attributable to each of the Blade and glassware and merchandise. (*Id.*) Ms. Mulhern summarized these percentages in Table No. 10 below.

Table No. 10: Depiction of Mr. Tron's Allocations Compared to Sales-Based and Revenue-Based Allocations⁸⁷

	2016	2017	Jan-Apr 2018	May-Jul 2018
Proportion of Hopsy's business elated to DI Products			·, · · · ·	4

	2016	2017	Jan-Apr 2018	May-Jul 2018
DI Products' share of overall Hopsy unit sales		1	1	K.
DI Products' share of overall Hopsy net revenue				

(CDX-40009C (introduced during Ms. Mulhern's testimony).).

Heineken argued that its reliance on Mr. Tron's domestic industry allocations set forth

⁸⁷ "Unit sales" refers to "the share of Hopsy's overall unit sales allocated to the DI products or associated with the DI products." (Tr. (Mulhern) at 555:3-5.). Net revenue appears to refer to gross revenues minus processing fees and sales discounts. (See, e.g., CX-1228C.0003.).

above, instead of a sales-based allocation, was reasonable in this instance. (CBr. at 58.).

Ms. Mulhern explained that a sales-based allocation would not fully capture how Hopsy re-allocated its annual domestic investments as it was ramping up its SUB/Torp business and phasing out its growler business from 2016 to 2018. (*See id*; Tr. (Mulhern) at 552:1-553:17, 620:10-621:7, 628:19-23.). Heineken argued that Mr. Tron had in-depth knowledge of Hopsy's business during this timeframe and, thus, was in a unique position to address, and clarify the record with respect to, why his allocations were adequate. (CBr. at 58.). This is particularly true, Heineken suggested, given Hopsy's small size and status as a start-up. (*Id.*). Mr. Tron's testimony appeared to supports these arguments:

So in my role, I mean, I keep track of all the sales. I am really involved in tracking the sales daily. In my company I'm also the data guy. So I am the one who put the data together. I build dashboard. Every hour on my phone I have the sales metric being posted, so I keep track on a daily and hourly basis of our sales numbers, so I know very much our sales and metrics over time. ... So I also keep tabs on everything we do in the company, all the projects, I am directly involved in all the projects we do. Our company is still small, and as the CEO, I am really involved in every aspect of the business. Also depending on the time frame that you mention, I know the company has grown pretty fast and now we have like - I mean December 2018, we had like about employees. But that's not always been the case. We've been really growing the company into that. If you look at 2016 for instance, there of us. So I know what like the were doing, and most of the were project that was driving there I was doing myself. So I have a pretty good sense of each project and how much time we spend on each project.

(Tr. (Tron) at 274:4-275:15.).

ABI vociferously questioned the merits of relying only on Mr. Tron's recollection, as opposed to citing hard data, for allocation percentages. (RRBr. at 35.). According to ABI, "Mr. Tron gave the allocation estimates off the top of his head at his deposition, without referring to any financial records or calculations." (*Id.* (citing Tr. (Tron) at 335:13-24 ("Yeah, I put my best estimate out there.")).). ABI argued that this allocation evidence is particularly suspect given, in ABI's characterization, Mr. Tron's

"objective" evidence of Hopsy's sales that fails to comport with the allocation percentages devised by Mr. Tron and ultimately used by Heineken. (*Id.* ("while Mr. Tron may be an engaging and energized entrepreneur,

... Thus, Ms. Mulhern's total reliance on allocation estimates he provided off the top of his head fatally undermines her work.").).

(RX-0115C ¶¶ 6, 11; Tr. (Tron) at 192:3-5, 323:12-16, 332:12-17.). Undeniably, at the Complaint stage, Mr. Tron appeared to have

However, despite its valid critiques, ABI failed to provide its own rebuttal evidence that Mr. Tron's Hearing testimony in general and his allocation testimony in particular were necessarily unreliable. For example, ABI was correct that Mr. Tron testified that at the end of 2018, Hopsy had "like roughly employees ..., including the part-timers," (*id.* at 308:8-9, RRBr. at 36-37), which suggests that Hopsy grew rapidly during 2018 when compared with the people Hopsy employed in August 2, 2018, when Heineken filed its Complaint, (CX-1275C,

col. E.). However, as Mr. Tron noted, some of Hopsy's employee numbers, salaries and

benefits,

(Tr. (Tron) at 225:7-13.). Hopsy "hire[d] more

' (Id. at 265:4-9.). Moreover,

Mr. Tron's use of the word "roughly" in characterizing Hopsy's workforce is consistent with evidence highlighted by ABI of (CX-1275C, column E (termination date); Tr. (Mulhern) at 570:13-571:1.). As Ms. Mulhern testified, ' people were employed by Hopsy" from January through July 2018, although "some of them came and went" (Tr. (Mulhern) at 570:13-23.).

Given that Hopsy's investments in domestic labor Mr. Tron's lack of precision with labor-related numbers was understandable. Moreover, the testimony-based allocation method that Heineken used, to arrive at a percentage of those figures attributable to domestic work related to the DI Products, was reasonable in this instance. Hopsy is a start-up, and start-ups do not necessary lend themselves to rigid allocation methodologies. *See Certain Mobile Device Holders & Components Thereof*, Inv. No. 337-TA-1028, Comm'n Op., 2018 WL 4042764, at *9 (Mar. 22, 2018) ("Often, complainants in section 337 investigations claim domestic investments relating to domestic industry articles by using allocation methodologies appropriate to the complainant's circumstances, as supported by the evidence in the record.").

Therefore, notwithstanding certain merits of ABI's criticisms, ultimately, they do not undermine Heineken's allocation methodology. Mr. Tron's testimony in support of Heineken's reasonable allocation approach stood unrebutted, and nothing more than his unrebutted testimony was required. *Certain Solid State Storage Devices*, 2018 WL 4300500, at *13 ("[T]here is no Commission requirement that sworn witness testimony directed to the domestic industry requirement cannot be credited without further corroboration by underlying documentation.... Instead, all that is required is the use of reasonable allocations for the purposes of establishing the economic prong of the domestic industry requirement."). Additionally, Mr. Tron's

allocations were not far afield from sales-based allocations as shown above in Table No. 10,88

and Ms. Mulhern testified that using sales-based allocation would not change her ultimate

conclusion that Heineken satisfied the economic prong of domestic industry.⁸⁹ (Tr. (Mulhern) at

553:18-554:20.).

H. With Respect to the SUB DI Product,⁹⁰ Heineken's Investments Are Significant Under Subsection (A) (Plant and Equipment) and Subsection (B) (Labor and Capital)

From January 2017 through July 2018, the total investments of Heineken's licensee,

⁸⁹ ABI attempts to use Hopsy's growler business as rebuttal evidence to Mr. Tron's allocations. ABI notes that this business was not merely "on autopilot," as Heineken suggests, but instead involved inventory "stored in Hopsy's warehouse" that "had to be processed by Hopsy personnel and delivered to consumers' homes in Hopsy vehicles driven by Hopsy personnel." (RRBr. at 38.). Yet, this is attorney argument, not evidence. Moreover, this particular tack does not account for the testimony and opinions that Ms. Mulhern provided that the SUB and TORP are

(Tr. (Mulhem) at 549:10-554:20; CUA-4031C-4032C; CX-1228C; CX-1262C.).

⁹⁰ It is not necessary to consider Heineken's investments with respect to the Blade DI Product. Heineken concedes as much. (CBr. at 53 ("While Hopsy's activities largely related to the SUB and Torp, a small portion of its activities related to the Blade, which it sold for "), 59 n.14 ("Blade-specific investments were a small portion of the overall DI investments—i.e., at most, approximately 1% of the total DI investments[.]").). Taking this approach renders moot ABI's argument that Ms. Mulhern accorded differential treatment to Heineken and Hopsy's investments in the Blade. (RRBr. at 39.). It also defers an interesting question pertaining to whether and under what circumstances an economic prong analysis warrants a product-by-product approach (as opposed to aggregation of investments across DI products), particularly where, as here, domestic investments related to one DI product (the Blade) consist mostly of marketing and advertising expenses. (CBr. at 59 n.14 ("*nearly all [Blade-specific investments] related to sales and marketing* except for Tr.

(Tron) 262:6-8, 269:20-270:5, 278:6-279:9; Tr. (Mulhern) 530:4-531:4, 534:7-14, 563:7-564:3.") (emphasis added); Certain Solid State Storage Drives, Stacked Electronics Components, and Products

⁸⁸ As ABI notes, Mr. Tron testified that in 2017, about of Hopsy's business related to the SUB system, while the SUB/Torp represented of Hopsy's total sales, constituting a discrepancy. (Tr. (Tron) at 335:25-336:4-8; RDX-3000 at 18C; CDX-4033C at row [6].). However, Mr. Tron testified that for the period January through April 2018, approximately of Hopsy's business related to the SUB system, while the SUB/Torp represented ______ of Hopsy's sales, constituting a discrepancy. (Tr. (Tron) at 276:25-277:2; RDX-3000 at 18C; CDX-4033C at row [6].).

Hopsy, in plant and equipment allocable to the SUB/Torp under subprong (A) wasapproximatelytotal, andexclusive of sales and marketing. (Tr.(Mulhern) at 519:21-520:16; CDX-4003C; CDX-4029C; CX-1226C; CX-1270C; CX-1271C;CX-1274C; CX-1275C.).These investments included rent on Hopsy'sL.S. facilities,capital improvements to its warehouses, and equipment necessary to support its operationsrelated to the SUB/Torp. (Tr. (Tron) at 237:12-238:10, 240:14-24, 258:7-260:19; Tr. (Mulhern)at 564:16-24; CX-0009C at 184:21-185:16, 208:11-16, 209:21-210:25, 211:24-212:7, 219:5-18,219:22-220:9, 232:17-25.).Ms. Mulhern concluded that these investments were significant. (Tr.(Mulhern) at 519:16-20 ("So with respect to economic prong of the domestic industryrequirement, it's my opinion that Heineken's licensee Hopsy has made significant investments inthe United States in plant and equipment ... that are related to the DI products.").).

While ABI contended that most of these domestic investments related to rent and other indirect costs such as utilities and phone, office furniture, and office supplies, (RRBr. at 39 (citing RX-2770C)), such investments are appropriate to include under subsection (A) and directly relate to the SUB/Torp for the reasons explained above. *See, e.g., Certain Wireless Commc'ns Equip. & Articles Therein*, Inv. No. 337-TA-866, Order No. 41, 2013 WL 5491820, at *1-*3 (Sept. 11, 2013) (counting rent under sub-prong (A)); *Certain Pumping Bras*, Inv. No. 337-TA-988, Order No. 11, 2016 WL 6903399, at *16-*24 (Oct. 31, 2016) (same).

Turning to subprong (B), as shown above in Table No. 8, from January 2017 through July 2018, Hopsy's total investments in labor or capital allocable to the SUB/Torp were

Containing Same, Inv. No. 337-TA-1097, ID at 11 (U.S.I.T.C. May 11, 2018) ("sales and marketing activities alone are insufficient to satisfy the economic prong") (citing Certain Kinesiotherapy Devices and Components Thereof, Inv. No. 337-TA-823, Comm'n Op. at 29 n.8 (U.S.I.T.C. July 12, 2013)).).

approximately	and approximately	exclusive of sales and marketing.
(Tr. (Mulhern) at 574	:5-15; CDX-4017C; CX-1226C,	CX-1270C; CX-1271C; CX-1274C; CX-
1275C.). Ms. Mulher	n testified that these domestic in	vestments were significant. (Tr. (Mulhern)
at 519:16-20 ("So wit	th respect to economic prong of t	he domestic industry requirement, it's my
opinion that Heineke	n's licensee Hopsy has made sign	ificant investments in the United States in
labor and capital th	hat are related to the DI products	.").).

Figure 59: ABI's Depiction of Ms. Mulhern's Summary of Qualifying Hopsy Investments for Heineken's Domestic Industry Analysis (Subprongs (a)(3) (A) and (a)(3) (B))

Brief Summ Ms. Mulhern's Estimated						ng
Sub-Prong A	= Plant	Eguipment	· Labor	Capital	Sub-Prong B	
Ms. Mulhern includes no Heineken d	rect inve	stment in	her qua	antificatio	on of Domestic Inc	dustry - \$0
Inclusive of sales and marketing exp	enditures		Sub-P	rong A/	Sub-F	Prong B)

(RDX-3000 at 11C (introduced during the testimony of Mr. Martinez).).

ABI and its economic expert, Mr. Martinez, did not challenge this starting point with respect to subprong (B), as shown above in Figure 59. Instead, in addition to their arguments addressed above (e.g., allocation methodology), they attempted to discredit the financial data relied upon by Heineken and Ms. Mulhern. (Tr. (Martinez) at 1287:2-7 ("there are clearly some unexplained items included in the aggregate financial data of Hopsy, and it appears that Ms. Mulhern did not investigate some of the red flags related to those problems or issues and quite honestly should have probably expanded her scope, knowing that there were some ").). In particular, ABI attempted to exclude the "unspecified CapEx" and

" figures from Hopsy's capital expenditures.91

However, even assuming, arguendo, that Mr. Tron did not adequately account for both the "unspecified CapEx" and " prompting their removal from the domestic industry analysis, this shortcoming would not be fatal to Heineken's domestic industry case. Ms. Mulhern noted during her deposition and during trial that removal of the " " of resulted in a decrease of her calculation of the labor and capital investment by approximately inclusive of sales and (to marketing), would not materially affect her opinions, as shown below in Table No. 11. (Tr. (Mulhern) 520:17-524:1; CDX-4004C.). Additionally, even if this Initial Determination were to remove both the and "unspecified CapEx" figures entirely from the subprong (B) analysis, Hopsy's investments in labor alone would still exclusive of sales and marketing).92 over nineteen months (total over (Tr. (Tron) at 266:21-270:5; Tr. (Mulhern) at 567:6-571:9; CX-1226C; CX-1270C; CX-1271C;

⁹¹ As explained above, Hopsy's "unspecified CapEx" figure is sufficiently reliable for inclusion in the domestic industry analysis, while the "is not."

⁹² What drives this finding is the reality that Hopsy's capital expenditures are ______ As Mr. Martinez testified in reference to RDX-3000.20C, Hopsy's capital expenditures "are a relatively small portion of the total [of Heineken's overall domestic industry case.]" (Tr. (Martinez) at 1311:19-21; see also id. at 1311:11-18 ("Well, again, this is simply just a pie graph that shows of her total prongs A and B, there's _______ relates to capital expenditures, approximately relates to operating expenses").).

CX-1274C; CX-1275C; CX-1550C at 1, 9-10, 14; CDX-4014C-15C; CDX-4017C.).

Table No. 11: Depiction of Hopsy's Domestic Industry Investments, with and without Sales & Marketing, After Removal of the "" " of

Les	5		
lopsy DI Total	2017	Jan July 2018	Total
Plant and Equipment			
Labor and Capital			
Total DI			
Hopsy Di Salas & Marketing	No. of Concession, Name		
Plant and Equipment			
Labor and Capital			
Total DI		and the second s	
Hopsy DI Total Excl. Sales & Market	ting		16
Plant and Equipment			Carlos .
Labor and Capital			
Total Di			

(CDX-40004C (introduced during Ms. Mulhern's testimony).).

Note: Values in USD

Hopsy's subprong (A) and subprong (B) investments are quantitatively significant. (Tr.

CX-1270C; CX-1271C; CX-1274C; CX-1275C

(Mulhern) at 519:16-521:2, 639:14-21; CDX-4003C, 4C; CDX-4029C; CX-1226C; CX-1270C;

CONTAINS CONFIDENTIAL BUSINESS INFORMATION SUBJECT TO PROTECTIVE OR

CX-1271C; CX-1274C; CX-1275C.). Hopsy made DI-qualifying investments of

of dollars to catalyze the growth of the home-draft beer industry.

As indicated in Figure 60 below, ABI's expert, Mr. Martinez, did not directly dispute the

significance of Hopsy's DI Investments as framed by Ms. Mulhern based on their absolute size.

Instead, Mr. Martinez argued that the DI Investments should be evaluated relative to the "some

other benchmarks," such as "one might compare them to Heineken's budgeted spend on

And those.

budgeted amounts are between " (Tr. (Martinez) at 1284:14-18.). As asserted by ABI, it would have been helpful for Heineken to provide more evidence with respect to its overseas investments in the SUB/Torp,⁹³ as Heineken as Complainant bears the burden of proving its own domestic industry, not Hopsy's.⁹⁴ (RRBr. at 41-42.). Yet, the law does not require this domestic versus international framing of investments. *Certain Optoelectronic Devices for Fiber Optic Comme'ns, Components Thereof, & Prods. Containing the Same* ("*Certain Optoelectronic Devices*"), Inv. No. 337-TA-860, Comm'n Op. at 18-19 (May 9, 2014) (noting that comparison of domestic to foreign investments "is one of the possible factors that the Commission could but ... is not required to consider").

f

(Tr. (Tron) at 227:6-11.). Heineken subsequent

Id. at

of Heineken's estimatec

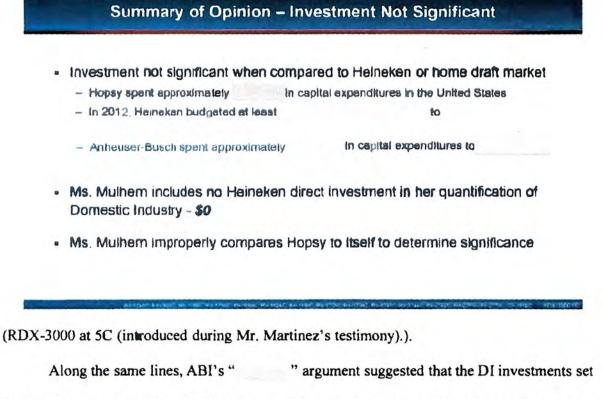
represent (RRBr. at 44.).

⁹³ ABI makes a similar argument with respect to Heineken's investments in the Blade. (RRBr. at 39.). In particular, ABI chastises Ms. Mulhern for including Hopsy's but not Heineken's Blade investments in her analysis. (Id.). However, as discussed above, Hopsy sold the Blade for and thus Blade investments (by Heineken or Hopsy) are not material to the domestic industry analysis herein. ABI concedes as much. (RRBr. at 39 ("Hopsy's Blade investments should also have been excluded.").).

⁹⁴ Nevertheless, by way of a rough and incomplete comparison, it appears that Heineken "budgeted at least (RRBr. at

^{43-44 (}citing RDX-3000 at 14C).). This

Figure 60: ABI's Framing of Significance as Relative to Investments (Some International, Some Domestic) Made by Multinationals Heineken and ABI



forth herein were "significant" only when considered in the context of Hopsy's small stature as a

start-up. (RRBr. at 27-28 ("

95

").).

⁹⁵ ABI did not support its

ev

narrative critique with an analysis of the appropriate legal authority or indicia that would support ABI's claim that (*Id.*). Consequently, ABI's argument was given no weight. Moreover, since ABI did not develop its theory with evidence or legal support, or raise the argument in its post-hearing briefing, it has waived the right to raise its theory as an issue pursuant to Ground Rule 10.1.

Moreover, ABI's domestic investments in its Draftmark home draft product, approximately

are of marginal relevance to the significance analysis here. (RRBr. at 44.). While these investments do provide some indication of ABI's assessment of growth prospects for the home-draft industry, based on the present record, any comprehensive "apples-to-apples" comparison of investments by ABI and Hopsy (and, Heineken, for that matter) in the home-draft market would focus only on capital expenditures and thus would be incomplete. (RDX-3000

(Id. at 200:9-15.).

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(demonstratives of Mr. Martinez) at 14C-5C.). As discussed *supra*, the home-draft market remains relatively small and emerging. Hopsy implements a recurring revenue business model that drives added value for Hopsy and craft brewery partners in the U.S. marketplace, and the significance of the domestic investments of Hopsy (or Heineken or ABI, for that matter) should be (and were in this Initial Determination) evaluated through that contextual lens.

Therefore, for the reasons set forth above, Heineken has proven by a preponderance of the evidence that it has satisfied the economic prong of domestic industry under Section 337 (a)(3)(A) and (a)(3)(B).

X. INVENTORSHIP: SECOND AFFIRMATIVE DEFENSE

A. ABI Failed to Prove Its Inventorship Defense by Clear and Convincing Evidence

1. Legal Standard

"Patent issuance creates a presumption that the named inventors are the true and only inventors." *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998). "[A] coinventor need not make a contribution to every claim of a patent. A contribution to one claim is enough." *Id.* "A patent is invalid if more or less than the true inventors are named." *Trovan, Ltd. v. Sokymat SA, Irori*, 299 F.3d 1292, 1301 (Fed. Cir. 2002).

"The Commission has no power in Section 337 investigations to correct inventorship. Therefore, when a patent at issue in a Section 337 investigation has been shown to have incorrect inventorship, the patent is unenforceable by the Commission unless and until the inventorship is corrected by action of the U.S. Patent and Trademark Office or a federal district court." *Certain Home Vacuum Packaging Prod.*, Inv. No. 337-TA-496, Order No. 36 at 66-67 (U.S.I.T.C. Dec. 16, 2003). The "burden of showing misjoinder or nonjoinder of inventors is a heavy one and must be proved by clear and convincing evidence." Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997) (internal quotation marks omitted). "Conception is the touchstone to determining inventorship." Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997). Conception is the "formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376 (Fed. Cir. 1986) (internal quotation marks omitted); Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994).

2. The Record Lacks Clear and Convincing Evidence that Contributed to the Conception of a Claim of the '751 Patent

The '751 patent names three inventors: Guido van der Klaauw; Bart Jan Bax; and Marius van Duuren. (CX-0012 ('751 patent) at 2.). According to ABI, should have been named as an inventor "because clear and convincing evidence demonstrates that he contributed to the conception of the claimed valve and tapping components, and later reduced these components to practice." (RBr. at 63.). Based on the analysis that follows, only the latter appears true.

(RX-2713C (van Duuren

Depo.) at 179:20-180:2; Tr. (Otto) at 167:22-168:5.).

In response, Heineken asserted that the evidentiary record did not support ABI's inventorship defense. (CRBr. at 2 ("ABI's inventorship case ... suffers from a basic failure of proof.").). Heineken contended that the record included deposition testimony from two (2) of the

three (3) named inventors both of whom clearly asserted that they conceived of the invention and documentary evidence showed that assisted the actual inventors only in reducing their conceived invention to practice. (*Id.* at 39-40.). Heineken also drew attention to evidence conspicuously missing from the record, including ABI's decision not to use deposition testimony in this Investigation. (*Id.* at 40-41.).

As a starting point, an examination of claim scope in the '751 patent reveals that the primary point of novelty in the eleven (11) issued claims (drawn to drink dispenser assemblies and containers) appears to be the inclusion of a "shut-off valve" in the "coupling element" of the dispensing lines). (CX-0012 at claims 1, 7.). The specification of the '751 patent supports this interpretation: "the drink dispenser assembly according to the invention is characterised in that the coupling element [of the dispensing line] comprises a shut-off valve ….." (*Id.* at 2:17-20.). Named inventor Mr. Bax provided further support for this interpretation during his deposition:

" (RX-2692C (Bax Depo.) at 193:17-19.).

The 11 issued claims appear to cover a wide array of "shut-off valve[s] (19, 32) made of rigid material," not a particular shut-off valve. (CX-0012 at claims 1, 7.). The specification of the '751 patent explains that "[t]he shut-off valve can be a normally closed shut-off valve, such as a slit valve in the flexible hose, that can be opened by compression by the tap handle, a separate plastic shutoff valve with a closed equilibrium position, a spring loaded (ball) valve or an electromagnetic valve." (*Id.* at 3:5-9.). "The shut-off valve can, however, also comprise a tap or valve known per se and can be provided with an operating element by means of which it can be opened and closed by a user after it has been placed in the dispensing head." (*Id.* at 3:9-13.).

Against this backdrop, ABI's framing of its inventorship defense misses the mark. ABI

asserted that before "[m]any critical elements of the '751 Patent—*including the specific valve type and tapping mechanism*—had yet to be determined." (RBr. at 63 (emphasis added).). ABI also contended that was an inventor because he "contributed to the conception of *the claimed valve*[.]" (*Id.* (emphasis added).). Likewise, ABI's technical expert, Dr. Slocum, explained that received instructions from named-inventor Mr. Bax,

' (Tr. (Slocum) at 1027:1-7.)

However, as explained above, the claims of the '751 patent are not drawn to the idea of a particular valve type or tapping mechanism. Instead, they are drawn to a purportedly inventive and overarching concept that "the coupling element [of the dispensing line] comprises a shut-off valve[.]" (CX-0012 ('751 patent) at 2:17-20.). Based on the express teachings of the '751 patent, details of how to arrive at the best design for the coupling element and shut-off valve combination for a particular use case appear to inhabit the domain of reduction to practice, not the underlying conception. ABI needed to provide proof of the latter, not the former, for its inventorship defense. As set forth below, ABI failed to do so by clear and convincing evidence.

Heineken claimed that ABI did not cite to deposition testimony, who was the very person ABI characterized as the missing inventor. (CBr. at 39, 41.). This is curious given that, according to Heineken, ABI flew its counsel to the Netherlands to depose for a full day in the 1115 Investigation, another investigation pitting ABI (as complainant) against Heineken (as respondent). (*Id.*). However, Heineken asserted that ABI did not depose in this Investigation or seek a cross-use agreement to use in this Investigation his testimony from the 1115 investigation. (*Id.*). According to Heineken, this was because never claimed to be an inventor of the '751 patent, which is a purportedly atypical circumstance for cases

"when misjoinder issues arise." (*Id.* at 41 (citing *Gen. Elec. Co. v. Wilkins*, 750 F.3d 1324, 1330 (Fed. Cir. 2014) (misjoinder not proven by clear and convincing evidence when "[the putative inventor] did not present any credible testimony that could be corroborated").

ABI derived little support for its inventorship defense from testimony in the evidentiary record. ABI jettisoned deposition testimony. Moreover, deposition testimony from two (2) of the named inventors confirmed that they believed that they (and they alone, without

conceived of the invention claimed of the '751 patent. (RX-2713C at 127:2-10; see also 136:7-9 (

'); RX-2691C (Bax Depo.) at 94:6-99:20.).

Although silent on role in conception, testimony of record supports an argument that was instrumental in reducing to practice the invention claimed in the '751 patent. For example, named-inventor Mr. van Duuren testified that

(RX-

2713C (van Duuren Dep. Tr.) at 180:23-182:7.). Mr. van Duuren also testified that

' (Id. at 192:3-193:4.). Named inventor, Mr. Bax, explained that Heineken

(RX-2692C (Bax Dep. Tr.) at 271:7-17.).

According to Mr. van Duuren,

(RX-2713C (van Duuren Dep. Tr.) at 192:22-

193:4.). Mr. van Duuren also testified that it was the

(RX-2713C (van Duuren Dep. Tr.) at 216:18-23.).

While this testimony solidifies	design role in commercializing the '751 patent, it is
not clear and convincing evidence of	conception of the invention.

ABI also relied heavily on documentary evidence for its inventorship defense. However, the documentary evidence that ABI cited lacked any clear indication that conceived of including a "shut-off valve" in the "coupling element" of a beer dispensing line. (See, e.g., RX-0240C /

; RX-0243C at 24 (

"; RX-0242C at 5 (

). Additionally, on several occasions, ABI highlighted places where

(RBr. at 64

(citing RX-0243C at 8; RX-0253C at 1; RX-0253C.0001).). However, at best, these documents provide

Based on the weight of the testimonial and documentary evidence, it appears that rather than disclosing an inventive concept to Heineken, the opposite occurred: the named inventors of the '751 patent disclosed their inventive concept to (RX-0015C at 1.). Specifically, as shown below in Figure 61, named-inventor Mr. Bax sent

(Id.).

Figure 61:

(RX-0015C.0001.).96

As Mr. Bax explained at his deposition:

⁹⁶ According to ABI, "[t]his letter does not describe an invention that was 'sufficiently definite and permanent' such that 'only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.' *Ethicon*, 135 F.3d at 1460. Rather, this letter describes a general overview of Heineken's program requirements for its development project. (RX-0015C.0001.). Many critical elements of the '751 Patent—including the specific valve type and tapping mechanism—had yet to be determined." (RBr. at 63.). However, as explained above, this is a mischaracterization of the invention claimed in the '751 patent. In particular, the invention was not drawn to the idea of a particular valve type or tapping mechanism and thus conception of the invention does not require conception of a particular valve type or tapping mechanism. (*See, e.g.*, CX-0012 ('751 patent) at 3:5-9.). Once again, ABI has confused the "invention" with the specific use case commercialized by Heineken.

(RX-2692C at 190:19-22, 194:4-18, 258:25-259:4, 280:7-15, 282:16-19.).

Here, it appears that Mr. Bax

As

explained above, that is a defining feature of the invention disclosed in the '751 patent and, based on the evidentiary record before us, this feature was revealed to

Finally, legal precedent ABI cited in support of its inventorship defense is inapposite. ABI relied on Certain EPROM, EEPROM, Flash Memory, & Flash Microcontroller Semiconductor Devices, and Products Containing Same ("EPROM"), Inv. No. 337-TA-395, Comm'n Op. at 8 (U.S.I.T.C. July 9, 1998), for the proposition that improper inventorship existed when the sole named inventor "had a general concept" but "had no involvement in the physical realization of the invention," and "did not conceive of any of the circuitry by which the elements of the patent claims at issue were realized." (RBr. at 65.). Although this argument has facial appeal, a close examination of the facts in *EPROM* reveals that its application in this Investigation is a stretch for even the most imaginative thinkers among us.

The technology at issue in *EPROM* was circuitry implemented "in silicon," which is far more technically challenging and thus difficult to conceptualize than the mechanical components of beer dispensers at issue in this Investigation. *EMPROM*, Inv. No. 337-TA-395, Comm'n Op. at 10-12. Moreover, in *EPROM*, "the sole named inventor of the '903 patent, Larry Jordan, is a marketing person who has never designed semiconductor products in his career," whereas here Mr. van Duuren studied mechanical engineering at university and was hired by Heineken as a project engineer.⁹⁷ *Id.* at 12. (RX-2713C (van Duuren Depo.) at 14:9-23, 15:15-25.). Furthermore, inventorship arose in *EPROM* in the specific context of an asserted patent that recited means-plus-function claims where the Commission found that the purported sole-inventor "Jordan neither selected nor simulated the performance of any circuit means." *EPROM* at 14 (citing *Ethicon*, 135 F.3d at 1463, for the proposition that "[t]he contributor of any disclosed means of a means-plus-function claim element is a joint inventor as to that claim, unless one asserting sole inventorship can show that the contribution of that means was simply a reduction

⁹⁷ Although named inventor Mr. Bax made several engineering references during this deposition, it is unclear from his deposition designations what he studied at university or what title he held at Heineken. (See, generally, RX-2692C (Bax Depo.).).

to practice of the sole inventor's broader concept"). Here, unlike in *EPROM*, the '751 patent contains no means-plus-function claims, thereby maintaining a clean separation for the purposes of inventorship between any contribution made to the means of the project and the conceptual underpinnings of the invention.

Based on the analysis above, ABI failed to satisfy the clear and convincing burden of

proof required to assert an inventorship defense.

XI. WAIVER OR WITHDRAWAL OF RESPONDENTS' DEFENSES

ABI did not raise in its Pre-Hearing Brief or offer any evidence during the Hearing to

support its Fourth Affirmative Defense of prosecution history estoppel. (Resp. at ¶ 12.).

Consequently, it is a finding of this decision that ABI has withdrawn, waived and/or

abandoned its Fourth Affirmative Defense consistent with Ground Rules 7.2 and 10.1. Kinik Co.

v. Int'l Trade Comm'n, 362 F.3d 1359, 1367 (Fed. Cir. 2004).

XII. CONCLUSIONS OF FACT OR LAW: THIS INITIAL DETERMINATION FINDS A SECTION 337 VIOLATION BASED UPON INFRINGEMENT OF U.S. PATENT NO. 7,188,751

- 1. Jurisdiction and standing requirements are satisfied;
- Claims 1, 3, 7, and 10 of U.S. Patent No. 7,188,751 are valid and infringed by the NOVA System;
- Heineken's and Hopsy's domestic activities with respect to the DI Products are found to satisfy the economic prong of the domestic industry requirement under 19 U.S.C. § 337(a)(3)(A) and (B);
- At least one of Heineken's DI Products practices one or more claims of U.S. Patent No. 7,188,751; and
- ABI has violated Section 337 of the Tariff Act of 1930, as amended, by importing into the United States, selling for importation, or selling within the United States after importation certain beverage dispensing systems and components by infringing claims 1, 3, and 10 of U.S. Patent No. 7,188,751.

The lack of discussion of any matter raised by the Parties, or any portion of the record,

does not indicate that it has not been considered. Rather, any such matter(s) or portion(s) of the record has/have been determined to be irrelevant, immaterial or meritless. Arguments made on briefs, which were otherwise unsupported by record evidence or legal precedent, have been accorded no weight.

XIII. CONCLUSION AND ORDER

This Initial Determination on Violation of Section 337 of the Tariff Act of 1930 is certified to the Commission. All orders and documents, filed with the Secretary, including the exhibit lists enumerating the exhibits received into evidence in this Investigation, that are part of the record, as defined in 19 C.F.R. § 210.38(a), are not certified, since they are already in the Commission's possession in accordance with Commission Rules. *See* 19 C.F.R. § 210.38(a). In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential under 19 C.F.R. § 210.5 is to be given *in camera* treatment.

After the Parties have provided proposed redactions of confidential business information ("CBI") that have been evaluated and accepted, the Secretary shall serve a public version of this ID upon all parties of record. The Secretary shall serve a confidential version upon counsel who are signatories to the Protective Order (Order No. 1) issued in this Investigation.

Pursuant to 19 C.F.R. § 210.42(h), this Initial Determination shall become the determination of the Commission unless a party files a petition for review pursuant to 19 C.F.R. § 210.43(a) or the Commission, pursuant to 19 C.F.R. § 210.44, orders on its own motion a review of the Initial Determination or certain issues therein.

Within fourteen (14) days of the date of this document, the Parties shall submit to the Office of Administrative Law Judges a joint statement regarding whether or not they seek to have any portion of this document deleted from the public version. The Parties' submission shall be made by hard copy and must include a copy of this ID with <u>yellow highlighting</u>, with or without red brackets, indicating any portion asserted to contain CBI to be deleted from the public version. The Parties' submission shall also include an <u>index</u> identifying the pages of this document where proposed redactions are located. The Parties' submission concerning the public version of this document need not be filed with the Commission Secretary.

SO ORDERED.

MaryJoan McNamara Administrative Law Judge

PUBLIC VERSION

EXHIBIT A

EU Claims Different Than US Claims

		Cutta ou neineren : Scone Auriliary Request	Claim of EP 1254918 B2
 Drink dispenses assembly (1, 25) comprising a dispense device (2, 37) provided with a dispensing bead (18, 29) for accommodeling a 	 Drink (inspenser assembly (1.25) comprising: a despenser device (2.37) provided with a dispensing head (18,29) comprising an 	20. Drink dispenses device (2,37) comprising a dispensing head (18,29)	1. Drink dispense assembly (1, 25) comprising a dispense device (2, 37) provided with a dispensing head (18, 2919) for accommodating a
	at least partially flexible		fleatble
disperenting line (17, 28), and a continuer (7, 27) containing carbonated drank, connected during use to the dispensing line (17, 28) which has a coupling element at an outlet end for connection to the dispensing head (18, 29), characterised in that the compling element computes a	dispersing line $(17,28)$, and a container $(7,27)$ containing carbonated durit, connected during use to the dispensing line $(17,28)$ which has a coupling element at an outlet end for connection to the dispensing head $(18,29)$, characterised in that the coupling element comprises a	With a bandle (20,33) and an opparting element (45, 98) connected to the handle, characterized in that the operating element (45, 98) comprises an accommodating component (63,98) which is adapted for detechable connecting to a eleeve of a	dispensing fine (17, 28), and a contante (7, 27) containing carbonated dimit, connected during use to the flexible dispensing line (17, 28) which has a coupling element at an outlet and for connection to the dispensing head (18, 29), wherein the dispensing head (18, 29) is provided with a lmob or handle (20, 33) and has an operating element (45, 98) which is connected to the knob or handle, characterised in that the coupling element compress a
slunt-off valve (19, 32)	shut-off valve (19,32)	shut-off valve (19,63)	shut-off valve (19, 32)
	mede of rigid material		comprising an outer sleeve (70) of rigid plastic material,
	that is schrctively openable and	that is connected to a forthle depending line of a container for carbonated drink.	which strut-off valve can be detachably connected to the operating element (45,98) for opening and
that can be closed while placing the outlet cad of the dispensing line (17, 28) into the dispensing head (18, 29) and, respectively, removing the outlet and of the dispensing line (17, 28) from the dispensing head (18, 20)	closuble after plaring the outlet end of the dispensing line (17,28) into the dispensing bead (18,29),		closing the shut-off valve by moving the knob or handle (20, 33), wharan the shut-off valve, when it is connected to the dispensing head, can be opened and chosed for dispensing the carbounded drink and which shut-off valve can be closed while placing the outlet cod of the dispensing line (17, 28) into the dispensing head (18, 29) and, respectively, removing the outlet end of the dispensing line (17, 28) from the dispensing head (18, 29)
	the darpensing head (18,29) comprising a limbb or handle and an operating element (45,98) connected to task knob or handle by means of which the shul- off valve (19,32) is detachably connectable for opening and closing of the shult off valve by moving the lood or handle.	which accommodating component can be moved by operation of the handle in order to open and close the shurt-off valve for dispensing the carbonated denic through valve.	
	where is the dust of value is freely morable with the flexible take upon placement and removal of the value into and from the disperating head and is flue in positions by being releasably stratched to the dispensing head, and wherein the shut-off value is finally at sched to an outflow and of the flexible tube and is removable from the dispensing device appenreglecement of the container.		

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

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 **October 4, 2019**.

Lisa R. Barton, Sécretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, D.C. 20436

On Behalf of Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc.:

Helena D. Kiepura, Esq. KIRKLAND & ELLIS LLP 1301 Pennsylvania Avenue N.W. Washington, D.C. 20004

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 □ Other:_____

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. CADWALADER WICKERSHAM & TAFT LLC 700 Sixth Street, N.W. Washington, D.C. 20001 ☐ Via Hand Delivery
 ☑ Via Express Delivery
 □ Via First Class Mail
 □ Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Inv. No. 337-TA-1130

RECOMMENDED DETERMINATION ON REMEDY AND BOND

Administrative Law Judge MaryJoan McNamara

(September 19, 2019)

Pursuant to Commission Rule 210.42(a)(1)(ii), this document contains the recommended

determination on remedy and bond ("Recommended Determination"). 19 C.F.R.

§ 210.42(a)(1)(ii).¹

I. RECOMMENDATION ON REMEDY AND BOND

This decision recommends: (1) a limited exclusion order directed to Respondents

Anheuser-Busch S.A., InBev Belgium N.V., and Anhueser-Busch, LLC (collectively, "ABI")²

that infringe one or more of asserted claims 1, 3, 7, and 10 of U.S. Patent No. 7,188,751 ("the

'751 patent"); (2) a cease and desist order directed to ABI's NOVA System that infringe one or

¹ On September 5, 2019, the Final Initial Determination ("ID") in this Investigation issued, finding that Respondents Anheuser-Busch S.A., InBev Belgium N.V., and Anhueser-Busch, LLC (collectively, "ABI") violated subsection (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 certain beverage dispensing systems and components thereof.

² Complainants Heineken International B.V., Heineken Supply Chain B.V. (formerly known as Heineken Technical Services B.V.), and Heineken USA Inc. (collectively, "Heineken") accused versions 3 and 4 of ABI's NOVA System ("NOVA System"). (*See, e.g., Doc. ID No.* 687319 (Initial Determination) at 25 (Sept. 5, 2019).). It is a finding of the ID that the NOVA System practices one or more of the asserted claims of the '751 patent.

more of the asserted claims of the '751 patent; and (3) a bond rate during the Presidential Review Period ("PRP") based on a provide the period of the period NOVA keg.

A. Legal Standard

Pursuant to Commission Rule 210.42, an Administrative Law Judge ("ALJ") must issue a recommended determination on: (i) an appropriate remedy if the Commission finds a violation of Section 337, and (ii) an amount, if any, of the bond to be posted. 19 C.F.R. § 210.42(a)(1)(ii). When a Section 337 violation has been found, as has been found in this Investigation, "the Commission has the authority to enter an exclusion order, a cease and desist order, or both." *Certain Flash Memory Circuits and Prods. Containing the Same*, Inv. No. 337-TA-382,

Comm'n Op. on the Issues Under Review and on Remedy, the Public Interest and Bonding, at 26 (June 9, 1997).

Upon a finding of infringement, 19 U.S.C. § 1337(d) provides for a Limited Exclusion Order ("LEO"), directed to the products of the named respondents, excluding any articles that infringe one or more claims of the asserted patent(s). 19 U.S.C. § 1337(d).

A Cease and Desist Order ("CDO") is also appropriate where the evidence demonstrates the presence of commercially significant inventory in the United States. 19 U.S.C. § 1337(f); see also Certain Crystalline Cefadroxil Monohydrate, Inv. No. 337-TA-293, Comm'n Op., USITC Pub. No. 2391, 1991 WL 790061, at *30-32 (June 1991).

Infringing articles may enter the United States upon the infringer's payment of a bond during the sixty-day Presidential Review Period. 19 U.S.C. § 1337(j)(3). The bond is to be set at a level sufficient to "offset any competitive advantage resulting from the unfair method of competition or unfair act enjoyed by persons benefiting from the importation." *Certain Dynamic Random Access Memories, Components Thereof and Prods. Containing Same*, Inv. No. 337-TA- 242, Comm'n Op., 1987 WL 450856 at 37 (Sept. 21, 1987).

B. A Limited Exclusion Order with a Certification Provision Is Warranted

In the event of a finding of violation of Section 337, Heineken has requested that the Commission issue a LEO prohibiting ABI from importing, selling for importation, or selling after importation any infringing articles, including the NOVA System, the NOVA appliance, the NOVA keg and the NOVA disposable coupler. (CBr. at 70 (citing Notice of Institution at 2; Tr. (Daniel Ingram)³ at 693:19-697:5; Tr. (Peter Wolski)⁴ at 393:20-394:3).).

ABI contended that any LEO should be limited to ______ of the NOVA System.

(RRBr. at 46.). According to ABI, a LEO should not extend to of the NOVA System

because: (i) substantial noninfringing uses exist for each component of ; (ii) ABI

stopped actively _____ in 2017; and (iii) no new appliances have been

. (Id. (citing id. at Part IV.B.2; Tr. (Ingram) at

705:12-706:6, 708:14-709:4).). Each of ABI's assertions are unavailing for the following

reasons.

Although components of were found to have non-infringing uses, that finding

was made with respect to Heineken's allegations of contributory infringement. Certain

Beverage Dispensing Sys. and Components, Inv. No. 337-TA-1130, Initial Determination at 82-

³ When he testified during the evidentiary hearing ("Hearing") on April 18, 2019, Mr. Daniel Ingram was the Global Manager of Trade Innovation at ABI. (RPSt. at 2.). ABI identified Mr. Ingram as a fact witness to testify about ABI's business plan, importation, inventory, pricing, licenses, and sales strategy related to the NOVA System. (*Id.*).

⁴ When he testified during the Hearing on April 17, 2019 and April 19, 2019, Mr. Peter Wolski was the President of Highland Consulting. (CPSt. at Ex. 1.). Heineken identified Mr. Wolski as an expert to testify about the technology of the '751 patent, the background technology, infringement of the accused products (i.e., versions 3 and 4 of the NOVA System), Heineken's domestic industry, and validity and enforceability of the '751 patent, including objective evidence of non-obviousness. (*Id.* at 3.).

85 (Sept. 5, 2019) ("1130 ID").⁵ It was determined that **Sept. 1999** of the NOVA System directly infringed the asserted claims of the '751 patent. (*See id.* at 28-58.).

Moreover, ABI's assertions that it was no service and that and that

Investigation. (1130 ID at 64-66.). For example, ABI's fact witness, Mr. Ingram, explicitly stated in a declaration ("1115 Declaration") he signed on *May 15, 2018* in support of ABI's assertion of a domestic industry in Investigation No. 337-TA-1115 ("1115 Investigation"), that "Anheuser-Busch orders, ships and *imports the NOVA System into the U.S.* for sale to its U.S. customers." (CX-0122 at ¶ 15 (May 15, 2018) (emphasis added).). ABI also provided an interrogatory response approximately three (3) weeks before the close of fact discovery on *December 28, 2018* confirming the same. (CX-0486C at Interrog. No. 11 (Dec. 7, 2018) ("Anheuser-Busch orders, ships and imports the NOVA System into the U.S. for sale to its U.S. customers.").).

Additionally,	
	(Tr. (Ingram) at
720:6-17, 757:9-12, 768:12-19; CX-0486C at Interrog. Nos. 2, 11, 48 (Dec.	7, 2018); CX-0491C
at RFA No. 28 (Dec. 19, 2018)); and	

⁵ ABI's contention that the NOVA keg has other uses (i.e., in ABI's PureDraught product) can be addressed via a certification provision in the LEO, not through a carve-out with respect to kegs generally. See Certain Three-Dimensional Cinema Sys. & Components Thereof, Inv. No. 337-TA-939, Comm'n Op., 2016 WL 7635412, at *37 (Aug. 23, 2016). Mr. Ingram testified that the PureDraught was a OO01C (Ingram Dep Tr.) at 128:25-129:9.). Furthermore, Heineken presented evidence that for the

. (CX-0001C (Ingram Dep Tr.) at 107:11-110:17; CX-0113C.).

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(Tr. (Ingram) at 717:25-718:7, 719:4-18, 757:13-758:3; CX-0128C;
CX-0486C at Interrog. Nos. 2, 11, 98; CX-0001C (Ingram Dep. Tr.) at 45:16-47:9; CX-0003C
(Jason Garrison Dep. Tr.) ⁶ at 59:7-12, 140:12-16; CX-0007C (Lauren Machens Dep. Tr.) ⁷ at

65:11-67:24, 69:12-24, 74:22-75:13; CX-0129C).).

Even assuming, arguendo, that ______, that fact

"does not preclude a finding that section 337 has been violated, nor does it preclude the imposition of a remedy." Certain Hardware Logic Emulation Sys. & Components Thereof ("Hardware Logic"), Inv. No. 337-TA-383, Final ID/RD, 1997 WL 665006, at *8 n.6 (July 31, 1997) (citing Intel Corp. v. Int'l Trade Comm'n, 946 F.2d 821, 830 n.14 (Fed. Cir. 1991); Certain Integrated Circuit Telecomm'cns Chips and Prods. Containing Same Including Dialing Apparatus ("Integrated Circuit Chips"), Inv. No. 337-TA-337, USITC Pub. No. 2670, Comm'n Op at 36-37 (Aug. 1993)).

Thus, it is recommended that a LEO be issued that covers _______ of the NOVA System. The recommended LEO should apply not only to the NOVA *System* but also to the *components* of the NOVA System, including, at a minimum, the NOVA appliance, keg and coupler.⁸ Permitting these components to be imported or to be sold separately, after importation,

⁶ When he provided his deposition testimony on November 20, 2018, Mr. Jason Garrison was employed by Anheuser-Busch, North America. (CX-0003C (Garrison Dep. Tr.) at 5:21-6:5.). ABI designated him as a 30(b)(6) witness to testify on behalf of ABI. (See, e.g., id. at 33:15-18, 35:4-8.).

⁷ When she provided her deposition testimony on December 14, 2018, Ms. Lauren Machens was the Global Manager of Platform Commercialization at ABI. (RPSt. at 2.). ABI identified Ms. Machens as a fact witness to testify about the servicing, repair, operation, and training related to the NOVA System. (*Id.*).

⁸ The NOVA coupler consists of three (3) elements: (i) beer valve; (ii) beer tube; and (iii) butterfly coupler. (See, e.g., Tr. (Ingram) at 694:1-11; CX-0645C.0016; CDX-5045C.).

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would allow for the continued infringement of the '751 patent.9

ABI also asserted that any LEO should apply to ABI alone ¹⁰ and not to unnamed third
parties, such as and ¹¹ (RRBr. at 47 (citation omitted).).
Although the LEO should not name such non-parties consistent with settled law, ¹² evidence
adduced in this Investigation demonstrates that the NOVA coupler
, and the NOVA appliance
l.
For example, Mr. Ingram testified that as of the close of fact discovery in this
nvestigation, the NOVA coupler was (Tr. (Ingram) at
18:3-7

_____.).

Mr. Ingram also confirmed that the NOVA appliance was

shipped to the United States. (Id. at 758:4-759:9

⁹ For a discussion of the meaning of "articles that infringe," see generally 1130 ID at 62-64. (See id. at 64 (holding that "articles that infringe" include "infringing products whose components are not *imported* together or assembled at the time of importation") (emphases in original).).

¹⁰ ABI manufactures the NOVA keg, i.e., bottle, [_____] and imports the bottle into the United States. (Tr. (Ingram) at 720:6-17.).

] is the]. (See, e.g.,	Tr. (Ingram)
at 694:104, 695:8-10.).	is the		(See, e.g.,
<i>id.</i> at 711:19-21.).			

¹² See, e.g., Kyocera Wireless Corp. v. ITC, 545 F.3d 1340, 1356 (Fed. Cir. 2008).

ABI argued that any LEO should include a reporting requirement for Heineken with respect to its domestic industry. (RRBr. at 47.). Based upon, *inter alia*, the fact that Heineken's Blade DI product was **Example 1999**, ABI asserted that Heineken should be required to certify that it is continuing to domestically exploit the '751 patent at least on a quarterly basis. (*Id.* (citation omitted).).

As discussed in Section X of the 1130 ID, Heineken demonstrated that its domestic investments in its SUB/Torp¹³ domestic industry ("DI") product alone, and *not* its Blade DI product, have been significant and have been found to satisfy the economic prong of domestic industry under Subsections (a)(3)(A) and (a)(3)(B) of Section 337. (1130 ID at 197-205.). Thus, for Heineken, no reporting requirement is necessary.

ABI contended that any LEO should include a carve-out and certification provision to allow for the importation of re-designed products that do not infringe. (RPBr. at 94; RRPr. at 47-48 (citation omitted).). However, ABI did not identify any "re-designs" beyond a vague reference to one in the remedy sections of its Pre-Hearing and Initial Post-Hearing Briefs. (RPBr. at 94, RRBr. at 47-48.). ABI failed to adduce any evidence that a final design of any such re-design exists or that it has imported such a product. *Certain Elec. Digital Media Devices* & Components Thereof, Inv. No. 337-TA-796, Comm'n Op., 2012 WL 6738157, at *7-8 (Oct.

¹³ The Torp is the container associated with the SUB DI product. (See, e.g., Tr. (Wolski) at 430:4-14; CPX-0008; CX-1245C at 1, 6; 1130 ID at 19-20 (discussion of Heineken's DI products).).

24, 2012) (adjudicating redesigned products when "the design around products are fixed" and "are within the scope of this investigation, have been imported into the United States or sold in the United States, [and] were the subject of extensive discovery as well as testimony during the evidentiary hearing in this investigation"), *aff'd* in relevant part, Comm'n Op., 2013 WL 10734395 (Sept. 6, 2013).

It is recommended that the LEO include a certification provision for the NOVA kegs only, to allow for the importation of NOVA kegs to be used with a product other than in the NOVA System, as Heineken proposed. (CBr. at 2, 71.).

Lastly, based on ABI's allegations that

h, and ABI's 12 liter BiB kegs are intended for PureDraught establishments," ABI asserted that public interest counsels against Heineken's request.¹⁴ (RRBr. at 48.). According to ABI, "[i]t would be against the public interest for an exclusion order to cover 12 liter BiB kegs, as Heineken's allegation of use with the NOVA is hypothetical, while their use with PureDraught is real, significant, and expanding." (*Id.*).

Evidence presented in this Investigation does not support ABI's assertion that the ______]. As discussed above and in the 1130 ID, Mr. Ingram's 1115 Declaration and ABI's response to an interrogatory indicate that the ______].

(CX-0122 at ¶ 15 (May 15, 2018) ("Anheuser-Busch orders, ships and imports the NOVA System into the U.S. for sale to its U.S. customers."); (CX-0486C at Interrog. No. 11 (Dec. 7, 2018) ("Anheuser-Busch orders, ships and imports the NOVA System into the U.S. for sale to its

¹⁴ "BiB" stands for "bottle-in-bottle," and refers to the NOVA keg. (See, e.g., CX-0645C.0012.).

U.S. customers."); 1130 ID at 59-68.). Heineken also offered evidence that

(CX-0001C (Ingram Dep Tr.) at 107:11-110:17; CX-0113C.).

More importantly, it is not clear why either of these purported facts are relevant to a public interest defense. Section 337 mandates consideration of the effect of exclusion on: (1) 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 the articles subject to the investigation; and (4) U.S. consumers. 19 U.S.C. § 1337(d)(l). ABI provided *no* explanation how the alleged cessation of the NOVA appliance or use of the NOVA keg solely in the PureDraught product, even if true, would have an adverse effect on any of these public interest factors.

In sum, it is recommended that a LEO issue with a provision requiring ABI to certify NOVA kegs to be used with a product other than the NOVA System pursuant to the procedures to be specified by the U.S. Customs and Border Protection.

C. A Cease and Desist Order Is Warranted

Heineken requested that a CDO issue against ABI's NOVA System and components thereof (i.e., appliance, kegs, couplers). (CPBr. at 97.). ABI argued that Heineken is not entitled to a CDO because there is "no threat of imminent harm" to Heineken. (RRBr. at 48 (citing *Fuji Photo Film Co. v. ITC*, 386 F.3d 1095, 1106 (Fed. Cir. 2004)).). ABI also contended that a CDO is not needed because [...]. (*Id.* at 49 (citing Tr. (Ingram) at 705:12-706:6).).

As an initial matter, whether Heineken would be harmed absent a CDO is irrelevant. The CDO inquiry is not whether the complainant suffers commercial harm absent such an order but

rather whether the remedy would be undercut should the respondent be permitted to continue to supply an infringing product from inventory. 19 U.S.C. § 1337(f)(1); *Certain Wireless Commc'n Devices, Portable Music & Data Processing Devices, Computs. & Components Thereof* ("*Wireless Commc'n Devices*"), Inv. No. 337-TA-745, RD, 2012 WL 1881015, at *3 (May 9, 2012) ("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.") (citing *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 Prods. Containing Same, Including Air Conditioners for Automobiles*, Inv. No. 337-TA-334, Comm'n Op. at 26-28 (Aug. 27, 1997)).

Public Version

:. See, e.g.,

Hardware Logic, Inv. No. 337-TA-383, 1997 WL 665006, at *8 n.6 (noting that "the fact that respondents allege to have discontinued importation does not preclude a finding that section 337 has been violated, nor does it preclude the imposition of a remedy"); *Intel Corp.*, 946 F.2d at 830 n.14; *Integrated Circuit Chips*, Inv. No. 337-TA-337, Comm'n Op at 36-37 (Aug. 1993)).

A CDO is appropriate here because the evidence demonstrates that ABI

(Tr. (Carla Mulhern)¹⁵ at 621:8-24; Tr. (Ingram) at 767:13-20; CDX-4026C; CDX-4049C; CX-1550C.0034 (Ex. 27); CX-0912C.). Ms. Mulhern testified that conservatively, the

¹⁵ When she testified during the Hearing on April 18, 2019, Ms. Carla Mulhern was the Managing Principal of Analysis Group, Inc. (CPSt. at Ex. 2.). Heineken identified Ms. Mulhern as an expert to testify about Heineken's domestic industry, ABI's inventories of accused products, and an appropriate bond rate pending Presidential review. (*Id.* at 3.).

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[]: (Tr. (Mulhern) at 621:14-622:18; CDX-
4026C; CDX-4049C; CX-1550C.0034 (Ex. 27); CX-0912C.).
Ms. Mulhern also testified that ABI maintains a
[]. (Tr. (Mulhern) at 621:14-622:18; CDX-4026C; CDX-4049C; CX-
0912C; CX-1550C.0034 (Ex. 27).). She explained that the
· · · · · · · · · · · · · · · · · · ·
[]. (Tr. (Mulhern) at 621:14-622:18; Tr. (Ingram) at 771:24-772:1; CDX-4026C; CX-
0912C; CX-1550C.0034 (Ex. 27 n.2); CX-0909C.).
In addition, Ms. Mulhern testified that
. (Tr. (Mulhern) at 621:14-622:18; CDX-
4026C; CDX-4049C; CX-1550C.0034 (Ex. 27 n.2); CX-0910C; CX-0909C.).
Allowing ABI to would
"undercut the remedy" because it would allow the continued use of the infringing NOVA System
in the U.S. despite an exclusion order preventing its entry. Wireless Commc'n Devices, Inv. No.
337-TA-745, 2012 WL 1881015, at *3. Accordingly, a cease and desist order is recommended
here. See, e.g., Certain Robotic Vacuum Cleaning Devices & Components Thereof Such As
Spare Parts, Inv. No. 337-TA-1057, Comm'n Op., 2019 WL 1292948, at *45 (Feb. 1, 2019)
(issuing CDO directed to infringing devices and components thereof, including spare parts).
D A Dand Is Wannanded During the Dussidential Deview Devied

D. A Bond Is Warranted During the Presidential Review Period

Heineken proposed a bond based on a

(CBr. at 74.). Ms. Mulhern explained that under its license with

Heineken,	
[]:. (Tr. (Mulhern) at 624:22-24; CX-1	230C.0006; CDX-4027C.).
	¹⁶ (CX-0532C at ¶ 25.). Ms. Mulhern
testified that under the Hopsy/Heineken licer	nse, this volume would incur
[;. (Tr. (Mulhern) at 624:1	4-625:20; CX-1230C.0006; CX-1262C.0027; CX-
1228C.0018; CDX-4027C-4028C; CDX-405	50C; CX-1550C.0035 (Ex. 28).).
ABI's expert, Mr. Christopher Martin	nez, ¹⁷ opined that the bond rate should be lower
because the	
	(Tr. (Martinez)
at 1314:25-11, 1316:1-7.). However, the lice	ense agreement, which Mr. Martinez agreed is the
relevant license for determining bond,	,
making that the relevant base. (Tr. (Mulherr	n) at 668:12-15; Tr. (Martinez) at 1315:16-22; CX-
1230C.0006.).	
	•

Mr. Martinez's opinion also ignores the fact that bond is applied to entered value rather than to selling price. See Certain Hardware Logic Emulation Systems & Components Thereof, Inv. No. 337-TA-383, Comm'n Op., 1997 WL 854940, at *1 n.4 (Nov. 1997) (noting that "[a]t

¹⁶ Contrary to ABI's suggestion, the complainant need not be currently selling a competing product in order for it to be injured by Respondents' importation of infringing goods. (RPBr. at 95-96.). Such a situation simply suggests a reasonable royalty rather than a price differential analysis is the appropriate measure for determining bond. See, e.g., Certain Audiovisual Components & Prods. Containing the Same, Inv. No. 337-TA-837, RD, 2013 WL 4408170, at *8 (July 31, 2013) (recommending a bond based on reasonable royalty when Complainants "do not manufacture or sell products that compete with those of Respondents").

¹⁷ When he testified during the Hearing on April 23, 2019, Mr. Christopher Martinez was a co-founding member and managing partner of StoneTurn Group, a "forensic accounting and economic consulting firm." (Tr. (Martinez) at 1278:13-16; RPSt. at Ex. A.). ABI identified Mr. Martinez as an expert to testify about "the absence of a domestic industry for the alleged Domestic Industry Products." (RPSt. at 3.).

the request of the U.S. Customs Service, the Commission has for years expressed bond amounts as a percentage of the entered value, even though the entered value may be less than the importer's U.S. selling price''). In this case, the goods that cross the border are the Torp and the NOVA keg (sold by ABI to its distributors), and using the cost of the Torp as the denominator in the bond calculation is therefore appropriate for that reason as well.

Accordingly, this decision recommends a bond of ______ be imposed during the PRP.

II. ORDER

This Recommendation on Remedy and Bond is certified to the Commission. All orders and documents, filed with the Secretary, including the exhibit lists enumerating the exhibits received into evidence in this Investigation, that are part of the record, as defined in 19 C.F.R. § 210.38(a), are not certified, since they are already in the Commission's possession in accordance with Commission Rules. *See* 19 C.F.R. § 210.38(a). In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential under 19 C.F.R. § 210.5 is to be given *in camera* treatment.

After the Parties have provided proposed redactions of confidential business information ("CBI") that have been evaluated and accepted, the Secretary shall serve a public version of this ID upon all parties of record. The Secretary shall serve a confidential version upon counsel who are signatories to the Protective Order (Order No. 1) issued in this Investigation.

Pursuant to 19 C.F.R. § 210.42(h), this Initial Determination shall become the determination of the Commission unless a party files a petition for review pursuant to 19 C.F.R. § 210.43(a) or the Commission, pursuant to 19 C.F.R. § 210.44, orders on its own motion a

review of the Initial Determination or certain issues therein.

Within fourteen (14) days of the date of this document, the Parties shall submit to the Office of Administrative Law Judges a joint statement regarding whether or not they seek to have any portion of this document deleted from the public version. The Parties' submission shall be made by hard copy and must include a copy of this ID with <u>vellow highlighting</u>, with or without red brackets, indicating any portion asserted to contain CBI to be deleted from the public version.

The Parties' submission shall also include a chart that: (i) contains the page number of each proposed redaction; and (ii) states (next to each page number) every sentence or phrase, listed separately, that the party proposes be redacted; and (iii) for each such sentence or phrase that the party proposes be redacted, a citation to case law with an explanation as to why each proposed redaction constitutes CBI consistent with case law. Any proposed redaction that is not explained may not be redacted after a review.

The Parties' submission concerning the public version of this document need not be filed with the Commission Secretary.

SO ORDERED.

MaryJoan McNamara Administrative Law Judge

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

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 October 4, 2019.

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

On Behalf of Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc.:

Helena D. Kiepura, Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue N.W. Washington, D.C. 20004 □ Yia Hand Delivery
 □ Via Express Delivery
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 □ Other:

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

Peter E. Moll, Esq. CADWALADER WICKERSHAM & TAFT LLC 700 Sixth Street, N.W. Washington, D.C. 20001 ☑ X ia Hand Delivery
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UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Inv. No. 337-TA-1130

ORDER NO. 16: ERRATUM TO MARKMAN ORDER (ORDER NO. 14)

(March 28, 2019)

The *Markman* Order for this Investigation issued on March 26, 2018. (See Order No. 14 (Mar. 26, 2018).). After issuing, it was discovered that the dates of the evidentiary hearing ("Hearing") identified on page 20 of the *Markman* Order are incorrect. The Hearing is scheduled to be held on April 16-19, 2019. (See id. at 12.).

SO ORDERED.

MaryJoan McNamara Administrative Law Judge

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER** has been served upon the following parties as indicated on **March 28, 2019**.

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

<u>On Behalf of Complainants Heineken International B.V.,</u> Heineken Supply Chain B.V., and Heineken USA Inc.:

Helena D. Kiepura, Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue N.W. Washington, D.C. 20004 Via Hand Delivery
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 Other:

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

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 Via Express Delivery
 Via First Class Mail
 Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of

CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

Inv. No. 337-TA-1130

ORDER NO. 14:

CONSTRUING CERTAIN TERMS OF THE ASSERTED CLAIMS OF THE PATENTS AT ISSUE (*MARKMAN* CLAIM CONSTRUCTION)

(March 26, 2019)

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Appendix A

Appendix A Claim Chart No. 1: Court's Constructions of Disputed Claims Terms

Table of Abbreviations

Compl. Complaint

CMBr. Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc.'s (collectively, "Heineken") *Markman* Brief

RMBr. Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC's (collectively, "ABI") *Markman* Brief

CSMBr. Heineken's Supplemental *Markman* Brief

RSMBr. ABI's Supplemental *Markman* Brief

Joint CC Chart Revised Joint Claim Construction Chart

I. RELEVANT BACKGROUND AND SUMMARY OF CLAIM CONSTRUCTION PROCEEDINGS

The complaint ("Complaint") and Notice of Institution ("NOI") identify U.S. Patent No. 7,188,751 ("the '751 patent") as the asserted patent in this Investigation. (Compl. (Doc. ID No. 651909) at ¶ 1 (Aug. 2, 2018); 83 Fed. Reg. 45141 (Sept. 5, 2018).). In the Complaint, Complainants Heineken International B.V., Heineken Supply Chain B.V. (formerly known as Heineken Technical Services B.V.), and Heineken USA Inc. (collectively, "Heineken" or "Complainants") allege that Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC (collectively, "ABI" or "Respondents," and with Heineken, the "Parties") infringe certain claims of the '751 patent. (Compl. at ¶¶ 1, 3.).

On September 10, 2018, a proposed Scheduling Order ("Proposed Scheduling Order") issued to guide the timing and conduct of this Investigation. (Order No. 2 (Sept. 10, 2018).). On September 24, 2018, pursuant to Order No. 2, the Parties jointly filed a joint proposed procedural schedule ("Joint Proposed Procedural Schedule") that filled in certain dates left open in Order No. 2, adopted other proposed dates contained in Order No. 2, and requested that certain proposed dates in Order No. 2 be changed. (Doc. ID No. 656658 (Sept. 24, 2018).). On September 25, 2018, an initial procedural schedule ("Procedural Schedule") issued that adopted the dates in the Parties' Joint Proposed Procedural Schedule. (Order No. 4 (Sept. 25, 2018).).

On December 6, 2018, consistent with Order No. 4, the Parties filed a Joint Claim Construction Chart. (Doc. ID No. 663478 (Dec. 6, 2018).). On March 20, 2019, the Parties filed a revised Joint Claim Construction Chart, which struck out claim terms no longer at issue ("Joint CC Chart"). (Doc. ID No. 670602 (Mar. 20, 2019).). The Joint CC Chart lists seven (7) disputed claim terms and each party's proposed constructions. (*Id*.).

- 1 -

On December 12, 2018, Heineken and ABI each filed a claim construction brief.

(Heineken's *Markman* Brief ("CMBr."), Doc. ID No. 664021 (Dec. 12, 2018); ABI's *Markman* Brief ("RMBr."), Doc. ID No. 664034 (Dec. 12, 2018).). On December 19, 2018, the Parties filed their Joint *Markman* Hearing Proposal in which they proposed that a *Markman* hearing be held. (Doc. ID No. 664647 (Dec. 19, 2018).).

Pursuant to the Procedural Schedule, the *Markman* hearing was scheduled to be held the week of January 14-19, 2019. (*See* Order No. 4, Attach. A at 3.). However, due to the government shutdown, the *Markman* hearing was not held that week. On February 6, 2019, an Order issued, re-scheduling the *Markman* hearing for February 14, 2019. (Order No. 7 (Feb. 7, 2019); *see also* Order No. 8 ("Revised Procedural Schedule") (Feb. 15, 2019).). On February 12, 2019, the Parties identified three (3) terms to be argued during the *Markman* hearing. (Doc. ID No. 666773 (Feb. 12, 2019).).

During the February 14, 2019 *Markman* hearing, the Parties were asked to provide supplemental briefing to address ABI's argument that Heineken's February 25, 2005 and June 16, 2005 responses to an election/restriction requirement supported ABI's proposed construction limiting the term "shut-off valve" to "a valve comprising an outer sleeve and an inner sleeve, said valve opened and closed by linear movement," which Heineken alleged was presented for the first time during the *Markman* hearing. (*Markman* Tr. at 41:2-42:1, 89:17-95:21; CXM-0022; CXM-0023.). Heineken and ABI each filed a supplemental claim construction brief on February 21, 2019 and February 22, 2019, respectively.¹ (Heineken's Supplemental *Markman* Brief ("CSMBr."), Doc. ID No. 667790 (Feb. 21, 2019); ABI's Supplemental *Markman* Brief

- 2 -

¹ The substance of the election/restriction requirement is described in more detail in Section II.D, *infra*.

("RSMBr."), Doc. ID No. 667860 (Feb. 22, 2019).).

II. PATENT AT ISSUE

5

A. Background

Heineken originally asserted claims 1-11 of the '751 patent in this Investigation. (*See*, *e.g.*, Compl. at ¶ 3.). On January 31, 2019, Heineken filed a motion for partial termination of this Investigation based on the withdrawal of claims 2, 4, 5, 6, 8, 9, and 11 of the '751 patent. (Motion Docket No. 1130-002 (Jan. 31, 2019).). On February 5, 2019, an Initial Determination ("ID") issued granting the motion for partial termination, which the Commission chose not to review. (*See* Order No. 6 (Feb. 5, 2019); Doc. ID No. 669298 (Mar. 7, 2019).).

Heineken continues to assert claims 1, 3, 7, and 10 of the '751 patent for purposes of infringement, and claims 1, 3, 4, 7, and 10 of the '751 patent for purposes of the technical prong of the domestic industry requirement. (Motion Docket No. 1130-002 at 3; *see also* Joint CC Chart at 1.).

The seven (7) disputed claim terms are recited in claims 1, 7, and 10 of the '751 patent.² (*See* Joint CC Chart.).

B. Technology Overview

This Investigation involves beverage dispensers, including beverage dispensers for carbonated beverages such as beer. (JXM-0001 at Abstract, 2:24-35.). Beer is typically distributed for consumption in one of two ways. (Technology Stipulation at 1 (Doc. ID No. 666386 (Feb. 8, 2019).). A consumer can purchase beer in bottles or cans, which are filled by a brewery and generally intended for single serving use. (*Id.*). A consumer can also consume beer

² It appears that the Parties did not agree upon any of the constructions.

at bars and restaurants around the world, which can often be found in the form of draught (or draft) beer. (*Id.*).

Draught beer is beer served from a large container, commonly referred to as a keg, that holds many servings of beer. (*Id.*). Draught beer is typically served by the glass, usually with a bartender controlling the dispensing of the beer using a tap handle at a tap head. (*Id.*).

A standard setup for dispensing draught beer is depicted in Figure 1 below:

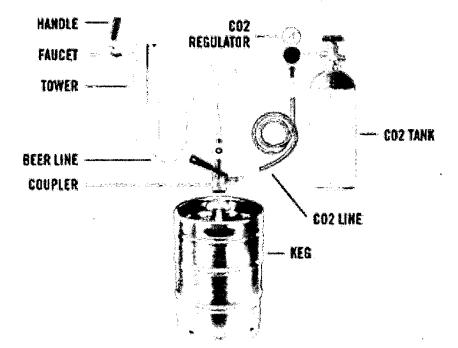


Figure 1: Traditional Draught System

(Id. at 2; see also CMBr. at 3 (citing CXM-0001).).

In order to extract beer from the keg, the keg is tapped by attaching a keg coupler, which engages a valve on the keg. (Technology Stip. at 2.). The keg coupler permits pressurized carbon dioxide (CO₂) gas to enter the keg via a CO₂ line and CO₂ tank, the pressure of which is regulated by a CO₂ regulator. (*Id.*). As pressurized CO₂ enters the keg, it pushes the beer out of the keg and into the beer line, through a tower, and up to the point of the faucet or tap head.

(*Id*.). Pulling the handle connected to the tap head allows the beer to flow through the faucet and into a glass for serving. (*Id*.).

Because beer is fermented and contains yeast, the lines that transport beer from the kegs to the tap must be cleaned regularly, in order to avoid microbiological growths that can, among other things, negatively affect the taste of the beer. (CMBr. at 4.). According to Heineken, cleaning beer lines is costly, both in time spent and beer lost. (*Id.*). Each time the lines are cleaned, the beer that is present in the lines, which can sometimes extend over long distances (e.g., to the basement of a bar where kegs are often stored), must be discarded. (*Id.*).

In the 1990s, smaller, "countertop" beverage dispensers were designed that could be used to dispense draught beer for consumption either at home or at smaller bars and restaurants without existing draught systems. (Technology Stip. at 2-3.). Rather than using the traditional setup with large, permanent lines connecting kegs to the tap, these devices either eliminated the line between the keg and the tap or used a much shorter line than those used in traditional draught systems. (*Id.*).

All of these devices still required a method to control the flow of beer from the container to ensure the beer reaches the glass with the proper carbonation. (CMBr. at 5.). One method that was used in some of these designs was a "pinch tube." (*Id.*). In these devices, the beer line led from the keg to the tap head, and a mechanism in the tap head pinched the end of the tube closed until the tap handle was pulled. (*Id.*). The design had several drawbacks, such as incomplete sealing of the beer line, which would lead to leakage and loss of carbonation. (*Id.*). Another method involved attaching a disposable beer line to a permanent valve in the tap head. (*Id.* at 6.). Even though this design eliminated the need to clean a long line, the valve still required cleaning because it would come into contact with beer. (*Id.*).

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The inventors of the '751 patent set out to develop a new draught delivery system with a disposable line that preserves beer quality and freshness. (*Id*.).

C. The '751 Patent

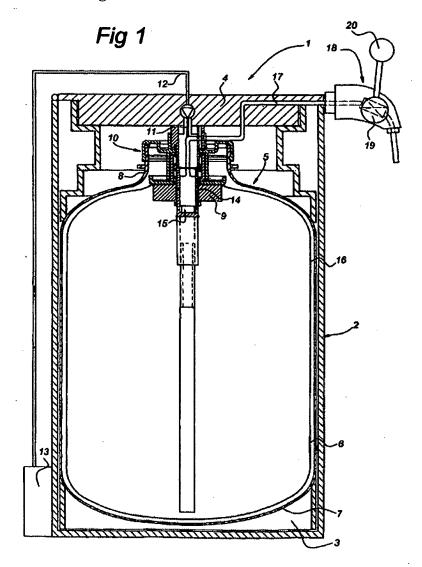
The '751 patent, entitled "Drink Dispenser Assembly and Container for Drink and Drink Dispensing Line," was filed on May 31, 2001 as U.S. Patent Application Serial No. 10/296,986 ("the '986 application"). (JXM-0001 at (21), (22), (54).). The '986 application issued as the '751 patent on March 13, 2007, and names as inventors Guido Petrus Johannes Van Der Klaauw, Bart Jan Bax, and Marius Corstiaan Van Duuren. (*Id.* at (72).).

Heineken Supply Chain B.V. owns, by assignment, all right, title, and interest in and to the '751 patent. (*See, e.g.*, Compl. at Exs. 2 (assignment of the '751 patent from inventors to Heineken Technical Services B.V.), 3 (document formalizing name change of Heineken Technical Services B.V. to Heineken Supply Chain B.V.).).

The asserted claims of the '751 patent are apparatus claims generally directed towards a beverage dispenser and its constituent components. (JMX-0001 at Abstract.). The disclosed beverage dispenser involves the use of a partially flexible, disposable dispensing line that also would maintain the carbonated beverage in its desired state more effectively than the prior art. (CMBr. at 6.). Specifically, the device includes a disposable beer line having a flexible tube (to ease connecting the beer line from the keg to the dispensing head) in combination with a shut-off valve located near the end of the tube farthest from the keg and closest to the glass, and coupled with the tap of the dispensing device to open and close the valve to dispense, and stop dispensing, a beverage, without the permanent elements of the tap coming into contact with the beer. (*Id*.).

One of the embodiments disclosed in the '751 patent is shown below in Figure 2.

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(JXM-0001 at Fig. 1.).

In this embodiment, a keg ("outer, rigid container 7") containing a carbonated drink such as beer is placed in the dispensing device 2. (*Id.* at 5:35-36.). The keg is tapped at "dispensing head 10," which is also connected to a "flexible dispensing line 17." (*Id.* at 5:50-52.). The dispensing line can be "at least partially of flexible construction." (*Id.* at 2:60-62.). The '751 patent teaches that "[i]t is preferable to make the dispensing line of flexible plastic so that this constitutes a disposable or semi-disposable line that is thrown away after it has been used once or

a number of times." (*Id.* at 2:63-67.). "The dispensing line 17 has a shut-off valve 19 close to an outlet end." (*Id.* at 5:52-55.).

The '751 patent discloses that "[t]he shut-off valve can be a normally closed shut-off valve, such as a slit valve in the flexible hose, that can be opened by compression by the tap handle, a separate plastic shutoff valve with a closed equilibrium position, a spring-loaded (ball) valve or an electromagnetic valve." (*Id.* at 3:5-9.). Alternatively, the shut-off valve may also "comprise a tap or valve known per se," "a 'can' shut-off valve," or may "comprise[] a first sleeve and a second sleeve." (*Id.* at 3:9-13, 3:51-52, 4:7-13.). The "shut-off valve 19 is removably fitted in the dispensing head 18 and is in a normally closed position." (*Id.* at 5:52-55.). There is also an "outlet end of the dispensing line that is located downstream of the shut-off valve" that "can consist of a relatively rigid plastic section," and is also placed into the dispensing head of the drink dispensing device. (*Id.* at 4:27-29.).

When pressure is applied to the keg via a pressure line 12, beer is driven out of the keg and "into the flexible line 17, against the shut-off valve 19." (*Id.* at 5:56-61.). Once the system has been pressurized, beer is dispensed by operating a handle that opens the shut-off valve. (*Id.* at 5:61-64 ("[b]y operating a handle 20, the shut-off valve 19, which is an integral part of the dispensing line 17, can be opened" to dispense a serving of beer").). Unlike traditional draught systems in which beer comes into contact with the dispensing head, the '751 patent avoids having beer contact the dispensing head, and instead sends the beer through the "outlet end of the dispensing line that is located downstream of the shut-off valve" that "can consist of a relatively rigid plastic section." (*Id.* at 4:27-29.).

When a keg has been emptied and is ready to be replaced with a full keg, "the container 7 and the flexible dispensing line 17 with the closed shut-off valve 19, which are connected

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thereto, are removed." (*Id.* at 5:64-6:2.). Removing the keg, flexible dispensing line, and closed shut-off valve all at once, without having to disassemble them, minimizes leakage of beer onto the elements of the drink dispensing device that are not normally in contact with beer. Because "[t]he shut-off valve is closed when the empty or partially empty pack is removed from the dispenser device and leakage of drink, present in the flexible dispensing line, from the dispensing line is prevented. As a result a favourable microbiological environment is maintained and the need for frequent cleaning of the dispenser device decreases." (*Id.* at 2:45-51.). It is also not necessary to clean the elements that do come into contact with beer—the flexible dispensing line, shut-off valve, and outlet end of the shut-off valve 19 can have been made for once-only use and thrown away or recycled after use").). Because beer only comes into contact with the disposable elements of the drink dispenser of the '751 patent, it "requires very little maintenance, requires little cleaning and provides a hygienic environment." (*Id.* at 2:13-16.).

D. Supplemental Briefing Regarding Construction of "Shut-Off Valve" and Summary of Relevant Prosecution History of the '751 Patent

As noted above in Section I, the Parties submitted supplemental briefing to address ABI's argument regarding Heineken's responses to an election/restriction requirement issued by the examiner during the prosecution of the '751 patent. (CSMBr., Doc. ID No. 667790 (Feb. 21, 2019); RSMBr., Doc. ID No. 667860 (Feb. 22, 2019).). The nature of the election/restriction requirement, and relevant portions of the prosecution history, are briefly discussed below.³

Pending claims 53-103 were filed with the U.S. Patent and Trademark Office ("PTO") on December 2, 2002. (JXM-0002 at HEIA-ITC-00000027-042). Pending claims 53, 64, 84, and

³ The Parties' arguments are discussed in Chart No. 1 of Appendix A.

92 ultimately issued as claims 1, 3, 7, and 10, respectively. (Id. at HEIA-ITC-00000421.).

On January 31, 2005, the examiner issued an election/restriction requirement because pending claims 53-108 were "directed to more than one species of the generic invention." (JXM-0002 at HEIA-ITC-00000308.). The examiner's reason for the election/restriction was that "these species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept." (*Id.*). The examiner identified three (3) species and five (5) subspecies:

- (i) Species A, corresponding to Figure 1;
- (ii) Species B, corresponding to Figure 2;
- (iii) Species C, corresponding to Figures 11-13;
- (iv) Subspecies D-G, corresponding to Figures 8a-8d, respectively; and
- (v) Subspecies H, corresponding to Figures 9 and 10.
- (Id.).

The examiner stated that each of the pending claims corresponding to the asserted claims in this Investigation (53, 64, 84, and 92), each of which claim a "shut-off valve," "are deemed to correspond to" Species B, which the examiner found corresponded to Figure 2. (*Id.* at HEIA-ITC-00000308-09.). The examiner also found that pending dependent claims 57-60, which depended from claim 53 and further recited "that the shut-off valve (32) comprises a first sleeve (75) and a second sleeve (70)" were a separate subspecies (Subspecies E) from pending claims 53, 64, 84, and 92. (*Id.*).

On February 25, 2005, Heineken responded by "elect[ing] the embodiment of Group III, Species C, namely that depicted in Figures 11-13." (*Id.* at HEIA-ITC-00000326.). Heineken also listed the claims Heineken believed read on the elected embodiment: pending claims 53-56,

64-67, 70-86, 88, and 90-97. (*Id.*). In addition, Heineken withdrew dependent claims 57-60, which the examiner found to be a different species than pending claims 53, 64, 84, and 92. (*Id.* at HEIA-ITC-00000313-14.).

On May 20, 2005, the Examiner issued another Office Action repeating his earlier finding that claims 53-103 were "subject to restriction and/or election requirement," and stated that Heineken's response was "not fully responsive to the prior Office Action because . . . the elected species (Group III, Species C; Figures 11-13) do not correspond to the elected claims 53-56, 64-67, 70-86, 88, 90-97." (*Id.* at HEIA-ITC-00000330-32.).

On June 16, 2005, Heineken responded by repeating its previous election of "Species C" and stating that each of pending claims 53, 64, 84, and 92 read on "Figures 1-5, 9 and 10, and 11-13 and hence on Species A, B, C and H."⁴ (*Id.* at HEIA-ITC-00000334.).

On August 25, 2005, the examiner acknowledged Heineken's February 25, 2005 and June 16, 2005 elections. (*Id.* at HEIA-ITC-00000340-42.).

On October 26, 2006, following some amendments, the examiner issued a Notice of Allowability, allowing, *inter alia*, pending claims 53, 64, 84, and 92 to issue. (*Id.* at HEIA-ITC-00000413-417.).

III. TERMS CONSTRUED IN THIS ORDER

A. Claim Construction and Current Ground Rules

Claim terms are construed in this Order solely for the purposes of this Section 337 Investigation. Only claim terms in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Vanderlande Indus. Nederland BV v. Int'l Trade Comm.*, 366 F.3d 1311, 1323 (Fed. Cir. 2004); *Vivid Tech., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795,

⁴ Heineken revised the list of pending claims readable on Species C. (*Id.* at HEIA-ITC-00000334.).

803 (Fed. Cir. 1999).

Going forward, including during the evidentiary hearing ("Hearing") scheduled to be held April 16-19, 2019, the Parties are limited to the constructions adopted in this Order. Ground Rule 1.14 states that "[t]he parties will be bound by their claim construction positions set forth on the date they are required to submit a joint list showing each party's final proposed construction of the disputed claim terms and will not be permitted to alter these absent a timely showing of good cause." Modified or new constructions set forth for the first time in posthearing briefs will be considered to be waived.

Similarly, it will not be appropriate for any party to seek additional claim construction during the Hearing or merely to state that a claim term that may be implicated in an expert report or expert testimony has either a "plain or ordinary" meaning, or that a claim term is "indefinite." (*See* Order No. 2 at 8; G.R. 1.14.). If any party posits a "plain and ordinary meaning," it must be explained. (Order No. 2 at 8.).

B. Claim Chart in Appendix A

The claim chart attached as Appendix A contains five (5) columns in the chart: (1) Term(s) to be Construed; (2) Heineken's Proposed Construction; (3) ABI's Proposed Construction; (4) the Adopted Construction; and (5) and the Rationale/Support for the Adopted Construction. (*See id.* at Claim Chart No. 1.).

IV. APPLICABLE LAW⁵

A. Claim Construction Generally

Claim construction begins with the language of the claims themselves. Claims should be

⁵ The constructions of the disputed claim terms in Claim Chart No. 1 of Appendix A generally follow and apply the law as described above. To the extent possible, the case law that applies to a construction is either identified explicitly, or implicitly in adopting a party's argument or construction.

given their ordinary and customary meaning as understood by a person of ordinary skill in the art, viewing the claim terms in the context of the entire patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). In some cases, the plain and ordinary meaning of claim language is readily apparent and claim construction will involve little more than "the application of the widely-accepted meaning of commonly understood words." *Id.* at 1314. In other cases, claim terms have a specialized meaning and it is necessary to determine what a person of ordinary skill in the art would have understood disputed claim language to mean by analyzing "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, as well as the meaning of technical terms, and the state of the art." *Id.* (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)).

The claims themselves provide substantial guidance with regard to the meaning of disputed claim language. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Similarly, other claims of the patent at issue, regardless of whether they have been asserted against respondents, may show the scope and meaning of disputed claim language. *Id.*

In cases in which the meaning of a disputed claim term in the context of the patent's claims was uncertain, the specification was used as the "single best guide to the meaning of a disputed term." *Id.* at 1321. Moreover, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316. As a general rule, however, the particular examples or

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embodiments discussed in the specification are not to be read into the claims as limitations. *Id.* at 1323.

The prosecution history may also explain the meaning of claim language, although "it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* at 1317. The prosecution history consists of the complete record of the patent examination proceedings before the U.S. Patent and Trademark Office, including cited prior art. *Id.* The prosecution history may reveal "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." *Id.*

If the intrinsic evidence is insufficient to establish the clear meaning of a claim, a court may resort to an examination of the extrinsic evidence. *Zodiac Pool Care, Inc. v. Hoffinger Indus., Inc.*, 206 F.3d 1408, 1414 (Fed. Cir. 2000). Extrinsic evidence may shed light on the relevant art, and "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317. In evaluating expert testimony, a court should disregard any expert testimony that is conclusory or "clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent." (*Id.* at 1318.). Moreover, expert testimony is only of assistance if, with respect to the disputed claim language, it identifies what the accepted meaning in the field would be to one skilled in the art. *Symantec Corp. v. Comput. Assocs. Int'l, Inc.*, 522 F.3d 1279, 1289 n.3., 1290-91 (Fed. Cir. 2008). Testimony that recites how each expert would construe the term should be accorded little or no weight. *Id.* Extrinsic evidence is inherently "less reliable" than intrinsic evidence, and "is unlikely to result in a reliable interpretation of patent claim scope unless

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considered in the context of the intrinsic evidence." Phillips, 415 F.3d at 1318-19.

Extrinsic evidence is a last resort: "[i]n those cases where the public record

unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence

is improper." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996).

B. Means-Plus-Function Claim Terms

Some patent claim limitations are drafted in means-plus-function format and are

governed by 35 U.S.C. § 112 ¶ 6.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112 ¶ 6. According to the Federal Circuit, "[t]he first step in construing a meansplus-function limitation is to identify the function explicitly recited in the claim." *Asyst Techs., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1369-70 (Fed. Cir. 2001). The function may only include the limitations contained in the claim language: it is improper to narrow or broaden "the scope of the function beyond the claim language." *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002).

The next step in the analysis of a means-plus-function claim limitation "is to identify the corresponding structure set forth in the written description that performs the particular function set forth in the claim." *Asyst*, 268 F.3d at 1369-70. Corresponding structure "must not only perform the claimed function, but the specification must clearly associate the structure with performance of the function." *Cardiac Pacemakers*, 296 F.3d at 1113.

Section 112 paragraph 6 does not 'permit incorporation of structure from the written description beyond that necessary to perform the claimed function.' Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations.

Asyst, 268 F.3d at 1369-70 (citations omitted). For example, features that enable the pertinent structure to operate as intended are not the same as corresponding structures that actually perform the stated function. *Id.* at 1371. Different embodiments disclosed in the specification may disclose different corresponding structure. *Cardiac Pacemakers*, 296 F.3d at 1113.

A means-plus-function analysis is "undertaken from the perspective of a person of ordinary skill in the art." *Id.* While the focal point for determining the corresponding structure is the patent specification, other intrinsic evidence remains relevant. The other claims in a patent "may provide guidance and context for interpreting a disputed means-plus-function limitation, especially if they recite additional functions." *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233-34 (Fed. Cir. 2001). If another claim in the patent recites a separate and distinct function, "the doctrine of claim differentiation indicates that these claims are presumptively different in scope." *Id.*⁶ The prosecution history of the patent may also be useful in interpreting a claim written in means-plus-function form. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1457 (Fed. Cir. 1998) (abrogated with respect to de novo claim construction).

* *

⁶ The Federal Circuit has explained that claim differentiation may not be used to circumvent the requirements of Section 112 \P 6 but may still play a role during claim construction:

Although the judicially created doctrine of claim differentiation cannot override the statutory requirements of § 112, ¶ 6, it does not necessarily follow that means-plus-function limitations must be interpreted without regard to other claims. Claim differentiation ... is clearly applicable when there is a dispute over whether a limitation found in a dependent claim should be read into an independent claim, and that limitation is the only meaningful difference between the two claims.

We explained that "[a] means-plus-function limitation is not made open-ended by the presence of another claim specifically claiming the disclosed structure which underlies the means clause or an equivalent of that structure." Thus, *Laitram* held that the stringencies of a means-plus-function limitation are not to be avoided by the mere addition of a dependent claim that recites the corresponding structure disclosed in the specification. However, *Laitram* does not stand for the broader proposition suggested by CMS, viz., that a means-plus-function limitation must be interpreted without regard to other claims.

Id. (internal citations omitted).

"[P]ositions taken before the PTO may bar an inconsistent position on claim construction under § 112 ¶6" if a "competitor would reasonably believe that the applicant had surrendered the relevant subject matter" as a result of "clear assertions made in support of patentability." *Id.*

C. Definiteness

A patent specification must "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as [the] invention." 35 U.S.C. \$ 112, \$ 2. Previously, the Federal Circuit held that a patent claim is not indefinite "so long as the claim is amenable to construction, and the claim, as construed, is not insolubly ambiguous." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S.Ct. 2120, 2124 (2014). More recently, the U.S. Supreme Court determined that this standard lacks precision. *Id.* at 2130. Instead, the Supreme Court held:

we read § 112, ¶ 2 to require that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty. The definiteness requirement, so understood, mandates clarity, while recognizing that absolute precision is unattainable. The standard we adopt accords with opinions of this Court stating that "the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter."

Id. at 2129 (citations omitted).

A party seeking to invalidate a patent claim must do so by clear and convincing evidence.

See, e.g., Tech. Licensing Corp. v. Videotek, Inc., 545 F.3d 1316, 1327 (Fed. Cir. 2008) (citing

Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1375 (Fed. Cir. 1986)).

D. Doctrine of Prosecution History Disclaimer

"[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." *Phillips*, 415 F.3d at 1317. To narrow claim scope during prosecution, "[t]he applicant, however, must clearly and unambiguously express any such surrender of subject matter." *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1367 (Fed. Cir. 2003); *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed.Cir.2005) ("The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.") (internal quotation and citation omitted). Responses to elections/restrictions only serve to limit if "the applicant's response to the restriction requirement ... constitutes a clear and unmistakable disclaimer of claim scope." *Uship Intellectual Props. v. U.S.*, 714 F.3d 1311, 1315 (Fed. Cir. 2013).

"Absent applicant argument in the face of a restriction requirement, ... courts have consistently refused to find an examiner's restriction requirement, by itself, to result in a disavowal of claim scope." *Bestop, Inc. v. Tuffy Sec. Prod., Inc.*, 2015 WL 470552, at *6 (E.D. Mich. Feb. 4, 2015). "The reason is that restriction requirements constitute 'an administrative tool' that is 'employed early in the prosecution, at the discretion of the Examiner, to control the Examiner's time . . . and prior to determining the scope or boundaries of any of the claims." *Id.* (quoting *Amersham Pharmacia Biotech, Inc. v. Perkin-Elmer Corp.*, 2000 WL 34204509, at *16 (N.D. Cal. 2000) (ellipses in original).

V. PERSON OF ORDINARY SKILL IN THE ART

A hypothetical person is a person of ordinary skill and "ordinary creativity." *KSB Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 420 (2007). "Factors that may be considered in determining [the] level of ordinary skill in the art include: (1) the educational level of the inventor[s]; (2) type of problems encountered in the art; (3) prior art solutions to the problems; (4) rapidity with which inventions are made; (5) sophistication of the technology; and (6) educational level of

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active workers in the field." *Envtl. Designs Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 696-97 (Fed. Cir.) (citations omitted). "These factors are not exhaustive but merely a guide to determining the level of ordinary skill in the art." *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F3d 1254, 1256 (Fed. Cir. 2007).). The hypothetical person of skill is also separately presumed to have knowledge of all the relevant prior art in the field. *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 693, 697 (Fed. Cir. 1983).

Heineken contends that a person of ordinary skill in the art would have at least four (4) years of research and/or industry work experience in the field of carbonated beverage dispensing systems, particularly with beer. (CMBr. at 12 (citing CXM-0003C (Heineken's 3rd Supplemental Responses to ABI's Interrogatory Nos. 1-47) at No. 38 (Nov. 16, 2018)).). Heineken argues that such experience is necessary because "[m]any of the benefits of and challenges overcome by the '751 Patent are unique to carbonated beverages such as beer," such as proper carbonation and a "favourable microbiological environment." (*Id.*).

ABI proposes that one of ordinary skill in the art would have: (1) "at least a Master's degree in mechanical engineer or product design"; and/or (2) "four years of relevant experience designing fluid dispensing devices." (RMBr. at 11 (citing RXM-0008 (Decl. of Dr. Alexander H. Slocum) at ¶¶ 12-13).).

Heineken's arguments in support of its proposed definition are persuasive. As Heineken notes, the benefits disclosed in the '751 patent include the counteraction of "undesired frothing," and, as mentioned above, a "favourable microbiological environment," which is "particularly applicable to beer, a fermented beverage made from yeast prone to microbiological growths that, at minimum, can negatively affect the taste of the beer and can create an unhygienic environment within the dispensing device." (CMBr. at 12 (citing JXM-0001 at 2:13-16, 2:27-29, 2:45-51.).

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Thus, it is determined that a person of ordinary skill in the art would have least four (4) years of research and/or industry work experience in the field of carbonated beverage dispensing systems, particularly with beer.

VI. PROCEEDINGS GOING FORWARD

A. Supplementation in Response to This Order

The Parties may not file supplemental expert reports in response to this Order. No additional discovery will be permitted because of this Order. No re-argument of the claims construed in this Order may occur.

As the Parties proceed in this Investigation, they will be expected to notify Chambers of any issues that have become moot, or have been eliminated for any reason through a filing on EDIS. The Parties' required outlines that must identify any issues, claims, defenses, prior art, theories, or any other content that was originally asserted or argued, should identify all issues or contentions and patents that have been dropped or become moot for any reason.

The Parties should redact from expert reports and from any other documents upon which they intend to rely any issues, claims, defenses, prior art, theories, or any other content that has been rendered moot or disallowed as a result of this or other Orders, or termination from this Investigation of patent claims or allegations. The Parties must file on EDIS any expert reports or other documents upon which they intend to rely that have been redacted for the reasons stated above, and provide two (2) copies to Chambers.

B. Streamlining the Investigation

To the extent that this *Markman* Order will enable the Parties to streamline the Investigation, the Parties are encouraged to drop issues now in advance of the Hearing scheduled for April 8-11, 2019. Moreover, the Parties are encouraged to resolve promptly each issue in this

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Investigation for which there is no reasonable dispute or little, or weak, evidentiary support.

C. Settlement

It is strongly recommended that the Parties take informal opportunities to engage in settlement.

VII. CONCLUSION

Constructions of the disputed claim terms are hereby adopted by this Order for the reasons discussed in Claim Chart No. 1.

Within seven (7) business days of the date of this document, each party shall submit to the Office of the Administrative Law Judges a statement as to whether or not⁷ it seeks to have any confidential portion of this document (including Charts 1 and 2) deleted from the public version. Any party seeking redactions to the public version must submit to this office two (2) copies of a proposed public version of this document pursuant to Ground Rule 1.10 with red brackets clearly indicating any portion asserted to contain confidential business information.

The Parties' submissions may be made by facsimile and/or hard copy by the aforementioned date. In addition, an electronic courtesy copy is required pursuant to Ground Rule 1.3.2.

The Parties' submissions concerning the public version of this document need not be filed with the Commission Secretary.

SO ORDERED.

MaryJoan McNamara Administrative Law Judge

⁷ This means that parties that do not seek to have any portion of this Order redacted are still required to submit a statement to this effect.

Claim Chart No. 1: Court's Constructions of Disputed Claim Terms

Public Version

		U.S. Pa	U.S. Patent No. 7,188,751	
Terms to be Construed	Heineken's Proposed Construction	ABI's Proposed Construction	Adopted Construction	Support for Construction
"shut-off valve" (Claims 1 and 7)	Plain and ordinary meaning, which is a valve to open and close flow	A valve comprising an outer sleeve and an inner sleeve, said valve opened and closed by linear movement	Plain and ordinary meaning, which is a valve to open and close flow	Heineken's proposed construction is adopted. A person of ordinary skill in the art would understand the plain and ordinary meaning of a "shut-off valve" as a valve that opens and closes flow, as Heineken asserts. (CMBr. at 20.). Claims 1 and 7 state that the shut-off valve "is selectively openable and closable." (JXM- 0001 at 11:13, 12:18.). The specification informs that opening and closing the shut-off valve controls dispensing of the drink. (<i>See, e.g., JXM</i> -0001 at 2:24- 27.). Thus, the intrinsic evidence does not compel departing from the plain and ordinary meaning. <i>Phillips</i> , 415 F.3d at 1313. As Heineken contends, ABI's proposed construction improperly attempts to limit the claimed "shut-off valve" to a single embodiment described in the specification of the '751 patent. (CMBr. at 20.). As a general rule, specific examples or embodiments discussed in the specification are not to be read into the claims as limitations. <i>See, e.g., Phillips</i> , 415 F.3d at

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Inv. No. 337-TA-1130 Appendix A to Order No. 14

		U.S. Pa	U.S. Patent No. 7,188,751	
Terms to be Construed	Heineken's Proposed Construction	ABI's Proposed Construction	Adopted Construction	Support for Construction
				 1323 ("although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments"); see also Nazomi Commc 'ns, Inc. v. ARM Holdings, PLC, 403 F.3d 1364, 1369 (Fed.Cir.2005) (claims may embrace "different subject matter than is illustrated in the specific embodiments in the specific embodiments in the specification"); <i>C.R. Bard v. U.S. Surgical Corp.</i>, 388 F.3d 858 (Fed. Cir. 2004) ("a patentee's choice of embodiments can shed light on the intended scope of the claim, but a patent claim term is not limited merely because the embodiments in the specification all contain a particular feature") (citation omitted). ABI's proposed construction is not supported by the intrinsic evidence. The '751 patent makes clear that the shut-off valve is not limited to a linear valve made of sleeves. It teaches a variety of shut-off valves, including "a slit valve in the flexible hose a separate plastic shutoff valve with a closed equilibrium position, a spring-loaded (ball) valve or an electromagnetic valve." (JXM-0001 at 3:5-9.). ABI's
	-			embodiments. See, e.g., Vitronics Corp. v.

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Terms to be Construed	Heineken's Proposed Construction	ABI's Proposed Construction	Adopted Construction	Support for Construction
				<i>Conceptronic, Inc.</i> , 90 F.3d 1576, 1583 (Fed. Cir. 1996) (noting that constructions that exclude embodiments are "rarely, if ever, correct"). A person having ordinary skill in the art would thus understand the term "shut-off valve" to include other types shut-off valves, and would not limit the term to sleeve valves. Similarly, the '751 patent does not limit operation of the shut-off valve "by linear movement." The specification discloses that the dispensing line, which contains the shut-off valve in some embodiments, may be opened and closed "by relative rotation, translation, or a combination thereof." (JXM-0001 at 3:51-62.). Accordingly, a person having ordinary skill in the art would understand that the term "shut-off valve" is not limited to opening by "linear" movement, but could also open by "rotation, translation, or a combination thereof." (<i>See id.</i> ; <i>see also id.</i> at 9:51-55 ("Embodiments provided with inlets and outlets that can be position by turning relative to one another or in a flow position by turning relative to one another or in a flow position by turning relative to one another are also possible.").)

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characterised in that the shut-off valve (32) comprises a first sleeve (75) and a second sleeve (70)." (JMX-0002 application demonstrate that the term "a shut-off valve" the later, narrowing dependent claims. ABI's proposed additional qualification, along with dependent claim 5, patent claims priority, Heineken proposed independent was not limited to a particular valve, as evidenced by independent claim 53 and dependent claim 57). The Additionally, ABI's proposed construction is refuted by the prosecution history, which similarly does not Here, the independent claims in Heineken's priority support limiting a shut-off valve to a valve made of Roussel, Inc., 314 F.3d 1313, 1329 (Fed. Cir. 2003) Federal Circuit has found that claims withdrawn or "sleeves" that operates "by linear movement." For TC0000027-29 (proposing the same for pending at HEIA-ITC-0000093-94); see also id. at HEIAunderstanding claim language of those claims that instance, in the PCT application to which the '751 ultimately issued. Amgen Inc. v. Hoechst Marion claim 1, which recites "a shut-off valve" without cancelled during prosecution are relevant to which recites "[d]rink dispenser assembly . Support for Construction U.S. Patent No. 7,188,751 Construction Adopted ABI's Proposed Construction Construction Heineken's Proposed Terms to be Construed

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	Support for Construction	construction would impermissibly read a limitation from the pending dependent claims into the independent claims. <i>Id.</i> (cancelled product-by-process claims supported not limiting issued product claims to any particular process or source used to obtain process); <i>Rodime PLC v. Seagate Tech., Inc.</i> , 174 F.3d 1294, 1304-05 (Fed. Cir. 1999). Heineken also submitted pending dependent claims 20, 38, 72, and 90, which recite "that the shut-off valve is electromagnetic." (JMX-0002 at HEIA-ITC- 00000033, 38, 96, 99.). A person having ordinary skill in the art would thus understand the term "shut-off valves, and would not limit the term to sleeve valves. In its supplemental <i>Markman</i> Brief ("Supplemental Brief"), ABI contends that Heineken's election of Species C in response to an election/restriction requirement limits Heineken's claimed invention to the embodiments in Species C, ¹ which ABI states is: "(1) an in-line piston valve with two concentric sleeves that opens and closes through linear movement, and (2) a
U.S. Patent No. 7,188,751	Adopted Construction	
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¹ The substance of the election/restriction requirement is discussed in more detail in Section II.D of Order No. 14.

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	Support for Construction	 tapping mechanism for operating the valve in this linear manner." (RSMBr. at 1; <i>see also id.</i> at 12.). ABI asserts that the "shut-off valve" recited in claims 1 and 7 "cannot cover electromagnetic valves, slit valves, spring loaded (ball) valves, or any valve that opens and closes via the relative rotation of valve components" because such "non-linear valves are inconsistent with Heineken's affirmative election of Species C" and Heineken's decision to withdraw certain claims to "electromagnetic valves." (<i>Id.</i> at 1, 12-13.). ABI also argues that "Heineken added limitations to the pending independent claims reflecting Species C, and the issued claims focus on various aspects of this embodiment." (<i>Id.</i> at 13.). In support of its contentions, ABI cites <i>Automated Packaging Systems, Inc. v. Free Flow Pkg'g Int'l, Inc.</i>, 00356-EMC, 2018 WL 3659014, at *14 (N.D. Cal. Aug. 2, 2018). ABI's reliance is misguided.
U.S. Patent No. 7,188,751	Adopted Construction	
U.S. Pa	ABI's Proposed Construction	
	Heineken's Proposed Construction	
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	Support for Construction	In <i>Automated Packaging</i> , the court found clear and unmistakable disclaimer of claim scope, as ABI claims. However, the finding was based on the patentee's selection of an <i>embodiment</i> of a particular <i>figure</i> at the request of the examiner. <i>Automated Packaging</i> , 2018 WL 3659014, at *14. Moreover, in the prosecution history, the patentee summarized a conversation and agreement reached with the examiner during interviews with regard to amendment. <i>Id.</i> at *13. In that letter, the patentee explicitly stated, <i>inter alia</i> , that: (i) "[c]laims that <i>do not read</i> on the [selected] embodiment of Figure 6 have been canceled by this amendment" (<i>id.</i> at *14 (emphasis added); and (ii) "[c]laims 53, 54, 60, [and] 65 have been canceled as requested by the examiner, as <i>not reading</i> on the 'gap forming area' embodiment selected by Applicant (i.e., Figure 6) pursuant to the request by the Examiner during the telephone interview described above" (<i>id.</i> (emphases added)). There has been no such disclaimer here. Here, the examiner gave no specific reason for dividing the invention into eight distinct species and subspecies, instead reciting the boilerplate statement that "they are
U.S. Patent No. 7.188.751	Adopted Construction	
U.S. Pat	ABI's Proposed Construction	
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unnistakable disavowal" needed to support narrowing finding that "Plantronics' election of species of Figures 1A and 1B did not amount to such a surrender of claim "[b]ecause Plantronics elected to prosecute the species limited to the disclosures and embodiments pertaining claim scope. Plantronics, Inc. v. Aliph, Inc., 724 F.3d of Figures 1A and 1B, . . . the asserted claims must be Plantronics elected to pursue." Plantronics, 724 F.3d at 1350. The Federal Circuit rejected Aliph's attempt scope." Id. at 1351. In doing so, the court found that [TC-00000308-310.). Such an ambiguous restriction to Figures 1A and 1B," that is, "the claims should be concept," as Heineken notes. (JXM-0002 at HEIArequirement does not rise to the level of "clear and not so linked as to form a single general inventive Plantronics, the case upon which Heineken relies. to limit the claims based on Plantronics' election, limited to the single invention depicting a single embodiment having on 'elongated' structure as The facts here are more aligned with those in Plantronics, the defendant, Aliph argued that (CSMBr. at 9.). As Heineken describes, in Support for Construction 1343, 1350 (Fed. Cir. 2013) U.S. Patent No. 7,188,751 Construction Adopted ABI's Proposed Construction Construction Heineken's Proposed Terms to be Construed

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Terms to be Construed	Heineken's Proposed Construction	U.S. Pat ABI's Proposed Construction	U.S. Patent No. 7,188,751 osed Adopted ion Construction	Support for Construction support for Construction was ambiguous because "the PTO found four patentably distinct inventions in the figures of the '453 patent without providing any reasons why in its view the application presented differing inventions" and that "[t]he PTO's restriction requirement did not suggest that the different inventions it found were based on differences in structure." <i>Id.</i> The court also found that Plantronics "election of an invention in response to an ambiguous restriction requirement in turn cannot be said to provide any guidance forming a basis for
			;	narrowing a broadly drafted claim." <i>Id.</i> (citing <i>Omega Eng'g, Inc. v. Raytek Corp.</i> , 334 F.3d 1314, 1325 (Fed. Cir. 2003)). Furthermore, in this case, the examiner made clear that he believed pending claims 53, 64, 84, and 92 corresponded to Species B and read on Figure 2. (JXM-0002 at HEIA-ITC-00000309.). Figure 2 contains "shut-off valve 32," which is never described in the patent as being limited to any specific structure or direction of movement, and is shown in Figure 2 and described in the specification without limitation. (JXM-0001 at 6:28-31; Fig. 2.). The examiner also

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,188,751	Adopted Support for Construction Construction	found that claims 57-60, which depend from claim 53 and add the limitations ABI seeks to include in the term's construction, were a separate subspecies from claims 53, 64, 84 and 92. (JXM-0002 at HEIA-ITC- 00000309.). Claim 53 recites a "shut-off valve"; claims 57-60 further limit the "shut-off valve" to one that "comprises a first sleeve (75) and a second sleeve (70)." (<i>Id.</i> at HEIA-ITC-00000313-14.). This supports Heineken's assertion that the limitation from the dependent claims should not be read into the "shut-off valve" recited in independent claims 53, 64, 84, and 92. <i>Rodime</i> , 174 F.3d at 1304-05.	Heineken's responses to the examiner's restriction also make clear that it did not believe its claims were limited to a linear, sleeve valve. In electing to pursue claims covering Species C, corresponding to Figures 11-13, Heineken stated that the claims that ultimately issued as claims 1, 3, 7, and 10 covered other species as well, stating that these claims "read[] on Figures 1-5, 9 and 10, and 11-13 and hence on Species A, B, C, and H." (JXM-0002 at HEIA-ITC-00000334-39.). Heineken's statement makes clear its contention that these claims read on species A and B, corresponding to
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n	ABI's Proposed Construction		
	Heineken's Proposed Construction		
	Terms to be Construed		

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Terms to be Construed	Heineken's Proposed Construction	ABI's Proposed Construction	Adopted Construction	Support for Construction
				 Figures 1 and 2, which are not limited to any specific structure or movement direction of shut-off valve. Moreover, Heineken's cancellation of dependent claims 57-60, which claim the additional limitation of a "first sleeve" and "second sleeve," indicates that it elected not to pursue claims that were limited to particular types of valves. (JXM0002 at HEIAITC-00000313-14.). In sum, the inventors did not act as lexicographers and explicitly defined "shut-off valve" different from its plain and ordinary meaning. In addition, nothing in the specification or the prosecution history constitutes a clear and unmistakable disclaimer of claim scope that would make it appropriate to limit the term "shut-off valve" to the embodiment in the specification upon which ABI relies. See, e.g., Thorner v. Sony Comput. Entm't Am. LLC, 669 F.3d 1362, 1365-67 (Fed. Cir. 2008); CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366-69 (Fed. Cir. 2002) (narrow construction unjustified without any disclaimer of the scope of ordinary meaning); Rexnord Corp. v. Laitram

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	Support for Construction	<i>Corp.</i> , 274 F.3d 1336, 1343-44 (Fed. Cir. 2001) (claims are not limited to preferred embodiment). For the reasons discussed above, Heineken's proposed construction is adopted.	Heineken's proposed construction is adopted. As Heineken notes, "[t]here is no dispute that claims 1 and 7 require that the shut-off valve be detachably connectable to the operating element." (CMBr. at 25.). ABI's proposed construction includes "fork 63 on the <i>operating element for receiving the shut-off valve</i> ." (RMBr. at 21 (emphasis added).). The '751 patent uses the phrase "by means of" to describe the relationship between the operating element and the shut-off valve, not as a substitute for structure. (<i>See</i> CXM-0005, <i>Exablaze Pty. Ltd. v. Solarflare Commc 'ns, Inc.</i> , IPR2016-01908, Paper No. 7, at 10 (PTAB Mar. 2, 2017) ("The recitation 'by means of' simply acts as an introduction or identification of the structure rather than as a substitute for structure.").). Additionally, the Federal Circuit has found that § 112, ¶ 6 is presumed not to apply to claims reciting the
U.S. Patent No. 7,188,751	Adopted Construction		Plain and ordinary meaning / not means plus function
U.S. P	ABI's Proposed Construction		Means-plus- function claim term <u>Structure</u> : fork 63 on the operating element for receiving the shut- off valve 19/32's flange 51/79/105; handle or knob, joined to the housing 43, that operates with shaft 40; spring 57 and projection 57' on operating element 45/78 for opening
	Heineken's Proposed Construction		Plain and ordinary meaning / not means plus function As an alternative, if the Court finds this is a means plus function term: <u>Structure</u> : the "operating element" of the dispensing head may comprise one or more of an essentially horizontal arm (7:17-22); a fork (3:46- 50, 7:62-67, 8:14-16, 9:11-19,
	Terms to be Construed		"by means of which the shut-off valve (19, 32) is detachably connectable for opening and closing of the shut off valve by moving the knob or handle" (Claims 1 and 7)

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	Support for Construction	 phrase "by means of." We are unaware of any precedent stating that the presumption is triggered by a claim's use of the expression "by means of." In the past we have applied the presumption when a claim uses the word "means" as a noun in the claim: a "means" for doing something. We have not done so for the phrase "by means of." Robert Bosch, LLC v. Snap-On Inc., 769 F.3d 1094, 1098-99 (Fed. Cir. 2014); see also Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1349 ("fed. Cir. 2015) (§ 112, ¶ 6 is presumed not to apply to term not drafted in "means for" form). Other courts and tribunals have found also that the phrase "by means of" a plurality of pins" was not a means-plus-function limitation) (emphasis added); CXM-0005, Exablaze Pty. Ltd., IPR2016-01908, Paper No. 7, at 9 (the terms "by means of the network interface device," "by means of communication between the non-operating-system
U.S. Patent No. 7,188,751	Adopted Construction	
U.S. Pa	ABI's Proposed Construction	and closing the shut-off valve 32/19. <u>Function</u> : to connect the shut- off valve such that it is detachable, and to transfer the movement of the knob or handle to the shut-off valve, such that the shutoff valve opens and closes via linear movement.
	Heineken's Proposed Construction	10:1-5); a coupling element (7:23-28); a seat (7:5-11, 7:62- 8:8, 8:56- 62); a guide (7:17-22, 9:56-10:4); a curved end (7:17-22); a stop (7:53-57); a curved saddle (7:62- 67); a spring (6:48-7:4); a projection (6:48- 7:4); and a rim (7:5- 11, 7:62-8:8); Figs. 3, 4, 5, 6a, 6b, 7a, 7:4); and a rim (7:5- 11, 7:62-8:8); Figs. 3, 4, 5, 6a, 6b, 7a, 7:4); and a rim (7:5- 11, 7:62-8:8); Figs. 0, 11, 12, 13. <u>Function</u> : capable of detachably connecting the shut- off valve to the dispensing head for opening and closing of the shut off valve
	Terms to be Construed	

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	Support for Construction	functionality and the network interface device that bypasses the operating system," and "by means of the non-operating system functionality" are introductions or identifications of the structure rather than as a substitute for structure, and do not invoke § 112, ¶ 6) (emphases in original); CXM-0006, <i>Caterpillar Inc.</i> v. <i>Wirtgen Am. Inc.</i> , IPR2017-02185, Paper No. 7, at 8 (PTAB May 3, 2018) ("connected to a chassis of the road-building machine by means of an actuating member" is not a means-plus-function claim limitation) (emphasis added). Claims 1 and 7 recite sufficient structure, and sufficiently definite structure, for which the "shut-off valve is detachably connectable." <i>See, e.g.</i> , <i>Williamson</i> , 792 F.3d at 1349 ("When a claim term lacks the word "means," the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to "function without reciting sufficient structure for performing that function.") (citation omitted). As noted above, even under ABI's proposed construction, the corresponding structure includes "fork 63 on the
U.S. Patent No. 7,188,751	Adopted Construction	
U.S. P	ABI's Proposed Construction	
	Heineken's Proposed Construction	by moving the knob or handle.
	Terms to be Construed	

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	Support for Construction	operating element for receiving the shut-off valve." (RMBr. at 21.). Furthermore, the operating element appears in the claims. Thus, it is undisputed that the claims themselves provide the structure, an operating element, "by means of which the shut-off valve is detachably connectable." For these reasons, Heineken's proposed construction is adopted.	Heineken's proposed construction is adopted. Consistent with its proposed construction attempting to limit the term "shut-off valve" to in-line piston valves, which was rejected above, ABI contends that the "flexible tube" must move in conjunction with the valve to allow for the valve to open and close. (RMBr. at 29.). According to ABI, "the claimed dispensing approach would be inoperable if the flexible tube did not move with the valve." (<i>Id.</i> at 30.). ABI's assertions are unavailing. Additionally, to the extent ABI is seeking to narrow the plain and ordinary meaning of the term based on the attributes of exemplary embodiments described in the specification,
U.S. Patent No. 7,188,751	Adopted Construction		Plain and ordinary meaning
U.S. Pa	ABI's Proposed Construction		The shut-off valve moves in conjunction with at least part of the flexible tube
	Heineken's Proposed Construction		Plain and ordinary meaning
	Terms to be Construed		"the shut-off valve is freely mov[e]able with the flexible tube upon placement and removal of the valve into and from the dispensing head" (Claims 1 and 7)

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	Support for Construction	such a restriction is improper. <i>See, e.g., Plantronics,</i> <i>Inc. v. Altph, Inc.,</i> 724 F.3d 1343, 1350 (Fed. Cir. 2013) (""The patentee is entitled to the full scope of his claims, and we will not limit him to his preferred embodiment or import a limitation from the specification into the claims." (quoting <i>Kara Tech.</i> <i>Inc. v. Stamps.com Inc.,</i> 582 F.3d 1341, 1348 (Fed. Cir. 2009)).) As Heineken points out, "the claim language specifically recites that the valve is moveable with the tube 'upon placement and removal of the valve into and from the dispensing head." and "has nothing to do with how the value and the tube interact when the value is coupled with the tap head." (CMBr. at 31.). Rather, this term pertains to "the fact the valve stays with the tube when the dispensing line is removed from the dispensing device." (<i>Id.</i>). ABI's reading completely ignores the recitation that the valve is moveable with the tube when the valve is moveable relative to the tube when the valve is coupled to the tap. (JXM-0001 at 3:46-50.).
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	Heineken's Proposed Construction	
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	Support for Construction	Heineken's proposed construction also is supported by the prosecution history. Heineken described the claimed invention as having "a disposable valve attached to a flexible tube. This flexible tube allows a large degree of freedom while the consumer positions the valve in the dispensing device." (JMX-0002 at HEIA-ITC-0000395.). Moreover, as Heineken notes, the plain language of the claims requires only that the shut-off valve be capable of being "freely moveable." (CMBr. at 32.). In it invalidity contentions, ABI argued that "claims 1 and 7 are invalid as indefinite for being improper hybrid claims" because "these claims recite method steps for using the claims apparatus—e.g., the act of fixing the valve in position." (CX-0004C (ABI's 1st Supplemental Response to Interrogatory No. 28 (Nov. 2, 2008)).). ABI's proposed construction seeks to include a "method step," in support of its indefiniteness argument, by improperly transforming this capability into a requirement that the "shut-off valve" actually "moves."
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U.S. Pat	ABI's Proposed Construction	
	Heineken's Proposed Construction	
	Terms to be Construed	

		U.S. Pa	U.S. Patent No. 7,188,751	
Terms to be Construed	Heineken's Proposed Construction	ABI's Proposed Construction	Adopted Construction	Support for Construction
				For the foregoing reasons, Heineken's proposed construction is adopted.
"fixedly attached" (Claim 1)	Plain and ordinary meaning, which is attached in an unchanging way	fixed such that it is non-detachable	Plain and ordinary meaning, which is securely fastened	Neither party's proposed construction is adopted. The term "fixedly attached" is construed to have its plain and ordinary meaning, which is securely fastened. (<i>See</i> Ex. 1, Merriam-Webster's Collegiate® Dictionary (10th ed. 1999) at 441.).
			,	Heineken's proposed construction, i.e., "attached in an unchanging way," introduces the vague term, "unchanging way," as ABI notes. (RMBr. at 32.). This vague construction only introduces additional ambiguity into this limitation. Moreover, as ABI points out, there is no support in the claims or the specification for Heineken's contention that "fixed" means "unchanging way" with respect to the claimed beverage dispenser. (<i>Id.</i>).
				ABI correctly recognizes that claims 1 and 7 differentiate between components that are "detachably connectable," such as the flange and fork 63, and those that are "fixedly attached," such as the dispensing line and shut-off valve. (<i>Id.</i> at 31.). Claims 1 and 7 also

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	Support for Construction	evidence compels departing from the plain and ordinary meanings. <i>Phillips</i> , 415 F.3d at 1313. For example, claim 1 recites that the "at least partially flexible dispensing line has a coupling element at an outlet end" and that the "coupling element at comprises a shut-off valve (19, 32) made of <i>rigid</i> material." (JMX-0001 at Cl. 1 (emphasis added); <i>see</i> <i>also id</i> , at Cl. 7.). The "at least partially flexible dispensing line" also includes a "flexible tube" to which "the shut-off valve is fixedly attached." (<i>Id</i> .). It is clear from the claims that the "at least partially flexible dispensing line" includes at least partially flexible dispensing line (17, 28)," and claim 10, which depends from claim 7, adds the additional limitation that the "dispensing line (17, 28) is provided at the outlet end with a relatively <i>rigid tube section</i> (41)." (<i>Id</i> at Cl. 7, 10 (emphasis added)). Claim 8, which similarly depends from claim 7, recites that "the dispensing line (17, 28) is provided at the outlet end with a relatively <i>rigid tube section</i> (41)." (<i>Id</i> at Cl. 7, 10 (emphasis added)). Claim 8, which similarly depends from claim 7, recites that "the dispensing line (17, 28) is at least partially of flexible construction," indicating that a part, or portion, of the dispensing line is flexible. (<i>Id</i> at Cl. 8.). The
U.S. Patent No. 7,188,751	Adopted Construction	meaning at least a portion of the item described is flexible
	ABI's Proposed Construction	
	Heineken's Proposed Construction	meaning at least a portion of the item described is flexible
	Terms to be Construed	"partially flexible" (Claims 1 and 7)

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	Support for Construction	 same language also appears in the specification: "[t]he dispensing line can be of rigid construction, but can also be telescopic or at least partially of flexible construction." (<i>Id.</i> at 2:60-67.). Based on these disclosures, a person of ordinary skill in the art "flexible tube" refers to the "at least partially flexible dispensing line," and does not lack antecedent basis.² Additionally, courts have repeatedly declined to construe the term "partially" as indefinite. <i>See Legacy Separators LLC v. Halliburton Energy Servs., Inc.</i>, 2016 WL 3017140, at *3-4 (S.D. Tex. May 26, 2016); <i>In the Matter of Certain Semiconductor Devices</i>, <i>Semiconductor Device Packages, & Prods. Containing Same</i>, 337-TA-1010, Order No. 63, at 26-28 (Feb. 6, 2017). This is also the case for the term "flexible." <i>Advanced Aerospace Techs., Inc. v. U.S.</i>, 124 Fed. Cl. 282, 298 (Nov. 24, 2015) (construing "flexible" as "the ability to be repeatedly bent and still maintain its
U.S. Patent No. 7,188,751	Adopted Construction	
U.S. Pa	ABI's Proposed Construction	
	Heineken's Proposed Construction	
	Terms to be Construed	

² "[T]he failure to provide explicit antecedent basis for terms does not always render a claim indefinite. If the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite." MPEP § 2173:05(e) (citing *Energizer Holdings Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 77 USPQ2d 1625 (Fed. Cir. 2006) (holding that "anode gel" provided by implication the antecedent basis for "zinc anode"); *Ex parte Porter*, 25 USPQ2d 1144, 1145 (Bd. Pat. App. & Inter. 1992) ("controlled stream of fluid" provided reasonable antecedent basis for "the controlled fluid")).

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				original shape afterward"); <i>Promethean Insulation</i> <i>Tech. LLC v. Reflectix, Inc.</i> , 2015 WL 9093824, at *4-6 (E.D. Tex. Dec. 16, 2015).	r
				Moreover, as Heineken points out, both of ABI's 30(b)(6) witnesses who testified about the development	· ·····
				of the accused NUVA System used the word flexible consistently with that plain and ordinary meaning. (CX-0008C, Dirx Den, Tr. at 26:17-20 (Dec. 7, 2018)	
				("Q. What do you mean by flexible? A. They can be bended.") (objections omitted), 26:23-27:3 ("Q. Well	
				They bend back. You don't deform them, they bend	
				Vandekerckhove Dep. Tr. at 76:10-16 (Dec. 5, 2018) ("O. Is the clear plastic tubing designed to be flexible?	
				A. No, it's not designed to be flexible, it just happens to be flexible.") (objections omitted).). Thus, ABI	
				cannot credibly claim that a person having ordinary skill in the art could not ascertain the meanings of "flexible" and "partially flexible."	
				For the foregoing reasons, ABI has failed to demonstrate by clear and convincing evidence that	

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	Support for Construction	these claim terms are indefinite. <i>See, e.g., Microsoft</i> <i>Corp. v. i4i Ltd. P'ship,</i> 131 S. Ct. 2238, 2242 (2011) (explaining that a party challenging the validity of a claim must prove invalidity by clear and convincing standard). Accordingly, Heineken's proposed constructions are adopted.	Heineken's proposed construction is adopted. Here, there is no reason to deviate from the plain and ordinary meaning of the term "relatively rigid tube section," which is a section of tube that is relatively not flexible or pliant; stiff relative to another part of the tube. (CX-0007, American Heritage Dictionary (4th ed. 2000) at 1473, 1501.). The specification discloses that "this relatively rigid tube section (41), which is described in the specification as "outlet end (41) of the flexible dispensing line 28" is rigid relative to the flexible portions of that dispensing line.
U.S. Patent No. 7,188,751	Adopted Construction		Plain and ordinary meaning of "relatively rigid tube section," which is a section of tube that is relatively not flexible or pliant; stiff relative to another part of the tube
U.S. Pa	ABI's Proposed Construction		Indefinite
	Heineken's Proposed Construction		Plain and ordinary meaning of "relatively rigid tube section," which is a section of tube that is relatively not flexible or pliant; stiff relative to another part of the tube
	Terms to be Construed		"relatively rigid" (Claim 10)

Public Version

ABI's Proposed Construction

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Public Version

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	Support for Construction	 Moreover, courts have repeatedly declined to construe the term "relatively" as indefinite. See Traxxas, L.P. v. Hobbico, Inc., 2017 WL 4347709, at *22-23 (E.D. Tex. Sept. 29, 2017); Silicon Labs., Inc., v. Cresta Tech. Corp., 2016 WL 791792, at *1-3 (N.D. Cal. Mar. 1, 2016); Maxlinear, Inc., v. Silicon Labs., Inc., 2013 WL 12124606, at *9-10 (S.D. Cal. Apr. 17, 2013); Adair v. Boat Dock Innovations, LLC, 2016 WL 3951393, at *18-19 (N.D. Ga. Mar. 31, 2016) (report and recommendation). This also the case for the term "rigid." Hear-Wear Techs., LLC v. Oticon, Inc., 2016 WL 215273, at *11-12 (N.D. Okla. Jan. 19, 2016). For the reasons discussed above, ABI has failed to demonstrate by clear and convincing evidence that the term "relatively rigid" is indefinite. See, e.g., Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2242 (2011) (explaining that a party challenging the validity of a claim must prove invalidity by clear and convincing standard). Accordingly, Heineken's proposed construction is adopted.
U.S. Patent No. 7,188,751	Adopted Construction	
U.S. Pa	ABI's Proposed Construction	
	Heineken's Proposed Construction	
	Terms to be Construed	

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CERTAIN BEVERAGE DISPENSING SYSTEMS AND COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER** has been served upon the following parties as indicated on **April 3, 2019**.

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

On Behalf of Complainants Heineken International B.V., Heineken Supply Chain B.V., and Heineken USA Inc.:

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 Other:

On Behalf of Respondents Anheuser-Busch InBev S.A., InBev Belgium N.V., and Anheuser-Busch, LLC:

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