# In the Matter of

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

**Publication 5288** 

March 2022

**U.S. International Trade Commission** 



Washington, DC 20436

# **U.S. International Trade Commission**

# COMMISSIONERS

Jason E. Kearns, Chair Randolph J. Stayin, Vice Chair David S. Johanson, Commissioner Rhonda K. Schmidtlein, 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 LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155



March 2022

## UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

## ISSUANCE OF A GENERAL EXCLUSION ORDER AND CEASE AND DESIST ORDERS; 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 affirmed a summary determination of violation of section 337 with respect to certain defaulting respondents and has determined to issue a general exclusion order ("GEO") denying entry of certain infringing luxury vinyl tile and components thereof as well as cease and desist orders ("CDOs") against certain of the defaulting respondents. The investigation is terminated.

**FOR FURTHER INFORMATION CONTACT**: Lynde Herzbach, Office of the General Counsel, U.S. International Trade Commission, 500 E Street S.W., Washington, D.C. 20436, telephone (202) 205-3228. Copies of non-confidential documents filed in connection with this investigation may be viewed on the Commission's electronic docket (EDIS) at <a href="https://edis.usitc.gov">https://edis.usitc.gov</a>. For help accessing EDIS, please email <a href="https://edis.usitc.gov">EDIS3Help@usitc.gov</a>. General information concerning the Commission may also be obtained by accessing its Internet server at <a href="https://www.usitc.gov">https://www.usitc.gov</a>. 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**: On May 16, 2019, the Commission instituted this investigation based on a complaint filed by Mohawk Industries, Inc. of Calhoun, Georgia; Flooring Industries Ltd. Sarl of Bertrange, Luxembourg; and IVC US Inc. of Dalton, Georgia (collectively, "Complainants"). 84 FR 22161 (May 16, 2019). The complaint, as supplemented, alleges a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337 ("section 337") in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain luxury vinyl tiles by reason of infringement of certain claims of U.S. Patent Nos. 9,200,460 ("the '460 patent"); 10,208,490 ("the '490 patent"); and 10,233,655 ("the '655 patent") (collectively, "the Asserted Patents"). *Id.* The complaint further alleges that a domestic industry exists. *Id.* The Commission's notice of investigation names forty-five respondents, including: ABK Trading Corp. of Katy, Texas

("ABK"); Aurora Flooring LLC of Kennesaw, Georgia ("Aurora"); Changzhou Runchang Wood Co., Ltd. of Jiangsu, China ("Runchang"); Go-Higher Trading (Jiangsu) Co., Ltd. of Jiangsu, China ("Go-Higher"); Jiangsu Divine Building Technology Development Co. Ltd. Jiangsu, China ("Divine"); Jiangsu Lejia Plastic Co. Ltd. of Jiangsu, China ("Lejia"); JiangSu Licheer Wood Co., Ltd. of Jiangsu, China ("Licheer"); Maxwell Flooring Distribution LLC of Houston, Texas ("Maxwell Flooring"); Mr. Hardwood Inc. of Acworth, Georgia ("Mr. Hardwood"); and Sam Houston Hardwood Inc. of Houston, Texas ("Sam Houston") (collectively, "Defaulting Respondents"). *Id.* The Office of Unfair Import Investigations ("OUII") is also participating in the investigation. *Id.* 

The Commission previously terminated the investigation as to thirty-five respondents based on settlement, consent order, or partial withdrawal of the complaint. *See* Order No. 14 (Sept. 26, 2019), *unreviewed by*, Notice (Oct. 17, 2019); Order Nos. 15-21 (Sept. 27, 2019 for all), *unreviewed by*, Notice (Oct. 17, 2019); Order Nos. 23-25 (Oct. 2, 2019 for all), *unreviewed by*, Notice (Oct. 23, 2019); Order No. 27 (Oct. 9, 2019), *unreviewed by*, Notice (Nov. 6, 2019); Order No. 26 (Oct. 9, 2019)), *unreviewed by*, Notice (Nov. 8, 2019); Order No. 30 (Oct. 25, 2019), *unreviewed by*, Notice (Nov. 21, 2019); Order No. 34 (Nov. 7, 2019), *unreviewed by*, Notice (Dec. 11, 2019); Order No. 35 (Jan. 24, 2020), *unreviewed by*, Notice (Feb. 25, 2020).

On November 21, 2019, the Commission found respondent Go-Higher in default. *See* Order No. 31 (Oct. 25, 2019), *unreviewed by*, Notice (Nov. 21, 2019). On November 22, 2019, the Commission found an additional eight respondents in default: ABK; Aurora; Divine; Lejia; Licheer; Maxwell Flooring; Mr. Hardwood; and Sam Houston. *See* Order No. 32 (Oct. 30, 2019), *unreviewed by*, Notice (Nov. 22, 2019). On November 25, 2019, the Commission found respondent Runchang in default. *See* Order No. 33 (Oct. 30, 2019), *unreviewed by*, Notice (Nov. 25, 2019).

On January 15, 2020, Complainants filed a motion for summary determination that Complainants have satisfied the domestic industry requirement and of a violation of section 337 by the Defaulting Respondents. Complainants filed supplements to their summary determination motion on January 23, 2020, February 11, 2020, and February 19, 2020. On February 12, 2020, OUII filed a response to Complainants' motion. On May 14, 2020, OUII filed a supplemental response.

On May 15, 2020, the ALJ issued Order No. 36 granting the motion for summary determination and finding a violation of section 337 by the Defaulting Respondents. The ALJ recommended that the Commission issue a GEO prohibiting entry of luxury vinyl tiles that infringe the asserted claims of the Asserted Patents and CDOs against the five domestic Defaulting Respondents: ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston. The ALJ also recommended setting a bond of \$0.08 per square foot of luxury vinyl tile product and components thereof imported during the period of Presidential review. *Id.* No party petitioned for review of the ID.

On June 30, 2020, the Commission determined to review the ID in part. 85 FR 40683 (July 7, 2020). On review, the Commission affirmed the finding of violation of section 337 by the Defaulting Respondents' importation of luxury vinyl tile and components thereof that infringe one or more claims of the Asserted Patents. *Id.* Further, the Commission determined to review and, on review, to take no position on the ID's findings regarding the economic prong of the domestic industry requirement under subsection 337(a)(3)(B) (19 U.S.C. 1337(a)(3)(B)) with respect to the '460 patent. *Id.* The Commission also determined to review the ID's findings regarding a domestic industry for the '490 and '655 patents, and on review, to clarify that the Commission did not intend to imply that the investments already made with respect to those patents are not significant or could not be used to show the existence of a domestic industry under section 337(a)(3). *Id.* The Commission further determined to review the ID's findings as to two products from non-parties, *i.e.*, the Quickstyle and Uniflor Aqua products. *Id.* The Notice also requested written submissions on remedy, public interest, and bonding. *See id.* 

On July 15, 2020, Complainants and OUII submitted briefs on remedy, public interest, and bonding supporting the ALJ's recommendations. On July 22, 2020, OUII submitted a reply to Complainants' response. No other submissions were filed in response to the Notice.

As noted above, the Commission affirms the ID's finding that there is a violation of section 337 with respect to Defaulting Respondents. Moreover, the Commission finds that the statutory requirements for issuance of a GEO under section 337(d)(2) are met with respect to the Defaulting Respondents. *See* 19 U.S.C. 1337(d)(2). The Commission also finds that issuance of CDOs against the five domestic Defaulting Respondents is appropriate under 337(f)(1). *See* 19 U.S.C. 1337(f)(1). In addition, the Commission finds that the public interest factors do not preclude issuance of the requested relief. *See* 19 U.S.C. 1337(d)(1), (f)(1).

The Commission therefore has determined that the appropriate remedy in this investigation is: (1) a GEO prohibiting the unlicensed entry of certain luxury vinyl tile and components thereof that infringe one or more of claims 7-8, 13, 15-17, 20-23, and 30 of the '460 patent, claims 1-6, 8, 10-11, 13-16, and 18 of the '490 patent, and claims 1-4, 6-16, 18, and 20-26 of the '655 patent; and (2) CDOs against ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston. The Commission has also determined that the bond during the period of Presidential review shall be in the amount of \$0.08 per square foot of imported luxury vinyl tile and components thereof that are subject to the GEO and CDOs. *See* 19 U.S.C. 1337(j). The Commission has further determined to vacate the findings under review to the extent the ID adjudicates infringement of the Asserted Patents as to non-respondents.

The Commission's orders were delivered to the President and to the United States Trade Representative on the day of their issuance. The investigation is terminated.

While temporary remote operating procedures are in place in response to COVID-19, the Office of the Secretary is not able to serve parties that have not retained counsel or otherwise provided a point of contact for electronic service. Accordingly, pursuant to Commission Rules 201.16(a) and 210.7(a)(1) (19 CFR 201.16(a), 210.7(a)(1)), the Commission orders that the

Complainant complete service for any party without a method of electronic service noted on the attached Certificate of Service and shall file proof of service on the Electronic Document Information System (EDIS).

The Commission vote for this determination took place on September 16, 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: September 16, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

# PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **September 16, 2020**.

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

# <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

## **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Email Notification of Availability for Download
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
   Other: Service to Be
   Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

### UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

## CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

#### **GENERAL 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 of certain luxury vinyl tile floor and components thereof (as defined in paragraph 2 below) that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of U.S. Patent No. 9,200,460 ("the '460 patent"); claims 1-6, 8, 10, 11, 13-16, and 18 of U.S. Patent No. 10,208,490 ("the '490 Patent"); or claims 1-4, 6-16, 18, and 20-26 of U.S. Patent No. 10,233,655 ("the '655 Patent") (collectively, "Asserted Patents").

Having reviewed the record in this investigation, including the written submissions of the parties, the Commission has made its determinations on the issues of remedy, the public interest, and bonding. The Commission has determined that a general exclusion from entry for consumption is necessary (1) to prevent circumvention of an exclusion order limited to products of named persons and (2) because there is a pattern of violation of section 337 and it is difficult to identify the source of the infringing products. Accordingly, the Commission has determined to issue a general exclusion order prohibiting the unlicensed importation of infringing luxury vinyl tile floor and components thereof.

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 general exclusion order, and that the bond during the period of Presidential review shall be in the amount of \$0.08 per square foot of the covered articles subject to this Order.

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

1. Certain luxury vinyl tile floor and components thereof (as defined in paragraph 2 below) that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of the '460 patent; claims 1-6, 8, 10, 11, 13-16, and 18 of the '490 Patent; or claims 1-4, 6-16, 18, and 20-26 of the '655 Patent 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 terms of the Asserted Patents, except under license from, or with the permission of, the patent owner or as provided by law.

2. The certain luxury vinyl tile floor and components thereof subject to this exclusion order (*i.e.*, "covered articles") are as follows: interlocking luxury vinyl tile floor panels and components thereof.

3. Notwithstanding paragraph 1 of this Order, covered articles 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 \$0.08 per square foot of the covered articles, pursuant to subsection (j) of section 337 (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 until such time as the United States Trade Representative notifies the Commission that this Order is approved or disapproved but, in any event, not later than sixty (60) days after the receipt of this Order. All entries of covered articles made pursuant to this

2

paragraph are to be reported to U.S. Customs and Border Protection ("CBP"), in advance of the date of the entry, pursuant to procedures CBP establishes.

4. At the discretion of CBP and pursuant to the procedures it establishes, persons seeking to import covered articles may be required to certify that they are familiar with the terms of this Order, that they have made appropriate inquiry, and 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 the certification.

5. In accordance with 19 U.S.C. § 1337(1), the provisions of this Order shall not apply to covered articles that are imported by and 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.

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).

7. The Secretary shall serve copies of this Order upon each party of record in this investigation that has retained counsel or otherwise provided a point of contact for electronic service and upon CBP. While temporary remote operating procedures are in place in response to COVID-19, the Office of the Secretary is not able to serve parties that have not retained counsel or otherwise provided a point of contact for electronic service. Accordingly, pursuant to Commission Rules 201.16(a) and 210.7(a)(1) (19 CFR §§ 201.16(a), 210.7(a)(1)), the Commission orders that the Complainant complete service of this Order for any party without a method of electronic service noted on the attached Certificate of Service and shall file proof of

3

service on the Electronic Document Information System (EDIS).

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

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: September 16, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

# PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER, COMMISSION** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **September 16, 2020**.

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

# <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

## **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Email Notification of Availability for Download
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
   Other: Service to Be
   Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
□ Via Express Delivery
□ Via First Class Mail
⊠ Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

## UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

#### **CEASE AND DESIST ORDER**

#### IT IS HEREBY ORDERED THAT RESPONDENT Maxwell Flooring Distribution

LLC of Houston, Texas cease and desist from conducting any of the following activities in the United States: importing, selling, offering for sale, 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 certain luxury vinyl tile and components thereof (as defined in Definition (G) below) that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of U.S. Patent No. 9,200,460 ("the '460 patent"); claims 1-6, 8, 10, 11, 13-16, and 18 of U.S. Patent No. 10,208,490 ("the '490 Patent"); or claims 1-4, 6-16, 18, and 20-26 of U.S. Patent No. 10,233,655 ("the '655 Patent") (collectively "the Asserted Patents") 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 Mohawk Industries, Inc., Flooring Industries Ltd.Sarl, and IVC US Inc.

- (C) "Respondent" shall mean Maxwell Flooring Distribution LLC of Houston, Texas.
- (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 certain luxury vinyl tile and components thereof that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of the '460 patent; claims 1-6, 8, 10, 11, 13-16, and 18 of the '490 Patent; or claims 1-4, 6-16, 18, and 20-26 of the '655 Patent. The certain luxury vinyl tile and components thereof subject to this order are as follows: interlocking luxury vinyl tile floor panels and components thereof. Covered products shall not include articles for which a provision of law or license avoids liability for infringement.

#### 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, 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 Asserted Patents, 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) 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:

- (A) in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct; or
- (B) such specific conduct is related to the importation or sale of covered products by or for the United States.

## 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 (whether held in warehouses or at customer sites) 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-1155") in a prominent place on the cover pages and/or the first page. *See* Handbook for Electronic Filing Procedures, http://www.usitc.gov/secretary/fed\_reg\_notices/rules/handbook\_on\_electronic\_filing.pdf. Persons with questions regarding filing should contact the Secretary (202-205-2000). 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 Complainant's counsel.<sup>1</sup>

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. The Commission's paper filing requirements in 19 C.F.R.

<sup>&</sup>lt;sup>1</sup> Complainants 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.

210.4(f) are currently waived, pending resolution of the COVID-19 crisis. 85 Fed. Reg. 15798 (March 19, 2020).

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, 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.
- (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's 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.

5

#### VII. Service of Cease and Desist Order

The Secretary shall serve copies of this Order upon each party of record in this investigation that has retained counsel or otherwise provided a point of contact for electronic service and upon CBP. While temporary remote operating procedures are in place in response to COVID-19, the Office of the Secretary is not able to serve parties that have not retained counsel or otherwise provided a point of contact for electronic service. Accordingly, pursuant to Commission Rules 201.16(a) and 210.7(a)(1) (19 CFR 201.16(a), 210.7(a)(1)), the Commission orders that the Complainant complete service of this Order for any party without a method of electronic service noted on the attached Certificate of Service and shall file proof of service on the Electronic Document Information System (EDIS).

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 of the Asserted Patents.

6

#### VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to sections V and 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, Respondent 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 (60) 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 Respondent's posting

of a bond in the amount of \$0.08 per square foot of the covered products. This bond provision does not apply to conduct that is otherwise permitted by section IV of this Order. Covered products imported on or after the date of issuance of this Order are subject to the entry bond as 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 Complainant's counsel.<sup>2</sup>

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 (i) 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, (ii) the U.S. Court of Appeals for

<sup>&</sup>lt;sup>2</sup> See Footnote 1.

the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or (iii) Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission, upon service on Respondent of an order issued by the Commission based upon application therefor made by Respondent to the Commission.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: September 16, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

# PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER, COMMISSION** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **September 16, 2020**.

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

# <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

## **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Email Notification of Availability for Download
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
   Other: Service to Be
   Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
□ Via Express Delivery
□ Via First Class Mail
⊠ Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

## UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

#### **CEASE AND DESIST ORDER**

#### IT IS HEREBY ORDERED THAT RESPONDENT Mr. Hardwood Inc. of

Acworth, Georgia cease and desist from conducting any of the following activities in the United States: importing, selling, offering for sale, 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 certain luxury vinyl tile and components thereof (as defined in Definition (G) below) that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of U.S. Patent No. 9,200,460 ("the '460 patent"); claims 1-6, 8, 10, 11, 13-16, and 18 of U.S. Patent No. 10,208,490 ("the '490 Patent"); or claims 1-4, 6-16, 18, and 20-26 of U.S. Patent No. 10,233,655 ("the '655 Patent") (collectively "the Asserted Patents") 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 Mohawk Industries, Inc., Flooring Industries Ltd.Sarl, and IVC US Inc.

- (C) "Respondent" shall mean Mr. Hardwood Inc. of Acworth, Georgia.
- (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 certain luxury vinyl tile and components thereof that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of the '460 patent; claims 1-6, 8, 10, 11, 13-16, and 18 of the '490 Patent; or claims 1-4, 6-16, 18, and 20-26 of the '655 Patent. The certain luxury vinyl tile and components thereof subject to this order are as follows: interlocking luxury vinyl tile floor panels and components thereof. Covered products shall not include articles for which a provision of law or license avoids liability for infringement.

#### 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, 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 Asserted Patents, 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) 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:

- (A) in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct; or
- (B) such specific conduct is related to the importation or sale of covered products by or for the United States.

## 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 (whether held in warehouses or at customer sites) 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-1155") in a prominent place on the cover pages and/or the first page. *See* Handbook for Electronic Filing Procedures, http://www.usitc.gov/secretary/fed\_reg\_notices/rules/handbook\_on\_electronic\_filing.pdf. Persons with questions regarding filing should contact the Secretary (202-205-2000). 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 Complainant's counsel.<sup>1</sup>

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. The Commission's paper filing requirements in 19 C.F.R.

<sup>&</sup>lt;sup>1</sup> Complainants 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.

210.4(f) are currently waived, pending resolution of the COVID-19 crisis. 85 Fed. Reg. 15798 (March 19, 2020).

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, 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.
- (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's 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.

5

#### VII. Service of Cease and Desist Order

The Secretary shall serve copies of this Order upon each party of record in this investigation that has retained counsel or otherwise provided a point of contact for electronic service and upon CBP. While temporary remote operating procedures are in place in response to COVID-19, the Office of the Secretary is not able to serve parties that have not retained counsel or otherwise provided a point of contact for electronic service. Accordingly, pursuant to Commission Rules 201.16(a) and 210.7(a)(1) (19 CFR 201.16(a), 210.7(a)(1)), the Commission orders that the Complainant complete service of this Order for any party without a method of electronic service noted on the attached Certificate of Service and shall file proof of service on the Electronic Document Information System (EDIS).

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 of the Asserted Patents.

6

#### VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to sections V and 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, Respondent 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 (60) 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 Respondent's posting
of a bond in the amount of \$0.08 per square foot of the covered products. This bond provision does not apply to conduct that is otherwise permitted by section IV of this Order. Covered products imported on or after the date of issuance of this Order are subject to the entry bond as 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 Complainant's counsel.<sup>2</sup>

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 (i) 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, (ii) the U.S. Court of Appeals for

<sup>&</sup>lt;sup>2</sup> See Footnote 1.

the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or (iii) Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission, upon service on Respondent of an order issued by the Commission based upon application therefor made by Respondent to the Commission.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: September 16, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

## PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER, COMMISSION** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **September 16, 2020**.

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

### <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

#### **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Email Notification of Availability for Download
- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Service to Be
  Completed by Complainants
- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Service to Be
  Completed by Complainants
- Via Hand Delivery
  Via Express Delivery
  Via First Class Mail
  Other: Service to Be
  Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

 Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

#### UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

## CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

#### **CEASE AND DESIST ORDER**

#### IT IS HEREBY ORDERED THAT RESPONDENT Sam Houston Hardwood Inc. of

**Houston, Texas** cease and desist from conducting any of the following activities in the United States: importing, selling, offering for sale, 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 certain luxury vinyl tile and components thereof (as defined in Definition (G) below) that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of U.S. Patent No. 9,200,460 ("the '460 patent"); claims 1-6, 8, 10, 11, 13-16, and 18 of U.S. Patent No. 10,208,490 ("the '490 Patent"); or claims 1-4, 6-16, 18, and 20-26 of U.S. Patent No. 10,233,655 ("the '655 Patent") (collectively "the Asserted Patents") 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 Mohawk Industries, Inc., Flooring Industries Ltd.Sarl, and IVC US Inc.

- (C) "Respondent" shall mean Sam Houston Hardwood Inc. of Houston, Texas.
- (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 certain luxury vinyl tile and components thereof that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of the '460 patent; claims 1-6, 8, 10, 11, 13-16, and 18 of the '490 Patent; or claims 1-4, 6-16, 18, and 20-26 of the '655 Patent. The certain luxury vinyl tile and components thereof subject to this order are as follows: interlocking luxury vinyl tile floor panels and components thereof. Covered products shall not include articles for which a provision of law or license avoids liability for infringement.

#### 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, 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 Asserted Patents, 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) 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:

- (A) in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct; or
- (B) such specific conduct is related to the importation or sale of covered products by or for the United States.

### 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 (whether held in warehouses or at customer sites) 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-1155") in a prominent place on the cover pages and/or the first page. *See* Handbook for Electronic Filing Procedures, http://www.usitc.gov/secretary/fed\_reg\_notices/rules/handbook\_on\_electronic\_filing.pdf. Persons with questions regarding filing should contact the Secretary (202-205-2000). 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 Complainant's counsel.<sup>1</sup>

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. The Commission's paper filing requirements in 19 C.F.R.

<sup>&</sup>lt;sup>1</sup> Complainants 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.

210.4(f) are currently waived, pending resolution of the COVID-19 crisis. 85 Fed. Reg. 15798 (March 19, 2020).

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, 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.
- (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's 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.

5

#### VII. Service of Cease and Desist Order

The Secretary shall serve copies of this Order upon each party of record in this investigation that has retained counsel or otherwise provided a point of contact for electronic service and upon CBP. While temporary remote operating procedures are in place in response to COVID-19, the Office of the Secretary is not able to serve parties that have not retained counsel or otherwise provided a point of contact for electronic service. Accordingly, pursuant to Commission Rules 201.16(a) and 210.7(a)(1) (19 CFR 201.16(a), 210.7(a)(1)), the Commission orders that the Complainant complete service of this Order for any party without a method of electronic service noted on the attached Certificate of Service and shall file proof of service on the Electronic Document Information System (EDIS).

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 of the Asserted Patents.

6

#### VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to sections V and 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, Respondent 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 (60) 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 Respondent's posting

of a bond in the amount of \$0.08 per square foot of the covered products. This bond provision does not apply to conduct that is otherwise permitted by section IV of this Order. Covered products imported on or after the date of issuance of this Order are subject to the entry bond as 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 Complainant's counsel.<sup>2</sup>

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 (i) 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, (ii) the U.S. Court of Appeals for

<sup>&</sup>lt;sup>2</sup> See Footnote 1.

the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or (iii) Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission, upon service on Respondent of an order issued by the Commission based upon application therefor made by Respondent to the Commission.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: September 16, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

## PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER, COMMISSION** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **September 16, 2020**.

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

### <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

#### **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Email Notification of Availability for Download
- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Service to Be
  Completed by Complainants
- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Service to Be
  Completed by Complainants
- Via Hand Delivery
  Via Express Delivery
  Via First Class Mail
  Other: Service to Be
  Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

#### UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

## CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

#### CEASE AND DESIST ORDER

#### IT IS HEREBY ORDERED THAT RESPONDENT Aurora Flooring LLC of

**Kennesaw**, **Georgia** cease and desist from conducting any of the following activities in the United States: importing, selling, offering for sale, 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 certain luxury vinyl tile and components thereof (as defined in Definition (G) below) that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of U.S. Patent No. 9,200,460 ("the '460 patent"); claims 1-6, 8, 10, 11, 13-16, and 18 of U.S. Patent No. 10,208,490 ("the '490 Patent"); or claims 1-4, 6-16, 18, and 20-26 of U.S. Patent No. 10,233,655 ("the '655 Patent") (collectively "the Asserted Patents") 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 Mohawk Industries, Inc., Flooring Industries Ltd.Sarl, and IVC US Inc.

- (C) "Respondent" shall mean Aurora Flooring LLC of Kennesaw, Georgia.
- (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 certain luxury vinyl tile and components thereof that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of the '460 patent; claims 1-6, 8, 10, 11, 13-16, and 18 of the '490 Patent; or claims 1-4, 6-16, 18, and 20-26 of the '655 Patent. The certain luxury vinyl tile and components thereof subject to this order are as follows: interlocking luxury vinyl tile floor panels and components thereof. Covered products shall not include articles for which a provision of law or license avoids liability for infringement.

#### 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, 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 Asserted Patents, 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) 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:

- (A) in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct; or
- (B) such specific conduct is related to the importation or sale of covered products by or for the United States.

### 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 (whether held in warehouses or at customer sites) 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-1155") in a prominent place on the cover pages and/or the first page. *See* Handbook for Electronic Filing Procedures, http://www.usitc.gov/secretary/fed\_reg\_notices/rules/handbook\_on\_electronic\_filing.pdf. Persons with questions regarding filing should contact the Secretary (202-205-2000). 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 Complainant's counsel.<sup>1</sup>

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. The Commission's paper filing requirements in 19 C.F.R.

<sup>&</sup>lt;sup>1</sup> Complainants 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.

210.4(f) are currently waived, pending resolution of the COVID-19 crisis. 85 Fed. Reg. 15798 (March 19, 2020).

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, 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.
- (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's 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.

5

#### VII. Service of Cease and Desist Order

The Secretary shall serve copies of this Order upon each party of record in this investigation that has retained counsel or otherwise provided a point of contact for electronic service and upon CBP. While temporary remote operating procedures are in place in response to COVID-19, the Office of the Secretary is not able to serve parties that have not retained counsel or otherwise provided a point of contact for electronic service. Accordingly, pursuant to Commission Rules 201.16(a) and 210.7(a)(1) (19 CFR 201.16(a), 210.7(a)(1)), the Commission orders that the Complainant complete service of this Order for any party without a method of electronic service noted on the attached Certificate of Service and shall file proof of service on the Electronic Document Information System (EDIS).

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 of the Asserted Patents.

6

#### VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to sections V and 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, Respondent 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 (60) 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 Respondent's posting

of a bond in the amount of \$0.08 per square foot of the covered products. This bond provision does not apply to conduct that is otherwise permitted by section IV of this Order. Covered products imported on or after the date of issuance of this Order are subject to the entry bond as 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 Complainant's counsel.<sup>2</sup>

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 (i) 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, (ii) the U.S. Court of Appeals for

<sup>&</sup>lt;sup>2</sup> See Footnote 1.

the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or (iii) Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission, upon service on Respondent of an order issued by the Commission based upon application therefor made by Respondent to the Commission.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: September 16, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

## PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER, COMMISSION** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **September 16, 2020**.

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

### <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

#### **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Email Notification of Availability for Download
- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Service to Be
  Completed by Complainants
- □ Via Hand Delivery
  □ Via Express Delivery
  □ Via First Class Mail
  ⊠ Other: Service to Be
  Completed by Complainants
- Via Hand Delivery
  Via Express Delivery
  Via First Class Mail
  Other: Service to Be
  Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

 Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

#### UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

## CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

#### CEASE AND DESIST ORDER

#### IT IS HEREBY ORDERED THAT RESPONDENT ABK Trading Corp. of Katy,

**Texas** cease and desist from conducting any of the following activities in the United States: importing, selling, offering for sale, 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 certain luxury vinyl tile and components thereof (as defined in Definition (G) below) that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of U.S. Patent No. 9,200,460 ("the '460 patent"); claims 1-6, 8, 10, 11, 13-16, and 18 of U.S. Patent No. 10,208,490 ("the '490 Patent"); or claims 1-4, 6-16, 18, and 20-26 of U.S. Patent No. 10,233,655 ("the '655 Patent") (collectively "the Asserted Patents") 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 Mohawk Industries, Inc., Flooring Industries Ltd.Sarl, and IVC US Inc.

- (C) "Respondent" shall mean ABK Trading Corp. of Katy, Texas.
- (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 certain luxury vinyl tile and components thereof that infringe one or more of claims 7, 8, 13, 15-17, 20-23, and 30 of the '460 patent; claims 1-6, 8, 10, 11, 13-16, and 18 of the '490 Patent; or claims 1-4, 6-16, 18, and 20-26 of the '655 Patent. The certain luxury vinyl tile and components thereof subject to this order are as follows: interlocking luxury vinyl tile floor panels and components thereof. Covered products shall not include articles for which a provision of law or license avoids liability for infringement.

#### 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, 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 Asserted Patents, 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) 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:

- (A) in a written instrument, the owner of the Asserted Patents licenses or authorizes such specific conduct; or
- (B) such specific conduct is related to the importation or sale of covered products by or for the United States.

### 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 (whether held in warehouses or at customer sites) 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-1155") in a prominent place on the cover pages and/or the first page. *See* Handbook for Electronic Filing Procedures, http://www.usitc.gov/secretary/fed\_reg\_notices/rules/handbook\_on\_electronic\_filing.pdf. Persons with questions regarding filing should contact the Secretary (202-205-2000). 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 Complainant's counsel.<sup>1</sup>

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. The Commission's paper filing requirements in 19 C.F.R.

<sup>&</sup>lt;sup>1</sup> Complainants 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.

210.4(f) are currently waived, pending resolution of the COVID-19 crisis. 85 Fed. Reg. 15798 (March 19, 2020).

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, 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.
- (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's 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.

5

#### VII. Service of Cease and Desist Order

The Secretary shall serve copies of this Order upon each party of record in this investigation that has retained counsel or otherwise provided a point of contact for electronic service and upon CBP. While temporary remote operating procedures are in place in response to COVID-19, the Office of the Secretary is not able to serve parties that have not retained counsel or otherwise provided a point of contact for electronic service. Accordingly, pursuant to Commission Rules 201.16(a) and 210.7(a)(1) (19 CFR 201.16(a), 210.7(a)(1)), the Commission orders that the Complainant complete service of this Order for any party without a method of electronic service noted on the attached Certificate of Service and shall file proof of service on the Electronic Document Information System (EDIS).

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 of the Asserted Patents.

6

#### VIII. Confidentiality

Any request for confidential treatment of information obtained by the Commission pursuant to sections V and 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, Respondent 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 (60) 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 Respondent's posting
of a bond in the amount of \$0.08 per square foot of the covered products. This bond provision does not apply to conduct that is otherwise permitted by section IV of this Order. Covered products imported on or after the date of issuance of this Order are subject to the entry bond as 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 Complainant's counsel.<sup>2</sup>

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 (i) 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, (ii) the U.S. Court of Appeals for

<sup>&</sup>lt;sup>2</sup> See Footnote 1.

the Federal Circuit, in a final judgment, reverses any Commission final determination and order as to Respondent on appeal, or (iii) Respondent exports or destroys the products subject to this bond and provides certification to that effect that is satisfactory to the Commission, upon service on Respondent of an order issued by the Commission based upon application therefor made by Respondent to the Commission.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: September 16, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

# PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **ORDER, COMMISSION** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **September 16, 2020**.

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

# <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

## **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
   Other: Email Notification of Availability for Download
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
   Other: Service to Be
   Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

 Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

## UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

#### **COMMISSION OPINION**

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 ("section 337"), with respect to U.S. Patent Nos. 9,200,460 ("the '460 patent"), 10,208,490 ("the '490 patent"), and 10,233,655 ("the '655 patent") (collectively, the "Asserted Patents") on review of the presiding administrative law judge's ("ALJ") Initial Determination ("ID") and Recommended Determination ("RD") (Order No. 36) granting summary determination of a violation. After considering the public interest, the Commission has also determined that the appropriate form of relief is a general exclusion order ("GEO") prohibiting the unlicensed importation of articles that infringe certain claims of the Asserted Patents. The Commission has determined to set a bond during the period of Presidential review in the amount of \$0.08 per square foot of the infringing products imported. The Commission has further determined to vacate the findings under review to the extent the ID adjudicates infringement of the Asserted Patents as to non-respondents.

This opinion sets forth the Commission's reasoning in support of its determinations. In addition, the Commission adopts the findings in the ID to the extent such findings are not inconsistent with this opinion.

### I. PROCEDURAL HISTORY

On May 16, 2019, the Commission instituted this investigation based upon a complaint, as amended, filed on behalf of Mohawk Industries Inc. of Calhoun, Georgia; Flooring Industries Ltd. Sarl of Bertrange, Luxembourg; and IVC US Inc. of Dalton, Georgia (collectively, "Complainants") alleging violations of section 337 in the sale for importation, importation, or sale in the United States after importation of luxury vinyl tile ("LVT") and components thereof that infringe one or more claims of the Asserted Patents. 84 Fed. Reg. 22161 (May 16, 2019). The notice of investigation names forty-five (45) respondents. *Id.* The Office of Unfair Import Investigations ("OUII") is also a party to the investigation. *Id.* 

Thirty-five (35) of the respondents were terminated on the basis of settlement, consent order, or termination by Complainants. *See* Order No. 14 (Sept. 26, 2019), *unreviewed by* Notice (Oct. 17, 2019); Order Nos. 15-21 (Sept. 27, 2019 for all), *unreviewed by* Notice (Oct. 17, 2019); Order No. 27 (Oct. 9, 2019), *unreviewed by* Notice (Nov. 6, 2019); Order No. 26 (Oct. 9, 2019)), *unreviewed by* Notice (Nov. 8, 2019); Order No. 35 (Jan. 24, 2020), *unreviewed by* Notice (Feb. 25, 2020); Order Nos. 23-5 (Oct. 2, 2019 for all), *unreviewed by* Notice (Oct. 23, 2019); Order No. 34 (Nov. 7, 2019), *unreviewed by*, Notice (Dec. 11, 2019); Order No. 30 (Oct. 25, 2019), *unreviewed by* Notice (Nov. 21, 2019).

The other ten respondents were found in default, specifically:

- 1. ABK Trading Corp. of Katy, Texas ("ABK");
- 2. Aurora Flooring LLC of Kennesaw, Georgia ("Aurora");
- 3. Changzhou Runchang Wood Co., Ltd. of Jiangsu, China ("Runchang");
- 4. Go-Higher Trading (Jiangsu) Co., Ltd. of Jiangsu, China;
- 5. Jiangsu Divine Building Technology Development Co. Ltd. Jiangsu, China;
- 6. Jiangsu Lejia Plastic Co. Ltd. of Jiangsu, China;
- 7. JiangSu Licheer Wood Co., Ltd. of Jiangsu, China;
- 8. Maxwell Flooring Distribution LLC of Houston, Texas ("Maxwell Flooring");
- 9. Mr. Hardwood Inc. of Acworth, Georgia ("Mr. Hardwood"); and
- 10. Sam Houston Hardwood Inc. of Houston, Texas ("Sam Houston") (collectively, "Defaulting Respondents").

See Order No. 31 (Oct. 25, 2019), *unreviewed by* Notice (Nov. 21, 2019); Order No. 32 (Oct. 30, 2019), *unreviewed by* Notice (Nov. 22, 2019); Order No. 33 (Oct. 30, 2019), *unreviewed by* Notice (Nov. 25, 2019). Accordingly, no active parties remain in this investigation.

On January 15, 2020, Complainants filed a motion, which was supplemented three times, for summary determination that Complainants demonstrated a domestic industry and that Defaulting Respondents have violated section 337.<sup>1</sup> On May 15, 2020, the presiding ALJ issued an ID and RD (Order No. 36) granting the motion for summary determination. *See* ID and RD. The ALJ also recommended the issuance of a GEO, issuance of CDOs against only the five domestic Defaulting Respondents (*i.e.*, ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston), and imposition of a bond of \$0.08 per square foot of LVT and components thereof imported during the period of Presidential review. RD at 248-67.

On June 30, 2020, the Commission determined to review the ID in part. 85 Fed. Reg. 40683 (July 7, 2020). On review, the Commission affirmed the finding of violation of section 337 as to Defaulting Respondents. *Id.* The Commission, however, determined to review and, on review, to take no position on the ID's findings regarding the economic prong of the domestic industry requirement under subsection 337(a)(3)(B) with respect to the '460 patent. *Id.* The Commission further determined to review the ID's findings regarding a domestic industry "in the process of being established" with respect to the '490 and '655 patents, and on review, to clarify that its determination to affirm these domestic industry findings does not imply

<sup>&</sup>lt;sup>1</sup> Memorandum of Law in Support of Complainants' Motion for Summary Determination That Defaulting Respondents Have Violated Section 337 and For a Recommended Determination on Remedy and Bonding (Jan. 15, 2020) ("MSD"); Supplement to Complainants' Motion for Summary Determination (Jan. 23, 2020); Supplement to Complainants' Motion for Summary Determination (Feb. 11, 2020); Second Supplement to Complainants' Motion for Summary Determination (Feb. 19, 2020).

that the investments already made with respect to the '490 and '655 patents are not significant or could not be used to show that a domestic industry exists under section 337(a)(3). *Id.* The Commission further determined to review the ID's infringement findings as to two products of non-parties, *i.e.*, the Quickstyle and Uniflor Aqua products. *Id.* The Notice also requested written submissions on remedy, public interest, and bonding. *See id.* 

On July 15, 2020, Complainants and OUII submitted briefs on remedy, public interest, and bonding requesting that the Commission issue a GEO, issue CDOs against only the five domestic Defaulting Respondents, and set a bond of \$0.08 per square foot of infringing LVT and components thereof imported during the period of Presidential review.<sup>2</sup> On July 22, 2020, OUII submitted a reply to Complainants' response.<sup>3</sup> No other submissions were received.

### II. STANDARD ON REVIEW

With respect to the issues under review, "the Commission may affirm, reverse, modify, set aside or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge." 19 C.F.R. § 210.45(c). The Commission also "may take no position on specific issues or portions of the initial determination," and "may make any finding or conclusions that in its judgment are proper based on the record in the proceeding." *Id.* 

<sup>&</sup>lt;sup>2</sup> Complainants' Response to the Commission's Notice and Submission on Remedy, the Public Interest, and Bonding (July 15, 2020) ("Comp. Rmdy"); Written Submission of the Office of Unfair Import Investigations on Remedy, the Public Interest, and Bonding (July 15, 2020) ("OUII Rmdy").

<sup>&</sup>lt;sup>3</sup> Reply Submission of the Office of Unfair Import Investigations to Complainants' Response to the Commission's Notice and Submission on Remedy, the Public Interest, and Bonding (July 22, 2020) ("OUII Rmdy Reply").

### III. ANALYSIS OF FINDINGS AS TO NON-RESPONDENTS

The Commission determined to review the ID's findings with respect to the nonrespondents' Quickstyle and Uniflor Aqua products. 85 Fed. Reg. 40683 (July 7, 2020); *see also* ID at 12-3, 18-9, 34-7, 103-118, 149-185. As discussed below, to avoid confusion and possible prejudice to non-respondents in future proceedings, the Commission vacates certain findings in the ID that may be read as adjudicating infringement by the non-respondents.

# 1. ID's Findings Regarding Non-Respondents' Quickstyle and Uniflor Aqua Products

The ID states, "[i]n connection with complainants' request for a general exclusion order, complainants assert that two additional products from non-respondents – the Quickstyle and Uniflor Aqua products – infringe the asserted patents." *Id.* at 12-3 (in section titled, "1. The Accused Products"). The ID further states,

The administrative law judge recognizes that non-respondent Quickstyle and Uniflor Aqua products are not accused products in the ordinary sense. Nonetheless, hereinafter, non-respondent Quickstyle and Uniflor Aqua products will be referred to as accused products for ease of reference.

*Id.* at 13.

The ID analyzes whether the Quickstyle and Uniflor Aqua products were imported into the United States in the same "Importation" section which analyzes Defaulting Respondents' accused products. *Id.* at 18-9, 34-7. The ID finds, "the evidence shows that the Quickstyle and Uniflor Aqua products have been imported into the United States." *Id.* at 37.

In two sections, "Infringement Analysis of the '490 patent" and "Infringement Analysis of the '655 Patent," the ID analyzes whether the Quickstyle product infringes claim 1 of the '490 patent and whether the Quickstyle and Uniflor Aqua products infringe claim 1 of the '655 patent. *Id.* at 103, 149-150. The ID includes these two products from non-respondents in the list of "accused products" for each patent and provides "an element by

element infringement analysis for each of the products accused of infringing the ['490 and '655 patents]." *Id.* at 103-118, 149-185. In the "Conclusions of Law," the ID states, "[t]he accused products infringe the asserted claims of [the Asserted Patents]." *Id.* at 267.

#### 2. Analysis

In order to eliminate any risk of confusion or possible prejudice to non-parties, the Commission has determined to vacate the findings under review to the extent the ID adjudicates infringement as to non-parties.

In other investigations involving consideration of non-respondents' products in the context of whether issuance of a GEO is appropriate, the analysis has been more clearly limited to whether there was a pattern of violation. For example, in *Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same* ("*Coaxial Cable Connectors*"), the RD restricts findings for non-respondents' products "for purposes of demonstrating a pattern of violation only" and presents such findings in the remedy section of the RD, not in the infringement section of the ID. *See* Inv. No. 337-TA-650, Initial Determination (October 13, 2009)<sup>4</sup>; *compare Coaxial Cable Connectors*, ID at 49-85 (infringement) *to* RD at 121, 125-26 (remedy). Specifically, in that investigation, the presiding ALJ found "that, for purposes of demonstrating a pattern of violation only, PPC has produced sufficient evidence to show that the

<sup>&</sup>lt;sup>4</sup> The complainant in *Coaxial Cable Connectors* identified non-respondents that allegedly infringed in order to support its assertion of a widespread pattern of infringement. ID at 14, 17, 121; *Coaxial Cable Connectors*, Complainant's Post-Hearing Brief at 15, 26-7. For example, the complainant provided "Proposed Findings of Fact and Conclusions of Law and evidence cited [in its post-hearing brief], [and] at the hearing, [the complainant's expert] testified and provided undisputed, substantial, reliable, and probative proof that each and every element of [the asserted claims] were found in a total of fourteen infringing products from these non-respondents." *Id.* at 26. This evidence is similar to Complainants' evidence regarding the non-respondents' Quickstyle and Uniflor Aqua products in the present investigation. MSD at 86-98, 105-136, 225, 247-48.

imported [non-respondent's product] meets the elements of [the asserted claims] and would likely violate Section 337." *Coaxial Cable Connectors*, RD at 133. That RD further states that, "[w]hile not every product of non-respondents appears to infringe the '257 patent, taken together, the Administrative Law Judge finds that there is sufficient evidence . . . to establish a pattern of violation with respect to the '257 patent." *Id.* at 140. The Commission determined to issue a GEO for one patent and specifically noted, "[t]he ALJ credited PPC's evidence of 'certain non-respondents selling for importation, importing, or selling after importation coaxial cable connectors alleged to infringe claims 1 and 2 of the '194 patent." *Coaxial Cable Connectors*, Comm'n Op. at 58 (March 31, 2010). The Commission's use of the term "alleged" further demonstrates that neither the ALJ nor the Commission found that non-respondents infringe the claims of the asserted patent. *Id.* 

Similarly, in *Certain Electric Skin Care Devices, Brushes and Chargers Therefore, and Kits Containing Same*, the ALJ did not analyze whether the non-respondents infringed the asserted patents but instead made note of the complainant's evidence of non-ITC proceedings<sup>5</sup> against alleged, non-respondent infringers. *See* Inv. No. 337-TA-959 (*"Electric Skin Care Devices"*), Order No. 42 at 52 (Apr. 11, 2016). Further, the RD in that investigation analyzes the allegations as to the non-respondents in the RD's "Remedy & Bonding" section and not in the ID's "Infringement" section. *Compare Electric Skin Care Devices*, ID at 34-46 *to* RD at 46-52. The Commission found in its Remedy analysis that "[u]ndisputed record evidence shows a widespread pattern of infringement by both respondents and non-respondents" and specifically noted the terminated respondents and non-ITC proceedings. *Electric Skin Care Devices*,

<sup>&</sup>lt;sup>5</sup> The non-ITC proceedings included U.S. district court litigations and enforcement proceedings in China and Great Britain, where foreign counterparts of the asserted patents were at issue. Inv. No. 337-TA-959, Order No. 42 at 52.

Comm'n Op. at 17-8 (Feb. 6, 2017).

Accordingly, the Commission has determined to vacate certain findings in the ID to the extent that they may be read to adjudicate infringement with respect to the non-respondents.<sup>6</sup> This includes the ID's analysis to the extent it: (1) assesses the non-respondents' products in the ID's "Importation" and "Infringement" sections rather than the more appropriate RD's "Remedy" section; (2) uses the term "accused products" with respect to the non-respondents' products; and (3) does not include language limiting the findings as to the non-respondents' products "for purposes of demonstrating a pattern of violation only."

### IV. REMEDY, THE PUBLIC INTEREST, AND BONDING

### A. Remedy

The Commission has "broad discretion in selecting the form, scope, and extent of the remedy." *Viscofan, S.A. v. Int'l Trade Comm'n*, 787 F.2d 544, 548 (Fed. Cir. 1986).

#### 1. General Exclusion Order

Section 337(d)(2) provides that "[t]he authority of the Commission to order an exclusion from entry of articles shall be limited to persons determined by the Commission to be violating this section unless the Commission determines that— (A) a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to products of named

<sup>&</sup>lt;sup>6</sup> Infringement findings made against non-parties are not preclusive as to the non-parties in future proceedings. The Commission can issue a GEO that prohibits entry of articles that infringe the relevant claims of the Asserted Patents without regard to whether the persons importing such articles were parties to, or were related to parties to, the investigation that led to issuance of the GEO. The Commission's findings concerning infringement are final and conclusive, unless appealed to the Federal Circuit, only as to parties who have had a full and fair opportunity to litigate the issues before the Commission. *See Yingbin-Nature (Guangdong) Wood Indus. Co. v. United States*, 535 F.3d 1322, 1332-33 (Fed. Cir. 2008) (citing *Comair Rotron, Inc. v. Nippon Densan Corp.*, 49 F.3d 1535, 1537 (Fed. Cir. 1995)); *see also Hyundai Elecs. Indus. Co. v. U.S. Int'l Trade Comm'n*, 899 F.2d 1204, 1210 (Fed. Cir. 1990).

persons; or (B) there is a pattern of violation of this section and it is difficult to identify the source of infringing products." 19 U.S.C. §  $1337(d)(2)^7$ ; *see also* 19 C.F.R. § 210.50(c).

#### a. A GEO is Necessary to Prevent Circumvention of an LEO

The Commission finds that a GEO is an appropriate remedy and is needed to prevent circumvention of an LEO.

The undisputed evidence demonstrates that Defaulting Respondents have altered their corporate structures, changed their names or addresses, created new entities, or operated under multiple names. RD at 255-57; *see also Certain Ground Fault Circuit Interrupters & Prods. Containing Same*, Inv. No. 337-TA-739, Comm'n Op. at 88-9 (June 8, 2012) (a GEO was appropriate based on evidence that named respondents would likely circumvent an LEO by changing their corporate identity); *Certain Cases for Portable Elec. Devices*, Inv. No. 337-TA-867, Comm'n Op. at 9 (June 20, 2014) (a GEO was appropriate where there was evidence of "companies operating under fake names and fake addresses").

The Commission finds that Defaulting Respondents' use of generic and non-descript packaging, which omits the manufacturer's names or the country of origin, increases the risk of circumvention of an LEO. RD at 257. There is a further risk of circumvention because Defaulting Respondents do not always sell the accused products under their own names. *Id.* 

The evidence also shows that Defaulting Respondents have sold the accused products online on various websites. *Id.* at 257-58. In addition to Defaulting Respondents' online sales, it is common practice to sell LVT on online platforms, such as Alibaba.com and eBay.com. *Id.* 

<sup>&</sup>lt;sup>7</sup> Although 19 U.S.C. § 1337(g)(2) applies to the consideration of whether to issue a GEO in certain default cases, "this provision applies only when no respondent appears to contest the investigation. In this case, since several respondents did appear and were later terminated based on consent orders or settlement agreements, section 337(g)(2) does not apply." *Certain Handbags, Luggage, Accessories, and Packaging Thereof*, Inv. No. 337-TA-754, Comm'n Op. at 5 n.3 (June 13, 2012).

at 258. For example, a search of "LVT Click" on Alibaba.com results in around 18,000 results. *Id.* A similar search on eBay.com for "LVT Click" in the "Vinyl Flooring" product category for items in "new" condition results in over 400 results. *Id.* 

The Commission agrees with the RD's conclusion that GEOs have issued in factual circumstances that are similar to this investigation. Id. at 258-59 (citing Certain Toner Cartridges, and Components Thereof, Inv. No. 337-TA-918 ("Certain Toner Cartridges"), Comm'n Op. at 6 (Oct. 1, 2015) (finding a GEO appropriate under subsection (A) based on practices including "(i) replication of operations; (ii) sourcing imported accused products from domestic suppliers outside the reach of an LEO; (iii) facilitating circumvention through Internet operations; (iv) masking of identities and product sources; and (v) use of unmarked, generic, and/or reseller-branded packaging"); Certain Toner Cartridges and Components Thereof, Inv. No. 337-TA-829, Comm'n Op. at 6-7 (July 29, 2013) (GEO issued under 19 U.S.C. § 1337(d)(2)(A) to prevent likely circumvention because respondents "do business under multiple names, and create an array of subsidiaries and changing corporate profiles" and because their accused products "are often labeled under other brand names or packaged in unmarked, generic packaging"); Certain Toner Cartridges and Components Thereof, Inv. No. 337-TA-740, Comm'n Op. at 5 (Oct. 5, 2011) (GEO issued under 19 U.S.C. § 1337(d)(2)(A) because "respondents do business under multiple names" and "an LEO could be circumvented because Lexmark-compatible laser toner cartridges are often labeled under other original equipment manufacturer brand names, making it easier . . . to evade enforcement.")).

In addition, the Commission finds that there are other practices and industry conditions that support the issuance of a GEO, including: (1) low barriers of entry and ease of replication of operations; (2) high demand for accused products; (3) practices that maintain anonymity of

importation, such as exclusion of manufacturers or importers from bills of lading; (4) complex corporate structures and expansive supply chains; and (5) minimum order sizes and use of third parties to import and source the products. *Id.* at 259-60.

Accordingly, the Commission finds that the conditions for obtaining a GEO under section 337(d)(2)(A) are satisfied because the evidence demonstrates that the named respondents have been shown to use multiple ways that would circumvent an LEO.

# b. There is a Pattern of Violation of Section 337 with Respect to the Asserted Patents

The Commission also finds there is a widespread pattern of violation with respect to the Asserted Patents. RD at 260-63; 19 U.S.C. § 1337(d)(2)(B). The RD notes that it found Defaulting Respondents infringe the '460 and '655 patents with respect to at least five products, and that these Defaulting Respondents also infringe the '490 patent. Id. at 260-61. In addition, the terminated respondents infringe the Asserted Patents. Id. (citing Certain Toner Cartridges, Comm'n Op. at 9-10 (Oct. 1, 2015) ("in determining whether a GEO is warranted, the Commission looks not only to the activities of active respondents, but also to those of respondents that have been terminated from an investigation as well as non-respondents")). Moreover, Complainants have alleged that the Quickstyle product infringes claim 1 of the '490 patent and that the Quickstyle and Uniflor Aqua products infringe claim 1 of the '655 patent. See id. For purposes of assessing whether there is a widespread pattern of violation only, Complainants have produced sufficient evidence to show that the non-respondents' Quickstyle and Uniflor Aqua products meet the limitations of the Asserted Patents. See ID at 105-118 (claim 1 of the '490 patent), 153-185 (claim 1 of the '655 patent); MSD at 86-98, 105-136, 225, 247-48. The Commission finds that Complainants' evidence supports the conclusion that there is a widespread pattern of violation as to the Asserted Patents. See Coaxial Cable Connectors,

Comm'n Op. at 58 (March 31, 2010); *Electric Skin Care Devices*, Comm'n Op. at 17-8 (Feb. 6, 2017). There are also a large number of entities involved in the manufacture, sale, and distribution of infringing products. RD at 261.

#### c. Sources of the Infringing Product are Difficult to Identify

The Commission further finds it is difficult to identify sources of the infringing LVT products. As noted above, Defaulting Respondents: (1) have altered their corporate structures, changed their names or addresses, created new entities, and/or operated under multiple names; (2) use generic and non-descript packaging that omits their names and makes the manufacturers difficult to identify; (3) sell the accused products using names other than their own; and (4) omit the name of manufacturers and other relevant entities from the bill of lading. *Id.* at 255-57, 262. Furthermore, as previously noted, LVT products are also sold extensively online via third-party retail websites, such as Alibaba.com and eBay.com. *Id.* at 257-58.

Accordingly, based on the record before it, the Commission has determined that a GEO barring entry of infringing articles is necessary to prevent circumvention of an exclusion order limited to Defaulting Respondents. There is also a pattern of violation of section 337, and the sources of the infringing products are difficult to identify. Thus, the conditions of both sections 337(d)(2)(A) and (B) are satisfied.

#### **B.** Cease and Desist Orders

Section 337(f)(1) provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a cease and desist order ("CDO") as a remedy for violation of section 337. *See* 19 U.S.C. § 1337(f)(1).<sup>8</sup> CDOs are generally issued when, with respect to the

<sup>&</sup>lt;sup>8</sup> Complainants request for CDOs against the domestic Defaulting Respondents is analyzed under section 337(f)(1) and not section 337(g)(1). Section 337(f)(1) provides that in addition to, or in lieu of, the issuance of an exclusion order under subsections (d) or (e), 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.<sup>9</sup> See, e.g., Certain Table Saws Incorporating Active Injury Mitigation Technology & Components Thereof ("Table Saws"), Inv. No. 337-TA-965, Comm'n Op. at 4-6 (Feb. 1, 2017); Certain Protective Cases & Components Thereof, Inv. No. 337-TA-780, USITC Pub. No. 4405, Comm'n Op. at 28 (Nov. 19, 2012) (citing Certain Laser Bar Code Scanners & Scan Engines, Components Thereof & Prods. Containing Same, Inv. No. 337-TA-551, Comm'n Op. at 22 (June 24, 2007)). Complainants bear the burden on this issue. "A complainant seeking a cease and desist order must demonstrate, based on the record, that this remedy is

Commission may issue a cease and desist order as a remedy for violation of section 337. 19 U.S.C. § 1337(f)(1); *see Certain Pocket Lighters*, Inv. No. 337-TA-1142, Comm'n Op. at 16-17 (July 13, 2020). As discussed earlier, Complainants' request for a general exclusion from entry of articles is analyzed under section 337(d), not (g)(1).

<sup>&</sup>lt;sup>9</sup> In Commissioner Schmidtlein's view, Complainants' request for CDOs against the domestic Defaulting Respondents is governed by section 337(g)(1), rather than section 337(f)(1). Specifically, none of the domestic Defaulting Respondents responded to the complaint or otherwise appeared in the investigation, and the other conditions of subsections (A) through (E) of section 337(g)(1) are met with respect to the requested CDOs. See Order No. 32 (finding domestic Defaulting Respondents in default for failing to respond to the complaint, the notice of investigation, and the show cause orders thereby satisfying subsections 337(g)(1)(A)-(D)), unreviewed, Comm'n Notice (Nov. 22, 2019); Comp. Remedy Br. at 26 (requesting CDOs limited to each of the domestic Defaulting Respondents satisfying subsection 337(g)(1)(E)). In prior investigations, Commissioner Schmidtlein has explained her view that absent public interest considerations to the contrary the "shall, upon request, issue" language in section 337(g)(1) does not grant the Commission discretion to decline to issue a requested CDO when the conditions of subsections (A) through (E) are satisfied. See Certain Industrial Automation Systems and Components Thereof Including Control Systems, Controllers, Visualization Hardware, Motion and Motor Control Systems, Networking Equipment, Safety Devices, and Power Supplies, Inv. No. 337-TA-1074, Comm'n Op., Dissenting Views of Commissioner Schmidtlein (Apr. 23, 2019); Certain Water Filters and Components Thereof, Inv. No. 337-TA-1126, Comm'n Op. at 10, n.1 (Nov. 12, 2019). Consistent with that view, Commissioner Schmidtlein finds that the Commission is required to issue the requested CDOs against the domestic Defaulting Respondents, regardless of whether any inventories of infringing articles are maintained by the domestic Defaulting Respondents in the United States.

necessary to address the violation found in the investigation so as to not undercut the relief provided by the exclusion order." *Table Saws*, Comm'n Op. at 5 (citing *Certain Integrated Repeaters, Switches, Transceivers, & Prods. Containing Same*, Inv. No. 337-TA-435, USITC Pub. No. 3547 (Oct. 2002), Comm'n Op. at 27 (Aug. 16, 2002); *see also* H.R. REP. No. 100-40, at 160 (1987)).

Complainants seek CDOs against only the five domestic Defaulting Respondents. Comp. Rmdy at 26.<sup>10</sup> The Commission has consistently inferred the presence of commercially significant inventories in the United States for domestic defaulting respondents and granted a complainant's request for relief in the form of a CDO toward domestic defaulting respondents. *See Certain Hand Dryers and Housing for Hand Dryers*, Inv. No. 337-TA-1015, Comm'n Op. at 24 (Oct. 30, 2017) (citing *Certain Agricultural Tractors, Lawn Tractors, Riding Lawnmowers, and Components Thereof*, Inv. No. 337-TA-486, Comm'n Op. at 17-8 (July 14, 2003)); *Certain Mobile Device Holders and Components Thereof*, Inv. No. 337-TA-1028, Comm'n Op. at 24 (Mar. 22, 2018). In this investigation, it is undisputed that Defaulting Respondents ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston are domestic entities such that the Commission infers commercially significant U.S. inventories. *Id.*; *see also* RD at 264-65.

There is also undisputed circumstantial evidence that the domestic Defaulting Respondents maintain commercially significant inventories in the United States and engage in sales activity directed at the United States. Comp. Rmdy at 28-32. For example, Complainants presented evidence that domestic Defaulting Respondents maintain domestic storefronts. *Id.* 

 $<sup>^{10}</sup>$  In its notice of review, the Commission requested Complainants to explain, to the extent Complainants are seeking a CDO against foreign respondent Runchang, whether the requirements of section 337(g)(1)(A)-(E) are satisfied with respect to Runchang. 85 Fed. Reg. 40683 (July 7, 2020). Complainants responded that they are not seeking a CDO against Runchang. Comp. Rmdy at 26.

Further, Complainants purchased samples of infringing products from domestic storefronts operated by Maxwell Flooring, which is associated with ABK and Sam Houston, and by Mr. Hardwood, which is associated with Aurora. *Id.* at 31-2. Further, the RD finds that ABK is believed to be associated with or using the name Maxwell Flooring Distribution LLC. RD at 8. The RD also finds that Aurora and Mr. Hardwood have domestic places of business in Georgia. *Id.* at 8, 11.

The Commission finds that the record evidence demonstrates that domestic Defaulting Respondents maintain commercially significant inventories and engage in business activities in the United States. Accordingly, the Commission has determined to issue CDOs against respondents ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> Commissioner Karpel concurs with the majority that CDOs directed to defaulting respondents ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston should be issued but bases her decision on grounds that differ from the majority view. For the reasons noted in Certain Powered Cover Plates, Inv. No. 337-TA-1124, Comm'n Op. at 22-23 n.20 (June 11, 2020), Certain Pocket Lighters, Inv. No. 337-TA-1142, Comm'n Op. at 19-20 n.15 (July 13, 2020), and Certain Footwear, Inv. No. 337-TA-936 (remand), Comm'n Op. at 120-21 n.66 (Sept. 9, 2020), Commissioner Karpel does not consider the Commission's determination to issue a GEO under section 337(d)(2) to direct that the requested CDOs with respect to the five domestic defaulting respondents be considered under section 337(f)(1). Rather, she considers section 337(g)(1) is the appropriate authority for the issuance of CDOs as to the defaulting respondents because the criteria for issuance of CDOs under subsection 337(g)(1)(A)-(E) are met as to these respondents. Each of these respondents was named in the complaint and each was served with the complaint and notice of investigation. See Order No. 32 (Oct. 30, 2019) (finding ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston in default for failing to respond to the complaint and notice of investigation), unreviewed by Notice (Nov. 22, 2019). The ALJ issued show cause orders ordering these respondents to show cause why they should not be held in default for failing to respond to the complaint and notice of investigation. See id. None of these respondents filed responses to the show cause orders. Id. These findings satisfy subsections 337(g)(1)(A)-(D). Complainants requested CDOs limited to each of these defaulting respondents (Comp. Rmdy at 26), thus satisfying subsection 337(g)(1)(E). Given that subsections 337(g)(1)(A)-(E) are satisfied and Complainants requested CDOs directed to these respondents, the statute directs the Commission to issue the requested CDOs, subject to consideration of the public interest. The public interest factors as detailed in Part IV(C) infra do not support a finding that the remedial orders in this investigation would be contrary to the public

## C. Public Interest

Section 337 requires the Commission, upon finding a violation of section 337, to issue an exclusion order "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). Similarly, the Commission must consider these public interest factors before issuing a CDO. 19 U.S.C. § 1337(f)(1). The statute requires the Commission to consider and make findings on the public interest in every case in which a violation is found. 19 U.S.C. § 1337(d)(1), (f)(1).

Under appropriate facts and circumstances, the Commission may determine that no remedy should issue because of the adverse impacts on the public interest. *See, e.g., Certain Fluidized Supporting Apparatus & Components Thereof*, Inv. Nos. 337-TA-182/188, USITC Pub. 1667, Comm'n Op. at 1–2, 23–25 (Oct. 1984) (finding that the public interest warranted denying complainant's requested relief). Moreover, when the circumstances of a particular investigation require, the Commission has tailored its relief in light of the statutory public interest factors. For example, the Commission has allowed continued importation for ongoing medical research, exempted service parts, grandfathered certain infringing products, and delayed the imposition of remedies to allow affected third party consumers to transition to non-infringing products. *E.g., Certain Microfluidic Devices*, Inv. No. 337-TA-1068 Comm'n Op. at 1, 22–48, 53–54 (analyzing the public interest, discussing applicable precedent, and ultimately issuing a tailored LEO and a tailored CDO); *Certain Road Milling Machines & Components Thereof*, Inv. No. 337-TA-1067, Comm'n Op. at 32–3 (July 18, 2019) (exempting service parts); *Certain* 

interest. Accordingly, Commissioner Karpel would issue CDOs against ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston under section 337(g)(1).

Baseband Processor Chips & Chipsets, Transmitter, & Receiver (Radio) Chips, Power Control Chips, & Prods. Containing Same, Including Cellular Tel. Handsets, 337-TA-543, USITC Pub.
No. 4258, Comm'n Op. at 150–51 (Oct. 2011) (grandfathering certain products); Certain Personal Data & Mobile Comm'n Devices & Related Software, 337-TA-710, USITC Pub. No.
4331, Comm'n Op., at 72–73, 80–81 (June 2012) (delaying imposition of remedy).

The record in this investigation contains no evidence that a GEO or CDOs would adversely affect the public health and welfare, competitive conditions in the U.S. economy, the production of like or directly competitive articles in the United States, or U.S. consumers. *See* 19 U.S.C. §§ 1337(d)(l), (f)(1). In their submissions in response to the Commission notice of June 30, 2020, both Complainants and OUII contend that the statutory public interest factors do not warrant denying a remedy. Comp. Rmdy at 34-7; OUII Rmdy at 18-20; OUII Rmdy Reply at 5. In addition to requesting submissions from the parties, the Commission requested submissions from interested government agencies and any other interested persons with respect to the public interest. *See* 85 Fed. Reg. 40683 (July 7, 2020). No third party filed a submission in response to the Commission's notice.

The LVT products at issue are used for flooring and there is no evidence that they are necessary to fulfill any public health, safety, or welfare needs. Comp. Rmdy at 35; OUII Rmdy at 19. In addition, the record shows that Complainants have sufficient capacity to readily replace the infringing products at issue if they are excluded. *See* Comp. Rmdy at 34-7; *see also* OUII Rmdy at 18-20; OUII Rmdy Reply at 5. Complainants manufacture many other types of LVT that could fill any gap created by the exclusion of the accused products, and there are a number of licensees that can provide LVT not implicated by the requested GEO or CDOs. *Id.* 

17

Accordingly, the Commission finds that the statutory public interest factors do not preclude issuance of a GEO or the CDOs.

#### D. Bonding

When the Commission enters an exclusion order or a cease and desist order, a respondent may continue to import and sell its products during the 60-day period of Presidential review under a bond in an amount determined by the Commission to be "sufficient to protect the complainant from any injury." 19 U.S.C. § 1337(j)(3); see also 19 C.F.R. § 210.50(a)(3). When reliable price information is available in the record, the Commission has often set the bond in an amount that would eliminate the price differential between the domestic product and the imported, infringing product. See Certain Microsphere Adhesives, Processes for Making Same, & Prods. Containing Same, Including Self-stick Repositionable Notes, Inv. No. 337-TA-366, USITC Pub. No. 2949, Comm'n Op. at 24 (Jan. 16, 1996). The Commission also has used a reasonable royalty rate to set the bond amount where a reasonable royalty rate could be ascertained from the evidence in the record. See, e.g., Certain Audio Digital-to-Analog Converters & Prods. Containing Same, Inv. No. 337-TA-499, Comm'n Op. at 25 (Mar. 3, 2005). Where the record establishes that the calculation of a price differential is impractical or there is insufficient evidence in the record to determine a reasonable royalty, the Commission has imposed a 100 percent bond. See, e.g., Certain Liquid Crystal Display Modules, Prods. Containing Same, & Methods Using the Same, Inv. No. 337-TA-634, Comm'n Op. at 6-7 (Nov. 24, 2009). The complainant, however, bears the burden of establishing the need for a bond. Certain Rubber Antidegradants, Components Thereof & Prods. Containing Same, Inv. No. 337-TA-533, USITC Pub. No. 3975, Comm'n Op. at 40 (July 21, 2006).

Here, the ALJ, Complainants, and OUII all recommend a bond in the amount of \$0.08

per square foot of infringing LVT. RD at 265-67; Comp. Rmdy at 33-4; OUII Rmdy at 20-1; OUII Rmdy Reply at 5-6. For the following reasons, the Commission agrees that a bond in the amount of \$0.08 per square foot of infringing LVT is appropriate.



(Prowse Decl.) ¶¶ 64–65; MSD, Exs. F-94 to F-129).

Accordingly, the Commission has determined to set the bond in the amount of \$0.08 per square foot of infringing LVT imported during the period of Presidential review.

#### V. CONCLUSION

For the reasons set forth herein, the Commission determines that Complainants have established a violation of section 337 by Defaulting Respondents with respect to claims 7, 8, 13, 15-7, 20-3, and 30 of the '460 patent; claims 1-6, 8, 10, 11, 13-6, and 18 of the '490 Patent; and claims 1-4, 6-16, 18, and 20-6 of the '655 Patent. Accordingly, the investigation is terminated with a finding of violation of section 337. The Commission determines that the appropriate remedy is a GEO that excludes from entry for consumption into the United States LVT and components thereof that infringe one or more of the asserted claims of the Asserted Patents. The Commission has also determined to issue CDOs directed to domestic Defaulting Respondents: ABK; Aurora; Maxwell Flooring; Mr. Hardwood; and Sam Houston. The

Commission has determined that the public interest does not preclude issuance of these remedial orders. Finally, the Commission has determined to set the bond during the period of Presidential review in the amount of \$0.08 per square foot of infringing LVT and components thereof imported.

By order of the Commission.

Lisa R. Barton Secretary to the Commission

Issued: October 5, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

# **PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **COMMISSION OPINION** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **October 5, 2020**.

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

# <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

## **Respondents:**

ABK Trading Corp. 925 S. Mason Road, Suite 168 Katy, TX 77450

Aurora Flooring LLC 1920 Shiloh Road NW, Bldg. 5 Kennesaw, GA 30144

Changzhou Jinuo Decorative Material Co., Ltd. No. 4 Cuili Road Henglin, Changzhou, Jiangsu 213103 China

- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
   Other: Email Notification of Availability for Download
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
   ⊠ Other: Service to Be
   Completed by Complainants
- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
   Other: Service to Be
   Completed by Complainants

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 2

Go-Higher Trading (Jiangsu) Co., Ltd. No. 5-1001 Changfa Commercial Plaza Xinbei, Changzhou, Jiangsu 213000 China

Jiangsu Divine Building Technology Development Co. Ltd. No. 27 CuiRong Road, Shuangrong, Henglin Wujin, Changzhou Jiangsu 213103 China

Jiangsu Lejia Plastic Co. Ltd. Shuang Rong, Henglin Changzhou, Jiangsu 213103 China

JiangSu Licheer Wood Co., Ltd. 10 Ying Bing Road, Cuibei, Henglin Wujin, Changzhou, Jiangsu 213103 China

Maxwell Flooring Distribution LLC 1075 W. Sam Houston Pkwy North, Suite 216 Houston, TX 77043

Mr. Hardwood Inc. 4260 Industrial Center Ln NW #100 Acworth, GA 30101

Sam Houston Hardwood Inc.

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

 Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be Completed by Complainants

 □ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

Via Hand Delivery
 Via Express Delivery
 Via First Class Mail
 Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery
 □ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

□ Via Hand Delivery

# CERTAIN LUXURY VINY TILE AND COMPONENTS THEREOF

Certificate of Service - Page 3

1075 W. Sam Houston Pkwy North, Suite 204 Houston, TX 77043

□ Via Express Delivery
 □ Via First Class Mail
 ⊠ Other: Service to Be
 Completed by Complainants

## UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Investigation No. 337-TA-1155

# NOTICE OF A COMMISSION DETERMINATION TO REVIEW IN PART AND, ON REVIEW, TO AFFIRM AN INITIAL DETERMINATION GRANTING SUMMARY DETERMINATION OF VIOLATION BY DEFAULTING RESPONDENTS; REQUEST FOR WRITTEN SUBMISSIONS ON REMEDY, THE PUBLIC INTEREST, AND BONDING

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

**SUMMARY**: Notice is hereby given that the U.S. International Trade Commission ("Commission") has determined to review in part and, on review, to affirm an initial determination ("ID") of the presiding administrative law judge ("ALJ") granting summary determination of violation of section 337 by certain defaulting respondents. The Commission requests written submissions from the parties, interested government agencies, and interested persons on the issues of remedy, the public interest, and bonding, under the schedule set forth below.

**FOR FURTHER INFORMATION CONTACT**: Lynde Herzbach, Office of the General Counsel, U.S. International Trade Commission, 500 E Street S.W., Washington, D.C. 20436, telephone (202) 205-3228. Copies of non-confidential documents filed in connection with this investigation may be viewed on the Commission's electronic docket (EDIS) at <a href="https://edis.usitc.gov">https://edis.usitc.gov</a>. For help accessing EDIS, please email <a href="https://edis.usitc.gov">EDIS3Help@usitc.gov</a>. General information concerning the Commission may also be obtained by accessing its Internet server at <a href="https://www.usitc.gov">https://www.usitc.gov</a>. 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**: On May 16, 2019, the Commission instituted this investigation based on a complaint filed by Mohawk Industries, Inc. of Calhoun, Georgia; Flooring Industries Ltd. Sarl of Bertrange, Luxembourg; and IVC US Inc. of Dalton, Georgia (collectively, "Complainants"). 84 FR 22161 (May 16, 2019). The complaint, as supplemented, alleges a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337 ("section 337") in the importation into the United States, the sale for importation, or the sale

within the United States after importation of certain luxury vinyl tiles by reason of infringement of certain claims of U.S. Patent Nos. 9,200,460 ("the '460 patent"); 10,208,490 ("the '490 patent"); and 10,233,655 ("the '655 patent") (collectively, "the Asserted Patents"). *Id.* The complaint further alleges that a domestic industry exists. *Id.* The Commission's notice of investigation names forty-five respondents, including: ABK Trading Corp. of Katy, Texas ("ABK"); Aurora Flooring LLC of Kennesaw, Georgia ("Aurora"); Changzhou Runchang Wood Co., Ltd. of Jiangsu, China ("Runchang"); Go-Higher Trading (Jiangsu) Co., Ltd. of Jiangsu, China ("Go-Higher"); Jiangsu Divine Building Technology Development Co. Ltd. Jiangsu, China ("Divine"); Jiangsu Lejia Plastic Co. Ltd. of Jiangsu, China ("Lejia"); Jiangsu Lejia Plastic Co. Ltd. of Jiangsu, China ("Maxwell Flooring"); Mr. Hardwood Inc. of Acworth, Georgia ("Mr. Hardwood"); and Sam Houston Hardwood Inc. of Houston, Texas ("Sam Houston") (collectively, "Defaulting Respondents"). *Id.* The Office of Unfair Import Investigations ("OUII") is also participating in the investigation. *Id.* 

The Commission previously terminated the investigation as to thirty-five respondents based on settlement, consent order, or partial withdrawal of the complaint. *See* Order No. 14 (Sept. 26, 2019), *not rev'd*, Notice (Oct. 17, 2019); Order Nos. 15-21 (Sept. 27, 2019 for all), *not rev'd*, Notice (Oct. 17, 2019); Order Nos. 23-25 (Oct. 2, 2019 for all), *not rev'd*, Notice (Oct. 23, 2019); Order No. 27 (Oct. 9, 2019), *not rev'd*, Notice (Nov. 6, 2019); Order No. 26 (Oct. 9, 2019)), *not rev'd*, Notice (Nov. 8, 2019); Order No. 30 (Oct. 25, 2019), *not rev'd*, Notice (Nov. 21, 2019); Order No. 34 (Nov. 7, 2019), *not rev'd*, Notice (Dec. 11, 2019); Order No. 35 (Jan. 24, 2020), *not rev'd*, Notice (Feb. 25, 2020).

On November 21, 2019, the Commission found respondent Go-Higher in default. *See* Order No. 31 (Oct. 25, 2019), *not rev'd*, Notice (Nov. 21, 2019). On November 22, 2019, the Commission found an additional eight respondents in default: ABK; Aurora; Divine; Lejia; Licheer; Maxwell Flooring; Mr. Hardwood; and Sam Houston. *See* Order No. 32 (Oct. 30, 2019), *not rev'd*, Notice (Nov. 22, 2019). On November 25, 2019, the Commission found respondent Runchang in default. *See* Order No. 33 (Oct. 30, 2019), *not rev'd*, Notice (Nov. 25, 2019).

On January 15, 2020, Complainants filed a motion for summary determination of domestic industry and violation of section 337 by the Defaulting Respondents. Complainants filed supplements to their summary determination motion on January 23, 2020, February 11, 2020, and February 19, 2020.

On February 12, 2020, OUII filed a response to Complainants' motion. On May 14, 2020, OUII filed a supplemental response.

On May 15, 2020, the ALJ issued the subject ID (Order No. 36) granting the motion for summary determination and finding a violation of section 337 by the Defaulting Respondents. The ALJ recommended that the Commission issue a GEO and CDOs against the five domestic respondents: ABK, Aurora, Maxwell Flooring, Mr. Hardwood, and Sam Houston. The ALJ also

recommended setting a bond of \$0.08 per square foot of luxury vinyl tile product and components thereof imported during the period of Presidential review. *Id.* No party petitioned for review of the subject ID.

Having reviewed the record of the investigation, the Commission has determined to review the subject ID in part, and on review, to affirm the ID's finding of violation. Specifically, the Commission has determined to review and, on review, to take no position on the ID's findings regarding the economic prong under subsection 337(a)(3)(B) with respect to the '460 patent. The Commission has also determined to review the ID's findings regarding a domestic industry "in the process of being established" with respect to the '490 and '655 patents and affirms those findings but with the following clarifications: The ID addresses the issue of domestic industry for the '490 and '655 patents under the theory of whether the industry is "in the process of being established" since that is the theory advanced by Complainants. In affirming the ID's findings, the Commission does not intend to imply that the investments already made with respect to the '490 and '655 patents are not substantial or could not be used to show the existence of a domestic industry under section 337(a)(3). Further, although the "IVC Foamed Rigid LVT" product asserted by the Complainants is not yet commercially manufactured, under Commission precedent there is no requirement that there be a commercial domestic industry product in order to establish an existing domestic industry. See Certain Thermoplastic-Encapsulated Electric Motors, Components Thereof, and Products and Vehicles Containing Same II, Inv. No. 337-TA-1073, Comm'n Op. at 9 (Aug. 12, 2019) (public version). The Commission has also determined to review the ID's findings with respect to the two products from non-parties, the Quickstyle and Uniflor Aqua products.

The Commission has determined not to review the remainder of the ID, including the findings that Complainants have satisfied the domestic industry requirement under subsection 337(a)(3)(A) with respect to the '460 patent. Accordingly, the Commission affirms the ID's finding of a violation of section 337 by the Defaulting Respondents' importation of luxury vinyl tiles and components thereof that infringe one or more of claims 7-8, 13, 15-17, 20-23, and 30 of the '460 patent, claims 1-6, 8, 10-11, 13-16, and 18 of the '490 patent, and claims 1-4, 6-16, 18, and 20-26 of the '655 patent.

In connection with the final disposition of this investigation, the statute authorizes issuance of, *inter alia*, (1) an exclusion order that could result in the exclusion of the subject articles from entry into the United States and/or (2) cease and desist orders that could result in the respondents 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). In addition, if a party seeks issuance of any cease and desist orders, the written submissions should address that request in the context

of recent Commission opinions, including those in *Certain Arrowheads with Deploying Blades and Components Thereof and Packaging Therefor*, Inv. No. 337-TA-977, Comm'n Op. (Apr. 28, 2017) and *Certain Electric Skin Care Devices, Brushes and Chargers Therefor, and Kits Containing the Same*, Inv. No. 337-TA-959, Comm'n Op. (Feb. 13, 2017). Specifically, if Complainants seek a cease and desist order against a respondent, the written submissions should respond to the following requests:

1. Please identify with citations to the record any information regarding commercially significant inventory in the United States as to each respondent against whom a cease and desist order is sought. If Complainants also rely on other significant domestic operations that could undercut the remedy provided by an exclusion order, please identify with citations to the record such information as to each respondent against whom a cease and desist order is sought.

2. In relation to the infringing products, please identify any information in the record, including allegations in the pleadings, that addresses the existence of any domestic inventory, any domestic operations, or any sales-related activity directed at the United States for each respondent against whom a cease and desist order is sought.

3. Please discuss any other basis upon which the Commission could enter a cease and desist order.

4. To the extent Complainants seek a cease and desist order against defaulting respondent Runchang, please address whether the requirements of section 337(g)(1)(A)-(E) are satisfied with respect to Runchang.

The statute requires the Commission to consider the effects of that remedy upon the public interest. The public interest factors the Commission will consider include the effect that an exclusion 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, disapprove, or take no action on the Commission's determination. *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**: 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.

In their initial submission, Complainants are also requested to identify the remedy sought and Complainants and OUII are requested to submit proposed remedial orders for the Commission's consideration. Complainants are further requested to state the dates that the Asserted Patents expire, the HTSUS subheadings under which the accused products are imported, and to supply the identification information for all known importers of the products at issue in this investigation. The initial written submissions and proposed remedial orders must be filed no later than close of business on **July 15, 2020**. Reply submissions must be filed no later than the close of business on **July 22, 2020**. 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. The Commission's paper filing requirements in 19 CFR 210.4(f) are currently waived. 85 FR 15798 (March 19, 2020). Submissions should refer to the investigation number (Inv. No. 337-TA-1155) in a prominent place on the cover page and/or the first page. (*See* Handbook for Electronic Filing Procedures, *https://www.usitc.gov/documents/handbook\_on\_filing\_procedures.pdf*). Persons with questions regarding filing should contact the Secretary, (202) 205-2000.

Any person desiring to submit a document to the Commission in confidence must request confidential treatment. All such requests should be directed to the Secretary to the Commission and must include a full statement of the reasons why the Commission should grant such treatment. See 19 CFR 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. A redacted non-confidential version of the document must also be filed simultaneously with any confidential filing. 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, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements. All nonconfidential written submissions will be available for public inspection on EDIS.

The Commission vote for this determination took place on June 30, 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 30, 2020

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

# **PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **June 30, 2020**.

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

## <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

- Via Hand Delivery
   Via Express Delivery
   Via First Class Mail
- $\boxtimes$  Other: Email Notification of
- Availability for Download

# UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C. 20436

In the Matter of

CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

Inv. No. 337-TA-1155

# Order No. 36

# **INITIAL DETERMINATION**

Granting Complainants' Motion for Summary Determination of Violation by the Defaulting Respondents

And

**RECOMMENDED DETERMINATION** 

**On Remedy and Bonding**
# **TABLE OF CONTENTS**

I.	Background	1
	A. Institution of the Investigation; Procedural History	1
	B. The Parties	7
	C. The Products at Issue	11
	D. Technological Background	14
II.	Jurisdiction	17
III.	Importation	18
IV.	General Principles of Applicable Law	37
V.	United States Patent No. 9,200,460	43
VI.	United States Patent No. 10,208,490	98
VII.	United States Patent No. 10,233,655	140
VIII.	Domestic Industry (Economic Prong)	228
IX.	Remedy and Bonding	248
X.	Conclusions of Law	267
XI.	Initial Determination and Order	267

The following abbreviations may be used in this Initial Determination:

EDIS - Electronic Document Imaging System

# I. Background

# A. Institution of the Investigation; Procedural History

By publication of a notice in the Federal Register on May 16, 2019, pursuant to

subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission

instituted this investigation to determine:

[W]hether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain products identified in paragraph (2) by reason of infringement of one or more of claims 7, 8, 13, 15–17, 20-23, and 30 of the '460 patent [U.S. Patent No. 9,200,460]; claims 1-21 of the '490 patent [U.S. Patent No. 10,208,490]; and claims 1-27 of the '655 patent [U.S. Patent No. 10,233,655], and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

84 Fed. Reg. 22161 (May 16, 2019).

Pursuant to section 210.10(b)(1) of the Commission's Rules of Practice and

Procedure, 19 CFR 210.10(b)(1):

[T]he plain language description of the accused products or category of accused products, which defines the scope of the investigation, is "interlocking luxury vinyl tile floor panels and components thereof."

Id.

The complainants are Mohawk Industries Inc. of Calhoun, Georgia; Flooring

Industries Ltd. Sarl of Bertrange, Luxembourg; and IVC US Inc. of Dalton, Georgia. The

named respondents are:

1. ABK Trading Corp. of Katy, Texas;

- 2. Anhui Hanhua Building Materials Co., Ltd. of Anhui, China;
- 3. Aspecta North America, LLC of Norwalk, Connecticut;

- 4. Aurora Flooring LLC of Kennesaw, Georgia;
- 5. Benchwick Construction Products Ltd. of Jiangsu, China;
- 6. Changzhou Jinuo Decorative Material Co., Ltd of Jiangsu, China;
- 7. Changzhou Marco Merit International Solutions Co. of Jiangsu, China;
- 8. Changzhou Runchang Wood Co., Ltd. of Jiangsu, China;
- 9. Christina & Son Inc. of Temple City, California;
- Chungstine Inc. d/b/a Expert Hardwood Flooring of Ontario, Canada;
- 11. Davati Group LLC of Austin, Texas;
- 12. DeSoto Sales, Inc. of Canoga Park, California;
- 13. Global Wood Inc. of Walnut, California;
- 14. Go-Higher Trading (Jiangsu) Co., Ltd. of Jiangsu, China;
- 15. Golden Tree Import & Export Inc. of Temple City, California;
- 16. Halstead New England Corp. of Norwalk, Connecticut;
- 17. Hangzhou Kingdom Import & Export Trading Co. Ltd. of Hangzhou, China;
- 18. IN.id Corp. of Diamond Bar, California;
- 19. JC Int'l Trading, Inc. of City of Industry, California;
- 20. Jiangsu Divine Building Technology Development Co. Ltd. Jiangsu, China;
- 21. Jiangsu Lejia Plastic Co. Ltd. of Jiangsu, China;
- 22. JiangSu Licheer Wood Co., Ltd. of Jiangsu, China;
- 23. JiangSu TongSheng Decorative Materials Co., Ltd. of Jiangsu, China;
- 24. Jkgy Inc. d/b/a Nextar Trading of City of Industry, California;
- 25. KJ Carpet Wholesale, Inc. of Pomona, California;
- 26. Maxwell Flooring Distribution LLC of Houston, Texas;
- 27. Metroflor Corp. of Norwalk, Connecticut;

- 28. Mountain High Corp. of El Monte, California;
- 29. Mr. Hardwood Inc. of Acworth, Georgia;
- 30. National Coverings, LLC of Fort Lauderdale, Florida;
- 31. Nextar Wholesale of City of Industry, California;
- 32. Northann Distribution Center Inc. of Sacramento, California;
- 33. Pentamax Inc. of Compton, California;
- 34. RBT Industries LLC d/b/a Hardwood Bargains of Austin, Texas;
- 35. RC Vinyl Inc. of City of Industry, California;
- 36. Royal Family Inc. of Temple City, California;
- 37. Sam Houston Hardwood Inc. of Houston, Texas;
- 38. Zhejiang Changxing Senda Bamboo and Wood Products Co. Ltd. of Jiangsu, Chin;
- 39. Zhangjiagang Elegant Home-Tech Co. Ltd of Jiangsu, China;
- 40. Zhangjiagang Elegant Plastics Co. Ltd. of Jiangsu, China;
- 41. Zhangjiagang Yihua Plastics Co., Ltd of Jiangsu, China;
- 42. Zhangjiagang Yihua Rundong New Material Co. Ltd of Jiangsu, China;
- 43. Zhejiang Kimay Building Material Technology Co., Ltd. of Zhejiang, China;
- 44. Zhejiang Kingdom Flooring Plastic Co., Ltd. of Zhejiang, China; and
- 45. Zhejiang Walrus New Material Co., Ltd. of Zhejiang, China.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Hereinafter, the 45 named respondents will be referenced using the following: (1) ABK Trading Corp. ("ABK"); (2) Anhui Hanhua Building Materials Co., Ltd. ("Anhui"); (3) Aspecta North America, LLC ("Aspecta"); (4) Aurora Flooring LLC ("Aurora"); (5) Benchwick Construction Products Ltd. ("Benchwick"); (6) Changzhou Jinuo Decorative Material Co., Ltd. ("Jinuo"); (7) Changzhou Marco Merit International Solutions Co. ("Marco Merit"); (8) Changzhou Runchang Wood Co., Ltd. ("Runchang"); (9) Christina & Son Inc. ("Christina & Son"); (10) Chungstine Inc. d/b/a Expert Hardwood Flooring ("Chungstine"); (11) Davati Group LLC ("Davati"); (12) DeSoto Sales, Inc. ("DeSoto"); (13) Global Wood Inc. ("Global Wood"); (14) Go-Higher Trading (Jiangsu) Co., Ltd. ("Go-Higher"); (15) Golden Tree Import & Export Inc. ("Golden Tree"); (16) Halstead

The Office of Unfair Import Investigations ("Staff") is a party to this investigation. Id.

The target date for completion of this investigation was set at September 16, 2020, which is sixteen months after institution of the investigation. *See* Order No. 3 (June 4, 2019). Accordingly, the due date for the initial determination on violation is May 15, 2020.

\* \* \*

On October 23, 2019, four of the named respondents (Global Wood; JC Int'l

Trading; National Coverings; and RC Vinyl) were terminated from the investigation

based on consent orders. See Commission Determination Not to Review Order Nos. 23-

25 (Oct. 23, 2019).

During the course of this investigation, the following 28 named respondents were

New England Corp. ("Halstead"); (17) Hangzhou Kingdom Import & Export Trading Co. Ltd. ("Kingdom"); (18) IN.id Corp. ("IN.id"); (19) JC Int'l Trading, Inc. ("JC Int'l Trading"); (20) Jiangsu Divine Building Technology Development Co. Ltd. ("Divine"); (21) Jiangsu Lejia Plastic Co. Ltd. ("Lejia"); (22) JiangSu Licheer Wood Co., Ltd ("Licheer"); (23) JiangSu TongSheng Decorative Materials Co., Ltd. ("TongSheng"); (24) Jkgy Inc. d/b/a Nextar Trading ("Jkgy"); (25) KJ Carpet Wholesale, Inc. ("KJ"); (26) Maxwell Flooring Distribution LLC ("Maxwell Flooring"); (27) Metroflor Corp. ("Metroflor"); (28) Mountain High Corp. ("Mountain High"); (29) Mr. Hardwood Inc. ("Mr. Hardwood"); (30) National Coverings, LLC ("National Coverings"); (31) Nextar Wholesale ("Nextar"); (32) Northann Distribution Center Inc. ("Northann"); (33) Pentamax Inc. ("Pentamax"); (34) RBT Industries LLC d/b/a Hardwood Bargains ("RBT"); (35) RC Vinyl Inc. ("RC Vinyl"); (36) Royal Family Inc. ("Royal Family"); (37) Sam Houston Hardwood Inc. ("Sam Houston"); (38) Zhejiang Changxing Senda Bamboo and Wood Products Co. Ltd. ("Senda"); (39) Zhangjiagang Elegant Home-Tech Co. Ltd. ("Elegant Home-Tech"); (40) Zhangjiagang Elegant Plastics Co. Ltd. ("Elegant Plastics"); (41) Zhangjiagang Yihua Plastics Co., Ltd. ("Yihua Plastics"); (42) Zhangjiagang Yihua Rundong New Material Co. Ltd. ("Rundong"); (43) Zhejiang Kimay Building Material Technology Co., Ltd. ("Kimay"); (44) Zhejiang Kingdom Flooring Plastic Co., Ltd. ("Kingdom"); and (45) Zhejiang Walrus New Material Co., Ltd. ("Walrus").

terminated from the investigation based upon settlement agreements: (1) Anhui; (2) Aspecta; (3) Benchwick; (4) Jinuo; (5) Marco Merit; (6) Christina & Son; (7) Chungstine; (8) Davati; (9) DeSoto; (10) Golden Tree; (11) Halstead; (12) Kingdom; (13) IN.id; (14) TongSheng; (15) Jkgy; (16) KJ; (17) Metroflor; (18) Mountain High; (19) Nextar; (20) Northann; (21) Pentamax; (22) RBT; (23) Royal Family; (24) Senda; (25) Elegant Home-Tech; (26) Rundong; (27) Kingdom; and (28) Walrus. *See* Commission Determination Not to Review Order No. 14 (Oct. 17, 2019); Commission Determination Not to Review Order Nos. 15-21 (Oct. 17, 2019); Commission Determination Not to Review Order No. 27 (Nov. 6, 2019); Commission Determination Not to Review Order No. 26 (Nov. 8, 2019); Commission Determination Not to Review Order No. 35 (Feb. 25, 2020).

Three named respondents (Elegant Plastics; Yihua Plastics; and Kimay) were terminated for good cause because those respondents changed their names and no longer exist as legal entities. *See* Comm'n Determination Not to Review Order No. 30 (Nov. 21, 2019).

On November 21, 2019, the Commission determined not to review an initial determination finding respondent Go-Higher in default pursuant to 19 C.F.R. § 210.16. *See* Commission Determination Not to Review Order No. 31 (Nov. 21, 2019).

On November 22, 2019, the Commission determined not to review an initial determination finding the following eight respondents in default pursuant to 19 C.F.R. § 210.16: (1) ABK; Aurora; Divine; Lejia; Licheer; Maxwell Flooring; Mr. Hardwood; and Sam Houston. *See* Commission Determination Not to Review Order No. 32 (Nov. 22, 2019).

On November 25, 2019, the Commission determined not to review an initial

determination finding respondent Runchang in default pursuant to 19 C.F.R. § 210.16.

See Commission Determination Not to Review Order No. 33 (Nov. 25, 2019).

Thus, remaining ten respondents ABK; Aurora; Runchang; Go-Higher; Divine;

Lejia; Licheer; Maxwell Flooring; Mr. Hardwood; and Sam Houston (collectively

"defaulting respondents") are the subject of the motion for summary determination of

violation discussed below.

#### **Summary Determination Motion**

On January 15, 2020, complainants filed a motion for summary determination of

violation of section 337 by the defaulting respondents, and for a recommended

determination on remedy and bonding, and a memorandum in support thereof. Motion

Docket No. 1155-53. Specifically, complainants seek the following:

(1) an initial determination that the Defaulting Respondents have violated Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, through their importation into the United States, sale for importation and/or sale within the United States after importation of certain luxury vinyl tile products that infringe U.S. Patent Nos. 9,200,460, 10,208,490, and 10,233,655;

(2) an initial determination that Complainants have satisfied both the technical and economic prongs of the domestic industry requirement of 19 U.S.C. § 1337(a)(2)-(3)(A)-(B); and (3) a determination recommending that the Commission issue a general exclusion order pursuant to 19 U.S.C. § 1337(d)(2), and in no event less than a limited exclusion order against Defaulting Respondents under 19 U.S.C. § 1337(d)(1); issue cease and desist orders pursuant to 19 U.S.C. § 1337(f)(1) directed to the domestic2 Defaulting Respondents; and set a bond during the Presidential Review Period at \$0.08 per square foot for any Accused Product imported during the Presidential Review Period.

### Mot. at 1-2.

Supplements to complainants' motion were filed on January 23, 2020, February

11, 2020, and February 19, 2020. See EDIS Doc. ID Nos. 700137, 702220, 702940.

On February 12, 2020, the Staff filed a response supporting the motion in part, and as requested by the administrative law judge, on May 14, 2020, the Staff filed a supplemental response. *See* Staff Resp. at 1-4; Staff Supp. Resp. (EDIS Doc. ID No. 710376).

### **B.** The Parties

### 1. Complainants

#### a. Mohawk Industries, Inc.

Complainant Mohawk is a Delaware corporation with its principal place of business at 160 South Industrial Boulevard, Calhoun, Georgia 30701. Compl., ¶ 8. Mohawk is in the business of designing, developing, manufacturing, and marketing flooring products to enhance residential and commercial spaces around the world. Compl. ¶ 9. Mohawk is the world's largest flooring company, with operations in the United States, as well as Australia, Brazil, Canada, China, Europe, India, Malaysia, Mexico, New Zealand, and Russia. Compl., ¶ 9.

### b. Flooring Industries Ltd. Sarl

Flooring Industries is a corporation organized under the laws of Luxembourg and Ireland, with its principal place of business at 10B rue des Merovingiens, 8070, Bertrange Luxembourg. Flooring Industries is an indirect wholly owned subsidiary of Mohawk. Compl., ¶ 10. Flooring Industries owns by assignment the entire right, title, and interest in, and to the asserted patents. Compl., ¶ 11; Compl. Exs. 1-6.

### c. IVC US Inc.

IVC is a Georgia corporation with its principal place of business at 101 IVC

Drive, Dalton, GA 30721. Compl., ¶ 12. IVC manufactures luxury vinyl tile floor panel products in the United States. Pursuant to a license from Flooring Industries. Compl., ¶ 12. IVC is a non-exclusive licensee of the asserted patents and is an indirect wholly owned subsidiary of Mohawk. Compl., ¶ 12.

### 2. Defaulting Respondents

As noted above, 32 respondents have been terminated from this investigation. The following 10 respondents remain in this investigation, all of whom have been found in default.

### a. ABK Trading Corp.

ABK Trading Corp. is a company organized and existing under the laws of the United States, having its principal place of business located at 925 S. Mason Road, Suite 168, Katy, TX 77450. Compl., ¶ 14. ABK is believed to be associated with and/or operate under the name Maxwell Flooring Distribution LLC. Compl., ¶ 14.

ABK imports or sells after importation the accused EZ Go, Premier Flooring, and Top Flooring products. Compl., ¶¶ 15, 144, 186; Mem. at 6, 13, 26-31.

### **b.** Aurora Flooring LLC

Aurora Flooring LLC is a company organized and existing under the laws of the United States, having its principal place of business located at 1920 Shiloh Road NW, Bldg. 5, Kennesaw, GA 30144. Compl., ¶ 20. Aurora Flooring LLC is believed to be associated with and/or operate under the names Aurora Hardwood, Nova Hardwoods, LLC, Worldwide Flooring Inc., and JXZ Hardwood Inc. Compl., ¶ 20.

Aurora imports or sells after importation the accused WaterGuard products. See Compl., ¶¶ 21, 142, 182-83; Mem. at 6, 13, 31-34.

### c. Changzhou Runchang Wood Co., Ltd.

Runchang Changzhou Runchang Co. Wood, Ltd. is a company organized and existing under the laws of China, having its principal place of business at 5 Banagshang Road, Cuiqiao North Industrial Zone, Henglin, Changzhou, Jiangsu 213103. EDIS Doc. ID No. 678396, Runchang's Response to the Complaint, ¶ 28. Runchang is in the business of manufacturing, importing, and selling luxury vinyl tile floor panels. *See id.*, ¶ 29.

Runchang sells for importation the accused Ultra SPC products. *See* Compl., ¶¶ 29, 166, 212; Mem. at 6-7, 13, 34-36.

### d. Go-Higher Trading (Jiangsu) Co., Ltd.

Go-Higher is a company organized and existing under the laws of China, having its principal place of business located at No. 5-1001 Changfa Commercial Plaza, Xinbei, Changzhou, Jiangsu 213000. Compl., ¶ 40.

Go-Higher imports or sells for importation the accused Ultra SPC products. *See* Compl., ¶¶ 41, 166, 212; Mem. at 7, 13, 34-36.

### e. Jiangsu Divine Building Technology Development Co. Ltd.

Divine is a company organized and existing under the laws of China, having its principal place of business located at No. 27 CuiRong Road, Shuangrong, Henglin, Wujin, Changzhou Jiangsu. Compl., ¶ 52. Divine is believed to be associated with and/or operate under the name JiangSu Licheer Wood Co., Ltd. Compl., ¶ 52.

Divine sells for importation the accused Antigua WPC and Sorrento Niagara products. *See* Compl., ¶¶ 53, 146, 188; Mem. at 7, 13, 38-40.

### f. Jiangsu Lejia Plastic Co. Ltd.

Lejia is a company organized and existing under the laws of China, having its principal place of business located at Shuang Rong, Henglin, Changzhou, Jiangsu. Compl., ¶ 54.

Lejia sells for importation the accused Ultra SPC and NSG Hospitality products. See Compl., ¶¶ 55, 166, 212; Mem. at 7, 13, 34-38.

### g. Jiangsu Licheer Wood Co., Ltd.

Licheer is a company organized and existing under the laws of China, having its principal place of business located at 10 Ying Bing Road, Cuibei, Henglin, Wujin, Changzhou, Jiangsu 213103. Compl., ¶ 56. Licheer is believed to be associated with and/or operate under the name Jiangsu Divine Building Technology Development Co. Ltd. Compl., ¶ 56.

Licheer sells for importation the accused Antigua WPC and Sorrento Niagara products. *See* Compl., ¶¶ 57, 146, 188; Mem. at 7, 13, 38-40.

### h. Maxwell Flooring Distribution LLC

Maxwell Flooring is a company organized and existing under the laws of the United States, having its principal place of business located at I075 West Sam Houston Pkwy North, Suite 216, Houston, TX 77043. Compl., ¶ 64. Maxwell Flooring is believed to be associated with and/or operate under the name Maxwell Flooring. Compl., ¶ 64.

Maxwell Flooring imports or sells in the United States after importation the accused EZ Go, Premier Flooring, and Top Flooring products. *See* Compl., ¶¶ 65, 144, 186; Mem. at 7-8, 13, 26-31.

### i. Mr. Hardwood Inc.

Mr. Hardwood is a company organized and existing under the laws of the United States, having its principal place of business located at 4260 Industrial Center Ln NW #100, Acworth, GA 30101. Compl., ¶ 70.

Mr. Hardwood imports or sells in the United States after importation the accused WaterGuard and Adventure II. *See* Compl., ¶¶ 71, 142, 183; Mem. at 8, 13, 31-34.

### j. Sam Houston Hardwood Inc.

Sam Houston is a company organized and existing under the laws of the United States, having its principal place of business located at 1075 W. Sam Houston Pkwy North, Suite 204, Houston, TX 77043. Compl., ¶ 86.

Sam Houston imports or sells in the United States after importation the accused EZ Go, Premier Flooring, and Top Flooring products. *See* Compl., ¶ 87, 144, 185; Mem. at 8, 13, 26-31.

### C. The Products at Issue

### 1. The Accused Products

The accused products associated with the defaulting respondents in this investigation are LVT floor panels manufactured in China and then imported into the United States. *See* Mem. at 12-14; Compl., ¶¶ 104, 108. These products include: (1) EZ Go; (2) Premier Flooring; (3) Top Flooring; (4) WaterGuard; (5) Adventure II; (6) Ultra SPC; (7) NSC Hospitality; (8) Antigua WPC; and (9) Sorrento Niagara. The defaulting respondents associated with each product are listed in the table below.

Accused Product	Patent	
EZ Go	ABK Trading Sam Houston Hardwood Maxwell Flooring	·655
Premier Flooring	ABK Trading Sam Houston Hardwood Maxwell Flooring	'460
Top Flooring	ABK Trading Sam Houston Hardwood Maxwell Flooring	·655
WaterGuard	Aurora Flooring Mr. Hardwood	·655
Adventure II	Mr. Hardwood	·460
Ultra SPC	Changzhou Runchang Go-Higher Trading Jiangsu Lejia	·655
NSG Hospitality	Jiangsu Lejia	ʻ460
Antigua WPC	Jiangsu Divine Jiangsu Licheer	'460 '490 '655
Sorrento Niagara	Jiangsu Divine Jiangsu Licheer	ʻ460

Complainants' expert also tested additional products. Ex. A (Scott Decl.), ¶¶ 150,

186.<sup>2</sup> In connection with complainants' request for a general exclusion order,

 $<sup>^2</sup>$  Citations to exhibits refer to exhibits to the pending motion and memorandum thereto unless noted otherwise.

complainants assert that two additional products from non-respondents—the Quickstyle and Uniflor Aqua products—infringe the asserted patents. Thus, these two products are imported, sold for importation, or sold after importation in the United States by nonrespondents. Ex. B (Schuster Decl.), ¶ 19; Ex. B-16 (Uniflor Aqua); Ex. C ([ ] Decl.), ¶ 14; Ex. C-10 (Quickstyle). The remaining tested products are products of terminated respondents. *See* Exhibit UUU (Chart of Tested and Representative Products).

As used herein, the term "accused products" refers to the products listed above as well as any product that allegedly practices one or more of the asserted claims of the asserted patents and that has been imported, sold for importation, or sold after importation without authentic L2C labels properly affixed to the short side of the box. *See* Compl., ¶ 129-136.<sup>3</sup> The administrative law judge recognizes that non-respondent Quickstyle and Uniflor Aqua products are not accused products in the ordinary sense. Nonetheless, hereinafter, non-respondent Quickstyle and Uniflor Aqua products will be referred to as accused products for ease of reference.

### 2. The Domestic Industry Products

Complainants identify the following products as the domestic industry products:

Asserted U.S. Patent No.	Complainants' Domestic Industry Product
9,200,460	[

<sup>&</sup>lt;sup>3</sup> As used herein, the term "unlabeled" refers to products that do not have an authentic L2C label properly affixed to the short side of the box. This includes certain accused products that had an I4F label but not an authentic L2C label.

	]
	The above models use the click installation method and are sold under at least the following collection names:
	Aladdin Grass Valley Click Collection, Home Decorators Floating Vinyl Plank Collection, Home Decorators Luxury Vinyl Plank Flooring Collection, IVC Horizon Collection (Click Installation), IVC Revel Click Collection, Mohawk Home Expressions Collection, Mohawk Home Signature Collection, Mohawk Lasting Charm Collection, Mohawk Woodlands Collection, Portico Brentwood Collection, and Portico Lasting Splendor Collection
10,208,490 10,233,655	IVC's Foamed Rigid LVT Product is planned to be sold under at least the following brand names:

See Mem. at 14-15.

Further, complainants identify the Home Decorators Luxury Vinyl Plank Flooring Collection ("Home Decorators Collection") as representative of the '460 domestic industry products, *i.e.*, the IVC CL Flex LVT line. *See* Complainants' Amended Disclosure of Domestic Industry Products (Aug. 13, 2019).

# D. Technological Background

### The '460 Patent

The '460 patent, entitled "Floor Covering, Floor Element and Method for Manufacturing Floor Elements," issued on December 1, 2015, to inventor Mark Cappelle. The '460 patent issued from U.S. Patent Application Serial No. 14/672,437, filed on March 30, 2015, and expires on March 22, 2027. The '460 patent has 30 claims, 2 of which are independent claims. *See* Ex. A-1 ('460 Patent). Complainant Flooring

Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '460 patent. *See* Complaint Ex. 4 (certified assignment record).

The '460 patent discloses an "invention relat[ing] to a floor covering, to a floor element with which such floor covering can be composed, as well as to a method for manufacturing floor elements." Ex. A-1 ('460 Patent) at 1:8-10. More specifically, the '460 patent is "aim[ed] at a floor covering or floor elements having, allowing, respectively, a better and/or sturdier and/or simpler to manufacture coupling among adjacent floor elements in a floor covering." Ex. A-1 ('460 Patent) at 1:40-44.

Complainants assert claims 7-8, 13, 15-17, 20-23, and 30 of the '460 patent. Mem. at 10.

#### The '490 Patent

The '490 patent, entitled "Floor Panel," issued on February 19, 2019 to inventors Laurent Meersseman and Luc Vanhastel. The '490 patent issued from U.S. Patent Application Serial No. 15/972,633, filed on May 7, 2018, and expires on April 28, 2031. The '490 patent has 30 claims, 3 of which are independent claims. *See* Ex. A-2 ('490 Patent). Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '490 patent. See Complaint Ex. 5 (certified assignment record).

The '490 patent relates to floor panels "of the type which is at least composed of a substrate and a top layer provided on this substrate, wherein said top layer comprises a print, " and "above such motif a transparent or translucent synthetic material layer may be provided, which then forms part of said top layer." Ex. A-2 ('490 Patent) at 1:16-22. In addition, the '490 patent "relates to panels of the type which, at two or more opposite

edges, comprises coupling means or coupling parts, with which two of such floor panels can be coupled at the respective edges, such that they are locked to each other in a horizontal direction perpendicular to the respective edge and as in the plane of the floor panels, as well as in a vertical direction perpendicular to the plane of the floor panels." Ex. A-2 ('490 Patent) at 1:23-30.

Complainants assert claims 1-6, 8, 10-11, 13-16, and 18 of the '490 patent. Mem. at 11.

#### The '655 Patent

The '655 patent, entitled "Floor Panel," issued on March 19, 2019 to inventors Laurent Meersseman, Martin Segaert, Bernard Thiers, Benjamin Clement, and Christophe Maesen. The '655 patent issued from U.S. patent Application Serial No. 16/158,612, filed on October 12, 2018, and expires on April 28, 2031. The '655 patent has 30 claims, 3 of which are independent claims. See Ex. A-3 ('655 Patent). Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '655 patent. See Complaint Ex. 6 (certified assignment record).

The '655 patent discloses "floor panels and methods for manufacturing floor panels." Ex. A-3 ('655 Patent) at 1:26-27. More specifically, the '655 patent "relates to floor panels of the type which is at least composed of a substrate and a top layer provided on this substrate, wherein said top layer comprises a motif," and "above said motif a transparent or translucent synthetic material layer can be provided, which layer then forms part of said top layer." Ex. A-3 ('655 Patent) at 1:28-33. Additionally, the '655 patent "relates to floor panels of the type which, at two or more opposite edges, comprises coupling means or coupling parts, with which two of such floor panels can be

coupled at the respective edges, such that they are locked together in a horizontal direction perpendicular to the respective edge and in the plane of the floor panels, as well as in a vertical direction perpendicular to the plane of the floor panels." Ex. A-3 ('655 Patent) at 1:34-41.

Complainants assert claims 1-4, 6-16, 18, and 20-26 of the '655 patent. Mem. at 12.

### II. Jurisdiction

As indicated in the Commission's notice of investigation, discussed above, this investigation involves the importation of products alleged to infringe United States patent and trademarks in a manner that violates section 337 of the Tariff Act, as amended. No party has contested the Commission's jurisdiction over the subject matter of this investigation. It is found that the Commission has subject matter jurisdiction over this investigation.

No party has contested the Commission's personal jurisdiction over it. In particular, respondents have been given notice of this investigation at least through service of the complaint and notice of investigation. It is therefore found that the Commission has personal jurisdiction over all parties.

No party has contested the Commission's *in rem* jurisdiction over the accused products. Evidence of specific instances of importation of the accused products is discussed in the importation section of this initial determination. Accordingly, it is found that the Commission has *in rem* jurisdiction over the accused products.

### **III.** Importation

Section 337 prohibits "[t]he importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles that – (i) infringe a valid and enforceable United States patent . . . ." 19 U.S.C. § 1337(a)(1)(B). Section 337 also prohibits "[t]he importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles that infringe a valid and enforceable United States trademark . . . ." 19 U.S.C. § 1337(a)(1)(C).

A complainant "need only prove importation of a single accused product to satisfy the importation element." *Certain Purple Protective Gloves*, Inv. No. 337-TA-500, Order No. 17 at 5 (Sept. 23, 2004); *Certain Trolley Wheel Assemblies*, Inv. No. 337-TA-161, Views of the Commission at 7-8 (Aug. 29, 1984), USITC Pub. No. 1605 (Nov. 1984), *available as* 1984 WL 951859 (importation of product sample sufficient to establish violation, even though sample "had no commercial value and had not been sold in the United States").

As discussed below, complainants presented substantial, reliable, and probative evidence of importation as to each of the defaulting respondents. *See* Mem. at 25-40. *See* Staff Resp. at 23-41.

Complainants have submitted declarations from Paul Schuster, the Business Development Manager, Technology, and manager of the market research team at complainant Flooring Industries, and [\_\_\_\_\_], a market researcher at Unilin North America, LLC, along with the evidence attached to the declarations of counsel and complainants' expert, Dr. Stephen Prowse, to show that the defaulting respondents have

imported, sold for importation, or sold after importation the accused products. *See* Exs. B (Schuster Decl.); Ex. C ([ ] Decl.); Ex. D (Kiepura Decl.); Ex. E (Abhyankar Decl.); (Ex. F (Prowse Decl.); Compl. Exs. 54, 54A, 54B; Mem. at 15-16, 25-40. For example, Mr. Schuster and his team of market researchers, such as [ ], uncovered evidence of specific instances of importation by purchasing the accused products in the United States and conducting research of importation data and other available information to tie the products to particular business entities. *See* Exs. B (Schuster Decl.), ¶¶ 10-23; Ex. C ([ ] Decl.), ¶¶ 2-14; Compl. Ex. 54, ¶¶ 1-3,7-16,32, 33; Compl. Ex. 54A, ¶¶ 1, 2, 5, 8-11, Compl. Ex. 54B, ¶¶ 2-4, 10; Ex. D (Kiepura Decl.), ¶¶ 2-6, 9; Ex. E, ¶¶ 2-6. Evidence showing importation of the accused products by the defaulting respondents is discussed below.

# 1. Adventure II Accused Products and Defaulting Respondent Mr. Hardwood

The evidence with respect to the Adventure II accused products and defaulting respondent Mr. Hardwood includes:

[

19

]





See Exs. E (Abhyankar Decl.), ¶¶ 2-5 (declaring that the Adventure II products were purchased from and delivered to a home in the United States by defaulting respondent Mr. Hardwood), E-1 (invoice showing a sale of accused products from Mr. Harwood Inc. to a Max Rubinson in Atlanta, GA); E-2 (photographs of the accused Adventure II products' packaging indicating that the products were "Made in China"); Mem. at 34.

## 2. Sorrento Niagara Accused Products and Defaulting Respondents Divine and Licheer

The evidence as to the Sorrento Niagara accused products and defaulting respondents Divine and Licheer includes:

Grand Prairie 2725 South Highway 360 Grand Prairie, TX 75052 469-263-1111

Ticket #3-242808 Cus#9725150162	Slp	:CAM	User: CAM Drw#32
11/27/2019 11:57:14	AM	Stat	ion:P0S03-2
Item Description	Qty	Price	Total
90-SPC-NIAGARA-074 Sorrento Niagara Si	2 PC Viny	55.57 /1 Flo	111.14
Subtotal Tax		-	111.14 9.17
Total		-	120.31
Tender: V1SA			120.31



See Ex. B (Schuster Decl.), ¶ 17; Ex. C ([ ] Decl.), ¶ 13; Ex. C-7; Ex. C-8 (declarations, receipt, and photographs showing that the Sorrento Niagara accused products were purchased on November 27, 2019, from the Second & Surplus store in Texas and the packaging stated the Sorrento Niagara products were "MADE IN CHINA").

Complainants' market research team, after a search of importation information in the Descartes Datamyne database, uncovered evidence of a link between the Second & Surplus store were the accused products were purchased and defaulting respondent Divine. Ex. B (Schuster Decl.), ¶ 17; Ex. B-2; Ex. B-13; Ex. S at 1, 5, 11, 14. In particular, the Datamyne search revealed that Divine is the only company that ships products having a short container description matching those typically used in the industry for LVT flooring to a "Seconds and Surplus Building Material." *See* Ex. B

(Schuster Decl.), ¶ 17; Ex. B-2 (yellow annotations). The "About Us" page of the website for the Second & Surplus store where complainants' purchased the Sorrento Niagara accused products identifies the full name of the company as "Second and Surplus Building Materials," stating "Seconds and Surplus Building Materials has been bringing contractors bargains from all of the world ... We buy directly from the manufacturer new and surplus merchandise." Ex. B-13. In addition, the "Consignee Declared Address" used by Second and Surplus Building Material in the Datamyne records is one of several associated property addresses for Second & Surplus. Ex. S at 1, 5, 11, 14.

Mr. Schuster further declared that, based upon his industry knowledge, he knows that Divine is an LVT flooring manufacturer and that defaulting respondent Licheer is its related entity. Ex. B (Schuster Decl.), ¶ 13; Compl. Ex. 54A, ¶ 11, Attachment G. Furthermore, complainants have provided evidence that defaulting respondents Divine and Licheer are owned by the same individual and currently operate out of the same address. *See* Ex. F-142 at 24; Ex. WW at 28; Ex. F-142 at 5 (Jiangsu Divine address); Compl. Ex. 54A (Schuster 2nd Decl.) Attachment G at 1 (Jiangsu Licheer address).

The record evidence, when combined, provides reliable, probative and substantial evidence that the importation requirement has been satisfied with respect to defaulting respondents Divine and Licheer and the Sorrento Niagara accused products.

# 3. Antigua WPC Accused Products and Defaulting Respondents Divine and Licheer

The evidence for the Antigua WPC accused products and the defaulting respondents Divine and Licheer includes:

PENTA 410 S. SIEF	MAX, I/V RRA DRIVE	С.							Invoice
COMPTON	CA 90220							Date	INVOICE #
FAX: 310-53	7-2244 37-4477							-14/2019	PEN-1012/8
8d To					Γ	Ship To			
					ľ				
					l				
P O Number	Tenns		Rep	Ship	Via	1	FOB		Project
				4/11/2019	PICK-UP				
Quantity	Item Code			Descript	ion		Price E	ach	Amount
	SALES TAX	TOT	4L 58X	s				21 52	21 5
							1		



See Compl. Ex. 54B, ¶ 4, Attachment D1 (declaration, invoice, and photographs showing that the Antigua WPC accused products were purchased on April 11, 2019 from the Pentamax Inc. store in California and the packaging stated the Antigua WPC products were "MADE IN CHINA"); Ex. C ([ ] Decl.), ¶ 12. There is evidence that complainants made an earlier purchase of the Antigua WPC accused products from the Pentamax Inc. store on January 11, 2019. Compl. Ex. 54, Attachment D1 at 2, 11-12; Ex. C ([ ] Decl.), ¶ 11.

As with the Sorrento Niagara products, complainants' market research team, after a search of importation information in the Descartes Datamyne database, uncovered evidence of a link between the address of the Pentamax Inc. store and defaulting respondent Divine. The Datamyne search showed that, since early 2017, Divine has continuously shipped imported LVT flooring to the Pentamax store address. Ex. B (Schuster Decl.), ¶ 13; Ex. B-12; Compl. Ex. 54, ¶¶ 13-16, Attachment D2.

As discussed above, Mr. Schuster also declared that, based upon his industry knowledge, he knows that Divine is an LVT flooring manufacturer and there is evidence that defaulting respondent Licheer is its related entity. Ex. B (Schuster Decl.), ¶ 13; Compl. Ex. 54A, ¶ 11, Attachment G; Ex. F-142 at 24; Ex. WW at 28; Ex. F-142 at 5 (Jiangsu Divine address); Compl. Ex. 54A (Schuster 2nd Decl.) Attachment G at 1 (Jiangsu Licheer address).

Thus, it is determined that there is reliable, probative and substantial evidence that the importation requirement has been satisfied with respect to defaulting respondents Divine and Licheer and the Antigua WPC accused products.

# 4. Ultra SPC Accused Products and Defaulting Respondents Runchang, Lejia and Go-Higher

The evidence with respect to the Ultra SPC accused products and defaulting

respondents Runchang, Lejia, and Go-Higher includes:

4	GLOBAL 1180-AC CITY OF INOL Tel: 909-598-8538 globalwo	WOOD INC. ENTRE DR. STRY, CA 91789 • Fax: 909-598-8535 odine.com	0745	33	Invoice Number 74533 Invoice Date Jan 9, 2019 Page
Sold To:	Customer ID 25069525 Jales Rep ID	Custo CH Shipping	Shin Ta-	Payi	ment Terms
	HO291	Cust P	Pickup	Ship Date	Due Date
Quant	ity Item	C HOL I	Description	Ush Balan	1/5/19
TERMS OF 5 1. Inspectior 2. Returns: no cays ofter p	алана, моло пис тала сание, кая ята и стиу молитич, сая, итака зана зана зана зана Sale изохохоживо VISA Entry /	2052 ethod: Drip instantise thod: Drip instantise			
core will be in present of an or part of an	Total: \$ 01-09-19 Inv N: 00000006 Aspro Asprod: Online VISA CEDIT ADD: A0000000031010 TNR: 00 80 40 00 TSI: F8 00 Cuntemer Carr THMAX YOUM	73.67 the involve as "spec- geods-valves will 1 (5:16):40 events in al rainment/action de we with events the consulter of the the expected we will a set of the rest involve the	call other." Ino warranty," an soft "as e charge for cancellation of editer entransport of cancellation of editer instant products. By buying natural fectiveness representation of the soft fectiveness representation of the soft fectiveness representation of the fectiveness of the soft of the instant on the defective analysis, buy safe amount specified on the invoice he products. Global Weed in: in not he installation, whether or not the failures. Immition, clean and dry subfloor, elo- iser any of the pathes hereis beaution ductate the disquers. The provides may be utilized.	Subtotal Sales Tax Total Invoice Amount TOTAL Thanke	67.28 6.39 73.67 73.67



See Ex. B (Schuster Decl.), ¶ 12; Ex. C ([ ] Decl.), ¶ 8; Compl. Ex. 54, ¶¶ 32, 33,

Attachment J1 (declarations, paid invoice, and photographs showing that the Ultra SPC accused products were purchased on January 9, 2019<sup>4</sup> from the Global Wood Inc. store in California and the packaging stated the Ultra SPC products were "MADE IN CHINA").

Complainants' market research team linked the accused Ultra SPC products with terminated respondent JC Int'l Trading, who it in turn is linked to terminated respondent RC Vinyl. Compl. Ex. 54, ¶ 32; Ex. B (Schuster Decl.), ¶ 12. The evidence shows that

<sup>&</sup>lt;sup>4</sup> The Ultra SPC products are accused of infringing the '655 patent, which issued on March 19, 2019. Thus, complainants' January 19, 2019, purchase was prior to the issuance of the '655 patent. Complainants, however, have provided evidence that the Ultra SPC products were available online for sale in the United States on April 12, 2019. Compl. Ex. 54A, ¶ 5, Attachment D. The Staff, however notes that it is unclear from the evidence of record whether the Ultra SPC products available online included an authentic L2C labels and were therefore licensed products. Staff Resp. at 32 n.7. In addition, Datamyne importation records indicate that defaulting respondents Runchang and Go-Higher shipped products from China as late as October 2019 and August 2019, respectively, to terminated respondent RC Vinyl at an address near and on the same street as the Global Wood Inc. store where complainants purchased the accused Ultra SPC products. See Ex. B (Schuster Decl.), ¶ 12; Ex. B-11. As explained above, RC Vinyl also admitted it was an importer of the accused Ultra SPC products and that it was associated and shares an address with terminated Respondent JC Int'l Trading and the Global Wood Inc. store admitted it purchased the Ultra SPC products from JC Int'l Trading. See EDIS Doc. ID Nos. 678837, Global Wood Inc.'s Response to the Complaint and NOI, ¶214; 678835, JC Int'l Trading and RC Vinyl's Response to the Complaint and NOI, ¶¶ 213-214.

RC Vinyl's Ultra SPC products are linked to the Global Wood Inc. location where complainants purchased the accused products. In particular, terminated respondent RC Vinyl admitted it was an importer of the accused Ultra SPC products and that it was associated with and shares an address with terminated respondent JC Int'l Trading. *See* EDIS Doc. ID No. 678835, JC Int'l Trading and RC Vinyl's Response to the Complaint and NOI, ¶¶ 213-214. Additionally, the Global Wood Inc. store admitted it purchased the Ultra SPC products from JC Int'l Trading. *See* EDIS Doc. ID 678837, Global Wood Inc.'s Response to the Complaint and NOI, ¶ 214.

Moreover, Datamyne importation records identify defaulting respondents Go-Higher, Lejia, and Runchang as the "Shipper"<sup>5</sup> of products having a short form description matching those typically used for LVT Flooring from China to RC Vinyl at an address near and, in fact, on the same street as the Global Wood Inc. store where complainants purchased the accused Ultra SPC products. Ex. B (Schuster Decl.), ¶ 12; Ex. B-11; Compl. Ex. 54, ¶ 32-33, Attachments J1, J2.

Thus, the direct and circumstantial evidence as to the Ultra SPC products, when combined, provides reliable, probative and substantial evidence that defaulting Runchang, Lejia, and Go-Higher respondents sold the accused Ultra SPC products for importation into the United States, satisfying the importation requirement.

<sup>&</sup>lt;sup>5</sup> Based upon his experience and industry knowledge, Mr. Shuster declared that companies identified as "shippers" in Datamyne are manufacturers or they are companies that purchase from a manufacturer to re-sell the product. Ex. B (Schuster Decl.), ¶ 12. Changzhou Runchang is a company that manufactures LVT flooring product in China. *Id.* Go-Higher Trading is a company in China that purchases and re-sells LVT flooring. *Id.* 

### 5. EZ Go, Premier Flooring, and Top Flooring Accused Products and Defaulting Respondents ABK, Maxwell Flooring and Sam Houston

The evidence shows that complainants purchased the accused EZ Go,<sup>6</sup> Premier Flooring, and Top Flooring accused products from defaulting respondent Maxwell Flooring store in Texas. Ex. B (Schuster Decl.), ¶¶ 10, 14, 18; Ex. C ([ ] Decl.), ¶¶ 2-5; Ex. C-1 (receipt for Premier Flooring purchase); Ex. C-2 (photographs of Premier Flooring); Ex. C-3 (receipt for Top Flooring purchase); Ex. C-4 (photographs of Top Flooring); Compl. Ex. 54, ¶ 10, Attachment C1.

The EZ Go, Premier Flooring, and Top Flooring products and their packaging do not indicate their country of origin and there is no other direct evidence of importation.

Ex. C ([ ] Decl.), ¶ 2-5; Ex. C-1 (receipt for Premier Flooring purchase); Ex. C-2

(photographs of Premier Flooring); Ex. C-3 (receipt for Top Flooring purchase); Ex. C-4

(photographs of Top Flooring); Compl. Ex. 54, ¶ 10, Attachment C1.

Complainants have nevertheless provided circumstantial evidence that these accused products have been imported, likely from China. First, there is evidence showing that, if applicable, LVT flooring products typically display "Made in the

<sup>&</sup>lt;sup>6</sup> Complainants' purchase of the EZ Go products from the Maxwell Flooring store was on May 4, 2017, which was prior to the March 19, 2019 issuance of the '655 patent that the products are accused of infringing. *See* Ex. C ([ ] Decl.), ¶ 2; Compl. Ex. 54, ¶ 10, Attachment C1. However, complainants have provided evidence that the same accused products were for sale at the Maxwell Flooring store on April 8, 2019, but a minimum purchase of 1000 sq. ft. was required. Ex. C ([ ] Decl.), ¶ 3. The evidence shows that, on September 30, 2019, complainants purchased additional EZ Go products that were supplied by Maxwell Flooring through the iDeal Floors website and had them shipped to a residence in Maryland. Ex. D (Kiepura Decl.), ¶¶ 2-4; Ex. D-1 (invoice for EZ Go purchase); Ex. D-2 (invoice for EZ Go purchase); Ex. D-3 (email from iDeal Floors sales representative with screen shot from the representative's computer showing that Maxwell Flooring is the supplier for iDeal Floors' EZ Go products); Ex. D-4 (photographs of the purchased EZ Go products).

U.S.A." or something similar, prominently on the product packaging, because such statements are highly marketable to consumers. Compl. Ex. 54A, ¶ 9; Ex. B (Schuster Decl.), ¶ 20. Moreover, Mr. Schuster declared that the absence of a country of origin is a common means of disguising the product's source that is used by manufacturers in the LVT industry, particularly in China. Ex. B (Schuster Decl.), ¶ 21.

Second, the evidence shows that the EZ Go and Top Flooring products are WPC products; and aside from IVC US, only two other companies currently are, or soon may be, manufacturing WPC products in the United States—Shaw Industries Group, Inc. and Nox Corporation—and both companies sell under specific branded product lines. Compl. Ex. 54A (Schuster Decl.), ¶¶ 8, 10; Ex. B (Schuster Decl.), ¶ 20. Likewise, the Premier Flooring product is a SPC product, and aside from IVC, only a few other companies make SPC in the United States: Nox Corporation, ROKplank Inc., Reward Flooring (a Galleher Company), and Armstrong Flooring, Inc. Ex. B (Schuster Decl.), ¶ 20. Those companies also sell under specific branded product lines. *Id.* The EZ Go, Top Flooring, and Premier Flooring products are not from one of the specific branded product lines. Compl. Ex. 54A (Schuster Decl.), ¶¶ 8, 10; Ex. B (Schuster Decl.), ¶ 20.

Third, as discussed above, complainants purchased the EZ Go, Premier Flooring, and Top Flooring products from Maxwell Flooring, and a search of importation records revealed that all LVT flooring imported to Maxwell Flooring's address originated in China. Ex. B (Schuster Decl.), ¶ 22. Furthermore, Maxwell Flooring's store has Chinese characters on the sign on its storefront. Ex. D-9; Ex. D-10; Ex. C ([ ] Decl.), ¶ 4.

The evidence, including evidence from business registration records, certificates of formation, the Texas Sales Taxpayer database, and importation records, shows that

defaulting respondent Maxwell Flooring is interrelated with the defaulting ABK and Sam Houston respondents. *See* Mem. at 28-31; Ex. B (Schuster Decl.), ¶¶ 9, 10; Ex. C

([ ] Decl.), ¶ 4; Ex. B-9; Ex. C-1; Ex. C-3; Ex. D-8; Ex. D-9; Ex. D-10; Ex. D-11; Compl. Ex. 54, ¶¶ 2, 10, 11, Attachments C1, C2; Compl. Ex. 57; Ex. F-135; Ex. F-136 (Maxwell Flooring Accurint Business Report) at 1-3; Ex. F-137 (ABK Certificate of Formation).

Based on the above, it is determined that there is reliable, probative, and substantial evidence with respect to the EZ Go, Premier Flooring and Top Flooring products that the importation requirement necessary for finding a violation of section 337 has been met for defaulting respondents Maxwell Flooring, ABK, and Sam Houston.

# 6. WaterGuard Accused Products and Defaulting Respondents Aurora Flooring and Mr. Hardwood

The evidence shows that complainants purchased the WaterGuard accused products from defaulting respondent Mr. Hardwood's store in Acworth, Georgia. Ex. B (Schuster Decl.), ¶ 11; Ex. C ([ ] Decl.), ¶¶ 6, 7; Compl. Ex. 54, ¶ 7, Attachment B1; Compl. Ex. 54B, ¶ 2, Attachment B1. Packing slips attached to the invoices for the purchased WaterGuard accused products indicate that the products were billed and shipped to Mr. Hardwood from defaulting respondent Aurora, located at 1920 Shiloh Road, Building 5, Kennesaw, Ga. *Id.* Further, [ ] declared that a representative from Mr. Hardwood sent him to Aurora's address to pick up the accused WaterGuard products. Ex. C ([ ] Decl.), ¶¶ 6, 7.

The WaterGuard products and their packaging do not indicate their country of origin and there is no other direct evidence of importation. *See* Ex. B (Schuster Decl.), ¶

11; Ex. C ( Decl.), ¶¶ 6, 7; Compl. Ex. 54, ¶ 7, Attachment B1; Compl. Ex.

54B, ¶ 2, Attachment B1. Complainants, however, have provided circumstantial evidence that the WaterGuard accused products have been imported, likely from China. First, as discussed above, there is evidence showing that, when applicable, LVT flooring products typically display "Made in the U.S.A." or something similar, prominently on the product packaging, because such statements are highly marketable to consumers. Compl. Ex. 54A, ¶ 9; Ex. B (Schuster Decl.), ¶ 20. Moreover, Mr. Schuster declared that the absence of a country of origin is a common means of disguising the product's source that is used by manufacturers in the LVT industry, particularly in China. Ex. B (Schuster Decl.), ¶ 21.

Second, the evidence shows that the WaterGuard accused products are WPC products; and aside from IVC US, only two other companies currently are, or soon may be, manufacturing WPC products in the United States, Shaw Industries Group, Inc. and Nox Corporation, and both companies sell under specific branded product lines. *See* Compl. Ex. 54A (Schuster Decl.), ¶¶ 8, 10; Ex. B (Schuster Decl.), ¶ 20. The WaterGuard products are not from one of those specific branded product lines. Compl. Ex. 54A (Schuster Decl.), ¶¶ 8, 10; Ex. B (Schuster Decl.), ¶ 20.

Third, as discussed above, complainants purchased the WaterGuard products from defaulting respondent Mr. Hardwood and picked them up from defaulting respondent Aurora. Ex. B (Schuster Decl.), ¶ 11; Ex. C ([ ] Decl.), ¶¶ 6, 7. Searches of importation records revealed that all LVT flooring imported to Aurora's address originated in China. *See* Ex. B (Schuster Decl.), ¶¶ 11, 22; Ex. B-10; Compl. Ex. 54, Attachment B2.

Accordingly, there is reliable, probative, and substantial evidence with respect to the WaterGuard products that the importation requirement for finding a violation of section 337 has been met for defaulting respondents Mr. Hardwood and Aurora.

# 7. NSG Hospitality Accused Products and Defaulting Respondent Lejia

Complainants purchased the NSG Hospitality Products from a National Stone Gallery store located in Texas. *See* Ex. B (Schuster Decl.), ¶ 15; Ex. C ([ ] Decl.), ¶ 9; Ex. C-5; Ex. C-6.

The NSG Hospitality products and their packaging do not indicate their country of origin and there is no other direct evidence of importation. *See* Ex. B (Schuster Decl.), ¶¶ 15, 16; Ex. C ([ ] Decl.), ¶ 9; Ex. C-5; Ex. C-6. However, complainants provided circumstantial evidence that the NSG accused products have been imported, likely from China. First, as discussed above, there is evidence showing that, when applicable, LVT flooring products typically display "Made in the U.S.A." or something similar, prominently on the product packaging, because such statements are highly marketable to consumers. Compl. Ex. 54A, ¶ 9; Ex. B (Schuster Decl.), ¶ 20. Moreover, Mr. Schuster declared that the absence of a country of origin is a common means of disguising the product's source that is used by manufacturers in the LVT industry, particularly in China. Ex. B (Schuster Decl.), ¶ 21.

Second, the evidence shows that the NSG Hospitality products are SPC products, and aside from IVC, only a few other companies make SPC in the United States, Nox Corporation, ROKplank Inc., Reward Flooring (a Galleher Company), and Armstrong Flooring, Inc.. Ex. B (Schuster Decl.), ¶ 20. Those companies also sell under specific

branded product lines. *Id.* The NSG Hospitality products are not from one of those specific branded product lines. Ex. B (Schuster Decl.), ¶ 20.

Third, as discussed above, complainants purchased the NSG Hospitality products from the National Stone Gallery store in Texas. *See* Ex. B (Schuster Decl.), ¶ 15; Ex. C

[] Decl.), ¶ 9; Ex. C-5. Searches of importation records revealed that all LVT flooring imported to Aurora's address originated in China. *See* Ex. B (Schuster Decl.), ¶ 16, 22; Suppl. Ex. B. (Schuster Suppl. Decl.), ¶ 2; Ex. B-1.

As with several of the other accused products, complainants' market research team, after a search of importation information in the Descartes Datamyne database, uncovered evidence of a link between the National Stone Gallery store where the accused products were purchased and defaulting respondent Lejia. *See* Ex. B (Schuster Decl.), ¶ 16; Ex. B-1. Specifically, the Datamyne search revealed that Lejia is the only company that ships products having a short container description matching those typically used in the industry for LVT flooring to a National Stone Gallery store where the accused products were purchased. *See* Ex. B (Schuster Decl.), ¶ 16; Ex. B-1 (yellow annotations).

Thus, there is reliable, probative, and substantial evidence that the importation requirement has been satisfied with respect to defaulting respondent Lejia and the NSG Hospitality Products.

### 8. Quickstyle and Uniflor Aqua Products

In connection with complainants' request for a general exclusion order, complainants assert that two additional products from non-respondents (the Quickstyle and Uniflor Aqua products) infringe the asserted patents. The evidence shows that these additional products are imported into the United States.
As to the Quickstyle products, the evidence shows that complainants' purchased the products in Florida in July 2019 and, as seen below, the packaging indicates that the products were "Made in PRC," referring to the "People's Republic of China." *See* Ex. C ([ ] Decl.), ¶ 14; Ex. C-9 (receipt for Quickstyle and Uniflor Aqua products); Ex.

C-10 (photographs of Quickstyle products).



With respect to the Uniflor Aqua products, the evidence shows that complainants purchased these products in Florida. Ex. C ([ ] Decl.), ¶ 14; Ex. C-9 (receipt for Quickstyle and Uniflor Aqua products); Ex. C-11 (photographs of Uniflor Aqua products).

The Uniflor Aqua products and their packaging do not indicate their country of origin and there is no other direct evidence of importation. Ex. B (Schuster Decl.), ¶ 19; Ex. C ([ ] Decl.), ¶ 14; Ex. C-9; Ex. C-11. Nonetheless, complainants have

provided circumstantial evidence that the Unifllor Aqua products were imported, likely from China. First, as discussed above, there is evidence showing that, when applicable, LVT flooring products typically display "Made in the U.S.A." or something similar, prominently on the product packaging, because such statements are highly marketable to consumers. Compl. Ex. 54A, ¶ 9; Ex. B (Schuster Decl.), ¶ 20. Moreover, Mr. Schuster declared that the absence of a country of origin is a common means of disguising the product's source that is used by manufacturers in the LVT industry, particularly in China. Ex. B (Schuster Decl.), ¶ 21.

Second, the evidence shows that the Uniflor Aqua products are WPC products; and aside from IVC US, only two other companies currently are, or soon may be, manufacturing WPC products in the United States, Shaw Industries Group, Inc. and Nox Corporation, and both companies sell under specific branded product lines. *See* Compl. Ex. 54A (Schuster Decl.), ¶ 10; Ex. B (Schuster Decl.), ¶ 20. The Uniflor Aqua products are not from one of those specific branded product lines. Compl. Ex. 54A (Schuster Decl.), ¶ 10; Ex. B (Schuster Decl.), ¶ 20.

Third, as discussed above, complainants purchased the Uniflor Aqua products from a location in Texas. *See* Ex. B (Schuster Decl.), ¶ 19; Ex. C ([ ] Decl.), ¶ 14; Ex. C-9. Using information from the product packaging and online, complainants determined that the Uniflor Aqua products were imported by a company known as Custom Wholesale Floors, Inc. Moreover, searches of importation records revealed that the only company that ships products to Custom Wholesale Floors, Inc. having a short container description matching those typically used in industry for LVT flooring is

Changzhou Yongfeng Packing Material and those products originated in China. *See* Ex. B (Schuster Decl.), ¶ 19; Ex. B-16.

Thus, the evidence shows that the Quickstyle and Uniflor Aqua products have been imported into the United States.

\* \* \*

In sum, the evidence shows that the importation requirement for finding a violation of section 337 has been met for each of the defaulting respondents and that the non-respondent Quickstyle and Uniflor products are also imported products.

# IV. General Principles of Applicable Law

# A. Summary Determination

Section 337 prohibits "[t]he importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles that (i) infringe a valid and enforceable United States patent ...." 19 U.S.C. § 1337(a)(1)(B). A complainant need only prove importation of a single accused product to satisfy the importation element. *See Certain Trolley Wheel Assemblies*, Inv. No. 337-TA-161, Comm'n Op. at 7-8, USITC Pub. No. 1605 (Nov. 1984).

The Commission Rules provide that "[a]ny party may move with any necessary supporting affidavits for a summary determination in its favor upon all or part of the issues to be determined in the investigation. 19 C.F.R. § 210.18(a). Summary determination "shall be rendered if pleadings and any depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that

there is no genuine issue as to any material fact and that the moving party is entitled to summary determination as a matter of law." 19 C.F.R. § 210.18(b).

# **B.** Patent Claim Construction

Claim construction begins with the plain language of the claim.<sup>7</sup> Claims should be 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.<sup>8</sup> *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).

In some instances, claim terms do not have particular meaning in a field of art, and claim construction involves little more than the application of the widely accepted meaning of commonly understood words. *Phillips*, 415 F.3d at 1314. "In such circumstances, general purpose dictionaries may be helpful." *Id*.

In many cases, claim terms have a specialized meaning, and it is necessary to determine what a person of skill in the art would have understood the disputed claim language to mean. "Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to 'those sources available to the public that show

<sup>&</sup>lt;sup>7</sup> Only those claim terms that are in controversy need to be construed, and 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. American Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

<sup>&</sup>lt;sup>8</sup> Factors that may be considered when determining the level of ordinary skill in the art include: "(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field." *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983), *cert. denied*, 464 U.S. 1043 (1984).

what a person of skill in the art would have understood disputed claim language to mean."" *Phillips*, 415 F.3d at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). The public sources identified in *Phillips* include "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.* (quoting *Innova*, 381 F.3d at 1116).

In cases in which the meaning of a claim term is uncertain, the specification usually is the best guide to the meaning of the term. *Phillips*, 415 F.3d at 1315. As a general rule, the particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). The specification is, however, always highly relevant to the claim construction analysis, and is usually dispositive. *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). 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.

## C. Patent Infringement

Under 35 U.S.C. §271(a), direct infringement consists of making, using, offering to sell, or selling a patented invention without consent of the patent owner. The complainant in a section 337 investigation bears the burden of proving infringement of the asserted patent claims by a "preponderance of the evidence." *Certain Flooring Products*, Inv. No. 337-TA-443, Comm'n Notice of Final Determination of No Violation

of Section 337, 2002 WL 448690, at \*59, (Mar. 22, 2002); *Enercon GmbH v. Int'l Trade Comm'n*, 151 F.3d 1376 (Fed. Cir. 1998).

Literal infringement of a claim occurs when every limitation recited in the claim appears in the accused device, *i.e.*, when the properly construed claim reads on the accused device exactly.<sup>9</sup> *Amhil Enters., Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996); *Southwall Tech. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed Cir. 1995).

# **D. Domestic Industry**

A violation of section 337(a)(1)(B), (C), (D), or (E) can be found "only if an

industry in the United States, with respect to the articles protected by the patent,

copyright, trademark, mask work, or design concerned, exists or is in the process of being

established." 19 U.S.C. § 1337(a)(2). Section 337(a) further provides:

(3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—

(A) significant investment in plant and equipment;

(B) significant employment of labor or capital; or

(C) substantial investment in its exploitation, including engineering, research and development, or licensing.

19 U.S.C. § 1337(a)(3).

<sup>&</sup>lt;sup>9</sup> 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). If an accused device lacks a limitation of an independent claim, the device cannot infringe a dependent claim. *See Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989).

These statutory requirements consist of an economic prong (which requires certain activities)<sup>10</sup> and a technical prong (which requires that these activities relate to the intellectual property being protected). *Certain Stringed Musical Instruments and Components Thereof*, Inv. No. 337-TA-586, Comm'n Op. at 13 (May 16, 2008) ("*Stringed Musical Instruments*"). The burden is on the complainant to show by a preponderance of the evidence that the domestic industry requirement is satisfied. *Certain Multimedia Display and Navigation Devices and Systems, Components Thereof*, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. at 5 (July 22, 2011).

"With respect to section 337(a)(3)(A) and (B), the technical prong is the requirement that the investments in plant or equipment and employment in labor or capital are actually related to 'articles protected by' the intellectual property right which forms the basis of the complaint." *Stringed Musical Instruments*, Comm'n Op. at 13-14. "The test for satisfying the 'technical prong' of the industry requirement is essentially same as that for infringement, i.e., a comparison of domestic products to the asserted claims." *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003). "With respect to section 337(a)(3)(C), the technical prong is the requirement that the activities

<sup>&</sup>lt;sup>10</sup> The Commission practice is usually to assess the facts relating to the economic prong at the time that the complaint was filed. *See Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same*, Inv. No. 337-TA-560, Comm'n Op. at 39 n.17 (Apr. 14, 2010) ("We note that only activities that occurred before the filing of a complaint with the Commission are relevant to whether a domestic industry exists or is in the process of being established under sections 337(a)(2)-(3).") (citing *Bally/Midway Mfg. Co. v. U.S. Int'l Trade Comm'n*, 714 F.2d 1117, 1121 (Fed. Cir. 1983)). In some cases, however, the Commission will consider later developments in the alleged industry, such as "when a significant and unusual development occurred after the complaint has been filed." *See Certain Video Game Systems and Controllers*, Inv. No. 337-TA-743, Comm'n Op., at 5-6 (Jan. 20, 2012) ("[I]n appropriate situations based on the specific facts and circumstances of an investigation, the Commission may consider activities and investments beyond the filing of the complaint.").

of engineering, research and development, and licensing are actually related to the asserted intellectual property right." *Stringed Musical Instruments*, Comm'n Op. at 13.

With respect to the economic prong, and whether or not section 337(a)(3)(A) or (B) is satisfied, the Commission has held that "whether a complainant has established that its investment and/or employment activities are significant with respect to the articles protected by the intellectual property right concerned is not evaluated according to any rigid mathematical formula." *Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Comm'n Op. at 27 (Feb. 17, 2011) ("Printing and *Imaging Devices*") (citing *Certain Male Prophylactic Devices*, Inv. No. 337 TA-546, Comm'n Op. at 39 (Aug. 1, 2007)). Rather, the Commission examines "the facts in each investigation, the article of commerce, and the realities of the marketplace." *Id.* "The determination takes into account the nature of the investment and/or employment activities, 'the industry in question, and the complainant's relative size.'" *Id.* (citing *Stringed Musical Instruments* at 26).

The Commission has rejected a finding of quantitative significance based solely on the absolute value of the domestic industry investments devoid of any context. A contextual analysis is required. The analysis may include a discussion of the value of 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. *See Certain Carburetors and Products Containing Such Carburetors*, Inv. No. 337-TA-1123, Comm'n Op. at 18 (Oct. 28, 2019).

## E. Default

"In any motion requesting the entry of default or the termination of the investigation with respect to the last remaining respondent in the investigation, the complainant shall declare whether it is seeking a general exclusion order." 19 C.F.R. § 210.16(b)(4)(2). "A party found in default shall be deemed to have waived its right to appear, to be served with documents, and to contest the allegations at issue in the investigation." 19 C.F.R. § 210.16(b)(4). After a respondent has been found in default by the Commission, "[t]he facts alleged in the complaint will be presumed to be true with respect to the defaulting respondent." 19 C.F.R. § 210.16(c).

# V. U.S. Patent No. 9,200,460

The '460 patent, entitled "Floor Covering, Floor Element and Method for Manufacturing Floor Elements," issued on December 1, 2015, to inventor Mark Cappelle. The '460 patent issued from U.S. Patent Application Serial No. 14/672,437, filed on March 30, 2015, and expires on March 22, 2027. The '460 patent has 30 claims, 2 of which are independent claims. *See* Ex. A-1 ('460 Patent). Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '460 patent. *See* Complaint Ex. 4 (certified assignment record).

Complainants assert claims 7-8, 13, 15-17, 20-23, and 30 of the '460 patent. Mem. at 10.

## A. Dr. Scott's Testing Methods

Dr. Scott, complainants' technical expert, conducted numerous tests on the accused products and domestic industry products. *See* Mem. at 41-45; Ex. A (Scott

Decl.), ¶¶ 60-86.<sup>11</sup> Complainants provided a summary of the various tests Dr. Scott conducted. *See* Mem. at 41-45. Additional details regarding the tests described below, and how those tests support Dr. Scott's product analysis, are included in the declaration of Dr. Scott and supporting appendices.

# 1. Visual Inspection

Individual panels and the boxes in which they were obtained were inspected visually. *See* Ex. A (Scott Decl.),  $\P$  61. The surfaces and sides of the panels were inspected. Product panels were photographed, measured for thickness using a caliper, and measured for length, and width using a tape measure. *Id.* 

# 2. Optical Microscopy (OM)

Optical Microscopy ("OM") testing was performed using a Carl Zeiss SteREO Discovery V12 stereomicroscope. *See* Ex. A (Scott Decl.), ¶ 62. Panels were cut using a table saw so that panel cross-sections could be observed and photographed. *Id.* Panel cross-section were measured and photographed using the onboard digital camera. *Id.* 

## 3. Computerized Tomography (CT) Scanning

Computerized tomography ("CT") scanning utilizes X-rays to probe and document the geometry and structure of an object. *See* Ex. A (Scott Decl.), ¶ 63. The results of the CT scan include a digital three-dimensional representation of the panel and its interior. *Id.* 

The CT scans allowed each panel and its layers to be visualized, examined, and measured. *See* Ex. A (Scott Decl.), ¶ 64. For example, layers of different composition

<sup>&</sup>lt;sup>11</sup> As noted, citations to exhibits refer to exhibits to the pending motion and memorandum thereto unless noted otherwise.

like solid layers, foam layers, glue layers, and filled layers were identified. Layer thicknesses were measured from the images using caliper software. CT scanning was also used to measure the volume fraction of solid material of different portions through the thickness of foamed substrates. *See* Ex. A (Scott Decl.),  $\P$  65. For each region the software was utilized to calculate the total volume examined and the volume of solid (non-void) material. *Id*. The distinction between solid and void was determined by the software through a threshold isosurface value. *Id*. The ratio of the solid volume to the total volume is the volume fraction of solid material in that portion. *Id*.

# 4. Scanning Electron Microscopy (SEM) and Energy Dispersive X-ray Spectroscopy (EDS)

Scanning electron microscopy ("SEM") and energy dispersive X-ray spectroscopy ("EDS") were used to probe the microstructure of products. *See* Ex. A (Scott Decl.), ¶ 66. A scanning electron microscope uses electrons to image materials at high magnifications. Specimens were generally examined and photographed over a range of magnifications from 30x to 3,000x. *Id.* EDS is used to probe the elemental composition of portions of samples using X-rays. *Id.* 

# 5. Fourier Transform Infrared (FTIR) Spectroscopy

Panels were dissected, and the layers were tested by Fourier transform infrared ("FTIR") spectroscopy. *See* Ex. A (Scott Decl.), ¶¶ 74-76. Fourier transform infrared spectroscopy is an analytical technique used for testing the composition of materials. *Id.* ¶ 74. This instrument measures the interaction of infrared waves with the chemical structure of the constituents of a sample. The results are presented as a spectrum with

"Wavenumbers (cm<sup>-1</sup>)" on the x-axis and "Absorbance" on the y-axis. The infrared spectra were used to identify the major components of each layer tested. *Id*.

# 6. Density Measurements

Densities of product portions were calculated from measurements of the volume and mass of each portion. *See* Ex. A (Scott Decl.), ¶¶ 77-79. Each portion to be tested was cut as a rectangular specimen from a product panel. *Id.* ¶ 77. The mass of layer(s) was either measured directly or calculated by difference (before and after layer removal). *Id.* ¶¶ 77-78.

# 7. Thermal Gravimetric Analysis (TGA)

The substrates of certain products were tested using thermal gravimetric analysis ("TGA"). This is an analytical technique used for testing the inorganic content of composite materials. *See* Ex. A (Scott Decl.), ¶ 80. A specimen is slowly heated from room temperature to 750° C while its mass is precisely measured. The test results show thermal decomposition and combustion of the specimen along with its resulting loss of mass as the temperature is increased. *Id*.

# 8. Gas Chromatography-Mass Spectroscopy (GC-MS)

The back layer of selected products was tested using gas chromatography – mass spectroscopy (GC-MS). This is an analytical technique used for testing for the presence of chemicals, especially additives, in plastic parts. *See* Ex. A (Scott Decl.), ¶ 81. This method uses gas chromatography to separate the specimen into individual components and then mass spectroscopy to analyze each component. *Id.* The results of the test were analyzed using the National Institute of Standards and Technology (NIST) 2008 Mass Spectral Library to identify specific chemicals detected in the sample. *Id.* 

# 9. Circumference Analysis

Circumferences of coupling parts were measured on cross-sections of long side joints. In each case the circumference was measured on both the male side and female side of the joint. The figure below shows the analyses for both sides of the coupling parts. The top layer circumference is marked in red, the foamed PVC board in yellow, and the backing layer in blue.





See Ex. A (Scott Decl.), ¶ 82

## **10.** Gas Infiltration

Open cell content of selected foam substrates was measured by a gas infiltration method. Testing was guided by ASTM D6226-15 "Standard Test Method for Open Cell Content of Rigid Cellular Plastics." *See* Ex. A (Scott Decl.), ¶ 85. This test method is based on a determination of the accessible cellular volume of a cellular plastic that can be permeated by the gas. *Id.* This test method is suitable in the context of flooring panels due to the similarity of the test methodology (permeation of the specimen by a gas) to the actual application (permeation of a floor panel by air, moisture, or water). The remaining un-accessible volume is that occupied by closed cells and cell walls. *Id.* 

## **B.** Claim Construction

## 1. A Person of Ordinary Skill in the Art

Complainants, the Staff, and terminated respondents proposed very similar education and experience levels for a person of ordinary skill in the art at the time of the claimed invention. *See* Ex. A (Scott Decl.) at 19-21. The differences are not significant for purposes of deciding the issues on the merits in this investigation.

Thus, as proposed by complainants, the administrative law judge has determined that a person of ordinary skill in the art at the time of the claimed invention would have either (i) an undergraduate degree in mechanical engineering, materials science or engineering, polymer science, engineering arts, or an equivalent field, and a minimum two years of practical experience in the design, development, analysis or manufacturing of polymer-based structures, or (ii) a minimum of four years of practical experience in polymer-based floor covering design, development, analysis, or manufacturing. *See id.* at 19-20.

# 2. Claim Construction

As noted, complainants assert claims 7-8, 13, 15-17, 20-23, and 30 of the '460

patent. Mem. at 10.

Asserted independent claim 7 is recited below:

7. Floor covering, consisting of floor elements, which, at least at a first pair of two opposite sides, comprise coupling parts, which substantially are performed as a male coupling part and a female coupling part, which are provided with vertically active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in vertical direction, perpendicular to a plane of the floor covering, and also are provided with horizontally active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in horizontal

direction, perpendicular to the respective sides and in the plane of the floor covering, wherein said coupling parts are of a type allowing that two of such floor elements can be connected to each other at said sides by pushing one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element;

- wherein said floor elements comprise at least a substrate; wherein said substrate substantially consists of a filled synthetic material composite; wherein said substrate forms at least one side of said first pair of opposite sides, such that at least one of said coupling parts, either the male coupling part or the female coupling part, is at least partially made of said filled synthetic material composite;
- wherein the floor elements have a second pair of opposite sides, which also are provided with mutually cooperating coupling parts, which substantially are made as a male and a female coupling part, which are provided with vertically active locking portions and horizontally active locking portions; and wherein the coupling parts of the second pair of opposite sides allow that two of such floor elements can be interconnected at this pair of sides by providing one of these floor elements with the male coupling part, by means of a turning movement, in the female coupling part of the other floor element.

Ex. A-1 ('460 Patent).

The parties disputed three claim terms for the '460 patent. See Mem. at 45-54;

Staff Resp. at 43-44; Joint Claim Construction Chart (EDIS Doc. ID No. 687360); Staff's

Claim Construction Brief (EDIS Doc. ID No. 688498).

The proposed constructions for the three disputed claim terms are set forth in the

table below. See Mem. at 45-47; Staff Resp. at 43.

Claim Term	Complainants' Construction	Terminated Respondents' Construction <sup>12</sup>	Staff's Construction
"by pushing" (claim 7)	Plain and ordinary meaning: "by exerting a force on"	"by exerting a steady force on"	Plain and ordinary meaning: "by exerting a force on"
"filled synthetic material composite" (claim 7)	"a composite having a matrix formed of a synthetic material and filler contained within that matrix"	"a composite having a matrix formed of a synthetic material and filler contained within that matrix"	The Staff no longer believes that this term requires construction. If construction is necessary, however, it should be construed as "a composite having a matrix formed of a synthetic material and filler contained within that matrix."
"said substrate substantially consists of a filled synthetic material composite" (claim 7)	Plain and ordinary meaning: "the substrate is substantially made up of a filled synthetic material composite"	"the substrate includes only the filled synthetic material composite and acceptable levels of impurity"	The Staff no longer believes that this term requires construction. If construction is necessary, however, the term should be given its plain and ordinary meaning, which is "the substrate is substantially composed of a filled synthetic material composite."

# a. "by pushing" (Claim 7)

The claim term "by pushing" appears in asserted independent claim 7 of the '460

patent. See Ex. A-1 ('460 Patent) cl. 7. Complainants and the Staff agree that the "by

<sup>&</sup>lt;sup>12</sup> The terminated respondents were terminated after they submitted their proposed claim constructions but were no longer active in this investigation when the responses to the pending motion were due. Nonetheless, their proposed constructions are included for the sake of completeness.

pushing" term should be given its plain and ordinary meaning, and that a person of skill in the art would understand that meaning to be "by exerting a force on." *See* Mem. at 47-52; Staff Resp. at 43-44; Ex. A-6 (Joint Claim Construction Chart) at 7. The terminated respondents, on the other hand, previously proposed this term be construed as "by exerting a *steady* force on." *Id*.

The term "by pushing" is part of the larger phrase "floor elements can be connected to each other at said sides by pushing one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element." Ex. A-1 ('460 Patent) cl. 7. As is seen by this phrase, the "by pushing . . . by means of a downward movement" language describes a coupling method that can be used to connect the male and female coupling parts of two floor elements. In particular, the male coupling part of one floor element is pushed down into the female coupling part of another floor element. *Id.*; *id.* at Abstract; 1:58-64; 11:65-12:13; 12:24-36; 14:4-29; 14:53-15:9; 16:31-41; 17:62-18:14; 18:66-19:13; 19:19-47; 27:44-50; 28:14-33; claims 1, 7; and Figs. 3-6.

This type of coupling part is well known as "push-lock," "fold-down," or "droplock" inasmuch as the coupling parts are designed to allow for connection using a downward movement. Ex. A (Scott Decl.), ¶ 153. "Push-lock" type coupling parts are distinguished from other types of coupling parts known as "angle" or "snap." *See id.*; Ex. K (Gould Decl.), ¶¶ 38-41. Angle-type coupling parts are designed to allow coupling using a "turning" or "pivoting" movement, and snap-type coupling parts allow coupling using a horizontal movement where one element is moved horizontally into the other. Ex. K (Gould Decl.), ¶¶ 36-37. The claim language at issue therefore describes the type

of coupling part by explaining that the parts allow for installation by pushing the male part into a female part using a downward movement. Nothing in the claims recite how that movement must be accomplished, or how much force is required. Ex. A (Scott Decl.), ¶ 153.

The terminated respondents proposed a construction whereby claim 7 requires "floor elements can be connected to each other at said sides [by exerting a steady force on] one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element." *See* Ex. A-6 (Joint Claim Construction Chart) at 7.

The Staff argues that "in this instance and consistent with the intrinsic evidence, the plain and ordinary meaning of the 'by pushing' term refers to the exertion of 'a' singular force on the floor element. Staff Resp. at 44 (emphasis in original). Complainants disagree with the Staff on this particular issue.

As argued by complainants, this further limitation appears to be incorrect, as there is nothing in the claims or specification that would be understood by a person of ordinary skill in the art to require that the coupling parts be connected using only a single movement. *See* Ex. A (Scott Decl.), ¶ 159. For instance, although the specification which describes a "single movement, namely the turning movement W" (Staff Br. at 12), this movement refers to a movement of the floor element as a whole and is meant only to distinguish between other known locking systems, such as "angle-snap." *See* Ex. A (Scott Decl.), ¶ 159; Ex. K (Gould Decl.), ¶¶ 39. In the claimed "push-lock" system, it is the "single turning movement" of the floor element (as a whole) at the long side of the floor element that creates the downward movement on the short side and is used to

couple both the long and short side to floor elements that are already installed, but nothing in the claims or specification limits the force necessary to push the male coupling part into the female coupling part as part of the downward movement to a "singular force." *See id.* 

Accordingly, as proposed by complainants and the Staff, the administrative law judge construes the claim term "by pushing" as "by exerting a force on." However, the force need not be a singular force.

# b. "filled synthetic material composite" (Claim 7)

The parties agreed that if it is determined that "filled synthetic material composite" should be construed, it should be construed as "a composite having a matrix formed of a synthetic material and filler contained within that matrix." Mem. at 52-53; Staff Resp. at 44; Ex. A-6 (Joint Claim Construction Chart) at 7.

Thus, as proposed by the parties, the administrative law judge construes the claim term "filled synthetic material composite" as "a composite having a matrix formed of a synthetic material and filler contained within that matrix."

# c. said substrate substantially consists of a filled synthetic material composite" (Claim 7)

Complainants and the Staff agree that "said substrate substantially consists of a filled synthetic material composite" should be construed as "the substrate is substantially made up of (or composed of) a filled synthetic material composite." Mem. at 53-54; Staff Resp. at 44; Ex. A-6 (Joint Claim Construction Chart) at 7. The terminated respondents proposed a construction whereby claim 7 requires only acceptable levels of impurity.

To the extent that terminated respondents construction allows for only a single synthetic, a single filler, and acceptable levels of impurity, such construction is incorrect. *See* Ex. A (Scott Decl.), ¶ 168. The construction of "filled synthetic material composite" does not exclude for example the presence of multiple synthetics and/or multiple fillers. *Id.* Thus, a substrate that has multiple synthetics or multiple fillers can be a "filled synthetic material composite" so long as it is a composite having a matrix formed of a synthetic material and filler contained within that matrix." *Id.* Indeed, the '460 patent explicitly contemplates multiple fillers such as wood fibers, wood chips, hemp fibers, glass fiber, carbon fibers and the like. *See* Ex. A-1 ('460 Patent) at 12:37-58.

Accordingly, as proposed by complainants and the Staff, the administrative law judge construes the claim term "said substrate substantially consists of a filled synthetic material composite" as "the substrate is substantially made up of (or composed of) a filled synthetic material composite."

# C. Infringement Analysis of the '460 Patent

As noted, complainants assert claims 7-8, 13, 15-17, 20-23, and 30 of the '460 patent. Mem. at 10.

As discussed above, with its motion, complainants submitted a declaration from their expert, Dr. Scott, detailing his opinions after analysis and extensive testing conducted by him or at his direction of the defaulting respondents' accused luxury vinyl tiles.

Dr. Scott is the president of Material Answers LLC, a technical consulting firm

specializing in material science and engineering. *See* Ex. A (Scott Decl.), ¶ 7; Ex. A-4.<sup>13</sup> Dr. Scott conducted and directed a variety of extensive technical tests and analyses of the defaulting respondents' accused products, including the Adventure II, Sorrento Niagara, Antigua WPC, Ultra SPC, EZ Go, Premier Flooring, Top Flooring, WaterGuard, and NSG Hospitality accused products. Ex. A (Scott Decl.), ¶¶ 59-141. Further, Dr. Scott conducted and directed extensive testing of the Quickstyle and Uniflor Aqua products from non-respondents. Ex. A (Scott Decl.), ¶¶ 142-149.

Based on this testing and analyses, claim charts that contain Dr. Scott's detailed infringement analyses and include annotated photographs and test results accompany Dr. Scott's declaration. *See* Ex. A (Scott Decl.), ¶¶ 59, 99, 116, 129, 137, 141, 151-168, 186; Suppl. Ex. A (Scott Suppl. Decl.), ¶¶ 12-13; Ex. A-8 (Premier Flooring Chart); Ex. A-11 (Adventure II Chart); Ex. A-13 (NSG Hospitality Chart); Ex. 14 (Antigua WPC Chart); Ex. A-15 (Sorrento Niagara Chart). The claim charts provide an element by element explanation, of how, in the opinion of complainants' expert, the defaulting respondents' accused products meet every limitation of claims 7, 13, 15-17, 20-23, 30 of the '460 patent.<sup>14</sup> *See id.*; Mem. at 45-54, 61-86.

<sup>&</sup>lt;sup>13</sup> Dr. Scott is an expert in material science with an emphasis in material structure, properties, and processing, including thermoplastics and composites. *Id.* He holds a Ph.D. in Chemical Engineering from the University of Minnesota and a M.S. in Macromolecular Science and a B.S. in Chemical Engineering from Case Western Reserve University. *Id.* He was formerly a professor at the Massachusetts Institute of Technology (MIT), teaching courses on Polymer Processing and Materials Processing. *Id.* Dr. Scott has over 25 years of experience related to manufacturing, product development, and product design of systems including polymers, fillers, fibers, coatings, and adhesives, including related to composite flooring materials. *Id.* 

<sup>&</sup>lt;sup>14</sup> The claim chart for the accused Antigua WPC products shows that those products additionally infringe dependent claim 8. *See* Ex. A-14 at13-14.

Dr. Scott's analysis explains how, in his opinion, the accused products infringe the asserted claims under each of the proposed claim constructions for the three disputed claim terms, including the Staff's and the terminated respondents' proposed constructions. *See* Ex. A (Scott Decl.), ¶¶ 151-168; Ex. A-8 (Premier Flooring Chart); Ex. A-11 (Adventure II Chart); Ex. A-13 (NSG Hospitality Chart); Ex. 14 (Antigua WPC Chart); Ex. A-15 (Sorrento Niagara Chart); Mem. at 45-54.

\* \* \*

The '460 accused products include the following:

- Antigua WPC;
- Adventure II;
- Premier Flooring;
- NS Hospitality; and
- Sorrento Niagara.

The Staff argues that it "is not aware of any dispute as to the evidence offered by Dr. Scott and Complainants. The Staff is therefore of the view that Complainants are entitled to a summary determination of infringement as to the asserted claims of the '460 Patent." Staff Resp. at 47.

The table below, provided by the Staff, summarizes the results of Dr. Scott's analysis and his opinions with respect to the '460 patent. *See* Staff Resp. at 47; Ex. A (Scott Decl.), ¶¶ 59, 99, 116, 129, 137, 141, 151-168, 186; Suppl. Ex. A (Scott Suppl. Decl.), ¶¶ 12-13; Ex. A-8 (Premier Flooring Chart); Ex. A-11 (Adventure II Chart); Ex. A-13 (NSG Hospitality Chart); Ex. 14 (Antigua WPC Chart); Ex. A-15 (Sorrento Niagara Chart).

Accused Product	Defaulting Respondents	'460 patent	Claim Chart and Opinion
Premier Flooring	ABK Sam Houston Maxwell Flooring	Claims 7, 13, 15-17, 20-23, 30	Ex A, ¶¶ 93-99; 151- 168, 186; Ex. A-8
Adventure II	Mr. Hardwood	Claims 7, 13, 15-17, 20-23, 30	Ex A, ¶¶ 110-116, 151-168, 186; Ex. A-11
NSG Hospitality	Lejia	Claims 7, 13, 15-17, 20-23, 30	Ex A, ¶¶ 123-129, 151-168, 186; Suppl. Ex. A, ¶¶ 12-13 Ex. A-13
Antigua WPC	Divine Licheer	Claims 7, 8, 13, 15- 17, 20-23, 30	Ex A, ¶¶ 130-137, 151-168, 186; Suppl. Ex. A, ¶¶ 12-13 Ex. A-14
Sorrento Niagara	Divine Licheer	Claims 7, 13, 15, 17, 21-23, 30	Ex A, ¶¶ 138-141, 151-168, 186; Ex. A-15

An element by element infringement analysis for each of the products accused of infringing the '460 patent is discussed below.

# 1. Independent Claim 7

Independent claim 7 is directed to a "[f]loor covering, consisting of floor elements." *See* Ex. A-1 ('460 Patent) at 30:32. Visual inspection confirmed that the '460 accused products, which include the Antigua WPC, Adventure II, Premier Flooring, and NSG Hospitality products, are floor coverings consisting of floor elements. *See* Ex. A-14 (Antigua WPC); Ex. A-11 (Adventure II); Ex. A-8 (Premier Flooring); Ex. A-13 (NSG Hospitality); Ex. A-15 (Sorrento Niagara).

Asserted independent claim 7 is recited below:

- 7. Floor covering, consisting of floor elements, which, at least at a first pair of two opposite sides, comprise coupling parts, which substantially are performed as a male coupling part and a female coupling part, which are provided with vertically active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in vertical direction, perpendicular to a plane of the floor covering, and also are provided with horizontally active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in horizontal direction, perpendicular to the respective sides and in the plane of the floor covering, wherein said coupling parts are of a type allowing that two of such floor elements can be connected to each other at said sides by pushing one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element;
- wherein said floor elements comprise at least a substrate; wherein said substrate substantially consists of a filled synthetic material composite; wherein said substrate forms at least one side of said first pair of opposite sides, such that at least one of said coupling parts, either the male coupling part or the female coupling part, is at least partially made of said filled synthetic material composite;
- wherein the floor elements have a second pair of opposite sides, which also are provided with mutually cooperating coupling parts, which substantially are made as a male and a female coupling part, which are provided with vertically active locking portions and horizontally active locking portions; and wherein the coupling parts of the second pair of opposite sides allow that two of such floor elements can be interconnected at this pair of sides by providing one of these floor elements with the male coupling part, by means of a turning movement, in the female coupling part of the other floor element.

Ex. A-1 ('460 Patent).

- a. [7.a] which, at least at a first pair of two opposite sides, comprise coupling parts, which substantially are performed as a male coupling part and a female coupling part
  - i. Antigua WPC

Visual inspection and Optical Microscopy ("OM") testing confirmed that the Antigua WPC products contain a first pair of two opposite sides having a male coupling part and a female coupling part. *See* Ex. A-14 at '460 patent claim 7(a); Ex. A, Appx. 3 at SCOTT-A-3.2-004. For example, short sides of the floor elements have coupling parts that are either a male or female coupling part. *See id.* 

# ii. Adventure II

Visual inspection and OM testing confirmed that the Adventure II products contain a first pair of two opposite sides having a male coupling part and a female coupling part. *See* Ex. A-11 at '460 patent claim 7(a); Ex. A, Appx. 3 at SCOTT-A-3.2-028.

# iii. Premier Flooring

Visual inspection and OM testing confirmed that the Premier Flooring products contain a first pair of two opposite sides having a male coupling part and a female coupling part. *See* Ex. A-8 at '460 patent claim 7(a); Ex. A, Appx. 3 at SCOTT-A-3.2-032.

# iv. NSG Hospitality

Visual inspection and OM testing confirmed that the NSG Hospitality products contain a first pair of two opposite sides having a male coupling part and a female coupling part. *See* Ex. A-13 at '460 patent claim 7(a); Ex. A, Appx. 3 at SCOTT-A-3.2-030.

# v. Sorrento Niagara

Visual inspection and OM testing confirmed that the Sorrento Niagara products contain a first pair of two opposite sides having a male coupling part and a female coupling part. *See* Ex. A-15 at '460 claim 7(a); Ex. A, Appx. 3 at SCOTT-A-3.2-050.

# b. [7.b] which are provided with vertically active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in vertical direction, perpendicular to a plane of the floor covering,

i. Antigua WPC

OM testing of the locking parts of the Antigua WPC products confirmed that the male and female coupling parts on the first pair of opposite sides contain vertically active locking portions which effect a locking in the vertical direction, perpendicular to a plane of the floor covering. *See* Ex. A-14 at '460 patent claim 7(b); Ex. A, Appx. 3 at SCOTT-A-3.2-004.

# ii. Adventure II

OM testing of the locking parts of the Adventure II products confirmed that the male and female coupling parts on the first pair of opposite sides contain vertically active locking portions which effect a locking in the vertical direction, perpendicular to a plane of the floor covering. *See* Ex. A-11 at '460 patent claim 7(b); Ex. A, Appx. 3 at SCOTT-A-3.2-028.

# iii. Premier Flooring

OM testing of the locking parts of the Premier Flooring products confirmed that the male and female coupling parts on the first pair of opposite sides contain vertically active locking portions which effect a locking in the vertical direction, perpendicular to a

plane of the floor covering. *See* Ex. A-8 at '460 patent claim 7(b); Ex. A, Appx. 3 at SCOTT-A-3.2-032.

iv. NSG Hospitality

OM testing of the locking parts of the NSG Hospitality products confirmed that the male and female coupling parts on the first pair of opposite sides contain vertically active locking portions which effect a locking in the vertical direction, perpendicular to a plane of the floor covering. *See* Ex. A-13 at '460 patent claim 7(b); Ex. A, Appx. 3 at SCOTT-A-3.2-030.

# v. Sorrento Niagara

OM testing of the locking parts of the Sorrento Niagara products confirmed that the male and female coupling parts on the first pair of opposite sides contain vertically active locking portions which effect a locking in the vertical direction, perpendicular to a plane of the floor covering. *See* Ex. A-15 at '460 claim 7(b); Ex. A, Appx. 3 at SCOTT-A-3.2-050.

> c. [7.c] and also are provided with horizontally active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in horizontal direction, perpendicular to the respective sides and in the plane of the floor covering,

> > i. Antigua WPC

OM testing of the locking parts of the Antigua WPC products confirmed that the male and female coupling parts on the first pair of opposite sides contain horizontally active locking portions which effect a locking in the horizontal direction, perpendicular to

the respective sides and in the plane of the floor covering. *See* Ex. A-14 at '460 patent claim 7(c); Ex. A, Appx. 3 at SCOTT-A-3.2-004.

## ii. Adventure II

OM testing of the locking parts of the Adventure II products confirmed that the male and female coupling parts on the first pair of opposite sides contain horizontally active locking portions which effect a locking in the horizontal direction, perpendicular to the respective sides and in the plane of the floor covering. *See* Ex. A-11 at '460 patent claim 7(c); Ex. A, Appx. 3 at SCOTT-A-3.2-028.

# iii. Premier Flooring

OM testing of the locking parts of the Premier Flooring products confirmed that the male and female coupling parts on the first pair of opposite sides contain horizontally active locking portions which effect a locking in the horizontal direction, perpendicular to the respective sides and in the plane of the floor covering. *See* Ex. A-8 at '460 patent claim 7(c); Ex. A, Appx. 3 at SCOTT-A-3.2-032.

## iv. NSG Hospitality

OM testing of the locking parts of the NSG Hospitality products confirmed that the male and female coupling parts on the first pair of opposite sides contain horizontally active locking portions which effect a locking in the horizontal direction, perpendicular to the respective sides and in the plane of the floor covering. *See* Ex. A-13 at '460 patent claim 7(c); Ex. A, Appx. 3 at SCOTT-A-3.2-030.

# v. Sorrento Niagara

OM testing of the locking parts of the Sorrento Niagara products confirmed that the male and female coupling parts on the first pair of opposite sides contain horizontally

active locking portions which effect a locking in the horizontal direction, perpendicular to the respective sides and in the plane of the floor covering. *See* Ex. A-15 at '460 claim 7(c); Ex. A, Appx. 3 at SCOTT-A-3.2-050.

d. [7.d] wherein said coupling parts are of a type allowing that two of such floor elements can be connected to each other at said sides by pushing one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element,

As proposed by complainants and the Staff, the administrative law judge construed the claim term "by pushing" as "by exerting a force on." However, the force need not be a singular force.

Under this construction the '460 accused products meet this limitation. For example, claim 7 requires "floor elements can be connected to each other at said sides [by exerting a force on] one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element." Ex. A-1 ('460 Patent) at claim 7 (construction included).

Dr. Scott assembled each of the '460 accused products, and in doing so, exerted a force on one floor element with the male coupling part by means of a downward movement into the female coupling part of the other floor element in order to connect two floor elements. Ex. A (Scott Decl.), ¶ 154.

Also, under the terminated respondents' proposed construction, the '460 accused products meet this limitation. *Id.* ¶ 156. With respondents' construction, claim 7 requires "floor elements can be connected to each other at said sides [by exerting a steady force on] one of these floor elements with the male coupling part, by means of a

downward movement, into the female coupling part of the other floor element." *See* Ex. A-1 ('460 Patent) at claim 7 (construction included). The '460 accused products are capable of being connected to each other by way of a steady force. Dr. Scott accomplished this with a steady force when he connected panels of the '460 accused products. Ex. A (Scott Decl.), ¶ 156.

# e. [7.e] wherein said floor elements comprise at least a substrate;

i. Antigua WPC

Visual inspection and OM testing confirmed that the Antigua WPC products contain a substrate. *See* Ex. A-14 at '460 patent claim 7(e); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004. The presence of a substrate was further confirmed by CT scan, FTIR testing, and SEM/EDS testing. *See* Ex. A-14 at '460 patent claim 7(e); Ex. A, Appx. 4 at SCOTT-A-4-0009; Ex. A, Appx. 6 at SCOTT-A-6-00011; Ex. A, Appx. 5 at SCOTT-A-5-0005.

# ii. Adventure II

Visual inspection and OM testing confirmed that the Adventure II products contain a substrate. *See* Ex. A-11 at '460 patent claim 7(e); Ex. A, Appx. 3 at Scott-A-3.2-028. The presence of a substrate was further confirmed by SEM/EDS testing. *See* Ex. A-11 at '460 patent claim 7(e); Ex. A, Appx 5 at Scott-A-5-0028.

# iii. Premier Flooring

Visual inspection and OM testing confirmed that the Premier Flooring products contain a substrate. *See* Ex. A-8 at '460 patent claim 7(e); Ex. A, Appx. 3 at SCOTT-A-3.2-032. The presence of a substrate was further confirmed by SEM/EDS testing. *See* Ex. A-8 at '460 patent claim 7(e); Ex. A, Appx. 5 at SCOTT-A-5-0046.

# iv. NSG Hospitality

Visual inspection and OM testing confirmed that the NSG Hospitality products contain a substrate. *See* Ex. A-13 at '460 patent claim 7(e); Ex. A, Appx. 3 at SCOTT-A-3.2-030. The presence of a substrate was further confirmed by SEM/EDS testing. *See* Ex. A, Appx. 5 at SCOTT-A-5-0066.

## v. Sorrento Niagara

Visual inspection and OM testing confirmed that the Sorrento Niagara products contain a substrate. *See* Ex. A-15 at '460 claim 7(e); Ex. A, Appx. 3 at SCOTT-A-3.2-050. The presence of a substrate was further confirmed by SEM testing. *See* Ex. A, Appx. 5 at SCOTT-A-5-0173.

# f. [7.f] wherein said substrate substantially consists of a filled synthetic material composite;

As proposed by the parties, the administrative law judge construed the claim term "filled synthetic material composite" as "a composite having a matrix formed of a synthetic material and filler contained within that matrix."

Under this construction, as discussed below, the substrates of the '460 accused products substantially consist of a filled synthetic material composite. Dr. Scott's testing confirms that the '460 accused products meet this limitation.

The terminated respondents proposed a construction whereby claim 7 requires only acceptable levels of impurity. Although this proposed construction is incorrect, the '460 accused products meet this limitation as discussed below.

i. Antigua WPC

Fourier transform infrared ("FTIR") spectroscopy, scanning electron microscopy ("SEM"), and energy dispersive X-ray spectroscopy ("EDS") testing shows that the

Antigua WPC products contain PVC (a synthetic) and calcium carbonate (a filler) in the substrate, to form a filled synthetic material composite of the substrate. *See* Ex. A-14 at '460 patent claim 7(f); Ex. A, Appx. 6 at SCOTT-A-6-00018; Ex. A, Appx. 5 at SCOTT-A-5-0005, SCOTT-A-5-0017.

OM, FTIR, SEM/EDS, and CT testing also show that the substrate includes only the filled synthetic material composite and acceptable levels of impurity. *See* Ex. A-14 at '460 patent claim 7(f).

# ii. Adventure II

FTIR and SEM/EDS testing shows that the Adventure II products contain PVC (a synthetic) and calcium carbonate (a filler) in the substrate, to form a filled synthetic material composite of the substrate. *See* Ex. A-11 at '460 patent claim 7(f); Ex. A, Appx. 5 at SCOTT-A-5-0031; Ex. A, Appx. 6 at SCOTT-A-6-00077.

FTIR and SEM/EDS testing shows that the substrate includes only the filled synthetic material composite and acceptable levels of impurity. *See* Ex. A-11 at '460 patent claim 7(f).

## iii. Premier Flooring

FTIR and SEM/EDS testing shows that the Premier Flooring products contain PVC (a synthetic) and calcium carbonate (a filler) in the substrate, to form a filled synthetic material composite of the substrate. *See* Ex. A-8 at '460 patent claim 7(f); Ex. A, Appx. 5 at SCOTT-A-5-0046; Ex. A, Appx. 6 at SCOTT-A-6-00088.

FTIR and SEM/EDS testing shows that the substrate includes only the filled synthetic material composite and acceptable levels of impurity. *See* Ex. A-8 at '460 patent claim 7(f).

# iv. NSG Hospitality

FTIR and SEM/EDS testing shows that the NSG Hospitality products contain PVC (a synthetic) and calcium carbonate (a filler) in the substrate, to form a filled synthetic material composite of the substrate. *See* Ex. A-13 at '460 patent claim 7(f); Ex. A, Appx. 5 at SCOTT-A-5-0066; Ex. A, Appx. 6 at SCOTT-A-6-00087.

FTIR and SEM/EDS testing shows that the substrate includes only the filled synthetic material composite and acceptable levels of impurity. *See* Ex. A-13 at '460 patent claim 7(f).

### v. Sorrento Niagara

FTIR and SEM testing shows that the Sorrento Niagara products contain PVC (a synthetic) and calcium carbonate (a filler) in the substrate, to form a filled synthetic material composite of the substrate. *See* Ex. A-15 at '460 claim 7(f); Ex. A, Appx. 6 at SCOTT-A-6-00123; Ex. A, Appx. 5 at SCOTT-A-0173.

FTIR and SEM testing shows that the substrate includes only the filled synthetic material composite and acceptable levels of impurity. *See* Ex. A-15 at '460 claim 7(f).

- g. [7.g] wherein said substrate forms at least one side of said first pair of opposite sides, such that at least one of said coupling parts, either the male coupling part or the female coupling part, is at least partially made of said filled synthetic material composite;
  - i. Antigua WPC

OM testing of the locking parts of the Antigua WPC products confirmed that the substrate forms at least one side of the first pair of opposite sides. *See* Ex. A-14 at '460 patent claim 7(g); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004.

# ii. Adventure II

OM testing of the locking parts of the Adventure II products confirmed that the substrate forms at least one side of the first pair of opposite sides. *See* Ex. A-11 at '460 patent claim 7(g); Ex. A, Appx. 3 at SCOTT-A-3.2-028.

# iii. Premier Flooring

OM testing of the locking parts of the Premier Flooring products confirmed that the substrate forms at least one side of the first pair of opposite sides. *See* Ex. A-8 at '460 patent claim 7(g); Ex. A, Appx. 3 at SCOTT-A-3.2-032.

iv. NSG Hospitality

OM testing of the locking parts of the NSG Hospitality products confirmed that

the substrate forms at least one side of the first pair of opposite sides. See Ex. A-13 at

'460 patent claim 7(g); Ex. A, Appx. 3 at SCOTT-A-3.2-030.

# v. Sorrento Niagara

OM testing of the locking parts of the Sorrento Niagara products confirmed that the substrate forms at least one side of the first pair of opposite sides. *See* Ex. A-15 at '460 claim 7(g); Ex. A, Appx. 3 at SCOTT-A-3.2-050.

- h. [7.h] wherein the floor elements have a second pair of opposite sides, which also are provided with mutually cooperating coupling parts, which substantially are made as a male and a female coupling part,
  - i. Antigua WPC

Visual inspection as well as OM testing of the locking parts of the Antigua WPC products confirmed that the second pair of opposite sides have a male and female

coupling part that mutually cooperate with each other. *See* Ex. A-14 at '460 patent claim 7(h); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

## ii. Adventure II

Visual inspection as well as OM testing of the locking parts of the Adventure II products confirmed that the second pair of opposite sides have a male and female coupling part that mutually cooperate with each other. *See* Ex. A-11 at '460 patent claim 7(h); Ex. A, Appx. 3 at SCOTT-A-3.2-027.

# iii. Premier Flooring

Visual inspection as well as OM testing of the locking parts of the Premier Flooring products confirmed that the second pair of opposite sides have a male and female coupling part that mutually cooperate with each other. *See* Ex. A-8 at '460 patent claim 7(h); Ex. A, Appx. 3 at SCOTT-A-3.2-031.

# iv. NSG Hospitality

Visual inspection as well as OM testing of the locking parts of the NSG Hospitality products confirmed that the second pair of opposite sides have a male and female coupling part that mutually cooperate with each other. *See* Ex. A-13 at '460 patent claim 7(h); Ex. A, Appx. 3 at SCOTT-A-3.2-029.

# v. Sorrento Niagara

Visual inspection as well as OM testing of the locking parts of the Sorrento Niagara products confirmed that the second pair of opposite sides have a male and female coupling part that mutually cooperate with each other. *See* Ex. A-15 at '460 claim 7(h); Ex. A, Appx.3 at SCOTT-A-3.2-051.

# i. [7.i] which are provided with vertically active locking portions and horizontally active locking portions;

i. Antigua WPC

OM testing of the locking parts of the Antigua WPC products confirmed that the male and female coupling parts on the long sides have vertically and horizontally active locking portions. *See* Ex. A-14 at '460 patent claim 7(i); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

# ii. Adventure II

OM testing of the locking parts of the Adventure II products confirmed that the male and female coupling parts on the long sides have vertically and horizontally active locking portions. *See* Ex. A-11 at '460 patent claim 7(i); Ex. A, Appx. 3 at SCOTT-A-3.2-027.

# iii. Premier Flooring

OM testing of the locking parts of the Premier flooring products confirmed that the male and female coupling parts on the long sides have vertically and horizontally active locking portions. *See* Ex. A-8 at '460 patent claim 7(i); Ex. A, Appx. 3 at SCOTT-A-3.2-031.

# iv. NSG Hospitality

OM testing of the locking parts of the NSG Hospitality products confirmed that the male and female coupling parts on the long sides have vertically and horizontally active locking portions. *See* Ex. A-13 at '460 patent claim 7(i); Ex. A, Appx. 3 at SCOTT-A-3.2-029.
#### v. Sorrento Niagara

OM testing of the locking parts of the Sorrento Niagara products confirmed that the male and female coupling parts on the long sides have vertically and horizontally active locking portions. *See* Ex. A-15 at '460 claim 7(i); Ex. A, Appx. 3 at SCOTT-A-3.2-051.

- j. [7.j] and wherein the coupling parts of the second pair of opposite sides allow that two of such floor elements can be interconnected at this pair of sides by providing one of these floor elements with the male coupling part, by means of a turning movement, in the female coupling part of the other floor element.
  - i. Antigua WPC

Physical assembly and OM testing of the locking parts of the Antigua WPC products confirmed that two of such floor elements can be interconnected by providing the floor element with the male coupling part in the female coupling part of the other floor element by means of a turning movement. *See* Ex. A-14 at '460 patent claim 7(j); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

#### ii. Adventure II

Physical assembly and OM testing of the locking parts of the Adventure II products confirmed that two of such floor elements can be interconnected by providing the floor element with the male coupling part in the female coupling part of the other floor element by means of a turning movement. *See* Ex. A-11 at '460 patent claim 7(j); Ex. A, Appx. 3 at SCOTT-A-3.2-027.

#### iii. Premier Flooring

Physical assembly and OM testing of the locking parts of the Premier Flooring products confirmed that two of such floor elements can be interconnected by providing the floor element with the male coupling part in the female coupling part of the other floor element by means of a turning movement. *See* Ex. A-8 at '460 patent claim 7(j); Ex. A, Appx. 3 at SCOTT-A-3.2-031.

#### iv. NSG Hospitality

Physical assembly and OM testing of the locking parts of the NSG Hospitality products confirmed that two of such floor elements can be interconnected by providing the floor element with the male coupling part in the female coupling part of the other floor element by means of a turning movement. *See* Ex. A-13 at '460 patent claim 7(j); Ex. A, Appx. 3 at SCOTT-A-3.2-029.

#### v. Sorrento Niagara

Physical assembly and OM testing of the locking parts of the Sorrento Niagara products confirmed that two of such floor elements can be interconnected by providing the floor element with the male coupling part in the female coupling part of the other floor element by means of a turning movement. *See* Ex. A-15 at '460 claim 7(j); Ex. A, Appx. 3 at SCOTT-A-3.2-051.

## 2. Dependent Claim 8: wherein said filled synthetic material composite comprises at least two zones of different composition

#### Antigua WPC

Computerized tomography ("CT") scanning confirmed that the filled synthetic material composite of the Antigua WPC products comprises at least two zones of

different composition. By measuring proportions of solid and hollow areas (*i.e.*, voids) of the filled synthetic material composite, it is possible to determine different composition zones based on different solid/void ratios. *See* Ex. A-14 at '460 patent claim 8; Ex. A, Appx. 4 at SCOTT-A-4-0013 (showing a top zone with 55% solids (45% voids), and central zone with 40% solids (60% voids).

#### 3. Dependent Claim 13: wherein a thermoplastic material is applied as the synthetic material in said filled synthetic material composite.

i. Antigua WPC

FTIR testing confirmed that PVC (a thermoplastic material) is the synthetic material in the synthetic material composite of the Antigua WPC products. *See* Ex. A-14 at '460 patent claim 13; Ex. A, Appx. 6 at SCOTT-A-6-00018.

#### ii. Adventure II

FTIR testing confirmed that PVC (a thermoplastic material) is the synthetic material in the synthetic material composite of the Adventure II products. *See* Ex. A-11 at '460 patent claim 13; Ex. A, Appx. 6 at SCOTT-A-6-00077.

#### iii. Premier Flooring

FTIR testing confirmed that PVC (a thermoplastic material) is the synthetic

material in the synthetic material composite of the Premier Flooring products. See Ex. A-

8 at '460 patent claim 13; Ex. A, Appx. 6 at SCOTT-A-6-00088.

#### iv. NSG Hospitality

FTIR testing confirmed that PVC (a thermoplastic material) is the synthetic material in the synthetic material composite of the NSG Hospitality products. *See* Ex. A-13 at '460 patent claim 13; Ex. A, Appx. 6 at SCOTT-A-6-00087.

#### v. Sorrento Niagara

FTIR testing confirmed that PVC (a thermoplastic material) is the synthetic material in the synthetic material composite of the Sorrento Niagara products. *See* Ex. A-15 at '460 claim 13; Ex. A, Appx. 6 at SCOTT-A-6-00123.

#### 4. Dependent Claim 15: wherein the synthetic material in said filled synthetic material composite is one of the following materials: polyethylene, polypropylene, polystyrene, polycarbonate or polyvinylchloride.

i. Antigua WPC

As described with respect to claim 13, FTIR testing confirmed that PVC is the synthetic material in the synthetic material composite of the Antigua WPC products. *See* Ex. A-14 at '460 patent claim 15; Ex. A, Appx. 6 at SCOTT-A-6-00018.

#### ii. Adventure II

As described with respect to claim 13, FTIR testing confirmed that PVC is the

synthetic material in the synthetic material composite of the Adventure II products. See

Ex. A-11 at '460 patent claim 15; Ex. A, Appx. 6 at SCOTT-A-6-00077.

#### iii. Premier Flooring

As described with respect to claim 13, FTIR testing confirmed that PVC is the

synthetic material in the synthetic material composite of the Premier Flooring products.

See Ex. A-8 at '460 patent claim 15; Ex. A, Appx. 6 at SCOTT-A-6-00088.

#### iv. NSG Hospitality

As described with respect to claim 13, FTIR testing confirmed that PVC is the synthetic material in the synthetic material composite of the NSG Hospitality products. *See* Ex. A-13 at '460 patent claim 15; Ex. A, Appx. 6 at SCOTT-A-6-00087.

#### v. Sorrento Niagara

As described with respect to claim 13, FTIR testing confirmed that PVC is the synthetic material in the synthetic material composite of the Sorrento Niagara products. *See* Ex. A-15 at '460 claim 15; Ex. A, Appx. 6 SCOTT-A-6-00123.

#### 5. Dependent Claim 16: wherein a mixing ratio between the synthetic material and the filling material of said filled synthetic material composite is between 70/30 and 20/80.

i. Antigua WPC

Thermal gravimetric analysis ("TGA") testing confirmed that the mixing ratio between the synthetic material and the filling material of the filled synthetic material composite for the Antigua WPC products is between 70/30 and 20/80. *See* Ex. A-14 at '460 patent claim 16; Ex. A, Appx. 8 at SCOTT-A-8-0001, SCOTT-A-8-0009. Specifically, the testing shows that the mixing ratio is approximately 50/50. *See id*.

#### ii. Adventure II

TGA testing confirmed that the mixing ratio between the synthetic material and the filling material of the filled synthetic material composite for the Adventure II products is between 70/30 and 20/80. *See* Ex. A-11 at '460 patent claim 16; Ex. A, Appx. 8 at SCOTT-A-8-0005, SCOTT-A-8-0002. Specifically, the testing shows the mixing ratio is approximately 30/70. *See id*.

#### iii. Premier Flooring

TGA testing confirmed that the mixing ratio between the synthetic material and the filling material of the filled synthetic material composite for the Premier Flooring products is between 70/30 and 20/80. *See* Ex. A-8 at '460 patent claim 16; Ex. A, Appx.

8 at SCOTT-A-8-0007, SCOTT-A-8-0004. Specifically, the testing shows the mixing ratio is approximately 29/71. *See id*.

#### iv. NSG Hospitality

TGA testing confirmed that the mixing ratio between the synthetic material and the filling material of the filled synthetic material composite for the NSG Hospitality products is between 70/30 and 20/80. *See* Ex. A-13 at '460 patent claim 16; Ex. A, Appx. 8 at SCOTT-A-8-0003; SCOTT-A-8-0006. Specifically, the testing shows the mixing ratio is approximately 29/71. *See id*.

### 6. Dependent Claim 17: wherein said substrate is provided with a top layer.

i. Antigua WPC

Visual inspection confirmed that the Antigua WPC products include a top layer. *See* Ex. A-14 at '460 patent claim 17. OM, CT, SEM/EDS, and FTIR testing further confirm the presence of a top layer located above the substrate. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 5 at SCOTT-A-5-0020; Ex. A, Appx. 6 at SCOTT-A-6-00011.

ii. Adventure II

Visual inspection confirmed that the Adventure II products include a top layer. *See* Ex. A-11 at '460 patent claim 17. OM and SEM/EDS testing further confirm the presence of a top layer located above the substrate. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-028; Ex. A, Appx. 5 at SCOTT-A-5-0038.

#### iii. Premier Flooring

Visual inspection confirmed that the Premier Flooring products include a top layer. *See* Ex. A-8 at '460 patent claim 17. OM and SEM/EDS testing further confirm the presence of a top layer located above the substrate. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-032; Ex. A, Appx. 5 at SCOTT-A-5-0057.

#### iv. NSG Hospitality

Visual inspection confirmed that the NSG Hospitality products include a top layer. *See* Ex. A-13 at '460 patent claim 17. OM and SEM/EDS testing further confirm the presence of a top layer located above the substrate. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-030; Ex. A, Appx. 5 at SCOTT-A-5-0075.

#### v. Sorrento Niagara

Visual inspection confirmed that the Sorrento Niagara products include a top layer. *See* Ex. A-15 at '460 claim 17. OM testing further confirmed the presence of a top layer located above the substrate. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-050.

### 7. Dependent Claim 20: wherein said substrate is provided with a top layer and a backing layer.

i. Antigua WPC

Visual inspection confirmed that the substrate of the Antigua WPC products includes a top layer and a backing layer. *See* Ex. A-14 at '460 patent claim 20. OM, CT, SEM/EDS, and FTIR testing further confirmed that this limitation is met. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 5 at SCOTT-A-5-0015; Ex. A, Appx. 6 at SCOTT-A-6-00011.

ii. Adventure II

Visual inspection confirmed that the substrate of the Adventure II products includes a top layer and a backing layer. *See* Ex. A-11 at '460 patent claim 20. OM and SEM/EDS testing further confirmed that this limitation is met. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-028; Ex. A, Appx. 5 at SCOTT-A-5-0025.

#### iii. Premier Flooring

Visual inspection confirmed that the substrate of the Premier Flooring products includes a top layer and a backing layer. *See* Ex. A-8 at '460 patent claim 20. OM and SEM/EDS testing further confirmed that this limitation is met. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-032; Ex. A, Appx. 5 at SCOTT-A-5-0043.

#### iv. NSG Hospitality

Visual inspection confirmed that the substrate of the NSG Hospitality products includes a top layer and a backing layer. *See* Ex. A-13 at '460 patent claim 20. OM and SEM/EDS testing further confirmed that this limitation is met. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-030; Ex. A, Appx. 5 at SCOTT-A-5-0062.

- 8. Dependent Claim 21: wherein said substrate forms both sides of said first pair of opposite sides, such that both of said coupling parts at the first pair of opposite sides, the male coupling part and the female coupling part, show at least a portion which is made in said filled synthetic material composite.
  - i. Antigua WPC

OM testing of the locking parts of the Antigua WPC products confirmed that the substrate forms both sides of said first pair of opposite sides, and that both coupling parts at the first pair of opposite sites show at least a portion which is made in the filled

synthetic material composite. *See* Ex. A-14 at '460 patent claim 21; Ex. A, Appx. 3 at SCOTT-A-3.2-004.

#### ii. Adventure II

OM testing of the locking parts of the Adventure II products confirmed that the substrate forms both sides of said first pair of opposite sides and that both coupling parts at the first pair of opposite sites show at least a portion which is made in the filled synthetic material composite. *See* Ex. A-11 at '460 patent claim 21; Ex. A, Appx. 3 at SCOTT-A-3.2-028.

#### iii. Premier Flooring

OM testing of the locking parts of the Premier Flooring products confirmed that the substrate forms both sides of said first pair of opposite sides and that both coupling parts at the first pair of opposite sites show at least a portion which is made in the filled synthetic material composite. *See* Ex. A-8 at '460 patent claim 21; Ex. A, Appx. 3 at SCOTT-A-3.2-032.

#### iv. NSG Hospitality

OM testing of the locking parts of the NSG Hospitality products confirmed that the substrate forms both sides of said first pair of opposite sides and that both coupling parts at the first pair of opposite sites show at least a portion which is made in the filled synthetic material composite. *See* Ex. A-13 at '460 patent claim 21; Ex. A, Appx. 3 at SCOTT-A-3.2-030.

#### v. Sorrento Niagara

OM testing of the locking parts of the Sorrento Niagara products confirmed that the substrate forms both sides of said first pair of opposite sides and that both coupling

parts at the first pair of opposite sites show at least a portion which is made in the filled synthetic material composite. *See* Ex. A-15 at '460 claim 21; Ex. A, Appx. 3 at SCOTT-A-3.2-050.

#### 9. Dependent Claim 22: wherein both coupling parts at the first pair of opposite sides are entirely made of said filled synthetic material composite

i. Antigua WPC

OM testing of the locking parts of the Antigua WPC products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-14 at '460 patent claim 22; Ex. A, Appx. 3 at SCOTT-A-3.2-004.

#### ii. Adventure II

OM testing of the locking parts of the Adventure II products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-11 at '460 patent claim 22; Ex. A, Appx. 3 at SCOTT-A-3.2-028.

#### iii. Premier Flooring

OM testing of the locking parts of the Premier Flooring products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-8 at '460 patent claim 22; Ex. A, Appx. 3 at SCOTT-A-3.2-032.

#### iv. NSG Hospitality

OM testing of the locking parts of the NSG Hospitality products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-13 at '460 patent claim 22; Ex. A, Appx. 3 at SCOTT-A-3.2-030.

#### v. Sorrento Niagara

OM testing of the locking parts of the Sorrento Niagara products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-15 at '460 claim 22; Ex. A, Appx. 3 at SCOTT-A-3.2-050.

#### 10. Dependent Claim 23: wherein the floor elements are rectangular; wherein the first pair of opposite sides forms the short sides of the floor elements; and wherein the second pair of opposite sides forms the long sides of the floor elements.

i. Antigua WPC

Visual inspection of the Antigua WPC products confirmed that the floor elements are rectangular. *See* Ex. A-14 at '460 patent claim 23; Ex. A, Appx. 2 at SCOTT-A-2-0001. Visual inspection as well as OM testing of the locking parts of the Antigua WPC products further confirmed that first pair of opposite sides forms the short sides and the second pair of opposite sides forms the long sides. *See* Ex. A-14 at '460 patent claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0099-SCOTT-A-1-0106; Ex. A, Appx. 3 at SCOTT-A-3.2-004.

#### ii. Adventure II

Visual inspection of the Adventure II products confirmed that the floor elements are rectangular. *See* Ex. A-11 at '460 patent claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0201. Visual inspection as well as OM testing of the locking parts of the Adventure II products further confirmed that first pair of opposite sides forms the short sides and the second pair of opposite sides forms the long sides. *See* Ex. A-11 at '460 patent claim 23; Ex. A, Appx. 3 at SCOTT-A-3.2-027-SCOTT-A-3.2-028; Ex. A, Appx. 1 at Ex. A, Appx. 1 at SCOTT-A-1-0204- SCOTT-A-3.2-0206.

#### iii. Premier Flooring

Visual inspection of the Premier Flooring products confirmed that the floor elements are rectangular. *See* Ex. A-8 at '460 patent claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0198. Visual inspection as well as OM testing of the locking parts of the Premier Flooring products further confirmed that first pair of opposite sides forms the short sides and the second pair of opposite sides forms the long sides. *See* Ex. A-8 at '460 patent claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0199-SCOTT-A-1-0200; Ex. A, Appx. 3 at SCOTT-A-3.2-031-SCOTT-A-3.2-032.

#### iv. NSG Hospitality

Visual inspection of the NSG Hospitality products confirmed that the floor elements are rectangular. *See* Ex. A-13 at '460 patent claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0192. Visual inspection as well as OM testing of the locking parts of the NSG Hospitality products further confirmed that first pair of opposite sides forms the short sides and the second pair of opposite sides forms the long sides. *See* Ex. A-13 at '460 patent claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0193- SCOTT-A-1-0194; Ex. A, Appx. 3 at SCOTT-A-3.2-029- SCOTT-A-3.2-030.

#### v. Sorrento Niagara

Visual inspection of the Sorrento Niagara products confirmed that the floor elements are rectangular. *See* Ex. A-15 at '460 claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0213. Visual inspection as well as OM testing of the locking parts of the Sorrento Niagara products further confirmed that first pair of opposite sides forms the short sides and the second pair of opposite sides forms the long sides. *See* Ex. A-15 at '460 claim

## 23; Ex. A, Appx. 1 at SCOTT-A-1-0213-SCOTT-A-1-0214; Ex. A, Appx. 3 at SCOTT-A-3.2-050-SCOTT-A-3.2-051.

#### 11. Dependent Claim 30: wherein at least one of said coupling parts at the first pair of opposites sides, either the male coupling part or the female coupling part, is entirely made of the filled synthetic material composite.

i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-14 at '460 patent claim 30; Ex. A, Appx. 3 at SCOTT-A-3.2-004.

#### ii. Adventure II

OM testing of the locking sections of the Adventure II products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-11 at '460 patent claim 30; Ex. A, Appx. 3 at SCOTT-A-3.2-028.

iii. Premier Flooring

OM testing of the locking sections of the Premier Flooring products confirmed

that the coupling parts are entirely made of filled synthetic material composite. See Ex.

A-8 at '460 patent claim 30; Ex. A, Appx. 3 at SCOTT-A-3.2-032.

#### iv. NSG Hospitality

OM testing of the locking sections of the NSG Hospitality products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-13 at '460 patent claim 30; Ex. A, Appx. 3 at SCOTT-A-3.2-030.

#### v. Sorrento Niagara

OM testing of the locking sections of the Sorrento Niagara products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-15 at '460 claim 30; Ex. A, Appx. 3 at SCOTT-A-3.2-050.

#### D. Domestic Industry (Technical Prong) – '460 Patent

"With respect to section 337(a)(3)(A) and (B), the technical prong is the requirement that the investments in plant or equipment and employment in labor or capital are actually related to 'articles protected by' the intellectual property right which forms the basis of the complaint." *Stringed Musical Instruments*, Comm'n Op. at 13-14. "The test for satisfying the 'technical prong' of the industry requirement is essentially same as that for infringement, i.e., a comparison of domestic products to the asserted claims." *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003). "With respect to section 337(a)(3)(C), the technical prong is the requirement that the activities of engineering, research and development, and licensing are actually related to the asserted intellectual property right." *Stringed Musical Instruments*, Comm'n Op. at 13.

Complainants argue:

Complainants currently manufacture flexible LVT products with locking profiles along the long and short edges ("Click Flex LVT products"), that practice at least one claim of the '460 Patent. *See* Ex. J (Young Decl.), ¶¶ 2-3. The Click Flex LVT products are manufactured at their Dalton, Georgia facility and are sold commercially in the United States under at least the following collection names: Aladdin Grass Valley Click Collection, Home Decorators Floating Vinyl Plank Collection, Home Decorators Luxury Vinyl Plank Flooring Collection, IVC Horizon Collection (Click Installation), IVC Revel Click Collection, Mohawk Home Expressions Collection, Mohawk Home Signature Collection, Portico Brentwood Collection, and Portico Lasting Splendor Collection (collectively "the '460 Domestic Industry Products"). *See* Ex. J (Young Decl.), ¶¶ 2-3. Complainants identify the Home Decorators Luxury Vinyl Plank Flooring Collection ("the Home Decorators Collection") as representative of the '460 Domestic Industry products, *i.e.*, the IVC Click Flex LVT line. *See* Ex. J (Young Decl.), ¶ 3....

Testing and analysis performed by Dr. Scott confirm that the current Home Decorators Collection products practice claims 7, 13, 15-17, 21-23, 29-30 of the '460 Patent. *See* Ex. A (Scott Decl.), ¶ 193. Testing was performed, including examination of cross-sections using optical microscopy (OM), SEM, and EDS. *See* Ex. A (Scott Decl.), ¶¶ 198-204. The cross-sections were also imaged using CT scan. *Id*.

Mem. at 64-66 (footnote omitted).

The Staff argues:

In the Staff's view, there is no dispute as to any material fact that Complainant IVC's domestically manufactured CL Flex LVT domestic industry products practice claims 7, 13, 15-17, 21-23, 29, and 30 of the '460 Patent, satisfying the technical prong of the domestic industry requirement related to the '460 Patent.

The declaration from Dr. Scott, Complainants' expert, supports finding that IVC's CL Flex LVT products practice claims from the '460 Patent. Based upon the technical information provided by Complainants and their declarants, as well as on the testing and analysis of the CL Flex LVT products that he conducted or directed, Dr. Scott performed a limitation-by-limitation analysis and opined that IVC's CL Flex LVT domestic industry products practice claims 7, 13, 15-17, 21-23, 29, and 30 of the '460 Patent. See Ex. A (Scott Decl.) at ¶¶ 187-193, 198-204, 209-220, 224; Ex. A-18 (CL Flex LVT Claim Chart). Dr. Scott's analysis also explains how, in his opinion, the CL Flex LVT products practice those claims, even if each of the proposed claim constructions for the three disputed claim terms of the '460 Patent, including the Staff's and the terminated Respondents' proposed constructions. Id. Moreover, Dr. Scott noted that changes were made to the CL Flex LVT products during the course of this investigation, including the locking profile of the short sides of the products and adjusting the [

. See Ex. A (Scott

Decl.) at ¶¶ 187-193; Ex. J (Young Decl.) at ¶¶4-10. Dr. Scott opined that, in his opinion these changes were "inconsequential" for purposes of whether the CL Flex LVT products practice the claims of the '460 Patent and that both the version of the products that existed at the time the Complaint was filed and the current version practice claims 7, 13, 15-17,

21-23, 29, and 30 of the '460 Patent. See Ex. A (Scott Decl.) at ¶¶ 187-193. 198-204, 209-220, 224; Ex. A-18 (CL Flex LVT Claim Chart).

The Staff is not aware of any dispute as to the evidence offered by Complainants or Dr. Scott's technical prong analysis. The Staff is therefore of the view that Complainants are is entitled to a summary determination that the technical prong of the domestic industry requirement as to the '460 Patent is satisfied.

Staff Resp. at 56-57.

Complainants currently manufacture flexible LVT products with locking profiles along the long and short edges ("Click Flex LVT products"), that practice at least one claim of the '460 patent. *See* Ex. J (Young Decl.), ¶¶ 2-3. The Click Flex LVT products are manufactured at their Dalton, Georgia facility and are sold commercially in the United States under at least the following collection names: Aladdin Grass Valley Click Collection, Home Decorators Floating Vinyl Plank Collection, Home Decorators Luxury Vinyl Plank Flooring Collection, IVC Horizon Collection (Click Installation), IVC Revel Click Collection, Mohawk Home Expressions Collection, Mohawk Home Signature Collection, Mohawk Lasting Charm Collection, Mohawk Woodlands Collection, Portico Brentwood Collection, and Portico Lasting Splendor Collection (collectively "the '460 domestic industry products").<sup>15</sup> *See* Ex. J (Young Decl.), ¶¶ 2-3. Complainants identify the Home Decorators Luxury Vinyl Plank Flooring Collection ("the Home Decorators

<sup>&</sup>lt;sup>15</sup> The following models correspond to the '460 domestic industry products: [

<sup>].</sup> See Complainants Amended Disclosure of Domestic Industry Products (Aug. 13, 2019); Ex. J (Young Decl.) ¶ 2.

Collection") as representative of the '460 domestic industry products, *i.e.*, the IVC Click Flex LVT line. *See* Ex. J (Young Decl.), ¶ 3.

At the time of the complaint, the short sides of the Home Decorators Collection featured a LockXpress locking profile, which is a specific type of "push-lock" coupling mechanism. See Ex. J (Young Decl.), ¶ 4 (showing LockXpress locking profile); Ex. A (Scott Decl.), ¶ 190. Certain criticisms of the LockXpress locking profile were that LockXpress was . See Ex. J (Young Decl.), ¶ 6. Since the filing of the complaint, the Home Decorators Collection products have been [ to incorporate a DropXpress profile on short sides, which is another type of "push-lock" coupling mechanism. See Ex. J (Young Decl.), ¶ 5 (showing DropXpress locking profile); Ex. A (Scott Decl.), ¶ 191. DropXpress is version of LockXpress with ], which allows for a greater ease of installation. See Ex. J (Young Decl.), ¶ 6. The transition to the DropXpress locking profile was completed by and DropXpress is currently the short-side locking joint for all flexible LVT products at the Dalton facility. See Ex. J (Young Decl.), ¶ 6.

There have also been slight modifications to the [ ] of the Home Decorators Collection products to account for the [

]. See Ex. J (Young Decl.), ¶ 7; Ex. A (Scott Decl.), ¶ 192. For example, the amount of [

] in order to increase the overall rigidity of the product. *Id.* This change was completed by [ ]. Although no additional
testing was performed on the former Home Decorators Collection product, the recent

changes are immaterial to the technical-prong analysis and do not effect whether the Home Decorators Collection products practice one or more claims of the '460 patent. *See* Ex. A (Scott Decl.), ¶ 193.

As discussed below, testing and analysis performed by Dr. Scott demonstrates that the current Home Decorators Collection products practice claims 7, 13, 15-17, 21-23, 29-30 of the '460 patent. *See* Ex. A (Scott Decl.), ¶ 193. Testing was performed, including examination of cross-sections using optical microscopy (OM), SEM, and EDS. *See* Ex. A (Scott Decl.), ¶¶ 198-204. The cross-sections were also imaged using CT scan. *Id*.

An element by element technical prong analysis for the Home Decorators Collection products is discussed below.

#### 1. Independent Claim 7

Independent claim 7 is directed to a "[f]loor covering, consisting of floor elements." *See* Ex. A-1 ('460 Patent) at 30:32. Visual inspection confirmed that the Home Decorators Collection products are floor coverings consisting of floor elements. *See* Ex. A-18 at '460 patent claim 7; Ex. A, Appx. 1 at SCOTT-A-1-0154-SCOTT-A-1-0179). As discussed below, the Home Decorators Collection products meet each limitation of independent claim 7 of the '460 patent.

#### a. [7.a] which, at least at a first pair of two opposite sides, comprise coupling parts, which substantially are performed as a male coupling part and a female coupling part,

Visual inspection and OM testing confirmed that the Home Decorators Collection products contain a first pair of two opposite sides having a male coupling part and a

female coupling part. *See* Ex. A-18 at '460 patent claim 7(a); Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018. For example, short sides of the floor elements have coupling parts that are either a male or female coupling part. *See id.*; Ex. J (Young Decl.), ¶¶ 4-5.

b. [7.b] which are provided with vertically active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in vertical direction, perpendicular to a plane of the floor covering,

OM testing of the locking parts of the Home Decorators Collection products confirmed that the male and female coupling parts on the first pair of opposite sides contain vertically active locking portions that effect a locking in vertical direction perpendicular to a plane of the floor covering. *See* Ex. A-18 at '460 patent claim 7(b); Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018; Ex. J (Young Decl.), ¶¶ 4-5.

c. [7.c] and also are provided with horizontally active locking portions, which, when the coupling parts of two of such floor elements cooperate with each other, effect a locking in horizontal direction, perpendicular to the respective sides and in the plane of the floor covering;

OM testing of the locking parts of the Home Decorators Collection products confirmed that the male and female coupling parts on the first pair of opposite sides also contain horizontally active locking portions that effect a locking in horizontal direction perpendicular to the respective sides and in the plane of the floor covering. *See* Ex. A-18 at '460 patent claim 7(c); Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018; Ex. J (Young Decl.), ¶¶ 4-5.

d. [7.d] wherein said coupling parts are of a type allowing that two of such floor elements can be connected to each other at said sides by pushing one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element,

Visual inspection, OM testing, and physical connection of the Home Decorators Collection products confirmed that the male and female coupling parts on the first pair of opposite sides allow floor elements to be connected by pushing the male coupling part of one floor element into the female coupling part of the other floor element by means of a downward movement into the female coupling part. *See* Ex. A-18 at '460 patent claim 7(d); Ex. A, Appx. 1 at SCOTT-A-1-00154-SCOTT-A-1-00179; Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018; Ex. J (Young Decl.), ¶¶ 4-5.

As proposed by complainants and the Staff, the administrative law judge construed the claim term "by pushing" as "by exerting a force on." However, the force need not be a singular force.

Under this construction, the Home Decorators Collection products meet this limitation. For example, claim 7 requires "floor elements can be connected to each other at said sides [by exerting a force on] one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element. Ex. A-1 ('460 Patent) at claim 7 (construction included).

Dr. Scott assembled an example the Home Decorators Collection products, and in doing so, exerted a force on one floor element with the male coupling part by means of a downward movement into the female coupling part of the other floor element in order to connect two floor elements. *See* Ex. A (Scott Decl.), ¶ 171.

Additionally, under the terminated respondent's proposed construction these products meet this limitation. With respondents' construction claim 7 requires "floor elements can be connected to each other at said sides [by exerting a steady force on] one of these floor elements with the male coupling part, by means of a downward movement, into the female coupling part of the other floor element." Ex. A-1 ('460 Patent) at claim 7 (construction included). The Home Decorators Collection products are capable of being connected to each other by way of a steady force. Dr. Scott accomplished this with a steady force when he connected panels personally. See Ex. A (Scott Decl.), ¶ 184.

### e. [7.e] wherein said floor elements comprise at least a substrate;

Visual inspection and OM testing confirmed that the Home Decorators Collection products contain a substrate. *See* Ex. A-18 at '460 patent claim 7(e); Ex. A, Appx. 3 at SCOTT-A-3.1-013-SCOTT-A-3.1-014; Ex. J-3 ("[]]" tab referring to the "[]

]" (*i.e.* "[ ]"), "[ ]," and "[ ]" (*i.e.* [ ]) as the substrate). The presence of a substrate was further confirmed by CT scan, FTIR testing, and SEM and EDS analysis. *See* Ex. A-18 at '460 patent claim 7(e); Ex. A, Appx. 4 at SCOTT-A-4-0001-SCOTT-A-4-0002; Ex. A, Appx. A-6 at SCOTT-A-6-00074; Ex. A, Appx. 5 at SCOTT-A-5-0138.

### f. [7.f] wherein said substrate substantially consists of a filled synthetic material composite;

As proposed by complainants and the Staff, the administrative law judge construed the claim term "said substrate substantially consists of a filled synthetic material composite" as "the substrate is substantially made up of (or composed of) a filled synthetic material composite."

The substrate of the Home Decorators Collection products substantially consists of a filled synthetic material composite. *See* Ex. A-18 at '460 patent claim 7(f). For example, the substrate of the Home Decorators Collection products includes PVC, a synthetic, additives, and filler. *See* Ex. J-3 ("[]" tab referring to "[]]" and "[]" of the substrate); Ex. J-4; Ex. J-2 ("[]]" tab referring to "[]]" and "[]" of the substrate); Ex. J (Young Decl.), ¶¶ 7-9.

As proposed by the parties, the administrative law judge construed the claim term "filled synthetic material composite" as "a composite having a matrix formed of a synthetic material and filler contained within that matrix." Dr. Scott's testing confirms that the Home Decorators Collection products meet this limitation. For instance, FTIR and SEM/EDS testing shows that the Home Decorators Collection products contain PVC (a synthetic) and calcium carbonate (a filler) in the substrate. *See* Ex. A-18 at '460 patent claim 7(f).

As proposed by complainants and the Staff, the administrative law judge construed the claim term "said substrate substantially consists of a filled synthetic material composite" as "the substrate is substantially made up of (or composed of) a filled synthetic material composite." The Home Decorators Collection products meet this limitation. For example, the FTIR analysis shows that the Home Decorators Collection products contain PVC (a synthetic) and calcium carbonate (a filler) in the substrate. *See id*.

Additionally, under the terminated respondent's proposed construction these products meet this limitation. The terminated respondents proposed a construction whereby claim 7 requires only acceptable levels of impurity. The OM, FTIR, SEM/EDS,

and CT testing further confirmed that the substrate includes only the filled synthetic material composite and acceptable levels of impurity. *See* Ex. A-18 at '460 patent claim 7(f); Ex. A, Appx. 3 at SCOTT-A-3.1-013-SCOTT-A-3.1-014; Ex. A, Appx. 6 at SCOTT-A-6-00075; Ex. A, Appx. 5 at SCOTT-A-5-0138; Ex. A, Appx. 4 at SCOTT-A-4-0001-SCOTT-A-4-0002.

g. [7.g] wherein said substrate forms at least one side of said first pair of opposite sides, such that at least one of said coupling parts, either the male coupling part or the female coupling part, is at least partially made of said filled synthetic material composite;

OM testing of the locking parts of the Home Decorators Collection products

confirmed that the substrate forms at least one side of the first pair of opposite sides. See

Ex. A-18 at '460 patent claim 7(g); Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018;

Ex. J-3 ("[ ]" tab referring to the "[ ]" (*i.e.* "[ ]"),

"[ ]," and "[ ]" (*i.e.* ]) as the substrate); Ex. J-2.

h. [7.h] wherein the floor elements have a second pair of opposite sides, which also are provided with mutually cooperating coupling parts, which substantially are made as a male and a female coupling part,

OM testing of the locking parts of the Home Decorators Collection products confirmed that the second pair of opposite sides have a male and female coupling part. *See* Ex. A-18 at '460 patent claim 7(h); Ex. A, Appx. 3 at SCOTT-A-3.2-015, SCOTT-A-3.2-017.

#### i. [7.i] which are provided with vertically active locking portions and horizontally active locking portions;

OM testing of the locking parts of the Home Decorators Collection products confirmed that the male and female coupling parts on the long sides have vertically and horizontally active locking portion. *See* Ex. A-18 at '460 patent claim 7(i); Ex. A, Appx. 3 at SCOTT-A-3.2-015, SCOTT-A-3.2-017.

j. [7.j] and wherein the coupling parts of the second pair of opposite sides allow that two of such floor elements can be interconnected at this pair of sides by providing one of these floor elements with the male coupling part, by means of a turning movement, in the female coupling part of the other floor element.

Physical assembly and OM testing of the locking parts of the Home Decorators

Collection products confirmed that two of such floor elements can be interconnected by providing the floor element with the male coupling part in the female coupling part of the other floor element by means of a turning movement. *See* Ex. A-18 at '460 patent claim 7(j); Ex. A, Appx. 3 at SCOTT-A-3.2-015, SCOTT-A-3.2-017.

#### 2. Dependent Claim 13: wherein a thermoplastic material is applied as the synthetic material in said filled synthetic material composite.

FTIR testing confirmed that PVC (a thermoplastic material) is the synthetic

material in the synthetic material composite of the Home Decorators Collection products.

See Ex. A-18 at '460 patent claim 13; Ex. A, Appx. 6 at SCOTT-A-6-00075; Ex. J-3

("[]" tab referring to "[]" and "[]" of the substrate containing various types of PVC); Ex. J-2; Ex. J-4.

# 3. Dependent Claim 15: wherein the synthetic material in said filled synthetic material composite is one of the following materials: polyethylene, polypropylene, polystyrene, polycarbonate or polyvinylchloride.

As described with respect to claim 13, FTIR testing confirmed that PVC is the

synthetic material in the synthetic material composite of the Home Decorators Collection

products. See Ex. A-18 at '460 patent claim 15; Ex. A, Appx. 6 at SCOTT-A-6-00075;

Ex. J-3 ("[ ]" tab referring to "[ ]" and "[ ]" of the substrate containing

various types of PVC); Ex. J-2; Ex. J-4.

#### 4. Dependent Claim 16: wherein a mixing ratio between the synthetic material and the filling material of said filled synthetic material composite is between 70/30 and 20/80.

The mixing ratio of the Home Decorators Collection products between the synthetic material and the filling material of the filled synthetic material composite is between 70/30 and 20/80. *See* Ex. A-18 at '460 patent claim 16. Specifically, the mixing ratio is approximately [ ]. *See* Ex. J-3 ("[ ]" tab referring to "[ ]" and "[ ]" of the substrate); Ex. J-2.

### 5. Dependent Claim 17: wherein said substrate is provided with a top layer.

Visual inspection confirmed that the Home Decorators Collection products include a top layer. *See* Ex. A-18 at '460 patent claim 17; Ex. A, Appx. 1 at SCOTT-A-1-0154-SCOTT-A-1-0179; Ex. J-3 ("[]" tab referring to the "[]]," "[]]," and "[]]"); Ex. J-2. OM, CT, SEM/EDS, and FTIR testing further confirmed that this limitation is met. *See* Ex. A-18 at '460 patent claim 17; Ex. A, Appx. 3 at SCOTT-A-3.1-013-SCOTT-A-3.1-014; Ex. A, Appx. 4 at SCOTT-A-4-0001-

SCOTT-A-4-0002; Ex. A, Appx. 5 at SCOTT-A-5-0150; Ex. A, Appx. 6 at SCOTT-A-6-00074.

#### 6. Dependent Claim 21: wherein said substrate forms both sides of said first pair of opposite sides, such that both of said coupling parts at the first pair of opposite sides, the male coupling part and the female coupling part, show at least a portion which is made in said filled synthetic material composite.

OM testing of the locking parts of the Home Decorators Collection products

confirmed that the substrate forms both sides of said first pair of opposite edges. See Ex.

A-18 at '460 patent claim 21; Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018.

#### 7. Dependent Claim 22: wherein both coupling parts at the first pair of opposite sides are entirely made of said filled synthetic material composite.

OM testing of the locking parts of the Home Decorators Collection products

confirmed that the coupling parts are entirely made of filled synthetic material composite.

See Ex. A-18 at '460 patent claim 22; Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-

3.2-018.

# 8. Dependent Claim 23: wherein the floor elements are rectangular; wherein the first pair of opposite sides forms the short sides of the floor elements; and wherein the second pair of opposite sides forms the long sides of the floor elements.

Visual inspection and OM testing of the cross sections of the Home Decorators Collection confirmed that the floor elements are rectangular. *See* Ex. A-18 at '460 patent claim 23; Ex. A, Appx. 1 at SCOTT-A-1-0154-SCOTT-A-1-0179; Ex. A, Appx. 3 at

SCOTT-A-3.1-013-SCOTT-A-3.1-014. OM testing of the locking parts of the Home

Decorators Collection products further confirmed that first pair of opposite sides forms

the short sides and the second pair of opposite sides forms the long sides. See id.; Ex. A,

Appx. 3 at SCOTT-A-3.2-015-SCOTT-A-3.2-018.

9. Dependent Claim 29: wherein the vertically active locking portions comprise first locking portions located at a distal end of the male coupling part at the first pair of opposite sides and second locking portions located at a distal end of a projecting lip of the female coupling part at the first pair of opposite sides.

OM testing of the locking sections of the Home Decorators Collection products

confirmed that the vertically active locking portions include first locking portions located at a distal end of the male coupling part at the first pair of opposite sides and second locking portions located at a distal end of a projecting lip of the female coupling part at the first pair of opposite sides. *See* Ex. A-18 at '460 patent claim 29; Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018.

#### 10. Dependent Claim 30: wherein at least one of said coupling parts at the first pair of opposites sides, either the male coupling part or the female coupling part, is entirely made of the filled synthetic material composite.

OM testing of the locking sections of the Home Decorators Collection products confirmed that the coupling parts are entirely made of filled synthetic material composite. *See* Ex. A-18 at '460 patent claim 30; Ex. A, Appx. 3 at SCOTT-A-3.2-016, SCOTT-A-3.2-018.

#### E. Validity of the '460 Patent

The patent at issue is presumed valid as a matter of law. 35 U.S.C. § 282. This resumption of validity may be overcome only by "clear and convincing evidence." *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1359 (Fed. Cir. 2007).

Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '460 patent. *See* Complaint Ex. 4 (certified assignment record).'

No party has challenged the validity or enforceability of the '460 patent. Thus, there is no issue of material fact as to the validity or enforceability of the '460 patent. *See Lannom Mfg. Co., Inc. v. Int'l Trade Comm'n*, 799 F.2d 1572, 1580 (Fed. Cir. 1986) (Commission did not have authority to redetermine patent validity when no defense of invalidity had been raised).

#### VI. U.S. Patent No. 9,200,490

The '490 patent, entitled "Floor Panel," issued on February 19, 2019 to inventors Laurent Meersseman and Luc Vanhastel.<sup>16</sup> The '490 patent issued from U.S. Patent Application Serial No. 15/972,633, filed on May 7, 2018, and expires on April 28, 2031. The '490 patent has 30 claims, 3 of which are independent claims. *See* Ex. A-2 ('490 Patent). Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '490 patent. *See* Complaint Ex. 5 (certified assignment record).

Complainants assert claims 1-6, 8, 10-11, 13-16, and 18 of the '490 patent. Mem. at 11.

<sup>&</sup>lt;sup>16</sup> A certificate of correction issued from the USPTO on June 11, 2019 to correct inventorship of this patent. The certificate of correction lists Laurent Meersseman, Martin Segaert, and Mark Cappelle as inventors. *See* Ex. A-2 ('490 Patent) at 22 ('490 Patent Cert. of Correction).

#### A. Dr. Scott's Testing Methods

As noted, Dr. Scott, complainants' technical expert, conducted numerous tests on the accused products and domestic industry products. *See* Mem. at 41-45; Ex. A (Scott Decl.), ¶¶ 60-86. Complainants provided a summary of the various tests Dr. Scott conducted. *See* Mem. at 41-45; Section V.A, *supra*.

#### **B.** Claim Construction

#### 1. A Person of Ordinary Skill in the Art

Complainants, the Staff, and terminated respondents proposed very similar education and experience levels for a person of ordinary skill in the art at the time of the claimed invention. *See* Ex. A (Scott Decl.) at 19-21. The differences are not significant for purposes of deciding the issues on the merits in this investigation.

Thus, as proposed by complainants, the administrative law judge has determined that a person of ordinary skill in the art at the time of the claimed invention would have either (i) an undergraduate degree in mechanical engineering, materials science or engineering, polymer science, engineering arts, or an equivalent field, and a minimum two years of practical experience in the design, development, analysis or manufacturing of polymer-based structures, or (ii) a minimum of four years of practical experience in polymer-based floor covering design, development, analysis, or manufacturing. *See id.* at 19-20.

#### 2. Claim Construction

As noted, complainants assert claims 1-6, 8, 10-11, 13-16, and 18 of the '490 patent. Mem. at 11.

Asserted independent claims 1 and 13 are recited below:

- 1. A floor panel comprising:
- a substrate; and
- a top layer located above the substrate;
- wherein the top layer is connected to the substrate by means of glue;
- wherein the substrate is single-layered and includes a closed cell foamed PVC board having a density of more than 450 kilograms per cubic meter;
- wherein the substrate has a thickness of 2 to 10 millimeters;
- wherein the substrate forms at least half of the thickness of the floor panel;
- wherein the top layer includes a back layer, a printed synthetic film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic film;
- wherein the transparent or translucent thermoplastic layer includes a vinyl-based material;
- wherein the back layer includes PVC with plasticizers and fillers;
- wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges;
- wherein the floor panel includes first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges;
- wherein the first mechanical coupling parts are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges;
- wherein the first mechanical coupling parts include a tongue and a groove;
- wherein the tongue and the groove are substantially responsible for the vertical locking;
- wherein the tongue and the groove include locking parts substantially responsible for the horizontal locking;
- wherein the first mechanical coupling parts are substantially realized in the substrate;
- wherein the second mechanical coupling parts comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two of such floor panels using a downward movement along the respective short edges;

- wherein the downward movement is automatically created by the turning movement along the respective long edges; and
- wherein the second mechanical coupling parts are substantially realized in the substrate.

**13**. A floor panel comprising:

a substrate;

a top layer located above the substrate; and

a backing layer located below the substrate;

- wherein the top layer is connected to the substrate by means of glue;
- wherein the substrate is single-layered and includes a closed cell foamed PVC board having a density of more than 650 kilograms per cubic meter;

wherein the substrate has a thickness of 2 to 10 millimeters;

- wherein the substrate forms at least half of the thickness of the floor panel;
- wherein the top layer includes a back layer, a printed synthetic film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic film;
- wherein the back layer includes PVC with plasticizers and fillers;
- wherein the transparent or translucent thermoplastic layer includes a vinyl-based material;
- wherein the top layer has a thickness of 0.5 to 3 millimeters;
- wherein the floor panel has a thickness of 5 to 15 millimeters;
- wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges;
- wherein the floor panel includes first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges;
- wherein the first mechanical coupling parts are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges;
- wherein the first mechanical coupling parts include a tongue and a groove;
- wherein the tongue and the groove are substantially responsible for the vertical locking;

- wherein the tongue and the groove include locking parts substantially responsible for the horizontal locking;
- wherein the first mechanical coupling parts are substantially realized in the substrate;
- wherein the second mechanical coupling parts comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two of such floor panels using a downward movement along the respective short edges;
- wherein the downward movement is automatically created by the turning movement along the respective long edges; and

Ex. A-2 ('490 Patent).

The parties agreed on the claim construction shown in the table below. See Mem.

at 45; Staff Resp. at 47-48.

Claim Term	Agreed Construction
"arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" (claims 1 and 13)	"allowing for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective long edges"

As shown in the table above, the parties agreed that the claim term "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" from claims 1 and 13 of the '490 patent should be construed as "allowing for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective long edges." *See* Mem. at 45; Staff Resp. at 47-48. The parties did not propose constructions for any other terms. *See* Mem. at 45-47, 86-105; Ex. A (Scott Decl.) at **P** 52-55; 151-185.

wherein the second mechanical coupling parts are substantially realized in the substrate.

Thus, as proposed by the parties, the administrative law judge construes the claim term "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" as "allowing for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective long edges."

#### C. Infringement Analysis of the '490 patent

As noted, complainants assert claims 1-6, 8, 10-11, 13-16, and 18 of the '490 patent. Mem. at 11.

The '490 accused products include the following:

- Antigua WPC; and
- Quickstyle.<sup>17</sup>

As with the '460 patent, Dr. Scott conducted and directed a variety of extensive technical tests and analyses of the accused Antigua WPC products to determine if those products infringe the asserted claims of the '490 patent. Ex. A (Scott Decl.), ¶¶ 130-137. Dr. Scott also conducted and directed extensive testing of the accused Quickstyle products from one or more non-respondents. Ex. A (Scott Decl.), ¶¶ 146-149.

Dr. Scott determined that, in his opinion, the Antigua WPC and Quickstyle products infringe certain asserted claims of the '490 patent. *See* Ex. A (Scott Decl.), ¶¶ 59, 137, 149, 182-186; Ex. A-14 (Antigua WPC Chart); Ex. A-17 (Quickstyle Niagara Chart). Similar to the '460 patent, claim charts that contain Dr. Scott's detailed infringement analyses and include annotated photographs and test results accompany Dr.

<sup>&</sup>lt;sup>17</sup> As discussed below, the Quickstyle product is an accused product imported, sold for importation, or sold after importation into the United States by non-respondents. *See* Ex. B, [ ] Decl. ¶ 14.

Scott's declaration. *See id.* The claim charts provide an element by element explanation, of how, in Dr. Scott's opinion, the Antigua WPC and Quickstyle products meet every limitation of certain asserted claims of the '490 patent. *See id.*; Mem. at 86-105. In addition, Dr. Scott's analysis explains how, in his opinion, those products infringe the asserted claims when applying the agreed upon construction for the "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" claim term *See* Ex. A (Scott Decl.), ¶¶ 182-185; Ex. A-14 (Antigua WPC Chart); Ex. A-17 (Quickstyle Niagara Chart); Mem. at 60-61.

The Staff argues that it "is not aware of any dispute as to the evidence offered by Dr. Scott and Complainants. The Staff is therefore of the view that Complainants are entitled to a summary determination that the accused Antigua WPC products infringe claims 1-6, 8, 10, 11, 13-16, and 18 of the '490 Patent. In addition, Complainants are entitled to rely on the Quickstyle products for additional support with respect to their request for a General Exclusion Order." Staff Resp. at 49.

The table below, provided by the Staff, summarizes the results of Dr. Scott's analysis and his opinions with respect to the '490 patent. *See* Staff Resp. at 49; Ex. A (Scott Decl.), ¶¶ 59, 137, 149, 182-186; Ex. 14 (Antigua WPC Chart); Ex. A-17 (Quickstyle Niagara Chart).

Accused Product	Defaulting Respondents	'490 patent	Claim Chart and Opinion
Antigua WPC	Divine Licheer	Claims 1-6, 8, 10, 11, 13-16, 18	Ex A, ¶¶ 130-137, 182-186; Ex. A-14
Quickstyle		Claim 1	Ex A, ¶¶ 146-149,

	182-186;
	Ex. A-17

An element by element infringement analysis for each of the products accused of infringing the '490 patent is discussed below.

#### 1. Independent Claim 1

Independent claim 1 of the '490 patent is directed to a "[f]loor panel." *See* Ex. A-2 ('490 Patent) at 17:66. Visual inspection confirmed that the '490 accused products, which include the Antigua WPC and Quicksatyle products are floor panels. *See* Ex. A-14 (Antigua WPC); Ex. A-17 (Quickstyle).

#### a. [1.a] a substrate; and

#### <u>Antigua</u>

Visual inspection and OM testing confirmed that the Antigua WPC products include a substrate. *See* Ex. A-14 at '490 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004. CT, FTIR, and SEM/EDS testing further confirmed that this limitation is met. *See* Ex. A-14 at '490 patent claim 1(a); Ex. A, Appx. 4 at SCOTT-A-4-0009; Ex. A, Appx. 6 at SCOTT-A-6-00011; Ex. A, Appx. 5 at SCOTT-A-5-0005.

#### **Quickstyle**

Visual inspection and OM testing confirmed that the Quickstyle products include a substrate. *See* Ex. A-17 at '490 patent claim 1(a); Ex. A, Appx. 3 SCOTT-A-3.2-048. SEM testing further confirmed that this limitation is met. *See* Ex. A-17 at '490 patent claim 1(a); Ex. A, Appx. 5 at SCOTT-A-5-0171.

#### b. [1.b] a top layer located above the substrate;

#### <u>Antigua</u>

Visual inspection confirmed that the Antigua WPC products include a top layer located above the substrate. *See* Ex. A-14 at '490 patent claim 1(b). OM, CT, FTIR and SEM/EDS testing confirmed that this limitation is met. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 6 at SCOTT-A-6-00011; Ex. A, Appx. 5 at SCOTT-A-5-0020.

#### Quickstyle

Visual inspection confirmed that the Quickstyle products include a top layer located above the substrate. *See* Ex. A-17 at '490 patent claim 1(b). OM and SEM testing confirmed that this limitation is met. *See id.*; Ex. A, Appx. 3 SCOTT-A-3.2-048; Ex. A, Appx. 5 SCOTT-A-5-0170.

### c. [1.c] wherein the top layer is connected to the substrate by means of glue;

#### <u>Antigua</u>

CT, SEM/EDS, and FTIR testing confirmed that the top layer of the Antigua WPC products is connected to the substrate by means of glue. *See* Ex. A-14 at '490 patent claim 1(c); Ex. A, Appx. 4 at SCOTT-A-4-0009; Ex. A, Appx. 6 at SCOTT-A-6-00011-SCOTT-A-6-00012, SCOTT-A-6-00017; Ex. A, Appx. 5 at SCOTT-A-5-0003.

#### Quickstyle

SEM testing confirmed that the top layer of the Quickstyle products is connected to the substrate by means of glue. *See* Ex. A-17 at '490 patent claim 1(c); Ex., Appx. 5 at SCOTT-A-5-0171.
d. [1.d] wherein the substrate is single-layered and includes a closed cell foamed PVC board having a density of more than 450 kilograms per cubic meter;

### <u>Antigua</u>

Testing confirmed that the substrate of the Antigua WPC products is singlelayered and includes a closed cell foamed PVC board having a density of more than 450 kilograms per cubic meter. *See* Ex. A-14 at '490 patent claim 1(d). For example, gas infiltration tests confirmed that the substrate of the Antigua WPC products includes a closed cell foamed board. *See id.*; Ex. A, Appx 11 at SCOTT-A-11-0002 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR and SEM/EDS testing further confirmed that the substrate includes PVC and fillers such as calcium carbonate (CaCO<sub>3</sub>). *See* Ex. A, Appx. 6 at SCOTT-A-6-00018; Ex. A, Appx. 5 at SCOTT-A-5-0013. Density testing further confirmed that the substrate has a density of 891 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-14 at '490 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0001.

#### **Quickstyle**

Testing confirmed that the substrate of the Quickstyle products is single-layered and includes a closed cell foamed PVC board having a density of more than 450 kilograms per cubic meter. *See* Ex. A-17 at '490 patent claim 1(d). For example, gas infiltration tests confirmed that the substrate of the Quickstyle products includes a closed cell foamed board. *See id.*; Ex. A, Appx 11 at SCOTT-A-11-0013 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR testing further confirmed that the substrate includes PVC and filers such as calcium carbonate

107

(CaCO<sub>3</sub>). *See* Ex. A, Appx. 6 at SCOTT-A-6-00104. Density testing further confirmed that the substrate has a density of 871 kilograms per cubic meter (kg/m<sup>3</sup>). *See id.*; Ex A, Appx. 7 at SCOTT-A-7-0002.

# e. [1.e] wherein the substrate has a thickness of 2 to 10 millimeters;

### <u>Antigua</u>

CT testing confirmed that the substrate of the Antigua WPC products has an average thickness of 3.93mm. *See* Ex. A-14 at '490 patent claim 1(e); Ex. A, Appx. 4 at SCOTT-A-4-0009.

## **Quickstyle**

OM testing of the substrate of the Quickstyle products has a thickness of approximately 4.84 millimeters. *See* Ex. A-17 at '490 patent claim 1(e); Ex. A, Appx. 3 at SCOTT-A-3.2-049.

# f. [1.f] wherein the substrate forms at least half of the thickness of the floor panel;

### <u>Antigua</u>

CT testing confirmed that the substrate of the Antigua WPC products forms at least 61% of the floor panel. *See* Ex. A-14 at '490 patent claim 1(f); Ex. A, Appx. 4 at SCOTT-A-4-0009 (confirming that the substrate has an average thickness of 3.93 mm and the floor panel has an average thickness between 6.22-6.34 mm; therefore the substrate forms at least 61% of the thickness of the floor panel).

#### Quickstyle

OM testing confirmed that the substrate of the Quickstyle products forms 73% of the floor panel. *See* Ex. A-17 at '490 patent claim 1(f); Ex. A, Appx. 3 at SCOTT-A-3.2-049 (confirming that the substrate has a thickness of approximately 4.84 mm and the floor panel has a thickness of approximately 6.62 mm).

g. [1.g] wherein the top layer includes a back layer, a printed synthetic film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic film;

### <u>Antigua</u>

The top layer of the Antigua WPC products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic material film. *See* Ex. A-14 at '490 patent claim 1(g). OM, CT, and FTIR testing of the Antigua WPC products further confirmed the presence of a back layer, a printed film, and a transparent or translucent wear layer in the claimed configuration. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.1-003, SCOTT-A-3.2-003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 6 at SCOTT-A-6-00011.

FTIR testing confirmed that the printed film layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00015. FTIR testing further confirmed that the transparent or translucent layer contains a thermoplastic (PVC). *See* Ex. A, Appx. 6 at SCOTT-A-6-00014.

### Quickstyle

The top layer of the Quickstyle products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic material film. *See* Ex. A-17 at '490 patent claim 1(g). OM and FTIR testing of the Quickstyle products further confirmed the presence of a back layer, a printed film, and a transparent or translucent wear layer in the claimed configuration. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-048; Ex. A, Appx. 6 at SCOTT-A-6-00101-SCOTT-A-6-00103.

FTIR testing confirmed that the printed film layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00102. FTIR testing further confirmed that the transparent or translucent layer contains a thermoplastic (PVC). *See* Ex. A, Appx. 6 at SCOTT-A-6-00101.

### h. [1.h] wherein the transparent or translucent thermoplastic layer includes a vinyl-based material;

#### <u>Antigua</u>

FTIR testing confirmed that the transparent or translucent thermoplastic layer of the Antigua WPC products includes PVC (a vinyl-based material). *See* Ex. A-14 at '490 patent claim 1(h); Ex. A, Appx. 6 at SCOTT-A-6-00014.

#### Quickstyle

FTIR testing confirmed that the transparent or translucent thermoplastic layer of the Quickstyle products includes PVC (a vinyl-based material). *See* Ex. A-17 at '490 patent claim 1(h); Ex. A, Appx. 6 at SCOTT-A-6-00101.

# i. [1.i] wherein the back layer includes PVC with plasticizers and fillers;

# <u>Antigua</u>

FTIR and SEM/EDS testing confirmed that the back layer of the Antigua WPC products includes PVC and calcium carbonate (a filler). *See* Ex. A-14 at '490 patent claim 1(i); Ex. A, Appx. 6 at SCOTT-A-6-00012, SCOTT-A-6-00016; Ex. A, Appx. 5 at SCOTT-A-5-0013. Gas chromatography – mass spectroscopy (GC-MS) testing confirmed that the back layer includes plasticizers such as dioctyl terephthalate (DOTP). *See* Ex. A-14 at '490 patent claim 1(i); Ex. A, Appx. 9 at SCOTT-A-9-0002-SCOTT-A-9-0005.

### **Quickstyle**

FTIR testing confirmed that the back layer of the Quickstyle products includes PVC, calcium carbonate (a filler), and BIS(2-ethylhexyl) terephthalate (DOTP) (a plasticizer). *See* Ex. A-17 at '490 patent claim 1(i); Ex. A., Appx. 6 at SCOTT-A-6-00103.

## j. [1.j] wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges;

#### <u>Antigua</u>

Visual inspection and OM testing of the Antigua WPC products confirmed that the floor panels are rectangular and oblong and include a pair of long edges and a pair of short edges. *See* Ex. A-14 at '490 patent claim 1(j); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004.

### **Quickstyle**

Visual inspection and OM testing of the Quickstyle products confirmed that the floor panels are rectangular and oblong and include a pair of long edges and pair of short edges. *See* Ex. A-17 at '490 patent claim 1(j); Ex. A, Appx. 3 at SCOTT-A-3.2-046, SCOTT-A-3.2-048.

# k. [1.k] wherein the floor panel includes first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges;

## <u>Antigua</u>

OM testing of the Antigua WPC products confirmed that the floor panels include first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges. *See* Ex. A-14 at '490 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004.

## Quickstyle

OM testing of the Quickstyle products confirmed that the floor panels include first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges. *See* Ex. A-17 at '490 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-046, SCOTT-A-3.2-048.

1. [1.1] wherein the first mechanical coupling parts are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges;

# <u>Antigua</u>

The first mechanical coupling parts of the Antigua WPC products are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges. *See* Ex. A-14 at '490 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-003.



As proposed by the parties, the administrative law judge construesd the claim term "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" as "allowing for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective long edges." As shown above, this construction is satisfied. The mechanical coupling part shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part into the other coupling part, as indicated.

### **Quickstyle**

The first mechanical coupling parts of the Quickstyle products are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges. *See* Ex. A-17 at '490 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-046, SCOTT-A-3.2-048.



As proposed by the parties, the administrative law judge construesd the claim term "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" as "allowing for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective long edges." As shown above, this construction is satisfied. The mechanical coupling part shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part into the other coupling part, as indicated.

# m. [1.m] wherein the first mechanical coupling parts include a tongue and a groove;

### <u>Antigua</u>

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanic coupling parts include a tongue and a groove. *See* Ex. A-14 at '490 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

### **Quickstyle**

OM testing of the locking sections of the Quickstyle products confirmed that the first mechanic coupling parts include a tongue and a groove. *See* Ex. A-17 at '490 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

# n. [1.n] wherein the tongue and the groove are substantially responsible for the vertical locking;

### <u>Antigua</u>

OM testing of the locking sections of the Antigua WPC products confirmed that the tongue and groove are substantially responsible for the vertical locking. *See* Ex. A-14 at '490 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

#### **Quickstyle**

OM testing of the locking sections of the Quickstyle products confirmed that the tongue and groove are substantially responsible for the vertical locing. *See* Ex. A-17 at '490 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

## o. [1.0] wherein the tongue and the groove include locking parts substantially responsible for the horizontal locking;

#### <u>Antigua</u>

OM testing of the locking sections of the Antigua WPC products confirmed that the tongue and grove include locking parts that are substantially responsible for the horizontal locking. *See* Ex. A-14 at '490 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

### Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the tongue and grove include locking parts that are substantially responsible for the horizontal locking. *See* Ex. A-17 at '490 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

## p. [1.p] wherein the first mechanical coupling parts are substantially realized in the substrate;

#### <u>Antigua</u>

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanical coupling parts are substantially realized in the substrate. *See* Ex. A-14 at '490 patent claim 1(p); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

# **Quickstyle**

OM testing of the locking sections of the Quickstyle products confirmed that the first mechanical coupling parts are substantially realized in the substrate. *See* Ex. A-17 at '490 patent claim 1(p); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

q. [1.q] wherein the second mechanical coupling parts comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two of such floor panels using a downward movement along the respective short edges;

## <u>Antigua</u>

OM testing of the locking sections of the Antigua WPC products confirmed that the second mechanical coupling parts comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two Antigua WPC floor panels using a downward movement along the respective short edges. *See* Ex. A-14 at '490 patent claim 1(q); Ex. A, Appx. 3 at SCOTT-A-3.2-004.

## **Quickstyle**

OM testing of the locking sections of the Quickstyle products confirmed that the second mechanical coupling parts comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two Quickstyle floor panels using a downward movement along the respective short edges. *See* Ex. A-17 at '490 patent claim 1(q); Ex. A, Appx. 3 at SCOTT-A-3.2-046.

r. [1.r] wherein the downward movement is automatically created by the turning movement along the respective long edges; and

#### <u>Antigua</u>

The downward movement is automatically created by the turning movement along the respective long edges of the Antigua WPC products. *See* Ex. A-14 at '490 patent claim 1(r). Dr. Scott installed the Antigua WPC products and confirmed that the downward movement is automatically created by the turning movement along the

respective long edges of the Antigua WPC products. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004.

### **Quickstyle**

The downward movement is automatically created by the turning movement along the respective long edges of the Quickstyle products. *See* Ex. A-17 at '490 patent claim 1(r). Dr. Scott installed the Quickstyle products and confirmed that the downward movement is automatically created by the turning movement along the respective long edges of the Quickstyle products. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-046, SCOTT-A-3.2-048.

# s. [1.s] wherein the second mechanical coupling parts are substantially realized in the substrate.

#### <u>Antigua</u>

OM testing of the locking sections of the Antigua WPC products confirmed that the second mechanical coupling parts are substantially realized in the substrate. *See* Ex. A-14 at '490 patent claim 1(s); Ex. A, Appx. 3 at SCOTT-A-3.2-004.

#### Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the second mechanical coupling parts are substantially realized in the substrate. *See* Ex. A-17 at '490 patent claim 1(s); Ex. A, Appx. 3 at SCOTT-A-3.2-046.

# 2. Dependent Claim 2: wherein the back layer is located above the center line determined by the tongue-in-groove coupling.

With respect to dependent claim 2 of the '490 patent, OM testing of the locking

sections of the Antigua WPC products confirmed that the back layer is located above the

center line determined by the tongue-in-groove coupling. See Ex. A-14 at '490 patent

claim 2; Ex. A, Appx. 3 at SCOTT-A-3.2-003.

# 3. Dependent Claim 3: wherein the closed cell foamed PVC board has a density of more than 650 kilograms per cubic meter.

Density testing of the Antigua WPC products confirmed that the substrate has a density of 891 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-14 at '490 patent claim 3;

Ex. A, Appx. 7 at SCOTT-A-7-0001.

# 4. Dependent Claim 4: wherein the transparent or translucent thermoplastic layer has a thickness of 1 millimeter or less.

CT testing of the Antigua WPC products confirmed that the transparent or

translucent wear layer has an average thickness between 0.28-0.29 mm. See Ex. A-14 at

'490 patent claim 4; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013.

# 5. Dependent Claim 5: wherein the vinyl-based material of the transparent or translucent thermoplastic layer is PVC.

FTIR testing of the Antigua WPC products confirmed that the transparent or

translucent wear layer includes PVC (a vinyl-based material). See Ex. A-14 at '490

patent claim 5; Ex. A, Appx. 6 at SCOTT-A-6-00014.

# 6. Dependent Claim 6: wherein the top layer has a thickness of 0.5 to 3 millimeters.

CT testing of the Antigua WPC products confirmed that the top layer has an average thickness between 1.25-1.37 mm. *See* Ex. A-14 at '490 patent claim 6; Ex. A, Appx. 4 at SCOTT-A-4-0009.

# 7. Dependent Claim 8: wherein the floor panel comprises a backing layer located below the substrate.

Visual inspection confirmed that the Antigua WPC products include a backing layer located below the substrate. *See* Ex. A-14 at '490 patent claim 8. OM, CT, SEM/EDS, and FTIR testing further confirmed that the Antigua WPC products include a backing layer below the substrate. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 5 at SCOTT-A-5-0015; Ex. A. Appx. 6 at SCOTT-A-6-00011.

# 8. Dependent Claim 10: wherein the floor panel has a thickness of 5 to 15 millimeters.

CT testing confirmed that the Antigua WPC products have an average thickness between 6.34-6.22 mm. *See* Ex. A-14 at '490 patent claim 10; Ex. A, Appx. 4 at SCOTT-A-4-0009. Three measurements were also taken with calipers of the Antigua WPC products, showing an average thickness of 6.60 mm. *See* Ex. A-14 at '490 patent claim 10; Ex. A, Appx. 2 at SCOTT-A-2-0001.

# 9. Dependent Claim 11: wherein the floor panel has a length of more than 110 centimeters.

Measurement of the Antigua WPC products confirmed that they have a length of over 119cm. *See* Ex. A-14 at '490 patent claim 11; Ex. A, Appx. 2 at SCOTT-A-2-0001.

#### 10. Independent Claim 13

Like claim 1, independent claim 13 of the '490 patent is directed to a "[f]loor

panel." See Ex. A-2 ('490 Patent) at 19:8. Visual inspection confirmed that the Antigua

WPC products are floor panels. See claim 1; Ex. A-14 at '490 patent claim 13. As

discussed below, the Antigua WPC products meets each limitation of independent claim

13 of the '490 patent.

Asserted independent claim 13 is recited below:

**13**. A floor panel comprising:

a substrate;

a top layer located above the substrate; and

a backing layer located below the substrate;

wherein the top layer is connected to the substrate by means of glue;

wherein the substrate is single-layered and includes a closed cell foamed PVC board having a density of more than 650 kilograms per cubic meter;

wherein the substrate has a thickness of 2 to 10 millimeters;

wherein the substrate forms at least half of the thickness of the floor panel;

wherein the top layer includes a back layer, a printed synthetic film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic film;

wherein the back layer includes PVC with plasticizers and fillers;

wherein the transparent or translucent thermoplastic layer includes a vinyl-based material;

wherein the top layer has a thickness of 0.5 to 3 millimeters;

wherein the floor panel has a thickness of 5 to 15 millimeters;

wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges;

wherein the floor panel includes first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges;

- wherein the first mechanical coupling parts are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges;
- wherein the first mechanical coupling parts include a tongue and a groove;
- wherein the tongue and the groove are substantially responsible for the vertical locking;
- wherein the tongue and the groove include locking parts substantially responsible for the horizontal locking;
- wherein the first mechanical coupling parts are substantially realized in the substrate;
- wherein the second mechanical coupling parts comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two of such floor panels using a downward movement along the respective short edges;
- wherein the downward movement is automatically created by the turning movement along the respective long edges; and
- wherein the second mechanical coupling parts are substantially realized in the substrate.

Ex. A-2 ('490 Patent).

### a. [13.a] a substrate;

The Antigua WPC products include a substrate. See claim 1(a); Ex. A-14 at '490

patent claim 13(a).

# b. [13.b] a top layer located above the substrate; and

The Antigua WPC products include a top layer located above the substrate. See

claim 1(b); Ex. A-14 at '490 patent claim 13(b).

# c. [13.c] a backing layer located below the substrate;

The Antigua WPC products include a backing layer located below the substrate.

See claim 8; Ex. A-14 at '490 patent claim 13(c).

# d. [13.d] wherein the top layer is connected to the substrate by means of a glue;

The top layer of the Antigua WPC products is connected to the substrate by means of glue. *See* claim 1(c); Ex. A-14 at '490 patent claim 13(d).

# e. [13.e] wherein the substrate is single-layered and includes a closed cell foamed PVC board having a density of more than 650 kilograms per cubic meter;

The substrate of the Antigua WPC products are single-layered and include a

closed cell foamed PVC board having a density of more than 650 kilograms per cubic

meter. See claim 1(d); Ex. A-14 at '490 patent claim 13(e).

# f. f[13.f] wherein the substrate has a thickness of 2 to 10 millimeters;

The substrate of the Antigua WPC products has a thickness of 2 to 10 millimeters.

See claim 1(e); Ex. A-14 at '490 patent claim 13(f) (confirming that the substrate has an average thickness of 3.93 mm).

# g. [13.g] wherein the substrate forms at least half of the thickness of the floor panel;

The substrate of the Antigua WPC products forms at least half of the thickness of the floor panel. *See* claim 1(f); Ex. A-14 at '490 patent claim 13(g) (confirming that the substrate has an average thickness of 3.93 mm and the floor panel has an average thickness between 6.22-6.34 mm; therefore the substrate forms at least 61% of the floor panel).

# h. [13.h] wherein the top layer includes a back layer, a printed synthetic film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic film;

The top layer of the Antigua WPC products includes a back layer, a printed synthetic film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic film. *See* claim 1(g); Ex. A-14 at '490 patent claim 13(h).

# i. [13.i] wherein the back layer includes PVC with plasticizers and fillers;

The back layer of the Antigua WPC products includes PVC with DOTP

plasticizers and fillers. See claim 1(i); Ex. A-14 at '490 patent claim 13(i).

# j. [13.j] wherein the transparent or translucent thermoplastic layer includes a vinyl-based material;

The transparent or translucent thermoplastic layer of the Antigua WPC products

includes a vinyl-based material. See claim 1(h); Ex. A-14 at '490 patent claim 13(j).

# k. [13.k] wherein the top layer has a thickness of 0.5 to 3 millimeters;

The top layer of the Antigua WPC products has a thickness of 0.5 to 3

millimeters. See claim 6; Ex. A-14 at '490 patent claim 13(k).

# I. [13.1] wherein the floor panel has a thickness of 5 to 15 millimeters;

The Antigua WPC products have a thickness of 5 to 15 millimeters. See claim 10;

Ex. A-14 at '490 patent claim 13(1).

# m. [13.m] wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges;

The Antigua WPC products are rectangular and oblong and include a pair of long

edges and a pair of short edges. See claim 1(j); Ex. A-14 at '490 patent claim 13(m).

# n. [13.n] wherein the floor panel includes first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges;

The Antigua WPC products include first mechanical coupling parts at the pair of

long edges and second mechanical coupling parts at the pair of short edges. See claim

1(k); Ex. A-14 at '490 patent claim 13(n).

# o. [13.0] wherein the first mechanical coupling parts are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges;

The first mechanical coupling parts of the Antigua WPC products are arranged for

horizontal and vertical locking of two of such floor panels using a turning movement

along the respective long edges. See claim 1(1); Ex. A-14 at '490 patent claim 13(0).

# p. [13.p] wherein the first mechanical coupling parts include a tongue and a groove;

The first mechanical coupling parts of the Antigua WPC products include a

tongue and a groove. See claim 1(m); Ex. A-14 at '490 patent claim 13(p).

# q. [13.q] wherein the tongue and the groove are substantially responsible for the vertical locking;

The tongue and the groove are substantially responsible for the vertical locking.

See claim 1(n); Ex. A-14 at '490 patent claim 13(q).

# r. [13.r] wherein the tongue and the groove include locking parts substantially responsible for the horizontal locking;

The tongue and the groove of the first mechanical coupling parts of the Antigua

WPC products include locking parts substantially responsible for the horizontal locking.

See claim 1(o); Ex. A-14 at '490 patent claim 13(r).

# s. [13.s] wherein the first mechanical coupling parts are substantially realized in the substrate;

The first mechanical coupling parts of the Antigua WPC products are substantially realized in the substrate. *See* claim 1(p); Ex. A-14 at '490 patent claim 13(s).

t. [13.t] wherein the second mechanical coupling parts comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two of such floor panels using a downward movement along the respective short edges;

The second mechanical coupling parts of the Antigua WPC products comprise a male coupling part and a female coupling part arranged for horizontal and vertical locking of two of such floor panels using a downward movement along the respective short edges. *See* claim 1(q); Ex. A-14 at '490 patent claim 13(t).

# u. [13.u] wherein the downward movement is automatically created by the turning movement along the respective long edges; and

The downward movement is automatically created by the turning movement along the respective long edges of the Antigua WPC products. *See* claim 1(r); Ex. A-14 at '490 patent claim 13(u).

# v. [13.v] wherein the second mechanical coupling parts are substantially realized in the substrate.

The second mechanical coupling parts of the Antigua WPC products are

substantially realized in the substrate. See 1(s); Ex. A-14 at '490 patent claim 13(v).

# 11. Dependent Claim 14: wherein the back layer is located above the center line determined by the tongue-ingroove coupling.

The back layer of the Antigua WPC products is located above the center line

determined by the tongue-in-groove coupling. See claim 2; Ex. A-14 at '490 patent claim

14.

# 12. Dependent Claim 15: wherein the transparent or translucent thermoplastic layer has a thickness of 1 millimeter or less.

The transparent or translucent thermoplastic layer of the Antigua WPC products

has a thickness of 1 millimeter or less. See claim 4; Ex. A-14 at '490 patent claim 15.

# 13. Dependent Claim 16: wherein the vinyl-based material of the transparent or translucent thermoplastic layer is PVC.

The vinyl-based material of the transparent or translucent thermoplastic layer of

the Antigua WPC products is PVC. See claim 5; Ex. A-14 at '490 patent claim 16.

# 14. Dependent Claim 18: wherein the floor panel has a length of more than 110 centimeters.

The Antigua WPC products have a length of more than 110 centimeters. See

claim 11; Ex. A-14 at '490 patent claim 18.

# D. Domestic Industry (Technical Prong) – '490 Patent

"With respect to section 337(a)(3)(A) and (B), the technical prong is the

requirement that the investments in plant or equipment and employment in labor or capital are actually related to 'articles protected by' the intellectual property right which forms the basis of the complaint." *Stringed Musical Instruments*, Comm'n Op. at 13-14. "The test for satisfying the 'technical prong' of the industry requirement is essentially same as that for infringement, i.e., a comparison of domestic products to the asserted claims." *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003). "With respect to section 337(a)(3)(C), the technical prong is the requirement that the activities of engineering, research and development, and licensing are actually related to the asserted intellectual property right." *Stringed Musical Instruments*, Comm'n Op. at 13.

Complainants argue:

Complainants are currently developing and manufacturing rigid LVT products using foaming ("IVC Foamed Rigid LVT products") that practice at least one claim of the '490 Patent. *See* Ex. I (Van Vlassenrode Decl.), ¶¶ 2-4. First, Complainants performed tests on the IVC Foamed Rigid LVT products in their Avelgem, Belgium facility. *See id.* ¶ 3. Then, Complainants replicated those same tests in the United States at their Dalton, Georgia facility 6-8 weeks later. *See id.*.

Since then, Complainants have made significant investments and refined their plan to produce the IVC Foamed Rigid LVT products. *See id.* ¶ 5. They have finalized the commercialization schedule of [ ] for the IVC Foamed Rigid LVT products and received the final approval needed to manufacture the VIC Foamed Rigid LVT. *See id.* ¶ 6. The buildup of the IVC Foamed Rigid LCT products are [ ], but will include [

| (collectively "the '490 Domestic Industry Products"). *See id.* ¶ 7; *see also* Complainants Amended Disclosure of Domestic Industry Products (Aug. 13, 2019).

Evidence confirming Complainants' practice of the '490 Patent at the time of the Complaint was submitted as Compl. Ex. 11 (claim chart applying at least claim 22 of the '490 Patent to Complainants' IVC Foamed Rigid LVT products).

Dr. Scott also conducted various tests on panels of the forthcoming IVC Foamed Rigid LVT product, including the examination of cross-sections using optical microscopy ("OM"), SEM and EDS, and FTIR. *See* Ex. A, (Scott Decl.), ¶¶ 162-164. Dr. Scott's testing reveals that the IVC Foamed Rigid LVT product practices claims 22-23, 25-29 of the '490 Patent.

Mem. at 174-75.

The Staff argues:

In the Staff's view, there is no dispute as to any material fact that Complainant IVC's forthcoming Foamed Rigid LVT domestic industry products, which will be domestically manufactured in the state of Georgia, will practice claims 22, 23, and 25-29 of the '490 Patent and claims 28 and 29 of the '655 Patent, satisfying the technical prong of the domestic industry requirement related to both patents.

The declaration from Dr. Scott, Complainants' expert, supports finding that IVC's forthcoming Foamed Rigid LVT products will practice claims from both the '490 and '655 Patents. Based upon the technical information provided by Complainants and their declarants, as well as on the testing and analysis of samples of the forthcoming Foamed Rigid LVT products<sup>18</sup> that he conducted or directed, Dr. Scott performed a limitation-by-limitation analysis and opined that the Foamed Rigid LVT domestic industry products will claims 22, 23, and 25-29 of the '490 Patent and claims 28 and 29 of the '655 Patent. *See* Ex. A (Scott Decl.) at ¶¶ 187, 194-197, 205-208, 221-224; Ex. A-19 (Foamed Rigid LVT Claim Chart). Dr. Scott's analysis also explains how, in his opinion, the Foamed Rigid LVT products practice the claims of the '490 Patent when the parties' agreed to claim constructions for the "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" claim term is applied. *Id*.

The Staff is not aware of any dispute as to the evidence offered by Complainants or Dr. Scott's technical prong analysis of the IVC Foamed Rigid LVT products. The Staff is therefore of the view that Complainants

<sup>&</sup>lt;sup>18</sup> In October 2019, Dr. Scott received from Complainant IVC's parent company finished samples of products resulting from the foaming test runs performed in Belgium in September 2019. *See* Ex. I (Van Vlassenrode Decl.), ¶ 14; Ex. A (Scott Decl.), ¶ 197. In his declaration, Mr. Kristof Van Vlassenrode, who is the a Research and Development Director at IVC's parent company, IVC Group, stated that he directed these samples to be sent to Dr. Scott for testing and that the samples "are representative of the IVC Foamed Rigid LVT product that will be made in the Dalton IVC facility in the United States." *Id.* 

are is entitled to a summary determination that the technical prong of the domestic industry requirement as to the '490 and '655 Patents is satisfied.

Staff Resp. at 57-58.

To support the technical prong domestic industry allegations, complainants' motion includes, *inter alia*, declarations from: (1) Joren Knockaert, the Vice President Manufacturing, Operations at IVC US, Inc. (Ex. H); (2) Kristoff Van Vlassenrode, a Research and Development Director at IVC Group (Ex. I); and (3) Jonathan Young, the Director of Quality at Mohawk Industries (Ex. J). Complainants also rely on documents, including technical documents, related to the domestic industry products. Furthermore, as he did for infringement, complainants' expert Dr. Scott provided a declaration and claim charts that include his expert analysis and opinion, on an element by element basis, as to how the domestic industry products practice one or more claims from the asserted patents.

Complainants are currently developing and manufacturing rigid LVT products using foaming ("IVC Foamed Rigid LVT products") that practice at least one claim of the '490 patent. *See* Ex. I (Van Vlassenrode Decl.), ¶¶ 2-4. First, complainants performed tests on the IVC Foamed Rigid LVT products in their Avelgem, Belgium facility. *See id.* ¶ 3. Then, complainants replicated those same tests in the United States at their Dalton, Georgia facility 6-8 weeks later. *See id.* 

Complainants refined their plan to produce the IVC Foamed Rigid LVT products. See id. ¶ 5. They have finalized the commercialization schedule of [ ] for the IVC Foamed Rigid LVT products and received the final approval needed to manufacture the VIC Foamed Rigid LVT. See id. ¶ 6. The buildup of the IVC Foamed Rigid LCT

130

products are [

] (collectively "the '490 domestic industry products"). See id. ¶ 7;

Complainants Amended Disclosure of Domestic Industry Products (Aug. 13, 2019).

Evidence showing complainants' practice of the '490 patent at the time of the complaint was submitted as Compl. Ex. 11 (claim chart applying at least claim 22 of the '490 patent to complainants' IVC Foamed Rigid LVT products).

As noted, Dr. Scott conducted various tests on panels of the forthcoming IVC Foamed Rigid LVT product, including the examination of cross-sections using optical microscopy ("OM"), SEM and EDS, and FTIR. *See* Ex. A, (Scott Decl.), ¶¶ 162-164.

As discussed below, Dr. Scott's testing demonstrates that the IVC Foamed Rigid LVT product practices claims 22-23, 25-29 of the '490 patent. An element by element technical prong analysis for the IVC Foamed Rigid LVT products is discussed below.

### 1. Independent Claim 22

Independent claim 22 is directed to a "[f]loor panel comprising" various floor elements. *See* Ex. A-2 ('490 Patent) at 20:16. Visual inspection confirmed that the forthcoming IVC Foamed Rigid LVT products are floor panels comprising various floor elements. *See* Ex. A-19 at '490 patent claim 22; Ex. A, Appx. 1 at SCOTT-A-1-0180-SCOTT-A-1-0188; Ex. I (Van Vlassenrode Decl.), ¶ 2. As discussed below, the forthcoming IVC Foamed Rigid LVT products meet each limitation of independent claim 22 of the '490 patent.

#### a. [22.a] a substrate

Visual inspection, OM testing, and SEM and EDS analysis confirmed that the forthcoming IVC Foamed Rigid LVT products contain a substrate. *See* Ex. A-19 at '490 patent claim 22(a); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 8-9; Ex. A, Appx. 3 at SCOTT-A-3.1-012; Ex. A, Appx. 5 at SCOTT-A-5-0156-SCOTT-A-5-163.

#### b. [22.b] a top layer located above the substrate;

Visual inspection, OM testing, and SEM and EDS analysis confirmed that the top layer of the forthcoming IVC Foamed Rigid LVT products is located above the substrate. *See* Ex. A-19 at '490 patent claim 22(b); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 8-9; Ex. A, Appx. 3 at SCOTT-A-3.1-012; Ex. A, Appx. 5 at SCOTT-A-5-0152, SCOTT-A-5-0168-SCOTT-A-5-0169.

> c. [22.c] wherein the substrate is multi-layered and includes a closed cell foamed PVC board having a density of more than 450 kilograms per cubic meter;

The substrate of the forthcoming IVC Foamed Rigid LVT products is multilayered and includes a closed cell foamed PVC board having a density between [

] kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-19 at '490 patent claim 22(c); Ex. I-2 at MOH1155\_00141596 (showing multi-layered foamed substrate); Ex. I (Van Vlassenrode Decl.), ¶¶ 7-8, 11 (noting that the forthcoming IVC Foamed Rigid LVT products will include a multi-layer foamed PVC substrate). Gas infiltration tests confirmed that the substrate of the IVC Foamed Rigid LVT products includes a closed cell foamed board. *See* Ex. A-19 at '490 patent claim 22(c); Ex. A, Appx. 11 at SCOTT-

A-11-0007 - 0010 (test results demonstrating that the substrate includes a closed cell foamed board).

SEM and EDS analysis confirmed that the substrate of the forthcoming IVC Foamed Rigid LVT products is multi-layered. *See* Ex. A, Appx. 5 at SCOTT-A-5-0151-SCOTT-A-5-0169. SEM testing also confirmed that the substrate includes closed cell foam with an open cell content of [ ]. *See* Ex. A, Appx. 5 at SCOTT-A-5-0154-SCOTT-A-5-0156. FTIR analysis also confirmed that the substrate contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00084.

## d. [22.d] wherein the substrate has a thickness of 2 to 10 millimeters;

The substrate of the forthcoming IVC Foamed Rigid LVT products will be approximately [ ] thick. *See* Ex. A-19 at '490 patent claim 22(d); Ex. I-2 at MOH1155\_00141596; Ex. I-1 at MOH1155\_00092482 ([ ] IVC US Buildup showing [ ] rigid core); Ex. I (Van Vlassenrode Decl.), ¶ 7.

# e. [22.e] wherein the substrate forms at least half of the thickness of the floor panel;

The substrate of the forthcoming IVC Foamed Rigid LVT product forms approximately [ ] of the panel thickness. *See* Ex. A-19 at '490 patent claim 22(e); Ex. I-2 at MOH1155\_00141596 (showing approximately [ ] thick floor panel with [ ] substrate); Ex. I-1 at MOH1155\_00092482; Ex. I (Van Vlassenrode Decl.), ¶ 7.

# f. [22.f] wherein the substrate includes a plurality of embedded glass fiber layers situated on both sides of the center line of the substrate;

The forthcoming IVC Foamed Rigid LVT product includes a plurality of embedded glass fiber layers situated above and below the center line of the substrate. *See* 

Ex. A-19 at '490 patent claim 22(f); Ex. I-2 at MOH1155 00141596; Ex. I-1 at

MOH1155\_00092482 (([]] IVC US Buildup showing a plurality of glass fiber layers); Ex. I (Van Vlassenrode Decl.), ¶¶ 7, 11). SEM and EDS analysis further confirmed that the substrate of the forthcoming IVC Foamed Rigid LVT products includes glass fiber layers on both sides of the center line. *See* Ex. A, Appx. 5 at SCOTT-A-5-0155, SCOTT-A-5-0162.

# g. [22.g] wherein the top layer includes a back layer, a printed synthetic film located above the back layer and a transparent or translucent thermoplastic layer located above the printed synthetic film;

The top layer of the forthcoming IVC Foamed Rigid LVT products will include a back layer, a printed synthetic film above the back layer, and a transparent or translucent thermoplastic layer above the printed film. *See* Ex. A-19 at '490 patent claim 22(g); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 8-9 (describing the wear layer (transparent or translucent thermoplastic layer), print layer (printed film), and an upper back ([]) layer (back layer)). SEM and EDS analysis further confirmed that the top layer includes a back layer, a printed film above the back layer, and a transparent layer above the printed film. *See* Ex. A, Appx. 5 at SCOTT-A-5-0168-SCOTT-A-5-169.

FTIR testing confirmed that the printed film layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-0079-SCOTT-A-6-0083. FTIR testing further confirmed that the transparent or translucent layer contains a thermoplastic (PVC). *See id.* 

# h. [22.h] wherein the back layer includes PVC with plasticizers and fillers;

The forthcoming IVC Foamed Rigid LVT product line has a back layer that will include PVC with plasticizers and fillers. *See* Ex. A-19 at '490 patent claim 22(h). For example, the back layer (upper back ([ ]) layer) will include PVC with [

] (plasticizers) and calcium carbonate (fillers). See id; Ex. I (Van

Vlassenrode Decl.), ¶¶ 9-10; Ex. I-1 (referencing plasticizers in [ ] layer).

FTIR testing further confirmed that the back layer includes PVC and filler (calcium carbonate). *See* Ex. A, Appx. 6 at SCOTT-A-6-0083. Gas chromatography – mass spectroscopy (GC-MS) testing also confirmed that the back layer includes [ ] (plasticizers). *See* Ex. A, Appx. 9 at SCOTT-A-9-0007.

# i. [22.i] wherein the transparent or translucent thermoplastic layer includes PVC;

The transparent or translucent thermoplastic layer (wear layer) of the forthcoming IVC Foamed Rigid LVT products will include PVC. *See* Ex. A-19 at '490 patent claim 22(i); Ex. I (Van Vlassenrode Decl.), ¶¶ 9-10 ("The wear layer is a protective transparent layer made primarly of PVC resin."); Ex. I-1 at MOH1155\_00092482. FTIR testing further confirmed the transparent or translucent layer contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-0081.

# j. [22.j] wherein the transparent or translucent thermoplastic layer has a thickness of 1 millimeter or less;

The transparent or translucent thermoplastic layer of the forthcoming IVC Foamed Rigid LVT product has a thickness of [ ]. *See* Ex. A-19 at '490 patent claim

22(j); Ex. I (Van Vlassenrode Decl.), ¶ 9; Ex. I-1 at MOH1155\_00092482 ([ ] IVC

US buildup with [ ] wear layer).

# k. [22.k] wherein the top layer has a thickness of 0.5 to 3 millimeters;

The top layer of the forthcoming IVC Foamed Rigid LVT product has a total thickness of [ ]. *See* Ex. A-19 at '490 patent claim 22(k); Ex. I (Van Vlassenrode Decl.), ¶¶ 7-9; Ex. I-1 at MOH1155\_00092482 ([ ] IVC US buildup with [ ] top layer).

# 1. [22.1] wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges;

Visual inspection of the forthcoming IVC Foamed Rigid LVT products confirmed that the floor panels are rectangular and oblong and include a pair of long edges and a pair of short edges. *See* Ex. A-19 at '490 patent claim 22(1); Ex. A, Appx. 1 at SCOTT-A-1-0183; Ex. A, Appx. 2 at SCOTT-A-2-0001 (overall length and width of '490 domestic industry products).

# m. [22.m] wherein the floor panel includes first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges;

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges. *See* Ex. A-19 at '490 patent claim 22(m); Ex. A, Appx. 3 at SCOTT-A-3.2-013-SCOTT-A-3.2-014.

# n. [22.n] wherein the first mechanical coupling parts are arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges;

As proposed by the parties, the administrative law judge construesd the claim term "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" as "allowing for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective long edges." Claim 22 contains this limitation. The forthcoming IVC Foamed Rigid LVT products satisfy this limitation. *See* Ex. A-19 at '490 patent claim 22(n). For instance, OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that this limitation is met. *See* Ex. A, Appx. 3 at SCOTT-A-3.2-013.

When the forthcoming IVC Foamed Rigid products are connected using a turning movement along the long sides, the coupling parts are locked in the vertical and horizontal directions such that the coupling parts resist separation in those directions. *See* Ex. A-19 at '490 patent claim 22(n). In other words, once connected, the coupling parts are not easily separated along the long sides using a force in the horizontal and vertical direction. *See id.* 

# o. [22.0] wherein the first mechanical coupling parts include a tongue and a groove;

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that the first mechanical coupling parts include a tongue and groove. *See* Ex. A-19 at '490 patent claim 22(o); Ex. A, Appx. 3 at SCOTT-A-3.2-013.

137

p. [22.p] wherein the tongue and the groove are substantially responsible for the vertical locking; and wherein the tongue and the groove include locking parts substantially responsible for the horizontal locking.

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that the tongue and groove are substantially responsible for the

vertical locking and include locking parts substantially responsible for the horizontal

locking. See Ex. A-19 at '490 patent claim 22(p); Ex. A, Appx. 3 at SCOTT-A-3.2-013.

# 2. Dependent Claim 23: wherein the first mechanical coupling parts are substantially realized in the substrate.

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT

products confirmed that the first mechanical coupling parts are substantially realized in

the substrate. See Ex. A-19 at '490 patent claim 23; Ex. A, Appx. 3 at SCOTT-A-3.2-

013.

# 3. Dependent Claim 25: wherein the back layer is located above the center line determined by the tongue-in-groove coupling.

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT

products confirmed that the back layer is located above the center line determined by the

tongue-in-groove coupling. See Ex. A-19 at '490 patent claim 25; Ex. A, Appx. 3 at

SCOTT-A-3.2-013.

# 4. Dependent Claim 26: wherein the closed cell foamed PVC board has a density of more than 650 kilograms per cubic meter.

The substrate of the forthcoming IVC Foamed Rigid LVT products includes a

closed cell foamed PVC board having a density between [ ] kilograms per cubic

meter (kg/m<sup>3</sup>). *See* Ex. A-19 at '490 patent claim 26; Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 7, 11.

### 5. Dependent Claim 27: wherein the floor panel comprises a backing layer located below the substrate.

OM testing of the locking sections of the forthcoming IVC Foamed Rigid LVT products confirmed a backing layer located below the substrate. *See* Ex. A-19 at '490 patent claim 27; Ex. A, Appx. 3 at SCOTT-A-3.2-013; Ex. I (Van Vlassenrode Decl.), ¶ 12 ("The forthcoming IVC Foamed Rigid LVT will also include an optional backing layer located below the substrate.").

# 6. Dependent Claim 28: wherein the floor panel has a thickness of 5 to 15 millimeters.

The forthcoming IVC Foamed Rigid LVT products will have the thickness of either [ ], depending on whether the product includes the optional backing layer. *See* Ex. A-19 at '490 patent claim 28; Ex. I (Van Vlassenrod Decl.), ¶¶ 9,12 ("The optional backing layer will have a thickness of approximately [ ], such that the IVC Foamed Rigid LVT product will have a total thickness of [ ], depending on whether the optional backing layer is included."); Ex. I-1 at MOH1155\_00092482.

Three measurements were also taken with calipers to determine the thickness of the forthcoming IVC Foamed Rigid LVT products with the optional backing layer, each of which was between [\_\_\_\_]. *See* Ex. A-19 at '490 patent claim 28; Ex. A, Appx. 2 at SCOTT-A-2-0001. The average thickness was [\_\_\_]. *See id.* 

# 7. Dependent Claim 29: wherein the floor panel has a length of more than 110 centimeters.

Dimensional analysis with a tap measure confirms that the length of the IVC Foamed Rigid LVT products is approximately [ ] centimeters. *See* Ex. A-19 at '490 patent claim 29; Ex. A, Appx. 2 at SCOTT-A-2-0001.

#### E. Validity of the '490 Patent

The patent at issue is presumed valid as a matter of law. 35 U.S.C. § 282. This resumption of validity may be overcome only by "clear and convincing evidence." *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1359 (Fed. Cir. 2007).

Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '490 patent. *See* Complaint Ex. 5 (certified assignment record).

No party has challenged the validity or enforceability of the '490 patent. Thus, there is no issue of material fact as to the validity or enforceability of the '490 patent. *See Lannom Mfg. Co., Inc. v. Int'l Trade Comm'n*, 799 F.2d 1572, 1580 (Fed. Cir. 1986) (Commission did not have authority to redetermine patent validity when no defense of invalidity had been raised).

#### VII. U.S. Patent No. 9,200,655

The '655 patent, entitled "Floor Panel," issued on March 19, 2019 to inventors Laurent Meersseman, Martin Segaert, Bernard Thiers, Benjamin Clement, and Christophe Maesen.<sup>19</sup> The '655 patent issued from U.S. patent Application Serial No.

<sup>&</sup>lt;sup>19</sup> A certificate of correction issued from the USPTO on May 14, 2019 to correct inventorship of this patent. The certificate of correction lists Laurent Meersseman and

16/158,612, filed on October 12, 2018, and expires on April 28, 2031. The '655 patent has 30 claims, 3 of which are independent claims. *See* Ex. A-3 ('655 Patent). Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '655 patent. *See* Complaint Ex. 6 (certified assignment record).

Complainants assert claims 1-4, 6-16, 18, and 20-26 of the '655 patent. Mem. at 12.

#### A. Dr. Scott's Testing Methods

As noted, Dr. Scott, complainants' technical expert, conducted numerous tests on the accused products and domestic industry products. *See* Mem. at 41-45; Ex. A (Scott Decl.), ¶¶ 60-86. Complainants provided a summary of the various tests Dr. Scott conducted. *See* Mem. at 41-45; Section V.A, *supra*.

### **B.** Claim Construction

#### 1. A Person of Ordinary Skill in the Art

Complainants, the Staff, and terminated respondents proposed very similar education and experience levels for a person of ordinary skill in the art at the time of the claimed invention. *See* Ex. A (Scott Decl.) at 19-21. The differences are not significant for purposes of deciding the issues on the merits in this investigation.

Thus, as proposed by complainants, the administrative law judge has determined that a person of ordinary skill in the art at the time of the claimed invention would have either (i) an undergraduate degree in mechanical engineering, materials science or engineering, polymer science, engineering arts, or an equivalent field, and a minimum

Martin Segaert as inventors. *See* Ex. A-3 ('655 Patent) at 18 ('655 Patent Cert. of Correction).

two years of practical experience in the design, development, analysis or manufacturing of polymer-based structures, or (ii) a minimum of four years of practical experience in polymer-based floor covering design, development, analysis, or manufacturing. *See id.* at 19-20.

## 2. Claim Construction

As noted, complainants assert claims 1-4, 6-16, 18, and 20-26 of the '655 patent.

Mem. at 12.

Asserted independent claims 1 and 18 are recited below:

1. A floor panel comprising:

a substrate; and

- a top layer located above and glued to the substrate;
- wherein the substrate includes a closed cell foamed PVC board with fillers;
- wherein the closed cell foamed PVC board has an average density of more than 300 kilograms per cubic meter;
- wherein the top layer includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film;
- wherein the back layer includes a vinyl compound with fillers;
- wherein the back layer has a thickness of at least 45 percent of the thickness of the top layer;
- wherein the floor panel includes a first pair of edges and a second pair of edges;
- wherein the floor panel includes first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges;
- wherein the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges;
- wherein the first mechanical coupling parts include a tongue and a groove;
wherein the groove is flanked by an upper lip and a lower lip;

- wherein the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip;
- wherein the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip; and
- wherein both said horizontally active locking surfaces and both said vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board.

**18**. A floor panel comprising:

a substrate;

a top layer located above and glued to the substrate; and

a backing layer located below the substrate;

- wherein the substrate includes a closed cell foamed PVC board with fillers;
- wherein the closed cell foamed PVC board has an average density of more than 300 kilograms per cubic meter;
- wherein the closed cell foamed PVC board has a top flat side and a bottom flat side;
- wherein the closed cell foamed PVC board has a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed cell foamed PVC board;
- wherein the top layer includes a back layer, a printed synthetic material film located above the back layer, a transparent or translucent synthetic material wear layer located above the printed synthetic material film and a surface layer located above the transparent or translucent synthetic material wear layer;
- wherein the back layer comprises a vinyl compound with fillers;
- wherein the back layer has a thickness of at least 45 percent of the thickness of the top layer;
- wherein the transparent or translucent synthetic material wear layer includes a vinyl layer;
- wherein the surface layer includes a UV hardened substance;

- wherein the floor panel includes a first pair of edges and a second pair of edges;
- wherein the floor panel includes first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges;
- wherein the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges;
- wherein the first mechanical coupling parts include a tongue and a groove;
- wherein the groove is flanked by an upper lip and a lower lip;
- wherein the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip;
- wherein the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip; and
- wherein both said horizontally active locking surfaces and both said vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board.

Ex. A-3 ('655 Patent).

## a. "the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges" (Claims 1 and 18)

The parties agreed on the claim construction shown in the table below. See Mem.

at 45; Staff Resp. at 49.

Claim Term	Agreed Construction
"the first mechanical coupling parts allow	"the first mechanical coupling parts allow
a horizontal and vertical locking of two of	for horizontal and vertical locking of two
such floor panels using a turning	of such floor panels by turning one
movement along the respective edges"	coupling part into the other coupling part at
(claims 1 and 18)	the respective edges"

As proposed by the parties, the administrative law judge construes the claim term "the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edge" as "the first mechanical coupling parts allow for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective edges."

# b. "the closed cell foamed PVC board...." (Claims 6, 7, and 18)

The proposed constructions for the related disputed claim terms are set forth in the table below. *See* Mem. at 45-47; Staff Resp. at 50.

Claim Term	Complainants' Construction	Terminated Respondents' Construction	Staff's Construction
"the closed cell foamed PVC board has a top flat side and a bottom flat side [and] a central layer of the closed cell foamed PVC board" (claim 6)	Plain and ordinary meaning: "the closed cell foamed PVC board has a top flat side and a bottom flat side and a central thickness located between the top and bottom flat sides"	"the closed cell foamed PVC board has a top flat side and a bottom flat side and a separate central layer located between the top and bottom flat sides"	"the closed cell foamed PVC board has a top flat side and a bottom flat side and a separate central layer located between the top and bottom flat sides"
"the closed cell foamed PVC board has a top flat side and [a] bottom flat side [and] a central layer of the closed cell foamed PVC board" (claim 7)			
"the closed cell foamed PVC board has a top flat side and a bottom flat side [and] a central layer of the closed cell foamed PVC board" (claim 18)			

Claim 6 of the '655 Patent recites:

The floor panel of claim 1, wherein the closed cell foamed PVC board has a top flat side and a bottom flat side; and wherein the closed cell foamed PVC board has a local density on the top flat side which is higher than in *a central layer of the closed cell foamed PVC board*.

Ex. A-3 ('655 Patent) at claim 6 (emphasis added). Claims 7 and 18 similarly recite a

floor panel wherein the closed cell foamed PVC board has a (i) "top flat side," (ii)

"bottom flat side," and (iii) "central layer." Id. at claims 7 and 18.

Each of the claims 6, 7 and 18 recites the location of the central layer and its characteristics. *See, e.g., id.* at claim 6 ("local density on the top flat side [] is higher than in a central layer of the closed cell foamed PVC board"). The claim language itself thus requires a closed cell foamed PVC board having a non-uniform density down its vertical axis, with density being higher at one (or both) distal ends of the axis (*i.e.*, at the bottom and/or top flat sides). In other words, the closed cell foamed PVC board has a lower-density region – or "thickness" – in the center area of its vertical axis (*i.e.*, between the top and bottom flat sides). *See* Ex. A (Scott Decl.), ¶ 171.

The specification describes a foamed synthetic material board having "a local density on one or both flat sides which is higher than in a central layer of the foamed synthetic material board." Ex. A-3 ('655 Patent) at 3:3-5; *id.* at 11:13-18 (describing a foamed synthetic material board having a local density on the flat sides "which is higher than the density of a central layer"). This concept of a foamed synthetic material board having a non-uniform density down its vertical axis is illustrated in the annotated version of Figure 2 of the '655 patent below:



Annotated Figure 2 shows that the foamed synthetic material board has lowerdensity layer – or "thickness" – located between flat sides 24 and 25 (highlighted in red). Ex. A-3 ('655 Patent) at Fig. 2; *id.* at 11:13-18. As illustrated in Figure 2, the central layer is not required to be a uniform structure, but is rather distinguished by the fact that it has a different density than that of the top and bottom sides. *See* Ex. A (Scott Decl.), ¶ 173; Staff's Claim Construction Brief (EDIS Doc. ID No. 688498) at 23-24 (stating that "the 'central layer' must be a separate layer in the sense that it must have distinct or different properties from the top and bottom flat sides of the substrate"). Thus, the claims and specification support complainants' proposed construction that the "central layer" of the closed cell foamed PVC board is a "central thickness located between the top and bottom flat sides." *Id.* 

In describing the "particularity of the present invention," the specification discloses that the central layer is distinct from the substrate's flat sides, explaining:

The particularity of the present invention, at least according to its first aspect, consists in that said substrate 2 substantially consists of a foamed synthetic material board. In the example, the substrate 2 relates to a foamed PVC board of the closed cell type. The board 2 concerned has an average density of 450 kilograms per cubic meter, however, also has a local density on both flat sides 24-25, namely, a density of 500 kilograms per cubic meter or more, which is higher than the density of a central layer 26 of the synthetic material board 2. Moreover, the substrate 2 comprises separate layers 27, in this case layers of glass fiber, which increase the bending stiffness thereof. In the example, these separate layers 27 are situated on both flat sides 24-25 of the substrate 2.

Ex. A-3 ('655 Patent) at 11:9-22; 3:3-18 ("said synthetic material board has a

local density on one or both flat sides which is higher than in a central layer of the foamed synthetic material board").

Accordingly, as proposed by complainants, the administrative law judge construes the claim term "the closed cell foamed PVC board has a top flat side and a bottom flat side . . . [and] a central layer of the closed cell foamed PVC board" as "the closed cell foamed PVC board has a top flat side and a bottom flat side . . . and a central thickness located between the top and bottom flat sides."

### C. Infringement Analysis of the '655 Patent

As noted, complainants assert claims 1-4, 6-16, 18, and 20-26 of the '655 patent.

Mem. at 12.

The '655 accused products include the following:

- Antigua WPC;
- EZ Go;
- WaterGuard;
- Ultra SPC;

- Top Flooring;
- Uniflor Aqua;
- Quickstyle.

As with the '460 and '490 patents, Dr. Scott conducted and directed a variety of extensive technical tests and analyses of the accused EZ Go, Top Flooring, WaterGuard, Ultra SPC, and Antigua WPC products to determine if those products infringed the asserted claims of the '655 patent. Ex. A (Scott Decl.), ¶¶ 87-92, 100-109, 117-122, 130-137. Likewise, Dr. Scott conducted and directed extensive testing of the Uniflor Aqua and Quickstyle products from one or more non-respondents to provide additional support for complainants' request for a general exclusion order. Ex. A (Scott Decl.), ¶¶ 142-149.

Dr. Scott determined that, in his opinion, the EZ Go, Top Flooring, WaterGuard, Ultra SPC, Antigua WPC, Uniflor Aqua, and Quickstyle products infringe certain asserted claims of the '655 patent. Claim charts that contain Dr. Scott's detailed infringement analyses and include annotated photographs and test results accompany Dr. Scott's declaration. *See* Ex. A (Scott Decl.), ¶¶ 59, 92, 103, 109, 122, 137, 145, 149, 169-181, 186; Suppl. Ex. A (Scott Suppl. Decl.), ¶¶ 4-11; Ex. A-7 (EZ Go Chart); Ex. A-9 (Top Flooring Chart); Ex. A-10 (WaterGuard Chart); Ex. A-12 (Ultra SPC Chart); Ex. A-14 (Antigua WPC Chart); Ex. A-16 (Uniflor Aqua Chart); Ex. A-17 (Quickstyle Niagara Chart).

The claim charts provide an element by element explanation, of how, in Dr. Scott's opinion, the EZ Go, Top Flooring, WaterGuard, Ultra SPC, Antigua WPC, Uniflor Aqua, and Quickstyle products meet every limitation of certain asserted claims of the '655 patent. *See id.*; Mem. at 105-63. Furthermore, Dr. Scott's analysis explains

how, in his opinion, those products infringe the asserted claims under each of the agreed upon and proposed claim constructions offered by the parties in the claim construction phase. *See* Ex. A (Scott Decl.), ¶¶ 169-181; Ex. A-7 (EZ Go Chart); Ex. A-9 (Top Flooring Chart); Ex. A-10 (WaterGuard Chart); Ex. A-12 (Ultra SPC Chart); Ex. A-14 (Antigua WPC Chart); Ex. A-16 (Uniflor Aqua Chart); Ex. A-17 (Quickstyle Niagara Chart); Mem. at 54-60.

The Staff argues that it "is not aware of any dispute as to the evidence offered by Dr. Scott and Complainants. The Staff is therefore of the view that Complainants are entitled to a summary determination that the accused EZ Go, Top Flooring, WaterGuard, Ultra SPC, and Antigua WPC products infringe the asserted claims of the '655 Patent. Similarly, Complainants are entitled to rely on the Uniflor Aqua and Quickstyle products as additional support in connection with their request for a General Exclusion Order." Staff at 52-53.

The table below, provided by the Staff, summarizes the results of Dr. Scott's analysis and his opinions with respect to the '655 patent. See Staff Resp. at 52; Ex. A (Scott Decl.), ¶¶ 59, 92, 103, 109, 122, 137, 145, 149, 169-181, 186; Suppl. Ex. A (Scott Suppl. Decl.), ¶¶ 4-11; Ex. A-7 (EZ Go Chart); Ex. A-9 (Top Flooring Chart); Ex. A-10 (WaterGuard Chart); Ex. A-12 (Ultra SPC Chart); Ex. A-14 (Antigua WPC Chart); Ex. A-16 (Uniflor Aqua Chart); Ex. A-17 (Quickstyle Niagara Chart).

Accused Product	Defaulting Respondents	'655 patent	Claim Chart and Opinion
EZ Go	ABK Sam Houston Maxwell Flooring	Claims 1-4, 6-12, 15- 16	Ex A, ¶¶ 87-92; 169- 181, 186; Ex. A-7
Top Flooring	ABK Sam Houston Maxwell Flooring	Claim 1	Ex A, ¶¶ 100-103, 169-181, 186; Suppl. Ex. A, ¶¶ 4-6 Ex. A-9
WaterGuard	Aurora Mr. Hardwood	Claims 1-4, 6-16, 18, 20-26	Ex A, ¶¶ 104-109, 169-181, 186; Suppl. Ex. A, ¶¶ 7-11 Ex. A-10
Ultra SPC	Runchang Lejia Go-Higher	Claims 1-4, 6, 8-16	Ex A, ¶¶ 117-122, 169-181, 186; Ex. A-12
Antigua WPC	Divine Licheer	Claims 1-4, 6-16, 18, 20-26	Ex A, ¶¶ 130-137, 169-181, 186; Suppl. Ex. A, ¶¶ 7-11 Ex. A-14
Uniflor Aqua		Claim 1	Ex A, ¶¶ 142-145, 169-181, 186; Suppl. Ex. A, ¶¶ 4-6 Ex. A-16
Quickstyle		Claim 1	Ex A, ¶¶ 156-149, 169-181, 186; Suppl. Ex. A, ¶¶ 4-6 Ex. A-17

An element by element infringement analysis for each of the products accused of infringing the '655 patent is discussed below.

### 1. Independent Claim 1

Independent claim 1 is directed to a "[f]loor panel." *See* Ex. A-3 ('655 Patent) at 14:59. Visual inspection confirmed that the '655 accused products, which include the Antigua WPC, EZ Go, WaterGuard, and Ultra SPC products, are floor panels. *See* Ex. A-14 (Antigua WPC), Ex. A-7 (EZ Go), Ex. A-10 (WaterGuard), Ex. A-12 (Ultra SPC); Ex. A-9 (Top Flooring); Ex. A-16 (Uniflor Aqua); Ex. A-17 (Quickstyle).

#### a. [1.a] a substrate; and

i. Antigua WPC

Visual inspection and OM testing confirmed that the Antigua WPC products include a substrate. *See* Ex. A-14 at '655 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004. CT, FTIR, and SEM/EDS testing further confirmed that this limitation is met. *See* Ex. A-14 at '655 patent claim 1(a); Ex. A, Appx. 4 at SCOTT-A-4-0009; Ex. A, Appx. 6 at SCOTT-A-6-00011; Ex. A, Appx. 5 at SCOTT-A-5-0005.

#### ii. EZ Go

Visual inspection and OM testing confirmed that the EZ Go products include a substrate. *See* Ex. A-7 at '655 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-3.2-012, SCOTT-A-3.2-033. CT, FTIR, and SEM/EDS testing further confirmed that this limitation is met. *See* Ex. A-7 at '655 patent claim 1(a); Ex. A, Appx. 4 at SCOTT-A-4-0023; Ex. A, Appx. 6 at SCOTT-A-6-00066; Ex. A, Appx. 5 at SCOTT-A-5-0085.

## iii. WaterGuard

Visual inspection and OM testing confirmed that the WaterGuard products include a substrate. *See* Ex. A-10 at '655 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-

3.2-025-SCOTT-A-3.2-026. CT, FTIR, and SEM/EDS testing further confirmed that this limitation is met. *See* Ex. A-10 at '655 patent claim 1(a); Ex. A, Appx. 4 at SCOTT-A-4-0058; Ex. A, Appx. 6 at SCOTT-A-6-00056; Ex. A, Appx. 5 at SCOTT-A-5-0122.

## iv. Ultra SPC

Visual inspection and OM testing confirmed that the Ultra SPC products include a substrate. *See* Ex. A-12 at '655 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-3.2-023-SCOTT-A-3.2-024. CT, FTIR, and SEM/EDS testing confirmed that this limitation is met. *See* Ex. A-12 at '655 patent claim 1(a); Ex. A, Appx. 4 at SCOTT-A-4-0051; Ex. A, Appx. 6 at SCOTT-A-6-00047; Ex. A, Appx. 5 at SCOTT-A-5-0102.

## v. Top Flooring

Visual inspection and OM testing confirmed that the Top Flooring products include a substrate. *See* Ex. A-9 at '655 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-3.2-036. SEM testing further confirmed this limitation is met. *See* Ex. A, Appx. 5 at SCOTT-A-5-0183.

#### vi. Uniflor Aqua

Visual inspection and OM testing confirmed that the Uniflor Aqua products include a substrate. *See* Ex. A-16 at '655 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-3.2-044. SEM testing further confirmed this limitation is met. *See* Ex. A, Appx. 5 at SCOTT-A-5-0187.

#### vii. Quickstyle

Visual inspection and OM testing confirmed that the Quickstyle products include a substrate. *See* Ex. A-17 at '655 patent claim 1(a); Ex. A, Appx. 3 at SCOTT-A-3.2-

154

048. SEM testing further confirmed this limitation is met. *See* Ex. A, Appx. 5 at SCOTT-A-5-0171.

# b. [1.b] a top layer located above and glued to the substrate;

i. Antigua WPC

Visual inspection and OM testing confirmed that the Antigua WPC products include a top layer located above the substrate. *See* Ex. A-14 at '655 patent claim 1(b); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004. CT, SEM/EDS, and FTIR testing confirmed that the top layer of the Antigua WPC products is glued to the substrate. *See* Ex. A-14 at '655 patent claim 1(b); Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 5 at SCOTT-A-5-0020; Ex. A, Appx. 6 at SCOTT-A-6-00011-SCOTT-A-6-00012, SCOTT-A-6-00017.

ii. EZ Go

Visual inspection and OM testing confirmed that the EZ Go products include a top layer located above the substrate. *See* Ex. A-7 at '655 patent claim 1(b); Ex. A, Appx. 3 at SCOTT-A-3.2-012, SCOTT-A-3.2-033. CT, SEM/EDS, and FTIR testing confirmed that the top layer of the EZ Go products is glued to the substrate. *See* Ex. A-7 at '655 patent claim 1(b); Ex. A, Appx. 4 at SCOTT-A-4-0021-SCOTT-A-4-0027; Ex. A, Appx. 5 at SCOTT-A-5-0079; Ex. A, Appx. 6 at SCOTT-A-6-00066-SCOTT-A-6-00067, SCOTT-A-6-00072.

#### iii. WaterGuard

Visual inspection and OM testing confirmed that the WaterGuard products include a top layer located above the substrate. *See* Ex. A-10 at '655 patent claim 1(b); Ex. A, Appx. 3 at SCOTT-A-3.2-025- SCOTT-A-3.2-025. CT, SEM/EDS, and FTIR

testing confirmed that the top layer of the WaterGuard products is glued to the substrate. *See* Ex. A-10 at '655 patent claim 1(b); Ex. A, Appx. 4 at SCOTT-A-4-0056-SCOTT-A-4-0062; Ex. A, Appx. 5 at SCOTT-A-5-0118; Ex. A, Appx. 6 at SCOTT-A-6-00056-SCOTT-A-6-00057, SCOTT-A-6-00063.

#### iv. Ultra SPC

Visual inspection and OM testing confirmed that the Ultra SPC products include a top layer located above the substrate. *See* Ex. A-12 at '655 patent claim 1(b); Ex. A, Appx. 3 at SCOTT-A-3.2-023-SCOTT-A-3.2-024. CT, SEM/EDS, and FTIR testing confirmed that the top layer of the Ultra SPC products is glued to the substrate. *See* Ex. A-12 at '655 patent claim 1(b); Ex. A, Appx. 4 at SCOTT-A-4-0049-SCOTT-A-4-0055; Ex. A, Appx. 5 at SCOTT-A-5-0098; Ex. A, Appx. 6 at SCOTT-A-6-00047-SCOTT-A-6-00048, SCOTT-A-6-00053.

#### v. Top Flooring

Visual inspection and OM testing confirmed that the Top Flooring products include a top layer located above the substrate. *See* Ex. A-9 at '655 patent claim 1(b); Ex. A, Appx. 3 at SCOTT-A-3.2-036. SEM testing further confirmed a top layer located above and glued to the substrate. *See* Ex. A, Appx. 5 at SCOTT-A-5-0182-SCOTT-A-5-0183.

### vi. Uniflor Aqua

Visual inspection and OM testing confirmed that the Uniflor Aqua products include a top layer located above the substrate. *See* Ex. A-16 at '655 patent claim 1(b); Ex. A, Appx. 3 at SCOTT-A-3.2-044. SEM testing further confirmed a top layer located

156

above and glued to the substrate. *See* Ex. A, Appx. 5 at SCOTT-A-5-0185, SCOTT-A-5-0187.

#### vii. Quickstyle

Visual inspection and OM testing confirmed that the Quickstyle products include a top layer located above the substrate. *See* Ex. A-17 at '655 patent claim 1(b); Ex. A, Appx. 3 at SCOTT-A-3.2-048. SEM testing further confirmed a top layer located above and glued to the substrate. *See* Ex. A, Appx. 5 at SCOTT-A-5-0170-SCOTT-A-5-0171.

# c. [1.c] wherein the substrate includes a closed cell foamed PVC board with fillers;

### i. Antigua WPC

Testing confirmed that the substrate of the Antigua WPC products includes a closed cell foamed PVC board with fillers. *See* Ex. A-14 at '655 patent claim 1(c). For example, gas infiltration tests confirmed that the substrate of the Antigua WPC products includes a closed cell foamed board. *See id.*; Ex. A, Appx. 11 at SCOTT-A-11-0002 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR and SEM/EDS testing further confirmed that the substrate includes PVC and fillers such as calcium carbonate (CaCO<sub>3</sub>). *See id.*; Ex. A, Appx. 6 at SCOTT-A-6-00018; Ex. A, Appx. 5 at SCOTT-A-5-0013.

### ii. EZ Go

Testing confirmed that the substrate of the EZ Go products includes a closed cell foamed PVC board with fillers. *See* Ex. A-7 at '655 patent claim 1(c). For example, gas infiltration tests confirmed that the substrate of the EZ Go products includes a closed cell foamed board. *See id.*; Ex. A, Appx. 11 at SCOTT-A-11-0003 - 4 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR and

SEM/EDS testing further confirmed that the substrate includes PVC and fillers such as calcium carbonate (CaCO<sub>3</sub>). *See id.*; Ex. A, Appx. 5 at SCOTT-A-5-0085; Ex. A, Appx. 6 at SCOTT-A-6-00067, SCOTT-A-6-00073.

## iii. WaterGuard

Testing confirmed that the substrate of the WaterGuard products includes a closed cell foamed PVC board with fillers. *See* Ex. A-10 at '655 patent claim 1(c). For example, gas infiltration tests confirmed that the substrate of the WaterGuard products includes a closed cell foamed board. *See id.*; Ex. A, Appx. 11 at SCOTT-A-11-0001 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR and SEM/EDS testing further confirmed that the substrate includes PVC and fillers such as calcium carbonate (CaCO<sub>3</sub>). *See id.*; Ex. A, Appx. 5 at SCOTT-A-5-0122; Ex. A, Appx. 6 at SCOTT-A-6-00057, SCOTT-A-6-00064.

#### iv. Ultra SPC

Testing confirmed that the substrate of the Ultra SPC products includes a closed cell foamed PVC board with fillers. *See* Ex. A-12 at '655 patent claim 1(c). For example, gas infiltration tests confirmed that the substrate of the Antigua WPC products includes a closed cell foamed board. *See id.*; Ex. A, Appx. 11 at SCOTT-A-11-0005 - 6 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR and SEM/EDS testing further confirmed that the substrate includes PVC and fillers such as calcium carbonate (CaCO<sub>3</sub>). *See* Ex. A-12 at '655 patent claim 1(c); Ex. A, Appx. 5 at SCOTT-A-5-0102; Ex. A, Appx. 6 at SCOTT-A-6-00055.

#### v. Top Flooring

Testing confirmed that the substrate of the Top Flooring products includes a closed cell foamed PVC board with fillers. *See* Ex. A-9 at '655 patent claim 1(c). For example, gas infiltration tests confirmed that the substrate of the Top Flooring products includes a closed foamed board. *See id.*; Ex. A, Appx. 11 at SCOTT-A-11-0011 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR testing further confirmed that the substrate includes PVC and filers such as calcium carbonate (CaCO<sub>3</sub>). *See* Ex. A, Appx. 6 at SCOTT-A-6-00110.

## vi. Uniflor Aqua

Testing confirmed that the substance of the Uniflor Aqua products includes a closed cell foamed PVC board with fillers. *See* Ex. A-16 at '655 patent claim 1(c). For example, gas infiltration tests confirmed that the substrate of the Uniflor Aqua products includes a closed foamed board. *See id.*; Ex. A, Appx. 11 at SCOTT-A-11-0012 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR testing further confirmed that the substrate includes PVC and filers such as calcium carbonate (CaCO<sub>3</sub>). *See* Ex. A, Appx. 6 at SCOTT-A-6-00094.

## vii. Quickstyle

Testing confirmed that the substance of the Quickstyle products includes a closed cell foamed PVC board with fillers. *See* Ex. A-17 at '655 patent claim 1(c). For example, gas infiltration tests confirmed that the substrate of the Quickstyle products includes a closed foamed board. *See id.*; Ex. A, Appx. 11 at SCOTT-A-11-0013 (test results demonstrating that the substrate includes a closed cell foamed board). FTIR

testing further confirmed that the substrate includes PVC and filers such as calcium carbonate (CaCO<sub>3</sub>). *See* Ex. A, Appx. 6 at SCOTT-A-6-00104.

## d. [1.d] wherein the closed cell foamed PVC board has an average density of more than 300 kilograms per cubic meter;

i. Antigua WPC

Density testing confirmed that the substrate of the Antigua WPC products has a density of 891 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-14 at '655 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0001.

## ii. EZ Go

Density testing confirmed that the substrate of the EZ Go products has a density of 870 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-7 at '655 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0001.

## iii. WaterGuard

Density testing confirmed that the substrate of the WaterGuard products has a density of 983 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-10 at '655 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0001.

## iv. Ultra SPC

Density testing confirmed that the substrate of the Ultra SPC products has a density of 891 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-12 at '655 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0001.

## v. Top Flooring

Density testing confirmed that the substrate of the Top Flooring products has a density of 955 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-9 at '655 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0002.

vi. Uniflor Aqua

Density testing confirmed that the substrate of the Uniflor Aqua products has a density of 979 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-16 at '655 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0002.

vii. Quickstyle

Density testing confirmed that the substrate of the Quickstyle products has a density of 871 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-17 at '655 patent claim 1(d); Ex. A, Appx. 7 at SCOTT-A-7-0002.

- e. [1.e] wherein the top layer includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film;
  - i. Antigua WPC

The top layer of the Antigua WPC products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film. *See* Ex. A-14 at '655 patent claim 1(e). OM, CT, and FTIR testing of the Antigua WPC products further confirmed the presence of a back layer, a printed film, and a transparent or translucent wear layer. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.1-003, SCOTT-A-3.2-

003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 6 at SCOTT-A-6-00011.

FTIR testing confirmed that the printed film layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00015. FTIR testing further confirmed that the transparent or translucent layer contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00014.

ii. EZ Go

The top layer of the EZ Go products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film. *See* Ex. A-7 at '655 patent claim 1(e). OM, CT, and FTIR testing of the EZ Go products further confirmed the presence of a back layer, a printed film, and a transparent or translucent wear layer. *See* Ex. A-7 at '655 patent claim 1(e); Ex. A, Appx. 3 at SCOTT-A-3.1-011, SCOTT-A-3.2-012, SCOTT-A-3.2-033; Ex. A, Appx. 4 at SCOTT-A-4-0021-SCOTT-A-4-0027; Ex. A, Appx. 6 at SCOTT-A-6-00066.

FTIR testing confirmed that the printed film layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00070. FTIR testing further confirmed that the transparent or translucent layer contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00069.

## iii. WaterGuard

The top layer of the WaterGuard products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film. *See* Ex.

A-10 at '655 patent claim 1(e). OM, CT, and FTIR testing of the WaterGuard products further confirmed the presence of a back layer, a printed film, and a transparent or translucent wear layer. *See* Ex. A-10 at '655 patent claim 1(e); Ex. A, Appx. 3 at SCOTT-A-3.1-021, SCOTT-A-3.2-025-SCOTT-A-3.2-026; Ex. A, Appx. 4 at SCOTT-A-4-0056-SCOTT-A-4-0062; Ex. A, Appx. 6 at SCOTT-A-6-00056, SCOTT-A-6-00059-SCOTT-A-6-00060.

### iv. Ultra SPC

The top layer of the Ultra SPC products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film. *See* Ex. A-12 at '655 patent claim 1(e). OM, CT, and FTIR testing of the Ultra SPC products further confirmed the presence of a back layer, a printed film, and a transparent or translucent wear layer. *See* Ex. A-12 at '655 patent claim 1(e); Ex. A, Appx. 3 at SCOTT-A-3.2-023-SCOTT-A-3.2-024; Ex. A, Appx. 4 at SCOTT-A-4-0049-SCOTT-A-4-0055; Ex. A, Appx. 6 at SCOTT-A-6-00047.

FTIR testing confirmed that the printed film layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00051. FTIR testing further confirmed that the transparent or translucent layer contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00050.

## v. Top Flooring

The top layer of the Top Flooring products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film. *See* Ex.

163

A-9 at '655 patent claim 1(e). OM and FTIR testing of the Top Flooring products further confirmed the presence of a back layer, a printed film, and transparent or translucent wear layer. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-036; Ex. A, Appx. 6 SCOTT-A-6-00107-SCOTT-A-6-00108.

FTIR testing confirmed that the printed layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx 6 SCOTT-A-6-00107. FTIR testing further confirmed that the transparent or translucent layer contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00108.

## vi. Uniflor Aqua

The top layer of the Uniflor Aqua products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film. *See* Ex. A-16 at '655 patent claim 1(e). OM and FTIR testing of the Uniflor Aqua products further confirmed the presence of a back layer, a printed film, and transparent and translucent wear layer. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-044; Ex. A, Appx. 6 at SCOTT-A-6-00091-SCOTT-A-6-00092.

FTIR testing confirmed that the printed layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00092. FTIR testing further confirmed that the transparent or translucent layer contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00091.

#### vii. Quickstyle

The top layer of the Quickstyle products includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic

164

material wear layer located above the printed synthetic material film. *See* Ex. A-17 at '655 patent claim 1(e). OM and FTIR testing of the Quickstyle products further confirmed the presence of a back layer, a printed film, and a transparent and translucent wear layer. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-048; Ex. A, Appx. 6 at SCOTT-A-6-00101-SCOTT-A-6-00102.

FTIR testing confirmed that the printed layer is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00102. FTIR testing further confirmed that the transparent or translucent layer contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00101.

# f. [1.f] wherein the back layer includes a vinyl compound with fillers;

#### i. Antigua WPC

FTIR and SEM/EDS testing confirmed that the back layer of the Antigua WPC products includes PVC (a vinyl compound) and calcium carbonate (a filler). *See* Ex. A-14 at '655 patent claim 1(f); Ex. A, Appx. 6 at SCOTT-A-6-00012, SCOTT-A-6-00016; Ex. A, Appx. 5 at SCOTT-A-5-0013.

## ii. EZ Go

FTIR and SEM/EDS testing confirmed that the back layer of the EZ Go products includes PVC (a vinyl compound) and calcium carbonate (a filler). *See* Ex. A-7 at '655 patent claim 1(f); Ex. A, Appx. 6 at SCOTT-A-6-00067, SCOTT-A-5-00071; Ex. A, Appx. 5 at SCOTT-A-5-0091.

## iii. WaterGuard

FTIR and SEM/EDS testing confirmed that the back layer of the WaterGuard products includes PVC (a vinyl compound) and a calcium carbonate (a filler). *See* Ex. A-

10 at '655 patent claim 1(f); Ex. A, Appx. 6 at SCOTT-A-6-00057, SCOTT-A-6-00062; Ex. A, Appx. 5 at SCOTT-A-5-0130.

iv. Ultra SPC

FTIR and SEM/EDS testing confirmed that the back layer of the Ultra SPC products includes PVC (a vinyl compound) and a calcium carbonate (a filler). *See* Ex. A-12 at '655 patent claim 1(f); Ex. A, Appx. 6 at SCOTT-A-6-00048, SCOTT-A-6-00052; Ex. A, Appx. 5 at SCOTT-A-5-0111.

## v. Top Flooring

FTIR testing confirmed that the back layer of the Top Flooring products includes PVC (a vinyl compound) and calcium carbonate (a filler). *See* Ex. A-9 at '655 patent claim 1(f); Ex. A, Appx. 6 at SCOTT-A-6-00109.

## vi. Uniflor Aqua

FTIR testing confirmed that the back layer of the Uniflor Aqua products includes PVC (a vinyl compound) and calcium carbonate (a filler). *See* Ex. A-16 at '655 patent claim 1(f); Ex. A, Appx. 6 at SCOTT-A-6-00093.

vii. Quickstyle

FTIR testing confirmed that the back layer of the Quickstyle products includes PVC (a vinyl compound) and calcium carbonate (a filler). *See* Ex. A-17 at '655 patent claim 1(f); Ex. A, Appx. 6 at SCOTT-A-6-00103.

# g. [1.g] wherein the back layer has a thickness of at least 45 percent of the thickness of the top layer;

i. Antigua WPC

CT testing confirmed that the top layer of the Antigua Products has an average thickness between 1.25-1.37 mm and the back layer has an average thickness between

0.91-1.01 mm. *See* Ex. A-14 at '655 patent claim 1(g); Ex. A, Appx. 4 at SCOTT-A-4-0009. Therefore, the back layer has a thickness of at least 66% of the thickness of the top layer, *i.e.*, 0.91 mm (the average minimum of the back later) / 1.37 mm (the average maximum of the top layer). *See id*.

### ii. EZ Go

CT testing confirmed that the top layer has an average thickness between 1.89-2.01 mm and the back layer has an average thickness between 1.66-1.77 mm. *See* Ex. A-7 at '655 patent claim 1(g); Ex. A, Appx. 4 at SCOTT-A-4-0023. Therefore, the back layer has a thickness of at least 82% of the thickness of the top layer, *i.e.*, 1.66 mm mm (the average minimum of the back later) / 2.01 mm (the average maximum of the top layer). *See id*.

#### iii. WaterGuard

CT testing confirmed that the top layer has an average thickness between 0.84-0.88 mm and the back layer has an average thickness between 0.84-0.88 mm. *See* Ex. A-10 at '655 patent claim 1(g); Ex. A, Appx. 4 at SCOTT-A-4-0058. Therefore, the back layer has a thickness of at least 58% of the thickness of the top layer, *i.e.*, 0.84 mm (the average minimum of the back later) / 1.43 mm (the average maximum of the top layer). *See id.* 

#### iv. Ultra SPC

CT testing confirmed that the top layer has an average thickness between 1.71-1.78 mm and the back layer has an average thickness between 1.13-1.17 mm. *See* Ex. A-12 at '655 patent claim 1(g); Ex. A, Appx. 4 at SCOTT-A-4-0051. Therefore, the back layer has a thickness of at least 66% of the thickness of the top layer, *i.e.*, 1.13 mm (the

average minimum of the back later) / 1.78 mm (the average maximum of the top layer). *See id.* 

v. Top Flooring

OM testing of the locking sections of the Top Flooring products confirmed that the top layer has a thickness of approximately 2.03 millimeters and the back layer has a thickness of approximately 1.79 millimeters. *See* Ex. A-9 at '655 patent claim 1(g); Ex. A, Appx. 3 at SCOTT-A-3.2-037. Therefore, the back layer has a thickness of approximately 88% of the thickness of the top layer. *See id*.

## vi. Uniflor Aqua

OM testing of the locking sections of the Uniflor Aqua products confirmed that the top layer has a thickness of approximately 1.47 millimeters and the back layer has a thickness of approximately 1.00 millimeters. *See* Ex. A-16 at '655 patent claim 1(g); Ex. A, Appx. 3 at SCOTT-A-3.2-043. Therefore, the back layer has a thickness of approximately 68% of the thickness of the top layer. *See id*.

#### vii. Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the top layer has a thickness of approximately 1.79 millimeters and the back layer has a thickness of 1.20 millimeters. *See* Ex. A-17 at '655 patent claim 1(g); Ex. A, Appx. 3 at SCOTT-A-3.2-049. Therefore, the back layer has a thickness of approximately 67% of the thickness of the top layer. *See id*.

# h. [1.h] wherein the floor panel includes a first pair of edges and a second pair of edges;

i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the floor panels include a pair of long edges and a pair of short edges. *See* Ex. A-14 at '655 patent claim 1(h); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT A 3.2-004.

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the floor panels include a pair of long edges and a pair of short edges. *See* Ex. A-7 at '655 patent claim 1(h); Ex. A, Appx. 3 at SCOTT-A-3.2-012, SCOTT-A-3.2-033.

#### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the floor panels include a pair of long edges and a pair of short edges. *See* Ex. A-10 at '655 patent claim 1(h); Ex. A, Appx. 3, SCOTT-A-3.2-025-SCOTT A 3.2-026.

## iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that the floor panels include a pair of long edges and a pair of short edges. *See* Ex. A-12 at '655 patent claim 1(h); Ex. A, Appx. 3 at SCOTT-A-3.2-023-SCOTT-A 3.2-024.

## v. Top Flooring

Visual inspection and OM testing of the locking sections of the Top Flooring products confirmed that the floor panels include a pair of long edges and a pair of short edges. *See* Ex. A-9 at '655 patent claim 1(h); Ex. A, Appx. 1 at SCOTT-A-1-0209-SCOTT-A-1-0210; Ex. A, Appx. 3 at SCOTT-A-3.2-034, SCOTT-A-3.2-036.

vi. Uniflor Aqua

Visual inspection and OM testing of the locking sections of the Uniflor Aqua products confirmed that the floor panels include a pair of long edges and a pair of short edges. *See* Ex. A-16 at '655 patent claim 1(h); Ex. A, Appx. 1 at SCOTT-A-1-0217-SCOTT-A-1-0218; Ex. A, Appx. 3 at SCOTT-A-3.2-042, SCOTT-A-3.2-044.

vii. Quickstyle

Visual inspection and OM testing of the locking sections of the Quickstyle products confirmed that the floor panels include a pair of long edges and a pair of short edges. *See* Ex. A-17 at '655 patent claim 1(h); Ex. A, Appx. 1 at SCOTT-A-1-0221-SCOTT-A-1-0222; Ex. A, Appx. 3 at SCOTT-A-3.2-046, SCOTT-A-3.2-048.

- i. [1.i] wherein the floor panel includes first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges;
  - i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the floor panels include first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges. *See* Ex. A-14 at '655 patent claim 1(i); Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004.

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the floor

panels include first mechanical coupling parts at the first pair of edges and second

mechanical coupling parts at the second pair of edges. See Ex. A-7 at '655 patent claim

1(i); Ex. A, Appx. 3 at SCOTT-A-3.2-012, SCOTT-A-3.2-033.

#### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the floor panels include first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges. *See* Ex. A-10 at '655 patent claim 1(i); Ex. A, Appx. 3, SCOTT-A-3.2-025-SCOTT A 3.2-026.

#### iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that the floor panels include first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges. *See* Ex. A-12 at '655 patent claim 1(i); Ex. A, Appx. 3 at SCOTT-A-3.2-023-SCOTT-A 3.2-024.

## v. Top Flooring

OM testing of the locking sections of the Top Flooring products confirmed that the floor panels include first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges. *See* Ex. A-9 at '655 patent claim 1(i); Ex. A, Appx. 3 at SCOTT-A-3.2-034, SCOTT-A-3.2-036.

## vi. Uniflor Aqua

OM testing of the locking sections of the Uniflor Aqua products confirmed that the floor panels include mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges. *See* Ex. A-16 at '655 patent claim 1(i); Ex. A, Appx. 3 at SCOTT-A-3.2-042, SCOTT-A-3.2-044.

## vii. Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the floor panels include mechanical coupling parts at the first pair of edges and second

171

mechanical coupling parts at the second pair of edges. *See* Ex. A-17 at '655 patent claim 1(i); Ex. A, Appx. 3 at SCOTT-A-3.2-046, SCOTT-A-3.2-048.

## j. [1.j] wherein the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges;

As proposed by the parties, the administrative law judge construed the claim term "the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edge" as "the first mechanical coupling parts allow for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective edges." As discussed below, this construction is satisfied by all of the '655 accused products.

# i. Antigua WPC

The first mechanical coupling parts of the Antigua WPC products allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* Ex. A-14 at '490 patent claim 1(l); Ex. A, Appx. 3 at SCOTT-A-3.2-003.



The mechanical coupling part shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part into the other coupling part, as indicated.

ii. EZ Go

The first mechanical coupling parts of the EZ Go products allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* Ex. A-7 at '655 patent claim 1(j); Ex. A, Appx. 3 at SCOTT-A-3.2-012.



The mechanical coupling part shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part into the other coupling part, as indicated.

iii. WaterGuard

The first mechanical coupling parts of the WaterGuard products allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* Ex. A-10 at '655 patent claim 1(j); Ex. A, Appx. 3 at SCOTT-A-3.2-025.



The mechanical coupling part shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part into the other coupling part, as indicated.

## iv. Ultra SPC

The first mechanical coupling parts of the Ultra SPC products allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* Ex. A-12 at '655 patent claim 1(j); Ex. A, Appx. 3 at SCOTT-A-3.2-023.



The mechanical coupling part shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part into the other coupling part, as indicated.

## v. Top Flooring

The first mechanical coupling parts of the Top Flooring products allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* Ex. A-9 at '655 patent claim 1(j); Ex. A, Appx. 3 at SCOTT-A-3.2-034, SCOTT-A-3.2-036.



The mechanical coupling part shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part in the other coupling part, as indicated.

## vi. Uniflor Aqua

The first mechanical coupling parts of the Uniflor Aqua products allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* Ex. A-16 at '655 patent claim 1(j); Ex. A, Appx.3 at SCOTT-A-3.2-044.



The mechanical coupling parts shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part in the other coupling part, as indicated.

# vii. Quickstyle

The first mechanical coupling parts of the Quickstyle products allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* Ex. A-17 at '655 patent claim 1(j); Ex. A, Appx. 3 at SCOTT-A-3.2-048.



The mechanical coupling parts shown above allows for horizontal and vertical locking of the floor panel by turning one coupling part in the other coupling part, as indicated.

# k. [1.k] wherein the first mechanical coupling parts include a tongue and a groove;

i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-14 at '655 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-7 at '655 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-012.

#### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-10 at '655 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-025.

iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-12 at '655 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-023.

v. Top Flooring

OM testing of the locking sections of the Top Flooring products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-9 at '655 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-036.

## vi. Uniflor Aqua

OM testing of the locking sections of the Uniflor Aqua products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-16 at '655 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-044.

vii. Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-17 at '655 patent claim 1(k); Ex. A, Appx. 3 at SCOTT-A-3.2-048.
# I. [1.1] wherein the groove is flanked by an upper lip and a lower lip;

# i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the groove of the first mechanical coupling parts is flanked by an upper lip and a lower lip. *See* Ex. A-14 at '655 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the groove of the first mechanical coupling parts is flanked by an upper lip and a lower lip. *See* Ex. A-7 at '655 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-012.

#### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the groove of the first mechanical coupling parts is flanked by an upper lip and a lower lip. *See* Ex. A-10 at '655 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-025.

### iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that the groove of the first mechanical coupling parts is flanked by an upper lip and a lower lip. *See* Ex. A-12 at '655 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-023.

# v. Top Flooring

OM testing of the locking sections of the Top Flooring products confirmed that the groove of the first mechanical coupling parts is flanked by an upper lip and a lower lip. *See* Ex. A-9 at '655 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-036.

# vi. Uniflor Aqua

OM testing of the locking sections of the Uniflor Aqua products confirmed that the groove of the first mechanical coupling parts is flanked by an upper lip and a lower lip. *See* Ex. A-16 at '655 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-044.

#### vii. Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the groove of the first mechanical coupling parts is flanked by an upper lip and a lower lip. *See* Ex. A-17 at '655 patent claim 1(1); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

- m. [1.m] wherein the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip;
  - i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* Ex. A-14 at '655 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* Ex. A-7 at '655 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-012.

#### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* Ex. A-10 at '655 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-025.

#### iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* Ex. A-12 at '655 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-023.

# v. Top Flooring

OM testing of the locking sections of the Top Flooring products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* Ex. A-9 at '655 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-036.

#### vi. Uniflor Aqua

OM testing of the locking sections of the Uniflor Aqua products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active

locking surface at the lower side of the upper lip. *See* Ex. A-16 at '655 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-044.

### vii. Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* Ex. A-17 at '655 patent claim 1(m); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

n. [1.n] wherein the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip; and

i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip. *See* Ex. A-14 at '655 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip. *See* Ex. A-7 at '655 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-012.

#### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip. *See* Ex. A-10 at '655 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-025.

#### iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip. *See* Ex. A-12 at '655 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-023.

# v. Top Flooring

OM testing of the locking sections of the Top Flooring products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip. *See* Ex. A-9 at '655 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-036.

#### vi. Uniflor Aqua

OM testing of the locking sections of the Uniflor Aqua products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally

active locking surface at the upper side of the lower lip. *See* Ex. A-16 at '655 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-044.

# vii. Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip. *See* Ex. A-17 at '655 patent claim 1(n); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

# o. [1.0] wherein both said horizontally active locking surfaces and both said vertically active locking surfaces are formed completely in the material of the closed cell PVC board.

i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that both the horizontally and vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See* Ex. A-14 at '655 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-003.

#### ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that both the horizontally and vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See* Ex. A-7 at '655 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-012.

# iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that both the horizontally and vertically active locking surfaces are formed completely in the

material of the closed cell foamed PVC board. *See* Ex. A-10 at '655 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-025.

#### iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that both the horizontally and vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See* Ex. A-12 at '655 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-023.

# v. Top Flooring

OM testing of the locking sections of the Top Flooring products confirmed that both the horizontally and vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See* Ex. A-9 at '655 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-036.

#### vi. Uniflor Aqua

OM testing of the locking sections of the Uniflor Aqua products confirmed that both the horizontally and vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See* Ex. A-16 at '655 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-044.

#### vii. Quickstyle

OM testing of the locking sections of the Quickstyle products confirmed that both the horizontally and vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See* Ex. A-17 at '655 patent claim 1(o); Ex. A, Appx. 3 at SCOTT-A-3.2-048.

# 2. Claim 2: wherein at least 70 percent of the circumference of the first mechanical coupling parts is formed in the material of the closed cell foamed PVC board.

i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that 89% of the circumference of the first mechanical coupling parts is formed in the material of closed cell foamed PVC board. *See* Ex. A-14 at '655 patent claim 2; Ex. A, Appx. 3 at SCOTT-A-3.2-003; Ex. A, Appx. 10 at SCOTT-A-10-003-SCOTT-A-10-004.

# ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that 85% of the circumference of the first mechanical coupling parts is formed in the material of closed cell foamed PVC board. *See* Ex. A-7 at '655 patent claim 2; Ex., A, Appx. 3 at

SCOTT-A-3.2-012; Ex. A, Appx. 10 at SCOTT-A-10-005-SCOTT-A-10-006.

### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that 92% of the circumference of the first mechanical coupling parts is formed in the material of closed cell foamed PVC board. *See* Ex. A-10 at '655 patent claim 2; Ex. A, Appx. 3 at SCOTT-A-3.2-025; Ex. A, Appx. 10 at SCOTT-A-10-009-SCOTT-A-10-010.

iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that 87% of the circumference of the first mechanical coupling parts is formed in the material of closed cell foamed PVC board. *See* Ex. A-12 at '655 patent claim 2; Ex. A, Appx. 3 at SCOTT-A-3.2-023; Ex. A, Appx. 10 at SCOTT-A-10-011-SCOTT-A-10-012.

- 3. Claim 3: wherein the first mechanical coupling parts comprise additional horizontally active locking surfaces situated at the height of the location where the top layers of two of such floor panels in coupled condition are flanking each other; and wherein the additional horizontally active locking surfaces are formed substantially in the material of the top layer.
  - i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanical coupling parts comprises horizontally active locking surfaces situated at the height of the location where the top layers of two of such floor panels in coupled condition are flanking each other. *See* Ex. A-14 at '655 patent claim 3; Ex. A, Appx. 3 at SCOTT-A-3.2-003.

OM testing of the locking sections of the Antigua WPC products further confirmed that the additional horizontally active locking surface are formed substantially in the material of the top layer. *See id.* The additional horizontally active locking surfaces effect a locking in a horizontal direction because they mutually prevent movement in the horizontal direction by the adjacent floor element. *See id.* 

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the first mechanical coupling parts comprises horizontally active locking surfaces situated at the height of the location where the top layers of two of such floor panels in coupled condition are flanking each other. *See* Ex. A-7 at '655 patent claim 3; Ex. A, Appx. 3 at SCOTT-A-3.2-012.

OM testing of the locking sections of the EZ Go products further confirmed that the additional horizontally active locking surface are formed substantially in the material

of the top layer. *See id.* The additional horizontally active locking surfaces effect a locking in a horizontal direction because they mutually prevent movement in the horizontal direction by the adjacent floor element. *See id.* 

### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the first mechanical coupling parts comprises horizontally active locking surfaces situated at the height of the location where the top layers of two of such floor panels in coupled condition are flanking each other. *See* Ex. A-10 at '655 patent claim 3; Ex. A, Appx. 3 at SCOTT-A-3.2-025.

OM testing of the locking sections of the WaterGuard products further confirmed that the additional horizontally active locking surface are formed substantially in the material of the top layer. *See id.* The additional horizontally active locking surfaces effect a locking in a horizontal direction because they mutually prevent movement in the horizontal direction by the adjacent floor element. *See id.* 

#### iv. Ultra SPC

OM testing of the locking sections of the Ultra SPC products confirmed that the first mechanical coupling parts comprises horizontally active locking surfaces situated at the height of the location where the top layers of two of such floor panels in coupled condition are flanking each other. *See* Ex. A-12 at '655 patent claim 3; Ex. A, Appx. 3 at SCOTT-A-3.2-023.

OM testing of the locking sections of the Ultra SPC products confirmed that the additional horizontally active locking surface are formed substantially in the material of the top layer. *See id.* The additional horizontally active locking surfaces effect a locking

188

in a horizontal direction because they mutually prevent movement in the horizontal direction by the adjacent floor element. *See id*.

4. Claim 4: wherein the first mechanical coupling parts comprise additional vertically active locking surfaces at the lower side of the tongue and the upper side of the lower lip, respectively; and wherein the additional vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board.

i. Antigua WPC

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanical coupling parts comprise additional vertically active locking surfaces at the lower side of the tongue and the upper side of the lower lip, respectively. *See* Ex. A-14 at '655 patent claim 4; Ex. A, Appx. 3 at SCOTT-A-3.2-003.

OM testing of the locking sections of the Antigua WPC products further confirmed that the additional vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See id*.

ii. EZ Go

OM testing of the locking sections of the EZ Go products confirmed that the first mechanical coupling parts comprise additional vertically active locking surfaces at the lower side of the tongue and the upper side of the lower lip, respectively. *See* Ex. A-7 at '655 patent claim 4; Ex. A, Appx. 3 at SCOTT-A-3.2-012.

OM testing of the locking sections of the EZ Go products confirmed that the additional vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See id.* 

#### iii. WaterGuard

OM testing of the locking sections of the WaterGuard products confirmed that the first mechanical coupling parts comprise additional vertically active locking surfaces at the lower side of the tongue and the upper side of the lower lip, respectively. *See* Ex. A-10 at '655 patent claim 4; Ex. A, Appx. 3 at SCOTT-A-3.2-025.

OM testing of the locking sections of the WaterGuard products confirmed that the additional vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See id*.

#### iv. Ultra SPC

OM testing of the locking sections of the Antigua WPC products confirmed that the first mechanical coupling parts comprise additional vertically active locking surfaces at the lower side of the tongue and the upper side of the lower lip, respectively. *See* Ex. A-12 at '655 patent claim 4; Ex. A, Appx. 3 at SCOTT-A-3.2-023.

OM testing of the locking sections of the Antigua WPC products confirmed that the additional vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See id*.

> 5. Claim 6: wherein the closed cell foamed PVC board has a top flat side and a bottom flat side; and wherein the closed cell foamed PVC board has a local density on the top flat side which is higher than in a central layer of the closed cell foamed PVC board.

As proposed by complainants, the administrative law judge construed the claim term "the closed cell foamed PVC board has a top flat side and a bottom flat side . . . [and] a central layer of the closed cell foamed PVC board" as "the closed cell foamed

PVC board has a top flat side and a bottom flat side . . . and a central thickness located between the top and bottom flat sides."

i. Antigua WPC

The closed cell foamed PVC board of the Antigua WPC products has a top flat side and a bottom flat side, and wherein the closed cell foamed PVC board has a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed cell foamed PVC board. *See* Ex. A-14 at '655 patent claim 6. As shown below, the Antigua WPC products have a top flat side, a bottom flat size, and a closed cell foamed PVC Board. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-003.



CT testing confirmed that the remaining elements of the claim are met. *See id.*; Ex. A, Appx. 4 at SCOTT-A-4-0013 (explaining that the testing results show a top zone with 55% solids (45% voids), a bottom zone with 48% solids (52% voids), and central zone with 40% solids (60% voids)). Thus, the local density on the top flat side is higher than in a central layer of the closed cell foamed PVC board.

### ii. EZ Go

The closed cell foamed PVC board of the EZ Go products has a top flat side and a bottom flat side, and wherein the closed cell foamed PVC board has a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed

cell foamed PVC board. *See* Ex. A-7 at '655 patent claim 6. As shown below, the EZ Go products have a top flat side, a bottom flat size, and a closed cell foamed PVC Board. *See id;* Ex. A, Appx. 3 at SCOTT-A-3.2-012.



CT testing confirmed that the remaining elements of the claim are met. *See* Ex. A-7 at '655 patent claim 6; Ex. A, Appx. 4 at SCOTT-A-4-0027 (explaining that the testing results show a top zone with 65% solids (35% voids), a bottom zone with 38% solids (62% voids), and central zone with 63% solids (37% voids)). Thus, the local density on the top flat side is higher than in a central layer of the closed cell foamed PVC board.

#### iii. WaterGuard

The closed cell foamed PVC board of the WaterGuard products has a top flat side and a bottom flat side, and wherein the closed cell foamed PVC board has a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed cell foamed PVC board. *See* Ex. A-10 at '655 patent claim 6. As shown below, the WaterGuard products have a top flat side, a bottom flat size, and a closed cell foamed PVC Board. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-025.



CT testing confirmed that the remaining elements of the claim are met. *See* Ex. A-10 at '655 patent claim 6; Ex. A, Appx. 4 at SCOTT-A-4-0062 (explaining that the testing results show a top zone with 53% solids (47% voids), a bottom zone with 48% solids (52% voids), and central zone with 44% solids (56% voids)). Thus, the local density on the top flat side is higher than in a central layer of the closed cell foamed PVC board.

### iv. Ultra SPC

The closed cell foamed PVC board of the Ultra SPC products has a top flat side and a bottom flat side, and wherein the closed cell foamed PVC board has a local density on the top flat side which is higher than in a central layer of the closed cell foamed PVC board. *See* Ex. A-12 at '655 patent claim 6. As shown below, the Ultra SPC products have a top flat side, a bottom flat size, and a closed cell foamed PVC Board. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-023.



CT testing confirmed that the remaining elements of the claim are met. *See* Ex. A-12 at '655 patent claim 6; Ex. A, Appx. 4 at SCOTT-A-4-0055 (explaining that the testing results show a top zone with 55% solids (45% voids), central zone with 50% solids (50% voids), and bottom zone with 44% solids (56% voids). Thus, the local density on the top flat side is higher than in a central layer of the closed cell foamed PVC board.

# 6. Claim 7: wherein the closed cell foamed PVC board has a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed cell foamed PVC board.

As proposed by complainants, the administrative law judge construed the claim term "the closed cell foamed PVC board has a top flat side and a bottom flat side . . . [and] a central layer of the closed cell foamed PVC board" as "the closed cell foamed PVC board has a top flat side and a bottom flat side . . . and a central thickness located between the top and bottom flat sides."

# i. Antigua WPC

The closed cell foamed PVC board of the Antigua WPC products has a local density on the top flat side and the bottom flat side which is higher than the central layer of the closed cell foamed PVC board. *See* Ex. A-14 at '655 patent claim 7. As shown

below, the Antigua WPC products have a top flat side, a bottom flat size, and a closed cell foamed PVC Board. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-003.



CT testing confirmed that the remaining elements of the claim are met. *See id.;* Ex. A, Appx. 4 at SCOTT-A-4-0013 (explaining that the testing results show a top zone with 55% solids (45% voids), a bottom zone with 48% solids (52% voids), and central zone with 40% solids (60% voids)). Thus, the local density on the top flat side and the bottom flat side is higher than in a central layer of the closed cell foamed PVC board.

#### ii. EZ Go

The closed cell foamed PVC board of the EZ Go products has a local density on the top flat side and the bottom flat side which is higher than the central layer of the closed cell foamed PVC board. *See* Ex. A-7 at '655 patent claim 7. As shown below, the EZ Go products have a top flat side, a bottom flat size, and a closed cell foamed PVC Board. *See id;* Ex. A, Appx. 3 at SCOTT-A-3.2-012.



CT testing confirmed that the remaining elements of the claim are met. *See* Ex. A-7 at '655 patent claim 7; Ex. A, Appx. 4 at SCOTT-A-4-0027 (explaining that the testing results show a top zone with 65% solids (35% voids), central zone with 38% solids (62% voids), and bottom zone with 63% solids (37% voids)). Thus, the local density on the top flat side and the bottom flat side is higher than the central layer of the closed cell foamed PVC board.

# iii. WaterGuard

The closed cell foamed PVC board of the WaterGuard products has a local density on the top flat side and the bottom flat side which is higher than the central layer of the closed cell foamed PVC board. *See* Ex. A-10 at '655 patent claim 7. As shown below, the WaterGuard products have a top flat side, a bottom flat size, and a closed cell foamed PVC Board. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.2-025.



CT testing confirmed that the remaining elements of the claim are met. *See* Ex. A-10 at '655 patent claim 7; Ex. A, Appx. 4 at SCOTT-A-4-0062) (explaining that the testing results show a top zone with 53% solids (47% voids), a bottom zone with 48% solids (52% voids), and central zone with 44% solids (56% voids)). Thus, the local density on the top flat side and the bottom flat side is higher than in a central layer of the closed cell foamed PVC board. *See id*.

# 7. Claim 8: wherein the transparent or translucent synthetic material wear layer comprises a vinyl layer.

i. Antigua WPC

FTIR testing confirmed that the transparent layer of the Antigua WPC products includes PVC (a vinyl). *See* Ex. A-14 at '655 patent claim 8; Ex. A, Appx. 6 at SCOTT-A-6-00014.

ii. EZ Go

FTIR testing confirmed that the transparent layer includes PVC (a vinyl). See Ex.

A-7 at '655 patent claim 8; Ex. A, Appx. 6 at SCOTT-A-6-00067, SCOTT-A-6-00069.

iii. WaterGuard

FTIR testing confirmed that the transparent layer includes PVC (a vinyl). See Ex.

A-10 at '655 patent claim 8; Ex. A, Appx. 6 at SCOTT-A-6-00057, SCOTT-A-6-00059.

iv. Ultra SPC

FTIR testing confirmed that the transparent layer includes PVC (a vinyl). See Ex.

A-12 at '655 patent claim 8; Ex. A, Appx. 6 at SCOTT-A-6-00048, SCOTT-A-6-00050.

# 8. Claim 9: wherein the back layer is the thickest and densest layer of the top layer.

i. Antigua WPC

CT testing confirmed that the top layer of the Antigua WPC products has an average thickness between 1.25-1.37 and the back layer has an average thickness between 0.91-1.01. *See* Ex. A-14 at '655 patent claim 9; Ex. A, Appx. 4 at SCOTT-A-4-0009. Therefore, the back layer is the thickest layer of the top layer. *See id.* FTIR testing confirmed that the back layer contains the most filler among the top layers, and this is indicative of the relative densities as explained in Dr. Scott's declaration. *See* Ex. A-14

at '655 patent claim 9; Ex. A, Appx. 6 at SCOTT-A-6-00011-SCOTT-A-6-00019.

SEM/EDS testing further confirmed that the back layer is the thickest layer of the top layer. *See* Ex. A-14 at '655 patent claim 9; Ex. A, Appx. 5 at SCOTT-A-5-0001.

### ii. EZ Go

CT testing confirmed that the top layer of the EZ Go products has an average thickness between 1.89-2.01 mm and the back layer has an average thickness between 1.66-1.77. *See* Ex. A-7 at '655 patent claim 9; Ex., A, Appx. 4 at SCOTT-A-4-0023. Therefore, the back layer is the thickest layer of the top layer. *See id.* FTIR testing confirmed that the back layer contains the most filler among the top layers, and this is indicative of the relative densities as explained in Dr. Scott's declaration. *See* Ex. A-7 at '655 patent claim 9; Ex. A, Appx. 6 at SCOTT-A-6-00066-SCOTT-A-6-00073. SEM/EDS testing confirms that back layer is the thickest layer of the top layer. *See* Ex. A-7 at '655 patent claim 9; Appx. 5 at SCOTT-A-5-0079.

#### iii. WaterGuard

CT testing confirm that the top layer of the WaterGuard products has an average thickness between 1.34-1.43 and the back layer has an average thickness between 0.84-0.88. *See* Ex. A-10 at '655 patent claim 9; Ex. A, Appx. 4 at SCOTT-A-4-0058. Therefore, the back layer is the thickest layer of the top layer. *See id.* FTIR testing confirmed that the back layer contains the most filler among the top layers, and this is indicative of the relative densities as explained in Dr. Scott's declaration. *See* Ex. A-10 at '655 patent claim 9; Ex. A, Appx. 6 at SCOTT-A-6-00056-SCOTT-A-6-00065. SEM/EDS testing confirms that back layer is the thickest layer of the top layer. *See* Ex. A-10 at '655 patent claim 9; Appx. 5 at SCOTT-A-5-0118.

#### iv. Ultra SPC

CT testing confirm that the top layer of the Ultra SPC products has an average thickness between 1.71-1.78 and the back layer has an average thickness between 1.13-1.17. *See* Ex. A-12 at '655 patent claim 9; Ex. A, Appx. 4 at SCOTT-A-4-0051. Therefore, the back layer is the thickest layer of the top layer. *See id.* FTIR testing confirmed that the back layer contains the most filler among the top layers, and this is indicative of the relative densities as explained in Dr. Scott's declaration. *See* Ex. A-12 at '655 patent claim 9; Ex. A, Appx. 6 at SCOTT-A-6-00047-SCOTT-A-6-00055. SEM testing further confirmed that the back layer is the thickest layer is the thickest. *See* Ex. A-12 at '655 patent claim 9; Ex. A, Appx. 5 at SCOTT-A-5-0098.

# 9. Claim 10: wherein the top layer has a thickness of 0.5 to 3 millimeters.

i. Antigua WPC

CT testing confirmed that the top layer of the Antigua WPC products has an average thickness between 1.25-1.37 mm. *See* Ex. A-14 at '655 patent claim 10; Ex. A, Appx. 4 at SCOTT-A-4-0009.

#### ii. EZ Go

CT testing confirmed that the top layer of the EZ Go products has an average thickness between 1.25-1.37 mm. *See* Ex. A-7 at '655 patent claim 10; Ex. A, Appx. 4 at SCOTT-A-4-0023.

#### iii. WaterGuard

CT testing confirmed that the top layer of the WaterGuard products has an

average thickness between 1.34-1.43 mm. See Ex. A-10 at '655 patent claim 10; Ex. A,

Appx. 4 at SCOTT-A-4-0058.

iv. Ultra SPC

CT testing confirmed that the top layer of the Ultra SPC products has an average thickness between 1.71-1.78 mm. *See* Ex. A-12 at '655 patent claim 10; Ex. A, Appx. 4 at SCOTT-A-4-0051.

# 10. Claim 11: wherein the top layer has a density of more than 500 kilograms per cubic meter.

Dr. Scott's method for calculating the density of the top layer is described in his Declaration. *See* Ex. A (Scott Decl.), ¶¶ 77-79.

i. Antigua WPC

Density testing of the Antigua WPC products confirmed that the top layer has a density of 1568 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-14 at '655 patent claim 11; Ex. A, Appx. 7 at SCOTT-A-7-0001.

ii. EZ Go

Density testing of the EZ Go products confirmed that the top layer has a density of 2045 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-7 at '655 patent claim 11; Ex. A, Appx. 7 at SCOTT-A-7-0001.

#### iii. WaterGuard

Density testing of the WaterGuard products confirmed that the top layer has a density of 1711 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-10 at '655 patent claim 11; Ex. A, Appx. 7 at SCOTT-A-7-0001.

#### iv. Ultra SPC

Density testing of the Ultra SPC products confirmed that the top layer has a density of 1836 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-12 at '655 patent claim 11; Ex. A, Appx. 7 at SCOTT-A-7-0001.

# 11. Claim 12: wherein the top layer has a higher density than the substrate.

Dr. Scott's method for calculating the density of the top layer is described in his Declaration. *See* Ex. A (Scott Decl.), ¶¶ 77-79.

### i. Antigua WPC

Density testing of the Antigua WPC products confirmed that the top layer has a density of 1568 kilograms per cubic meter (kg/m<sup>3</sup>) and that the substrate has a density of 891 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-14 at '655 patent claim 12; Ex. A, Appx. 7 at SCOTT-A-7-0001. Thus, the top layer has a higher density than the substrate. *See id.* 

# ii. EZ Go

Density testing of the EZ Go products confirmed that the top layer has a density of 2045 kilograms per cubic meter (kg/m<sup>3</sup>) and that the substrate has a density of 870 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-7 at '655 patent claim 12; Ex. A, Appx. 7 at SCOTT-A-7-0001. Thus, the top layer has a higher density than the substrate. *See id.* 

201

#### iii. WaterGuard

Density testing of the WaterGuard products confirmed that the top layer has a density of 1711 kilograms per cubic meter (kg/m<sup>3</sup>) and that the substrate has a density of 983 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-10 at '655 patent claim 12; Ex. A, Appx. 7 at SCOTT-A-7-0001. Thus, the top layer has a higher density than the substrate. *See id.* 

#### iv. Ultra SPC

Density testing of the Ultra SPC products confirmed that the top layer has a density of 1836 kilograms per cubic meter and that the substrate has a density of 962 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-12 at '655 patent claim 12; Ex. A, Appx. 7 at SCOTT-A-7-0001. Thus, the top layer has a higher density than the substrate. *See id.* 

# 12. Claim 13: wherein the floor panel comprises a backing layer below the substrate.

# i. Antigua WPC

OM, CT, FTIR, and SEM/EDS testing confirmed that the Antigua WPC products include a backing layer below the substrate. *See* Ex. A-14 at '655 patent claim 13; Ex. A, Appx. 3 at SCOTT-A-3.2-003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 5 at SCOTT-A-5-0015; Ex. A, Appx. 6 at SCOTT-A-6-00011.

### ii. WaterGuard

OM, CT, and FTIR, testing confirmed that the WaterGuard products include a backing layer below the substrate. *See* Ex. A-10 at '655 patent claim 13; Ex. A, Appx. 3

at SCOTT-A-3.2-025; Ex. A, Appx. 4 at SCOTT-A-4-0058; Ex. A, Appx. 6 at SCOTT-A-6-00056.

#### iii. Ultra SPC

OM, CT, and FTIR, testing confirmed that the Ultra SPC products include a backing layer below the substrate. *See* Ex. A-12 at '655 patent claim 13; Ex. A, Appx. 3 at SCOTT-A-3.2-023; Ex. A, Appx. 4 at SCOTT-A-4-0051; Ex. A, Appx. 6 at SCOTT-A-6-00047.

# 13. Claim 14: wherein the backing layer has a lower density than the back layer.

#### i. Antigua WPC

Density testing of the Antigua WPC products confirmed that the back layer has a density of 1677 kilograms per cubic meter (kg/m<sup>3</sup>) and the backing layer has a density of 576 kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-14 at '655 patent claim 14; Ex. A, Appx. 7 at SCOTT-A-7-0001. Therefore, the backing layer has a lower density than the back layer. *See id.* 

#### ii. WaterGuard

Density testing of the WaterGuard products confirmed that the back layer has a density of 1845 kilograms per cubic meter (kg/m3) and the backing layer has a density of 416 kilograms per cubic meter (kg/m3). *See* Ex. A-10 at '655 patent claim 14; Ex. A, Appx. 7 at SCOTT-A-7-0001. Therefore, the backing layer has a lower density than the back layer. *See id.* 

#### iii. Ultra SPC

Density testing of the Ultra SPC products confirmed that the back layer has a density of 1970 kilograms per cubic meter (kg/m3) and the backing layer has a density of 186 kilograms per cubic meter (kg/m3). *See* Ex. A-12 at '655 patent claim 14; Ex. A, Appx. 7 at SCOTT-A-7-0001. Therefore, the backing layer has a lower density than the back layer. *See id*.

# 14. Claim 15: wherein the floor panel has a thickness of 5 to 10 millimeters.

### i. Antigua WPC

CT testing confimed that the Antigua WPC products have an average thickness between 6.22-6.34 mm. *See* Ex. A-14 at '655 patent claim 15; Ex. A, Appx. 4 at SCOTT-A-4-0009. Three measurements were also taken with calipers, showing an average thickness of 6.60mm. *See* Ex. A-14 at '655 patent claim 15; Ex. A, Appx. 2 at SCOTT-A-2-0001.

#### ii. EZ Go

CT testing confirmed that the EZ Go products have an average thickness between 6.67-6.63 mm. *See* Ex. A-7 at '655 patent claim 15; Ex. A, Appx. 4 at SCOTT-A-4-0023. Three measurements were also taken with calipers, showing an average thickness of 6.79 mm. *See* Ex. A-7 at '655 patent claim 15; Ex. A, Appx. 2 at SCOTT-A-2-0001.

#### iii. WaterGuard

CT testing confrimed that the WaterGuard products have an average thickness between 7.35-7.28 mm. *See* Ex. A-10 at '655 patent claim 15; Ex. A, Appx. 4 at SCOTT-A-4-0058. Three measurements were also taken with calipers, showing an average thickness of 7.48 mm. *See* Ex. A-10 at '655 patent claim 15; Ex. A, Appx. 2 at SCOTT-A-2-0001.

#### iv. Ultra SPC

CT testing confirmed that the Ultra SPC products have an average thickness between 7.50-7.22 mm. *See* Ex. A-12 at '655 patent claim 15; Ex. A, Appx. 4 at SCOTT-A-4-0051. Three measurements were also taken with calipers, showing an average thickness of 7.77 mm. *See* Ex. A-12 at '655 patent claim 15; Ex. A, Appx. 2 at SCOTT-A-2-0001.

- 15. Claim 16: wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges; wherein the pair of long edges is formed by the first pair of edges; and wherein the pair of short edges is formed by the second pair of edges.
  - i. Antigua WPC

Visual inspection of the Antigua WPC products confirmed that the floor panels are rectangular and oblong and include a pair of long edges and a pair of short edges. *See* Ex. A-14 at '655 patent claim 16. Measurements confirmed that the Antigua WPC panels are rectangular and oblong and includes a pair of long edges and a pair of short edges. *See id.*; Ex. A, Appx. 2 at SCOTT-A-2-0001.

OM testing of the locking sections of the Antigua WPC products further confirmed that the long edges is formed by the first pair of edges. *See* Ex. A-14 at '655 patent claim 16; Ex. A, Appx. 3 at SCOTT-A-3.2-003.

OM testing of the locking sections of the Antigua WPC products further confirmed that the pair of short edges is formed by the second pair of edges. *See* Ex. A-14 '655 patent claim 16; Ex. A, Appx. 3 at SCOTT-A-3.2-004.

#### ii. EZ Go

Visual inspection of the EZ Go products confirmed that floor panels are rectangular and oblong and include a pair of long edges and a pair of short edges. *See* Ex. A-7 at '655 patent claim 16. Measurements confirmed that the EZ Go panels are rectangular and oblong and includes a pair of long edges and a pair of short edges. *See* Ex. A-7 at '655 patent claim 16; Ex. A, Appx. 2 at SCOTT-A-2-0001.

OM testing of the locking sections of the EZ Go products further confirmed that the long edges is formed by the first pair of edges. *See* Ex. A-7 at '655 patent claim 16; Ex. A, Appx. 3 at SCOTT-A-3.2-012.

OM testing of the locking sections of the EZ Go products further confirmed that the pair of short edges is formed by the second pair of edges. *See* Ex. A-7 at '655 patent claim 16; Ex. A, Appx. 3 at SCOTT-A-3.2-033.

#### iii. WaterGuard

Visual inspection of the WaterGuard products confirmed that the floor panels are rectangular and oblong and include a pair of long edges and a pair of short edges. *See* Ex. A-10 at '655 patent claim 16. Measurements confirmed that the WaterGuard panels are rectangular and oblong and includes a pair of long edges and a pair of short edges. *See* Ex. A-10 at '655 patent claim 16; Ex. A, Appx. 2 at SCOTT-A-2-0001.

OM testing of the locking sections of the WaterGuard products further confirmed that the long edges is formed by the first pair of edges. *See* Ex. A-10 at '655 patent claim 16; Ex. A, Appx. 3 at SCOTT-A-3.2-025.

OM testing of the locking sections of the WaterGuard products further confirmed that the pair of short edges is formed by the second pair of edges. *See* Ex. A-10 at '655 patent claim 16; Ex. A, Appx. 3 at SCOTT-A-3.2-026.

# iv. Ultra SPC

Visual inspection of the Ultra SPC products confirmed that the floor panels are rectangular and oblong and include a pair of long edges and a pair of short edges. *See* Ex. A-12 at '655 patent claim 16. Measurements confirmed that the Ultra SPC panels are rectangular and oblong and includes a pair of long edges and a pair of short edges. *See id.*; Ex. A, Appx. 2 at SCOTT-A-2-0001.

OM testing of the locking sections of the Ultra SPC products further confirmed that the long edges is formed by the first pair of edges. *See* Ex. A-12 at '655 patent claim 16; Ex. A, Appx. at SCOTT-A-3.2-023.

OM testing of the locking sections of the Antigua WPC products further confirmed that the pair of short edges is formed by the second pair of edges. *See* Ex. A-12 at '655 patent claim 16; Ex. A, Appx. 3 at SCOTT-A-3.2-024.

#### 16. Independent Claim 18

Like independent claim 1, independent claim 18 is directed to a "[f]loor panel." See Ex. A-3 ('655 Patent) at 16:26. Visual inspection confirmed that the Antigua WPC and WaterGuard products are floor panels. See claim 1; Ex. A-14 at '655 patent claim 18; Ex. A-10 at '655 patent claim 18.

Asserted independent claim 18 is recited below:

**18**. A floor panel comprising: a substrate;

- a top layer located above and glued to the substrate; and
- a backing layer located below the substrate;
- wherein the substrate includes a closed cell foamed PVC board with fillers;
- wherein the closed cell foamed PVC board has an average density of more than 300 kilograms per cubic meter;
- wherein the closed cell foamed PVC board has a top flat side and a bottom flat side;
- wherein the closed cell foamed PVC board has a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed cell foamed PVC board;
- wherein the top layer includes a back layer, a printed synthetic material film located above the back layer, a transparent or translucent synthetic material wear layer located above the printed synthetic material film and a surface layer located above the transparent or translucent synthetic material wear layer;
- wherein the back layer comprises a vinyl compound with fillers;
- wherein the back layer has a thickness of at least 45 percent of the thickness of the top layer;
- wherein the transparent or translucent synthetic material wear layer includes a vinyl layer;
- wherein the surface layer includes a UV hardened substance;
- wherein the floor panel includes a first pair of edges and a second pair of edges;
- wherein the floor panel includes first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges;
- wherein the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges;
- wherein the first mechanical coupling parts include a tongue and a groove;
- wherein the groove is flanked by an upper lip and a lower lip;
- wherein the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip;

wherein the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip; and

wherein both said horizontally active locking surfaces and both said vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board.

Ex. A-3 ('655 Patent).

#### a. [18.a] a substrate;

The Antigua WPC and WaterGuard include a substrate. See claim 1(a); Ex. A-14

at '655 patent claim 18(a); Ex. A-10 at '655 patent claim 18(a).

# b. [18.b] a top layer located above and glued to the substrate; and

The Antigua WPC and WaterGuard include a top layer located above the substrate. *See* claim 1(b); Ex. A-14 at '655 patent claim 18(b); Ex. A-10 at '655 patent

claim 18(b).

# c. [18.c] a backing layer located below the substrate;

The Antigua WPC and WaterGuard include a backing layer located below the substrate. *See* claim 13; Ex. A-14 at '655 patent claim 18(c); Ex. A-10 at '655 patent claim 18(c).

d. [18.d] wherein the substrate includes a closed cell foamed PVC board with fillers;

The substrates of the Antigua WPC and WaterGuard include a closed cell foamed PVC board with fillers. *See* claim 1(c); Ex. A-14 at '655 patent claim 18(d); Ex. A-10 at '655 patent claim 18(d).

# e. [18.e] wherein the closed cell foamed PVC board has an average density of more than 300 kilograms per cubic meter;

The closed cell foamed PVC boards of the Antigua WPC and WaterGuard have an average density of more than 300 kilograms per cubic meter. *See* claim 1(d); Ex. A-14 at '655 patent claim 18(e); Ex. A-10 at '655 patent claim 18(e).

# f. [18.f] wherein the closed cell foamed PVC board has a top flat side and a bottom flat side;

The closed cell foamed PVC boards of the Antigua WPC and WaterGuard have a

top flat side and a bottom flat side. See claim 6; Ex. A-14 at '655 patent claim 18(f); Ex.

A-10 at '655 patent claim 18(f).

# g. [18.g] wherein the closed cell foamed PVC board has a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed cell foamed PVC board;

The closed cell foamed PVC boards of the Antigua WPC and WaterGuard have a local density on the top flat side and the bottom flat side which is higher than in a central layer of the closed cell foamed PVC board. *See* claim 7; Ex. A-14 at '655 patent claim 18(g); Ex. A-10 at '655 patent claim 18(g).

- h. [18.h] wherein the top layer includes a back layer, a printed synthetic material film located above the back layer, a transparent or translucent synthetic material wear layer located above the printed synthetic material film and a surface layer located above the transparent or translucent synthetic material wear layer;
  - i. Antigua WPC

The top layer of the Antigua WPC products includes a back layer, a printed synthetic material film located above the back layer, a transparent or translucent synthetic

material wear layer located above the printed synthetic material film and a surface layer located above the transparent or translucent synthetic material wear layer. *See* Ex. A-14 at '655 patent claim 18(h). OM, CT, and FTIR testing of the locking sections and cross sections of the Antigua WPC products confirmed that these products include a back layer, printed film, transparent or translucent wear layer, and a surface layer. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.1-003, SCOTT-A-3.2-003-SCOTT-A-3.2-004; Ex. A, Appx. 4 at SCOTT-A-4-0007-SCOTT-A-4-0013; Ex. A, Appx. 6 at SCOTT-A-6-00011, SCOTT-A-6-00013-SCOTT-A-6-00015.

#### ii. WaterGuard

The top layer of the WaterGuard products includes a back layer, a printed synthetic material film located above the back layer, a transparent or translucent synthetic material wear layer located above the printed synthetic material film and a surface layer located above the transparent or translucent synthetic material wear layer. *See* Ex. A-10 at '655 patent claim 18(h). OM, CT, and FTIR testing of the locking sections and cross sections of the WaterGuard products confirmed that these products include a back layer, printed film, transparent or translucent wear layer, and a surface layer. *See id.*; Ex. A, Appx. 3 at SCOTT-A-3.1-021, SCOTT-A-3.2-025-SCOTT-A-3.2-026; Ex. A, Appx. 4 at SCOTT-A-4-0056-SCOTT-A-4-0062; Ex. A, Appx. 6 at SCOTT-A-6-00056-SCOTT-A-6-00065.

211

# i. [18.i] wherein the back layer comprises a vinyl compound with fillers;

The back layers of the Antigua WPC and WaterGuard includes a vinyl compound with fillers. *See* claim 1(f); Ex. A-14 at '655 patent claim 18(i); Ex. A-10 at '655 patent claim 18(i).

# j. [18.j] wherein the back layer has a thickness of at least 45 percent of the thickness of the top layer;

The back layers of the Antigua WPC and WaterGuard have a thickness of at least 45 percent of the thickness of the top layer. *See* claim 1(g); Ex. A-14 at '655 patent claim 18(j); Ex. A-10 at '655 patent claim 18(j).

# k. [18.k] wherein the transparent or translucent synthetic material wear layer includes a vinyl layer;

The transparent or translucent synthetic material wear layers of the Antigua WPC and WaterGuard include a vinyl layer. *See* claim 8; Ex. A-14 at '655 patent claim 18(k); Ex. A-10 at '655 patent claim 18(k).

# I. [18.1] wherein the surface layer includes a UV hardened substance;

i. Antigua WPC

FTIR testing confirmed that the Antigua WPC product include a surface layer.

See Ex. A-14 at '655 patent claim 18(1); Ex. A, Appx. 6 at SCOTT-A-6-00011-SCOTT-

A-6-00013. Based on the FTIR results for the surface layer, and Dr. Scott's experience

with LVT products, Dr. Scott expects that the surface layer is UV cured (or UV

hardened). See Ex. A-14 at '655 patent claim 18(1).

ii. WaterGuard

FTIR testing confirmed that the WaterGuard products include a surface layer. See

Ex. A-10, Appx. 17 at '655 patent claim 18(1); Ex. A, Appx. At SCOTT-A-6-00056-

SCOTT-A-6-00058. Based on the FTIR results for the surface layer, and Dr. Scott's

experience with LVT products, Dr. Scott expects that the surface layer is UV cured (or

UV hardened). See Ex. A-10, Appx. 17 at '655 patent claim 18(1).

# m. [18.m] wherein the floor panel includes a first pair of edges and a second pair of edges;

The Antigua WPC and WaterGuard include a first pair of edges and a second pair of edges. *See* claim 1(h); Ex. A-14 at '655 patent claim 18(m); Ex. A-10 at '655 patent claim 18(m).

# n. [18.n] wherein the floor panel includes first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges;

The Antigua WPC and WaterGuard Products include first mechanical coupling parts at the first pair of edges and second mechanical coupling parts at the second pair of edges. *See* claim 1(i); Ex. A-14 at '655 patent claim 18(n); Ex. A-10 at '655 patent claim 18(n).

# o. [18.0] wherein the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges;

The first mechanical coupling parts of the Antigua WPC and WaterGuard allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges. *See* claim 1(j); Ex. A-14 at '655 patent claim 18(o); Ex. A-10 at '655 patent claim 18(o).

# p. [18.p] wherein the first mechanical coupling parts include a tongue and a groove;

The first mechanical coupling parts of the Antigua WPC and WaterGuard include a tongue and a groove. *See* claim 1(k); Ex. A-14 at '655 patent claim 18(p); Ex. A-10 at '655 patent claim 18(p).

# q. [18.q] wherein the groove is flanked by an upper lip and a lower lip;

The grooves of the first mechanical parts of the Antigua WPC and WaterGuard are flanked by an upper lip and a lower lip. *See* claim 1(1); Ex. A-14 at '655 patent claim 18(q); Ex. A-10 at '655 patent claim 18(q).

# r. [18.r] wherein the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip;

The first mechanical coupling parts of the Antigua WPC and WaterGuard include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* claim 1(m); Ex. A-14 at '655 patent claim 18(r); Ex. A-10 at '655 patent claim 18(r).

> s. [18.s] wherein the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip; and

The first mechanical coupling parts of the Antigua WPC and WaterGuard include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower
lip. *See* claim 1(n); Ex. A-14 at '655 patent claim 18(s); Ex. A-10 at '655 patent claim 18(s).

## t. [18.t] wherein both said horizontally active locking surfaces and both said vertically active locking surfaces are formed completely in the material of the closed cell foamed PVC board.

Both the horizontally active locking surfaces and the vertically active locking surfaces of the first mechanical coupling parts of the Antigua WPC and WaterGuard are formed completely in the material of the closed cell foamed PVC board. *See* claim 1(o); Ex. A-14 at '655 patent claim 18(t); Ex. A-10 at '655 patent claim 18(t).

# 17. Claim 20: wherein the back layer is the thickest and densest layer of the top layer.

The back layers of the Antigua WPC and WaterGuard are the thickest and densest layer of the top layer. *See* claim 9; Ex. A-14 at '655 patent claim 20; Ex. A-10 at '655 patent claim 20).

# 18. Claim 21: wherein the top layer has a thickness of 0.5 to 3 millimeters.

The top layers of the Antigua WPC and WaterGuard have a thickness between 0.5 and 3 millimeters. *See* claim 10; Ex. A-14 at '655 patent claim 21; Ex. A-10 at '655 patent claim 21.

# **19.** Claim 22: wherein the top layer has a higher density than the substrate.

The top layers of the Antigua WPC and WaterGuard have a higher density than the substrate. *See* claim 12; Ex. A-14 at '655 patent claim 22; Ex. A-10 at '655 patent claim 22.

# 20. Claim 23: wherein the top layer has a density of more than 500 kilograms per cubic meter.

The top layers of the Antigua WPC and WaterGuard have a density of more than 500 kilograms per cubic meter. *See* claim 11; Ex. A-14 at '655 patent claim 23; Ex. A-10 at '655 patent claim 23.

# 21. Claim 24: wherein the backing layer has a lower density than the back layer.

The backing layers of the Antigua WPC and WaterGuard have a lower density than the back layer. *See* claim 14; Ex. A-14 at '655 patent claim 24; Ex. A-10 at '655 patent claim 24.

# 22. Claim 25: wherein the floor panel has a thickness of 5 to 10 millimeters.

The Antigua WPC and WaterGuard have a thickness of 5 to 10 millimeters. See

claim 15; Ex. A-14 at '655 patent claim 25; Ex. A-10 at '655 patent claim 25.

23. Claim 26: wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges; wherein the pair of long edges is formed by the first pair of edges; and wherein the pair of short edges is formed by the second pair of edges.

The Antigua WPC and WaterGuard are rectangular and oblong and includes a pair of long edges and a pair of short edges; wherein the pair of long edges is formed by the first pair of edges; and wherein the pair of short edges is formed by the second pair of edges. *See* claim 16; Ex. A-14 at '655 patent claim 26; Ex. A-10 at '655 patent claim 26.

# D. Domestic Industry (Technical Prong) – '655 Patent

"With respect to section 337(a)(3)(A) and (B), the technical prong is the requirement that the investments in plant or equipment and employment in labor or

capital are actually related to 'articles protected by' the intellectual property right which forms the basis of the complaint." *Stringed Musical Instruments*, Comm'n Op. at 13-14. "The test for satisfying the 'technical prong' of the industry requirement is essentially same as that for infringement, i.e., a comparison of domestic products to the asserted claims." *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003). "With respect to section 337(a)(3)(C), the technical prong is the requirement that the activities of engineering, research and development, and licensing are actually related to the asserted intellectual property right." *Stringed Musical Instruments*, Comm'n Op. at 13.

Complainants argue:

Complainants are currently developing and manufacturing rigid LVT products using foaming ("IVC Foamed Rigid LVT products") that practice at least one claim of the '655 Patent. See Ex. I (Van Vlassenrode Decl.), ¶¶ 2-4). First, Complainants performed tests on the IVC Foamed Rigid LVT products in their Avelgem, Belgium facility. See id. ¶ 3). Then, Complainants replicated those same tests in the United States at their Dalton, Georgia facility 6-8 weeks later. See id.

Since then, Complainants have made significant investments and refined their plan to produce the IVC Foamed Rigid LVT products. *See id.* ¶ 5. They have finalized the commercialization schedule of [ ] for the IVC Foamed Rigid LVT products and received the final approval needed to manufacture the VIC Foamed Rigid LVT. *See id.* ¶ 6. The buildup of the IVC Foamed Rigid LCT products are [

] (collectively "the '655 Domestic Industry Products"). See id. ¶ 7; see also Complainants Amended Disclosure of Domestic Industry Products (Aug. 13, 2019).

Evidence confirming Complainants' practice of the '655 Patent at the time of the Complaint was submitted as Compl. Ex. 12 (claim charts applying at least claim 28 of the '655 Patent to Complainants' IVC Foamed Rigid LVT products).

Dr. Scott also conducted various tests on panels of the forthcoming

IVC Foamed Rigid LVT product, including the examination of crosssections using optical microscopy ("OM"), SEM and EDS, and FTIR. *See* Ex. A, (Scott Decl.), ¶¶ 162-164. Dr. Scott's testing reveals that the IVC Foamed Rigid LVT product practices claims 28-29 of the '655 Patent.

## Mem. at 182-83.

The Staff argues:

In the Staff's view, there is no dispute as to any material fact that Complainant IVC's forthcoming Foamed Rigid LVT domestic industry products, which will be domestically manufactured in the state of Georgia, will practice claims 22, 23, and 25-29 of the '490 Patent and claims 28 and 29 of the '655 Patent, satisfying the technical prong of the domestic industry requirement related to both patents.

The declaration from Dr. Scott, Complainants' expert, supports finding that IVC's forthcoming Foamed Rigid LVT products will practice claims from both the '490 and '655 Patents. Based upon the technical information provided by Complainants and their declarants, as well as on the testing and analysis of samples of the forthcoming Foamed Rigid LVT products<sup>20</sup> that he conducted or directed, Dr. Scott performed a limitation-by-limitation analysis and opined that the Foamed Rigid LVT domestic industry products will claims 22, 23, and 25-29 of the '490 Patent and claims 28 and 29 of the '655 Patent. *See* Ex. A (Scott Decl.) at ¶¶ 187, 194-197, 205-208, 221-224; Ex. A-19 (Foamed Rigid LVT Claim Chart). Dr. Scott's analysis also explains how, in his opinion, the Foamed Rigid LVT products practice the claims of the '490 Patent when the parties' agreed to claim constructions for the "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" claim term is applied. *Id*.

The Staff is not aware of any dispute as to the evidence offered by Complainants or Dr. Scott's technical prong analysis of the IVC Foamed Rigid LVT products. The Staff is therefore of the view that Complainants are is entitled to a summary determination that the technical prong of the domestic industry requirement as to the '490 and '655 Patents is satisfied.

<sup>&</sup>lt;sup>20</sup> In October 2019, Dr. Scott received from Complainant IVC's parent company finished samples of products resulting from the foaming test runs performed in Belgium in September 2019. *See* Ex. I (Van Vlassenrode Decl.), ¶ 14; Ex. A (Scott Decl.), ¶ 197. In his declaration, Mr. Kristof Van Vlassenrode, who is the a Research and Development Director at IVC's parent company, IVC Group, stated that he directed these samples to be sent to Dr. Scott for testing and that the samples "are representative of the IVC Foamed Rigid LVT product that will be made in the Dalton IVC facility in the United States." *Id.* 

Staff Resp. at 57-58.

To support the technical prong domestic industry allegations, complainants' motion includes, *inter alia*, declarations from: (1) Joren Knockaert, the Vice President Manufacturing, Operations at IVC US, Inc. (Ex. H); (2) Kristoff Van Vlassenrode, a Research and Development Director at IVC Group (Ex. I); and (3) Jonathan Young, the Director of Quality at Mohawk Industries (Ex. J). Complainants also rely on documents, including technical documents, related to the domestic industry products. Furthermore, as he did for infringement, complainants' expert Dr. Scott provided a declaration and claim charts that include his expert analysis and opinion, on an element by element basis, as to how the domestic industry products practice one or more claims from the asserted patents.

Complainants are currently developing and manufacturing rigid LVT products using foaming ("IVC Foamed Rigid LVT products") that practice at least one claim of the '655 patent. *See* Ex. I (Van Vlassenrode Decl.), ¶¶ 2-4). First, complainants performed tests on the IVC Foamed Rigid LVT products in their Avelgem, Belgium facility. *See id.* ¶ 3). Then, complainants replicated those same tests in the United States at their Dalton, Georgia facility 6-8 weeks later. *See id.* 

Since then, complainants have made significant investments and refined their plan to produce the IVC Foamed Rigid LVT products. *See id.* ¶ 5. They have finalized the commercialization schedule of [ ] for the IVC Foamed Rigid LVT products and received the final approval needed to manufacture the VIC Foamed Rigid LVT. *See id.* ¶ 6. The buildup of the IVC Foamed Rigid LCT products are [

219

| (collectively "the '655 domestic

industry products"). *See id.* ¶ 7; Complainants Amended Disclosure of Domestic Industry Products (Aug. 13, 2019).

Evidence confirming complainants' practice of the '655 patent at the time of the complaint was submitted as Compl. Ex. 12 (claim charts applying at least claim 28 of the '655 patent to complainants' IVC Foamed Rigid LVT products).

As noted, Dr. Scott conducted various tests on panels of the forthcoming IVC Foamed Rigid LVT product, including the examination of cross-sections using optical microscopy ("OM"), SEM and EDS, and FTIR. *See* Ex. A, (Scott Decl.), ¶¶ 162-164.

As discussed below, Dr. Scott's testing demonstrates that the IVC Foamed Rigid LVT product practices claims 28-29 of the '655 patent. An element by element technical prong analysis for the IVC Foamed Rigid LVT products is discussed below.

## 1. Independent Claim 28

Independent claim 28 is directed to a "[f]loor panel comprising" various floor elements. *See* Ex. A-3 ('655 Patent) at 17:38. Visual inspection confirmed that the forthcoming IVC Foamed Rigid LVT products are floor panels comprising various floor elements. *See* Ex. A-19 at '655 patent claim 28; Ex. A, Appx. 1 at SCOTT-A-1-0180-SCOTT-A-1-0188; Ex. I (Van Vlassenrode Decl.), ¶ 2. As discussed below, the forthcoming IVC Foamed Rigid LVT products meet each limitation of independent claim 28 of the '655 patent.

## a. [28.a] a substrate; and

Visual inspection, OM testing, and SEM and EDS analysis confirmed that the forthcoming IVC Foamed Rigid LVT products contain a substrate. *See* Ex. A-19 at '655 patent claim 28(a); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 8-9; Ex. A, Appx. 3 at SCOTT-A-3.1-012; Ex. A, Appx. 5 at SCOTT-A-5-0156-SCOTT-A-5-0163.

# b. [28.b] a top layer located above and welded to the substrate;

Visual inspection, OM testing, and SEM and EDS analysis confirmed that the forthcoming IVC Foamed Rigid LVT products contain a top layer located above the substrate and welded to the substrate. *See* Ex. A-19 at '655 patent claim 28(b); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 8-9; Ex. A, Appx. 3 at SCOTT-A-3.1-012; Ex. A, Appx. 5 at SCOTT-A-5-0152, SCOTT-A-5-0168-SCOTT-A-5-0169.

# c. [28.c] wherein the substrate includes a closed cell foamed PVC board with fillers;

The substrate of the forthcoming IVC Foamed Rigid LVT products includes a closed cell foam PVC board with fillers. *See* Ex. A-19 at '655 patent claim 28(c); Ex. I-2 (MOH1155\_00141596) (showing a foamed substrate); Ex. I (Van Vlassenrode Decl.), ¶¶ 8-9 (noting that the IVC Foamed Rigid Products will include a foamed PVC substrate). Gas infiltration tests confirmed that the substrate of the IVC Foamed Rigid LVT products includes a closed cell foamed board. *See* Ex. A-19 at '655 patent claim 28(c); Ex. A, Appx. 11 at SCOTT-A-11-0007 - 0010 (test results demonstrating that the substrate includes a closed cell foamed board).

SEM testing confirmed that the substrate includes closed cell foam with an open

cell content of [ ]. *See* Ex. A, Appx. 5 at SCOTT-A-5-0154-SCOTT-A-5-0156. FTIR testing further confirmed that the substrate contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-00084.

## d. [28.d] wherein the closed cell foamed PVC board has an average density of more than 300 kilograms per cubic meter;

The closed cell foamed PVC board of the forthcoming IVC Foamed Rigid LVT products will have a density between [ ] kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-19 at '655 patent claim 28(d); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 7, 11.

# e. [28.e] wherein the top layer includes a back layer, a printed synthetic material film located above the back layer and a transparent or translucent synthetic material wear layer located above the printed synthetic material film;

The top layer of the forthcoming IVC Foamed Rigid LVT products will include a back layer, a printed synthetic material film above the back layer, and a transparent or translucent synthetic material wear layer above the printed film. *See* Ex. A-19 at '655 patent claim 28(e); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 8-9 (describing the wear layer (transparent or translucent synthetic material wear layer), print layer (printed film), and an upper back ([ ]) layer (back layer)). SEM and EDS analysis further confirmed that the top layer includes a back layer, a printed film above the back layer, and a transparent layer above the printed film. *See* Ex. A, Appx. 5 at SCOTT-A-5-0168-SCOTT-A-5-0169. FTIR testing confirmed that the printed film layer

is synthetic, for example, because it contains PVC. *See* Ex. A, Appx. 6 at SCOTT-A-6-0079-SCOTT-A-6-0083.

# f. [28.f] wherein the top layer has a thickness of 0.5 to 3 millimeters;

The top layer of the forthcoming IVC Foamed Rigid LVT product will have a total thickness of [ ]. *See* Ex. A-19 at '655 patent claim 28(f); Ex. I (Van Vlassenrode Decl.), ¶¶ 7-9; Ex. I-1 at MOH1155\_00092482 ([ ] IVC US buildup with [ ] top layer).

# g. [28.g] wherein the top layer has a density of more than 500 kilograms per cubic meter;

The top layer of the forthcoming IVC Foamed Rigid LVT product will have a density between [ ] kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-19 at '655 patent claim 28(g); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 7, 11.

# h. [28.h] wherein the back layer comprises a vinyl compound with fillers;

The back layer of the forthcoming IVC Foamed Rigid LVT product line will comprise a vinyl compound with fillers. *See* Ex. A-19 at '655 patent claim 28(h). For example, the back layer (upper back ([ ]) layer) will include PVC with calcium carbonate (fillers). *See* Ex. I (Van Vlassenrode Decl.), ¶¶ 9-10. FTIR testing further confirmed that the back layer includes PVC and filler (calcium carbonate). *See* Ex. A, Appx. 6 at SCOTT-A-6-0083.

## i. [28.i] wherein the back layer has a thickness of at least 45 percent of the thickness of the top layer;

The back layer of the forthcoming IVC Foamed Rigid LVT products will form approximately [ ] of the panel thickness. *See* Ex. A-19 at '655 patent claim 28(i); Ex. I-2 at MOH1155\_00141596 (showing approximately [ ] thick top layer with [ ] back layer (upper back [ ])); Ex. I-1 at MOH1155\_00092482; Ex. I (Van Vlassenrode Decl.), ¶ 7.

## j. [28.j] wherein the back layer has a higher density than the transparent or translucent synthetic material wear layer;

The back layer of the forthcoming IVC Foamed Rigid LVT products will have a density of [ ] kilograms per cubic meter (kg/m<sup>3</sup>), which is higher than the transparent or translucent synthetic material wear layer density of [ ] kilograms per cubic meter (kg/m<sup>3</sup>). *See* Ex. A-19 at '655 patent claim 28(j); Ex. I-2 at MOH1155\_00141596; Ex. I (Van Vlassenrode Decl.), ¶¶ 7, 11.

## k. [28.k] wherein the transparent or translucent synthetic material wear layer has a thickness of 1 millimeter or less;

The transparent or translucent synthetic material wear layer of the forthcoming

IVC Foamed Rigid LVT product has a thickness [ ]. See Ex. A-19 at '655 patent

claim 28(k); Ex. I (Van Vlassenrode Decl.), ¶ 7; Ex. I-1 at MOH1155\_00092482 ([

IVC US buildup with [ ] wear layer).

## 1. [28.1] wherein the floor panel is rectangular and oblong and includes a pair of long edges and a pair of short edges;

Visual inspection of the forthcoming IVC Foamed Rigid LVT products confirmed

that the floor panels are rectangular and oblong and include a pair of long edges and a

pair of short edges. *See* Ex. A-19 at '655 patent claim 28(l); Ex. A, Appx. 1 at SCOTT-A-1-0183; Ex. A, Appx. 2 at SCOTT-A-2-0001 (overall length and width of '655 domestic industry products).

## m. [28.m] wherein the first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges;

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed first mechanical coupling parts at the pair of long edges and second mechanical coupling parts at the pair of short edges. *See* Ex. A-19 at '655 patent claim 28(m); Ex. A, Appx. 3 at SCOTT-A-3.2-013-SCOTT-A-3.2-014.

## n. [28.n] wherein the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edges;

As proposed by the parties, the administrative law judge construed the claim term "the first mechanical coupling parts allow a horizontal and vertical locking of two of such floor panels using a turning movement along the respective edge" as "the first mechanical coupling parts allow for horizontal and vertical locking of two of such floor panels by turning one coupling part into the other coupling part at the respective edges."

Claim 28 contains this limitation. The forthcoming IVC Foamed Rigid LVT products satisfy this limitation. For instance, OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that this limitation is met. *See* Ex. A-19 at '655 patent claim 28(n); Ex. A, Appx. 3 at SCOTT-A-3.2-013).

When the forthcoming IVC Foamed Rigid products are connected using a turning movement along the long sides, the coupling parts are locked in the vertical and horizontal direction such that the coupling parts resist separation in those directions. *See* Ex. A-19 at '655 patent claim 28(n). In other words, once connected, the coupling parts are not easily separated along the long sides using a force in the horizontal and vertical direction. *See id.* 

# o. [28.0] wherein the first mechanical coupling parts include a tongue and a groove;

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that the first mechanical coupling parts include a tongue and a groove. *See* Ex. A-19 at '655 patent claim 28(o); Ex. A, Appx. 3 at SCOTT-A-3.2-013.

## p. [28.p] wherein the groove is flanked by an upper lip and a lower lip;

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that the groove is flanked by an upper lip and a lower lip. *See* Ex. A-19 at '655 patent claim 28(p); Ex. A, Appx. 3 at SCOTT-A-3.2-013.

q. [28.q] wherein the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip;

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that the first mechanical coupling parts include a vertical locking mechanism having a vertically active locking surface at the upper side of the tongue and a vertically active locking surface at the lower side of the upper lip. *See* Ex. A-19 at '655 patent claim 28(q); Ex. A, Appx. 3 at SCOTT-A-3.2-013.

r. [28.r] wherein the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip; and

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that the first mechanical coupling parts include a horizontal locking mechanism having a horizontally active locking surface at the lower side of the tongue and a horizontally active locking surface at the upper side of the lower lip. *See* Ex. A-19 at '655 patent claim 28(r); Ex. A, Appx. 3 at SCOTT-A-3.2-013.

# s. [28.s] wherein both said horizontally active locking surfaces are formed completely in the material of the closed cell foamed PVC board.

OM testing of the locking parts of the forthcoming IVC Foamed Rigid LVT products confirmed that both said horizontally active locking surfaces are formed completely in the material of the closed cell foamed PVC board. *See* Ex. A-19 at '655 patent claim 28(s); Ex. A, Appx. 3 at SCOTT-A-3.2-013.

2. Claim 29: wherein the closed cell foamed PVC board has a top flat side and a bottom flat side; and wherein the closed cell foamed PVC board comprises a first glass fiber layer situated on the top flat side and a second glass fiber layer situated on the bottom flat side.

The closed cell foamed PVC board of the forthcoming IVC Foamed Rigid LVT products has a top flat side and a bottom flat side; and wherein the closed cell foamed PVC board comprises a first glass fiber layer situated on the top flat side and a second glass fiber layer situated on the bottom flat side. *See* Ex. A-19 at '655 patent claim 29; Ex. A, Appx. 3 at SCOTT-A-3.2-013; Ex. I-2 at MOH1155\_00141596; Ex. I-1 at

MOH1155\_00092482 ([ ]] IVC US Buildup showing a plurality of glass fiber layers); Ex. I (Van Vlassenrode Decl.), ¶¶ 7, 11. SEM and EDS analysis further confirmed that the substrate of the forthcoming IVC Foamed Rigid LVT products includes glass fiber layers on the top flat side and bottom flat side. *See* Ex. A, Appx. 5 at SCOTT-A-5-0155, SCOTT-A-5-0162.

## E. Validity of the '655 Patent

The patent at issue is presumed valid as a matter of law. 35 U.S.C. § 282. This resumption of validity may be overcome only by "clear and convincing evidence." *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1359 (Fed. Cir. 2007).

Complainant Flooring Industries Ltd. Sarl owns by assignment the entire right, title, and interest in and to the '655 patent. *See* Complaint Ex. 6 (certified assignment record).

No party has challenged the validity or enforceability of the '655 patent. Thus, there is no issue of material fact as to the validity or enforceability of the '655 patent. *See Lannom Mfg. Co., Inc. v. Int'l Trade Comm'n*, 799 F.2d 1572, 1580 (Fed. Cir. 1986) (Commission did not have authority to redetermine patent validity when no defense of invalidity had been raised).

## VIII. Domestic Industry (Economic Prong)

A violation of section 337(a)(1)(B), (C), (D), or (E) can be found "only if an industry in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established." 19 U.S.C. § 1337(a)(2). Section 337(a) further provides:

228

(3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—

(A) significant investment in plant and equipment;

(B) significant employment of labor or capital; or

(C) substantial investment in its exploitation, including engineering, research and development, or licensing.

19 U.S.C. § 1337(a)(3).

With respect to the economic prong, and whether or not section 337(a)(3)(A) or (B) is satisfied, the Commission has held that "whether a complainant has established that its investment and/or employment activities are significant with respect to the articles protected by the intellectual property right concerned is not evaluated according to any rigid mathematical formula." *Printing and Imaging Devices*, Comm'n Op. at 27 (Feb. 17, 2011) (citing *Certain Male Prophylactic Devices*, Inv. No. 337 TA-546, Comm'n Op. at 39 (Aug. 1, 2007)). Rather, the Commission examines "the facts in each investigation, the article of commerce, and the realities of the marketplace." *Id.* "The determination takes into account the nature of the investment and/or employment activities, 'the industry in question, and the complainant's relative size."" *Id.* (citing *Stringed Musical Instruments* at 26).

The Commission has rejected a finding of quantitative significance based solely on the absolute value of the domestic industry investments devoid of any context. A contextual analysis is required. The analysis may include a discussion of the value of 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

229

added to the product from a complainant's activities in the United States. See Certain

Carburetors and Products Containing Such Carburetors, Inv. No. 337-TA-1123,

Comm'n Op. at 18 (Oct. 28, 2019).

Complainants argue:

Complainants satisfy the domestic industry requirement of Section 337 through the activities of Complainant IVC, which holds a nonexclusive license to the Asserted Patents. Compl., ¶ 12; Compl. Ex. 9. At its facility in Dalton, GA, IVC manufactures flexible LVT products with locking profiles along the long and short edges ("IVC Click Flex LVT products") which practice at least one claim of the '460 patent. Ex. J (Young Decl.), ¶¶ 2–3. IVC is also currently establishing the domestic manufacture of its rigid LVT products using foaming ("IVC Foamed Rigid LVT products") that practice at least one claim of the '490 Patent and at least one claim of the '655 Patent, and will begin commercial production of these products at its Dalton, Georgia facility in 2020. Ex. I (Van Vlassenrode Decl.), ¶¶ 2–4. As explained in the detailed analysis below, IVC's domestic investments in plant, equipment, labor, and capital are significant and directly attributable to IVC's products practicing the Asserted Patents.

Mem. at 190-91.

The Staff agrees. See Staff at 58-69.

## **Background of IVC's Investments**

IVC is located in Dalton, Georgia. *See* Ex. F-23. Since 2015, IVC has spent hundreds of millions of dollars upgrading its 900,000 square foot Dalton, GA facility to manufacture an expansive, premium selection of flooring products. Moreover, IVC has

over 500 employees dedicated to engineering, production, and maintenance at this

facility.



IVC Factory in Dalton, Georgia – Exterior Views. Ex. F-162.

[

]

ſ

]

IVC Factory – Interior Views. Ex. F-162.

When IVC first opened its Dalton, Georgia facility in 2010, the facility produced only sheet vinyl flooring. *See* Ex. H (Knockaert 2nd Decl.), ¶ 4. In 2015, IVC was acquired by complainant Mohawk, with the express purpose for Mohawk "to enter the LVT category." *See* Ex. F (Prowse Decl.), ¶ 4; Ex. F-131 at 3. This acquisition positioned IVC to capitalize on the growth of LVT in the U.S. by "exploiting Mohawk's extensive customer relationships, marketing expertise and distribution channels in North America." Ex. F (Prowse Decl.), ¶ 4; Ex. F-131 at 3. To that end, in 2015, IVC commissioned a new production line, LVT1, exclusively for the production of two products: IVC CL Flex LVT and glue-down flexible LVT. *Id.* In 2018, IVC commissioned a second production line, LVT2, designed to produce IVC Foamed Rigid LVT. *See* Ex. H (Knockaert 2nd Decl.), ¶ 5.

[

]

[

]

## Portions of IVC LVT Production Lines in Dalton, Georgia. Ex. F-162.

Currently, while IVC has been developing its Foamed Rigid LVT product, IVC is using LVT2 to produce flexible LVT (including IVC CL Flex LVT and glue-down flexible LVT) and non-foamed rigid LVT, with the expectation that LVT2 will ultimately be primarily dedicated to producing IVC Foamed Rigid LVT. *See id.* In total, IVC spent approximately [\_\_\_\_\_] for the equipment used in LVT1 and LVT2. The two lines comprise over 135,000 square feet of IVC's 900,000 square-foot facility:

[

See Ex. T; Ex. H (Knockaert 2nd Decl.),  $\P$  6. In addition, the region of the facility enclosed in the red box above, comprising approximately two-thirds of the facility, is dedicated to manufacturing or warehousing IVC's flexible LVT and rigid LVT product lines, including IVC CL Flex LVT. See *id*. It is expected that IVC Foamed Rigid LVT will also be manufactured within this space. See Ex. H (Knockaert 2nd Decl.),  $\P\P$  3, 6.

1

From 2015 to the time of the complaint, IVC capitalized approximately [

] in plant and equipment for LVT1, with a current book value of approximately [ ] and recognized depreciation of approximately [ ]. *See* Ex. F (Prowse Decl.), ¶¶ 8–9. Since December 31, 2018 through the date of the complaint, IVC capitalized approximately [ ] in equipment for LVT2, with a current book value of approximately [ ] and recognized depreciation of approximately [ ]. *See* Ex. F (Prowse Decl.), ¶ 9. In addition, IVC's two production lines, LVT1 and LVT2, incurred utilities costs totaling approximately [

235

] from October 2015 through December 2018. *See* Ex. F (Prowse Decl.), ¶ 10. IVC also incurred at least [ ] in labor expenditures for its more than 500 employees dedicated to engineering, manufacturing, and technical maintenance at its Dalton facility. *See id.* In total, IVC has spent at least [ ] on facility-wide labor and utilities expenditures since 2015 for LVT1 and LVT2. *See id.* 

## A. The '460 Patent

IVC manufactures all IVC CL Flex LVT products in the United States. See Ex. G (Clear Decl.),  $\P$  2. Complainants rely on IVC's investments and expenditures with respect to those products at its Dalton, GA facility to establish a domestic industry as to the '460 patent. IVC does not track actual manufacturing costs at this granular level in the ordinary course of its business. See Ex. G (Clear Decl.),  $\P$  3. However, in the normal course of business, IVC uses standard costing to track the cost of goods sold for each of the products it sells on a product-by-product basis. See id. Each product that IVC manufactures has a "standard cost," which is an estimate of the cost per square foot to manufacture that product that IVC calculates at the end of each year based on input from IVC's engineers, manufacturing team, and cost accountants.

The standard cost is broken into categories, including (1) Raw, (2) Pack, (3) Royalties; (4) Fixed, (5) Salaries, and (6) Energy.<sup>21</sup> See Ex. F (Prowse Decl.), ¶¶ 13–22;

<sup>&</sup>lt;sup>21</sup> "Raw" is the raw materials that are needed to manufacture IVC's products. Ex. G (Clear Decl.),  $\P$  6. "Pack" is the raw materials used to package IVC's products. *Id.* "Royalties" includes the amount IVC pays for licensed technology. Ex. F (Prowse Decl.),  $\P$  16. "Fixed" includes fixed costs for running the manufacturing facility, including building and machines repair and maintenance, indirect labor that supports the manufacturing process, insurance, office supplies, property taxes, safety, and environmental. Ex. G. (Clear Decl.),  $\P$  6. "Salaries" is the direct labor to manufacture

Ex. G, (Clear Decl.), ¶¶ 5–6; Ex. F-33 (standard costing for flexible LVT from 2016–2018); Ex. F-13 (standard costing for flexible LVT for 2019). The standard cost is used to determine expected total manufacturing costs for the following year. *See* Ex. G (Clear Decl.), ¶ 4. Inasmuch as IVC does not track actual manufacturing costs at this granular level in the ordinary course of its business, the standard cost for a given year is the most reliable method for determining IVC's expenditures to manufacture a particular product in that year. *See* Ex. G (Clear Decl.), ¶ 3. The methodology is a conservative measure of the actual costs incurred by IVC in that particular year, [

]. See Ex. G (Clear Decl.), ¶ 5; Ex. F (Prowse Decl.), ¶¶ 34–38.

Complainants' expert, Dr. Prowse used the standard cost for each of the domestic industry products to allocate IVC's investments to the domestic industry products. *See Certain Mobile Device Holders & Components Thereof*, Inv. No. 337-TA-1028, Comm'n Op. at 18-19 (Mar. 22, 2018) (finding that complainant's allocation methodology used in the ordinary course of its business was a reasonable allocation methodology for purposes of domestic industry); *Certain Digital Video Receivers and Related Hardware and Software Components*, Inv. No. 337-TA-1103, ID at 296 (June 4, 2019), *not reviewed in relevant part*, Notice (Aug. 15, 2019) (same). At a high level, Dr. Prowse analyzed the cost categories included in the standard cost for each domestic industry product and determined whether each category was properly attributable to the domestic industry as either plant & equipment or labor. *See* Ex. F (Prowse Decl.), ¶¶ 13–22.

the product. *Id.* Energy is the electricity, gas, and water expenditures necessary for manufacturing the products. *Id.*; Ex. F (Prowse Decl.),  $\P$  22.

To arrive at his quantification, Dr. Prowse performed the following calculations. For sub-prong (A), Dr. Prowse totaled the amount for plant and equipment in a particular year and multiplied that amount by the total number of square feet of that product produced in that year. *See* Ex. F (Prowse Decl.), ¶¶ 23–28; Ex. F-6. For sub-prong (B), Dr. Prowse totaled the amount for capital and labor, in a particular year, and he multiplied that amount by the total number of square feet of that product produced in that year. *See* Ex. F (Prowse Decl.), ¶ 31. To get the total investment for sub-prong (A), Dr. Prowse performed the sub-prong (A) calculation for each domestic industry product and each time-period and summed them. *See* Ex. F (Prowse Decl.), ¶ 29. Likewise, to get the total investment for sub-prong (B), Dr. Prowse performed the sub-prong (B) calculation for each domestic industry product and each time-period and summed them. *See* Ex. F (Prowse Decl.), ¶ 31.

Using the standard cost methodology described above, Dr. Prowse quantified the following investments attributable IVC's manufacture of the IVC CL Flex LVT at its Dalton, Georgia facility:<sup>22</sup>

Total Sub-Prong (A)	[	]
Total Sub-Prong (B)	[	]

<sup>&</sup>lt;sup>22</sup> As pointed out by the Staff, the amounts that Dr. Prowse has quantified under subprong (A) and sub-prong (B) are not additive and are offered in the alternative. In particular, Dr. Prowse noted that, in his opinion and from an economic perspective, each of the plant and equipment categories could also be properly classified as capital. *See* Ex. F (Prowse Decl.). ¶ 30. Accordingly, Dr. Prowse included the plant and equipment investments he calculated for sub-prong (A) in the totals of investments under sub-prong (B). *See id.* 

*See* Ex. F (Prowse Decl.), ¶¶ 29, 32–33.

## **Plant and Equipment**

The record evidence shows that IVC has made significant investments and expenditures to manufacture IVC CL Flex LVT, including investments in plant and equipment quantifiable under sub-prong (A). See Mem. at 199-201. As discussed above, IVC's standard cost is broken into categories, including (1) Raw, (2) Pack, (3) Royalties; (4) Fixed, (5) Salaries, and (6) Energy. See Ex. F (Prowse Decl.), ¶¶ 13–22; Ex. G, (Clear Decl.), ¶¶ 5–6; Ex. F-33 (standard costing for flexible LVT from 2016–2018); Ex. F-13 (standard costing for flexible LVT for 2019). Complainants' expert attributed a portion of the "Fixed" cost category and the "Energy" cost category to investments in plant and equipment. The portion of the "Fixed" cost category attributed to plant and equipment included expenditures for building and equipment maintenance costs, gas lift trucks, waste/water treatment, environmental/safety costs, fire insurance, fixed asset depreciation, office supplies, computer costs, forklift rental, property tax, and cost quality lab expenses, all for the Dalton, GA facility. See Ex. F (Prowse Decl.), ¶¶ 17-20. The Energy category in IVC's standard costing model comprises energy/utility costs associated with electricity, gas, and water for IVC's Dalton, GA facility. See Ex. F (Prowse Decl.), ¶ 22.

In total, the evidence shows that IVC incurred at least [ ] in plant and equipment expenditures from October 2015 to March 2019 that can be quantified under sub-prong (A):

239

	Total for Sub-Prong (A) Plant & Equipment		
Fixed (Plant & Equipment)	[ ]		
Energy	[ ]		
Total	[ ]		

See Ex. F (Prowse Decl.), ¶ 29; Ex. F-15.

### **Contextual Analysis**

IVC's investments in plant and equipment, which total several millions of dollars, are quantitatively and qualitatively significant. *See* Mem. at 204-08. First, 100% of the manufacture of IVC CL Flex LVT occurs domestically at IVC's facility in Dalton, Georgia. *See* Ex. G (Clear Decl.), ¶ 2; Ex. F (Prowse Decl.), ¶ 40. In other words, 100% of the value-add for the product will be in the United States. *See, e.g., Certain Carburetors & Prods. Containing Such Carburetors*, Inv. No. 337-TA-1123, Comm'n Op. at 18-19 (Oct. 28, 2019) (noting that one method the Commission uses to assess quantitative significance is to "consider[] . . . the value added to the product from a complainant's activities in the United States by the domestic activities."). Thus, absent IVC's domestic investitures IVC's CL Flex LVT products would not exist. Second, nearly [ ] of the total production volume of LVT at IVC during the relevant time (October 2015-March 2019) was of IVC CL Flex LVT. *See* Ex. F (Prowse Decl.), ¶ 37.

Third, approximately two-thirds of IVC's Dalton facility is dedicated to the production of IVC's LVT product line, and therefore the majority of IVC's facility is dedicated to producing the domestic industry products, which shows the significance of IVC's domestic investments. *See* Ex. T; Ex. H (Knockaert 2nd Decl.), ¶ 6; Ex. F (Prowse

Decl.), ¶ 40. Fourth, IVC's domestic industry investments are quantitatively significant when compared against comparable investments for all LVT products and all products (including LVT and sheet vinyl) manufactured during the relevant time frame at IVC's Dalton facility. *See* Ex. F (Prowse Decl.), ¶ 41; ¶¶ 42, 43. Fifth, IVC's domestic industry investments are also quantitatively significant as a percentage of the sales of the domestic industry products. *See* Ex. F (Prowse Decl.), ¶ 44.

Accordingly, it is found that there is no dispute as to any material fact that IVC's investments with respect to the '460 patent satisfy the economic prong of the domestic industry requirement under 19 U.S.C. § 1337(a)(3)(A).

## **Labor and Capital**

The evidence establishes that IVC has made significant investments in labor and capital with respect to the IVC CL Flex LVT products and therefore the '460 patent. *See* Mem. at 201-03. Complainants' expert attributed a portion of the "Fixed" cost category and the "Salaries" cost category from IVC's standard costing model to investments in labor. The portion of the "Fixed" cost category attributed to labor included expenditures for indirect labor from administrative and executive workers to support the manufacture of IVC CL Flex LVT. *See* Ex. G (Clear Decl.), ¶ 6. The salaries category in IVC's standard costing model includes the direct labor to manufacture the product. *See* Ex. G (Clear Decl.), ¶ 6; Ex. F (Prowse Decl.), ¶ 21.

In total, IVC incurred at least [ ] in expenditures from October 2015 to March 2019 that can be quantified under sub-prong (B) as labor:

241

	Total for Sub-Prong (B) Labor		
Salaries (Direct Labor)	[	]	
Fixed (Overhead Labor)	[	]	
Total	[	]	

See Ex. F (Prowse Decl.), ¶ 32; Ex. F-16. As noted above, Dr. Prowse opined that each of the expenditures that can be allocated to plant and equipment under sub-prong (A) can also be properly classified as capital under sub-prong (B). See Ex. F (Prowse Decl.), ¶ 30. Thus, complainants argue that the total expenditures allocable to sub-prong (B) can alternatively be quantified as follows:

	Total for Sub-Prong (B) Labor and Capital		
Salaries (Direct Labor)	[	]	
Fixed (Overhead Labor)	[	]	
Fixed (Capital)	[	]	
Energy	[	]	
Total	[	]	

See Ex. F (Prowse Decl.), ¶ 33; Ex. F-16.

In view of the methodology used by complainants' expert, discussed above, the administrative law judge finds that the [ ] for plant and equipment should only be counted once, for either sub-prong (A) or sub-prong (B). Thus, with respect to sub-prong (B), the administrative law judge finds complainants' arguments and evidence persuasive only in the alternative.

## **Contextual Analysis**

The evidence shows that IVC's investments in labor and capital for the IVC CL Flex LVT products ([ ]) are both quantitatively and qualitatively significant. Indeed, the reasons discussed in the previous section (as to why IVC's investments in plant and equipment are significant) equally apply for IVC's investments in labor and capital. *See* Mem. at 204-08; Ex. F (Prowse Decl.), ¶¶ 39-46.

\* \* \*

Accordingly, it is determined that there is no dispute as to any material fact that IVC's investments with respect to the '460 patent satisfy the economic prong of the domestic industry requirement under 19 U.S.C. § 1337(a)(3)(B).

## B. The '490 and '655 Patents

Complainants rely on IVC's activities, investments and expenditures directed toward its manufacture of its forthcoming IVC Foamed Rigid LVT at its Dalton facility in order to demonstrate a domestic industry in the process of being established as to '490 and '655 patents. The evidence shows that IVC has taken and will continue to take necessary, tangible steps to establish a domestic industry manufacturing of IVC Foamed Rigid LVT in the United States, and that there is a substantial likelihood that this manufacturing—and therefore a domestic industry in the '490 and '655 patents—will be established in the future. Thus, complainants have established that a domestic industry is in the process of being established with respect to the '490 and '655 patents.

## **Tangible Steps to Establish a Domestic Industry**

The evidence at the time of the complaint demonstrates that IVC will massmanufacture IVC Foamed Rigid LVT in IVC's Dalton factory starting in [\_\_\_], and that it began taking tangible steps towards that goal as of [\_\_\_\_\_]. *See* Ex. I (Van Vlassenrode Decl.), ¶ 2. In [\_\_\_], IVC began constructing LVT2, a second LVT production line, specifically to manufacture significant quantities of IVC Foamed Rigid LVT efficiently. *See* Ex. H (Knockaert Decl.), ¶ 5; Ex. I (Van Vlassenrode Decl.), ¶ 4. By [\_\_\_\_\_], IVC had purchased and installed the vast majority of the equipment required to manufacture Foamed Rigid LVT, amounting to approximately [

] in equipment, with a current book value of [ ] and approximately [ ] in depreciation. *See* Ex. I (Van Vlassenrode Decl.), ¶ 4; Ex. F (Prowse Decl.), ¶ 48.

LVT2 contains equipment that IVC purchased and installed exclusively for the purpose of manufacturing rigid LVT, including equipment to be exclusively used to manufacture IVC Foamed Rigid LVT that is not used for current production of non-foamed product. *See* Ex. I (Van Vlassenrode Decl.), ¶¶ 4–5. At the time of the complaint, IVC had committed approximately [\_\_\_\_\_] to purchasing equipment in 2018 and 2019 for LVT2 that will be used exclusively for the production of IVC Foamed Rigid LVT. *See id.*; Ex. F (Prowse Decl.), ¶ 49. This equipment includes [

], as well as planned expenditures for [ ]:

244

	Total Expenditures for Rigid Manufacturing Equipment		
Mixing Tower	[ ]		
Finishing Line	[ ]		
Double Belt Press	[ ]		
Isochoric Unit (foam-specific)	[ ]		
Dosing Equipment (foam-specific)	[ ]		
Total (rigid)	[ ]		
Total (foam-specific)	[ ]		

*Id.* While the [ ] and [ ] equipment will be used exclusively to manufacture the IVC Foamed Rigid LVT, IVC purchased and installed all of the equipment on LVT2 for the production of IVC Foamed Rigid LVT. Complainants argue that all of the expenditures on LVT2—totaling [ ] in capitalized assets and [ ] in depreciation as of the date of the complaint—are therefore attributable to IVC Foamed Rigid LVT. See Ex. F (Prowse Decl.), ¶ 48.

In addition, evidence from after the filing of the complaint corroborates that IVC is continuing to progress towards producing IVC Foamed Rigid LVT by [

]. See Ex. I (Van Vlassenrode Decl.), ¶ 6. Specifically, IVC has confirmed a commercialization schedule, received final approval to purchase the [ ] necessary to manufacture IVC Foamed Rigid LVT, and conducted manual trials were conducted in Dalton in October and November 2019 based on IVC's manufacturing runs in Belgium. *See id.* 

Thus, it is determined that there is no dispute of material fact that IVC has taken and continues to take the necessary steps towards establishing a domestic industry in IVC Foamed Rigid LVT, and therefore the '490 and '655 patents.

## Satisfying the Domestic Industry Requirement in the Future

As discussed above, IVC's confirmed commercialization schedule provides that IVC will begin commercial manufacture of the Foamed Rigid LVT products in [

]. See Ex. I (Van Vlassenrode Decl.),  $\P$  6. IVC is particularly incentivized to adhere to this timeline because the primary reason IVC planned to produce IVC Foamed Rigid LVT was to create cost savings as compared to non-foamed rigid LVT by reducing

[ ], and the forthcoming product is expected to have a cumulative cost savings of approximately [ ] as compared to rigid LVT currently on the market. *See* Ex. I (Van Vlassenrode Decl.), ¶ 4.

Moreover, the evidence shows that once IVC begins producing IVC Foamed Rigid LVT, IVC's expenditures in plant, equipment, labor, and capital attributable to IVC Foamed Rigid LVT will be sufficient to prove a domestic industry in existence at that particular time. The evidence shows that IVC expects that the standard costs for IVC Foamed Rigid LVT will be broadly similar to those incurred for non-foamed rigid LVT, save for [\_\_\_\_\_\_]. *See* Ex. I (Van Vlassenrode Decl.), ¶ 2; Ex. F-25 (standard costing for rigid LVT for 2019). IVC also expects to manufacture at least [\_\_\_\_\_] of IVC Foamed Rigid LVT during its first full year of production

in [ ], or approximately [ ]. See Ex. I (Van Vlassenrode Decl.), ¶ 4.

Using this information, complainants' expert, Dr. Prowse, performed the same

analysis he conducted with respect to the IVC CL Flex LVT products and estimated IVC's investments and expenditures in IVC Foamed Rigid LVT for plant and equipment attributable to sub-prong (A), or labor and capital attributable to sub-prong (B) will be at least [\_\_\_\_\_\_], respectively for the first full year of production of

IVC Foamed Rigid LVT:

	Total Expenditures for Sub-Prong (A) Plant and Equipment		Total Expenditures for Sub-Prong (B) Labor and Capital	
Fixed (Plant & Equipment or Capital)	[	]	[	]
Energy	[	]	[	]
Salaried (Direct Labor)	N/A		[	]
Fixed (Overhead Labor)	N/A		[	]
Total	[	]	[	]

*See* Ex. F (Prowse Decl.), ¶ 51. Thus, the evidence shows that IVC will invest significant resources in the production of IVC Foamed Rigid LVT once production begins. These investments will also be quantitatively and qualitatively significant, at least because, like the IVC CL Flex LVT, 100% of the manufacture of IVC Foamed Rigid LVT will occur domestically at IVC's facility in Dalton, Georgia, and without IVC's investments the products would not exist. *See* Ex. I (Van Vlassenrode Decl.), ¶¶ 3–4; Ex. F (Prowse Decl.), ¶ 58.

\* \* \*

Accordingly, it is determined that complainants have established that there is a

significant likelihood that the domestic industry requirement will be satisfied in the future by IVC's investments in the IVC Foamed Rigid LVT products, and thus the '490 and '655 patents. There is no genuine dispute of material fact and complainants are entitled to a summary determination that IVC is in the process of establishing a domestic industry with respect to the '490 and '655 patents, satisfying the domestic industry requirement for those patents.

## IX. Remedy and Bonding

The Commission has broad discretion in selecting the form of the remedy in a section 337 proceeding. *See Fuji Photo Film v. International Trade Comm'n*, 386 F.3d 1095, 1106-07 (Fed. Cir. 2004); *Certain Hydraulic Excavators and Components Thereof*, Inv. No. 337-TA-582, Comm'n Op. at 15 (Feb. 3, 2009), USITC Pub. No. 4115 (Dec. 2009). Where a violation is found, the Commission generally issues a limited exclusion order ("LEO") directed against products imported by persons found in violation of the statute. In certain circumstances, however, the Commission may issue a general exclusion order ("GEO") directed against all infringing products. 19 U.S.C. § 1337(d)(2).

Complainants request the following:

....a determination recommending that the Commission issue a general exclusion order pursuant to 19 U.S.C. § 1337(d)(2), and in no event less than a limited exclusion order against Defaulting Respondents under 19 U.S.C. § 1337(d)(1); issue cease and desist orders pursuant to 19 U.S.C. § 1337(f)(1) directed to the domestic Defaulting Respondents; and set a bond during the Presidential Review Period at \$0.08 per square foot for any Accused Product imported during the Presidential Review Period.

Mot. at 1-2; Mem. at 217-54.

As discussed below, the Staff supports complainants' request. *See* Staff Resp. at 69-70, 72-82, 84-85; Staff Supp. Resp. (EDIS Doc. ID No. 710376).

## A. General Exclusion Order

Under 19 U.S.C. § 1337(g)(2), "a general exclusion from entry of articles,

regardless of the source or importer of the articles, may be issued if --- (A) no person

appears to contest an investigation concerning a violation of the provisions of this

section, (B) such a violation is established by substantial, reliable, and probative

evidence, and (C) the requirements of subsection (d)(2) are met." 19 U.S.C. §

1337(g)(2).

Section 337(d)(2) states in relevant part:

(d) Exclusion of articles from entry . . .

- (2) The authority of the Commission to order an exclusion from entry of articles shall be limited to persons determined by the Commission to be violating this section unless the Commission determines that –
  - (A) a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to products of named persons; or
  - (B) there is a pattern of violation of this section and it is difficult to identify the source of infringing products.

19 U.S.C. § 1337(d)(2).

Thus, a GEO is warranted when "a general exclusion from entry of articles is necessary to prevent circumvention of an exclusion order limited to products of named persons" or "there is a pattern of violation of this section and it is difficult to identify the source of infringing products." 19 U.S.C. § 1337(d)(2)(A); 19 U.S.C. § 1337(d)(2)(B). Satisfaction of either criterion is sufficient for imposition of a GEO. *Certain Cigarettes and Packaging Thereof*, Inv. No. 337-TA-643, Comm'n Op. at 24 (Oct. 1, 2009). The Commission "now focus[es] principally on the statutory language itself" when

determining whether a GEO is warranted. *Certain Ground Fault Circuit Interrupters and Products Containing Same*, Inv. No. 337-TA-615, Comm'n Op. at 25 (Mar. 27, 2009). The Commission may look not only to the activities of active respondents, but also to those of non-respondents as well as respondents who have defaulted or been terminated from an investigation. *See, e.g., Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same*, Inv. No. 337-TA-650, Comm'n Op. at 59 (Apr. 14, 2010).

As discussed above, in this investigation, ten respondents (ABK; Aurora; Runchang; Go-Higher; Divine; Lejia; Licheer; Maxwell Flooring; Mr. Hardwood; and Sam Houston) have defaulted, and a violation has been shown for the asserted patents.

A GEO is warranted in this investigation both to prevent circumvention of an exclusion order limited to products of named entities, and because there is a pattern of violation of section 337 and it is difficult if not impossible to identify the source of infringing products, as discussed below.

In the event the Commission does not issue a GEO, the administrative law judge finds that the default determination is sufficient to establish a violation for the purpose of issuing limited exclusion orders directed to the defaulting respondents.<sup>23</sup> *See* 19 C.F.R. § 210.16(c)(1).

<sup>&</sup>lt;sup>23</sup> "After a respondent has been found in default by the Commission, the complainant may file with the Commission a declaration that it is seeking immediate entry of relief against the respondent in default. The facts alleged in the complaint will be presumed to be true with respect to the defaulting respondent. The Commission may issue an exclusion order, a cease and desist order, or both, affecting the defaulting respondent only after considering the effect of such order(s) upon the public [interest.]" 19 C.F.R.  $\S 210.16(c)(1)$ .
## Necessary to Prevent Circumvention of LEO

As discussed below, the evidence establishes that a GEO is necessary for the three asserted patents to prevent circumvention of an order limited to the products of the named respondents.

\* \* \*

In its response to the pending motion, the Staff agreed that a GEO is necessary with respect to the '460 and 655 patents. With respect to the '490 patent, however, the Staff argued in its response:

The Staff, however, disagrees that the remedy is appropriate with respect to the '490 Patent. Relying on accused products from the Terminated Respondents, the Complainants argue that they have identified at least 42 products that infringe the '490 Patent. Memo at 226, 248. The infringement evidence that accompanies the motion, in its current form, however, only supports a finding of infringement by two products. More specifically, Complainants' motion provides detailed evidence of infringement of the '490 Patent for only two products-the Antigua WPC products from Defaulting Respondents Divine and Licheer and Quickstyle products from non-Respondents. Although in some instances it can easily be determined that a product likely infringes a patent's claims by, for example, simply looking at or operating the product, that is not the case here. And, Complainants have failed to provide sufficient, or any, information with respect to the other "identified" products and their testing. Accordingly, there is insufficient evidence to suggest that any products other than the Antigua WPC and Quickstyle products infringe any claim of the '490 Patent. Given that Complainants have provided sufficient infringement evidence for less than a handful of infringing goods, the Staff is not convinced that there is sufficient motivation in the market to even produce products that infringe the '490 Patent, let alone to circumvent a limited exclusion order. See Certain Ground Fault Circuit Interrupters and Products Containing Same, Inv. No. 337-TA-615, Commission Opinion at 26-27 (March 26, 2009).

Staff Resp. at 77-78 (footnotes omitted).

However, the Staff also expained:

The Staff's position on the appropriateness of a general exclusion order directed to the '490 Patent may change, however, if Complainants were to supplement their motion to include additional evidence about the Aspecta Ten products from the Terminated Respondent Halstead and Engage Genesis products from Terminated Respondent Metroflor, including more information about the testing and analysis of these products by Complainants' expert. This is because such supplemental analysis and evidence may provide support for suggesting that at least seven products infringe certain claims of the '490 Patent.

Id. at 77 n.15.

In response to the Staff's position concerning the '490 patent, on February 19,

2020, complainants filed a supplement addressing the Staff's concerns. See Second

Supplement to Complainants' Motion for Summary Determination ("Second

Supplement") (EDIS Doc. ID No. 702940).

Complainants argue:

[

Second Supplement at 2.

Indeed, this extensive supplement provides the additional evidence requested by the Staff concerning the testing and analysis of the Aspecta Ten and Engage Genesis products.<sup>24</sup> This supplement includes (1) a second supplemental declaration of Dr. Scott;

]

<sup>&</sup>lt;sup>24</sup> Engage Genesis and Aspecta Ten products are each representative of: the Engage

(2) seven exhibits; and (3) eleven appendices. See id.; Exs. A-25 to A-31; Appxs. 1-11.

As requested by the administrative law judge, on May 14, 2020, the Staff filed a

supplemental response stating that "a general exclusion order would also be an

appropriate remedy in this investigation as to the '490 Patent under 19 U.S.C. §

1337(d)(2)(A) and 19 U.S.C. § 1337(d)(2)(B)." See Staff Supp. Resp. (EDIS Doc. ID

No. 710376) at 5.

The Staff argues:

Dr. Scott determined that, in his opinion, the Aspecta Ten and Engage Genesis products do infringe certain asserted claims of the '490 Patent. See Scott 2<sup>nd</sup> Supp. Decl. at ¶¶ 14, 21-25; Ex. A-25 (Engage Genesis Chart); Ex. A-26 (Aspecta Ten Chart). As he did for the Antigua WPC and Quickstyle products, Dr. Scott provided claim charts that contain his detailed infringement analyses and his second supplemental declaration was accompanied by annotated photographs and test results as well. Scott 2<sup>nd</sup> Supp. Decl. at ¶¶ 7-25; see also Scott 2<sup>nd</sup> Supp. Decl. Appendices 1-11. The claim charts provide a limitation-by-limitation explanation of how, in Dr. Scott's opinion, the Aspecta Ten and Engage Genesis products meet every limitation of certain asserted claims of the '490 Patent. See Scott 2<sup>nd</sup> Supp. Decl. at ¶¶ 14, 21-25; Ex. A-25 (Engage Genesis Chart); Ex. A-26 (Aspecta Ten Chart). In addition, Dr. Scott's analysis explains how, in his opinion, those products infringe the asserted claims when applying the agreed upon construction for the "arranged for horizontal and vertical locking of two of such floor panels using a turning movement along the respective long edges" claim term See Scott 2<sup>nd</sup> Supp. Decl. at ¶¶ 22-24; Ex. A-25 (Engage Genesis Chart); Ex. A-26 (Aspecta Ten Chart).

Furthermore, Dr. Scott explains that, based upon representations about representative products made by the terminated Halstead Respondents, his testing and analysis of the Aspecta Ten and Engage Genesis products apply equally to three additional products, namely the [\_\_\_\_\_\_\_] products. See Scott 2<sup>nd</sup> Supp. Decl. at ¶¶ 5-7; Ex. A-27....

Genesis; Aspecta Ten; ISOCore; Lifeproof; and Aspecta Elemental ISOCore products. *See* Sec. Supp. Scott Decl. at 2 (citing ¶ Ex. A-27, Parties' August 29, 2019, Joint Stipulation Regarding Representative Accused Products at 2).

The Staff is not aware of any dispute as to the supplemental evidence offered by Dr. Scott and Complainants. The Staff is therefore of the view that Complainants are entitled to rely on the Asptecta Ten, Engage Genesis,

] products for additional support with respect to their request for a general exclusion order. Thus, based upon the supplemental testing, analysis, and evidence from Complainants' expert, Complainants' Second Supplement provides support for suggesting that at least seven products infringe certain claims of the '490 Patent.

Staff Supp. Resp. at 3-4.

\* \* \*

The evidence shows that common business practices by both respondents and non-respondents in the flooring industry include a variety of methods by which manufacturers and sellers of accused products, including the defaulting respondents, could circumvent an LEO directed only to named respondents.

For example, there is direct evidence that defaulting respondents have altered their corporate structures, changed their names or addresses, created new entities, or operated under multiple names. *See* Ex. F (Prowse Decl.), ¶¶ 85-86. Defaulting respondent Aurora Flooring is associated with, operates under the names of, and/or operates out of the same address as non-respondents Aurora Hardwood, Nova Hardwoods, LLC ("Nova Hardwoods"), Worldwide Flooring Inc. ("Worldwide Flooring"), and JXZ Hardwood Inc. ("JXZ Hardwood"). *See* Compl. Ex. 54 (Schuster 1st Decl.), ¶ 7; Ex. B (Schuster Decl.), ¶ 11; Ex. B-15; Ex. B-10; Ex. F (Prowse Decl.), ¶ 86; Ex. F-147. Aurora Flooring changed its address in 2017, and currently operates at the same address as non-respondents Nova Hardwood, Worldwide Flooring Inc., Aurora Hardwood, and JXZ Hardwood Inc. *See* Compl. Ex. 54 (Schuster Decl.), ¶ 7; Ex. B (Schuster Decl.), ¶ 11; Ex. F (Prowse Decl.), ¶ 86; Ex. F-147 (2017 Aurora Flooring

Annual Registration); Ex. B-15 (Better Business Bureau Listing for Aurora Hardwood).

Similarly, defaulting respondents ABK Trading, Sam Houston, and Maxwell Flooring are associated with and/or operate interchangeably with one another. *See* Ex. F (Prowse Decl.), ¶ 86, 113; Ex. F-137 (ABK Certificate of Formation); Ex. F-136 (Maxwell Flooring Accurint); Ex. UU (Sam Houston Certificate of Formation); Ex. F-135 (ABK Sales Tax Permit). For example, Maxwell Flooring is an associated entity of ABK Trading. *See* Ex. F-136. ABK Trading also has sales tax permits for a location called Ivy's Flooring which operates out of the same suite from which Sam Houston operates. *See* Ex. F (Prowse Decl.), ¶ 86, 113; Ex. B-9; Ex. D-8; Ex. F-135. Furthermore, Maxwell Flooring appears to operate under the name Houston Maxwell Flooring Distribution, which is listed on its website, as well as Maxwell Flooring and Cabinetry Distributors, which operates from the same address. *See* Ex. B-14 (Maxwell Flooring website); Ex. VV (Maxwell Cabinet website). Another similarly named store, Maxwell Flooring Cabinets, is located in the same distribution center as Maxwell Flooring, but operates from a different suite. *See* Ex. D-9.

Defaulting respondents Licheer and Divine are owned by the same individual and are related entities, with Licheer listing Divine's contact information in its product brochures. *See* Ex. F (Prowse Decl.), ¶ 86; Ex. F-142 at 24 (Orbis Report for Divine); Ex. WW at 28 (Orbis Report for Licheer); Compl. Ex. 54A (Schuster 2nd Decl.), ¶ 11. Divine changed its address in 2017 as well as its name from Jiangsu Dafu Building Technology Development Co. Ltd. *See* Ex. F-142 (Orbis Report for Divine). Licheer also changed its address in 2017, but currently operates from the same address as Divine. *See* Ex. F (Prowse Decl.), ¶ 86; *compare* Ex. F-143 (Licheer website Dec. 2017) *with* Ex.

F-144 (Licheer website Nov. 2017); Ex. F-142 at 5 (Divine address); Compl. Ex. 54A (Schuster Decl.) Attachment G at 1 (Licheer address).

Defaulting respondent Mr. Hardwood Inc. has also changed its address in the past. See Ex. F (Prowse Decl.), ¶ 86; compare Ex. F-145 (Mr. Hardwood Georgia Registration Records) with Ex. F-146 (Mr. Hardwood 2009 Registration).

Furthermore, defaulting respondents utilize generic and non-descript packaging that omits their names, which facilitates their ability to circumvent an LEO directed only to the named respondents. Specifically, the defaulting respondents' accused products are sold in product packaging, such as plain white boxes, that does not identify the manufacturer of that product. *See* Ex. HHH (Summary of Accused Product Packaging); Ex. C-2; Ex. C-4; Ex. C-6; Ex. C-8; Ex. C-10; Ex. C-11; Ex. E-2; Ex. D-4. Five of the nine defaulting respondents' accused products fail to identify the country of origin, increasing the difficulty in identifying the source or manufacturer of that product. *See*, *e.g.*, Compl. Ex. 54, ¶¶ 7, 10; Ex. B (Schuster Decl.), ¶¶ 21-22. It is also difficult to identify the source of the defaulting respondents' accused products because the manufacturers do not sell the accused products under their own names. *See* Ex. F (Prowse Decl.), ¶ 87.

In addition, the defaulting respondents' accused products were available for sale online. For example, the WaterGuard, Adventure II, Antigua WPC, and EZ Go products were available for sale on various websites. *See* Compl. Ex. 54 Attachment B1, D1; Ex. QQQ; Ex. D (Kiepura Decl.), ¶ 2; Ex. B (Schuster Decl.), ¶ 24. Moreover, the websites on which the products are available change frequently. *See* Ex. B (Schuster Decl.), ¶ 25. The Maxwell Flooring website was deactivated and then reactivated, and an additional

website was created to advertise Maxwell's' flooring products. *See* Ex. B (Schuster Decl.), ¶ 25. Antigua WPC was available for sale on the iMaxx Exchange website as well as House Depot USA at the start of the investigation, but since then, these websites have been deactivated and new websites have appeared. *See* Compl. Ex. 54 Attachment D1 at 3-10; Ex. D (Kiepura Decl.), ¶¶ 7-8; Ex. RRR (Cambridge Cabinets website showing same address as House Depot and iMaxx). Maxwell Flooring and the iDeal Floors websites, which sold EZ-Go, did not accurately identify the seller or manufacturer of EZ Go. *See* Compl. Ex. 54 Attachment C1; Ex. L. In addition, defaulting respondent Runchang operates its own page on Alibaba which sells various LVT products. *See* Ex. F (Prowse Decl.), ¶ 99; Ex. F-64.

It is common practice to sell LVT on online platforms such as Alibaba and other websites. A simple search of "LVT Click" on Alibaba under the "Construction and Real Estate" category provides around 18,000 results, with a vast majority of those products coming from suppliers in Asia. *See* Ex. F (Prowse Decl.), ¶ 98. A similar search on eBay.com for "LVT Click" in the "Vinyl Flooring" product category provides over 400 results for items in "new" condition. *See* Ex. F (Prowse Decl.), ¶ 99; Ex. F-49. Inasmuch as it is relatively easy to create an online profile with self-furnished information on platforms like Alibaba and eBay, defaulting respondents could create multiple online accounts to sell the accused products anonymously and thus circumvent and LEO. *See* Ex. F (Prowse Decl.), ¶ 96-97, 102.

The Commission has issued GEOs in similar factual circumstances. *See, e.g.*, *Certain Toner Cartridges, and Components Thereof,* Inv. No. 337-TA-918, Comm'n Op. at 6 (Oct. 1, 2015) (finding a GEO appropriate under subparagraph (A) based on practices

including "(i) replication of operations; (ii) sourcing imported accused products from domestic suppliers outside the reach of an LEO; (iii) facilitating circumvention through Internet operations; (iv) masking of identities and product sources; and (v) use of unmarked, generic, and/or reseller-branded packaging"); *Certain Toner Cartridges and Components Thereof*, Inv. No. 337-TA-829, Comm'n. Op. at 6-7 (July 29, 2013) (GEO issued under 19 U.S.C. § 1337(d)(2)(A) to prevent likely circumvention because respondents "do business under multiple names, and create an array of subsidiaries and changing corporate profiles" and because their accused products "are often labeled under other brand names or packaged in unmarked, generic packaging"); *Certain Toner Cartridges and Components Thereof*, Inv. No. 337-TA-740, Comm'n Op. at 5 (Oct. 5, 2011) (GEO issued under 19 U.S.C. § 1337(d)(2)(A) because "respondents do business under multiple names" and "an LEO could be circumvented because Lexmarkcompatible laser toner cartridges are often labeled under other original equipment manufacturer brand names, making it easier . . . to evade enforcement.").

Furthermore, complainants have also produced evidence of other practices and industry conditions that increase the likelihood of circumvention of an exclusion order limited to the named respondents, including the following: (1) low barriers of entry and ease of replication of operations (*see* Mem. at 219-23; Ex. F (Prowse Decl.), ¶¶ 89-95); (2) high demand for accused products (*see* Mem. at 223-28; Ex. F (Prowse Decl.), ¶¶ 104-111); (3) practices that maintain anonymity of importation, such as exclusion of manufacturers or imports from bills of lading (*see* Mem. at 228-29); (4) complex corporate structures and expansive supply chains (*see* Mem. at 233-39; Ex. F (Prowse Decl.), ¶¶ 112-125); and (5) requiring minimum order sizes and using third parties to

import and source the products (see Mem. at 244-46).

\* \* \*

Accordingly, the issuance of a GEO under 19 U.S.C. § 1337(d)(2)(A) is appropriate with respect to the three asserted patents.

# <u>Widespread Pattern of Violation and Difficulty Identifying the Source(s) of</u> <u>Infringing Products</u>

As discussed below, the record evidence supports issuance of a GEO under section 337(d)(2)(B) because there is a widespread pattern of violation, and it is difficult to identify the source of infringing products.

With respect to the '490 patent, the Staff argued that "complainants have not shown that the same pattern of violation exists." Staff Resp. at 79. As discussed in the immediate section above, in response to the Staff's position concerning the '490 patent, complainants filed a supplement addressing the Staff's concerns. *See* Second Supplement to Complainants' Motion for Summary Determination ("Second Supplement") (EDIS Doc. ID No. 702940).

## **Widespread Pattern of Violation**

The record evidence shows a widespread pattern of violation with respect to the three asserted patents. As discussed above in the infringement sections, there is evidence that at least five products from the defaulting respondents infringe the '460 patent, five products from defaulting respondents and two additional products from non-respondents infringe the '655 patent, and six products from defaulting respondents and one additional

product from a non-respondent infringe the '490 patent.<sup>25</sup> Further, complainants identified a number of other accused products from the terminated respondents that complainants and their expert allege infringe the asserted claims of the three patents. *See* Ex. A (Scott Decl.), ¶ 150, 186; Ex. UUU; *Certain Toner Cartridges, and Components Thereof,* Inv. No. 337-TA-918, Comm'n Op. at 9-10 (Oct. 1, 2015) ("in determining whether a GEO is warranted, the Commission looks not only to the activities of active respondents, but also to those of respondents that have been terminated from an investigation as well as non-respondents").

Further, the evidence shows that a large number of entities are involved in the manufacture, sale, and distribution of the accused products. For example, in addition to the 42 named respondents there are at least dozens of non-respondents that are involved in the supply chain of the respondents or are selling infringing products online. *See* Ex. F (Prowse Decl.), ¶¶ 123-124.

In addition, complainants have provided evidence of a high market demand for LVT products, and more specifically infringing LVT products, low barriers to entry, and attractive margins, all of which encourage foreign manufacturers to enter the market. *See* Mem. at 219-28; Ex. F (Prowse Decl.), ¶¶ 89-95, 104-111.

As discussed above, the defaulting respondents have imported, sold for importation, and/or sold within the United States after importation the accused products. Given the number of the defaulting respondents involved, the activities of the defaulting

<sup>&</sup>lt;sup>25</sup> For the '490 patent, Engage Genesis and Aspecta Ten products are each representative of: the Engage Genesis; Aspecta Ten; ISOCore; Lifeproof; and Aspecta Elemental ISOCore products. *See* Sec. Supp. Scott Decl. at 2 (citing ¶ Ex. A-27, Parties' August 29, 2019, Joint Stipulation Regarding Representative Accused Products at 2).

respondents are sufficient to demonstrate a widespread pattern of violation with respect to the three asserted patents.

## **Difficulty Identifying Source of Infringing Products**

In addition to the widespread pattern of violation, the evidence establishes that the defaulting respondents engage in a number of practices that mask the source of the accused product and as a result there is difficulty in identifying the source of the infringing products.

Indeed, there is direct evidence that defaulting respondents have altered their corporate structures, changed their names or addresses, created new entities, or operated under multiple names. *See* Ex. F (Prowse Decl.), ¶¶ 85-86. Defaulting respondents also utilize generic and non-descript packaging that omits their names, which facilitates their ability to circumvent an LEO directed only to the named respondents. *See* Ex. HHH (Summary of Accused Product Packaging); Ex. C-2; Ex. C-4; Ex. C-6; Ex. C-8; Ex. C-10; Ex. C-11; Ex. E-2; Ex. D-4. In addition, it is difficult to identify the source of the defaulting respondents' accused products because the manufacturers do not sell the accused products under their own names. *See* Ex. F (Prowse Decl.), ¶ 87. Companies also omit the name of the manufacturers and other entities from the bills of lading, which helps mask the source of the accused products. *See, e.g.,* Mem. at 228-29; Ex. B (Schuster Decl.), ¶ 25; Ex. B-5; Ex. X, Ex. KK. Furthermore, there is also evidence of complex corporate structures and expansive supply chains in the LVT industry. *See* Mem. at 233-39; Ex. F (Prowse Decl.), ¶ 112-125.

In earlier investigations, such evidence has been found to support the issuance of a GEO. See, e.g., Certain Toner Cartridges and Components Thereof, Inv. No. 337-TA-

829, Commission Opinion at 6-8 (July 29, 2013); Certain Toner Cartridges and *Components Thereof*, Inv. No. 337-TA-740, Commission Opinion at 5-6 (October 5,
2011); Ground Fault Circuit Interrupters, Inv. No. 337-TA-739, Commission Opinion at
91 (June 8, 2012); Certain Inkjet Ink Cartridges with Printheads and Components *Thereof*, Inv. No. 337-TA-723, Commission Opinion at 23 (Dec. 1, 2011).

Based on the undisputed evidence presented, complainants have met their burden of establishing that a pattern of violation exists with respect to the three asserted patents and that it is difficult to identify the source of infringing products. *See* 19 U.S.C. 1337(d)(2)(B).

## **B.** Cease and Desist Orders

Complainants request the administrative law judge to recommend the entry of cease and desist orders directed to each of the domestic defaulting respondents. *See* Mem. at 252-53.

Section 337(g)(l) authorizes the Commission to issue cease and desist orders against defaulted respondents. 19 U.S.C. § 1337(g)(l); *see Certain Hand Dryers and Housing for Hand Dryers*, Inv. No. 337-TA-1015, Comm'n Op. at 9-10 (Oct. 30, 2017) (*"Hand Dryers"*). This provision provides:

If—

(A) a complaint is filed against a person under this section;

(B) the complaint and a notice of investigation are served on the person;

(C) the person fails to respond to the complaint and notice or otherwise fails to appear to answer the complaint and notice;

(D) the person fails to show good cause why the person should not be found in default; and

(E) the complainant seeks relief limited solely to that person;

the Commission shall presume the facts alleged in the complaint to be true and shall, upon request, issue an exclusion from entry or a cease and desist order, or both, limited to that person unless, after considering the effect of such exclusion or order 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, the Commission finds that such exclusion or order should not be issued.

# 19 U.S.C. § 1337(g)(1).

As discussed above, the Commission has personal jurisdiction over all the respondents in this investigation. Nevertheless, "[i]n determining whether the issuance of a CDO against a defaulted respondent is appropriate, the Commission considers whether the defaulted respondent maintains commercially significant inventories in the United States or has significant domestic operations that could undercut the remedy provided by an exclusion order." *See Hand Dryers*, Inv. No. 337-TA-1015, Comm'n Op. at 10; *Certain Electric Skin Care Devices, Brushes and Chargers Therefore, and Kits Containing the Same*, Inv. No. 337-TA-959, Comm'n Op. at 21-31 (Feb. 13, 2017) ("*Skin Care Devices*") (discussion of statutory provision and Commission precedent). The Commission's practice recognizes that inasmuch as a defaulted respondent has chosen not to participate in the investigation, complainants are not able to obtain detailed information in discovery to support a request for a cease and desist order. *See Hand Dryers*, Inv. No. 337-TA-1015, Comm'n Op. at 10.

As to domestic respondents found in default under section 337(g)(1), the Commission has consistently inferred the presence of commercially significant inventories in the United States and granted complainant's request for relief in the form of a cease and desist order. *See Hand Dryers*, Inv. No. 337-TA-1015, Comm'n Op. at 24

(citing *Certain Agricultural Tractors, Lawn Tractors, Riding Lawnmowers, and Components Thereof*, Inv. No. 337-TA-486, Comm'n Op. at 17-18 (July 14, 2003)); *Certain Mobile Device Holders and Components Thereof*, Inv. No. 337-TA-1028, Comm'n Op. at 24 (Mar. 22, 2018).

Accordingly, the administrative law judge recommends that cease and desist orders issue to the five domestic defaulting respondents: ABK Trading; Aurora Flooring; Maxwell Flooring; Mr. Hardwood Inc.; and Sam Houston Hardwood Inc.

## C. Bond

Pursuant to section 337(j)(3), the administrative law judge and the Commission must determine the amount of bond to be required of a respondent, during the 60-day Presidential review period following the issuance of permanent relief, in the event that the Commission determines to issue a remedy. The purpose of the bond is to protect the complainant from any injury. 19 U.S.C. § 1337(j)(3); 19 C.F.R. §§ 210.42(a)(1)(ii),

When reliable price information is available, the Commission has often set bond by eliminating the differential between the domestic product and the imported, infringing product. *See Certain Microsphere Adhesives, Processes for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes*, Inv. No. 337-TA-366, Comm'n Op. at 24 (1995). In other cases, the Commission has turned to alternative approaches, especially when the level of a reasonable royalty rate could be ascertained. *See Certain Integrated Circuit Telecommunication Chips and Products Containing Same, Including Dialing Apparatus*, Inv. No. 337-TA-337, Comm'n Op. at 41 (1995). A 100 percent bond has been required when no effective alternative existed. *See Certain Flash Memory Circuits and Products Containing Same*, Inv. No. 337-TA-382, USITC Pub. No.

3046, Comm'n Op. at 26-27 (July 1997) (a 100% bond imposed when price comparison was not practical because the parties sold products at different levels of commerce, and the proposed royalty rate appeared to be *de minimis* and without adequate support in the record).

Complainants propose that the bond be set at a bond of \$0.08 per square foot of the imports. *See* Mem. at 253-54. The Staff agrees with this proposal. *See* Staff Resp. at 84-85.

In this investigation, a lack of reliable pricing data makes it difficult to use a price differential analysis to determine and appropriate bond. However, there is evidence available to determine a bond based on licensing royalties. Complainants have shown

[ ] many licensees to the asserted patents that include royalty provisions. *See* Ex. F (Prowse Decl.), ¶¶ 60-61. These licenses include information relevant to determining an appropriate royalty for a reasonable royalty-based bond.

The evidence shows that there are at least [ ] license agreements for [

. See Ex. F

(Prowse Decl.), ¶¶ 61-63; Exs. F-29 at 1, F-30 at 1, F-31 at 1. Specifically, the royalty rate on [ ] products in these agreements ranged from [ ] per square meter, or approximately [ ] per square foot. See Ex. F (Prowse Decl.), ¶ 61. Additionally, other licenses [ ] corroborate this rate. There are ] licenses to patent portfolios covering LVT flooring, [

] with royalty rates ranging from approximately [ ] per square meter, or
] per square foot. *See* Ex. F (Prowse Decl.), ¶ 64; Exs. F-94 to F-117.

Similarly, there are [ ] licenses additional licenses to patent portfolios covering LVT flooring, with royalty rates ranging from [ ] per square meter, or [ ] per square foot. *See* Ex. F (Prowse Decl.), ¶ 65; Exs. F-118 to F-129.

Accordingly, the administrative law judge recommends that the defaulting respondents be required to post a bond of \$0.08 per square foot during the 60-day Presidential review period. This amount should be sufficient to prevent any harm to complainants during the Presidential review period.

# X. Conclusions of Law

1. The Commission has subject matter, personal, and *in rem* jurisdiction in this investigation.

2. The accused products have been imported or sold for importation into the United States.

The accused products infringe the asserted claims of U.S. Patent Nos.
 9,200,460; 10,208,490; and 10,233,655.

4. The domestic industry requirement has been satisfied with respect to U.S. Patent Nos. 9,200,460; 10,208,490; and 10,233,655.

## XI. Initial Determination and Order

It is the initial determination of the administrative law judge that complainants'

Motion No. 1155-53 for summary determination of violation of section 337 by the

defaulting respondents is granted.

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 of the initial

determination 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 contained herein.

Further, it is recommended that the Commission issue a GEO, certain cease and desist orders, and that a bond of \$0.08 per square foot be established for importation during the Presidential review period.

All issues delegated to the administrative law judge, pursuant to the notice of investigation, have been decided, with dispositions as to all respondents. Accordingly, this investigation before the administrative law judge is concluded in its entirety.

\* \* \*

To expedite service of the public version, each party is hereby ordered to file with the Commission Secretary no later than May 25, 2020, a copy of this initial determination with brackets to show any portion considered by the party (or its suppliers of information) to be confidential, accompanied by a list indicating each page on which such a bracket is to be found. At least one copy of such a filing shall be served upon the office of the undersigned, and the brackets shall be marked in red. If a party (and its suppliers of information) considers nothing in the initial determination to be confidential, and thus

makes no request that any portion be redacted from the public version, then a statement to that effect shall be filed.<sup>26</sup>

DPShaw

David P. Shaw Administrative Law Judge

Issued: May 15, 2020

<sup>&</sup>lt;sup>26</sup> Confidential business information ("CBI") is defined in accordance with 19 C.F.R. § 201.6(a) and § 210.5(a). When redacting CBI or bracketing portions of documents to indicate CBI, a high level of care must be exercised in order to ensure that non-CBI portions are not redacted or indicated. Other than in extremely rare circumstances, block-redaction and block-bracketing are prohibited. In most cases, redaction or bracketing of only discrete CBI words and phrases will be permitted.

# CERTAIN LUXURY VINYL TILE AND COMPONENTS THEREOF

# **PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **Initial Detrmination** has been served via EDIS upon the Commission Investigative Attorney, **Sarah J. Sladic, Esq.**, and the following parties as indicated, on **August 7, 2020**.

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

# <u>On Behalf of Complainants Mohawk Industries, Inc., Flooring</u> <u>Industries Ltd. Sarl, and IVC US Inc.:</u>

Paul F. Brinkman Esq. **KIRKLAND & ELLIS LLP** 1301 Pennsylvania Avenue, N.W. Washington, DC 20004 Email: paul.brinkman@kirkland.com

- □ Via Hand Delivery
   □ Via Express Delivery
   □ Via First Class Mail
- $\boxtimes$  Other: Email Notification of
- Availability for Download