

UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of

**CERTAIN PRE-STRETCHED
SYNTHETIC BRAIDING HAIR AND
PACKAGING THEREOF (II)**

Inv. No. 337-TA-1457

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

Administrative Law Judge Cameron Elliot

(June 5, 2026)

Pursuant to the Notice of Investigation and Rule 210.42(a) of the Rules of Practice and Procedure of the United States International Trade Commission, this is my Initial Determination in the matter of *Certain Pre-Stretched Synthetic Braiding Hair and Packaging Thereof (II)*, Investigation No. 337-TA-1457.

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TABLE OF ABBREVIATIONS

CDX	Complainant’s Demonstrative Exhibit
CIB	Complainant’s Revised Initial Post-Hearing Brief
CPB	Complainant’s Pre-Hearing Brief
CPX	Complainant’s Physical Exhibit
CRB	Complainant’s Reply Post-Hearing Brief
CX	Complainant’s Exhibit
Hr’g Tr.	Hearing Transcript
JX	Joint Exhibit
RDX	Respondents’ Demonstrative Exhibit
RIB	Respondents’ Initial Post-Hearing Brief
RPB	Respondents’ Pre-Hearing Brief
RPX	Respondents’ Physical Exhibit
RRB	Respondents’ Reply Post-Hearing Brief
RX	Respondents’ Exhibit
SDX	Staff’s Demonstrative Exhibit
SIB	Staff’s Initial Post-Hearing Brief
SPB	Staff’s Pre-Hearing Brief
SPX	Staff’s Physical Exhibit
SRB	Staff’s Reply Post-Hearing Brief
SX	Staff’s Exhibit



I. INTRODUCTION

A. Procedural Background

Complainant JBS Hair, Inc. (“JBS”) filed the complaint underlying this investigation on July 3, 2025. The complaint alleged respondents Sun Taiyang Co., Ltd. (d/b/a Outre) (“Sun Taiyang”), Beauty Elements Corporation (d/b/a Bijouz) (“Beauty Elements”), Hair Zone, Inc. (d/b/a Sensationnel) (“Hair Zone”), Beauty Essence, Inc. (d/b/a Supreme Hair US) (“Beauty Essence”), SLI Production Corp. (d/b/a It’s a Wig!) (“SLI”), Royal Imex, Inc. (d/b/a Zury Hollywood) (“Royal Imex”), GS Imports, Inc. (d/b/a Golden State Imports, Inc.) (“GSI”), Eve Hair, Inc. (“Eve Hair”), Midway International, Inc. (d/b/a BOBBI BOSS) (“Midway”), Mayde Beauty Inc. (“Mayde Beauty”), Hair Plus Trading Co., Inc. (d/b/a Femi Collection) (“Hair Plus”), Optimum Solution Group LLC (d/b/a Oh Yes Hair) (“Optimum”), Chade Fashions, Inc. (“Chade”), Mane Concept Inc. (“Mane Concept”), Beauty Plus Trading Co., Inc. (d/b/a Janet Collection) (“Beauty Plus”), Model Model Hair Fashion, Inc. (“Model Model”), New Jigu Trading Corp. (d/b/a Harlem 125) (“New Jigu”), Shake N Go Fashion, Inc. (“Shake N Go”), and Amekor Industries, Inc. (d/b/a Vivica A. Fox Hair Collection) (“Amekor”) (collectively, “Respondents”) import or sell in connection with an importation certain pre-stretched synthetic braiding hair that infringes one or more claims of U.S. Patent No. 10,786,026 (“the 026 patent”), 10,945,478 (“the 478 patent”), 10,980,301 (“the 301 patent”), and 12,127,616 (“the 616 patent”) (altogether, “Asserted Patents”).

By publication of a notice in the *Federal Register* on August 7, 2025, the U.S. International Trade Commission ordered that:

Pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, an investigation be instituted to determine whether 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

[REDACTED]

claims 1 and 9-11 of the '026 patent; claim 20 of the '478 patent; claims 1, 4-9 and 11 of the '301 patent; and claims 11-13 of the '616 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337[.]

90 Fed. Reg. 38178-9 (Aug. 7, 2025). The Commission's order further assigned the Office of Unfair Import Investigations ("Staff") to the investigation. *Id.* at 38179.

On August 7, 2025, the investigation was assigned to me. EDIS Doc. ID 858959. On August 25, 2025, I set a target date of October 7, 2026 for completion of this investigation. Order No. 3. On September 3, 2025, I set the evidentiary hearing for March 9-13, 2026. Order No. 6.

On December 5, 2025, JBS moved (1457-008) to terminate claims 9-11 of the 026 patent, claims 4-7, 9, and 11 of the 301 patent, and claims 12 and 13 of the 616 patent from the investigation based on withdrawal. The motion was granted via initial determination on December 11, 2025. Order No. 11. On January 6, 2026, the Commission determined not to review Order No. 11. EDIS Doc. ID 868003.

The evidentiary hearing took place on March 9-13, 2026. Pursuant to the procedural schedule, the parties submitted initial and reply post-hearing briefs on March 27, 2026 and April 10, 2026, respectively.

Thereafter, on April 13, 2026, Respondents moved (1457-038) to strike certain content from JBS's initial post-hearing brief and to order JBS to show cause why it should not be sanctioned for that content. The motion argues the brief improperly cited to expert reports, expert deposition transcripts, JBS's own discovery responses, and a particular demonstrative, CDX-102C, as substantive evidence. Mot. at 1-2. On April 16, 2026, JBS filed an opposition to the motion. On that same day, JBS itself moved (1457-040) to remove some of the challenged citations from its brief and represented the motion was unopposed. The next day, April 17, 2026, JBS moved (1457-041) to remove similar citations from its reply post-hearing brief and again represented the motion was unopposed. Also on April 17, 2026, Respondents moved (1457-042)

[REDACTED]

to again strike certain citations from JBS's reply brief and order JBS to show cause on similar grounds to the first motion. JBS's two unopposed motions were granted on April 21, 2026. Order No. 31. On April 22, 2026, JBS filed an opposition to Respondents' second motion to strike, and on April 23, 2026, Staff filed a combined response to both motions to strike.

As of the date of this initial determination, Respondents' two motions to strike (1457-038, -042) remain pending. Respondents are largely persuasive, as supported by Staff, while JBS is unpersuasive. Expert reports, expert deposition transcripts, and a party's own discovery responses, which are hearsay and presumptively only impeachment evidence, and demonstrative exhibits, which merely illustrate a witness's testimony, are not substantive evidence, and documents that are otherwise substantive evidence but combined into one exhibit file with these materials run the risk of exclusion for this reason. *See, e.g.,* CX-3380C; RX-1295C; *see also* Hr'g Tr. at 10:9-13 (demonstrative exhibits "of course, are demonstrative, they are not substantive. . . . I may include images of them in my initial determination, but they're not substantive evidence."). The parties were specifically warned that many exhibits JBS cites were neither admitted nor admissible. *See* Hr'g Tr. at 523:6-527:11 (explaining own discovery responses, prehearing disclosures, impeachment-only evidence, deposition transcripts, and expert reports are not admitted as substantive evidence). Even Respondents and Staff run afoul of this prohibition at times. *See, e.g.,* RIB at 84 (citing RX-4724C) (Declaration of Ms. Jinah Chung, who testified at the hearing (*see* Hr'g Tr. (Chung) at 685:1-12)); SIB at 108-110 (citing CX-331[6]C). Nevertheless, both motions are denied as moot given the determinations made below, which either do not rely on the challenged exhibits (with noted exceptions) or explain why those exhibits were never admitted as

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substantive evidence (*i.e.*, granting Respondents' requested relief).¹ No other motions remain pending.

B. The Parties

Complainant JBS is a United States corporation organized under the laws of the state of Georgia with a principal place of business in Atlanta, Georgia. EDIS Doc. ID 855945 at ¶ 7 ("Complaint"). JBS describes itself as a leading innovator in the synthetic and human hair industries. *Id.*

According to the complaint, respondent Sun Taiyang is a company organized under the laws of the state of New York with a principal place of business in Moonachie, NJ. Complaint at ¶ 8. JBS alleges that Sun Taiyang imports or sells for importation synthetic braiding products on its website www.outr.com in various brand names, colors, and sizes. *Id.*

Respondent Beauty Elements is a company organized under the laws of the state of Florida with a principal place of business in Miami Gardens, FL. Complaint at ¶ 9. JBS alleges that Beauty Elements imports or sells for importation synthetic braiding products on its website www.bijouxhair.com in various brand names, colors, and sizes. *Id.*

Respondent Hair Zone is a company organized under the laws of the state of New Jersey with a principal place of business in Moonachie, NJ. Complaint at ¶ 10. JBS alleges that Hair Zone imports or sells for importation synthetic braiding products on its website www.sensationnel.com in various brand names, colors, and sizes. *Id.*

¹ These exhibits include: CX-0438C; CX-0573C; CX-0574C; CX3286C; CX-3338C; CX-3344C; CX-3380C; CX-3381C; CX-2754C; CX-2756C; RX-1295C; RX-1525C; CX-0226C; CX-3345C; RX-1517C; RX-1518C; RX-1519C; RX-1520C; Website URL regarding Evergreen Products Group; Website URL regarding Procopio Law Firm; and CDX-0102C.



Respondent Beauty Essence is a company organized under the laws of the state of New York with a principal place of business in Moonachie, NJ. Complaint at ¶ 11. JBS alleges that Beauty Essence imports or sells for importation synthetic braiding products on its website www.supremehairus.com in various brand names, colors, and sizes. *Id.*

Respondent SLI is a company organized under the laws of the state of New Jersey with a principal place of business in Moonachie, NJ. Complaint at ¶ 12. JBS alleges that SLI imports or sells for importation synthetic braiding products on its website www.itsawig.com in various brand names, colors, and sizes. *Id.*

Respondent Royal Imex is a company organized under the laws of the state of California with a principal place of business in Santa Fe Springs, CA. Complaint at ¶ 13. JBS alleges that Royal Imex imports or sells for importation synthetic braiding products on its website www.zuryhollywood.com in various brand names, colors, and sizes. *Id.*

Respondent GSI is a company organized under the laws of the state of California with a principal place of business in Paramount, CA. Complaint at ¶ 14. JBS alleges that GSI imports or sells for importation synthetic braiding products on its website www.gsihair.com in various brand names, colors, and sizes. *Id.*

Respondent Eve Hair is a company organized under the laws of the state of California with a principal place of business in Lakewood, CA. Complaint at ¶ 15. JBS alleges that Eve Hair imports or sells for importation synthetic braiding products on its website www.evehair.com in various brand names, colors, and sizes. *Id.*

Respondent Midway is a company organized under the laws of the state of California with a principal place of business in Cerritos, CA. Complaint at ¶ 16. JBS alleges that Midway imports

[REDACTED]

or sells for importation synthetic braiding products on its website www.bobbiboss.com in various brand names, colors, and sizes. *Id.*

Respondent Mayde Beauty is a company organized under the laws of the state of New York with a principal place of business in Port Washington, NY. Complaint at ¶ 17. JBS alleges that Mayde Beauty imports or sells for importation synthetic braiding products on its website www.mayde.com in various brand names, colors, and sizes. *Id.*

Respondent Hair Plus is a company organized under the laws of the state of Georgia with a principal place of business in Suwanee, GA. Complaint at ¶ 18. JBS alleges that Hair Plus imports or sells for importation synthetic braiding products on its website www.femicollection.com in various brand names, colors, and sizes. *Id.*

Respondent Optimum is a company organized under the laws of the state of Georgia with a principal place of business in Duluth, GA. Complaint at ¶ 19. JBS alleges that Optimum imports or sells for importation synthetic braiding products on its website www.myohyeshair.com in various brand names, colors, and sizes. *Id.*

Respondent Chade is a company organized under the laws of the state of Illinois with a principal place of business in Niles, IL. Complaint at ¶ 20. JBS alleges that Chade imports or sells for importation synthetic braiding products on its website www.chade.com in various brand names, colors, and sizes. *Id.*

Respondent Mane Concept is a company organized under the laws of the state of New Jersey with a principal place of business in Moonachie, NJ. Complaint at ¶ 21. JBS alleges that Mane Concept imports or sells for importation synthetic braiding products on its website www.maneconcepthair.com in various brand names, colors, and sizes. *Id.*

[REDACTED]

Respondent Beauty Plus is a company organized under the laws of the state of New York with a principal place of business in Moonachie, NJ. Complaint at ¶ 22. JBS alleges that Beauty Plus imports or sells for importation synthetic braiding products on its website www.janetcollection.com in various brand names, colors, and sizes. *Id.*

Respondent Model Model is a company organized under the laws of the state of New York with a principal place of business in Port Washington, NY. Complaint at ¶ 23. JBS alleges that Model Model imports or sells for importation synthetic braiding products on its website www.modelmodelhair.com in various brand names, colors, and sizes. *Id.*

Respondent New Jigu is a company organized under the laws of the state of New York with a principal place of business in Port Washington, NY. Complaint at ¶ 24. JBS alleges that New Jigu imports or sells for importation synthetic braiding products on its website www.harlem125.com in various brand names, colors, and sizes. *Id.*

Respondent Shake N Go is a company organized under the laws of the state of New York with a principal place of business in Port Washington, NY. Complaint at ¶ 25. JBS alleges that Shake N Go imports or sells for importation synthetic braiding products on its website www.snghair.com in various brand names, colors, and sizes. *Id.*

Respondent Amekor is a company organized under the laws of the state of Pennsylvania with a principal place of business in Conshohocken, PA. Complaint at ¶ 26. JBS alleges that Amekor imports or sells for importation synthetic braiding products on its website www.vivicafoxhair.com in various brand names, colors, and sizes. *Id.*

C. The Asserted Patents and Claims

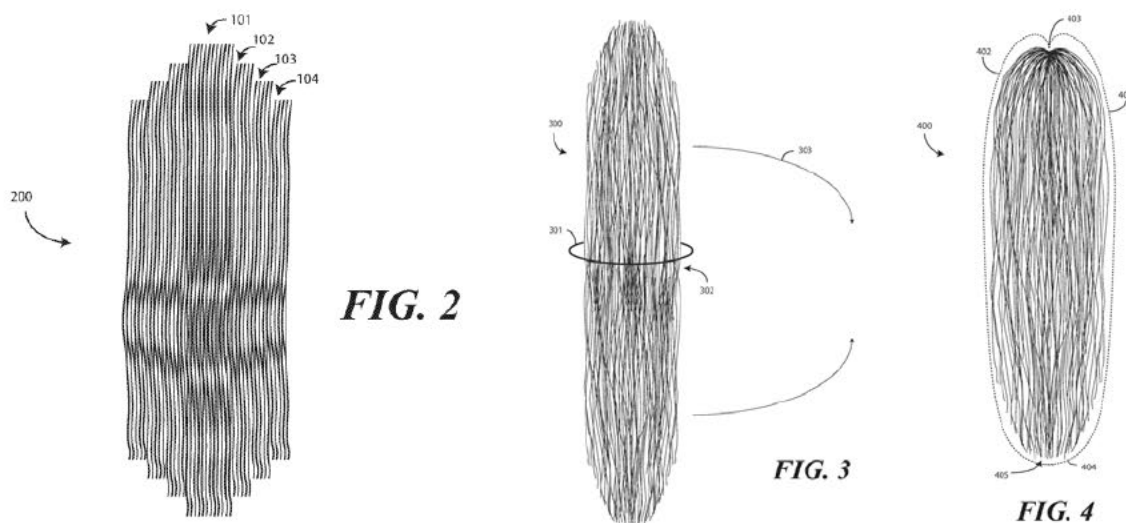
The Asserted Patents all have the same inventors, Messrs. Eddie K. Jhin and Jae Hoon Lee, and the same assignee, JBS Hair Inc. *See* 026 patent at cover; 478 patent at cover; 301 patent at

[REDACTED]

cover; 616 patent at cover. The application that issued as the 616 patent was a continuation of the application that issued as the 301 patent; the application that issued as the 301 patent was a continuation of the application that issued as the 026 patent; and the application that issued as the 478 patent was a continuation-in-part of the application that issued as the 026 patent, with several new figures and several columns of new matter. *See generally* 616 patent; 026 patent; 478 patent; 301 patent.

The subject matter of all four patents is “bundled synthetic braiding hair.” *E.g.*, 478 patent at Abstract. According to the patents, braiding hair consists of “loose strands of synthetic hair” that are “braided into strands of the wearer’s own hair,” thus “creat[ing] a lengthening effect as well as adding body to the wearer’s own hair.” *Id.* at 1:32-40. When braiding hair is manufactured, the strands are often cut to the same length, but braiding hair looks more natural when the strands have uneven lengths. *Id.* at 3:11-28. A hair stylist may create uneven lengths manually, by “teasing,” that is, “pull[ing] the ends of some strands,” but this process is tedious and time consuming. *Id.*

The patents describe an alternative, where strands that are already different lengths are bundled together, and then those bundles are combined: “a plurality of bundles of braiding hair strands, each having a different length, are bundled together.” 478 patent at 3:31-33. Once combined, the whole assembly is folded in half about the assembly’s “waist,” so that the folded bundles drape down and form an overall shape defined by a perimeter. *Id.* at 4:1-12. The 478 patent illustrates this technique:



Id. at Figs. 2, 3, 4. The left figure (Fig. 2) shows bundles of hair strands of varying lengths (101, 102, 103, 104), which are “bundled together” to form the “bundled synthetic braiding hair accessory” (300) shown in the center figure (Fig. 3). *Id.* at 5:32-50. The whole assembly is then folded about its waist (302), and may be secured using a binder such as an elastic band or zip tie. *See id.* at 51-60. As shown in the right figure (Fig. 4), the folded accessory has a perimeter with a “cusp” at the top and a rounded bottom, although it may also have a pointed bottom. *Id.* at 6:5-16, Fig. 8. The 478 patent describes this perimeter shape as “substantially cardioid.” *Id.* at 6:5-16. The folded accessory may be attached to a “backer panel,” which may include a flap folded over the top of the accessory, and then placed in a container, so that the “completed assembly is now ready for sale to a consumer.” *Id.* at 9:12-59.

The following patent claims are presently at issue in this investigation, according to Complainants’ briefing, either because they are asserted or because they are intervening dependent claims:

Asserted Patent	Infringement Claims	Domestic Industry Claims
10,786,026	1	1



10,980,301	1, 4, 7, 8	1, 4, 7, 8
10,945,478	17, 20	17, 20
12,127,616	11	11

See generally CIB at 1.

D. Products at Issue

1. Domestic Industry Products

JBS contends it “created the market for pre-stretched synthetic braiding hair products having a substantially cardioid shaped perimeter when they first introduced their [Queen Bee (“QB”)] DI Products in January 2017.” CIB at 44. According to JBS, all of its QB products practice the Asserted Claims, which include:

QB 3X BRAID EXPRESS 52 (discontinued)	QB 4X MULTI 30 (CPX-0007)
QB 4X MULTI 40 (CPX-0008)	QB 3X MULTI 50 (CPX-0012)
QB 4X MULTI 50 (CPX-0009)	QB 7X MULTI 50 (CPX-0011)
QB 4X MULTI 60 (CPX-0010)	QB KIDS 3X MULTI (CPX-0006)
QB XPRESS 86 (CPX-0005)	QUEEN B 30 (CPX-0001)
QUEEN B 40 (CPX-0002)	QUEEN B 50 (CPX-0003)
QUEEN B 60 (CPX-0004)	

See *id.* (altogether, “the DI Products”); SIB at 23.

Within the total group, JBS offers further categorization. For those asserted patent claims that require a folded backer panel (026 patent, claim 1; 301 patent, claim 8), only the following products practice: QB SINGLE 30; QB SINGLE 40; QB SINGLE 50; QB SINGLE 60; QB SINGLE 86 (altogether, “Group 1 DI Products”). *Id.* at 44-45. And for those claims that do not

require a backer panel (301 patent, claim 1; 478 patent, claim 20; 616 patent, claim 11), the full set of DI Products practice (altogether, “Group 2 DI Products”). *Id.* at 45-46. This organization is shown below:

Group 1 DI Products	Group 2 DI Products
QUEEN B 30 (CPX-0001)	QUEEN B 30 (CPX-0001)
QUEEN B 40 (CPX-0002)	QUEEN B 40 (CPX-0002)
QUEEN B 50 (CPX-0003)	QUEEN B 50 (CPX-0003)
QUEEN B 60 (CPX-0004)	QUEEN B 60 (CPX-0004)
QB XPRESS 86 (CPX-0005)	QB XPRESS 86 (CPX-0005)
	QB 4X MULTI 30 (CPX-0007)
	QB 3X MULTI 50 (CPX-0012)
	QB KIDS 3X MULTI (CPX-0006)
	QB 3X BRAID EXPRESS 52 (discontinued)
	QB 4X MULTI 40 (CPX-0008)
	QB 4X MULTI 50 (CPX-0009)
	QB 4X MULTI 60 (CPX-0010)
	QB 7X MULTI 50 (CPX-0011)

In this way, all DI Products are Group 2 DI Products, and a subset are additionally Group 1 DI Products.

[REDACTED]

Importantly, JBS designates the QB 3X Multi 50 (CPX-0012)² as representative of all Group 2 DI Products for purposes of technical prong domestic industry (“Group 2 Representative DI Product”); and the QB Single 50 (CPX-0003) as representative of the Group 1 DI Products (“Group 1 Representative DI Product”). CIB at 45. These are marked in bold, above. JBS makes these claims of representativeness based on the testimony of its expert, Ms. Esther Martinez, website marketing photos, and the physical exhibits themselves. *See id.* at 45-46 (citing Hr’g Tr. (Martinez) at 414:12-424:18, 426:23-427:24; C-0164; CX-0170C; CPX-0001 through CPX-0012); CRB at 47. Staff agrees with JBS’s claims of representation, adding “Respondents do not identify any material differences between the representative products and the products for which they are representative.” SIB at 24.

Respondents dispute that the QB Single 50 and QB 3X Multi 50 are effective representations of the other products. Essentially, they argue Ms. Martinez’s testimony about inspecting all DI Products to determine representativeness is not credible given admissions made during her deposition. RIB at 45-46 (citing Hr’g Tr. (Martinez) at 437:2-10, 466:15-17, 467:4-11); RRB at 17 (citing Hr’g Tr. (Martinez) at 345:15-18), 31. Respondents assert that under Commission precedent, such conclusory expert opinions on representativeness are not sufficient. RIB at 44-46 (citing *Certain LED Lighting Devices*, Inv. No. 337-TA-1081, Comm’n Op. at 9-16 (July 23, 2019) (“*LED Lighting Devices*”). Respondents also object to JBS and the Staff’s attempt to shift the burden onto Respondents to show lack of representativeness. RRB at 10 (citing *Medtronic, Inc. v. Mirowski Family Ventures, LLC*, 571 U.S. 191, 198-99, (2014); *Exigent Tech. v. Atrana Sols., Inc.*, 442 F.3d 1301, 1308 (Fed. Cir. 2006)), 19.

² JBS’s initial brief cites CPX-0009 for the 3X multipack, but CPX-0009 is the 4X multipack. CPX-0012 is the 3X multipack. *See* CIB at 45.

[REDACTED]

JBS has not met its burden with respect to the QB Single 50 being representative of all Group 1 DI Products, nor the QB 3X MULTI 50 being representative of all Group 2 DI Products. The principle of using representative products for either domestic industry or infringement is to avoid the time and expense of producing and analyzing duplicative evidence, which can result in efficiencies for both the parties and the factfinder. But to justify the shortcut, the proffering party must demonstrate that the features of one product are either identical to or immaterially different from another such that the evidence of one can be considered to apply to the other. This is distinct from stating or even proving that all products infringe and concluding they are thus representative of one another.

JBS has the burden to show infringement by the accused products and practice by the domestic industry products. *See Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1349 (Fed. Cir. 2010); *John Mezzalingua Associates, Inc. v. U.S. Int'l Trade Comm'n*, 660 F.3d 1322, 1331 (Fed. Cir. 2011). Thus, it also has the burden to show representativeness if representativeness is to be used as an evidentiary shortcut for a wide range of products. *LED Lighting Devices, Comm'n Op.* at 10 n.14 (citing, *inter alia*, *L&W, Inc. v. Shertech, Inc.*, 471 F.3d 1311, 1318 (Fed. Cir. 2006)). So Respondents are correct that JBS must make an adequate proffer even if Respondents were completely silent on the matter (they are not).

JBS's briefing is inadequate. It begins by stating that all of the Group 1 DI Products and all of the Group 2 DI Products include certain features, but the features listed are the elements of the asserted claims and not practical descriptions. *See* CIB at 44-45; *see* Hr'g Tr. (Martinez) at 339:18-341:25, 345:5-18. This is no different than stating the products are representative because they all infringe, which JBS explicitly does in its rebuttal brief, thereby putting the cart before the horse:

[REDACTED]

Ms. Martinez testified that the QB SINGLE 50 with backer panel folded and QB 3X MULTI 50 without backer panel folded are representative of all QB DI Products with and without backer panel folded (Group 2 Products) with respect to practicing Asserted Claim 1 of the '301 Patent, Asserted Claim 20 of the '478 Patent and Asserted Claim 11 of the '616 Patent (Group 2 Patents), because they all include all elements of the Asserted Claims.

CRB at 47.

JBS and Staff's additional statements that the physical exhibits themselves show representativeness would be germane but are made without any elaboration. *See* CIB at 44; SIB at 24. From the outset of the investigation, the Ground Rules have warned these sorts of blanket contentions are of no value. Order No. 2 at G.R. 4.4.2 ("Conclusory statements in responses to contention interrogatories are insufficient; *e.g.*, if a party simply states: "there is also infringement under the doctrine of equivalents," the party is prohibited from later introducing evidence regarding the details of such infringement."). Moreover, a physical inspection of one product, the QB 3X BRAID EXPRESS 52, is not even possible because no such exhibit exists in the record. JBS's employee witness, Mr. Justin (Jae Hoon) Lee, testified he physically measured the strands of hair in this product as a part of the litigation, so the product clearly exists, but it was apparently not admitted in evidence. *See* CDX-0107. And a cursory review of the QB XPRESS 86, either in physical or photographic form, shows that due to its extreme length it is braided, folded, arranged, and packaged very differently than all other DI Products, but especially the alleged representative product:



CX-2840.5 (QB XPRESS 86), 7 (QB 3X MULTI 50). The QB XPRESS 86 in the photo is also mounted to the backer panel opposite to that of the physical exhibit. *Compare CX-2840.5 (tail on left) with CPX-0005 (tail on right).* So Staff’s criticism that “Respondents do not identify any material differences between the representative products and the products for which they are representative” (SIB at 24) is incorrect both legally (because it implicitly shifts the burden of proof) and factually (because there are such material differences).

This leaves the opinions of Ms. Martinez. Respondents challenge her credibility on all topics (RIB at 14), including on the issue of representativeness. As previewed by the parties’ motions *in limine*, her opening direct testimony at trial was conclusory, resting largely on her representation that she looked at all the physical samples and found all the claim elements were there. *See, e.g.,* Hr’g Tr. (Martinez) at 413:11-23, 419:10-18, 426:4-21, 427:8-428:3, 432:3-9,

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437:2-10; Order No. 28 at 1-2.³ As noted above, all claim limitations being met in a group of products, even if true, does not mean those products are representative of one another for evidentiary purposes. So her testimony does not meet JBS's burden. Further, Ms. Martinez made the equivalent representation for the Accused Products and was effectively impeached on the point. Hr'g Tr. (Martinez) at 465:1-467:11; RRB at 17 (citing Hr'g Tr. (Martinez) at 345:15-18). While not directly transferable, this moment does call into question her overall opinion of representativeness-by-observation.

Accordingly, JBS has not shown that the QB Single 50 is representative of all Group 1 DI Products, nor that the QB 3X MULTI 50 is representative of all Group 2 DI Products. JBS has carried its burden, if at all, only with respect to the allegedly representative products and certain other products, the evidence for which is evaluated individually, below.

2. Accused Products

The accused articles in this investigation are, according to JBS, "pre-stretched synthetic hair braiding products." CIB at 1. One or more models of braiding products are accused for each Respondent and, similar to the DI Products, are divided into Groups 1 and 2. *See id.* at 39-44. Group 2 includes all of the products listed in JBS's table below which are accused of infringing claim 1 of the 301 patent, claim 20 of the 478 patent, and claim 11 of the 616 patent:

³ As discussed below in the contexts of infringement and technical prong domestic industry, JBS also attempted to introduce and support Ms. Martinez's opinions with claim charts and other tables of aggregated evidence compiled within certain CX and CDX exhibits. For the reasons explained, these charts and tables are not admitted and not considered for the purposes of this initial determination.



‘301 Claim 1; ‘478 Claim 20; ‘616 Claim 11		
Respondent(s)	Representative Accused Product(s)	Accused Product(s) [All Variations in Color, Length and Package Size]
Beauty Essence ¹¹	SUPERTZBRAID (CPX-018); TZ60 (CPX-060)	SUPERTZBRAID (CPX-018); TZ BRAID (CPX-060); TZ3 BRAID (CPX-018A); TZ4 BRAID (CPX-018B); and TZ60 BRAID (CPX-060)
HZ ¹²	RUWA (CPX-016); RUWA (folded backer panel) (CPX-00017)	X-PRESSION (CPX-00061); RUWA (CPX-016); RUWA

		(folded backer panel) (CPX-017)
SLI ¹³	MAGIC FINGERS by GoldnTree (CPX-019)	MAGIC FINGERS by GoldnTree (CPX-019)
Sun Taiyang ¹⁴	TWISTED UP (CPX-013); BRAID UP (CPX-014)	X-PRESSION (CPX-036); X-PRESSION ULTRA (CPX-037); TWISTED UP (CPX-013); BRAIDBABE (CPX-038); BRAID UP (CPX-014); LITTLE LOOKS (CPX-039); and AIRE (CPX-040)
Beauty Elements ¹⁵	REALISTIC X-PRESSION (CPX-015; CPX-042)	REALISTIC X-PRESSION (CPX-015; CPX-042); REALISTIC X-PRESSION GHANA (CPX-041)
Royal Imex ¹⁶	YAKY HOLLYWOOD (CPX-020; CPX-045)	FAST (CPX-043); FAST HOLLYWOOD BRAID (CPX-044); YAKY HOLLYWOOD (CPX-020; PX-045); ZURY LIKE HAIR BRAID (CX-001)
GS Imports ¹⁷	RASTAFRI™ BRAID (CPX-021)	RASTAFRI™ BRAID (CPX-021); FREED’M SILKY BRAID (CPX-046); and AMAZONIA BRAID (CPX-047)
Eve Hair ¹⁸	TRU BRAID (CPX-022)	TRU BRAID (CPX-022); and FEEL FREE (CPX-048)

Midway ¹⁹	JUST GLAM (CPX-04); JUST BRAID (CPX-023)	BOSS; BOBBI Boss Braid (CPX-049); JUST BRAID (CPX-023); and JUST GLAM BRAID (CPX-024)
Mayde ²⁰	BRAID NATION (CPX-026); Africana (CPX-025)	BRAID NATION (CPX-026); BRAID NATION KIDS (CPX-050); PURE TOUCH (CPX-026); and Africana (CPX-025)
Hair Plus ²¹	FEMI (CPX-027)	EZ SPLIT (CPX-051); FEMI (CPX-027)
Optimum ²²	SPETRA (CPX-028)	SPETRA (CPX-028)
Chade ²³	EZ X 28 (CPX-029A)	NATTY (CPX-052); EZ X (CPX-053); EZ X RAINBOW (CPX-054); EZ X WATERTEX (CPX-029); and YAKI (CPX-055)
Mane Concept ²⁴	Afri Naptural (CPX-030)	Afri Naptural (CPX-030)
Beauty Plus ²⁵	EZ SPLIT (CPX-031)	NALA TRESS (CPX-056); EZ SPLIT (CPX-031)
Model Model ²⁶	EVER CLEAR (CPX-032)	EVER CLEAR (CPX-032); GLANCE FORMATION (CPX-057)

New Jigu ²⁷	KIMA EZ TWIN PROFESSIONAL (CPX-033)	GOGO (CPX-058); KIMA EZ TWIN PROFESSIONAL (CPX-059); and KIMA EZ TWIN (CX-059)
SNG ²⁸	FREETRESS (CPX-034)	FREETRESS; QUE (CPX-034)
Amekor ²⁹	Amore Mio Spetra (CPX-035)	Amore Mio Spetra (CPX-035)

Id. (collectively, “Accused Products” or “Group 2 Accused Products”); *see* RIB at 3-4. Respondents’ identification of accused products includes different naming for the Beauty Elements products, includes a WATERPRO product for Mane which is not in JBS’s list, and a SPETRA product for New Jigu which is not on JBS’s list. *See* RIB at 3-4. A subset of these Respondents

and their products are designated by JBS as Group 1 Accused Products and are accused of additionally infringing claim 1 of the 026 patent and claim 8 of the 301 patent, which involve a folded backer panel:

‘026 Claim 1; ‘301 Claim 8		
Respondent¹⁰	Representative Accused Product(s)	Accused Product(s) [Including all variations in Color, Length and Package Size]
Beauty Essence	SUPERTZBRAID (CPX-018), TZ60 (CPX-060)	SUPERTZBRAID (CPX-018); TZ BRAID (CPX-060); TZ3 BRAID (CPX-018A); TZ4 BRAID (CPX-018B); and TZ60 BRAID (CPX-060)
Midway	JUST BRAID (CPX-023)	JUST BRAID (CPX-023)
Mayde	Africana (CPX-025)	Africana (CPX-025)
HZ	X-Pression Ruwa (CPX-061)	X-Pression Ruwa (CPX-061)

Id. at 40 (“Group 1 Accused Products”).

There is a plain error in at least the Group 1 table, however. The exhibit CPX-0061 is not an X-Pression Ruwa product but rather an X-Pression African Collection. *See* CPX-0061. Importantly, this African Collection product does not have a folded backer panel and so cannot possibly satisfy claim 1 of the 026 patent or claim 8 of the 301 patent. The error is avoided in the demonstratives of Ms. Martinez, however, where she identifies the Hair Zone representative product as X-Pression Ruwa, CPX-0017, and also in JBS’s Group 2 table where it states, “RUWA (folded back panel) (CPX-0017).” Indeed, CPX-0017 has a folded backer panel as required. CPX-0017; *see* CDX-0026.33. So CPX-0017 will be considered the Group 1 accused product from Hair Zone.



Further, as noted in the tables, JBS makes claims of per-respondent representative products to simplify the analysis. CIB at 39 (“representative of the structure, function and operation of all of the Accused Product(s) with the backer panel folded for each Respondent Beauty Essence, Midway, Mayde and HZ in all colors, lengths and package sizes with respect to infringement of each and every element . . .”), 40 (“representative of the structure, function and operation of all of the Accused Product(s) for each Respondent in all colors, lengths and package sizes with respect to infringement of each and every element . . .”). JBS again relies on the testimony of Ms. Martinez to justify the evidentiary shortcut. *Id.* at 39 (citing Hr’g Tr. (Martinez) at 364:16-371:24, 378:2-384:11), 41 (citing Hr’g Tr. (Martinez) at 387:19-411:15). For purposes of this initial determination they are referred to as the “Group 2 Representative Accused Products” and “Group 1 Representative Accused Products,” respectively. As with the DI Products, Staff agrees with JBS’s claims of representation and adds, “Respondents do not identify any material differences between the representative products and the products for which they are representative.” SIB at 23.

Respondents dispute the assertions of representativeness—both as between different product models from a given respondent and also as between packages of the same model with different numbers of braids (*e.g.*, 2-pack, 3-pack, etc.). *See* RIB at 29-32. Again, Respondents refer to the testimony of Ms. Martinez who, according to Respondents, provided only conclusory opinions and “admitted that she had not reviewed all the accused products, and her only basis for representativeness was that they came from the same respondent.” *Id.* at 29 (citing Hr’g Tr. (Martinez) at 371:10-24, 375:5-16; 381:15-23, 382:10-384:11, 388:10-24, 392:22-394:21, 400:6-23, 406:19-407:1, 408:4-16, 409:20-411:15, 464:15-467:11). Respondents argue this constitutes a failure of proof under, *inter alia*, *LED Lighting Devices*. *Id.*



For the same reasons discussed above for the DI Products, JBS has not shown the representative product for each Respondent represents other products from that Respondent. Ms. Martinez’s basis for representation was conclusory, focused on claim limitations rather than product features, and the veracity of her visual analysis was seriously called into question during cross-examination. Hr’g Tr. (Martinez) at 339:18-341:25, 345:5-18, 357:3-14, 371:10-24, 375:11-16, 381:17-23, 382:10-19, 388:13-24, 392:22-393:3, 400:6-15, 406:6-22, 408:4-12, 464:15-467:11; CRB at 38 (“Ms. Martinez testified that the Representative Accused Product(s) with the backer panel folded of each Respondent are representative of all Accused Products . . . because they all include all elements of the Asserted Claims.”). Further, JBS and Staff’s blanket assertion that the physical exhibits themselves demonstrate representativeness without any elaboration or factual support is ineffectual, as is their implicit attempt to shift the burden onto Respondents to show material differences. CIB at 39; CRB at 38-39; SIB at 23.

Accordingly, JBS has not shown representativeness as between the products of a given respondent. JBS has carried its burden, if at all, only with respect to the allegedly representative products, the evidence for which will be evaluated individually, below.

II. STANDARDS OF LAW

A. Standing

Commission Rule 210.12 states in relevant part “[f]or every intellectual property based complaint (regardless of the type of intellectual property involved), [the complaint must] include a showing that at least one complainant is the owner or exclusive licensee of the subject intellectual property.” 19 C.F.R. § 210.12(a)(7). In determining whether this rule is met, the Commission looks to the standing requirement used by courts in patent infringement cases. *Certain Audio Processing Hardware, Software, and Products Containing the Same*, Inv. No. 337-TA-1026, Comm’n Op. at 9 (April 18, 2018) (citations omitted).



B. Importation

A violation of Section 337 based on patent infringement requires a showing of “importation into the United States, the sale for importation, or the sale within the United States after importation . . . of articles that infringe a valid and enforceable United States patent.” 19 U.S.C. § 1337(a)(1)(B)(i). This can be satisfied by a single act of importation. *Certain Trolley Wheel Assemblies*, Inv. No. 337-TA-161, USITC Pub. 1605, Comm’n Op. at 7-8 (1984). But whether a particular respondent is an importer, or seller for importation, is a fact-intensive inquiry that considers the extent of the respondent’s conduct in causing the infringing article to enter the United States. *See Comcast Corp. v. Int’l Trade Comm’n*, 951 F.3d 1301, 1309 (Fed. Cir. 2020); *Certain Televisions, Remote Controls, & Components Thereof*, Initial Determination on Violation, Inv. No. 337-TA-1263, Initial Determination at 13 (June 28, 2022), *non-reviewed in relevant part*, Notice (Oct. 5, 2022). The sale for importation standard has been described as whether the respondent knew or should have known that its sale of a product to third parties would result in the product subsequently being imported into the United States. *Certain Carbon and Alloy Steel Products (“Alloy Steel”)*, Inv. No. 337-TA-1002, Initial Determination at 26 (Oct. 2, 2017), *non-reviewed*, Notice (Nov. 1, 2017); *see Certain Polyvinylidene Fluoride Resins*, Inv. No. 337-TA-1439, Notice at 3 (Feb. 11, 2026) (citing *Certain Glass Substrates for Liquid Crystal Displays, Products Containing the Same, and Methods for Manufacturing the Same*, Inv. No. 337-TA-1433, Order No. 64 at 3 (Jan. 9, 2026), *unreviewed*, Notice (Feb. 10, 2026)); *Certain Inkjet Ink Cartridges with Printheads and Components Thereof*, Inv. No. 337-TA-723, Initial Determination at 9 (June 10, 2011), *unreviewed in relevant part*, Notice (Aug. 11, 2011)).



C. Claim Construction

“The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims.” *Embrex, Inc. v. Serv. Eng'g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000). Although most of the disputed claim terms were construed in an earlier order, some of the issues presented below are only resolvable with additional claim construction.

Claim construction focuses on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc); *see also Markman v. Westview Instr., Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc). As the Federal Circuit in *Phillips* explained, courts must analyze each of these components to determine the “ordinary and customary meaning of a claim term” as understood by a person of ordinary skill in art at the time of the invention. 415 F.3d at 1313. “Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001).

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). “Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claims terms.” *Id.* at 1314; *see Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (“In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to ‘particularly point [] out

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and distinctly claim [] the subject matter which the patentee regards as his invention.”). The context in which a term is used in an asserted claim can be “highly instructive.” *Phillips*, 415 F.3d at 1314. Additionally, other claims in the same patent, asserted or unasserted, may also provide guidance as to the meaning of a claim term. *Id.* “Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee.” *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” *Id.* at 1316.

In addition to the claims and the specification, the prosecution history should be examined, if in evidence. *Phillips*, 415 F.3d at 1317; *see Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004). The prosecution history can “often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317; *see Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.”).

When the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence (*i.e.*, all evidence external to the patent and the prosecution history, including dictionaries, inventor testimony, expert testimony, and learned treatises) may be considered. *Phillips*, 415 F.3d at 1317. Extrinsic evidence is generally viewed as less reliable than the patent

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itself and its prosecution history in determining how to define claim terms. *Id.* “The court may receive extrinsic evidence to educate itself about the invention and the relevant technology, but the court may not use extrinsic evidence to arrive at a claim construction that is clearly at odds with the construction mandated by the intrinsic evidence.” *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999).

The construction of a claim term is generally guided by its ordinary meaning. However, courts may deviate from the ordinary meaning when: (1) “the intrinsic evidence shows that the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention;” or (2) “the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history.” *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1329 (Fed. Cir. 2009); *see Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 967 (Fed. Cir. 2022); *GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“the specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal.”); *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) (“[W]here the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender.”); *Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319, 1325 (Fed. Cir. 2002) (“The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution.”). Nevertheless, there is a “heavy presumption that a claim term carries its ordinary and customary meaning.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citations omitted); *Google LLC v. EcoFactor, Inc.*, 92 F.4th 1049, 1058 (Fed. Cir. 2024) (“A patentee ‘is free to choose a broad term

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and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its scope.”) (citing *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1367 (Fed. Cir. 2012). The standard for deviating from the plain and ordinary meaning is “exacting” and requires “a clear and unmistakable disclaimer.” *Thorner*, 669 F.3d at 1366-67; see *Epistar Corp. v. Int’l Trade Comm’n*, 566 F.3d 1321, 1334 (Fed. Cir. 2009) (requiring “expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope” to deviate from the ordinary meaning) (citation omitted).

D. Infringement

“An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing.” *Markman*, 52 F.3d at 976. A patentee may prove infringement either literally or under the doctrine of equivalents. Infringement of either sort must be proven by a preponderance of the evidence. *SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988). A preponderance of the evidence standard “requires proving that infringement was more likely than not to have occurred.” *Warner-Lambert Co. v. Teva Pharm. USA, Inc.*, 418 F.3d 1326, 1341 n.15 (Fed. Cir. 2005).

Literal infringement is a question of fact. *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). “To establish literal infringement, every limitation set forth in a claim must be found in an accused product, exactly.” *Microsoft Corp. v. GeoTag, Inc.*, 817 F.3d 1305, 1313 (Fed. Cir. 2016) (quoting *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir. 1995). If any claim limitation is absent, there is no literal infringement of that claim as a matter of law. *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000).



Doctrine of equivalents is also a form of infringement. One rubric for evaluating if a claimed feature is not literally, but nonetheless equivalent to, a claimed feature is known as the function-way-result test. Under this test, the accused feature is equivalent to the claim limitation when “it performs substantially the same function in substantially the same way to obtain the same result.” *Duncan Parking Techs., Inc. v. IPS Grp., Inc.*, 914 F.3d 1347, 1362 (Fed. Cir. 2019) (quoting *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950)). Another is known as the insubstantial differences test, where “[a]n element in the accused device is equivalent to a claim limitation if the only differences between the two are insubstantial.” *Voda v. Gordia Corp.*, 536 F.3d 1311, 1326 (Fed. Cir. 2008) (citing *Honeywell Int’l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1139 (Fed. Cir. 2004)). The Supreme Court has further instructed, “the proper time for evaluating equivalency . . . is at the time of infringement, not at the time the patent was issued.” *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 37 (1997).

In addition to direct infringement, Section 271 of the Patent Act defines two categories of indirect infringement, inducement of infringement and contributory infringement. 35 U.S.C. § 271. For indirect infringement violations under Section 337, the direct infringement element may occur after importation, so long as all the other elements of indirect infringement are met at the time of importation. See *Certain Vision-Based Driver Assistance System Cameras and Components Thereof*, Inv. No. 337-TA-907, Comm’n Op. at 19 (Dec. 1, 2015) (citing *Suprema, Inc. v. Int’l Trade Comm’n*, 796 F.3d 1338, 1348 (Fed. Cir. 2015)). It is well settled that “[a]bsent direct infringement of the patent claims, there can be neither contributory infringement ... nor inducement of infringement.” *Met-Coil Sys. Corp. v. Korners Unltd., Inc.*, 803 F.2d 684, 687 (Fed. Cir. 1986) (citations omitted).

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As to the first category, “[w]hoever actively induces infringement of a patent shall be liable as an infringer.” 35 U.S.C. § 271(b); *see DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1305 (Fed. Cir. 2006) (en banc) (“To establish liability under section 271(b), a patent holder must prove that once the defendants knew of the patent, they actively and knowingly aided and abetted another’s direct infringement.”) (citations omitted). “The mere knowledge of possible infringement by others does not amount to inducement; specific intent and action to induce infringement must be proven.” *Id.* (citations omitted). A defendant’s belief regarding patent validity is not a defense to a claim of induced infringement. *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920 (2015). A defendant’s willful blindness on the question of infringement will satisfy the knowledge requirement. *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 765, 768-771 (2011). The requisite intent to induce infringement “may be established through circumstantial evidence” and “may be inferred from all of the circumstances.” *See Broadcom Corp. v. Qualcomm, Inc.*, 543 F.3d 683, 699 (Fed. Cir. 2008) (citing *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293 (Fed. Cir. 2006); *Water Techs. Corp. v. Claco, Ltd.*, 850 F.2d 660, 669 (Fed. Cir. 1988)).

As to the second category, “a party who sells a component with knowledge that the component is especially designed for use in a patented invention, and is not a staple article of commerce suitable for substantial noninfringing use, is liable as a contributory infringer.” *Wordtech Sys., Inc. v. Integrated Networks Solutions, Inc.*, 609 F.3d 1308, 1316 (Fed. Cir. 2010). Contributory infringement is premised upon a finding that: (1) the entity sells, offers to sell, or imports into the United States a component of a product; (2) the component has no substantial non-infringing use; (3) the component constitutes a material part of the claimed invention; (4) the entity was aware of the patent and knew that the product may be covered by a claim of the patent; and (5) the use of the component in the product directly infringes the claim. *See Certain Gaming &*

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Entm't Consoles, Related Software, & Components Thereof, Inv. No. 337-TA-752, Initial Determination (Remand) at 7-8 (Mar. 22, 2013) (citing 35 U.S.C. § 271(c); *Arris Group v. British Telecomm. PLC*, 639 F.3d 1368, 1376 (Fed. Cir. 2011)), *non-reviewed*, Notice (May 23, 2013). As with inducement, willful blindness on the question of infringement will satisfy the knowledge requirement. *Global-Tech*, 563 U.S. at 765, 768-771.

E. Domestic Industry

In an investigation based on a claim of patent infringement, section 337 requires that an industry in the United States, relating to the articles protected by the patent, exist or be in the process of being established. 19 U.S.C. § 1337(a)(2). Under Commission precedent, the domestic industry requirement has been divided into (i) a “technical prong” (which requires articles covered by the asserted patent) and (ii) an “economic prong” (which requires certain levels of activity with respect to the protected articles or patent itself). *See Certain Video Game Systems and Controllers*, Inv. No. 337-TA-743, Comm’n Op. at 6-7 (April 14, 2011) (“*Video Game Systems*”).

1. Technical Prong

The technical prong of the domestic industry requirement is satisfied when the complainant in a patent-based section 337 investigation establishes that it is practicing or exploiting the patents at issue. *See* 19 U.S.C. §§ 1337 (a)(2), (3); *Certain Microsphere Adhesives, Process for Making Same and Prods. Containing Same, Including Self-Stick Repositionable Notes*, Inv. No. 337-TA-366, Comm’n Op. at 8 (U.S.I.T.C. Jan. 16, 1996). “In order to satisfy the technical prong of the domestic industry requirement, it is sufficient to show that the domestic industry practices any claim of that patent, not necessarily an asserted claim of that patent.” *Certain Ammonium Octamolybdate Isomers*, Inv. No. 337-TA-477, Comm’n Op. at 55 (U.S.I.T.C. Aug. 28, 2003). Historically, the Commission permits the complainant’s products, and those of its licensees, to be

considered for technical prong purposes. *See Certain Magnetic Tape Cartridges and Components Thereof*, Inv. No. 337-TA-1058, Comm’n Op. at 28-29 (April 9, 2019).

The test for claim coverage for the purposes of the technical prong of the domestic industry requirement is the same as that for infringement. *See Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109 (U.S.I.T.C. May 21, 1990), *aff’d*, Views of the Commission at 22 (U.S.I.T.C. Oct. 31, 1990); *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003). “First, the claims of the patent are construed. Second, the complainant’s article or process is examined to determine whether it falls within the scope of the claims.” *Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109. As with infringement, the technical prong of the domestic industry can be satisfied either literally or under the doctrine of equivalents. *Certain Dynamic Sequential Gradient Devices and Component Parts Thereof*, Inv. No. 337-TA-335, ID at 44, Pub. No. 2575 (U.S.I.T.C. May 15, 1992). In short, the patentee must establish by a preponderance of the evidence that the domestic product practices one or more claims of the patent.

2. Economic Prong

The “economic prong” of the domestic industry requirement is satisfied when there exists in the United States, in connection with products practicing at least one claim of the patent at issue: (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, and licensing. 19 U.S.C. § 1337(a)(3). Establishment of the “economic prong” is not dependent on any “minimum monetary expenditure” and there is no need for complainant “to define the industry itself in absolute mathematical terms.” *Certain Stringed Musical Instruments and Components Thereof*, Inv. No. 337-TA-586, Comm’n Op. at 25-26 (May 16, 2008) (“*Stringed Instruments*”). However, a complainant must substantiate the significance of its activities with

[REDACTED]

respect to the articles protected by the patent. *Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Comm’n Op. at 30 (Feb. 17, 2011) (“*Imaging Devices*”). Further, a complainant can show that its activities are significant by showing how those activities are important to the articles protected by the patent in the context of the company’s operations, the marketplace, or the industry in question. *Id.* at 27-28. That significance, however, must be shown in a quantitative context. *Lelo Inc. v. Int’l Trade Comm’n*, 786 F.3d 879, 886 (Fed. Cir. 2015). The Federal Circuit noted that when the ITC first addressed this requirement, it found the word “‘significant’ denoted ‘an assessment of the *relative* importance of the domestic activities.’” *Id.* at 883-4 (internal citation omitted) (emphasis added). In general, “[t]he purpose of the domestic industry requirement is to prevent the ITC from becoming a forum for resolving disputes brought by foreign complainants whose only connection with the United States is ownership of a U.S. patent.” *Certain Battery-Powered Ride-On Toy Vehicles*, Inv. No. 337-TA-314, USITC Pub. No. 2420, Initial Determination at 21 (Aug. 1991); see *Certain Vacuum Insulated Flasks and Components Thereof*, Inv. No. 337-TA-1216, Notice at 3-4 (Oct. 21, 2021) (“Given the nature and extent of [complainant’s] investments in plant and equipment as a whole, [complainant] is not a mere importer.”).

F. Invalidity

1. 35 U.S.C. § 102

Under the previous version of 35 U.S.C. § 102, a patent claim is invalid as anticipated if:

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant;
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States;

35 U.S.C. § 102 (pre-AIA). Under the current version, a patent claim is invalid as anticipated if:

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(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention; or

(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

35 U.S.C. § 102 (AIA). “A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention. Moreover, a prior art reference may anticipate without disclosing a feature of the claimed invention if that missing characteristic is necessarily present, or inherent, in the single anticipating reference.” *Schering Corp. v. Geneva Pharm., Inc.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) (citations omitted); *see Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1354 (Fed. Cir. 2012). “A century-old axiom of patent law holds that a product ‘which would literally infringe if later in time anticipates if earlier.’” *Upsher-Smith Labs., Inc. v. PamLab, L.L.C.*, 412 F.3d 1319, 1322 (Fed. Cir. 2005) (citing *Schering Corp.*, 339 F.3d at 1322). Anticipation, and all other grounds of patent invalidity, must be proved by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 95 (2011).

2. 35 U.S.C. § 103

Pursuant to the previous version of 35 U.S.C. § 103:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

35 U.S.C. § 103(a) (pre-AIA). Under the current version:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the

[REDACTED]

claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

35 U.S.C. § 103(a) (AIA). “Obviousness is a question of law based on underlying questions of fact.” *Scanner Techs. Corp. v. ICOS Vision Sys. Corp. N.V.*, 528 F.3d 1365, 1379 (Fed. Cir. 2008). The underlying factual determinations include: “(1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) objective indicia of non-obviousness.” *Id.* (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966)). These factual determinations are often referred to as the “*Graham* factors.”

The critical inquiry in determining the differences between the claimed invention and the prior art is whether there is a reason to combine the prior art references. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-21 (2007). In *KSR*, the Supreme Court rejected the Federal Circuit’s rigid application of the teaching-suggestion-motivation test. While the Court stated that “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does,” it described a more flexible analysis:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

Id. at 418. Since *KSR*, the Federal Circuit has announced that, where a patent challenger contends that a patent is invalid for obviousness based on a combination of prior art references, “the burden falls on the patent challenger to show by clear and convincing evidence that a person of ordinary

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skill in the art would have had reason to attempt to make the composition or device . . . and would have had a reasonable expectation of success in doing so.” *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1360 (Fed. Cir. 2007); *see KSR*, 550 U.S. at 399 (“The proper question was whether a pedal designer of ordinary skill in the art, facing the wide range of needs created by developments in the field, would have seen an obvious benefit to upgrading Asano with a sensor.”).

An obviousness determination should also include a consideration of how “secondary considerations” such as “commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *Graham*, 338 U.S. at 17-18. “For [such] objective evidence to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the claimed invention.” *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995); *see Merck & Cie v. Gnosis S.P.A.*, 808 F.3d 829, 837 (Fed. Cir. 2015). “Where the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention.” *In re Huai-Hung Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011); *see Apple Inc. v. Samsung Elecs. Co., Ltd.*, 839 F.3d 1034, 1054-1056 (Fed. Cir. 2016).

3. 35 U.S.C. § 112

The prior version of the Patent Act recites:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. § 112 (pre-AIA). Under the current version:

[REDACTED]

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

35 U.S.C. § 112 (AIA). Pursuant to section 112, a patent claim is invalid for lack of written description if the patent’s specification fails to “reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). “[T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skilled in the art” (*id.*), and “the level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology” (*id.* (citing *Capon v. Eshar*, 418 F.3d 1349, 1357-58 (Fed. Cir. 2005))).

A patent claim may also be invalid under Section 112 for lack of enablement. To prove that a claim is invalid for lack of enablement, a challenger must show by clear and convincing evidence that a person of ordinary skill in the art would not be able to practice the claimed invention without “undue experimentation.” *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1188 (Fed. Cir. 2014) (citation omitted). “Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighting many factual considerations.” *In re Wands*, 858 F.2d 731, 736-37 (Fed. Cir. 1988). Those considerations, commonly referred to as the “*Wands* factors,” are:

(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature

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of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims.

Id. at 737. The Supreme Court has recently explained and held: “If a patent claims an entire class of processes, machines, manufactures, or compositions of matter, the patent’s specification must enable a person skilled in the art to make and use the entire class. In other words, the specification must enable the full scope of the invention as defined by its claims. The more one claims, the more one must enable.” *Amgen Inc. v. Sanofi*, 598 U.S. 594, 610, (2023).

A patent claim may further be invalid under Section 112 if it is indefinite. The statutory language, “particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention,” present in both previous and current versions of the statute, has been interpreted to require the patentee to “be precise enough to afford clear notice of what is claimed, thereby ‘apprising the public of what is still open to them.’” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (citing *Markman*, 517 U.S. at 373). The Court held, “we read § 112, ¶ 2 to require that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Id.* at 910. Thus, a claim is required to “provide objective boundaries for those of skill in the art,” and a claim term is indefinite if it “might mean several different things and no informed and confident choice is among the contending definitions.” *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014). And the Federal Circuit reminds that it is not individual words or even limitations that are judged indefinite, but entire claims. *Cox Commc’ns, Inc. v. Sprint Commc’n Co. LP*, 838 F.3d 1224, 1231-2 (Fed. Cir. 2016) (“As *Nautilus* instructs, the dispositive question in an indefiniteness inquiry is whether the ‘claims,’ not particular claim terms, ‘read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.’”).

III. IMPORTATION AND STATUTORY AUTHORITY

In this investigation, importation and statutory authority are not disputed issues. RIB at 4. In its initial brief, JBS contends, “JBS has standing, and the Commission has statutory authority, personal jurisdiction over Respondents, and in rem jurisdiction over the imported Accused Products.” CIB at 46. JBS generally points to stipulations, corporate representative deposition transcripts, and admissions from Respondents to establish they have imported, sold for importation, or sold after importation the Accused Products. *Id.* at 46-47 n.30 (citing CX-3065; CX-0179C; JX-0015C; CX-0233; CX-0232C; JX-0034C; JX-0019C; JX-0014C; JX-0017C; JX-0037C; JX-0020C; JX-0012C; JX-0018C; JX-0026C; JX-0025C). Accordingly, the importation requirement under 19 U.S.C. § 1337(a)(1)(B) is satisfied, and the Commission has statutory authority over all Accused Products. *See Certain Light-Based Physiological Measurement Devices and Components Thereof*, Inv. No. 337-TA-1276, Comm’n Op. at 15 (Nov. 14, 2023) (“The Commission and ALJs have used the term ‘jurisdiction’ in the past as a shorthand for statutory authority. Executive agencies, of course, do not have jurisdiction, but rather are creatures of statute that cannot exceed their statutory authority.”).

IV. U.S. PATENT NO. 10,786,026

A. Level of Ordinary Skill in the Art

The parties propose slightly different versions of a person of ordinary skill in the art (“POSITA”) at the time of the 026 patent invention. Primarily citing Ms. Martinez, JBS argues that:

[A] POSITA would be a braiding hair stylist or designer and have at least three years of experience as a hair braider or designer of synthetic braiding hair products and hair accessories, including special braids, including training on different types of hair accessories and how to install them, and experience or knowledge of retail packaging for such products as of the December 15, 2016 filing date of the parent ‘026 Patent.

[REDACTED]

CIB at 47 (citing Hr’g Tr. (Martinez) at 336:23-337:7; Hr’g Tr. (Hwang) at 541:13-542:2).

Respondents offer:

A POSITA in this case would have had at least 2 years of experience and training in hair extension artistry and the design and application of hair extensions, including training on the types of hair extensions and how to use and install them. A POSITA would have some level of knowledge and/or experience in packaging synthetic braiding hairs, and would know and understand the appearance and configuration of the packaging and the packaged product.

RIB at 13-14. Staff favors JBS’s construction and finds that selecting either proposal does not affect the substantive issues in the investigation. SIB at 26.

All parties are persuasive and the nearly identical proposals are supported by the record. *See, e.g.*, 026 patent at 1:14-41 (background of the art discussing hair accessory categories, installation process, and buying habits); Hr’g Tr. (Martinez) at 336:23-337:7; Hr’g Tr. (DuPriest) at 826:8-827:3. Nevertheless, it is not clear why more than three years of this experience is required (JBS) as opposed to two (Respondents), so flexibility with this timeframe is reasonable. Accordingly, a POSITA at the time of the 026 patent invention would have several years of experience with installing hair braid products, the marketing, packaging, and purchasing thereof, and alternatives thereto known in the hair accessories industry.

B. Claims-at-Issue

Claim 1 of the 026 patent is at issue in this investigation, through allegations of infringement and domestic industry technical prong. *See* CIB at 62, 66. The claim is reproduced below:

1. A hair accessory, comprising:

bundled synthetic braiding hair, comprising:

a first bundle of synthetic hair strands having a first length; and

[REDACTED]

a second bundle of synthetic hair strands having a second length that is shorter than the first length; and

a binder coupled about a waist of the bundled synthetic braiding hair;

wherein the bundled synthetic braiding hair is folded about the binder to define a substantially cardioid shaped perimeter;

further comprising a backer panel, wherein the binder is coupled to the backer panel, wherein the backer panel is folded, thereby completely spanning a first side of the bundled synthetic braiding hair and partially spanning a second side of the bundled synthetic braiding hair.

026 patent at cl. 1.

C. Claim Construction

The parties identify several claim terms as needing construction and another for which there is an agreed construction stemming from Order No. 27 in the preceding investigation, *Certain Pre-Stretched Synthetic Braiding Hair and Packaging Therefor*, Inv. No. 337-TA-1415 (“*Braiding Hair*”). The agreed construction is as follows:

Term	Construction
“waist”	“central portion”

Braiding Hair, Inv. No. 337-TA-1415, Order No. 27 at 7-8 (Dec. 20, 2024); *see* CIB at 47-48; SIB at 27; RIB at 5. The disputed terms are addressed below.

1. “braiding hair”

JBS	Respondents	Staff
“loose strands of hair that are suitable for braiding into strands of the wearer’s own hair” Where “suitable” means the fiber is soft, lightweight, heat resistant, flame retardant,	“loose strands of hair that are suitable for braiding into strands of the wearer’s own hair”	“loose strands of hair that are suitable for braiding into strands of the wearer’s own hair”



capable of being hot water set and not chemically treated during manufacture of the braiding hair.		
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CIB at 48; RIB at 5-6; SIB at 27.

“Braiding hair” appears in claim 1 as “bundled synthetic braiding hair, comprising . . .” 026 patent at cl. 1. As shown in the table above, the parties essentially agree on “loose strands of hair that are suitable for braiding into strands of the wearer’s own hair” (*Braiding Hair*, Inv. No. 337-TA-1415, Order No. 27 at 7), but disagree as to the scope of “suitable” within that construction—*i.e.*, a construction within a construction. Staff and Respondents argue no other requirements are warranted. RIB at 7; SIB at 28-29.

JBS, on the other hand, argues “suitable” means hair that is at least soft, lightweight, heat resistant, flame retardant, capable of being hot water set, and not chemically treated during manufacture. CIB at 48, 49; CRB at 4. For support, JBS cites no intrinsic evidence for this list of must-haves, but rather extrinsic evidence in the form of its own experts’ opinions and Accused Products packaging labels. *Id.* at 49 (citing Hr’g Tr. (Martinez) at 336:23-337:7, 359:10-22; Hr’g Tr. (Adams) at 280:7-285:1, 289:8-290:9; CPX-0022; CPX-0023; CPX-0025); *see* CRB at 4-6.

JBS is not persuasive. Intrinsic evidence is of the utmost importance in understanding the meaning of claim terms. *Bell Atl.*, 262 F.3d at 1267. And there is no intrinsic evidence supporting JBS’s multi-prong requirement for “braiding hair.” Indeed, although JBS purports to cite the entire file wrapper, the only intrinsic evidence meaningfully cited is an excerpted portion comprising applicant-submitted photos of prior art braiding products. CIB at 49-50 (citing CX-0457C). These products sporadically display marketing labels that align with JBS’s proffered construction (*see, e.g.*, CX-0457C.18, 21, 33), as does JBS’s collection of Accused Product labels (CIB at 49 (citing CPX-0022; CPX-0023; CPX-0025)). But there is no more reason to include JBS’s criteria than

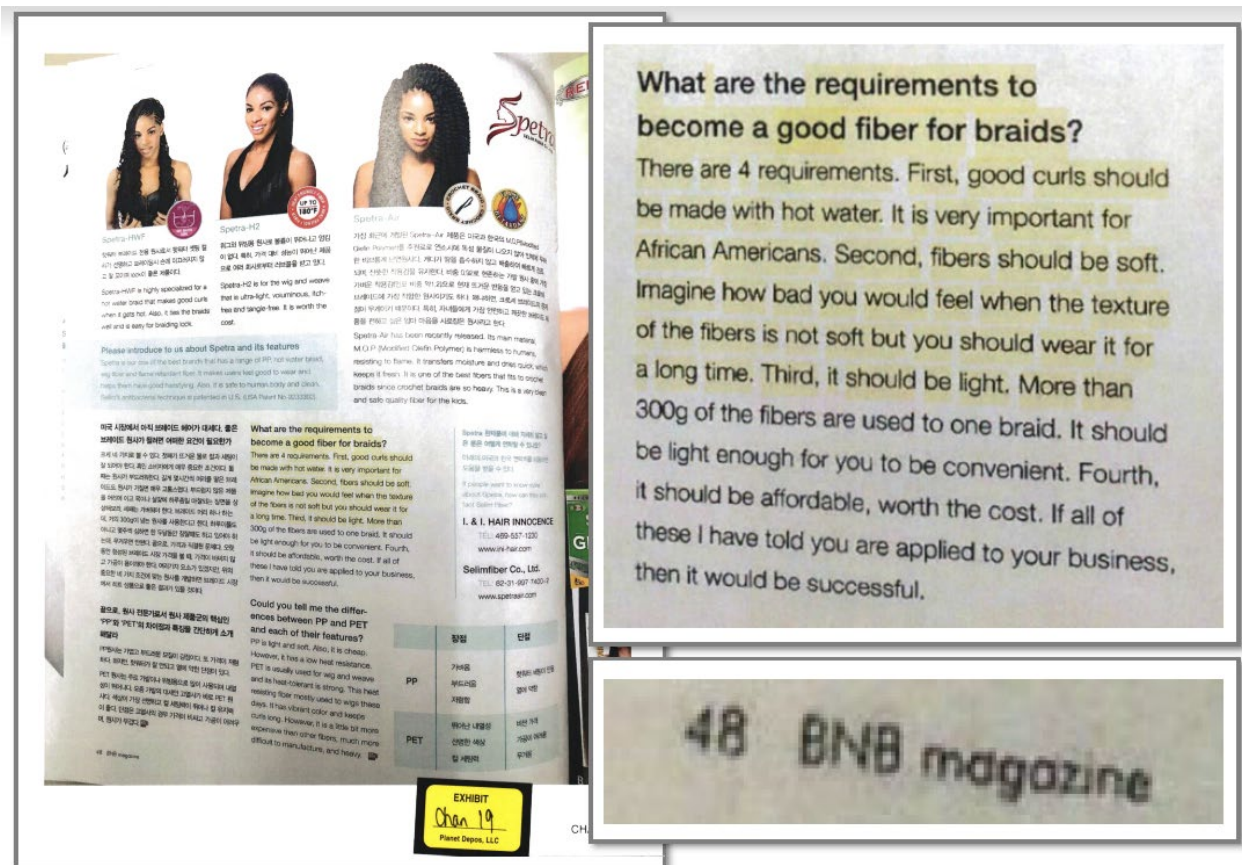
[REDACTED]

any other qualitative marketing jargon such as: “easy to divide strands” (found on Accused Product packaging CPX-0022; CPX-0023); “gentle on your fingers” (same); “tangle-free” (CX-0457C.16); or inexpensive, simulative of human hair, non-toxic, etc. Surely all of these are best understood as advertising features intended to induce sales—not to distinguish braiding hair from non-braiding hair. It is also worth noting that CX-0457C conspicuously removes certain prior art braiding products otherwise contained in the same page range in the full file wrapper, JX-0008. These products are admittedly braiding products but, presumably, lack the labels JBS promotes for its construction. *Compare CX-0457C with JX-0008.110-112, 119-121.* This only shows that the labels/features are not necessary for “braiding hair.”

Along these same lines, JBS refers to two well-known competing synthetic strand manufacturers, Kanekalon and Toyokalon, wherein Kanekalon represents suitable strands and Toyokalon represents unsuitable. *See CIB at 49.* Again, JBS’s primary evidence is marketing information, labels on certain prior art and Accused Products, and the opinions of its two experts. *Id.* (citing Hr’g Tr. (Martinez) at 336:23-337:7, 359:10-22; Hr’g Tr. (Adams) at 280:7-285:1, 289:8-290:9; CPX-0022; CPX-0023; CPX-0025; JX-0008; CX-3369.161). But there are other braiding products which are not made of Kanekalon, or at least do not mention it (*see, e.g.*, CX-0457C.10-12, 16-18 (“100% H-Microlon”), 19-21 (“100% Synthetic”)), and the record shows that braiding products made with Toyokalon M were known even if not preferred by some (*see, e.g.*, Hr’g Tr. (Yeo) at 746:25-750:9; Hr’g Tr. (Crawley) at 1052:4-1054:21; Hr’g Tr. (Adams) at 282:11-14 (“Toyokalon M has been known to shrink when being hot water dipped, as well as cause scalp irritation.”), 304:2-10 (admitting Toyokalon has been used to braid into a wearer’s natural hair), 311:14-312:5 (same); RX-0166C (2014 datasheet)). So it has not been shown that a person of ordinary skill would understand “braiding hair” to be limited to those features possessed by

Kanekalon but not by Toyokalon M.

Rejecting JBS's construction is further supported by the magazine excerpt, cited by JBS, that discusses how hot water setting is important for one customer demographic in particular and softness, weight, and affordability are all matters of preference:



CIB at 49 (citing CDX-0207; CX-3340C at Ex. 19; CX-3369C.161); see SIB at 29 (citing CX-3369.161). As Staff argues, “[t]he magazine describes ‘requirements to become *good* fiber for braids’ . . . [and] thus describes preferred qualities of braiding hair, not the requirements to qualify as braiding hair.” *Id.* (emphasis by Staff).

In sum, the record evidence does not support JBS's six limitations for “suitable” within the construction of “braiding hair.” It does support, however, Respondents’ and Staff’s simple “capable of braiding” meaning which sufficiently distinguishes other hair products that need to be

[REDACTED]

glued, sewed, or worn on top of a user’s head/hair or cannot be twisted/patterned into a braided structure. SIB at 27-28 (citing 026 patent at 1:27-35 (“Rather than clipping, sewing, or gluing a weft to the wearer’s head, with braiding hair the loose strands are braided into strands of the wearer’s own hair.”)); *see* CRB at 6 (affirming importance of braids versus other synthetic hair accessories).

Accordingly, “braiding hair” means “loose strands of hair that are suitable for braiding into strands of the wearer’s own hair.”

2. “substantially cardioid shaped perimeter”

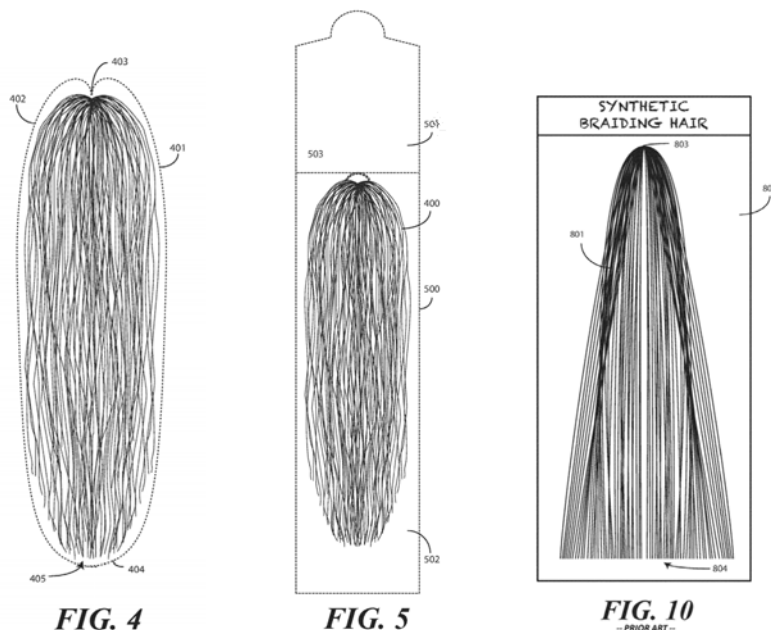
JBS	Respondents	Staff
“a substantially inverted teardrop shaped boundary with a distally narrowed or rounded bottom”	Plain and ordinary meaning; or, alternatively, indefinite	“perimeter with a substantially cardioid appearance that includes a cusp and two cardioid lobes”

CIB at 50; SIB at 40; *see* RIB at 9-12.

“[S]ubstantially cardioid shaped perimeter” appears in claim 1 of the 026 patent within “wherein the bundled synthetic braiding hair is folded about the binder to define a substantially cardioid shaped perimeter.” 026 patent at cl. 1. As shown in the table above, the parties disagree on the nature of this shape. JBS contends the patentee acted as its own lexicographer, clearly defining the term in the specification and figures as an “inverted teardrop” (CIB at 51 (citing 026 patent at 5:13-23, Figs. 3-6)), with further support from dependent claims in the related 301 patent which legally distinguish a cusp and lobes (CRB at 9 (citing 301 patent at cl. 6)). Staff argues the plain meaning and specification clearly define “cardioid” by a cusp and two lobes, and while the specification does recite a teardrop analogy, it is only a minor one based on the word “resembles.” *See* SIB at 40-41 (citing 026 patent at 5:13-23). Respondents reject JBS’s construction and agree with Staff but additionally argue the concept of a “perimeter” is too vague and, consequently,

indefinite. See RIB at 12; RRB at 5-6.

Staff is persuasive. To start, the standard for deviating from a plain and ordinary meaning due to inventor lexicography is exacting and must be clear and unmistakable. *Thorner*, 669 F.3d at 1366-67. As found in the prior investigation and literally explained in the patent's specification, a cardioid is a well-known shape, generally rounded with a cusp in between two lobes. 026 patent at 5:13-23; *Braiding Hair*, Inv. No. 337-TA-1415, Order No. 27 at 11. All 026 patent figures showing the invention include that cusp and lobes, and the figure denoting the prior art conspicuously lacks them:



026 patent at Figs. 4, 5, 10. Moreover, the paragraph cited by JBS which associates the perimeter 410 shown in these figures merely states that it “resembles” an inverted teardrop (which in ordinary understanding would have a single lobe and no cusp on top):

As shown in FIG. 4, the folded bundled synthetic braiding hair 400 defines a substantially cardioid shaped perimeter 401. The term “substantially” is used because while the substantially cardioid shaped perimeter 401 is not a perfect cardioid as would be the case when a circle of fixed radius is rotated about another circle with a point at the intersection of the fixed radius drawing the cardioid, it has a cardioid appearance in that it includes a cusp 403 and two cardioidal lobes. *The*

[REDACTED]

substantially cardioid shaped perimeter 401 also resembles an inverted teardrop with a rounded end instead of a pointed one.

026 patent at 5:13-23 (emphasis added); *see* CIB at 51. There is no clear and unmistakable disclaimer or lexicography here to read out the basic meaning of “cardioid” as in JBS would have it.

With that said, there is a preference in the law to interpret the same claim term consistently across patents within a family (*NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005)), and the prior *Markman* order and JBS properly bring attention to those dependent claims in the related 301 patent which—directly contrary to the specification passage above—suggest a cusp and two lobes are somehow not inherent characteristics of a cardioid. *Braiding Hair*, Inv. No. 337-TA-1415, Order No. 27 at 10; CRB at 9. Specifically, claim 5 states, “[t]he hair accessory of claim 4, wherein the perimeter defines a substantially cardioid shaped perimeter” and claim 6 states, “[t]he hair accessory of claim 5, the substantially cardioid shaped perimeter comprising a cusp positioned between two cardioid lobes.” 301 patent at cls. 5, 6. The twin doctrines of claim differentiation and narrowing dependent claims would imply that a “substantially cardioid shaped perimeter” must be broader than “a cusp positioned between two cardioid lobes.”

This would read out the very feature that makes the perimeter a cardioid, however, and the law disfavors nonsensical results. *AIA Engineering Ltd. v. Magotteaux Intern. S/A*, 657 F.3d 1264, 1276 (Fed. Cir. 2011) (“We strive, where possible, to avoid nonsensical results in construing claim language.”) (citing *Bd. Of Regents of the Univ. of Tex. Sys. V. BENQ Am. Corp.*, 533 F.3d 1362, 1370 (Fed. Cir. 2008)). The law also recognizes that a dependent claim may effectively be of the same scope as its independent claim if the claim construction evidence is compelling:

As this court has frequently stated, the presence of a dependent claim that adds a

particular limitation raises a presumption that the limitation in question is not found in the independent claim. *See Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed.Cir.2001); *Comark*, 156 F.3d at 1187. Although that presumption can be overcome if the circumstances suggest a different explanation, or if the evidence favoring a different claim construction is strong . . .

Liebel-Flarsheim, 358 F.3d at 910; see *Nystrom v. TREX Co.*, 424 F.3d 1136, 1143 (Fed. Cir. 2005) (“Different terms or phrases in separate claims may be construed to cover the same subject matter where the written description and prosecution history indicate that such a reading of the terms or phrases is proper.”). Based on the explicit terms of the specification, and the ordinary geometric meaning of cardioid, equivalent scope between claim 5 and claim 6 must be the case. So the existence of these claims is not a barrier to Staff’s construction.

This leaves the final portion of JBS’s construction concerning the bottom or distal end of the braid and whether it must have a tapered or rounded bottom. This too is present in all 026 patent figures showing the invention and omitted from the figure showing the prior art. 026 patent at Figs. 4, 5, 10. It is also consistent with the passage in the specification reproduced above which describes how a normal cardioid is essentially a circle and a “substantially” cardioid shape is the same but elongated, which is why it “resembles” an inverted teardrop. *Id.* at 5:13-23. In either case, the rounded or tapered end is preserved. Respondents do not dispute the appropriateness of this portion of the construction but argue it is nonetheless indefinite. *See* RRB at 5-6. Staff similarly offers no direct dispute and may actually agree on the need for a rounded bottom. *See* SIB at 42-43 (citing 026 patent at 3:24-32, 5:15-23).

Accordingly, “substantially cardioid shaped perimeter” means “perimeter with a substantially cardioid appearance that includes a cusp and two cardioidal lobes and a distally rounded or tapered bottom.” To the extent “cusp” and “two cardioidal lobes” require construction, they are given the meanings determined in *Braiding Hair*, that is “the point where the curves of

the left and right cardioid lobes meet” and “the curved portions adjacent the cusp of the substantially cardioid shaped perimeter,” respectively. Inv. No. 337-TA-1415, Order No. 27 at 7-8. No party disputes these meanings of “cusp” and “lobe.” *See generally* RIB at 5; SIB at 40-41; CRB at 9-10.

3. “bundle of synthetic hair”

JBS	Respondents	Staff
“a group of synthetic hair strands”	Plain and ordinary meaning	Plain and ordinary meaning, which is “synthetic hair strands grouped together”

CIB at 56; RIB at 13; SIB at 29-30.

“[B]undle of synthetic hair” appears in claim 1 of the 026 patent. 026 patent at cl. 1. As shown in the table above, the parties have presented constructions which differ but only slightly, indicating there is not much of a dispute. JBS’s briefing contains no real argument other than to reject any claim of indefiniteness, and agrees with Staff. *See* CIB at 55-56; CRB at 6-7. Respondents reject the importation of limitations involving manufacturing sequence, timing, or other processes that no party apparently now promotes, and also agree with Staff. *See* RIB at 13; RRB at 6. And Staff explicitly finds its and JBS’s constructions mean the same thing. *See* SIB at 29.

Accordingly, in light of the parties’ effective agreement, “bundle of synthetic hair” means “a group of synthetic hair strands.”

4. “a first bundle” / “a second bundle”

JBS	Respondents	Staff
“a group of synthetic hair strands having a first length”	Plain and ordinary meaning	Plain and ordinary meaning, which is “synthetic hair strands of a first length that are grouped together”
“a group of synthetic hair strands having a second length that is shorter than the first length”		Plain and ordinary meaning, which is “synthetic hair



		strands of a second length that are grouped together, wherein the second length is shorter than the first length”
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CIB at 56; RIB at 13; SIB at 30.

“[A] first bundle” and “a second bundle” appear in claim 1 of the 026 patent as “a first bundle of synthetic hair strands having a first length” and “a second bundle of synthetic hair strands having a second length . . .” 026 patent at cl. 1. The parties’ briefing on these terms largely mirrors that for “bundle of synthetic hair” addressed above. *See* CIB at 55-56; RIB at 13; SIB at 30-34. The Staff posits there may be a dispute over *when* the first and second bundles must exist (*see* SIB at 30-34), but the other parties do not address this question.

Accordingly, there is no substantive dispute over these terms and the plain and ordinary meaning controls.

5. “wherein the bundled synthetic hair is folded about the binder to define a substantially cardioid shaped perimeter”

JBS	Respondents	Staff
N/A	N/A	The claimed perimeter is meant to describe the bundled synthetic braiding hair when it is folded.

SIB at 36; *see generally* CIB; RIB.

“[W]herein the bundled synthetic hair is folded about the binder to define a substantially cardioid shaped perimeter” appears in claim 1 of the 026 patent. 026 patent at cl. 1. As shown in the table above, the Staff argues the claimed “perimeter” refers to a boundary after the overall hair bundle has been folded. SIB at 35 (“once it is folded, including before it is packaged”). On this point, Respondents would seem to agree even though they do not present a discrete claim construction argument. *See* RIB at 5 (“A binder holds the bundles together at the waist. When the bundled hair is folded around the binder the specification describes that it forms a substantially

[REDACTED]

cardioid-shaped perimeter.”), 10 (“The ’026 Patent explains that when bundled synthetic braiding hair is folded about a waist, the resulting folded assembly defines a substantially cardioid shaped perimeter.”). In a discussion of the separate but related 616 patent, with similar claim language to claim 1 of the 026 patent, JBS affirms the same concept. CIB at 36 (“the asserted claims – see, e.g., asserted Claim 11 of the ’616 Patent – require that the bundled strands be arranged and folded about a waist in a manner that yields the claimed narrowing geometry.”); CRB at 7.

Accordingly, there does not appear to be a dispute over *when* the claimed perimeter is to be assessed. It is assessed after the overall bundle of hair is folded about the waist.

D. Infringement

According to JBS’s post-hearing briefing, the use, manufacture, or sale of the Group 1 Accused Products infringes claim 1. CIB at 62. For the reasons discussed below, JBS has shown infringement of this claim by some of these products.

For reference, claim 1 of the 026 patent requires:

1. A hair accessory, comprising:

bundled synthetic braiding hair, comprising:

a first bundle of synthetic hair strands having a first length; and

a second bundle of synthetic hair strands having a second length that is shorter than the first length; and

a binder coupled about a waist of the bundled synthetic braiding hair;

wherein the bundled synthetic braiding hair is folded about the binder to define a substantially cardioid shaped perimeter;

further comprising a backer panel, wherein the binder is coupled to the backer panel, wherein the backer panel is folded, thereby completely spanning a first side of the bundled synthetic braiding hair and partially spanning a second side of the bundled synthetic braiding hair.

026 patent at cl. 1. In support of its theory, JBS generally relies on the testimony of its expert, Ms. Martinez, and her inspection of the physical products, photographs thereof, and certain measurements of strand length performed under her direction. *See generally* CIB at 59. JBS also cites a number of “admissions” in the form of collected deposition transcripts and discovery responses that would seem to cover some but not all Respondents. *See id.* at 59-60 nn. 36-41.⁴

1. General Disputes

Respondents dispute infringement on a number of grounds, both with respect to and apart from the language of claim 1. First, they repeat their position that JBS has failed to show Accused Product representativeness. *See* RIB at 29-32. As determined above, this is persuasive, and only those representative products analyzed and presented by Ms. Martinez at the evidentiary hearing will be considered for infringement.

Next, Respondents argue those Accused Products designated as representative cannot establish infringement because they are possibly not authentic (*i.e.*, knock-offs). *See* RIB at 32; RRB at 20. Respondents raise questions about how they were acquired and who took the photographs relied on by Ms. Martinez and presented at trial:

Many of the “Representative” products, including those Dr. Singh purchased, were purchased over the internet. Ms. Martinez does not know if the purchaser used the same level of diligence that she uses in her business to assure authentic products were obtained. Tr. (Martinez) 470:1-7; RX-4643 (Singh) 53:3-16. Complainant has provided no evidence that such diligence was used or that any of the “Representative” products are authentic.

Ms. Martinez did not dispute that her demonstratives use Dr. Singh’s photos. Ms. Martinez does not know who took the photos or when they were taken. She does not know if the products shown in the photos were fixed or shaped to look a certain

⁴ CDX-102C, cited in the footnotes, is a 44-page aggregate table of evidence citations and argument that functions only as a workaround to the need for live witness testimony established by Ground Rule 10.2 (Order No. 2 at G.R. at 10.2) and post-hearing briefing word count limits set at the conclusion of the hearing (Hr’g Tr. at 1241:19-25). As instructed at the beginning of the evidentiary hearing, demonstratives are not substantive evidence. *Id.* at 10:7-18. For these reasons, CDX-102C is not considered for the purposes of this initial determination.



way. Tr. (Martinez) 470:19-471:22; RX-4643 (Singh) 49:18-50:4. Ms. Martinez demonstrated how products could be “fixed” to change their shape and provide a particular perimeter. Tr. (Martinez) 457:6-25; 458:3-14.

Thus, the photographs and analysis provided by Ms. Martinez cannot establish that Respondents infringed.

RIB at 32; *see* RRB at 20-21 (arguing the receipts are unverified and relate to unverified vendors). Respondents are not persuasive. As noted by Staff, Respondents lodge these complaints but “do not affirmatively state (or provide particularized evidence) that the physical samples are not the products they purport to be.” SIB at 48. This is a critical omission because these are purportedly Respondents’ own products, so if there were features or other aspects that indicate inauthenticity, Respondents are in the best position to identify and explain them. That they do not is indicative of product authenticity.

Moreover, Ground Rule 9.5.6 states “[a]ll documents that appear to be genuine on their face shall be deemed authentic, unless it is shown by particularized evidence that the document is a forgery or is not what it purports to be.” Order No. 2 at G.R. 9.5.6. Setting aside whether this rule has been met, it at least functions to put Respondents on notice that if they attempt to challenge authenticity, blanket assertions are insufficient (similar to JBS’s claims of product representativeness). Finally, there is actual evidence to the contrary in the form of the backer panels and other inserts that bear Respondents’ tradenames and marks (similar to Respondents’ claims of prior art public availability). *See, e.g.*, CDX-0026C.33 (showing images of CPX-0060, CPX-0018, CPX-0025, CPX-0017). So this defense has no merit. In the same discussion, Respondents tangentially raise a concern over Ms. Martinez “fixing” the braids once out of the package “to change their shape and provide a particular perimeter” for photographs. RIB at 32 (citing Hr’g Tr. (Martinez) at 457:6-25, 458:3-14). This is discussed below in connection with the



claim limitation “substantially cardioid shaped perimeter” and, regardless, is a technique used by Respondents in their presentation of prior art as well. *See, e.g.*, CIB at 91 (citing CDX-0318).

In a last general dispute, Respondents challenge the showing of infringement for any representative product other than the Hair Zone 3x X-PRESSSION RUWA (3-pack). RIB at 33; RRB at 21. They explain this was the only product for which Mr. Martinez “presented substantive evidence,” in contrast with demonstrative exhibits referenced in a conclusory manner. RIB at 33 (citing Hr’g Tr. (Martinez) at 369:3-370:19). Respondents affirm the principle that “[d]emonstrative exhibits are not substantive evidence.” *Id.* (citing *Certain Windshield Wiper Devices and Components Thereof*, Inv. No. 337-TA-881, Initial Determination at 27 (May 8, 2014); *Certain Replacement Automotive Lamps*, Inv. No. 337-TA-1291, Initial Determination at 53 n.15 (Jan. 24, 2023)).

Respondents are correct. Ms. Martinez only provided a limitation-by-limitation analysis of the Hair Zone X-PRESSION RUWA product at the evidentiary hearing. *See* Hr’g Tr. (Martinez) at 364:16-371:24; CDX-0026C.11-25; CPX-0016; CPX-0017. For the other Group 1 representative products from Beauty Essence, Midway, and Mayde Beauty, Ms. Martinez attempted to incorporate by reference claim charts she made for each product in demonstrative form. Hr’g Tr. (Martinez) at 369:3-370:2. JBS seems to attempt the same in its initial post-hearing brief, string citing collections of claim charts as demonstrative exhibits. CIB at 58 n.34 (citing, *inter alia*, CDX-0026-CDX-0101). Yet, as Respondents argue, demonstratives cannot wholesale take the place of live testimony, and they cannot take the place of written argument in a post-hearing brief. *See, e.g.*, Order No. 2 at G.R. 10.2 (“All witness testimony shall be made orally.”), 13.1 (“The post-trial brief shall discuss the issues and evidence tried within the framework of the general issues determined by the Commission’s Notice of Investigation and those issues that are

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included in the pre-trial brief and any permitted amendments thereto. All other issues shall be deemed waived.”). So these claim charts are not considered and it is accurate to say Ms. Martinez only explained infringement for one Accused Product.

Nevertheless, the nature of the Asserted Claims and the Accused Products is not technologically complex and, with certain exceptions, can be evaluated with the naked eye. As discussed further below, few limitations are actually in dispute, and those that are can be settled with measurements combined with photographs of the Accused Products and inspection of physical exhibits—all available within the existing evidentiary record, contrary to Respondents’ suggestion. *Compare, e.g.*, RIB at 33 (“Thus, as to al[l] other ‘Representative’ products, Complainant has failed to provide any substantive evidence to establish infringement.”) *with* Hr’g Tr. (Lee) at 187:22-188:19 (conducting strand measurements); CX-0578 (strand measurement results including Beauty Essence); CX-02911 (same); CX-0354 (Beauty Essence photographs); CPX-0018 (Beauty Essence physical product). As noted by Staff, the Federal Circuit has held that in situations such as this, expert testimony is not firmly required. *See* SIB at 2 (citing *Meyer Intellectual Props. Ltd. v. Bodum, Inc.*, 690 F.3d 1354, 1374 (Fed. Cir. 2012) (“It is well established, moreover, that, where the technology involved is easily understandable, expert testimony is not required.”)). So Ms. Martinez’s testimony could be discounted entirely for any number of reasons, and a finding of infringement under claim 1 of the 026 patent would still be possible.

2. Limitation-by-Limitation Analysis

Turning to a limitation-by-limitation analysis of claim 1 of the 026 patent as against the Group 1 Representative Accused Products, JBS’s initial brief provides photographs and testimony from Ms. Martinez to show each is met in the Hair Zone X-PRESSION Ruwa product. *See* CIB at 62-66. JBS makes this showing with the contention that, overall, “all Group 1 Accused Products

[REDACTED]

with backer panel folded have the same structure and meet each and every element of '026 Patent Claim 1.” *Id.* at 62.⁵ As discussed above, only the Group 1 Representative Accused Products will be considered.

Turning to each limitation of claim 1, Staff observes that Respondents only dispute “bundled synthetic hair” under JBS’s construction, “first bundle . . . second bundle . . . having a second length that is shorter than the first length,” and “substantially cardioid shaped perimeter.” SIB at 49. Respondents’ briefing confirms their dispute is limited to these elements, including “bundled synthetic hair” under JBS’s now-rejected construction. *See* RIB at 33-38; RRB at 22-26. Thus, in light of the expert testimony and evidence cited, JBS has shown the non-disputed limitations are present in the Group 1 Representative Accused Products. *See* CIB at 62 (“a hair accessory”), 63 (“bundled synthetic braiding hair”), 64 (“binder coupled about a waist”), 65 (“a backer panel”), 66 (“backer panel is folded”); Hr’g Tr. (Martinez) at 365:4-366:11, 366:21-367:3, 367:21-368:17; *see generally* CPX-0017, CPX-0018, CPX-0023, CPX-0025, CPX-0060.

As for “a first bundle of synthetic hair strands having a first length; and a second bundle of synthetic hair strands having a second length that is shorter than the first length,” the record shows it is met. Ms. Martinez referred to measurements performed by JBS’s director, Mr. Lee, in which he identified the total length of each Group 1 Representative Accused Product and lengths of groups of strands within the total bundle. Hr’g Tr. (Martinez) at 361:2-13; CX-0578. Mr. Lee explained his process and results at the hearing as well. Hr’g Tr. (Lee) at 185:19-188:19; CX-

⁵ Here, again, JBS cites, in a footnote, several demonstrative and exhibit-numbered documents which comprise several hundred pages of claim charts, in an effort to show representativeness and infringement of all Group 1 Accused Products. CIB at 62 n. 44. As noted above, demonstratives are not evidence and not an appropriate substitute for live testimony or briefing argument, and so these charts are not considered.

2911. The chart shows each Group 1 Representative Accused Product has at least two bundles of differing lengths:

No	COMPANY	BRAND / ITEM	Size	Actual Hair Length
2	BEAUTY ESSENCE (SUPREME HAIR)	Super TZ Braid		
		X-Pression	2X 48"	30"/32"/40"/44"
24	Mayde	2X Africana		
		2X Africana Pre-Stretched Braid 24"	2X 24"	30"/42"
26	Midway	Just Braid		
		Just Braid Pre-Feathered 54"	1X 54"	33"/47"
36	Beauty Essence	SUPER X TZ60 Braid		
		3X 60"	3X 60"	43"/54"
37	Hair Zone	RUWA		
		3X RUWA 48"	3X 48"	32"/38"/42"

CX-2911 (excerpted). Neither Respondents in their briefing nor their expert at the hearing, Ms. Laura DuPriest, offered any challenge to these results, as noted by Staff. SIB at 51 (“Respondents do not actually dispute that the accused products include two different lengths of hair”); *see generally* RIB at 13, 35-36; RRB at 14-15, 23-25. Respondents do argue “Ms. Martinez admitted that the lengths of the fibers were never measured,” but the questions and answers in the cited transcript are too incongruous to support actual impeachment. RRB at 25 (citing Hr’g Tr. (Martinez) at 451:1-13); *see* Hr’g Tr. (Martinez) at 450:14-452:7. And Staff fairly reasons “that, because there are two lengths of hair, the accused products must have been made with two bundles of different lengths.” SIB at 50 (citing Hr’g Tr. (Martinez) at 495:8-23). Accordingly, a preponderance of the evidence shows the limitation is met in the Group 1 Representative Accused Products.

Next is “wherein the bundled synthetic braiding hair is folded about the binder to define a substantially cardioid shaped perimeter.” JBS argues the limitation is met in all Group 1 Representative Accused Products based on photographs of the Hair Zone X-PRESSION RUWA 3-pack product (CPX-0017) and Ms. Martinez’s interpretative outline of the perimeter of a single

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braid within the 3-pack. CIB at 64-65 (citing Hr’g Tr. (Martinez) at 367:4-18; CDX-0026.18-19; CX-0014.1). Respondents criticize Ms. Martinez’s outline for not following the actual shape of the product while in the package. RIB at 36. And, when viewed in the package, they state “[t]he perimeter shapes of the ‘Representative’ products in their package are nothing like the claimed cardioid shape.” *Id.* Respondents draw particular attention to the change in perimeters caused by additional binders located distally from the original “waist.” *See id.* at 38.

Staff sides with JBS, apparently crediting the testimony and annotations of Ms. Martinez (*see* SIB at 51) while also arguing the determination of shape can be assessed after the plastic wrap packaging is removed and/or before any additional binders are added (*see id.* at 52). On this latter point, Staff cites Ms. DuPriest to argue “that without the additional binder, these products would have a more substantially cardioid shaped perimeter.” *Id.*; *see id.* (“Before the hair is braided and the binders are added, the Beauty Essence TZ60 Braid would have a substantially cardioid shaped perimeter.”).

JBS and Staff are sufficiently persuasive. As determined above, “substantially cardioid shaped perimeter” means “perimeter with a substantially cardioid appearance that includes a cusp and two cardioidal lobes and a distally rounded or tapered bottom.” The record shows that the Group 1 Representative Accused Products include a binder at the top of the braid which creates the required cusp and lobes:



CX-0017.7 (Beauty Essence, SuperTZBraid);



CX-0032.5 (Midway, Just Braid);



CX-0035.6 (Mayde Beauty, Africana);



CX-0014.1 (Hair Zone, RUWA). The record also shows the Group 1 Representative Accused Products have a distally rounded or tapered bottom as opposed to a blunt flat bottom:



CX-0017.1 (Beauty Essence, SuperTZBraid); CX-0032.1 (Midway, Just Braid); CX-0035.2 (Mayde Beauty, Africana); CX-0014.1 (Hair Zone, X-Pression Ruwa). With respect to the intricacies of the products' perimeters created by additional bindings or internal braiding, the overall shape of the product falls within the scope provided by “*substantially* cardioid shaped,” as exemplified by the exaggeration and simplification of perimeter line 402 in the patent’s Figure to demonstrate a cusp between two lobes and smooth outer contour—not unlike Ms. Martinez’s perimeter line:

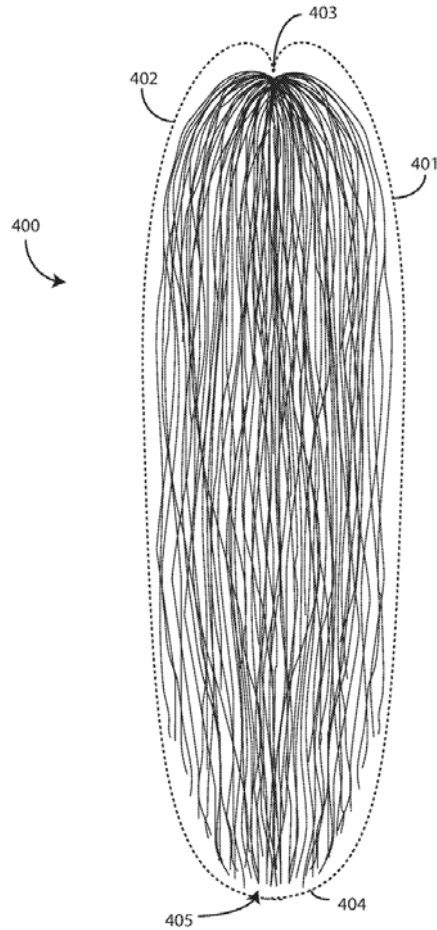


FIG. 4



026 patent at Fig. 4; CDX-0026.18; *see* CX-0014.1. And although not explicitly demonstrated by Ms. Martinez at the hearing, a similar line is apparent for the remaining Group 1 Representative Accused Products from Beauty Essence, Midway, and Mayde Beauty. This is shown based on photographs presented above, and those where the product remains within the plastic wrap. *See* CX-0017.3 (Beauty Essence, SuperTZBraid); CX-0032.2 (Midway, Just Braid); CX-0035.2 (Mayde Beauty, Africana). Moreover, removing the braid from the plastic wrap to evaluate a perimeter, and even brushing it down the length with one's hand, are necessary and ordinary uses of the product, and this line of inquiry would seem to be foreclosed via stipulation anyway. *See* RIB at 105 (citing Hr'g Tr. 1145:20-1147:5) ("Complainant's counsel stipulated on the record that

[REDACTED]

no attorneys or staff for either party in the 1415 or 1457 investigations had manipulated any accused or prior art products, and the ALJ accepted the stipulation.”).

The one exception to the available evidence on Group 1 Representative Products is theBeauty Essence TZ60. JBS’s Group 1 table identifies physical exhibit CPX-0060 as the representative product. CIB at 40. CPX-0060 is a three-pack of TZ60 braids, which matches the product listed in Mr. Lee’s length chart. CX-2911 (row 36). Yet there does not appear to be a photograph of CPX-0060 suitable to show the cusp and lobes, or approximate perimeter, to evaluate this claim element. *See, e.g.*, CX-0354.1 (product half off-screen); CX-0355.1 (same). Nevertheless, a cursory observation of the physical exhibit itself, held up vertically as it would be on a display wall shows a perimeter outline similar to the SuperTZBraid. CPX-0060. And underneath the folded backer panel is a cusp with two lobes, on each braid. *Id.* For this limited purpose, the physical evidence speaks for itself notwithstanding Respondents’ complaints of inadequate expert testimony.

In sum, the intrinsic evidence supports a flexible test for “substantially cardioid shaped perimeter” and a preponderance of the evidence supports finding it is present in each of the Group 1 Representative Accused Products. Accordingly, the Group 1 Representative Accused Products infringe claim 1 of the 026 patent.

E. Domestic Industry – Technical Prong

According to JBS’s post-hearing briefing, the Group 1 DI Products practice claim 1 of the 026 patent. CIB at 66. As with infringement, JBS presents its theory via the Group 1

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Representative DI Product (QB Single 50) supported by photographs and testimony from Ms. Martinez. *See* CIB at 66-70.⁶ Staff agrees claim 1 is practiced. SIB at 53.

Respondents raise two limited points in opposition to JBS's claims of technical prong domestic industry by the Group 1 DI Products. First, they argue JBS has failed to show the products are "braiding hair" under JBS's multi-factor construction. RIB at 38-44. That construction is not accepted, however, as explained above. Second, Respondents argue JBS failed to show that the Group 1 Representative DI Product, the QB Single 50, is truly representative of the other Group 1 DI Products. *Id.* at 44-46. Respondents are correct. As determined above, JBS has not sufficiently established representativeness by the QB Single 50.

Accordingly, there is no dispute that the QB Single 50 practices claim 1 of the 026 patent. In light of the expert testimony and evidence cited, JBS has shown all limitations are present in the Group 1 Representative DI Product. *See* CIB at 67 ("a hair accessory," "bundled synthetic braiding hair," "first bundle"), 68 ("second bundle," "binder coupled about a waist"), 69 ("braiding hair is folded about the binder"), 70 ("backer panel," "backer panel is folded"); Hr'g Tr. (Martinez) at 412:22-419:20.

This leaves the remaining Group 1 DI Products—the QB Single 30, QB Single 40, QB Single 60, and QB Single 86. Ms. Martinez did not provide a limitation-by-limitation analysis for these products in the same way as the QB Single 50, yet expert testimony is not always necessary (*Bodum*, 690 F.3d at 1374) and the record evidence speaks for itself. All of the products are

⁶ Here, again, JBS cites, in a footnote, an exhibit-number document comprising several claim charts in an effort to show representativeness amongst Group 1 Accused Products. CIB at 66 n. 46. As noted above, demonstratives are not evidence and not an appropriate substitute for live testimony or briefing argument, and so these charts are not considered. Similarly, expert reports, attachments thereto, and expert deposition transcripts have not been admitted as substantive evidence and are not considered for JBS's intended purpose, either. *See* Hr'g Tr. at 523:6-527:11.

[REDACTED]

bundled synthetic hair braids. For first and second bundles of different lengths, JBS's witness, Mr. Lee, measured strand lengths just as in the Accused Products and found disparate bundles for all but the QB Single 86, for which there are no measurement results whatsoever. Hr'g Tr. (Lee) at 185:19-187:21; *see* CDX-0107. Nevertheless, based on a cursory inspection, the QB Single 86 physical exhibit includes a tapered distal end once the product is completely unfolded out of its packaging. *See* CPX-0008; CDX-0026.85. The ends of the strands within the tapered portion terminate at different points which, while not necessarily dispositive, is indicative of different overall strand lengths within the bundle. Combined with Ms. Martinez's generalized testimony (Hr'g Tr. (Martinez) at 423:8-12), and Respondents and Staff's non-opposition, the limitation is fairly met in this product.

The physical samples of the QB Single 30, QB Single 40, QB Single 60, and QB Single 86 also reveal a binder coupled about a waist once the braid is removed from the plastic wrap and the backer panel lifted; and each braid is folded about the binder to create a substantially cardioid perimeter. *See* CPX-0001; CPX-0002; CPX-0004; CPX-0005. This evidence, combined with Ms. Martinez's generalized testimony (Hr'g Tr. (Martinez) at 423:13-424:18) and Respondents and Staff's non-opposition, shows the limitations are fairly met in each product.

Accordingly, the record shows all Group 1 DI Products practice claim 1 of the 026 patent.

F. Validity

Respondents identify the following invalidity theories for the 026 patent:

Claims	Theory
1	Anticipated under 35 U.S.C. § 102 by New York Short Braid
1	Anticipated under 35 U.S.C. § 102 by Mini Braid

1	Anticipated under 35 U.S.C. § 102 by Sunny Braid
1	Anticipated under 35 U.S.C. § 102 by Asante Braid
1	Anticipated under 35 U.S.C. § 102 by Sana Abuja Short and Long Braids
1	Anticipated under 35 U.S.C. § 102 by Sana Hi-Yaki Braid
1	Anticipated under 35 U.S.C. § 102 by Ganda Short Braid
1	Anticipated under 35 U.S.C. § 102 by GSI RastAfri Feed'm Silky Braid
1	Anticipated under 35 U.S.C. § 102 by GSI RastAfri Original Classic Jumbo
1	Rendered obvious under 35 U.S.C. § 103 by Sana Abuja Short and Long Braids in view of Sugai (RX-1679), Hayakawa (RX-1670), and Sasayama (RX-1680)
1	Rendered obvious under 35 U.S.C. § 103 by Sana Hi-Yaki Braid in view of Sugai (RX-1679), Hayakawa (RX-1670), and Sasayama (RX-1680)
1	Invalid under 35 U.S.C. § 112 for lack of written description
1	Invalid under 35 U.S.C. § 112 for lack of enablement
1	Invalid under 35 U.S.C. § 112 for indefiniteness

See generally RIB at 46-121. For all of the commercial products which are alleged to anticipate claim 1 of the 026 patent, the parties vigorously dispute the prior art status of each and, assuming that status, whether all limitations are met. These issues are addressed for each product, below. It is important to clarify that Respondents' anticipation theories (for all Asserted Patents) are not based on individual exhibits but a totality of the record concerning the listed product:

[REDACTED]

Respondents assert invalidity based on prior art products that were on sale and publicly available before the priority date. When the prior art is a physical product, the existence and features of that single product may be established through any relevant evidence. *See RCA Corp. v. Data Gen. Corp.*, 887 F.2d 1056, 1060 (Fed. Cir. 1989) (“That the offered product is in fact the claimed invention may be established by any relevant evidence, such as memoranda, drawings, correspondence, and testimony of witnesses.”); *Sonoscan, Inc. v. Sonoter, Inc.*, 936 F.2d 1261 (Fed. Cir. 1991). Complainant’s repeated insistence that the YouTube videos, specification sheets, and promotional materials must each independently disclose every claim element (CIB, 81–83, 87–89, 93) fundamentally misstates the law. These are not separate prior art “references” whose “teachings” are being improperly “combined.” They are evidence of what a single product looked like and when it was sold.

RRB at 36. Respondents correctly state the law, so JBS’s arguments about individual exhibits disclosing less-than-all features or lacking enabling detail are mostly beside the point. *See, e.g.*, CIB at 75 (discussing “four corners of a single, prior art document” legal principle), 79 (“Respondents contend that each of these hair samples anticipate the asserted claims of the Asserted patents”), 87 (“Nor does the YouTube video show the first and second lengths of hair limitation. The YouTube video cannot anticipate the asserted claims for at least those reasons.”), 93 (“The Specifications for the Mini Braid (RX-0242C) Do Not Enable the Production of the Product of the Asserted Claims”).

As determined below, Respondents have shown the invalidity of claim 1.

1. New York Short Braid

[REDACTED] contend a product called the New York Short Braid (“NYSB”) anticipates claim 1. RIB at 48. Respondents allege that respondent Beauty Essence “conceived of the NYSB around 2012-2013” and sent instructions to its manufacturer to produce a two-tone two-fiber braid in October 2013, with Toyokalon fibers “made longer so the tips would not burn during sealing,” as explained by Beauty Essence’s corporate witness, Ms. Julie Yeo. *Id.* (citing RX-0900; Hr’g Tr. (Yeo) at 748:12-749:8); *see id.* at 51 (citing RX-0023C). According to Respondents, Beauty Essence began selling the product in 2014, initially calling it the New York Braid before switching

[REDACTED]

to NYSB. RIB at 48(citing Hr’g Tr. (Yeo) at 743:10-744:3). Respondents contend, through the testimony of Ms. Yeo, “that the NYSB has not changed since it was first produced in 2014.” *Id.* at 50 (citing Hr’g Tr. (Yeo) at 743:10-744:3).

Respondents offer additional “corroborating” evidence of public use and sale of the NYSB before the priority date of the 026 patent, December 15, 2016,⁷ including YouTube videos from two different creators showing the product in its packaging and as installed in hair. RIB at 56 (citing RX-0686), 57 (citing RX-4430; RX-4464; RX-4433). To demonstrate that each limitation is met by the NYSB, Ms. DuPriest examined physical samples of the NYSB (RPX-0087) and original New York Braid (RPX-0086).

The record presents a clear and convincing case of anticipating prior use and sale of claim 1 by the NYSB. There is no dispute that there was a product bearing the name NYSB which had been sent in an arms-length commercial arrangement to at least two YouTube creators, who published videos on the YouTube platform prior to the 026 patent priority date that show these products with backer panels attached. *See* RIB at 56-57 (citing, *inter alia*, RX-0686; RX-4433⁸; RX-4430; RX-4464; Hr’g Tr. (Crawley) at 7057:16-1059:16, 1065:21-1066:11); *see* CIB at 78 (discussing March 20, 2015 video RX-0506). JBS itself acknowledges and relies on a social media post from February 4, 2016, with promotional photographs of the NYSB in various colors, to argue related points. CIB at 81 (citing CX-0644). Notably, the backer panel artwork matches as between these videos and advertisements. *See* RX-0686 at 2:06; RX-4433 at 0:37; RX-4430 at 1:02; CX-

⁷ This is the filing date of the patent. *See* 026 patent at cover. No party argues the 026 patent is entitled to any different priority date.

⁸ RX-4433 appears to be the same video as RX-0505. The same is true for RX-4464 and RX-0508, RX-0686 and RX-4455, and maybe others as well. Confusingly, the parties refer to one number or the other at varying times. CIB at 81 (citing RX-0505-0508); CRB at 56 (citing RX-4455); RIB at 56 (citing RX-0686), 57 (citing RX-4430; RX-4464; RX-4433).

[REDACTED]

0644. Thus, the record shows the NYSB is prior art under 35 U.S.C. § 102. Staff agrees. SIB at 64.

JBS's opposition on this status is not persuasive and also not particularly relevant. Much of its briefing challenges whether the NYSB physical exhibit submitted in connection with this investigation, RPX-0087, is itself prior art, with JBS pointing to a 2017 copyright on an informational tag to indicate it is not. *See* CIB at 76 (“NY Short Braid (RPX-0087) Is Not Prior Art”), 77 (“The NY Short Braid Charted By Ms. DuPriest Was Made in 2017 or Later”); CRB at 50 (“Respondent BE’s ©2017 NY Short Braid Sample (RPX-0087) Is Not Prior Art And Does Not Anticipate The Asserted Claims”), 52 (“Because the ©2017 NY Short Braid sample (RPX-0087) is not prior art . . .”), 53 (same), 55-56 (same). Whether or not RPX-0087 was made and/or sold before the priority date is not relevant to the evidence discussed above which proves clearly and convincingly that a product bearing the NYSB name was in the public’s hands prior to December 15, 2016. As Respondents, Staff, and previous orders have explained, RPX-0087 is just one piece of corroborating evidence, and not by itself the actual invalidating article. *See generally* RRB at 41; SIB at 61-64; SRB at 9-10; Order No. 21 at 3-5, 9; Order No. 24 at 1-2; Order No. 26 at 2-3.

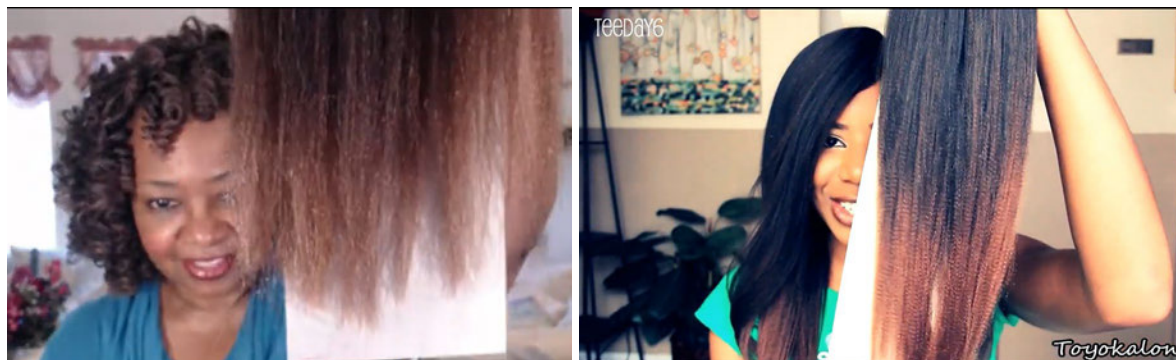
Additionally, JBS argues: the fibers in NYSB are not suitable for braiding and are thus not “braiding hair” (CIB at 80, 81-82; CRB at 51-52); there is no evidence of sales of the NYSB prior to 2019 (CIB at 80-81; CRB at 51); witness testimony on the development of the NYSB is unreliable (CIB at 76-79; CRB at 35, 52-66); manufacturing documents produced do not apply to the NYSB (CIB at 87-88; CRB at 51); and the NYSB has not been shown to be materially the same as the admitted prior art New York Braid (RPX-0086) (CIB at 83-89; CRB at 52-54). These

[REDACTED]

positions are either relevant only to a rejected claim construction or easily refuted by the video and social media evidence, which is discussed below.

The video and social media evidence, and the record as a whole, show that the prior art NYSB included all limitations of claim 1. The NYSB is a “hair accessory” comprising “synthetic braiding hair” as supported by the testimony of Ms. DuPriest, product packaging, and description and use in the relevant videos. RIB at 50 (citing Hr’g Tr. (DuPriest) at 853:6-24); CX-0644; RX-0686; RX-4433. JBS’s dispute here is dependent on adoption of its claim construction for “braiding hair,” rejected above. *See* CIB at 80-83; *see generally* CRB at 50-52.

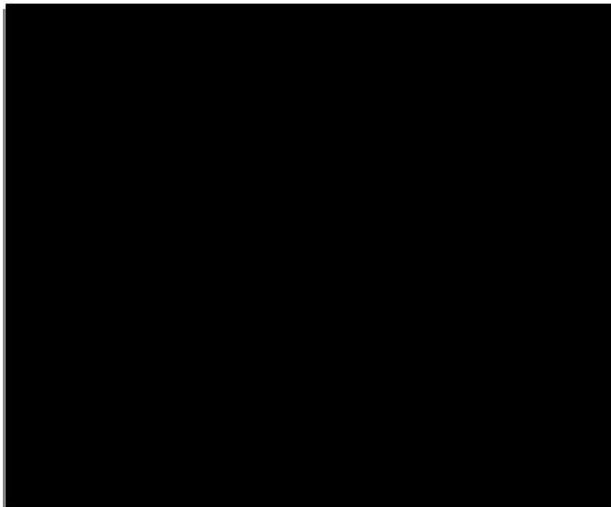
The NYSB contains two bundles of hair having a first length and a second length. This is directly shown in the videos where the presenters raise the hair to reveal two different colors called an “ombre”:



RX-0686 at 2:32; RX-4433 at 0:35; Hr’g Tr. (Crawley) at 1069:8-12. It is also shown in the social media promotion of February 2016:

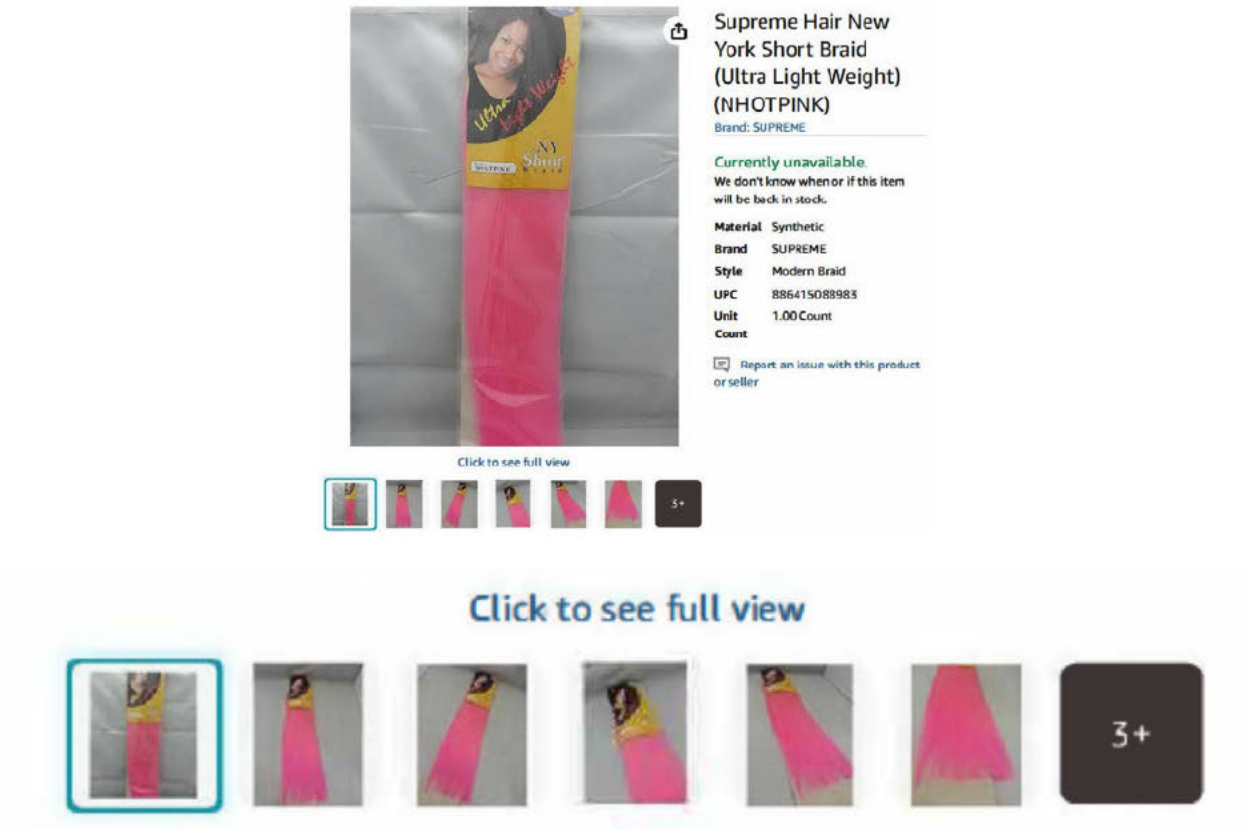


CX-0644. As Ms. DuPriest credibly testified, the two colors with one ending before the end of the braid must mean there are two strand lengths. Hr'g Tr. (DuPriest) at 857:9-21. This is clear and convincing, if not utterly dispositive, evidence in support of the limitation. That there are two different strand lengths is indirectly corroborated by email correspondence in the 2013-2014 timeframe between Beauty Essence and its manufacturer, Evergreen, where it was agreed to produce a braid with short polypropylene fibers and longer Toyokalon fibers:



RIB at 50-51 (citing, *inter alia*, RX-0873C; RX-0023C).

JBS disputes the limitation is met. CIB at 82-83 at Table (limitation marked with “X”). It argues the NYSB has “always” been a perfectly flat, blunt bottom end braid as shown in an Amazon store page implying it must have strands of only one length:



[REDACTED]

CIB at 76 (citing CX-0642), 82 (same); *see id.* at 88.

To the extent this is meant to cast doubt on strands of varying lengths, it is ineffective. The images of that store page are of unknown origin, screen captured well after the critical time period (November 2025), and altogether stand in direct conflict with the video evidence and promotional photographs reproduced above, which show a more randomized, tapered bottom and comfortably precede the 2016 priority date. RX-0686 at 2:32; CX-0644. The flat bottom product is also in conflict with the physical exhibit, RPX-0087, whose bottom (as provided to OALJ following the evidentiary hearing) is quite uneven and not as blunt.

JBS next argues, or at least implies, that the Evergreen-Beauty Essence correspondence actually relates to the New York Braid product, not the NYSB, and the two are not interchangeable. *See generally* CIB at 83-86. This is not a meritless position given the inconsistencies pointed out in the translation of Evergreen's specification sheet. *See id.* at 87-88 (discussing RX-0313C; JX-0038C (Jia) at 131:17-132:6; JX-0023C (Chan) at 176:19-177:19). But the appropriate result is to assign the records less weight, not outright dismissal. *See Medichem, SA v. Roblado, SL*, 437 F.3d 1157, 1170, 1172-3 (Fed. Cir. 2006) (holding the corroborative value of an inventor's notebook may vary, stating "a notebook, unlike the oral testimony of an inventor, may be weighed, for whatever it is worth, in the final determination of a reduction to practice," and assigning varied weight to NMR evidence). On balance, the limitation is met.

The record also shows the NYSB comprises "a binder coupled about a waist of the bundled synthetic braiding hair" and with the hair "folded about the binder to define a substantially cardioid shaped perimeter." The cusp and lobes are shown in the YouTube videos when the folded backer panel is lifted up:



RX-0686 at 3:17; RX-4433 at 1:01. And a rounded or tapered bottom is shown when the products are lifted for the camera, in addition to the promotional images above. RX-0686 at 2:32; RX-4433 at 1:04; CX-0644. Ms. DuPriest credibly testified this perimeter is equivalent to those in the Accused Products and DI Products, which JBS's expert, Ms. Martinez, alleged (correctly) were cardioid-shaped. RIB at 52 (citing Hr'g Tr. (DuPriest) at 862:1-863:10). JBS marks the limitation as in dispute with an "X" (CIB at 82-83 at Table) but offers no substantive explanation (*see generally id.* at 76-90; CRB at 50-57).

Finally, the NYSB includes a backer panel, coupled to the binder, partially folded over the bundled braiding hair on the front and running down the back. This is shown in the video stills and promotional images reproduced above, testified to by Ms. DuPriest (Hr'g Tr. (DuPriest) at 864:2-14, 834:24-835:1), and not disputed by JBS (*see, e.g.*, CIB at 82-83, Table).

Accordingly, clear and convincing evidence shows claim 1 is anticipated by the NYSB.

2. Mini Braid

Respondents contend a product called the Solpia Mini Braid ("Mini Braid") anticipates claim 1. RIB at 59. Respondents proffer that non-party Solpia Nigeria, Ltd. ("Solia Nigeria") produced the Mini Braid in Nigeria in the 2011 timeframe and *inter alia* advertised it in a May/June 2011 issue of African Hair and Beauty Magazine, Vol. 11, No. 48 ("AHB Magazine"). *Id.* at 58 (citing RX-0416). Respondents look to testimony from a Solpia Nigeria corporate witness and



allegedly original manufacturing specification, also from 2011, to confirm the product was available and comprised bundles of hair of at least two lengths. *Id.* (citing JX-0040C (Shin); JX-0032C (Shin); RX-0242C. Respondents also provide a Mini Braid physical sample bearing a label with a manufacturing date of February 2011. RPX-0092.

Respondents have made a clear and convincing case that the Mini Braid is prior art to the 026 patent, and, more specifically, the physical sample RPX-0092 is prior art under the on sale bar of 35 U.S.C. § 102. The backer panel of RPX-0092 bears a manufacturing date of “SP/11/02/01” which is well prior to December 15, 2016. The 2011 AHB Magazine article corroborates this date, as do two advertisements in other 2011-2012 magazines. RX-0253.10 (“Black Beauty Magazine”); RX-0254.8.

JBS’s central argument is a supposition that the real braid from 2011 has been switched out for some other that better meets the claim limitations. *See* CIB at 90 (“The Mini Braid sample was produced in an open bag after having been stored in a private internal sample room of Solpia Nigeria. Solpia Nigeria’s witness Shin agreed it would be a simple matter to slip any type of braiding hair into an open bag”), 94 (“the evidence shows that [the true Mini Braid] was a blunt bottom braid, consistent with the photos and instructions set forth in the manufacturing specifications . . .”). JBS argues this because of a photograph included within the manufacturing specifications which show a more flat, blunt bottom:



RX-0242C.1; CIB at 90 (“The photo of the Mini Braid in the manufacturing specifications shows that it was a flat-bottom braid.”); CRB at 66.

There are two problems here. First, the bottom of the photographed product is admittedly more blunt than the figures of the 026 patent showing the invention, but not as blunt as, for example, the figure showing the prior art (026 patent at Fig. 10) or the pink NYSB sample JBS discovered (CX-0642). The shape depicted is actually quite close to the shape of RPX-0092, backer panel artwork between the two appears to be the same, and both products match the model photograph found in the 2011 AHB Magazine:



RX-0242C.1; RX-2782; RX-00416.8;⁹ see RPX-0092. Further, the Black Beauty Magazine advertisement specifically discusses how the Mini Braid is intended to save time by having an “already stretched nature” indicative (although not dispositive) of a non-flat bottom:

BB HOT:

SUNNY BRAID & MINI BRAID

Offer More Benefits

- Already stretched attachment
- Cost effective
- Time saving and durable

The downside of braiding is on the time spent making the hair. While an average weavon fixing would take only one hour, average braiding of hair takes as much as three hours. Most of this time is spent waiting for the stylist to cut, stretch and brush the attachment properly to ensure smooth finishing of the braids. This need not be so if we take advantage of the technological advancement that makers of the X-Pression brand has put into the development of the New X-Pression Sunny Braid and Mini Braid.

Indeed, these two new braid products are the solution to all our braiding problems. Due to their already stretched nature, the use of these braids cut down to half the average time spent for braided hairstyle. This is perhaps the major strong point of these products. Also, because these products are mechanically stretched, the X-Pression Sunny Braid and Mini Braid produces far better finishing than the manually stretched braids because with these products, incidents of overstretching of the braids are reduced to the barest minimum. This guarantees a smoother and long lasting finishing than that of the regular braids which produces early “fly –aways”(as a result of overstretching) that makes the hair look really rough too early.

RX-0253.10; see RX-0416.8. This description matches the appearance of RPX-0092 and contradicts the idea that the Mini Braid was intended to have and only could have had a flat blunt bottom. Altogether, the record presents a clear and convincing evidence that the braids contained

⁹ JBS also argues that the backer panel artwork of RPX-0092 conflicts with the artwork shown in a Wayback Machine Internet Archive website record. CIB at 90 (citing CDX-0320 (citing CX-03381.2530)). But the differences are minimal, and even then, unless the backer panel of RPX-0092 is alleged to be a forgery, there is little significance to Solpia changing its artwork at times before the 026 patent priority date.

[REDACTED]

within RPX-0092 (2-pack) are authentic to that packaging, and thus prior art to the 026 patent. Staff agrees. SIB at 67.

The evidence supporting this finding is strong enough that it fatally undermines JBS's allegation that Solpia Nigeria is an interested third party who provided biased testimony and manipulated manufacturing records. CIB at 90 ("The HZ Respondents are customers of Solpia Nigeria and Solpia Nigeria will lose money if Respondents are enjoined"), 91 ("The Excel files of these specifications provided by Solpia Nigeria through Respondent HZ are obviously compromised"); CRB at 69 ("Solia Nigeria and Mr. [Jung Wook] Shin were previously discovered to have produced illegitimate evidence in the DNJ case and the 1415 Investigation."); *see id.* at 26 (listing close litigation coordination between Solpia and Respondents leading up to the evidentiary hearing). The determination also stands independent of any finding on Mr. Jongho Hwang's credibility as a validity expert for JBS in this investigation. *See* SIB at 59 ("Mr. Hwang has been a paid consultant for Complainant since 2016").

The record further supports that the Mini Braid included all limitations of claim 1. The Mini Braid is a "hair accessory" comprising "synthetic braiding hair" as supported by the testimony of Ms. DuPriest and product packaging. RIB at 59 (citing Hr'g Tr. (DuPriest) at 887:24-888:2). Ms. DuPriest also confirmed the existence of two different lengths of hair by physical examination. *Id.* (citing Hr'g Tr. (DuPriest) at 888:11-19); RX-2800. JBS identifies this limitation as in dispute (CIB at 94 (Table)) but argues only that RPX-0092 is not a real Mini Braid (*see generally id.* at 94; CRB at 66-70). On balance, the limitation is met.

The Mini Braid also includes a binder coupled about a waist. RIB at 59-60 (citing Hr'g Tr. (DuPriest) at 890:8-17). And the product is folded about that binder creating a substantially

cardioid shape similar to the figures of the 026 patent and nearly identical to Accused Products with a narrowing cinch at the top:



RX-2800; *see* RIB at 60; Hr’g Tr. (DuPriest) at 890:8-891:14; *Upsher-Smith Labs.*, 412 F.3d at 1322. Again, JBS marks this limitation as in dispute (CIB at 94 (Table)) but offers no particular argument other than to allege RPX-0092 is not a real Mini Braid (*see generally id.* at 94; CRB at 66-70). So this limitation is also met.

Lastly, the record shows the Mini Braid comprises a backer panel, where the binder is coupled to the backer panel, and the backer panel is folded to partially cover the front of the braid and completely cover the back. RIB at 60 (citing Hr’g Tr. (DuPriest) at 891:15-22). This is not disputed by JBS.

Accordingly, clear and convincing evidence shows claim 1 is anticipated by the Mini Braid.

3. Sunny Braid

Respondents contend a product called the Solpia Sunny Braid (“Sunny Braid”) anticipates claim 1. RIB at 59. They argue this product was produced and sold by Solpia Nigeria around the same time as the Mini Braid and also find it in the May/June 2011 issue of AHB Magazine. *Id.* at

[REDACTED]

63 (citing RX-0416); CIB at 98 n.56 (alleging 2010 debut). Respondents look to testimony from the same Solpia Nigeria corporate witness and a corresponding manufacturing specification to confirm the product was so available and further comprised bundles of hair of at least two lengths. *See* RIB at 63-64 (citing JX-0040C (Shin); JX-0032C (Shin); JX-0033C (Shin)). Respondents provide a Sunny Braid physical sample bearing a manufacturing date label of January 2014. RPX-0095.

Respondents have made a clear and convincing case that the Sunny Braid is prior art to the 026 patent, and, more specifically, the physical sample RPX-0095 is prior art under the on sale bar of 35 U.S.C. § 102. The backer panel of RPX-0095 bears a manufacturing date of “SP/01/2014” which is well prior to December 15, 2016. The 2011 AHB magazine article corroborates the early availability of this product, as do two advertisements in the other 2011-2012 magazines. RX-0253.10; RX-0254.8. The Black Beauty Magazine in particular shows the exact same backer panel artwork as RPX-0095. *Compare* RX-0253.10 *with* RX-2826; *see* RPX-0095. JBS again argues that the backer panel artwork of RPX-0095 conflicts with the artwork shown in a Wayback Machine Internet Archive website record. CIB at 95 (citing CDX-0321 (citing unadmitted exhibit RX-1295C.374)). But the Black Beauty Magazine is strong evidence that the RPX-0095 backer panel is authentic.

This leaves JBS’s central argument that the real Sunny Braid has been switched out for some other that better meets the claim limitations. *See* CIB at 95 (“the Sunny Braid sample was produced in an open package It would be a simple matter to slip any braiding product into that recreated packaging as even Mr. Shin admitted.”),¹⁰ 99 (“the evidence shows that [the true

¹⁰ It is unclear if JBS’s reference to “recreated” packaging means the backer panel is also a forgery. Regardless, as explained, the evidence shows it is authentic.

[REDACTED]

Sunny Braid] was a blunt bottom braid, consistent with the photos and instructions set forth in the manufacturing specifications . . .”). As with the Mini Braid, JBS argues this because of a photograph included within the manufacturing specifications which shows a more flat, blunt bottom:



RX-0240C.2; CIB at 95 (“The photo of the Sunny Braid in the manufacturing specifications show[s] that it was a flat-bottom braid.”); CRB at 70-71.

This argument suffers from the same problems as those concerning the Mini Braid. The physical sample RPX-0095 is not all that different than the photo taken from the manufacturing specification. Both have binders located near the distal end and the backer panel artwork matches:



[REDACTED]

RX-0240C; RX-2826; *see* RPX-0095. Further, the Black Beauty Magazine advertisement specifically discusses how the Sunny Braid is intended to save time by having an already stretched appearance; *i.e.*, a non-flat bottom. RX-0253.10. This description matches the appearance of RPX-0095 and contradicts the idea that the Sunny Braid was intended to have and only could have had a flat, blunt bottom. Altogether, the record presents clear and convincing evidence that the braids contained within RPX-0095 (2-pack) are authentic to that packaging, and thus prior art to the 026 patent. Staff agrees. SIB at 67.

The record does not support that the Sunny Braid meets “substantially cardioid shaped perimeter,” however. The Sunny Braid, apart from most other products in the investigation, is bound by three bands: at the waist, near the waist, and towards the distal end. It is also tightly braided within itself. Taken together, these features create distinct lumps that significantly detract from the roundness that a substantially cardioid shaped perimeter should have, as shown in the annotated photo relied on by Ms. DuPriest:



RDX-0001.79 (citing RX-2831); *see* 026 patent at 5:15-23. Respondents offer no explanation for this unique quality, and overall provide an extremely abbreviated discussion of this complicated set of facts. *See* RIB at 64 (three sentences); RRB at 49-50 (same). And in Ms. DuPriest's testimony, she appears to bypass these details and rest on a comparison to the accused SuperTZBraid from Hair Zone (Group 1 Representative Accused Product), in that if the SuperTZBraid infringes, so too must the Sunny Braid. Hr'g Tr. (DuPriest) at 890:19-891:7 ("I took her application of the perimeter and applied it to the Sunny Braid"). But as shown in her demonstrative, the Sunny Braid has a very different shape from the SuperTZBraid because of the tightness of its internal braids and extra binder near the waist:

SB: '026 Patent – additional claim elements

- a binder coupled about a waist of the bundled synthetic braiding hair;
- wherein the bundled synthetic braiding hair **is folded** about the binder to **define a substantially cardioid shaped perimeter**;



RX-2831 (RPX-0095) (RPX-0073)

RX-0612C.0009 (Martinez Report, Appendix A)

RDX0001-79

RDX-0001.79. The equivalence has not been shown and the limitation is not met.

Accordingly, the Sunny Braid does not anticipate claim 1 of the 026 patent.

4. Asante Short Braid

Respondents contend a product they call the “Asante Braid” from a related Solpia entity, Solpia Kenya Ltd. (“Solia Kenya”), anticipates claim 1. RIB at 68.¹¹ Respondents proffer that the Asante Short was developed in the 2011-2012 timeframe after employees of Solpia Nigeria visited the Kenya market, started Solpia Kenya, and observed popular competing products that “included two different lengths of fibers and used the same type of material fibers that Solpia was using from Japan.” *Id.* at 68-69 (citing JX-0041C (Jeong) at 17:23-22:24). Respondents provide one physical sample of each product produced by Solpia Kenya as part of this investigation (RPX-0088; RPX-0089) and a second Asante Short produced by non-party [REDACTED] (RPX-0090) (*see* RIB at 71). To establish the product as prior art, Respondents look to testimony from a Solpia Kenya corporate witness, a Solpia Kenya manufacturing specification, testimony from a [REDACTED] corporate witness, and various [REDACTED] market research reports. *Id.* at 68-72 (citing JX-0041C (Jeong); JX-0042C (Jeong); JX-0043 [REDACTED]; RX-0228C; RX-0230C; RX-0231C; RX-0136C; RX-0137C).

Respondents have made a clear and convincing case that the Asante Short is prior art to the 026 patent under the on sale bar of 35 U.S.C. § 102 by way of the [REDACTED] evidence. The relevant [REDACTED] market research report is dated 2013 and JBS offers no evidence to contradict the testimony of Mr. [REDACTED] that the record was contemporaneously created with a visit to Kenya and pulled as ordinary business records from [REDACTED] database. JX-0043C [REDACTED] at 34:15-35:10, 58:17-59:8, 62:8-64:6. Rather, JBS argues [REDACTED] testimony is biased because of the business done between [REDACTED] and Respondents. CIB at 109; CRB at 33, 73-75. But

¹¹ Respondents divide the Asante Braid into an Asante Braid (Short) and Asante Braid (Long), but the limitation-by-limitation discussions focus on the Asante Braid (Short). Thus, only the Asante Braid (Short) (“Asante Short”) is considered here.

[REDACTED]

Respondents effectively counter that [REDACTED] also does business with JBS. RRB at 60 (citing Hr’g Tr. (Lee) at 209:21-210:8); *see* Hr’g Tr. (Lee) at 183:16-185:18. So on balance the record shows clearly and convincingly that an Asante Short was available in the marketplace by at least 2013.

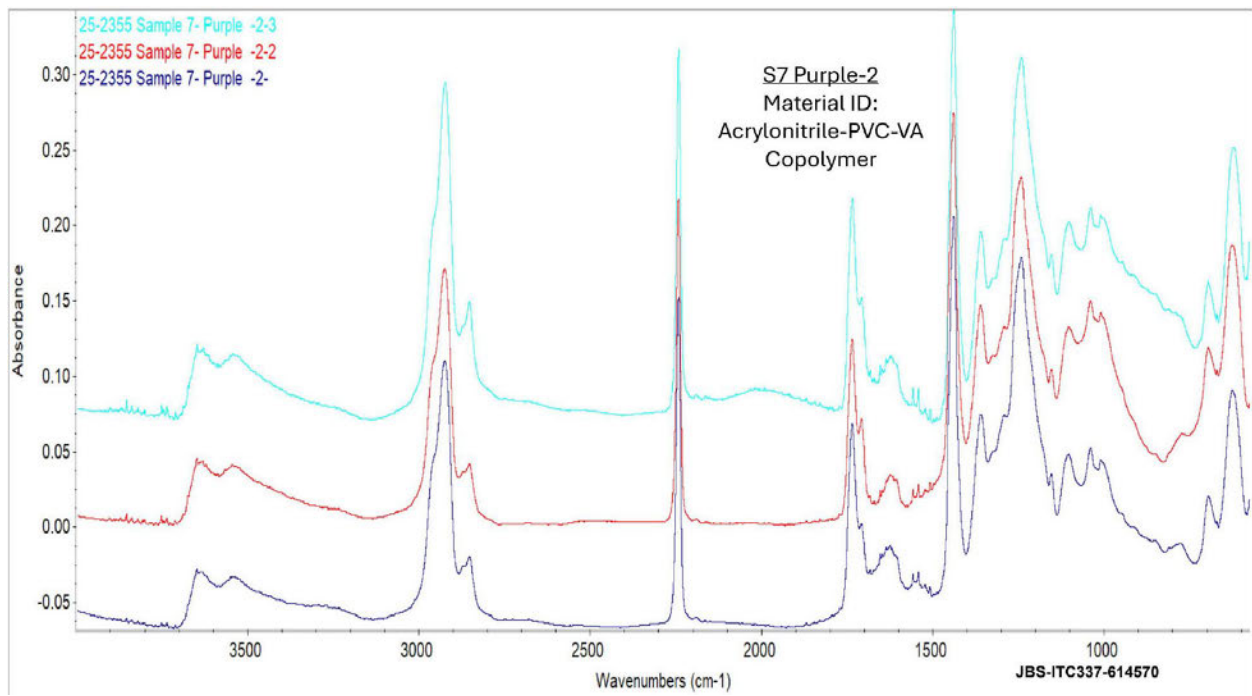
Respondents further contend that the physical exhibit that is RPX-0090, produced in this investigation, is the actual Asante Short collected by [REDACTED] during that 2013 trip. RIB at 71. They state, “Mr. [REDACTED] personally matched the physical samples to the database records. Database Exhibit 3 reflects Trip Number 181, dated October 2013. . . . Mr. [REDACTED] testified that he was ‘unmistakably’ comfortable that all five physical products including the [Asante Short, RPX-0090] were obtained in the years and months reflected in the database.” *Id.* (citing JX-0043C ([REDACTED]) at 63:20-64:6). Yet a third-party testing lab employed by JBS for the purposes of evaluating Mr. [REDACTED]’s samples calls this “unmistakable” opinion into question.

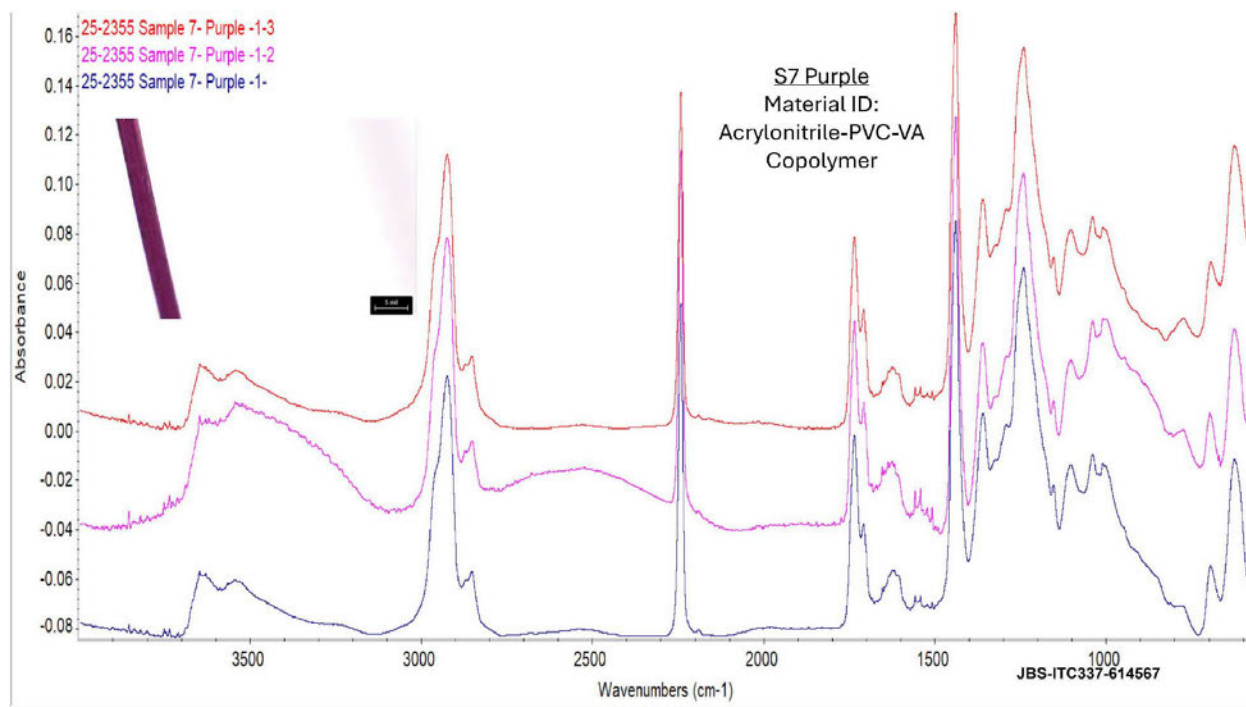
To wit, the 2013 [REDACTED] market research report lists the materials in the Asante Short as “[REDACTED].” RX-0230C.4. Ms. DuPriest stated that “PP” means polypropylene, a known polymer for synthetic hair, as did Mr. [REDACTED]. Hr’g Tr. (DuPriest) at 1088:13-23; JX-0043C ([REDACTED]) at 77:22-78:5 (discussing RX-0228.2). So, according to [REDACTED] 2013 record, the Asante Short sample had a majority of polypropylene.

But the Shirey Report produced by JBS, using spectroscopy and a known database of polymers, identified two very different looking fibers in RPX-0090—one thick double-lobe and one thin single-lobe—and determined neither was polypropylene:



JBS-ITC337-614565





RX-0647C.80, 82, 85; *see id.* at .148 (showing polypropylene spectra). Indeed, the two spectra match for what is likely the Kaneka “Afrelle” brand of fiber indicating (but not dispositively) that the physical exhibit produced by Mr. [REDACTED], RPX-0090, is composed entirely of Afrelle. Compare RX-0230C.4 (showing AFS cross-section) with RX-0228C.2 (showing pure Afrelle in Angels Hi-Yaki); RX-0647C.73, 76 (showing Angels Hi-Yaki spectra). This does not match the [REDACTED] report.

Conspicuously, Respondents omit any discussion of the Shirey Report in their initial brief (*see generally* RIB), and in their reply brief, only suppose that the analysis “may not be reflective of the full content of the specimen” (RRB at 64). Staff resolves the discrepancy the same way. SIB at 71 (“It may be that the three samples did not contain polypropylene, and that is why polypropylene was not detected. Therefore, the [REDACTED] catalogued information is not inconsistent with the Shirey Report.”). Respondents and Staff are correct that the Shirey Report is most reliable for showing what is in the sample but not necessarily what is *not* in the sample. But without

[REDACTED]

additional evidence or explanation of how the Shirey Report missed the majority polypropylene in RPX-0090, the record is not clear and convincing that this article is the one from 2013. JBS agrees. CIB at 115 (“RPX-0090 . . . cannot be the Solpia braid allegedly in the marketplace . . .”).¹²

The record nonetheless supports that the Asante Short included all limitations of claim 1. The Asante Short is a “hair accessory” comprising “synthetic braiding hair” as supported by the testimony of Ms. DuPriest and product packaging shown in the [REDACTED] record. RIB at 72 (citing Hr’g Tr. (DuPriest) at 901:21-903:13); RX-0230C.4. JBS identifies this limitation as in dispute (CIB at 107, 118) but it is unclear if the objection is on any grounds other than its now-rejected claim construction (*see generally* CIB at 107, 118; CRB at 71-78).

The [REDACTED] record shows “a binder coupled about a waist” and the braid folded about the binder to create a substantially cardioid shaped perimeter, just as in the Accused Products and DI Products:



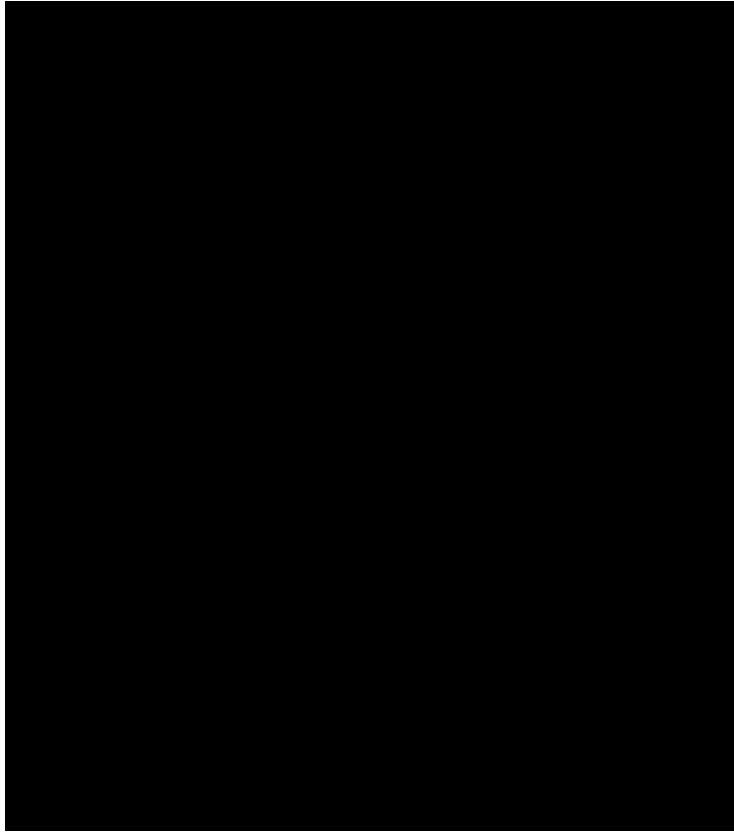
RX-0230C.4; *see* RIB at 72-73 (citing Hr’g Tr. (DuPriest) at 907:7-23). Again, JBS indicates this cardioid limitation is contested but offers no substantive argument. *See generally* CIB at 107, 118;

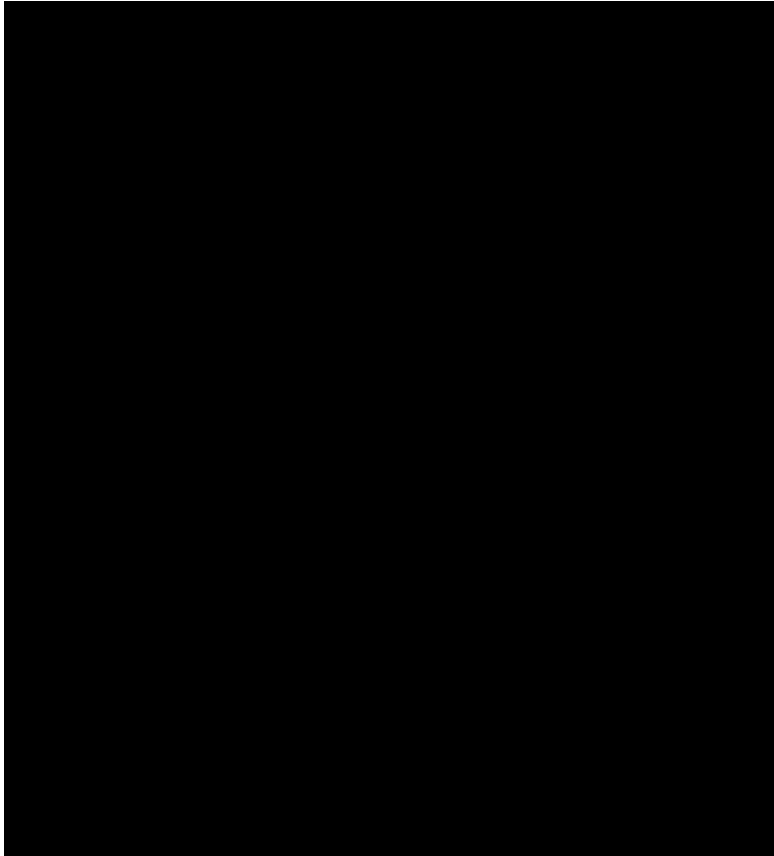
¹² JBS seeks to simultaneously establish the counterpoint—that the absence of polypropylene means the [REDACTED] market research is also erroneous. CRB at 78. As explained below, the manufacturing specifications plainly show two different types of fiber, so the more reasonable conclusion is simply that the sample analyzed in the Shirey Report is not the one collected by [REDACTED].

[REDACTED]

CRB at 71-78. The record also shows the Asante Short comprises a backer panel, where the binder is coupled to the backer panel, and the backer panel is folded to partially cover the front of the braid and completely cover the back. RIB at 73 (citing Hr’g Tr. (DuPriest) at 907:24-908:6). The presence of these limitations is undisturbed by JBS’s claim, even if true, that the samples should have been irreversibly disassembled to take the listed measurements. *See* CIB at 112.

This leaves the first and second bundles of different strand lengths. Neither the photographs nor the other information present in the [REDACTED] market research report shows these strands clearly and convincingly. RX-0230C. And the 478 patent teaches that a rounded or tapered bottom can be accomplished by strands of all the same length. *See* 478 patent at Figs. 5-7; *see id.* at 6:36-8:5. Nevertheless, Respondents provide Solpia Kenya manufacturing specifications which show, consistently over the life of the product, the use of two bundles of hair of two different lengths. RIB at 72 (citing, *inter alia*, RX-0136C). The earliest entry of August 2012 is consistent with Mr. Sung Hoon Jeong’s testimony on the creation of Solpia Kenya as an offshoot of Solpia Nigeria, and the Asante Short as its first product. JX-0041C (Jeong) at 38:18-39:17. The entry does not just list two lengths offhandedly, but the entire structure of the sheet reflects a manufacturing plan for two bundles of different length hair (PP/ATX) coming together:





RX-0136C.6, 13. And while the lengths of those bundles, their ratios, and the exact materials changed over the years following 2012, there were consistently two lengths—which clearly meets the basic limitation, “a first bundle of synthetic hair strands having a first length; and a second bundle of synthetic hair strands having a second length that is shorter than the first length.” Mr. Jeong credibly adds that Solpia Kenya got off the ground with this product by copying the competition, which also used strands of different lengths, and even hired some of their employees. *See* JX-0041C (Jeong) at 17:1-22:8, 38:24-42:19. Further corroborating this is the backer panel artwork, which matches as between the [REDACTED] report and Solpia manufacturing sheets. RX-0230C.4; RX-0136C.1-6. Altogether, a clear and convincing case of two bundles of strands with different lengths has been made. Staff agrees. SIB at 76-77.

JBS raises a laundry list of discrepancies and suggestions of bias to argue the cited testimony and documents are entirely unreliable. These arguments are noted but do not disrupt

[REDACTED]

the outcome. For example, as it concerns the Solpia Kenya manufacturing specifications, JBS complains they were sent from Solpia Kenya directly to Mr. Luis Choi, CEO of Hair Zone, in soft copy form which is easily editable, and Mr. Choi is not only a customer of Solpia Kenya but a family relation who (allegedly) altered other prior art evidence in the district court litigation. *See* CIB at 100; CRB at 27-32, 73-74. As for the content of the specifications JBS argues: they are unsigned even though they would have been signed prior to manufacturing at any scale, and signed copies were apparently withheld (CIB at 101, 102; CRB at 71-72); the metadata is conspicuous, sharing the same creation date with similar specifications from Solpia Nigeria and having a last modified date after the initial district court lawsuit (CIB at 101-102); the listed operating temperature of [REDACTED] or more in early entries would have melted the polypropylene fibers (CIB at 102, 104, 106; CRB at 77); one entry has a beginning length longer than the final length (CIB at 102); one entry has a missing third dimension for the packing bag size (CIB at 103; CRB at 72); and a few entries have “bag” quantity of 1pc indicating these are just samples (CIB at 105).

Admittedly, fixed, signed specifications as used for manufacturing would have been more reliable, as would have been evidence sent directly to counsel as opposed to counsel via the represented party, and an originating third-party without corporate, business, or familial relation to that party. Inaccuracies in a manufacturing document, of any type, also take away from its reliability to show the attributes of its produced product. Yet the Solpia Kenya specification is only used to corroborate one simple fact—that the Asante Short included hair bundles of two lengths—and this it does consistently and credibly. *See Medichem*, 437 F.3d at 1170, 1172-3 (holding the corroborative value of evidence may vary). And it would have taken a monumental amount of editing (as supposed by JBS) to falsely alter these specifications from a single-length to two-length design. Almost every entry or instruction is based on different length fibers. *See*

[REDACTED]

generally RX-0136C. JBS’s flagged errors and unusually close relationships do not warrant a finding that such manipulations occurred. And to the extent there is doubt about how many Asante Short products were produced, photographs included in the process flow description—prior to December 2016—show at least a carton of products having been created. RX-0136C.4; *see also* CIB at 105-106 (questioning actual promotion or sales).

JBS lodges similar accusations against the [REDACTED] market research records. They argue the records are unreliable because: they were sent directly to counsel for Respondents and [REDACTED] [REDACTED] (CIB at 108); there are no sales receipts for the samples collected (CIB at 111); other [REDACTED] records list two strand length measurements, but the entry for the Asante Short only has one, so the Asante Short must have had only one strand length (CIB at 113; CRB at 73, 78); the crimp size does not match the Solpia Kenya manufacturing specification (CIB at 114-115; CRB at 76); and [REDACTED] is similarly biased for Respondents (CRB at 33). Again, there may be some amount of bias, and inaccuracies do take away from reliability, but JBS’s collected observations do not rise to the level of tossing out the entire exhibit. Certainly none of JBS’s observations meaningfully affect the straightforward fact the document contributes to the analysis—that a product as shown in the photographs was collected in Kenya in the year 2013. JBS’s conclusion about strand length also goes too far, given the lack of explanation of why Solpia Kenya recorded two lengths in its specification, and how a uniform strand length of 17.5” could result in the bundled product shape shown in the photographs. *See generally* RX-0229C.4-5 (appears to show two products for entries with two recorded lengths); CIB at 7 (leaving strands of the same length, “braids would have the same thickness from top to bottom, which is not desirable for most styles”), 8 (“[to] avoid the undesired and unnatural blunt or flat look of the prior

[REDACTED]

art braiding hair assemblies, braiding hair bundles with differing hair strand lengths should be used.”); RX-0230C.4.

Accordingly, clear and convincing evidence shows claim 1 is anticipated by the Asante Short.

5. Sana Abuja Short Braid and Sana Abuja Long Braid

Respondents contend that products called the Angels Abuja Short Braid (“Abuja Short”) and Angels Abuja Long Braid (“Abuja Long”) from non-party Sana Industries (“Sana”) anticipate claim 1. RIB at 76. Respondents argue that the Abuja Braids were available for sale at least in the 2009 timeframe in the Kenya market as evidenced by trips taken by Mr. Shin of Solpia and Mr. [REDACTED] of [REDACTED]. See RIB at 75-76 (citing, *inter alia*, JX-0043C ([REDACTED]) at 63:20-64:6; RX-0229C; RX-0228C; JX-0033C (Shin) at 270:12-280:4). Much like the previous four products discussed, Respondents provide samples of the Abuja Short and Abuja Long with Mr. [REDACTED] producing one Abuja Short (RPX-0065) and the Abuja Long (RPX-0063) allegedly collected during these visits, and Mr. Shin producing a second Abuja Short (RPX-0064) from a Solpia visit (see RIB at 75-76, 104-105). To establish the products as prior art, Respondents primarily look to testimony from Messrs. Shin, Jeong, and [REDACTED], a Solpia receipt record, and the [REDACTED] market research reports. *Id.* at 75-76 (citing JX-0032C (Shin); JX-0033C (Shin); JX-0042C (Jeong); JX-0043 ([REDACTED]); RX-0228C; RX-0229C; RX-0261; RX-0249).

Respondents have made a clear and convincing case that the Abuja Short and Abuja Long are prior art to the 026 patent under the on sale bar of 35 U.S.C. § 102 by way of the [REDACTED] records. The relevant [REDACTED] market research record is dated 2009 and, as noted above, JBS offers no evidence to contradict Mr. [REDACTED]’s testimony on their collection other than allegations of overall bias (found not persuasive, above). JX-0043C ([REDACTED]) at 34:15-35:10, 58:17-59:8, 62:8-64:6. So the record shows clearly and convincingly that the Abuja Short and Abuja Long

[REDACTED]

were available in the marketplace by at least 2009. Staff disagrees but apparently misinterprets Respondents' anticipation theory as based solely on the [REDACTED] physical exhibits and not all corroborating evidence. SIB at 73 ("the Staff is of the view that Respondents have not clearly and convincingly shown that these [REDACTED] samples are representative of products sold and/or publicly available before the priority date."); *but see* SIB at 2 ("These physical exhibits, along with contemporaneous documents, corroborate testimony that these products were sold and/or publicly available before the priority date of the asserted patents."), 56-58 (summarizing law of corroborating evidence to show prior use), 63 (criticizing JBS for mistakenly arguing "that each corroborating document does not show all of the claim elements").

As noted, Respondents contend that the physical exhibits RPX-0065 and RPX-0063, produced in this investigation by [REDACTED], are the actual Abuja Short and Abuja Long collected by [REDACTED] during the two 2009 trips. RIB at 75-76 (citing JX-0043C ([REDACTED]) at 63:20-64:6; RX-0228C; RX-0230C). The evidence does not clearly and convincingly support this claim. As with the Asante Short, the Shirey Report arranged by JBS identified two distinct looking strands within samples of RPX-0065 and RPX-0063 and found all consisted of PVC-VA. RX-0647C.46, 49, 64, 67. This stands in stark contrast to the [REDACTED] market research reports, which found a majority of polypropylene in both samples across both trips. RX-0229C.3 (Abuja Long, Item #7 ([REDACTED])); RX-0228C.1 (Abuja Short, Item #1 ([REDACTED])). Respondents do not offer much of an explanation for this discrepancy other than to argue not all fibers were tested, nor do Respondents present material testing evidence of their own. And so, like the Asante Short, the record is less than clear and convincing that RPX-0065 and RPX-0063 are from 2009.

Respondents similarly contend that the physical exhibit RPX-0064, produced in this investigation by Solpia Nigeria, is the actual Abuja Short collected by Mr. Shin during a separate

[REDACTED]

2009 trip. RIB at 76 (citing JX-0033C (Shin) at 270:12-280:4). Respondents are persuasive. Mr. Shin produced a receipt from this trip (RX-0261) which, while hard to read because of glare in the photograph, contains descriptions of products including name/color code and a handwritten numbering scheme that matches numbers on several physical exhibits' plastic bags produced alongside the receipt (RPX-0079 (receipt item #7); RPX-0078 (receipt item #12); RPX-0080 (receipt item #13); JX-0033C (Shin) at 277:10-278:9). In light of this evidence it is reasonable to find RPX-0064, bearing a #9 on its plastic bag, and being essentially the same as item #12 (*Darling Angels Abuja Short*) with similar price (45.00), to be the receipt item #9. RX-0261. Additionally, while it is not apparent based on RX-0261 where the 2009 date of purchase is recorded, Mr. Shin testified directly that it was visible to him during his deposition, was specifically asked to point out where 2009 is written, and did so—without any objection or commentary from JBS's counsel:

Q. And when was that handwritten – when were those handwritten notations made by Mr. John?

A. October 2009.

Q. And there is no description on this invoice – let me rephrase that. There is no description in these handwritten notations or this document as a whole as to exactly what Darling products are that are referred to here, correct?

A. I can see the number of year, 2009, very –written very light, very – almost faded manner.

Q. Where are you referring to with the very light year? Can you point it to the camera.

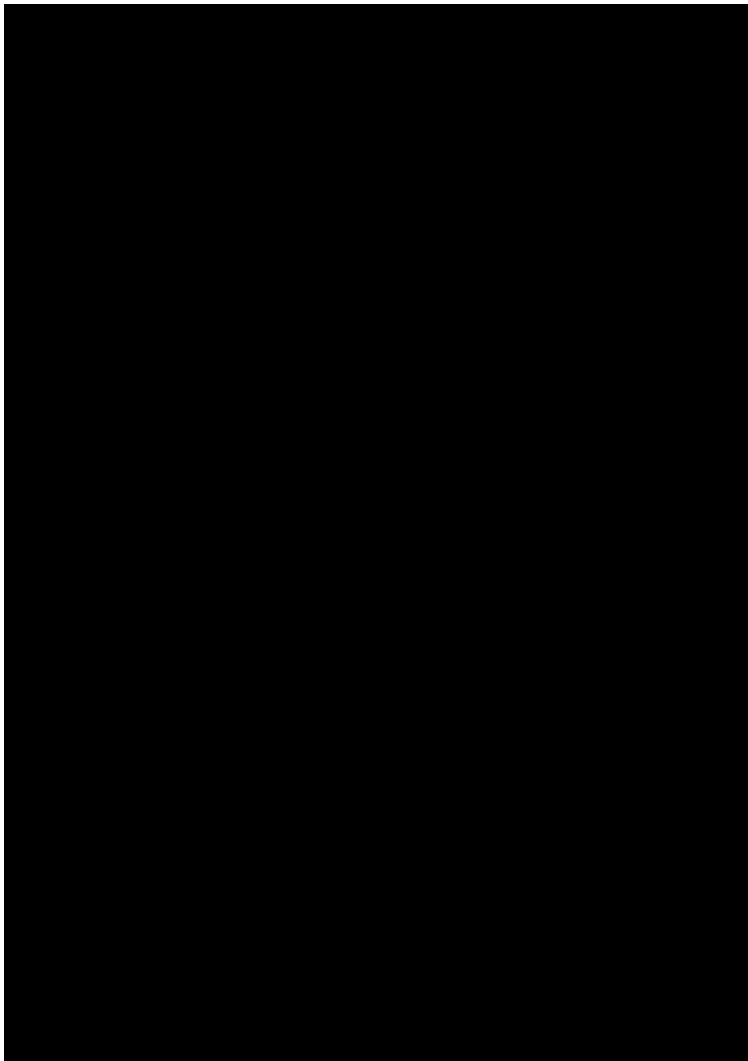
A. (Witness complies).

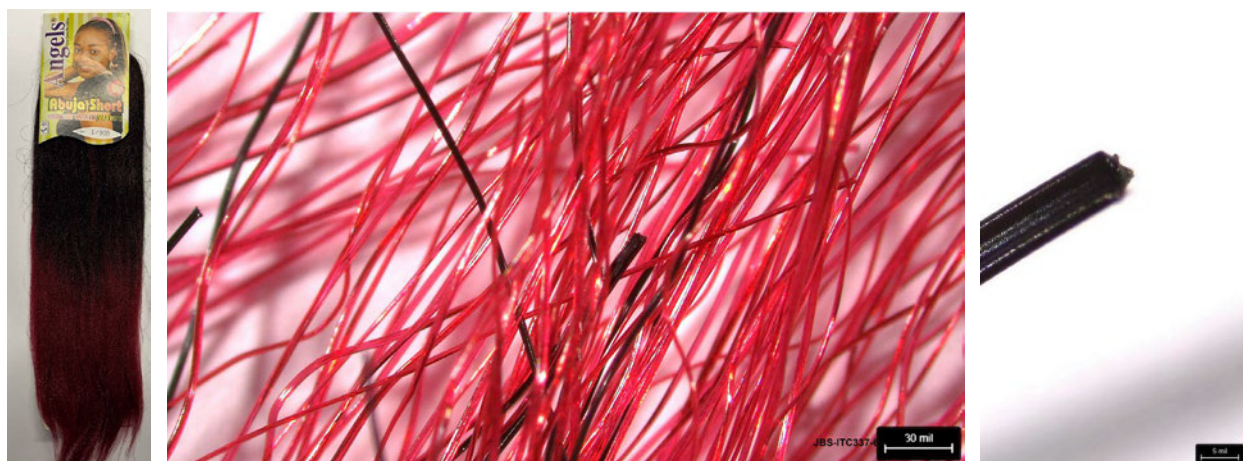
JX-0033C (Shin) at 276:3-18. Importantly, JBS does not dispute the date of this receipt in its briefing. *See generally* CIB; CRB.

Lastly, and further supporting the 2009 date of this physical exhibit is a correlation between the Shirey Report and [REDACTED] market research report. Even though RPX-0064 was collected by

[REDACTED]

Solpia, it was submitted for Shirey Report testing and the results returned PVC-VA and polypropylene (“PP”) strands. RX-0647C.118, 121. The [REDACTED] market research, in both 2009 entries, reports the Sana Abuja Short as being composed of [REDACTED] which is potentially consistent if [REDACTED]-T are PVC-VA. RX-0228C.1; RX-0229C.3. Cross sections shown in the December 2009 [REDACTED] report also tend to match the fiber images in the Shirey Report, with obvious thick and thin three-lobed PP strands:





RX-0228C.1; RX-2429; RX-0647C.115-121. Accordingly, clear and convincing evidence shows RPX-0064 is a legitimate 2009 sample of the Sana Abuja Short.

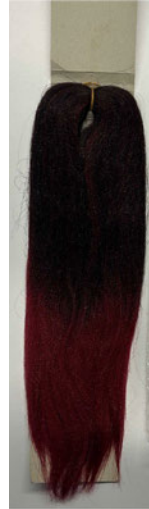
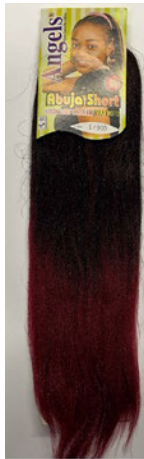
The record further supports that the Abuja Short included all limitations of claim 1. The Abuja Short is a “hair accessory” comprising “synthetic braiding hair” as supported by the testimony of Ms. DuPriest and product packaging shown in the [REDACTED] record. RIB at 72; Hr’g Tr. (DuPriest) at 917:20-918:24; RX-0288C.1; RX-0229C.3; *see* RPX-0064. JBS’s briefing suggests this limitation is in dispute (CIB at 118 (referring to “[REDACTED] Samples”)) but it is unclear if the objection is on any grounds other than its now-rejected claim construction.

The [REDACTED] record shows “a binder coupled about a waist” and the braid folded about the binder to create a substantially cardioid shaped perimeter, just as in the Accused Products and DI Products:



RX-0228C.1; *see* RIB at 77 (citing Hr’g Tr. (DuPriest) at 920:1-6; RX-2431; RPX-0064). Again, JBS indicates this perimeter limitation is contested but offers no accompanying argument. *See generally* CIB at 118; CRB at 78-79. The record also shows the Abuja Short comprises a backer panel, where the binder is coupled to the backer panel, and the backer panel is folded to partially cover the front of the braid and completely cover the back. RIB at 77 (citing Hr’g Tr. (DuPriest) at 920:7-16). JBS does not dispute this limitation.

This leaves the first and second bundles of different strand lengths. As with the Asante Short, neither the photographs nor the other information present in the [REDACTED] market research report demonstrates these lengths clearly and convincingly. RX-0228C.1; RX-0229C.3. And the 478 patent teaches that a rounded or tapered bottom can be accomplished by strands of uniform length. *See* 478 patent at Figs. 5-7; *see id.* at 6:36-8:5. Nevertheless, RPX-0064 is clearly a two-toned product or “ombre” with black or dark brown hair at the top and red hair at the tip:



RX-2429; RX-02431. As determined above, Ms. DuPriest credibly testified that the two colors with one ending before the end of the braid must mean there are two strand lengths. Hr’g Tr. (DuPriest) at 857:9-21. This is clear and convincing evidence that first and second bundles of different lengths are present.

JBS offers just one dispute here other than generalized assertions of bias and unreliability found unpersuasive above. JBS spots a conflict between the Toyokalon branding on some of the Abuja backer panels (RPX-0063; RPX-0065) and the [REDACTED] market research reports. CIB at 115-116 (“unequivocally not the 100% Toyokalon advertised on the Sana Abuja Long and Short Braid packaging”). The problem here is that the packaging of the Abuja Short that is RPX-0064 does not say 100% Toyokalon, just Toyokalon (RPX-0064)¹³ and, as discussed above, partial Toyokalon (possibly PVC-VA) combined with PP is consistent across the [REDACTED] market research’s Abuja Short specimens and the Shirey Report entry for RPX-0064.

Accordingly, clear and convincing evidence shows claim 1 is anticipated by the Abuja Short.

¹³ The other Abuja Short collected by [REDACTED] does not say Toyokalon at all. RPX-0065; RX-0228C.1 (“Highest Quality Hair Collection”).

[REDACTED]

The Abuja Long is a different matter. The sample RPX-0063 has not been shown to have been gathered during the critical time period. Unlike the Abuja Short, there is no second sample of this braid, nor records of acquisition from the critical time period, nor any manufacturing specifications or other documentary evidence. There is only the [REDACTED] market research report, and this is not sufficient on its own to show strands of different lengths. The photograph presented therein is also not particularly reflective of a “substantially cardioid shaped perimeter”:



RX-0229C.3. Accordingly, the record does not clearly and convincingly show the Abuja Long meets this limitation of claim 1 and it does not anticipate.

6. Sana Hi-Yaki Braid

Respondents contend that an additional product from non-party Sana, called the Hi-Yaki Braid (“HY Braid”), anticipates claim 1. RIB at 76. Respondents argue that the HY Braid was available for sale at least in the Kenya market in the 2009 timeframe as evidenced by the [REDACTED] market research collection effort. See RIB at 78-79 (citing, *inter alia*, JX-0043C ([REDACTED]) at 63:20-64:6; RX-0228C). Respondents provide the HY Braid allegedly collected during this visit (RPX-0066) and point to [REDACTED]’s research report and testimony from Mr. [REDACTED] for corroboration. RIB at 78-79 (citing JX-0043 ([REDACTED]); RX-0228C).

[REDACTED]

Respondents have made a clear and convincing case that the HY Braid is prior art to the 026 patent under the on sale bar of 35 U.S.C. § 102 by way of the [REDACTED] records. The relevant [REDACTED] record is dated 2009 and, as noted above, JBS offers no evidence to contradict Mr. [REDACTED]'s testimony that the records were contemporaneously created with visits to Kenya and pulled as ordinary business records from [REDACTED]'s database other than allegations of overall bias (found not persuasive, above). JX-0043C ([REDACTED]) at 34:15-35:10, 58:17-59:8, 62:8-64:6. So the record clearly and convincingly shows that the HY Braid was available in the marketplace by at least 2009. Staff disagrees but focuses on the physical sample, failing to consider this market research report. SIB at 73.

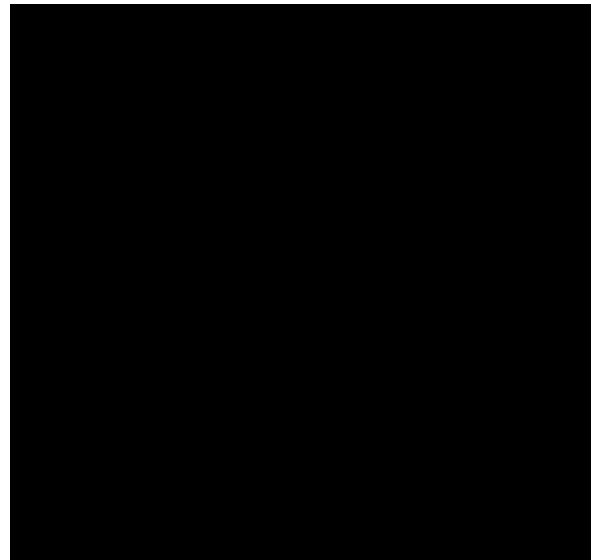
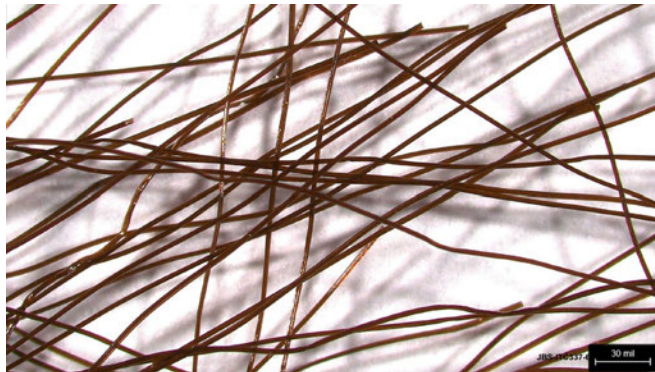
The record further shows clearly and convincingly that RPX-0066 is the article, or one of the articles, collected by [REDACTED] during the 2009 visit as reflected in RX-0228C. To start, the backer panel artwork is essentially identical between RPX-0066 and RX-0228C.1, the figures are the same, the printed text is the same, but it is true, among other things, that the white boxes containing color code “33” are not identical between the two:



[REDACTED]

RX-2461; RX-2464; *compare* RPX-0066 (printed market research report)¹⁴ *with* RPX-0066 (backer panel). This minor discrepancy is fairly explained, however. Mr. [REDACTED] credibly testified that multiple samples of the same product were sometimes collected on these trips. JX-0043C ([REDACTED]) at 39:17-40:20. Thus, the photographs within RX-0228C were likely of a different HY Braid than RPX-0066, but all were likely collected in the same outing.

JBS's Shirey Report provides strong corroboration here. The report includes an image of the braid sample that shows essentially uniform fibers, and the material composition of both measured strands is reported to be Acrylonitrile-PVC-VA Copolymer, which is likely the Afrelle brand of hair from [REDACTED] (discussed above). RX0647C.69-77. 100% uniform Afrelle matches the [REDACTED] market research report exactly:



RX-0647C.70; RX-0228C.1. So the weight of the evidence supports that RPX-0066 is a genuine 2009 article.

JBS's opposition is limited and not persuasive. Beyond the general allegations against all [REDACTED] samples (addressed above), JBS again turns to the Toyokalon mark appearing on the

¹⁴ The highest resolution image of the market research report is the one printed and affixed to RPX-0066.

[REDACTED]

backer panel of RPX-0066, which is inconsistent with the actual makeup of the braid as reported by [REDACTED] (only [REDACTED] Afrelle). JBS thus reasons, “the Catalogued Information cannot corroborate Respondents’ claim that the sample in the Sana Hi-Yaki Braid packaging is a true and accurate copy of the product [REDACTED] claims to have purchased and tested in December 2009.” CIB at 117. Not so. While the backer panel may be inaccurate by advertising Toyokalon strand content, that inaccuracy is also present in the photos of the product in the [REDACTED] market research report (showing the same Toyokalon mark):



RX-2461; RX-2459; *see* RPX-0066 (printed market research report); RPX-0066 (backer panel). So the physical sample matches the 2009 paper record, which is the important issue, even if both writings are technically inaccurate. And Respondents credibly argue that hair braid products are often mislabeled when it comes to material-type, including the DI Products. RIB at 60 (citing Hr’g

[REDACTED]

Tr. (Yeo) at 776:13-779:6 (100% Toyokalon advertising was not correct); Hr’g Tr. (Lee) at 209:21-210:8 (Queen B products are mixture of Afrelle and polypropylene); CPX-0009 (Queen B stating “100% Premium K-LON fiber”).

The record further supports that the HY Braid included all limitations of claim 1. The HY Braid is a “hair accessory” comprising “synthetic braiding hair” as supported by the testimony of Ms. DuPriest and product packaging. RIB at 79 (citing Hr’g Tr. (DuPriest) at 931:18-23; RPX-0066; RX-0228C.1). JBS’s briefing suggests this limitation is in dispute (CIB at 118 (referring to “[REDACTED] Samples”)) but it is unclear if the objection is on grounds other than the rejected claim construction.

The [REDACTED] record and physical exhibit show “a binder coupled about a waist” and the braid folded about the binder to create a substantially cardioid shaped perimeter, just as in the Accused Products and DI Products:



RX-0228C.1; RX-2465; *see* RIB at 79 (citing Hr’g Tr. (DuPriest) at 935:2-19; RX-2467; RPX-0066). Again, JBS indicates this perimeter limitation is contested but offers no argument. *See generally* CIB at 118; CRB at 78-79. The record also shows the HY Braid comprises a backer panel, where the binder is coupled to the backer panel, and the backer panel is folded to partially

[REDACTED]

cover the front of the braid and completely cover the back. RIB at 79 (citing Hr’g Tr. (DuPriest) at 935:20-936:4). JBS does not dispute this element.

This leaves the first and second bundles of different strand lengths, which are not clearly shown by the [REDACTED] market research report. Ms. DuPriest testified that she extracted and photographed fibers of different lengths from the physical exhibit RPX-0066. RIB at 79 (citing Hr’g Tr. (DuPriest) at 933:11-22; RX-2318). JBS provides no substantive reply to this evidence despite marking it contested. *See* CIB at 118; CRB at 78-79. The limitation is met.

Accordingly, clear and convincing evidence shows claim 1 is anticipated by the HY Braid.

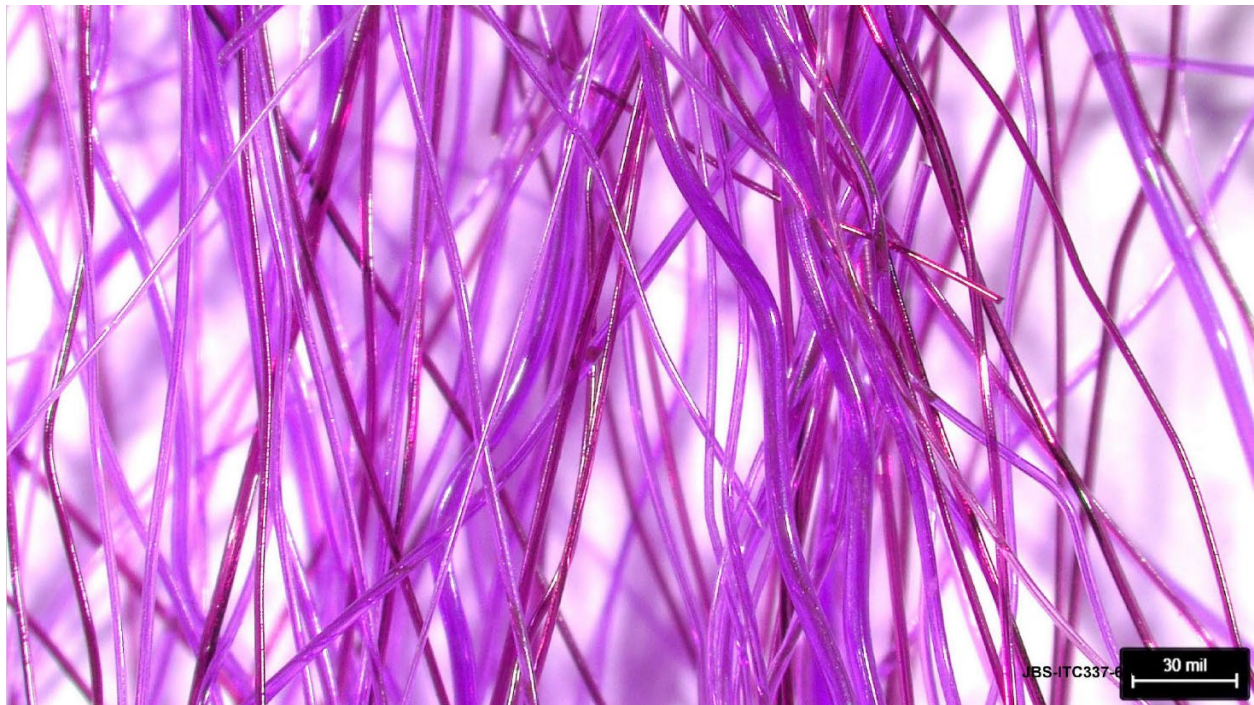
7. Ganda Short Braid

Respondents contend that a product called the Ganda Short Braid (“Ganda Short”) anticipates claim 1. RIB at 82. Respondents argue that the Ganda Short was available for sale at least in the 2013 timeframe in the Kenya market as evidenced by the [REDACTED]’s market research and Mr. [REDACTED]’s testimony. *See id.* at 81 (citing, *inter alia*, JX-0043C ([REDACTED]) at 33:10-12, 58:17-59:22, 61:4-11; RX-0230C). Respondents provide the Ganda Short allegedly collected during this visit. RPX-0082.

Respondents have made a clear and convincing case that the Ganda Short is prior art to the 026 patent under the on sale bar of 35 U.S.C. § 102 by way of the [REDACTED] records. The relevant [REDACTED] market research record is dated 2013 and, as noted for the Asante Short, JBS offers no evidence to contradict Mr. [REDACTED]’s testimony that the records were contemporaneously created with visits to Kenya and pulled as ordinary business records from [REDACTED]’s database other than allegations of overall bias (found not persuasive, above). JX-0043C [REDACTED] at 34:15-35:10, 58:17-59:8, 62:8-64:6. So the record shows clearly and convincingly that a Ganda Short was available in the marketplace by at least 2013. Staff disagrees but focuses on the physical sample and fails to consider this market research document. SIB at 73.

[REDACTED]

The record further shows clearly and convincingly that RPX-0082 is the article, or one of the articles, collected by [REDACTED] during the 2009 visit as reported in RX-0228C. The backer panel artwork of RPX-0082 matches what is shown in RX-0230C.3, as does the listed color (Purple) and seller (Uno). The Shirey Report corroborates this further. The report includes a microscopic image of the braid sample that shows three different types of fiber: thin light purple, thick light purple, and thin dark purple:



RX-0647C.142. The report lists the material for the thin light purple as PP, thick light purple as PP, and thin dark purple as PVC-VA. *Id.* at .145, 148, 151. This matches the [REDACTED] market research's cross-sectional image and composition measures: [REDACTED]

[REDACTED]

[REDACTED]

RX-0230C.3. And JBS’s expert, Mr. Hwang, identified “Falang” as a PVC fiber from the Uno company. Hr’g Tr. (Hwang) at 1182:14-16. So the weight of the evidence supports that RPX-0082 is a genuine 2013 article.

JBS’s opposition here is limited and not persuasive. Beyond the general allegations against all [REDACTED] samples (addressed above), JBS again looks to a composition mark on the Ganda Short backer panel and argues it “states that the Ganda Short Braid is 100% Fiber Uno,” which conflicts with the [REDACTED] market research and Shirey Report:



RX-2617; *see* CIB at 117. JBS is correct that there is a conflict, but like the HY Braid, the conflict is irrelevant because the product and the [REDACTED] market research report are consistent, which is what matters for establishing prior art status—and besides, hair braid products are apparently often mislabeled on material composition. *See* RIB at 60.

[REDACTED]

The record further supports that the Ganda Short included all limitations of claim 1. The Ganda Short is a “hair accessory” comprising “synthetic braiding hair” as supported by the testimony of Ms. DuPriest and product packaging. RIB at 82 (citing Hr’g Tr. (DuPriest) at 924:1-7; RPX-0082; RX-0230C.3). JBS’s briefing suggests this limitation is in dispute (CIB at 118 (referring to “[REDACTED] Samples”)) but it is unclear if the objection is anything other than its now-rejected claim construction.

The [REDACTED] record and physical exhibit show “a binder coupled about a waist” and the braid folded about the binder to create a substantially cardioid shaped perimeter, just as in the Accused Products and DI Products:



RX-0230C.3; RX-2621; *see* RIB at 79 (citing Hr’g Tr. (DuPriest) at 935:2-19; RX-2467; RPX-0082). Again, JBS indicates this perimeter limitation is contested but offers no specific argument. *See generally* CIB at 118; CRB at 78-79. The record also shows the Ganda Short comprises a backer panel, where the binder is coupled to the backer panel, and the backer panel is folded to partially cover the front of the braid and completely cover the back. RIB at 82 (citing Hr’g Tr. (DuPriest) at 927:14-19; RPX-0082).

[REDACTED]

This leaves the first and second bundles of different strand lengths, which are not clearly shown by the [REDACTED] market research report. Ms. DuPriest testified that she extracted and photographed fibers of different lengths from the physical exhibit RPX-0082. RIB at 82 (citing Hr’g Tr. (DuPriest) at 925:14-25; RX-2334). JBS provides no substantive argument with respect to this evidence despite marking it contested. *See* CIB at 118; CRB at 78-79. The limitation is met.

Accordingly, clear and convincing evidence shows claim 1 is anticipated by the Ganda Short.

8. GSI RastAfri Freed’m Silky Braid

Respondents contend that a product called the RastAfri Freed’m Silky Braid (“Silky Braid”) from respondent GSI anticipates claim 1. RIB at 84. Respondents argue the Silky Braid in a T-color style was available for sale at least in the 2001 timeframe as evidenced by testimony from the CEO of GSI, purchase orders, and catalogs. *See id.* (citing, *inter alia*, Hr’g Tr. (Chung) at 687:19-692:20; RPX-0035 through RPX-0041¹⁵; RX-1110 through RX-1113; RX-1117; RX-1340).

Respondents have made a clear and convincing case that T-color Silky Braid is prior art to the 026 patent under the on sale bar of 35 U.S.C. § 102 by way of an invoice and catalog. For example, GSI produced a 2007 purchase order to GSI’s supplier Boyang Industrial Co., Ltd. for “AFB Silky – B” with the name “Rast A fri Braid/Modacrylic Fiber” with a staggering quantity of 43,500:

¹⁵ Although Respondents cite this full range of catalogs and magazines, only RPX-0036 was submitted on the deadline for post-trial exhibits. Upon notification by my office, the remainder of the exhibits were submitted prior to the issuance of this initial determination, but those untimely exhibits are not considered.

Order To	Boyang Industrial Co., LTD. Unknown Unknown 000-000-0000 Unknown	Ship To	Golden State 7112 Alondra Blvd PARAMOUNT 562-272-6888 562-272-6880 Chun Kim		PO No	16
					VON	
					Order Date	02/12/2007
					Order By	Chun Kim

Memo RECEIVED ON 3/29/2007

Item				Qty
AFB Silky - B	Rast A fri Braid/Modacrylic Fiber			43,500
	1 - 4000	1B - 7100	2 - 5500	
	27 - 1300	3 - 1300	30 - 1100	
	33 - 1100	350 - 500	4 - 4200	
	6 - 1000	613 - 300	8 - 900	
	B44 - 200	BG - 400	BK/Wine - 600	
	FS1B/27 - 1050	FS1B/30 - 1500	FS1B/33 - 900	
	FS1B/35 - 600	FS1B/350 - 500	FS27/613 - 900	
	FS33/350 - 300	GSF/24 - 200	GSF/904 - 200	
	GSRB/1B - 300	GSRB/27 - 300	GSRB/39 - 600	
	M1B/35 - 200	M1B/BG - 950	M2/30 - 800	
	M2/33 - 600	M27/613 - 100	M30/144 - 200	
	M30/27 - 400	M33/35 - 200	M4/27 - 700	
	M4/30 - 850	SW. Red - 850	T1B/27 - 150	
	T1B/30 - 200	T1B/BG - 150	T4/Bg/144 - 300	

RX-0665C.4; Hr'g Tr. (Chung) at 733:11-16 (one of GSI's suppliers is Boyang)). Respondents and Ms. Jhina Chung, CEO of GSI, further refer to a GSI invoice dated October 15, 2003, allegedly kept in the ordinary course of business and showing the sale of T-color Silky Braids. RIB at 84 (citing RX-1113); Hr'g Tr. (Chung) at 691:10-692:11. But the document bears indicia of social media advertising at the top (Instagram) which would presumably not have existed in 2003. *See* RX-1113C; CX-0245 (accused product backer panel showing same indicia). So it is not given any weight towards this issue. The 2010 catalog referenced by Ms. Chung, however, squarely advertises the Silky Braid as a product available for purchase in that year:



RX-4476C; RX-4500C; Hr’g Tr. (Chung) at 697:6-14; RPX-0036. So the prior art status of such a product is clear and convincing. JBS and Staff acknowledge that a pre-2016 version of the Silky Braid existed but argue Respondents have not shown the physical exhibits brought to the hearing and analyzed by Ms. DuPriest are representative of that product. CIB at 119-120; SIB at 73-74; *see* RPX-0021; RPX-0022; RPX-0023.

JBS and Staff are persuasive. Unlike some of the other prior art products, there are no dates on the packages of RPX-0021, RPX-0022, or RPX-0023 (*e.g.*, Mini Braid), and no pre-2016 records concerning these specific products (*e.g.*, [REDACTED] records). So to the extent Respondents argue that RPX-0021, RPX-0022, and RPX-0023 are themselves prior art (RRB at 71 (“[GSI] Prior Art Samples are Authentic Prior Art”)) that is not supported by any corroborating documentary evidence. It is not supported by any actual testimony, either. *See* Hr’g Tr. (Chung) at 687:8-692:11 (describing physical exhibits as “exemplif[y]ing” the product sold in the past). And while Ms. Chung and Respondents claim that no changes have been made to the Silky Braid since its inception (*see, e.g., id.* at 692:21-693:7 (stating no changes have been made since 20[03])); RIB at 84 (“The product has remained unchanged and uses the same manufacturer.”)), other sections of Ms. Chung’s testimony and Respondents’ briefing contradict that claim (RIB at 85 (“Ms. Chung confirmed that Toyokalon, the fiber used in the [Silky Braid], was used for braiding hair as early as 2003”); RPX-0021 (label states made with Kanekalon); RPX-0022 (same); RPX-0023 (same);

[REDACTED]

Hr’g Tr. (Chung) at 688:12-24 (explaining original Silky Braid had different ratio of shorter hair to longer hair)). The Federal Circuit instructs that “[w]hen a party claims that its own invention predates, and thereby anticipates, a patent asserted against it, the oral testimony of the inventor of the purported prior art must be corroborated.” *Mosaic Brands, Inc. v. Ridge Wallet LLC*, 55 F.4th 1354, 1363 (Fed. Cir. 2022) (citations omitted). So RPX-0021, RPX-0022, and RPX-0023 are not themselves prior art to the 026 patent and not clearly representative of the pre-2016 product.

This largely defeats Respondents’ anticipation theory, which rests on these physical exhibits to show the critical claim limitations of claim 1 of the 026 patent are met. Specifically, to show the “substantially cardioid shaped perimeter,” Ms. DuPriest relies not only on one of the physical samples but on the appearance of that sample after a middle binding has been removed:



RIB at 86 (citing RX-1550C); *see* Hr’g Tr. (DuPriest) at 939:25-943:1 (citing RDX-0001.173); RPX-0023. Neither she nor Respondents refer to any other evidence which predates the 026 patent to demonstrate the appearance and perimeter of the Silky Braid. Without the physical braid, or with little weight assigned thereto, a clear and convincing case of anticipation has not been made. Moreover, the one document that does have a qualifying publication date (the 2010 catalog, above)

has a perimeter that is not substantially cardioid and reaches its widest before a rather blunt termination:



RX-4500; *see* Hr’g Tr. (Chung) at 697:6-14; *see also* R-4475C (same image). To the extent Respondents would further rely on a promotional flyer of Silky Braids depicting a variety of color options, this image bears no date and there is no corroborating evidence to show it was attached to any pre-2016 invoices as alleged by Ms. Chung. RX-1110C; Hr’g Tr. (Chung) at 690:15-20 (“We send this to our customers on our invoices as an advertisement.”).

So it has not been shown that the Silky Braid anticipates claim 1 of the 026 patent.

9. GSI RastAfri Original Classic Jumbo Braid

Respondents finally contend that a product called the RastAfri Original Classic Jumbo Braid (“Jumbo Braid”) from GSI anticipates claim 1. RIB at 90. Respondents argue the Jumbo Braid became commercially available in January 2016, as evidenced by testimony from Ms.

[REDACTED]

Chung, purchase orders, and catalogs. *See id.* (citing, *inter alia*, Hr’g Tr. (Chung) at 700:8-702:13; RPX-0035 through RPX-0041; RX-1114 through RX-1117; RX-1120).

Regardless of whether the Jumbo Braid is prior art under 35 U.S.C. § 102, Respondents’ theory is not persuasive for the same reason as the Silky Braid. The only catalog submitted within the cited range RPX-0035 through RPX-0041 is from 2010, which significantly predates the alleged 2016 Jumbo Braid launch and is therefore of little relevance. RPX-0036. RX-1114C and RX-1115C are promotional advertisements of the Jumbo Braid but are undated and otherwise depict flat bottoms which would not meet “substantially cardioid shaped perimeter” without extensive explanation. RX-1116, RX-117C, and RX-1120C are all invoices or purchase orders which do not show the appearance of the product other than listing color codes. And, like the Silky Braid, Respondents do not actually contend that the physical samples RPX-0024, RPX-0017, and RPX-0018 are prior art themselves, and Ms. DuPriest’s explanations of anticipation are again dependent upon an unbound version of RPX-0024. *See* Hr’g Tr. (DuPriest) at 947:2-951:23. Accordingly, there is insufficient evidence showing the attributes of a pre-December 2016 Jumbo Braid, and anticipation of claim 1 of the 026 patent has not been shown.

10. Obviousness

In addition to the above anticipation theories, Respondents contend that claim 1 would have been obvious in light of the Abuja Short and Abuja Long braids, and the HY Braid, in combination with publication references Sugai (RX-1679), Hayakawa (RX-1670), and Sasayama (RX-1680) should those prior art products fail to include any limitation. RIB at 105-106. Given that the Abuja Short and HY Braid have been found to anticipate, these references alone also establish obviousness. There is no dispute that Sugai, Hayakawa, and Sasayama were all published prior to December 2016 and are prior art under 35 U.S.C. § 102. RIB at 107, 108; RX-1679 at

[REDACTED]

Cover (publication date of February 18, 2010); RX-1670 at Cover (publication date of September 25, 2002); RX-1680 at Cover (publication date of November 10, 2011).

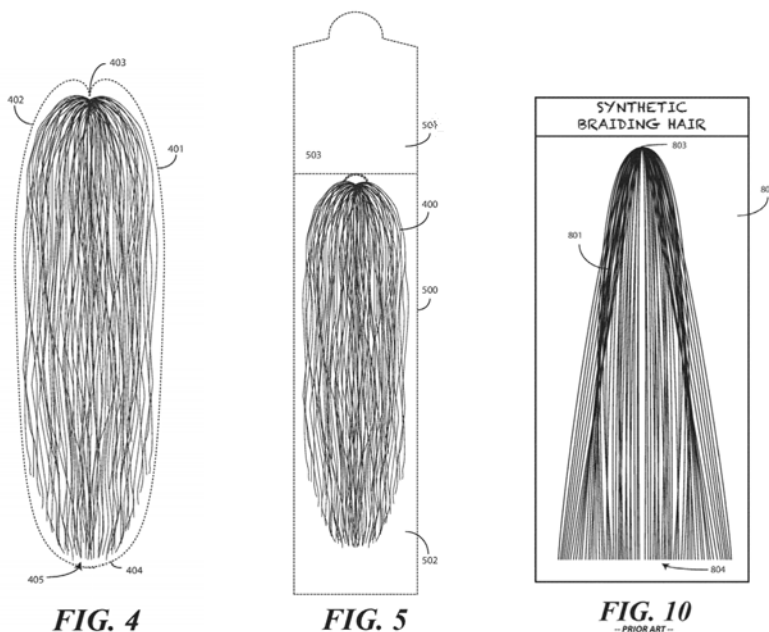
As for the Abuja Long, it is determined above that the [REDACTED] market research report fails to clearly and convincingly show first and second bundles of different lengths or a substantially cardioid shaped perimeter. *See* RX-0229C.3. Respondents do not explain or show where any of Sugai, Hayakawa, or Sasayama teach this perimeter, and it appears they do not. *See* RIB at 106-109; RX-1670 at Figs. 1-7; RX-1679 at Figs. 1-9; RX-1680 at Figs. 1A-4. To the extent they attempt to show the perimeter, they mainly rely on demonstrative exhibits, which is inappropriate, and Ms. DuPriest’s testimony, which was cursory and conclusory. *See* RIB at 111 (citing Hr’g Tr. (DuPriest) at 957:17-958:7). Thus, Respondents have not shown all limitations would be met in the proffered combinations, and generally have not carried their burden, so the objective evidence of non-obviousness has not been considered. *See* CIB at 122-24. The claim has accordingly not been shown to have been obvious.

11. Section 112

Respondents raise further challenges to claim 1 of the 026 patent under 35 U.S.C. § 112. First, they contend JBS’s construction of “braiding hair” raises written description and enablement problems. RIB at 118-119. With that construction discarded, above, these theories need not be addressed.

Respondents next contend “substantially cardioid shaped perimeter” is indefinite. They argue the term “does not inform a POSITA of claim scope with reasonable certainty because the patents provide no objective, boundary-defining rule for determining when the limitation is satisfied.” RIB at 119; RRB at 75. Not so. Under Section 112, a patent’s written description must “reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date,” that is, it must “describe an invention understandable to [a]

skilled artisan.” *Ariad*, 598 F.3d at 1351. Respondents correctly observe the specification “describe[s] the shape as having a cusp and two lobes and acknowledge[s] that the perimeter may be elongated or imperfect” but fail to appreciate the additional contribution of the patent’s figures:



026 patent at Figs. 4, 5, 10. These figures instruct how to evaluate the perimeter of a hair bundle (loosely, as in line 401) and how to identify a non-rounded or non-tapered base (flat, as in Figure 10). *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1231-32 (Fed. Cir. 2016) (“As *Nautilus* instructs, the dispositive question in an indefiniteness inquiry is whether the ‘claims,’ not particular claim terms, ‘read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.’”). Sure enough, even with these teachings, “substantially cardioid shaped perimeter” has a broad scope; but broad does not necessarily mean indefinite. *Niazi Licensing Corp. v. St. Jude Med. S.C., Inc.*, 30 F.4th 1339, 1347 (Fed. Cir. 2022) (“*Niazi*”) (“True, descriptive words (or terms of degree) in a claim may inherently result in broader claim scope than a claim defined with mathematical precision. But a claim is not indefinite just because it is broad.”) (citing

[REDACTED]

BASF Corp. v. Johnson Matthey Inc., 875 F.3d 1360, 1367 (Fed. Cir. 2017)). Respondents otherwise offer no examples from caselaw to show this scope is without reasonable certainty under *Nautilus*. See RIB at 119-121. A clear and convincing case has not been made.

V. U.S. PATENT NO. 10,980,301

A. Level of Ordinary Skill in the Art

Due to the relatedness of the Asserted Patents, the parties rely on the same POSITA definitions proposed for the 026 patent. CIB at 47; SIB at 26; *see generally* RIB at 13-14. Accordingly, a POSITA at the time of the 301 patent invention would have several years of experience with installing hair braid products, the marketing, packaging, and purchasing thereof, and alternatives thereto known in the hair accessories industry.

B. Claims-at-Issue

Claims 1, 4, 7, and 8 of the 301 patent are at issue in this investigation, either through allegations of infringement or domestic industry technical prong. *See* CIB at 128, 136-137. These claims are reproduced below:

1. A hair accessory, comprising:

bundled synthetic braiding hair, comprising:

a first bundle of synthetic hair strands having a first length; and

a second bundle of synthetic hair strands having a second length that is shorter than the first length;

wherein the bundled synthetic braiding hair is folded about a waist to define a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist; and

wherein a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.

....

4. The hair accessory of claim 1, further comprising a binder coupled about the waist of the bundled synthetic braiding hair.

....

7. The hair accessory of claim 4, further comprising a backer panel, wherein the binder is coupled to the backer panel.

8. The hair accessory of claim 7, the backer panel folded, thereby completely spanning a first side of the bundled synthetic braiding hair and partially spanning a second side of the bundled synthetic braiding hair, and disposed within a container.

301 patent at cls. 1, 4, 7, 8.

C. Claim Construction

As noted above, the application leading to the 301 patent was a continuation of the application leading to the 026 patent. Thus, the two patents share a common specification and intrinsic record. *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (“Accordingly, we conclude that Multi-Tech’s statements made during the prosecution of the ’627 patent with regard to the scope of its inventions as disclosed in the common specification are relevant not only to the ’627 and ’532 patents, but also to the earlier issued ’649 patent.”). For those 026 patent claim terms construed above, the same constructions have been applied to the 301 patent, where applicable, as below.

The parties do not identify any terms particular to the 301 patent as needing construction; but they do agree two terms were previously decided in *Braiding Hair*. CIB at 47-48; RIB at 5; SIB at 27. These terms are as follows:

Term	Construction
“middle”	Plain and ordinary meaning
“narrows”	Plain and ordinary meaning

Inv. No. 337-TA-1415, Order No. 27 at 7-8; *see* CIB at 47-48; RIB at 5; SIB at 27.

D. Infringement

According to JBS's post-hearing briefing, the use, manufacture, or sale of all Accused Products (*i.e.*, Group 2 Accused Products) infringes claim 1, and the same use, manufacture, or sale of Group 1 Accused Products additionally infringes claim 8 (along with intervening claims 1, 4, and 7). *See* CIB at 128 (referring to products "with backer panel folded" or "without backer panel folded"). For the reasons discussed below, JBS has shown infringement of these claims by these products.

To meet its burden, JBS generally relies on the testimony of Ms. Martinez and her inspection of the physical products, photographs thereof, and measurements of strand length; and additionally incorporates the argument and evidence presented for the 026 patent. *See generally* CIB at 129-136; CIB at 128-129 n.69.¹⁶ Respondents similarly incorporate their general and specific disputes made in connection with the 026 patent. RIB at 121. As determined above, these are persuasive with respect to representativeness such that only the Group 1 Representative Accused Products will be considered for claim 8 (and intervening claims 1, 4, and 7), and only the Group 2 Representative Accused Products will be considered for claim 1. Respondents additionally argue that JBS has not shown any product includes "a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end" as in claim 1. *See* RIB at 122; RRB at 76-77. Staff's brief confirms this is the only substantive limitation in dispute. SIB at 83. It is addressed below.

¹⁶ Here, again, JBS cites, in a footnote, several demonstrative and exhibit-numbered documents which comprise several hundred pages of claim charts in an effort to show representativeness and infringement by the Accused Products. CIB at 128-129 n.69. As noted above, demonstratives are not evidence and not an appropriate substitute for live testimony, admitted exhibits, or briefing argument. Similarly, expert reports, attachments thereto, and expert deposition transcripts have generally not been admitted as substantive evidence. *See* Hr'g Tr. at 523:6-527:11. For either reason, the charts are not considered for the issue of infringement.



For all other, non-disputed, limitations of claims 1, 4, 7, and 8, the expert testimony and evidence cited by JBS shows they are present in the Group 1 Representative Accused Products and Group 2 Representative Accused Products as alleged. *See* CIB at 132 (“a hair accessory”), 132-133 (“bundled synthetic braiding hair”), 133-134 (“first bundle,” “second bundle . . . shorter than the first length”), 134 (“folded about a waist”), 135 (“binder coupled about the waist”), 135-136 (“binder is coupled to the backer panel”), 136 (“backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side”), and associated physical exhibits; Hr’g Tr. (Martinez) at 367:21-368:17, 379:14-24, 389:16-391:9; *see generally* CIB at 129-132 (Group 2 discussion) (citing Hr’g Tr. (Martinez) at 389:16-391:9) and cited physical exhibits.

Turning to “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end,” the evidence shows it is met in the Group 1 Representative Accused Products. In its brief, JBS presents photographs of the Hair Zone X-PRESSION RUWA 3-pack product with a folded backer panel (CPX-0017) and Ms. Martinez’s interpretative outline of the perimeter of a single braid. *See* CIB at 135 (citing Hr’g Tr. (Martinez) at 391:2-9; CDX-0026.44; CX-0014.1). Photographs of the other Group 1 Representative Accused Products also show a narrowing or tapering of the braid as it approaches the end opposite from the folded waist. CX-0017.5 (Beauty Essence); RX-4245.6 (Beauty Essence)¹⁷; CX-0032.2 (Midway); CX-0035.5 (Mayde Beauty). Staff agrees the limitation is met. SIB at 83.

¹⁷ Again, JBS’s presentation of evidence with respect to the Beauty Essence TZ 60 braid is confusing. The image used in Ms. Martinez’s demonstrative slides CDX-0026.33 and CDX-0026.55 is not locatable in the record. And the physical exhibit number that is listed next to it does not match the image. In addition, on a separate slide, JBS cites RX-4245, which is a compilation of promotional material images from Beauty Essence’s website. *See* RX-4245.6-9. But again, this compilation does not include the particular image shown in the demonstrative. Nevertheless, the single braid that is shown on CDX-0026.33 and CDX-0026.55 is effectively the same as the braids included in CPX-0060 and RX-4245, and all have a tapered bottom end. Thus, it is more

The evidence also shows it is met in the Group 2 Representative Accused Products. In its brief, JBS presents photographs of the Hair Zone X-PRESSION RUWA 3-pack product *without* a folded backer panel (CPX-0016) and Ms. Martinez’s interpretative outline of the perimeter of a single braid. See CIB at 132 (citing Hr’g Tr. (Martinez) at 391:2-9; CDX-0026.44; CX-0014.5). Photographs of all other Group 2 Representative Accused Products (beyond the Group 1 Representative Accused Products) also show a narrowing or tapering of the braid as it approaches the distal end as compared to the middle:

 CX-0020.4 (SLI)	 CX-0008.5 (Sun Taiyang)	 CX-0008.12 (Sun Taiyang)	 CX-0011.4 (Beauty Elements)
 CX-0023.5 (Royal Imex)	 CX-0026.4 (GS Imports)	 CX-0029.3 (Eve Hair)	 CX-0032.13 (Midway)

likely than not that the Beauty Essence TZ 60, as a member of the Group 1 and Group 2 Representative Accused Products, meets this limitation.

 CX-0035.14 (Mayde Beauty)	 CX-0038.3 (Hair Plus)	 CX-0041.4 (Optimum)	 CX-0044.4 (Chade)
 CX-0047.4 (Mane Concept)	 CX-0050.4 (Beauty Plus)	 CX-0053.4 (Model Model)	 CX-0056.4 (New Jigu)
 CX-0059.4 (Shake N Go)	 CX-0062.4 (Amekor)		

Staff agrees the limitation is met. SIB at 83.

[REDACTED]

Respondents’ opposition, for both Group 1 and Group 2, is limited to a critique of one portion of testimony from Ms. Martinez regarding a “W” shaped braid-end. *See* RIB at 122. This in no way outweighs the undisputed photographic evidence noted above. Respondents further complain that JBS’s initial brief and Ms. Martinez’s testimony only address the Hair Zone RUWA product. *See* RRB at 76-77. But as determined above, the Asserted Claims and the Accused Products are not technologically complex and this limitation can be evaluated with the naked eye without any expert explanation. *See Meyer*, 690 F.3d at 1374.

Accordingly, the Group 1 Accused Products infringe claims 1 and 8 of the 301 patent, and the Group 2 Accused Products infringe claim 1.

E. Domestic Industry – Technical Prong

According to JBS’s post-hearing briefing, the Group 1 DI Products practice claims 1 and 8 (and intervening claims 4 and 7), and the Group 2 DI Products practice claim 1 of the 301 patent. CIB at 136-137. As with infringement, JBS presents its theory via the Group 1 Representative DI Product (QB Single 50) and the Group 2 Representative DI Product (QB 3X Multi 50) supported by photographs and testimony from Ms. Martinez. *See* CIB at 137-145.¹⁸ Staff agrees that claims 1, 4, 7, and 8 are practiced in these ways. *See generally* SIB at 84-85.

Respondents’ opposition is limited to an incorporation by reference of its 026 patent technical prong discussion. *See* RIB at 123; RRB at 77. As evaluated above, a first portion of that opposition is based on a claim construction that is not adopted, and the second portion is persuasive

¹⁸ Here, again, JBS cites an exhibit-number document comprising several claim charts in an effort to show representativeness and claim practice by the DI Products. CIB at 136 (citing CX-0574). As noted above, expert reports, attachments thereto, and expert deposition transcripts have generally not been admitted as substantive evidence. *See* Hr’g Tr. at 523:6-527:11. So this exhibit and others like it are not considered.

[REDACTED]

in that JBS has not sufficiently established representativeness of the Group 1 DI Products by the QB Single 50 or of the Group 2 DI Products by the QB 3X Multi 50.

Accordingly, there is no dispute that the QB 3X Multi 50 practices claim 1 of the 301 patent. And in light of the expert testimony and evidence cited, JBS has shown all limitations are present in this Group 2 Representative DI Product. *See* CIB at 67 (“a hair accessory,” “bundled synthetic braiding hair,” “first bundle”), 68 (“second bundle,” “binder coupled about a waist”), 69 (“braiding hair is folded about the binder”), 70 (“backer panel,” “backer panel is folded”); Hr’g Tr. (Martinez) at 412:22-419:20. *See* CIB at 137 (“a hair accessory”), 137-138 (“bundled synthetic braiding hair”), 138-139 (“first bundle,” “second bundle . . . shorter than the first length”), 139-140 (“folded about a waist”), 140 (“perimeter narrows”), and associated physical exhibits; Hr’g Tr. (Martinez) at 428:14-430:2.

There is also no dispute that the QB Single 50 practices claims 1, 4, 7, and 8 of the 301 patent. In light of the expert testimony and evidence cited, JBS has shown all limitations are present in this Group 1 Representative DI Product. *See* CIB at 141 (“a hair accessory”), 141 (“bundled synthetic braiding hair”), 141-142 (“first bundle,” “second bundle . . . shorter than the first length”), 142-143 (“folded about a waist”), 143 (“perimeter narrows”), 144 (“binder coupled about the waist”), 144 (“binder is coupled to the backer panel”), 144-145 (“backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side”), and associated physical exhibits; Hr’g Tr. (Martinez) at 415:13-421:10.

This leaves the remaining Group 1 DI Products and Group 2 DI Products. Ms. Martinez did not provide a limitation-by-limitation analysis for these products in the same way as the QB Single 50 and QB 3X Multi 50, yet the record evidence speaks for itself. All of the products are bundled synthetic hair braids. For first and second bundles of different lengths, JBS’s witness,

[REDACTED]

Mr. Lee, measured strand lengths just as in the Accused Products and found disparate bundles for all but the QB Single 86, for which there are inexplicably no measurement results. Hr'g Tr. (Lee) at 185:19-187:21; *see* CDX-0107. As determined above, inspection of the QB Single 86 physical sample shows it is more likely than not that it contains bundles of different strand lengths.

Moreover, photographs and inspections of all physical samples clearly show that all DI Products include a binder coupled about a waist, and each braid is folded about the binder to create a perimeter. *See* CPX-0001 through CPX-0012; CX-2840.1-13.¹⁹ That perimeter narrows as the braid proceeds from the middle of the complete bundle down to the distal end. *See* CPX-0001 through CPX-0012; CX-02840.1-13. Thus, all the DI Products practice claim 1 of the 301 patent.

The Group 1 DI Products further include a folded backer panel, with the binder coupled to that panel. *See* CPX-0001; CPX-0002; CPX-0004; CPX-0005; CX-2840.1-5. A first portion of the folded panel spans the length of the braid and a second portion spans only a portion of the braid, and the whole apparatus is placed into a plastic sleeve. *See* CPX-0001; CPX-0002; CPX-0004; CPX-0005; CX-2840.1-5. Thus, the Group 1 DI Products additionally practice claim 8 and intervening claims 4 and 7 of the 301 patent.

Accordingly, the record shows the Group 2 DI Products practice claim 1 of the 301 patent, and the Group 2 DI Products practice claims 1 and 8.

¹⁹ CX-2840 is not an entirely reliable exhibit. It purports to contain photographs of the DI Products but they are more accurately understood as renderings. For example, the backer panels are computer generated, not actual photographs. *E.g.*, CX-02840.6. And for some products, the braids are copied and pasted to create the illusion of a multipack, or copied and pasted to reflect different length multipacks. *Id.* at 7, 9-10. Nevertheless, the physical exhibits are sufficient to resolve the claim limitations.



F. Validity

For the 301 patent, Respondents refer to their anticipation, obviousness, and Section 112 theories presented for the 026 patent. RIB at 123. And within the section dedicated to the 026 patent, Respondents (unhelpfully) address those limitations specific to the 301 patent's asserted claims. Nevertheless, Respondents have shown the invalidity of claims 1 and 8.

1. New York Short Braid

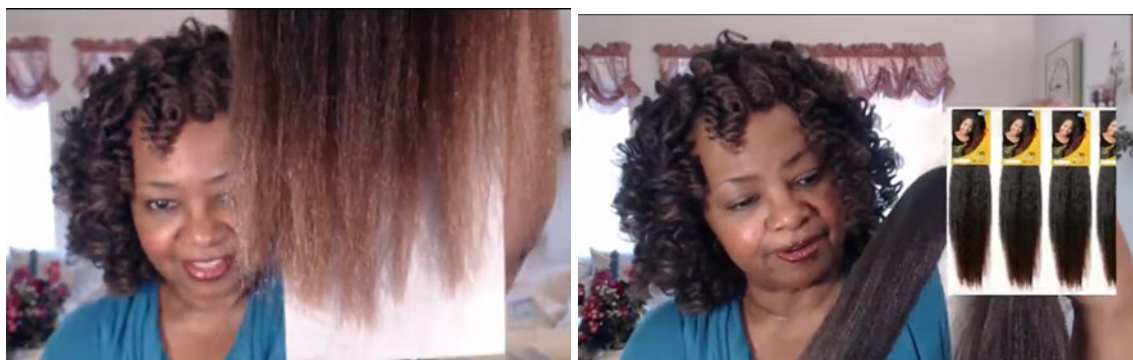
The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the NYSB to the 301 patent is established above.

Respondents contend the NYSB anticipates all of claims 1 and 8, and intervening claims 4 and 7, of the 301 patent. RIB at 53-55. Relevant to these claims, and as determined for the 026 patent, clear and convincing evidence shows the NYSB includes: “bundled synthetic hair” (claim 1), “first bundle” (claim 1), “second bundle . . . shorter than the first length” (claim 1), “folded about a waist” (claim 1), “binder coupled about the waist” (claim 4), “binder is coupled to the backer panel” (claim 7), and “backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side” (claim 8). This accounts for all limitations of claims 4 and 7, leaving claims 1 and 8.

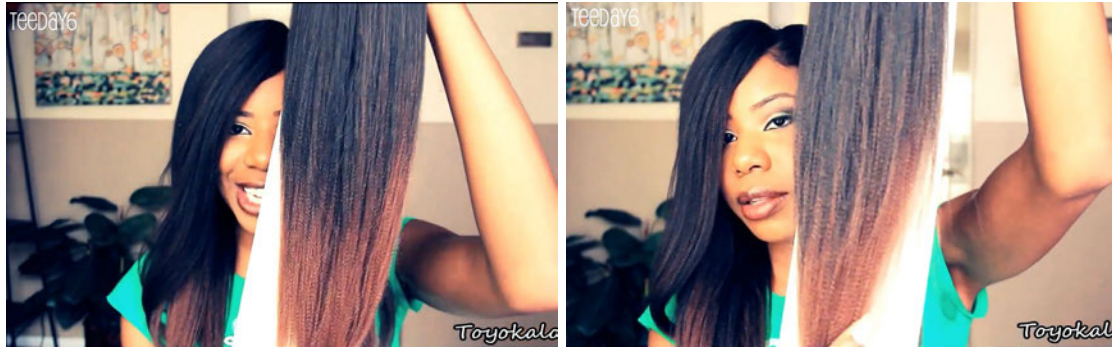
The NYSB includes the remaining limitations of claim 1—“a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist” wherein “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” The narrowing is clearly shown in some of the models within the promotional imagery cited in the discussion of the 026 patent:



CX-0644. The narrowed width was also shown in one YouTube video as the braider lifted the package and again later in reproduced promotional photos to indicate how many packs were used for the hairstyle:



RX-0686 at 2:32, 3:25. The narrowed width appears in the other video as well when the braider lifted the package, and was even more pronounced when they ran their hand down the bundle:



RX-4433 at 0:35, 1:04. Ms. DuPriest offered further corroboration at the evidentiary hearing with an annotated image making explicit the first end, middle, and narrowing to a second end on the RPX-0087 physical sample:



RDX-0001.45 (citing RX-2652); *see* RIB at 53 (citing Hr’g Tr. (DuPriest) at 864:23-865:15). Altogether, there can be no doubt this limitation was literally practiced with the NYSB before the priority date of the 301 patent. 35 U.S.C. § 102(a) (“A person shall be entitled to a patent unless— (1) the claimed invention was . . . in public use . . . before the effective filing date of the claimed invention.”).

[REDACTED]

JBS disputes the limitation, and, like Respondents, refers (unhelpfully) to its briefing section dedicated to the 026 patent. CIB at 145-146. Based on that section, JBS's position is presumably that the narrows limitation is not met because the NYSB "is a blunt bottom braid," demonstrated by a single Amazon store webpage screenshot. CIB at 76 (citing CX-0642). As explained above, the webpage—which admittedly does show a markedly blunt flat bottom—does not outweigh the clear video, promotional, and physical evidence showing a narrowing, tapered bottom end having been practiced at an earlier date by different NYSB products which predate the 301 patent. The limitation is met.

Accordingly, claim 1 and dependent claims 4 and 7 are anticipated by the NYSB.

For claim 8, the remaining limitation is "disposed within a container." Respondents argue that Ms. DuPriest testified using RPX-0087 that the NYSB backer panel and braiding hair are disposed within a plastic container. RIB at 53-54 (citing Hr'g Tr. (DuPriest) at 866:2-20). This is further consistent with all of the physical exhibits submitted for this investigation. JBS does not dispute this element. *See* CIB at 145-146 (Table).

Accordingly, claim 8 is anticipated by the NYSB.

2. Mini Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Mini Braid to the 301 patent is established above.

Respondents contend the Mini Braid anticipates claims 1 and 8 of the 301 patent, as well as intervening claims 4 and 7. RIB at 60. Relevant to these claims, and as determined for the 026 patent, clear and convincing evidence shows the Mini Braid includes: "bundled synthetic hair" (claim 1), "first bundle" (claim 1), "second bundle . . . shorter than the first length" (claim 1), "folded about a waist" (claim 1), "binder coupled about the waist" (claim 4), "binder is coupled to

[REDACTED]

the backer panel” (claim 7), and “backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side” (claim 8). This accounts for all limitations of claims 4 and 7, leaving claims 1 and 8.

The Mini Braid includes the remaining limitations of claim 1—“a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist” wherein “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” The narrowing is shown in the following photographs of RPX-0092:



RX-2800; *see* RIB at 60 (citing Hr’g Tr. (DuPriest) at 892:11-893:8; RX-2808).

JBS disputes the limitation is met, and, like Respondents, refers to its discussions under the 026 patent. CIB at 145-146. Based on those sections, JBS’s position is presumably that the limitation is not met because the true Mini Braid is a flat-bottom braid. As determined above, RPX-0092 is sufficiently authentic of the Mini Braid in existence in 2011. The limitation is met.

Accordingly, claim 1 and dependent claims 4 and 7 are anticipated by the Mini Braid.

[REDACTED]

For claim 8, the remaining limitation is “and disposed within a container.” Respondents argue that the Mini Braid is packaged within a plastic bag container. RIB at 61 (citing Hr’g Tr. (DuPriest) at 892:3-7). This is confirmed by RPX-0092 and consistent with all of the physical exhibits submitted for this investigation, and JBS does not dispute this element. *See* CIB at 145-146 (Table).

Accordingly, claim 8 is anticipated by the Mini Braid.

3. Sunny Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Sunny Braid to the 301 patent is established above.

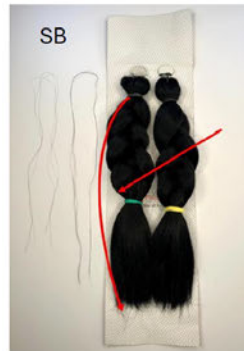
Respondents contend the Sunny Braid anticipates all relevant claims of the 301 patent. RIB at 64-65. Respondents are not persuasive for “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end” in claim 1. Again, Respondents offer no explanation in their briefing on this claim element, instead resting on the testimony of Ms. DuPriest. *See* RIB at 64-65 (citing Hr’g Tr. (DuPriest) at 892:11-12, 893:1-8). And Ms. DuPriest rests her opinion entirely on Ms. Martinez’s infringement opinion using the following demonstrative, which is considered because it conveniently compares two admitted exhibits:

SB: '301, '478 Patent – additional claim elements

- wherein a **width of the perimeter narrows** as the bundled synthetic braiding hair **extends distally from the middle [of the perimeter] to the second end**

[In '301 cl. 1, not in '478, cl. 17]

Based on how Martinez applies this limitation, SB meets it:



RX-2831 (RPX-0095)



(RPX-0073)

RX-0612C.00 (Martinez Report, Appendix A)

RD00001-82

Hr'g Tr. (DuPriest) at 892:24-894:2. The comparison is not effective at demonstrating equivalence. The annotations themselves are not directly comparable, let alone the obvious narrowing in the accused product and less than obvious narrowing in the Sunny Braid. As noted above, this is due to the Sunny Braid's unique use of three binders combined with internal braiding which keep the product relatively narrow in the top and middle as compared to the distal end, where there is no braiding or binding. Without more explanation, a clear and convincing case has not been made.²⁰

²⁰ It is worth acknowledging that practice of "wherein a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end" is particularly mercurial. Shaking the hair braid in its package can often turn a wide distal end (non-infringing) into a narrow end (infringing), and vice versa. So too can a gust of wind or a person's exhalation during close examination. The element is often dependent upon the conditions (all ordinary) rather than the braid's predefined structure. These are lightweight hairs, after all. In addition, the intended use of these products is to be held and physically inspected by the braider before installation—exactly as shown by, for example, the YouTube creators involved with the NYSB. As shown, when the hand moves down the braid, it is natural to grasp and compress the distal end to get its "feel." When doing so, this claim limitation of the 301 patent

4. Asante Short Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Asante Short to the 301 patent is established above.

Respondents contend the Asante Short anticipates claims 1 and 8, and intervening claims 4 and 7, of the 301 patent. RIB at 73. Relevant to these claims, and as determined for the 026 patent, clear and convincing evidence shows the Asante Short includes: “bundled synthetic hair” (claim 1), “first bundle” (claim 1), “second bundle . . . shorter than the first length” (claim 1), “folded about a waist” (claim 1), “binder coupled about the waist” (claim 4), “binder is coupled to the backer panel” (claim 7), and “backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side” (claim 8). This accounts for all limitations of claims 4 and 7 leaving claims 1 and 8.

The Asante Short includes the remaining limitations of claim 1—“a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist” wherein “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” The narrowing is shown in the following photographs in the [REDACTED] record:

becomes met regardless of its resting width. So it is entirely fair to say that it is more likely than not that at some point prior to December 15, 2016, the Sunny Braid was forced to have a narrowed distal end compared to its middle by some user. Yet, a more likely than not standard is not sufficient for invalidity. *i4i Ltd.*, 564 U.S. at 95.



RX-0230C.4; *see* RIB at 73 (citing Hr’g Tr. (DuPriest) at 908:7-22).

JBS disputes the narrowing limitation is met, and, like Respondents, refers to its discussions under the 026 patent. CIB at 145-146. But JBS’s position is only that the evidence is unreliable. As determined above, RX-0230C is sufficiently authentic of the Asante Short in existence in 2013. The limitation is met.

Accordingly, claim 1 and dependent claims 4 and 7 are anticipated by the Asante Short.

For claim 8, the remaining limitation is “and disposed within a container.” Respondents argue that the Asante Short is packaged within a plastic bag container. RIB at 73 (citing Hr’g Tr. (DuPriest) at 909:3-15). This is confirmed by RX-0230C and RX-0136C and consistent with all of the physical exhibits submitted for this investigation, and JBS does not dispute this element. *See* CIB at 145-146 (Table).

Accordingly, claim 8 is anticipated by the Asante Short.



5. Sana Abuja Short Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Abuja Short to the 301 patent is established above.²¹

Respondents contend the Abuja Short anticipates all pertinent claims of the 301 patent. RIB at 77. Relevant to these claims, and as determined for the 026 patent, clear and convincing evidence shows the Abuja Short includes: “bundled synthetic hair” (claim 1), “first bundle” (claim 1), “second bundle . . . shorter than the first length” (claim 1), “folded about a waist” (claim 1), “binder coupled about the waist” (claim 4), “binder is coupled to the backer panel” (claim 7), and “backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side” (claim 8). This accounts for all limitations of claims 4 and 7, leaving claims 1 and 8.

The Abuja Short includes the remaining limitations of claim 1—“a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist” wherein “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” The narrowing is shown in the following photographs in the  record:

²¹ As determined, the record does not clearly and convincingly show the Abuja Long contains bundles of first and second lengths, which is a limitation of all 301 patent Asserted Claims. Thus, it is not discussed further for anticipation.



RX-0228C.1; *see* RIB at 77 (citing Hr’g Tr. (DuPriest) at 920:22-921:12); RX-0229C.3

JBS disputes the limitation, and, like Respondents, refers to its discussions under the 026 patent. CIB at 145-146. But JBS’s position is only that the evidence is unreliable. As determined above, RX-0228C and RX-0229C are sufficiently authentic of the Abuja Short in existence in 2009. The limitation is met.

Accordingly, claim 1 and dependent claims 4 and 7 are anticipated by the Abuja Short.

For claim 8, the remaining limitation is “and disposed within a container.” Respondents argue that the Abuja Short is packaged within a plastic bag container. RIB at 77 (citing Hr’g Tr. (DuPriest) at 921:13-18). This is confirmed by RX-0229C, RX-0228C, and RPX-0064 and consistent with all of the physical exhibits submitted for this investigation, and JBS does not dispute this element. *See* CIB at 145-146 (Table).

Accordingly, claim 8 is anticipated by the Abuja Short.

6. Sana Hi-Yaki Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the HY Braid to the 301 patent is established above.

Respondents contend the HY Braid anticipates all asserted and intervening claims of the 301 patent. RIB at 80. Relevant to these claims, and as determined for the 026 patent, clear and

[REDACTED]

convincing evidence shows the HY Braid includes: “bundled synthetic hair” (claim 1), “first bundle” (claim 1), “second bundle . . . shorter than the first length” (claim 1), “folded about a waist” (claim 1), “binder coupled about the waist” (claim 4), “binder is coupled to the backer panel” (claim 7), and “backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side” (claim 8). This accounts for all limitations of claims 4 and 7 leaving claims 1 and 8.

The HY Braid includes the remaining limitations of claim 1—“a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist” wherein “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” The narrowing is shown in the following photographs in the [REDACTED] record and physical exhibit:



RX-0228C.1; RX-2465; *see* RIB at 80 (citing Hr’g Tr. (DuPriest) at 936:5-19).

JBS disputes the narrowing limitation is met, and, like Respondents, refers to its discussions under the 026 patent. CIB at 145-146. But JBS’s position is only that the evidence is unreliable. As determined above, RX-0228C and RPX-0066 are sufficiently authentic of the HY Braid in existence in 2009. The limitation is met.

Accordingly, claim 1 and dependent claims 4 and 7 are anticipated by the HY Braid.

[REDACTED]

For claim 8, the remaining limitation is “and disposed within a container.” Respondents argue that the HY Braid is packaged within a plastic bag container. RIB at 80 (citing Hr’g Tr. (DuPriest) at 936:20-937:5). This is confirmed by RX-0228C and RPX-0066, consistent with all of the physical exhibits submitted for this investigation. JBS does not dispute this element. *See* CIB at 145-146 (Table).

Accordingly, claim 8 is anticipated by the HY Braid.

7. Ganda Short Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Ganda Short to the 301 patent is established above.

Respondents contend the Ganda Short anticipates the relevant claims of the 301 patent. RIB at 82. Relevant to these claims, and as determined for the 026 patent, clear and convincing evidence shows the Ganda Short includes: “bundled synthetic hair” (claim 1), “first bundle” (claim 1), “second bundle . . . shorter than the first length” (claim 1), “folded about a waist” (claim 1), “binder coupled about the waist” (claim 4), “binder is coupled to the backer panel” (claim 7), and “backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side” (claim 8). This accounts for all limitations of claims 4 and 7 leaving claims 1 and 8.

The Ganda Short includes the remaining limitations of claim 1—“a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist” wherein “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” The narrowing is shown in the following photographs in the [REDACTED] record and physical exhibit:



RX-0230C.3; RX-2621; *see* RIB at 82 (citing Hr’g Tr. (DuPriest) at 928:1-16)

JBS disputes the narrowing limitation is met, and, like Respondents, refers to its discussions under the 026 patent. CIB at 145-146. But JBS’s position is only that the evidence is unreliable. As determined above, RX-0230C and RPX-0082 are sufficiently authentic of the Ganda Short in existence in 2013. The limitation is met.

Accordingly, claim 1 and dependent claims 4 and 7 are anticipated by the Ganda Short.

For claim 8, the remaining limitation is “and disposed within a container.” Respondents argue that the Ganda Short is packaged within a plastic bag container. RIB at 82 (citing Hr’g Tr. (DuPriest) at 928:24-929:3). This is confirmed by RX-0230C and RPX-0082, consistent with all of the physical exhibits submitted for this investigation, and JBS does not dispute this element. *See* CIB at 145-146 (Table).

Accordingly, claim 8 is anticipated by the Ganda Short.

8. GSI RastAfri Freed’m Silky Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Silky Braid to the 301 patent is established above.

[REDACTED]

Respondents contend the Silky Braid anticipates at least claim 1 of the 301 patent. RIB at 87. As determined for the 026 patent, clear and convincing evidence shows the Silky Braid includes: “bundled synthetic hair” (claim 1), “first bundle” (claim 1), “second bundle . . . shorter than the first length” (claim 1), “folded about a waist” (claim 1), “binder coupled about the waist” (claim 4), “binder is coupled to the backer panel” (claim 7), and “backer panel folded, thereby completely spanning a first side . . . and partially spanning a second side” (claim 8). This accounts for all limitations of claims 4 and 7 leaving claims 1 and 8.

The Silky Braid has not been shown to include “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” As determined above, the physical exhibit RPX-0023 on which Ms. Dupriest relies is of little value in this analysis. And the 2010 catalog image antedating the 301 patent (not relied on by Ms. DuPriest) generally does not show a narrowing of width at the distal end. RX-4500.

Accordingly, the Silky Braid has not been shown to anticipate any claim of the 301 patent.

9. GSI RastAfri Original Classic Jumbo Braid

The 301 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Jumbo Braid to the 301 patent is established above. Respondents contend the Jumbo Braid anticipates all of claims 1, 4, 7, and 8 of the 301 patent. RIB at 91-92. Yet, the Jumbo Braid has not been shown to include “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end.” As determined above, the physical exhibit RPX-0024 on which Ms. Dupriest relies is not prior art and has not been shown to represent the product prior to December of 2016. There is no other non-testimonial evidence from before the 301 patent to show the appearance of the braid.

Accordingly, the Jumbo Braid has not been shown to anticipate any claim of the 301 patent.

10. Obviousness

In addition to the above anticipation theories, Respondents contend that claims 1, 4, 7, and 8 would have been obvious in light of the Abuja Short and Abuja Long braids, and the HY Braid, in combination with Sugai, Hayakawa, and Sasayama should those prior art products fail to include any limitation. RIB at 105-106, 123. Sugai, Hayakawa, and Sasayama are all prior art to the 301 patent under 35 U.S.C. § 102 for the same reason as the 026 patent. And given that the Abuja Short and HY Braid have been found to anticipate, these references are not addressed further.

As for the Abuja Long, it is determined above that the [REDACTED] market research report fails to clearly and convincingly show first and second bundles of different lengths. *See* RX-0229C.3. Respondents contend this feature is taught in each of Sugai, Hayakawa, and Sasayama, and a POSITA would have been motivated to include different length strands in the Abuja Long to achieve “‘this naturally tapered tip’ to make the hair ‘look natural.’” RIB at 113 (citing Hr’g Tr. (DuPriest) at 955:1-2). Respondents add, “[t]hus, the very problem that the Asserted Patents purport to solve—eliminating the blunt, unnatural bottom of braiding hair—had already been solved in every segment of the hair accessory industry, and the solution involved the same techniques disclosed in the secondary references.” *Id.* Staff has no position on obviousness after erroneously concluding the Abuja Long is not prior art. SIB at 79.

Respondents are not particularly persuasive. For example, their presentation of obviousness is not tailored to the Abuja Long in any way, so it fails to address that which is fairly plain to see in the [REDACTED] market research report—the Abuja Long already has a fairly naturally shaped distal end. RX-0229C.3. Without further explanation, it is not clear nor convincing why a POSITA would be motivated to further incorporate first and second lengths of hair into the product. *See* RIB at 113 (“the very problem that the Asserted Patents purport to solve—eliminating the blunt, unnatural bottom of braiding hair—had already been solved . . .”); *Kinetic Concepts*,

[REDACTED]

Inc. v. Smith & Nephew, Inc., 688 F.3d 1342, 1369 (Fed. Cir. 2012) (“Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.”). Neither Respondents nor Ms. DuPriest addressed this point. *See* RIB at 111 (citing Hr’g Tr. (DuPriest) at 957:17-958:7). Thus, obviousness has not been shown.

11. Section 112

Respondents further raise challenges to claims 1 and 8 of the 301 patent under 35 U.S.C. § 112. Specifically, they contend JBS’s construction of “braiding hair” raises written description and enablement problems. RIB at 123. With that construction discarded, above, these theories need not be addressed.

VI. U.S. PATENT NO. 10,945,478

A. Level of Ordinary Skill in the Art

Due to the relatedness of the Asserted Patents, the parties rely on the same POSITA definitions proposed for the 026 patent. CIB at 47; SIB at 26; *see generally* RIB at 13-14. Accordingly, a POSITA at the time of the 478 patent invention would have several years of experience with installing hair braid products, the marketing, packaging, and purchasing thereof, and alternatives thereto known in the hair accessories industry.

B. Claims-at-Issue

Claims 17 and 20 of the 478 patent are at issue in this investigation, either through allegations of infringement or domestic industry technical prong. *See* CIB at 147 (“The Accused Products Infringe Asserted Claim 20 (which depends from Claim 17)”). These claims are reproduced below:

17. A hair accessory, comprising:



bundled synthetic braiding hair, comprising:

a first bundle of synthetic hair strands having a first length; and

a second bundle of synthetic hair strands having a second length that is shorter than the first length;

wherein the bundled synthetic braiding hair is folded by about a waist of the bundled synthetic braiding hair to define a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist; and

wherein a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle to the second end.

....

20. The hair accessory of claim 17, wherein the bundled synthetic braiding hair comprises pre-stretched braiding hair.

478 patent at cls. 17, 20.

C. Claim Construction

As noted above, the application leading to the 478 patent was a continuation-in-part of the application leading to the 026 patent. Thus, the two patents share a certain amount of common specification content and intrinsic record, also shared by the 301 patent. *Multi-Tech*, 357 F.3d at 1350. For those 026 and 301 patent claim terms construed above, the same constructions have been applied to the 478 patent where applicable. For the 478 patent, specifically, the parties identify two terms as needing construction, discussed below.

1. “pre-stretched braiding hair”

JBS	Respondents	Staff
“teased or pulled strands of braiding to form a more natural distally narrowed or rounded bottom.”	Plain and ordinary meaning, “stretched braiding hair,” without importing unstated manufacturing steps, appearance-based requirements, or stylist-dependent judgments	Plain and ordinary meaning, which is “stretched braiding hair”



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CIB at 54; RIB at 128; SIB at 46.

“Pre-stretched braiding hair” appears in claim 20 as “wherein the bundled synthetic braiding hair comprises pre-stretched braiding hair.” 478 patent at cl. 20. Despite the constructions included in table above, the parties dispute all aspects of what “pre-stretched” means. For example, JBS’s construction views stretching as “teas[ing]” or “pull[ing]” and reads in a prescribed shape for the overall bundle whose hairs have been stretched; Respondents’ explicitly reject any required shape; and Staff argues its construction of “stretched braiding hair” is the plain and ordinary meaning but argues neither pulling nor a tapered or narrowed bottom need be involved. *See* SIB at 46; SRB at 2-5.

Intrinsic evidence is of the utmost importance in the construction of claims (*Phillips*, 415 F.3d at 1314) and the present intrinsic record supports a mix of Respondents’ and Staff’s position. No party argues anything other than the plain and ordinary meaning should apply (*see Thorner*, 669 F.3d at 1366-67), and the plain meaning of “pre-stretched” is stretched. As Respondents explain, there is only one mention of the term in the specification and it warrants no deviation from the ordinary meaning:

Here, that record is notable for what it does not say. The term “pre-stretched braiding hair” appears only in claim 20 of the ’478 patent and in a single sentence of the specification stating that the synthetic braiding hair “can be pre-stretched synthetic braiding hair or synthetic braiding hair that is not pre-stretched.” JX-03 (’478 patent), 15:62–65. The specification does not define the term, describe how any “pre-stretching” is performed, identify when it occurs, or attribute to it any structural, geometric, or appearance-based characteristics. Nor does it contain any disclaimer or indication that “pre-stretched” was intended to carry a specialized meaning.

RIB at 124. JBS acknowledges the cited passage “refers to the synthetic fibers used to manufacture the final bundled synthetic braiding hair.” CRB at 11.

JBS’s citations to the intrinsic record are ineffective. For example, JBS cites various

[REDACTED]

excerpts from the 026 patent to demonstrate how the term would have been understood. *See* CIB at 53-54. Indeed, JBS affirmatively states “Figures 4-6 and 8-9 of the ‘026 Patent provide an illustrative roadmap of hackling followed by pre-stretching to form the more naturally distally narrowed or rounded bottom as understood by a POSITA.” CIB at 54. Yet the 026 patent never uses the term, let alone as any method or process step to create what is shown in the figures. JBS’s interpretation is thus mere speculation, as is Staff’s. *See also* SRB at 7 (“Figures 8 and 9 of the ’026 patent disclose[] the concept of pre-stretched braiding hair as understood by a person of ordinary skill.”).

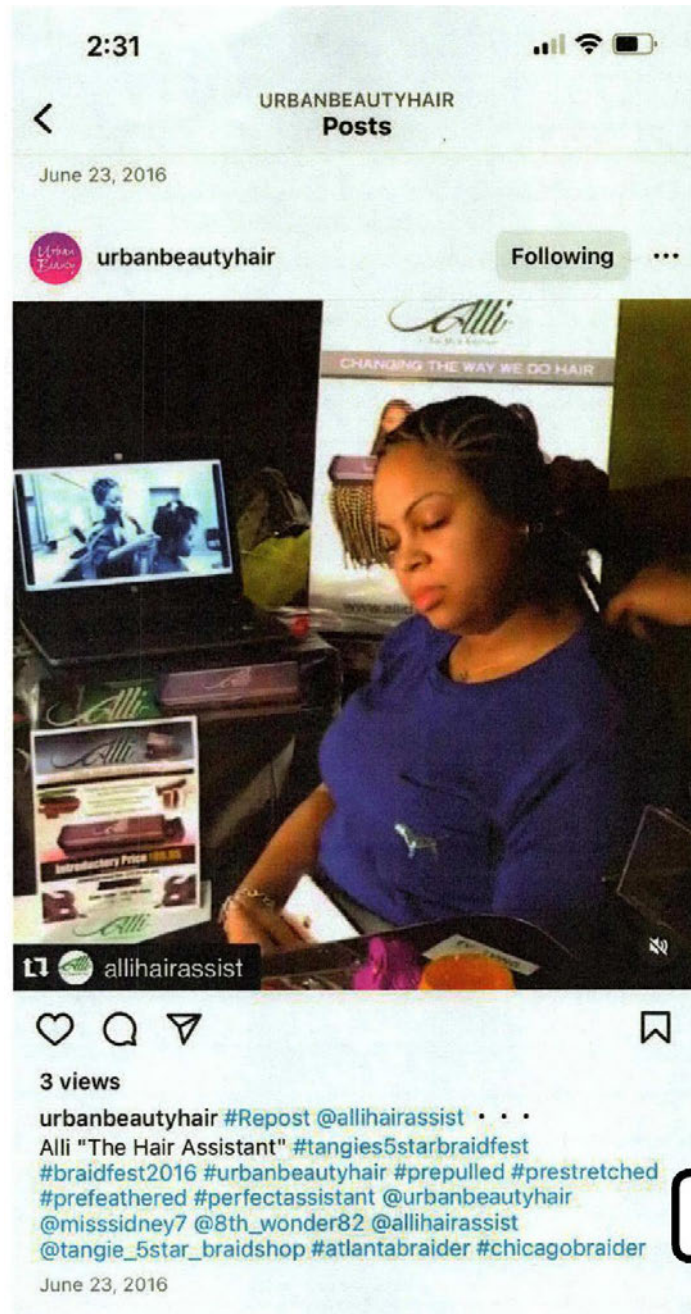
In another example, JBS states:

Figures 1, 2, 5, 6, 12, 13, 15 and 16 [of the 478 patent] illustrate non-pre-stretched or flat bottom synthetic braiding hair used in the manufacturing of the bundled synthetic braiding hair of the claimed inventions. Figures 3, 4, 7, 8, 9 and 10 [of the 478 patent] illustrate pre-stretched synthetic braiding hair used in the manufacture of the bundled synthetic braiding hair of the claimed inventions.

CRB at 11; *see id.* at 11-12. And in another place, JBS states, “[t]he step of pre-stretching is required to pull and tease the hair strands to form a distally narrowed bottom as shown in FIG. 4 of the Asserted Patents and FIG. 8 of the ‘478 Patent.” CRB at 11. Tellingly, neither assertion cites to any passages in the patent that might describe these figures in this way or make a connection to the status of being pre-stretched or not. Again, “pre-stretched” is only used in the singular sentence noted by Respondents. So, again, JBS’s interpretation of the 478 patent specification is speculative at best.

Finally, for that collection of expert and employee testimony offered by JBS, the opinions are not backed by any documentation or contemporary evidence from the time of the invention and so are entitled to little weight. *See generally* CIB at 54 (citing Hr’g Tr. (Martinez) at 398:1-12; Hr’g Tr. (Hwang) at 564:2-549:3; Hr’g Tr. (DuPriest) at 1101:10-23; CRB at 18; SIB at 59;

RIB at 17-18, 22-24; *Phillips*, 415 F.3d at 1313 (citing *Innova*, 381 F.3d at 1116). The few documents bearing on this topic from the relevant time period include a June 2016 social media post which JBS argues shows the first use of the term by the industry (specifically by JBS). CIB at 53 (citing CX-0441C). Yet the post shows no braid with a rounded or distal narrowed bottom and “pre-stretched” is just one of many tags used without explanation:



CX-0441C. Although not mentioned by the parties in the claim construction context, an industry article published in 2011 uses the term “a shorter length-already stretched-attachment” to describe the Solpia Mini Braid, but does not show any images of the braid pre-installation. RX-0416.8. Additionally, a photograph of a prior art synthetic braid submitted to the Patent Office during prosecution of the 026 patent is explicitly labeled “pre-stretched” yet does not have a rounded bottom. In fact it looks like it had a blunt flat bottom and then was pulled to create irregularities:



[REDACTED]

CX-0457C.10, 12; *see* JX-0008.92, 94. This further supports a finding that “pre-stretched” at the time of the invention meant stretched, rather than JBS’s preferred shape.

Staff’s position that no pulling need be involved in a plain meaning of “stretch” is equally ill-supported. For example, and keeping in mind that the 478 patent offers no written discussion of pre-stretched beyond the single sentence appearing at the end of the specification, Staff points to Figures 12 and 13 of the 478 patent, which show varying lengths of hairs hackled together and reasons this is what is meant by “pre-stretched”:

The Staff is of the view that the term “pre-stretched” means that the braiding hair is stretched, e.g., lengthened by shifting or offsetting the hair strands as shown in, for example, Figures 8 and 9 of the ’026 patent and Figures 12 and 13 of the ’478 patent. While the ’478 patent provides little context as to what is meant by “pre-stretched,” the Staff is of the view that the intrinsic record supports this construction.

SRB at 2-3. There is simply no intrinsic support or suggestion for a connection between these figures and the one-off statement at the end of the patent, let alone a connection between that statement and any portion of the 026 patent filed several years earlier. The more reasonable inference is that nothing in the 478 patent which also appears in the 026 patent has anything to do with “pre-stretched.”

Staff further argues that “shifting” strands of hair relative to one another achieves “pre-stretched.” SRB at 2. Only the 478 patent discloses such shifting, in Figures 5 and 6, where bundles of *common length* are shifted or offset to one another before binding and folding:

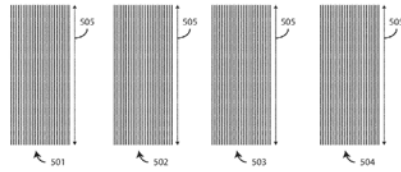


FIG. 5

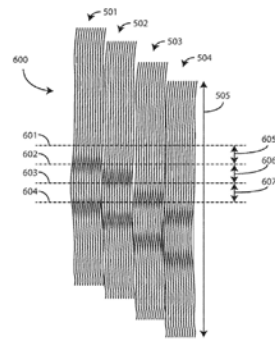


FIG. 6

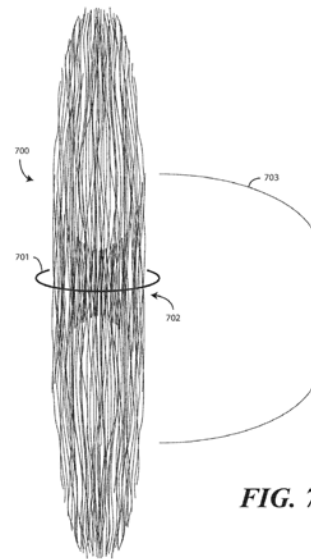


FIG. 7

478 patent at Figs. 5-7; *see id.* at 6:36-8:5. The patent teaches that shifting and combining these bundles, composed of strands having the same length, and hackling them, can create a single bundle with rounded ends as shown in Figure 7. *Id.* at 7:60-8:5. The patent states that hackling is optional (478 patent at 7:60-8:5) but it is difficult to see how the combined bundle of Figure 6 becomes the combined bundle of Figure 7 without hackling. Regardless, there is no more reason to associate this offset technique with pre-stretching than the technique of starting with strands of different lengths. Moreover, to the extent that the shift causes an elongation which is interpreted as stretching, it is the overall bundle which is elongated and not any of the hairs. *See id.* at Fig. 7. This conflicts with the language of the claim, where “pre-stretched” is an attribute of the hair within the bundle. 478 patent at cl. 20 (“wherein the bundled synthetic braiding hair comprises pre-stretched braiding hair”). Ms. DuPriest noted this in her testimony, where she drew a distinction between pre-stretched hairs and pre-stretched bundles of hair: “if we’re talking about the stretched bundle of hair, there should have been a claim wording in there that said stretched bundle of braiding hair. . . . We have always thought about the hairs as the hairs, the bundle is the bundle.” Hr’g Tr. (DuPriest) at 1090:10-1092:4.

[REDACTED]

All that said, Staff astutely observes “pre-stretched” was a term used on at least one piece of prior art packaging as submitted during prosecution, as noted above. SRB at 6 (citing JX-0008.92-94; CX-0457C.10-12). Further noted above, the concept of “already-stretched” also appeared in an early periodical. RX-0416.8. But there is nothing in either document that dispels the plain meaning of stretched, which is having been pulled.

Accordingly, the construction urged by Respondents and Staff is adopted, and “pre-stretched braiding hair” simply means “stretched braiding hair.”

2. “narrows”

Staff identifies the term “narrows” as requiring construction. SIB at 43. Staff offers a construction of “decreases in width.” *Id.* The other parties do not address this term outside of other issues. So its meaning will be determined as required, below.

D. Infringement

According to JBS’s post-hearing briefing, the use, manufacture, or sale of the Group 2 Accused Products (*i.e.*, all Accused Products) infringes claim 20. *See* CIB at 147 (referring to products “with and without backer panel folded”). For the reasons discussed below, JBS has not shown infringement of this claim by these products.

For reference, claim 20 and intervening claim 17 require:

17. A hair accessory, comprising:

bundled synthetic braiding hair, comprising:

a first bundle of synthetic hair strands having a first length; and

a second bundle of synthetic hair strands having a second length that is shorter than the first length;

wherein the bundled synthetic braiding hair is folded by about a waist of the bundled synthetic braiding hair to define a perimeter having a first end collocated with the waist, a middle, and a second end located distally from the waist; and

[REDACTED]

wherein a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle to the second end.

. . . .

20. The hair accessory of claim 17, wherein the bundled synthetic braiding hair comprises pre-stretched braiding hair.

478 patent at cls. 17, 20. In support, JBS generally relies on the testimony of Ms. Martinez and her inspection of the physical products, photographs thereof, and measurements of strand length, and incorporates the argument and evidence presented for the 026 patent. *See generally* CIB at 147-152; CIB at 147 n.72.²²

Respondents similarly incorporate their general and specific disputes made in connection with the 026 patent. RIB at 128. As determined above, these are persuasive with respect to representativeness such that only the Group 2 Representative Accused Products will be considered for infringement. Respondents additionally argue that JBS has not shown that any product includes “pre-stretched” hair as in claim 20. *See* RIB at 128; RRB at 82. Staff’s brief confirms this is the only substantive dispute. SIB at 88-89; SRB at 8-9. This is addressed below.

For all elements of claim 17, which are substantially identical to those of claim 1 of the 301 patent, the expert testimony and evidence cited by JBS shows they are present in the Group 2 Representative Accused Products as alleged—including the previously disputed limitation “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle to the second end.” *See* CIB at 147-148 (“a hair accessory”), 148 (“bundled synthetic braiding hair”), 148-149 (“first bundle,” “second bundle . . . shorter than the first length”), 150

²² Again JBS cites, in a footnote, demonstrative and exhibit-numbered documents which comprise several hundred pages of claim charts in an effort to show representativeness and infringement by the Accused Products. CIB at 147 n.72. For the reasons discussed previously, the charts are not considered for the issue of infringement.

[REDACTED]

(“folded about a waist”), 150-151 (“perimeter narrows”), and associated physical exhibits; Hr’g Tr. (Martinez) at 389:16-391:9. Accordingly, even though not asserted on its own, claim 17 is met in the Accused Products.

As for “pre-stretched braiding hair” in claim 20, JBS has not met its burden. As determined above, “pre-stretched” simply means “stretched” (as in pulled or put in tension) and does not refer to the shape of a folded bundle of hairs. JBS’s initial briefing does not present a cognizable theory under this construction, preferring instead to point to the “distally narrowed or rounded bottom” of each Accused Product as proof:

Claim 20: The hair accessory of claim 17, wherein the bundled synthetic braiding hair comprises pre-stretched braiding hair.

The Accused Products bundled synthetic braiding hair comprises pre-stretched braiding hair (Tr.(Martinez)398:22-25) as labeled below.

. . . .

The Accused Products are pre-stretched as they have teased or pulled strands of braiding hair to form a more natural distally narrowed or rounded bottom. This element is literally met by the Accused Products and/or under the doctrine of equivalents under the following construction offered by Respondents: “Plain and ordinary meaning, *e.g.*, ‘stretched braiding hair.’” The Accused Products literally meet the plain language of the foregoing construction as the different length hair strands in the Accused Products have been pulled to form a distally narrowed or rounded bottom. CDX-26.47. The plain and ordinary meaning of stretched: “to pull”. Webster’s Ninth New Collegiate Dictionary (1984) (CX-03013).

CIB at 151-152. JBS offers no argument in its reply brief to supplement this flawed theory (*see generally* CRB at 38-44) and whether or not synthetic hairs have been “pre-stretched” is not ascertainable from lay inspection of the physical exhibits. And Respondents specifically argue a lack of evidence that the “fibers in any ‘Representative’ Accused Products are stretched or elongated.” RIB at 128.

[REDACTED]

Staff nonetheless argues the limitation is met because the products' labels state "pre-stretched" and the corporate witnesses allegedly admitted it:

The evidence shows that the accused products include pre-stretched braiding hair. Tr. (Martinez) at 398:13-400:23; *see also* CDX-0026.47; CDX-58 to CDX-0078. Specifically, the accused products have a "distally narrowed or rounded bottom" and the bottom is not flat. *See* Tr. (Martinez) at 395:5-19; physical exhibits. Further, the accused products are marketed as pre-stretched. *See* physical exhibits.

Respondents essentially argue a failure of proof by Ms. Martinez. RPBr at 108. However, even if true, the physical evidence, including the packaging for the accused products, and depositions of Respondents' corporate witnesses show that the accused products are pre-stretched.

Id. at 88-89.

Staff is not persuasive. First, it must be appreciated that despite appearing in the caption of the investigation and on every DI Product and Accused Product packaging, and being central to JBS's alleged contribution to the industry (Hr'g Tr. (Jhin) at 56:8-12, 56:24-58:3, 65:8-15), there is no evidence in the record of how JBS or any Respondent actually stretches the strands of hair as part of manufacturing. Staff certainly cites none in its writeup. *See* SIB at 88-89. And this is true even with JBS stating in its briefing, repeatedly, that stretching is a real manufacturing step distinct from, for example, hackling:

The step of hackling is followed by the step of pre-stretching during manufacture by pulling or teasing the strands of braiding hair having differing lengths so that the base has a more natural look by being uneven . . . i.e., the base or bottom of the braiding hair is distally narrowed or rounded, not flat or blunt, to form the substantially cardioid shaped perimeter that became the new standard in the synthetic braiding hair industry desired by braiders and consumers for braiding hair installation and styling . . .

CIB at 36-37;

At the Hearing, inventor Justin Lee explained (Tr.(Lee)180:12-181:23) that Col. 2, l. 59 - Col. 3, l. 3 of the '026 patent (JX-4) teaches: "we are trying to make the end portion to become narrower, as it goes towards the bottom, and this pulling and teasing process in terms of the hair strand would become part of the manufacturing process, and that is being disclosed, is my understanding."

Staff contends (SBR.47) that pre-stretched is not limited to pulling and teasing to form a distally narrowed or rounded bottom, but can be achieved by hackling. However, hackling is a separate step from pre-stretching. “Hackling is a process where we comb the hairs.” . . . Hackling evenly distributes the hair strands of two separate lengths but does not create a distally narrowed bottom. . . . The step of -pre-stretching is required to pull and tease the hair strands to form a distally narrowed bottom as shown in FIG. 4 of the Asserted Patents and FIG. 8 of the ’478 Patent.

CRB at 10-11. Indeed, Respondent’s expert, Ms. DuPriest, credibly conceded it is now just a marketing term. Hr’g Tr. (DuPriest) at 871:2-17 (“Pre-stretching” is a new term), 996:19-997:2 (“pre-stretched” does not make any individual hair longer “the way industry talks about that”). Beauty Essence’s witness, Ms. Julie Yeo, essentially testified the same. Hr’g Tr. (Yeo) at 785:21-788:22. But that it now may be just a marketing term is not particularly relevant to understanding the claim at the time of the invention. *Phillips*, 415 F.3d at 1313 (citing *Innova*, 381 F.3d at 1116).

Ms. DuPriest also took the position, with respect to multiple prior art products, that hackling would have constituted “pre-stretching” because of how it rearranges or shifts the strands relative to one another (*see, e.g.*, Hr’g Tr. (DuPriest) at 869:25-870:21, 895:4-16, 937:15-21, 997:3-25, 937:15-21, 953:17-954:1), but this does not meet the claim construction arrived at above. Even then, her understanding appears to be entirely second-hand (*id.* at 870:3-9 (noting her opinion is based on how hackling was described to her)) and fluctuates to an application of JBS’s construction at times (*id.* at 875:5-19 (“Well, it’s, obviously, what I would call not a – you know, a deep stretch that comes to a point, but a very pronounced, rounded or almost ovaled bottom, which tells me that its’ not a flat bottom braid, and that it has been stretched.”)). It is also unlikely given the specification of the 478 patent which uses “pre-stretched” one time, but hackling over twenty times, with no connection made between them. *See generally* 478 patent. So evidence of

██

hackling in the record has no clear bearing on whether any Accused Product comprises pre-stretched braiding hair.

Thus, given the absence of any actual stretching during manufacturing in the record, it is equally likely, if not more so, that the rounded shapes achieved by the products in this investigation were accomplished by cutting strands to different lengths or perhaps shifting the hairs during hackling—far simpler techniques than recreating the manual stretching process used in salons. *See, e.g.*, Hr’g Tr. (Chung) at 734:4-737 (describing cutting to different lengths then hackling); Hr’g Tr. (Crawley) at 1058:6-22 (“So during this era we didn’t have what we call today pre-stretched hair.”); Hr’g Tr. (Adams) at 242:13-243:15 (explaining that non pre-stretched hair was first used until JBS’s inception of pre-stretched hair).

Accordingly, neither JBS nor Staff has shown claim 20 is met in the Accused Products.

E. Domestic Industry – Technical Prong

According to JBS’s post-hearing briefing, all DI Products practice claim 20 (which depends from claim 17) of the 478 patent. CIB at 152. As with infringement, JBS presents its theory via the Group 1 Representative DI Product (QB Single 50) and the Group 2 Representative DI Product (QB 3X Multi 50) as supported by photographs and testimony from Ms. Martinez. *See* CIB at 152-156.²³ Staff agrees that claims 17 and 20 are practiced. SIB at 89-90.

In contrast to its arguments on infringement of the 478 patent, Respondents’ opposition here is limited to an incorporation by reference of its 026 patent technical prong opposition. *See* RIB at 128; RRB at 82. As discussed, the first portion of the opposition is based on a claim construction that is not adopted, and the second portion is persuasive in that JBS has not

²³ Here, again, JBS cites an exhibit-number document comprising several claim charts in an effort to show representativeness and claim practice by the DI Products. CIB at 152 (citing CX-0574). For the reasons explained above, this exhibit and others like it are not considered.

[REDACTED]

sufficiently established representativeness of the Group 1 DI Products by the QB Single 50 or the Group 2 DI Products by the QB 3X Multi 50.

Accordingly, there is no dispute that the QB Single 50 and QB 3X Multi 50 practice claim 20 of the 478 patent—including the “pre-stretched” limitation, despite there being no evidence in the record that the strands of hair making up the DI Products are actually stretched, as opposed to cut to different lengths and hackled to achieve the tapered effect. Thus, in light of the non-opposition from Respondents, and the expert testimony and evidence cited, JBS has shown all limitations of dependent claim 20 are present in the Group 1 Representative DI Product and the Group 2 Representative DI Product. *See* CIB at 152 (“a hair accessory”), 152-153 (“bundled synthetic braiding hair”), 153-154 (“first bundle,” “second bundle . . . shorter than the first length”), 154-155 (“folded about a waist”), 155-156 (“perimeter narrows”), 156 (“comprises pre-stretched hair”); Hr’g Tr. (Martinez) at 428:14-430:2, 433:25-434:2; *Certain Marine Air Conditioning Systems, Components Thereof, and Products Containing the Same*, Inv. No. 337-TA-1346, Comm’n Op. at 68-71, 76-77 (Mar. 11, 2024) (“*Marine Air Conditioning*”) (holding ALJ may not make findings “beyond the issues and arguments raised by the parties.”).

This leaves the remaining Group 1 DI Products and Group 2 DI Products. As with the 301 patent, the record evidence speaks for itself. Claim 17 of the 478 patent is nearly identical to claim 1 of the 301 patent. Accordingly, the record supports finding the Group 1 DI Products and Group 2 DI Products practice claim 17 of the 478 patent for the same reasons that claim 1 of the 301 patent is practiced. And given the overall lack of opposition to “pre-stretched” from Respondents, the remaining Group 1 DI Products and Group 2 DI Products have been shown to practice claim 20. *Marine Air Conditioning*, Inv. No. 337-TA-1346, Comm’n Op. at 68-71, 76-77.



F. Validity

For the 478 patent, Respondents again refer to their anticipation, obviousness, and Section 112 theories presented for the 026 patent (RIB at 133, 134, 137), and further address those limitations specific to the 478 patent asserted claim. Respondents present an additional anticipation theory based on the priority date of the patent and commercial sale of the DI Products, as well as unique section 112 issues. RIB at 135-136. Respondents have shown the invalidity of claim 20.

1. Priority Date and the DI Products

Alone among the Asserted Patents, the parties dispute the proper priority date for asserted claim 20 of the 478 patent which, as noted above, is a continuation-in-part of the application that became the 026 patent. For background, the claim reads, “[t]he hair accessory of claim 17, wherein the bundled synthetic braiding hair comprises pre-stretched braiding hair” and the only mention of “pre-stretched” in the specification is: “For example, the synthetic braiding hair used with embodiments of the disclosure can be pre-stretched synthetic braiding hair or synthetic braiding hair that is not pre-stretched.” 478 patent at cl. 20, 15:62-65.

Respondents argue the 026 specification fails to provide adequate written description for the pre-stretched subject matter of claim 20 and thus claim 20 is not entitled to the 026 patent’s priority date. RIB at 128-130. According to Respondents, this means claim 20 receives the priority date of the 478 patent application itself which is August 13, 2020 (*id.* at 132) and, if so, JBS’s own DI Product becomes anticipating prior art (*id.* at 133-134 (“Queen B was commercially available and in public use well before August 13, 2020. Complainant does not dispute that Queen B predates that filing date.”)).

The only issue JBS and Staff raise is whether the 026 patent provides adequate written description for claim 20. The 026 patent unquestionably does not teach or suggest stretching the

[REDACTED]

synthetic hairs of the bundle. It is a new concept introduced by the 478 patent specification. Importantly, that the concept of stretching would have been known in the art and an obvious action to take when conditioning a braid is of no consequence to this inquiry. *Rivera v. Int'l Trade Comm'n*, 857 F.3d 1315, 1321-22 (Fed. Cir. 2017) (citing *Lockwood v. Am. Airlines*, 107 F.3d 1565, 1571-72 (Fed. Cir. 1997)); *see* CIB at 53-54 (“The costly and time-consuming step of stretching was previously manually performed by braiders . . .”); SRB at 6-7 (“Several witnesses also testified that the term ‘pre-stretched’ was understood as of 2016. . . . Ms. Chung testified that the stretching [of] braiding hair by hackling was done ‘pretty much since forever.’ . . . Therefore, the Staff is of the view that the ’026 patent specification provides adequate written description . . .”). Rather, “one skilled in the art, reading the [026 patent], must reasonably discern the limitation at issue in [claim 20].” *Crown Operations Intern., Ltd. v. Solutia Inc.*, 29 F.3d 1367, 1376 (Fed. Cir. 2002) (citing *Waldemar Link, GmbH & Co. v. Osteonics Corp.*, 32 F.3d 556, 558 (Fed. Cir. 1994)). The 026 patent does not contain any instruction or description of pre-stretching, or lack thereof, apart from “teasing.” But, notably, the disclosure of “pre-stretching” in the 478 patent appears in addition to the same teaching of “teasing,” thereby implying they are two different concepts. *See* 026 patent at 2:59-67 (discussing “teasing” by hair stylists); 478 patent at 3:19-28 (same), 15:62-65 (introducing “pre-stretched”).

So given the finding, uncontested by any party, that the DI Products practice claim 20 and the finding, uncontested by JBS, that the DI Products were available for sale and used prior to August 13, 2020, claim 20 is anticipated by the DI Products.

2. New York Short Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the NYSB to the 478 patent is established above.

[REDACTED]

Respondents contend the NYSB anticipates claim 20 of the 478 patent. RIB at 53-55. Relevant to these claims, and as determined for the 026 and 301 patents, clear and convincing evidence shows the NYSB includes: “bundled synthetic hair” (claim 17), “first bundle” (claim 17), “second bundle . . . shorter than the first length” (claim 17), “folded about a waist” (claim 17), “a perimeter having a first end. . . middle . . . and a second end located distally” (claim 17), and “perimeter narrows” (claim 17). This accounts for all limitations of claim 17.

For dependent claim 20, which recites, “the bundled synthetic braiding hair comprises pre-stretched braiding hair,” Respondents rely on a few different theories. First, they argue, “Ms. DuPriest applied Ms. Martinez’s construction of ‘pre-stretched’—*i.e.*, teased or pulled strands of braiding hair with different lengths forming a more natural, distally narrowed, rounded bottom, and found the NYSB meets this element.” RIB at 54 (citing Hr’g Tr. (DuPriest) at 867:1-13). They add, “[s]he further demonstrated this by fanning out the hair bundle from RPX-87 to show that ‘there’s teasing and feathering. The entire bundle of synthetic hair is completely feathered and teased all over.” *Id.* (citing Hr’g Tr. (DuPriest) at 867:15-20). Third, Respondents look to the Evergreen manufacturing specification’s reference to “combing,” interpreted to be the same as hackling which Respondents argue is sufficient. *Id.* (citing Hr’g Tr. (DuPriest) at 867:21-870:21). Staff agrees the limitation is met. SIB at 90-91.

Respondents are not persuasive. As determined above, “pre-stretched” means “stretched” and is not shown simply by a bundle of synthetic hair with a natural-looking non-blunt bottom end. Respondents’ and Ms. DuPriest’s reliance on the approach by Ms. Martinez falls short for this reason, as does their reference to “hackling,” as discussed above for infringement and technical prong. *See, e.g.*, RIB at 135 (“Nothing in the intrinsic record defines ‘pre-stretched,’ disclaims alternative meanings, or equates the term with hackling, other process steps, or the visual

[REDACTED]

appearance of a tapered or rounded bottom.”); RRB at 86 (“As the hearing testimony made clear, techniques such as mixing fibers during hackling or offsetting fibers of different lengths can produce a tapered appearance without stretching the fibers themselves. Those techniques do not yield ‘pre-stretched braiding hair’ as a compositional or physical characteristic of the hair.”). So too does Staff’s reasoning on “shifted” strands and the opinion of Ms. Crawley. *See* SIB at 91 (citing Hr’g Tr. (Crawley) at 1069:22-1070:2). As for Ms. DuPriest’s specific observation and opinion that the physical exhibit sample that is RPX-0087 has been “completely feathered and teased all over,” this is suggestive that actual stretching occurred to some of the strands but is not enough on its own to show how the product would have existed prior to December 15, 2016 under a clear and convincing standard. Moreover, the Accused Products and DI Products submitted as physical exhibits all have the same natural non-blunt ends, and Respondents deny these products have been “pre-stretched.” *See* RIB at 128.

Accordingly, claim 20 is not anticipated by the NYSB.

3. Mini Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the Mini Braid to the 478 patent is established above.

Respondents contend the Mini Braid anticipates claim 20 of the 478 patent. RIB at 61-62. Relevant to these claims, and as determined for the 026 and 301 patents, clear and convincing evidence shows the Mini Braid includes: “bundled synthetic hair” (claim 17), “first bundle” (claim 17), “second bundle . . . shorter than the first length” (claim 17), “folded about a waist” (claim 17), “a perimeter having a first end. . . middle . . . and a second end located distally” (claim 17), and “perimeter narrows” (claim 17). This accounts for all limitations of claim 17.

[REDACTED]

For dependent claim 20, which recites, “the bundled synthetic braiding hair comprises pre-stretched braiding hair,” Respondents take the same approach as for the NYSB, which is to argue Ms. DuPriest “fann[ed] out the fibers to confirm the pre-stretched component and by consulting the manufacturing specification sheets, which indicate extensive brushing and hackling.” RIB at 61 (citing Hr’g Tr. (DuPriest) at 894:3-16, 894:24-895:16; RX-2805; RX-0242). Respondents draw specific attention to the manufacturing specification’s call for “extensive brushing” which the Solpia Nigeria witness testified was needed for “the ‘irregular look.’” *Id.* (citing RX-242C.4; JX-0040C (Shin) at 28:22-25). Staff agrees the limitation is met. SIB at 90, 91-92.

It is a close call but the record evidence is not clear and convincing. Respondents’ theory suffers from the same problems applicable to the NYSB, which is that “pre-stretched” means “stretched” and is not shown simply by a bundle of synthetic hair with a natural-looking non-blunt bottom end. Ms. DuPriest’s visual observations are relevant but do not on their own rise to clear and convincing. And it is not clear how the Mini Braid manufacturing specification’s reference to brushing is any different from hackling—even if accepted as reliable. JX-0039C (Shin) at 42:6-43:20 (“Q. Are you familiar with the term ‘hackling’? A. Yes. Q. Can you describe to us what the term ‘hackling’ means? A. Hackling means brushing. . . . Q. Can you describe to us what it looks like? A. It is a type of brush where many iron pins are implanted into a plastic surface. . . . Q. And is that – have you -- would it resemble something that would look like a bed of nails? A. That’s right.”); RIB at 62 (“The MB’s manufacturing specification indicates the fibers are hackled as part of the production process.”); Hr’g Tr. (DuPriest) at 895:4-9 (“it’s a very short braid, so they have to stretch it quiet a bit, meaning they have to brush and hackle it”). This finding is reasonable despite, uniquely in the record, the 2011 Black Beauty Magazine specifically touting the Mini Braid as having been “mechanically stretched” just as would be done in a salon. RX-0253.10.

[REDACTED]

The manufacturing specification does not disclose any step resembling mechanical stretching. *See* RX-0242C.

Accordingly, claim 20 is not anticipated by the Mini Braid.

4. Sunny Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the Sunny Braid to the 478 patent is established above.

Respondents contend the Sunny Braid anticipates claim 20 of the 478 patent. RIB at 65. Like claim 1 of the 301 patent, independent claim 17 of the 478 patent requires, “wherein a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle to the second end.” 478 patent at cl. 17. As determined above, Respondents have not shown the Sunny Braid so narrows under the 301 patent. Neither they nor Ms. DuPriest offer any additional explanation particular to the 478 patent. RIB at 65; Hr’g Tr. (DuPriest) at 894:3-15; *see generally* RRB at 49-50. This is in addition to the problems surrounding “pre-stretched” which apply here as well.

Accordingly, the Sunny Braid has not been shown to anticipate any claim of the 478 patent.

5. Asante Short Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the Asante Short to the 478 patent is established above.

Respondents contend the Asante Short anticipates claim 20 of the 478 patent. RIB at 73-74. Relevant to these claims, and as determined for the 026 and 301 patents, clear and convincing evidence shows the Asante Braid includes: “bundled synthetic hair” (claim 17), “first bundle” (claim 17), “second bundle . . . shorter than the first length” (claim 17), “folded about a waist”

[REDACTED]

(claim 17), “a perimeter having a first end. . . middle . . . and a second end located distally” (claim 17), and “perimeter narrows” (claim 17). This accounts for all limitations of claim 17.

For dependent claim 20, which recites, “the bundled synthetic braiding hair comprises pre-stretched braiding hair,” Respondents argue it is pre-stretched because the two different length bundles are “hackled and brushed to create irregular, tapered ends,” and refer to either a definition of “pre-stretched” from Solpia Kenya’s Mr. Jeong or JBS’s construction of ““teased or pulled strands of braiding hair having different lengths to form a more natural distally narrowed or rounded bottom.”” RIB at 73-74 (citing JX-0041C (Jeong) at 43:1-4, 47:21-22, 48:1-6; Hr’g Tr. (DuPriest) at 909:16-910:11). Staff agrees the limitation is met. SIB at 92.

Respondents are not persuasive. “Pre-stretched” means “stretched” and is not shown simply by a bundle of synthetic hair with a natural-looking non-blunt bottom end. Further, hackling and combing have been shown to be distinct processes from stretching. For its part, Staff draws attention to the specific field in the Solpia Kenya manufacturing specification that reads “Length After Mixing” and reports lengths longer than in a cutting step. SIB at 92 (citing RX-0137C); *see* RX-0136C. But “mixing” in a plain and ordinary sense is not the same as stretching. Any changes in bundle length from mixing may be due to shifting of the fibers, as the 478 patent describes the prior art.

Accordingly, claim 20 is not anticipated by the Asante Short.

6. Sana Abuja Short Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the Abuja Short to the 478 patent is established above.

Respondents contend the Abuja Short anticipates claim 20 of the 478 patent. RIB at 78. Relevant to these claims, and as determined for the 026 and 301 patents, clear and convincing

[REDACTED]

evidence shows the Abuja Short includes: “bundled synthetic hair” (claim 17), “first bundle” (claim 17), “second bundle . . . shorter than the first length” (claim 17), “folded about a waist” (claim 17), “a perimeter having a first end. . . middle . . . and a second end located distally” (claim 17), and “perimeter narrows” (claim 17). This accounts for all limitations of claim 17. Accordingly, claim 17 is anticipated by the Abuja Short.

For dependent claim 20, which recites, “the bundled synthetic braiding hair comprises pre-stretched braiding hair,” Respondents argue it is pre-stretched “based on [Ms.] Martinez’s application of the construction” and because Ms. DuPriest ““fanned out the fibers on the slide so that she could see the internal structure. It’s indeed been stretched.”” RIB at 78 (citing Hr’g Tr. (DuPriest) at 921:19-24, 922:1-5).

Respondents are not persuasive. As determined above, “pre-stretched” means “stretched” and is not shown simply by a bundle of synthetic hair with a natural-looking non-blunt bottom end. So Respondents’ reliance on Ms. Martinez’s approach is not sufficient, nor are Ms. DuPriest’s visual observations, which are not clear and convincing evidence of stretching.

Accordingly, claim 20 is not anticipated by the Abuja Short.

7. Sana Hi-Yaki Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the HY Braid to the 478 patent is established above.

Respondents contend the HY Braid anticipates claim 20 of the 478 patent. RIB at 80. Relevant to these claims, and as determined for the 026 and 301 patents, clear and convincing evidence shows the HY Braid includes: “bundled synthetic hair” (claim 17), “first bundle” (claim 17), “second bundle . . . shorter than the first length” (claim 17), “folded about a waist” (claim 17), “a perimeter having a first end. . . middle . . . and a second end located distally” (claim 17), and

[REDACTED]

“perimeter narrows” (claim 17). This accounts for all limitations of claim 17. Accordingly, claim 17 is anticipated by the HY Braid.

For dependent claim 20, which recites, “the bundled synthetic braiding hair comprises pre-stretched braiding hair,” Respondents argue it is pre-stretched “under Martinez’s own definition: it has teased or pulled strands of braiding hair having different lengths forming a distally narrowed bottom” and because Ms. DuPriest “fanned out the fibers to confirm the repositioned structure characteristic of hackling, demonstrating satisfaction of the pre-stretching element.” RIB at 80 (citing Hr’g Tr. (DuPriest) at 937:6-14, 937:15-21).

Respondents are not persuasive. As determined above, “pre-stretched” means “stretched” and is not shown simply by a bundle of synthetic hair with a natural-looking non-blunt bottom end. So Respondents’ reliance on Ms. Martinez’s approach is not sufficient, nor are Ms. DuPriest’s visual observations, which are not clear and convincing evidence of stretching.

Accordingly, claim 20 is not anticipated by the HY Braid.

8. Ganda Short Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the Ganda Short to the 478 patent is established above.

Respondents contend the Ganda Short anticipates claim 20 of the 478 patent. RIB at 82. Relevant to these claims, and as determined for the 026 and 301 patents, clear and convincing evidence shows the Ganda Short includes: “bundled synthetic hair” (claim 17), “first bundle” (claim 17), “second bundle . . . shorter than the first length” (claim 17), “folded about a waist” (claim 17), “a perimeter having a first end. . . middle . . . and a second end located distally” (claim 17), and “perimeter narrows” (claim 17). This accounts for all limitations of claim 17. Accordingly, claim 17 is anticipated by the Ganda Short.

[REDACTED]

For dependent claim 20, which recites, “the bundled synthetic braiding hair comprises pre-stretched braiding hair,” Respondents argue it is pre-stretched “under Martinez’s own definition: it has teased or pulled strands of braiding hair having different lengths forming a distally narrowed bottom” and because Ms. DuPriest “fanned out the fibers to confirm the repositioned structure characteristic of hackling, demonstrating satisfaction of the pre-stretching element.” RIB at 82 (citing Hr’g Tr. (DuPriest) at 929:4-12).

Respondents are not persuasive. As determined above, “pre-stretched” means “stretched” and is not shown simply by a bundle of synthetic hair with a natural-looking non-blunt bottom end. So Respondents’ reliance on Ms. Martinez’s approach is not sufficient, nor are Ms. DuPriest’s visual observations, which are not clear and convincing evidence of stretching.

Accordingly, claim 20 is not anticipated by the Ganda Short.

9. GSI RastAfri Freed’m Silky Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the Silky Braid to the 478 patent is established above.

Respondents contend the Silky Braid anticipates claim 20 of the 478 patent. RIB at 87-88. Yet as determined above, the record does not show the Silky Braid meets “a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle to the second end” as in claim 17. Moreover, as it concerns claim 20, specifically, the evidence does not show the Silky Braid was “pre-stretched” by virtue of it being hackled, even if RPX-0023 is accepted as reflective of the prior art version of the Silky Braid. *See* RIB at 88 (citing Hr’g Tr. (DuPriest) at 944:18-945:4).

Accordingly, the Silky Braid has not been shown to anticipate any claim of the 478 patent.



10. GSI RastAfri Original Classic Jumbo Braid

The 478 patent has either the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) or one much later, so the prior art status of the Jumbo Braid to the 478 patent is established above. Respondents contend the Jumbo Braid anticipates claim 20 of the 478 patent. RIB at 92. Yet, the Jumbo Braid has not been shown to include the limitation of claim 17—“a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle to the second end.” The evidence also does not show the Jumbo Braid was “pre-stretched” by virtue of it being hackled, even if RPX-0024 is accepted to be reflective of the prior art version of the Jumbo Braid. *See* RIB at 92 (citing Hr’g Tr. (DuPriest) at 949:16-19).

Accordingly, the Jumbo Braid has not been shown to anticipate any claim of the 478 patent.

11. Obviousness

In addition to the above anticipation theories, Respondents contend that dependent claim 20 would have been obvious in light of the Abuja Short and Abuja Long braids, and the HY Braid, in combination with Sugai, Hayakawa, Sasayama, and a fourth reference Han (RX-1681) should those prior art products fail to include any limitation. RIB at 105-106. There is no dispute that Han was published prior to the 478 patent priority date of August 13, 2020 and is prior art under 35 U.S.C. § 102. RIB at 109; RX-1681 at Cover (published June 27, 2019). None of the Abuja Short, Abuja Long, or HY Braid have been found to anticipate claim 20 because none disclose or were found to comprise “pre-stretched braiding hair.”

Respondents have also not met their burden on obviousness. Oddly, when discussing the motivations of a POSITA, Respondents do not address the “pre-stretched” teaching in Han at all. *See* RIB at 112-117, 134. Even if they had, it would be difficult to find a motivation to pre-stretch given that each of Abuja Short, Abuja Long, and HY Braid already have fairly natural looking

[REDACTED]

distal ends. RX-0229C.3; RX-0228C.1; *Kinetic Concepts*, 688 F.3d at 1369. In addition, claim 17, from which claim 20 depends, requires hair bundles of varying lengths (478 patent at cl. 17) and Respondents have not shown this would have been an obvious modification for the Abuja Long, as explained above. Thus, Respondents have not shown all limitations would be met in the proffered combinations, and generally have not carried their burden, so the objective evidence of non-obviousness has not been considered.

12. Section 112

Respondents raise further challenges to claims 17 and 20 of the 478 patent under 35 U.S.C. § 112. First, they contend JBS's construction of "braiding hair" in claim 17 raises written description and enablement problems. RIB at 118-119, 137. With that construction discarded, above, these theories need not be addressed.

Respondents also contend "pre-stretched braiding hair" in claim 20 raises written description, enablement, and indefiniteness issues. RIB at 135-136; RRB at 86. Although not entirely clear, the written description challenge appears to require finding that the 026 patent priority date carries over (*see* RIB at 135), but it does not.

Respondents' enablement and indefiniteness challenges both refer to the specification's sole statement on "pre-stretched" ("the synthetic braiding hair used with embodiments of the disclosure can be pre-stretched synthetic braiding hair or synthetic braiding hair that is not pre-stretched") to argue it "provides no manufacturing steps, parameters, or objective criteria for producing" said hair (RIB at 135) and "provides no objective boundary for what constitutes stretching or how compliance would be determined" (*id.* at 136). Additionally, for enablement, Respondents argue, "[t]he specification does not explain how the braiding hair fibers are stretched, when any stretching occurs, the degree or nature of stretching required, or how compliance would be determined." *Id.* at 135-136.

[REDACTED]

Respondents are not persuasive. Their list of unresolved possibilities for how, when, and to what degree the stretching must occur (for lack of enablement) betrays its assertion that “pre-stretched” is somehow an unknown act (for indefiniteness). As determined above, “pre-stretched” simply means “stretched” as in lengthened by pulling. Among other evidence in the record, Respondents’ own 2011 Black Beauty Magazine specifically refers to the prior art Mini Braid product as having been “mechanically stretched” just as would be done in a salon. RX-0253.10. This both supports the ordered construction and shows a POSITA would know how to accomplish it and what it means. Perhaps tellingly, Respondents advance both arguments without any reference to the “at least 2 years of experience and training in hair extension artistry and the design and application of hair extensions” with which a POSITA under their proposal would approach the term. RIB at 13-14. Nor do they cite the *Wands* factors or any supporting testimony from Ms. DuPriest. RIB at 135-136; *see In re Wands*, 858 F.2d at 736-37. Altogether then, a clear and convincing case has not been made.

VII. U.S. PATENT NO. 12,127,616

A. Level of Ordinary Skill in the Art

Due to the relatedness of the Asserted Patents, the parties rely on the same POSITA definitions proposed for the 026 patent. CIB at 47; SIB at 26; *see generally* RIB at 13-14. Accordingly, a POSITA at the time of the 616 patent invention would have several years of experience with installing hair braid products, the marketing, packaging, and purchasing thereof, and alternatives thereto known in the hair accessories industry.

B. Claims-at-Issue

Claim 11 of the 616 patent is at issue in this investigation, through allegations of infringement and domestic industry technical prong. *See* CIB at 158-159, 164. The claim is reproduced below:

11. A hair accessory, comprising:

bundled synthetic braiding hair, comprising:

a first bundle of synthetic hair strands having a first length; and

a second bundle of synthetic hair strands having a second length that is shorter than the first length;

wherein:

the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side;

the bundled synthetic braiding hair is folded about a waist to define the perimeter; and

the perimeter has a first end collocated with the waist on the first side and a second end located distally from the first end on the second side.

616 patent at cl. 11.

C. Claim Construction

As noted above, the application leading to the 616 patent was a continuation of the application leading to the 301 patent, itself a continuation of the 026 patent. Thus, the three patents share a certain amount of common specification content and intrinsic record. *Multi-Tech*, 357 F.3d at 1350. For those 026 and 301 patent claim terms construed above, the same constructions have been applied to the 616 patent where applicable. For the 616 patent, specifically, the parties identify a number of terms as needing construction, discussed below.

1. “hackled”

JBS	Respondents	Staff
“combed”	“combed, e.g., pulled across a series of posts”	“combed, e.g., pulled through a bed of metal or plastic spikes”

CIB at 56; RIB at 138; SIB at 47.

“Hackled” appears in claim 11 as “the bundled synthetic braiding hair is hackled.” 616 patent at cl. 11. As shown the table above, the parties essentially agree that “hackled” means “combed.” Yet Respondents seek to further clarify that “hackled” should not be read as “a process that creates or preserves identifiable structural features, maintains bundle identity, or defines the characteristics of the finished product.” RIB at 137; *id.* at 138 (“Hackling is interchangeable with combing in industry usage and was routine long before the asserted patents. Importantly, hackling mixes and distributes strands, rather than fixing them into separable or traceable groupings.”). JBS does not offer any argument to the contrary and Staff notes it is “not aware of any dispute where any accused product, DI product, or prior art product is combed but does not qualify as hackled.” SIB at 48.

Accordingly, there being no dispute, “hackled” means “combed.”

2. “the bundled synthetic hair is hackled and is arranged to define a perimeter”

JBS	Respondents	Staff
Plain and ordinary meaning, or alternatively, arranged to define a boundary	(Possibly) Indefinite; or Plain and ordinary meaning “without importing assumptions about shape, folding, or finished-product geometry”	The bundled synthetic braiding hair is hackled, arranged, and folded to define the perimeter, which has the first and second side

CIB at 57; SIB at 45; *see* RIB at 138-139.

[REDACTED]

“[T]he bundled synthetic hair is hackled and is arranged to define a perimeter” appears in claim 11 within “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side.” 616 patent at cl. 11. The parties’ dispute centers on which factors, if any, contribute to the “perimeter.” JBS and Staff agree that the “perimeter” is informed not only by the hackling and arranging recited in this limitation but also the subsequent limitation which reads: “the bundled synthetic braiding hair is folded about a waist to define the perimeter.” CRB at 7; SIB at 45. Thus, according to JBS and Staff, the perimeter is created by the combination of, at least, hackling, arranging, and folding. CIB at 8; SIB at 45. Respondents on the other hand argue the claim’s use of “and” between “hackled” and “arranged” means these are distinct and unrelated characteristics, with only the latter contributing to the “perimeter.” They state: “[t]he claim and specification fail to provide guidance as to how ‘hackled’ and ‘arranged to define a perimeter’ work together to establish identifiable boundaries, thus, the limitation cannot be used to impose unstated geometric or structural requirements on claim scope.” RIB at 139. Respondents reject JBS’s and Staff’s reference to the language and figures of the specification to supply any meaning. RRB at 87.

Respondents are not persuasive. It is an axiom of the law that the intrinsic record, such as the specification’s language and figures, provide important context and meaning for the words recited in the claim. *Phillips*, 415 F.3d at 1314. Respondents have no trouble turning to the specification to understand “substantially cardioid,” among other claim terms discussed above. *See* RIB at 10-12 (“the term ‘substantially cardioid shaped perimeter’ does not warrant further construction beyond its plain and ordinary meaning as informed by the intrinsic record.”). And here, the intrinsic record supports JBS and Staff’s interpretation. Starting with the language of the

claim itself, it introduces “a” perimeter, then refers to that same perimeter twice with “the perimeter.” 616 patent at cl. 11. Thus, there is only one perimeter recited in the claim and, per the explicit language it is “defined” by at least two acts: arranging and folding. 616 patent at cl. 11 (“the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side; the bundled synthetic braiding hair is folded about a waist to define the perimeter”). Thus, it is proper to evaluate the perimeter—for compliance with any further limitations—after arranging and folding, and possibly also after hackling, which all parties agree is a well understood even more preliminary step in the manufacture of these products. RIB at 137 (“a preparatory combing operation”); CRB at 12; SIB at 35, 39, 47-48. This timing is supported by the figures of the 616 patent which only add a dotted imaginary perimeter line 401 to a folded product 400, and not the unfolded product 300. *See* 616 patent at Figs. 3, 4, 2:1-6, 5:16-37. No evidence is offered to override this ordinary and intrinsic evidence-supported meaning.

Accordingly, “the bundled synthetic hair is hackled and is arranged to define a perimeter” refers to the same perimeter that appears after the bundled hair is arranged and folded. Any effects from this construction on indefiniteness are discussed below.

3. “a first side and a second side”

JBS	Respondents	Staff
“first side” means “an upper portion extending from the waist to the middle” “second side” means “a lower portion extending from the middle to the bottom”	(Possibly) Indefinite; or Plain and ordinary meaning “without importing assumptions about folding, finished-product orientation, or visual appearance”	The bundled synthetic braiding hair is hackled, arranged, and folded to define the perimeter, which has the first and second side

CIB at 57; RIB at 141; SIB at 45.



“[A] first side and a second side” appears within “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side” in claim 11. 616 patent at cl. 11. The parties’ dispute is similar to the previous limitation and concerns the conditions in which “first side” and “second side” are evaluated, and then also how to demarcate those sides.

JBS argues, “[t]he Asserted Patents disclose that first side means the upper portion 402 shown in, for example, Figure 4 of the Asserted Patents extending from the waist to the middle and second side means the lower portion 404 extending from the middle to the bottom” (CIB at 57) which are determined after folding (*see* CRB at 8). Staff agrees the evaluation is to be made after folding (SIB at 37) but offers no position on how to distinguish the two sides (*see generally id.* at 34-46; SRB at 1-8). Respondents, again, find the intrinsic evidence to be entirely silent on both issues. *See* RIB at 139-141 (“Nothing in the specification explains how a POSITA would identify the sides on the claimed bundle standing alone, as opposed to a folded or finished product.”).

“[F]irst side” and “second side” belong to *the* perimeter as recited in the claim. 616 patent at cl. 11. As determined above, the intrinsic evidence supports evaluation of the perimeter after the braid is arranged and folded, and possibly also hackled. Thus, the “first side” and “second side” must also be evaluated after arranging and folding. As to the demarcation of the first side and second side, Respondents offer no real dispute with JBS’s proffered definitions, which reflect a plain and ordinary meaning that is also consistent with the specification. *See, e.g.*, 616 patent at Fig. 4, 5:38-56 (associating “first side” with the location of the cusp and lobes and “second side” with the rounded end). Thus, they are adopted. Any effects from these constructions on

indefiniteness are discussed below.

4. “narrows as the second side of the bundled synthetic braiding hair extends distally from the first side”

JBS	Respondents	Staff
Plain and ordinary meaning, or alternatively, tapers as the lower portion extends distally from the upper portion	(Possibly) Indefinite; or Plain and ordinary meaning “without importing assumptions about degree, continuity, orientation, or finished-product geometry”	“decreases in width”

CIB at 57; RIB at 142; SIB at 43.

“[N]arrows as the second side of the bundled synthetic braiding hair extends distally from the first side” appears within “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side” in claim 11. 616 patent at cl. 11. The parties’ dispute is similar to the previous limitations and concerns the conditions under which the “perimeter” is evaluated. *See* RIB at 142 (“The intrinsic record does not explain how, on an unfolded bundle, a perimeter is defined, how its sides are identified, or how narrowing is determined or measured.”). As determined, the intrinsic evidence supports evaluation of the perimeter after the braid is arranged and folded, and possibly also hackled. And Respondents offer no real challenge to JBS’s and Staff’s ordinary and reasonable interpretation of “narrows” as “tapers” or “decreases in width.”

Accordingly, “narrows” in “narrows as the second side of the bundled synthetic braiding hair extends distally from the first side” means “decreases in width” and is evaluated after arranging and folding.

D. Infringement

According to JBS's post-hearing briefing, the use, manufacture, or sale of all Accused Products infringes claim 11. *See* CIB at 147 (referring to products "with and without backer panel folded"). For the reasons discussed below, JBS has shown infringement of this claim by these products.

For reference, claim 11 requires:

11. A hair accessory, comprising:

bundled synthetic braiding hair, comprising:

a first bundle of synthetic hair strands having a first length; and

a second bundle of synthetic hair strands having a second length that is shorter than the first length;

wherein:

the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side;

the bundled synthetic braiding hair is folded about a waist to define the perimeter; and

the perimeter has a first end collocated with the waist on the first side and a second end located distally from the first end on the second side.

616 patent at cl. 11. In support, JBS generally relies on the testimony of Ms. Martinez and her inspection of the physical products, photographs thereof, and measurements of strand length; and incorporates the argument and evidence presented for the 026 patent. *See generally* CIB at 158-164; *see* CIB at 158-159 n.75.²⁴

²⁴ Again JBS cites, in a footnote, demonstrative and exhibit-numbered documents which comprise several hundred pages of claim charts in an effort to show representativeness and

[REDACTED]

Respondents similarly incorporate their general and specific disputes made in connection with the 026 patent. RIB at 128. As determined above, these are persuasive with respect to representativeness such that only the Group 2 Representative Accused Products will be considered for infringement. Respondents additionally argue that JBS has not shown any product includes “the perimeter that is defined by hack[l]ing and arranging.” RRB at 87; *see* RIB at 143. Staff’s brief confirms this is the only substantive limitation in dispute. SIB at 94. This element is addressed below.

For all other elements of claim 11, which are substantially identical to those of claim 1 of the 301 patent, the expert testimony and evidence cited by JBS shows they are present in the Group 2 Representative Accused Products (*i.e.*, all Accused Products) as alleged. *See* CIB at 159 (“a hair accessory”), 159-160 (“bundled synthetic braiding hair”), 160-161 (“first bundle,” “second bundle . . . shorter than the first length”), and associated physical exhibits; Hr’g Tr. (Martinez) at 389:16-390:9.

As for the “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter,” JBS argues that Respondents admit they are all hackled, but JBS presents this finding without any evidence except for the backer panel on the physical exhibit from respondent Beauty Essence and the opinion of Ms. Martinez concerning the Hair Zone Ruwa product. *See* CIB at 161 (citing CX-0017 (“pre-combed”); Hr’g Tr. (Martinez) at 404:22-405:10). Staff cites the same testimony to the same effect. SIB at 94. Yet this evidence and testimony only apply to these two products, not all Accused Products, let alone all Group 2 Representative Products.

infringement by the Accused Products. CIB at 158-159 n.75. For the reasons discussed previously, the charts are not considered for the issue of infringement.

Nevertheless, Respondents do not affirmatively dispute that the Accused Products are hackled, as would seem to be an ordinary if not necessary step in the manufacture of these products. *See generally* RIB at 143; RRB at 87. And Ms. Martinez did opine in a general sense, without dispute from Ms. DuPriest, that “all of Respondents[’] accused products . . . [are] hackled.” Hr’g Tr. (Martinez) at 409:20-410:1. Thus, on balance, the evidence shows the limitation is met.

With “hackling” established, the evidence further shows all Accused Products have a perimeter when folded, and the width of the perimeter “narrows” as the second side (lower) extends distally away from the first side (upper)—as determined for the similar limitation in the 301 patent, above. 301 patent at cl. 1 (“wherein a width of the perimeter narrows as the bundled synthetic braiding hair extends distally from the middle of the perimeter to the second end”). To be sure, in many Accused Products there is a horizontally-oriented binder or cinch located somewhere along the length of the bundle, as with Mane Concept’s Afri Naptural:



CX-0047.4. This additional binder causes the perimeter to have a complex shape, but for every Accused Product the perimeter narrows as the second side extends distally from the first side, at

[REDACTED]

least to some degree, and in any event although Respondents argue that Ms. Martinez did not identify any perimeter, they do not specifically contest the “narrows” limitation. *See* RIB at 143.

Accordingly, claim 11 is infringed by the Accused Products.

E. Domestic Industry – Technical Prong

According to JBS’s post-hearing briefing, all DI Products practice claim 11 of the 616 patent. CIB at 164. As with infringement, JBS presents its theory via the Group 1 Representative DI Product (QB Single 50) and the Group 2 Representative DI Product (QB 3X Multi 50) as supported by photographs and testimony from Ms. Martinez. *See* CIB at 165-169. Staff agrees that claim 11 is practiced. SIB at 94.

Respondents’ opposition is limited to an incorporation by reference of the 026 patent technical prong opposition. *See* RIB at 128; RRB at 82. As discussed, the first portion of the opposition is based on a claim construction that is not adopted, and the second portion is persuasive in that JBS has not sufficiently established representativeness of the Group 1 DI Products by the QB Single 50 or the Group 2 DI Products by the QB 3X Multi 50.

Accordingly, there is no dispute that the QB Single 50 and QB 3X Multi 50 practice claim 11 of the 616 patent. In light of the expert testimony and evidence cited, JBS has shown all limitations are present in the Group 1 Representative DI Product and the Group 2 Representative DI Product. *See* CIB at 165 (“a hair accessory”), 165 (“bundled synthetic braiding hair”), 166 (“first bundle,” “second bundle . . . shorter than the first length”), 167-168 (“is hackled and is arranged to define a perimeter . . . a second side that narrows”), 168 (“folded about a waist”), 169 (“first end collocated with the waist . . . and a second end located distally”), and associated physical exhibits; Hr’g Tr. (Martinez) at 428:14-430:2, 435:13-436:18.

[REDACTED]

This leaves the remaining Group 1 DI Products and Group 2 DI Products. As with the 301 and 478 patents, the record evidence speaks for itself. Claim 11 of the 616 patent is nearly identical to claim 1 of the 301 patent, with the exception of the “is hackled and is arranged” element. Nevertheless, there appears to be no opposition to Ms. Martinez’s conclusory opinion that all Group 1 DI Products and Group 2 DI Products practice claim 11. Hr’g Tr. (Martinez) at 436:19-437:1; *see* RIB at 143; RRB at 87. This necessarily includes the fact that the DI Products are hackled during their manufacture—a fact consistent with the general sense from the record that all products in this field are ordinarily hackled before sale. *See, e.g.*, Hr’g Tr. (Chung) at 734:1-736:24 (at least one respondent, hackling is done “since forever” for all hair accessories); Hr’g Tr. (DuPriest) at 837:4-951:23 (finding that all prior art products were hackled). Accordingly, the record supports finding the Group 1 DI Products and Group 2 DI Products practice claim 11 of the 616 patent for the same reasons that claim 1 of the 301 patent is practiced, in addition to having been hackled.

F. Validity

For the 616 patent, Respondents again refer to their anticipation, obviousness, and section 112 theories presented for the 026 patent (RIB at 143, 146), and within that 026 patent section address the limitations unique to the 616 patent asserted claims. Within the actual 616 patent section, Respondents present additional section 112 issues. RIB at 144-146. Respondents have shown the invalidity of claim 11.

1. New York Short Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the NYSB to the 616 patent is established above.



Respondents contend the NYSB anticipates claim 11 of the 616 patent. RIB at 55-56. Relevant to this claim, and as determined for the 026, 301, and 478 patents, clear and convincing evidence shows the NYSB includes: “bundled synthetic hair,” “first bundle,” “second bundle . . . shorter than the first length,” “folded about a waist,” and “perimeter has a first end. . . and a second end located distally.” This accounts for most limitations of claim 11.

For the remaining limitation, “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side,” Respondents argue that Ms. DuPriest annotated an image of RPX-0087 to show the “first side” and “second side” and verified that hackling was performed by consulting with the Evergreen specification and witnesses. RIB at 55-56 (citing Hr’g Tr. (DuPriest) at 872:1-873:5). Staff agrees. SIB at 96. JBS does not dispute the NYSB was hackled (CIB at 170 (Table)) and if the presence of two sides is somehow in dispute (*see id.*), that is not persuasive. Further, pursuant to the determinations made above under the 301 and 478 patents, the NYSB practices “narrows as the second side of the bundled synthetic braiding hair extends distally.”

Accordingly, claim 11 is anticipated by the NYSB.

2. Mini Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the Mini Braid to the 616 patent is established above.

Respondents contend the Mini Braid anticipates claim 11 of the 616 patent. RIB at 62-63. Relevant to this claim, and as determined for the 026, 301, and 478 patents, clear and convincing evidence shows the Mini Braid includes: “bundled synthetic hair,” “first bundle,” “second

[REDACTED]

bundle . . . shorter than the first length," "folded about a waist," and "perimeter has a first end. . . and a second end located distally." This accounts for most limitations of claim 11.

For the remaining limitation, "the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side," Respondents argue that "[t]he MB's manufacturing specification indicates the fibers are hackled as part of the production process" (RIB at 62 (citing RX-0242C)) and that Ms. DuPriest demonstrated first and second sides with a narrowing "as the second side extends distally from the first side" (*id.* (citing Hr'g Tr. (DuPriest) at 895:17-896:21; RX-2808; RPX-0092)). Staff agrees. SIB at 96. JBS does not dispute the Mini Braid was hackled (CIB at 170 (Table)) and if the presence of two sides is somehow in dispute (*see id.*), that is not persuasive. Further, pursuant to the determinations made above under the 301 and 478 patents, the Mini Braid practices "narrows as the second side of the bundled synthetic braiding hair extends distally."

Accordingly, claim 11 is anticipated by the Mini Braid.

3. Sunny Braid

The 616 patent shares a priority date with the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)) so the prior art status of the Sunny Braid to the 616 patent is established above.

Respondents contend the Sunny Braid anticipates claim 11 of the 616 patent. RIB at 65-66. Like claim 1 of the 301 patent, claim 11 of the 616 patent requires, "that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side." 616 patent at cl. 11. Although phrased slightly differently from claim 1 of the 301 patent, Respondents have not shown the Sunny Braid narrows as the braid moves to the distal end. *See* RIB at 65 (citing

[REDACTED]

RX-2831). Neither they nor Ms. DuPriest offer any additional explanation particular to the 616 patent. RIB at 65-66; Hr’g Tr. (DuPriest) at 896:10-21; *see generally* RRB at 49-50.

Accordingly, the Sunny Braid has not been shown to anticipate claim 11 of the 616 patent.

4. Asante Short Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the Asante Short to the 616 patent is established above.

Respondents contend the Asante Short anticipates claim 11 of the 616 patent. RIB at 74. Relevant to this claim, and as determined for the 026, 301, and 478 patents, clear and convincing evidence shows the Mini Braid includes: “bundled synthetic hair,” “first bundle,” “second bundle . . . shorter than the first length,” “folded about a waist,” and “perimeter has a first end. . . and a second end located distally.” This accounts for most limitations of claim 11.

For the remaining limitation, “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side,” Respondents argue that “[t]he August 2012 specification references the ‘Jeongmo method’ (Korean for hackling) as instruction #2” (RIB at 74 (citing JX-0041C (Jeong) at 48:18-49:1); *see* RX-0136C; RX-0138C), and that Ms. DuPriest demonstrated first and second sides with a narrowing “as the second side extends distally from the first side” (*id.* (citing Hr’g Tr. (DuPriest) at 910:21-911:18; *see* RX-0230C.4). Staff agrees. SIB at 97. JBS does not dispute the Mini Braid was hackled (CIB at 170 (Table)) and if the presence of two sides is somehow in dispute (*see id.*), that is not persuasive. Further, pursuant to the determinations made above under the 301 and 478 patents, the Asante Braid practices “narrows as the second side of the bundled synthetic braiding hair extends distally.”

Accordingly, claim 11 is anticipated by the Asante Braid.



5. Sana Abuja Short Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the Abuja Short to the 616 patent is established above.

Respondents contend the Abuja Short anticipates claim 11 of the 616 patent. RIB at 78. Relevant to this claim, and as determined for the 026, 301, and 478 patents, clear and convincing evidence shows the Abuja Short includes: “bundled synthetic hair,” “first bundle,” “second bundle . . . shorter than the first length,” “folded about a waist,” and “perimeter has a first end. . . and a second end located distally.” This accounts for most limitations of claim 11.

For the remaining limitation, “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side,” Respondents refer to Ms. DuPriest’s fanning of the product and statement that, “[i]t’s been hackled.” RIB at 78 (citing DuPriest) at 922:6-18). JBS does not dispute the Abuja Short was hackled (CIB at 170 (Table)) and if the presence of two sides is somehow in dispute (*see id.*), that is not persuasive. Further, pursuant to the determinations made above under the 301 and 478 patents, the Abuja Short practices “narrows as the second side of the bundled synthetic braiding hair extends distally.”

Accordingly, claim 11 is anticipated by the Abuja Short.

6. Sana Hi-Yaki Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the HY Braid to the 616 patent is established above.

Respondents contend the HY Braid anticipates claim 11 of the 616 patent. RIB at 80-81. Relevant to this claim, and as determined for the 026, 301, and 478 patents, clear and convincing

[REDACTED]

evidence shows the HY Braid includes: “bundled synthetic hair,” “first bundle,” “second bundle . . . shorter than the first length,” “folded about a waist,” and “perimeter has a first end. . . and a second end located distally.” This accounts for most limitations of claim 11.

For the remaining limitation, “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side,” Respondents refer to Ms. DuPriest’s testimony describing fanning out the strands and argue the hair “is hackled.” RIB at 80 (citing DuPriest) at 937:22-938:10 (discussing repositioning as indicative of hackling). JBS does not dispute the HY Braid was hackled (CIB at 170 (Table)) and if the presence of two sides is somehow in dispute (*see id.*), that is not persuasive. Further, pursuant to the determinations made above under the 301 and 478 patents, the HY Braid practices “narrows as the second side of the bundled synthetic braiding hair extends distally.”

Accordingly, claim 11 is anticipated by the HY Braid.

7. Ganda Short Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the Ganda Short to the 616 patent is established above.

Respondents contend the Ganda Short anticipates claim 11 of the 616 patent. RIB at 83. Relevant to this claim, and as determined for the 026, 301, and 478 patents, clear and convincing evidence shows the Ganda Short includes: “bundled synthetic hair,” “first bundle,” “second bundle . . . shorter than the first length,” “folded about a waist,” and “perimeter has a first end. . . and a second end located distally.” This accounts for most limitations of claim 11.

For the remaining limitation, “the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side

[REDACTED]

of the bundled synthetic braiding hair extends distally from the first side,” Respondents and Ms. DuPriest refer to testimony describing fanning out the strands and argue the hair “is hackled.” RIB at 83 (citing DuPriest) at 929:16-930:1 (implying earlier testimony on fanning shows hackling)). JBS does not dispute the Ganda Short was hackled (CIB at 170 (Table)) and if the presence of two sides is somehow in dispute (*see id.*), that is not persuasive. Further, pursuant to the determinations made above under the 301 and 478 patents, the Ganda Short practices “narrows as the second side of the bundled synthetic braiding hair extends distally.”

Accordingly, claim 11 is anticipated by the Ganda Short.

8. GSI RastAfri Freed’m Silky Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the Silky Braid to the 616 patent is established above. Respondents contend the Silky Braid anticipates claim 11 of the 616 patent. RIB at 88-89. Yet as determined above, the record does not show the Silky Braid meets “and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side.” Accordingly, the Silky Braid has not been shown to anticipate claim 11 of the 616 patent.

9. GSI RastAfri Original Classic Jumbo Braid

The 616 patent has the same priority date as the 026 patent (*see* CIB at 6 (alleging all Asserted Patents have a December 15, 2016 priority date)), so the prior art status of the Jumbo Braid to the 616 patent is established above. Respondents contend the Jumbo Braid anticipates claim 11 of the 616 patent. RIB at 92-93. Yet, as determined above, the record does not show the Jumbo Braid meets “and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side.” Accordingly, the Jumbo Braid has not been shown to anticipate claim 11 of the 616 patent.

10. Obviousness

In addition to the above anticipation theories, Respondents contend that claim 11 would have been obvious in light of the Abuja Short and Abuja Long braids, and the HY Braid, in combination with Sugai, Hayakawa, and Sasayama should those prior art products fail to include any limitation. RIB at 105-106, 143. Sugai, Hayakawa, and Sasayama are all prior art to the 616 patent for the same reason as the 026 patent. And given that the Abuja Short and HY Braid have been found to anticipate, these references are not discussed further.

As for the Abuja Long, the [REDACTED] market research report fails to clearly and convincingly show first and second bundles of different lengths. *See* RX-0229C.3. Respondents' obviousness theory fails as well for the reasons explained above as to the other patents. In sum, the problem that first and second lengths solves—the blunt, unnatural bottom of braiding hair—would seem to have been solved by the Abuja Long. *Kinetic Concepts*, 688 F.3d at 1369; RX-0229C.3. Without further explanation, obviousness has not been shown.

11. Section 112

Respondents further raise challenges to claim 11 of the 616 patent under 35 U.S.C. § 112. First, they contend JBS's construction of "braiding hair" in claim 17 raises written description and enablement problems. RIB at 118-119, 146. With that construction discarded, above, these theories need not be addressed.

Respondents next contend that "is hackled and is arranged to define a perimeter" is indefinite, not enabled, and lacks written description. RIB at 144-146. They explain:

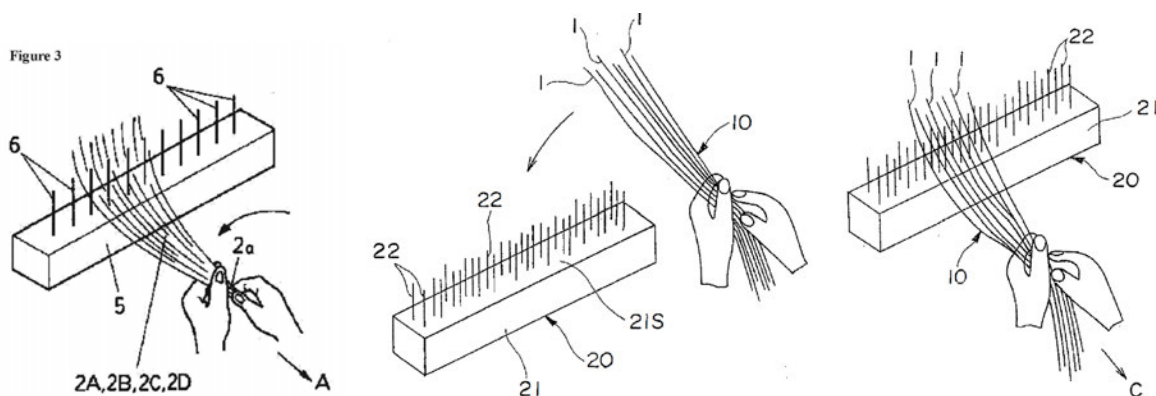
Hackling is described in the shared specification as a known preparatory process involving combing or brushing hair strands, but the '616 Patent does not explain how hackling must be performed or state that hackling produces any particular geometry, perimeter, or identifiable structural feature of the bundled hair. JX-04 ('026 Patent), 4:44–58; JX-02 ('301 Patent), 4:53–67; RPB at 127.

The patent also fails to explain how a perimeter is identified on hackled bundled hair, what physical features define that perimeter, or how a skilled artisan would distinguish the claimed perimeter from other possible boundaries of the bundle. Neither the requirement that the hair be hackled nor the requirement that the hair be arranged to define a perimeter supplies an objective standard for determining whether the limitation is satisfied.

RIB at 144; *see* CRB at 88-89. Respondents add, “[t]o the extent claim 11 is construed to require more than the known visual consequences of hackling, the patent provides no disclosure explaining how those requirements are achieved or evaluated.” RIB at 145-146.

Respondents are far from persuasive. First, as concluded above in the discussion of “substantially cardioid shaped perimeter” indefiniteness, the common specification provides sufficient instruction to a POSITA of how to determine the perimeter of a bundle of hair. And as resolved in connection with 616 patent claim construction, the perimeter of claim 11 refers to the perimeter that appears after the bundled hair is arranged and folded.

Second, Respondents admit in their very line of argument that hackling is “a known preparatory process involving combing or brushing hair strands.” RIB at 144. That the patent does not place further restrictions on how the hackling must occur (*e.g.*, speed, amount of throws, time elapsed, volume of hair, etc.) does not mean a POSITA could not accomplish some form of hackling. Indeed, hackling is taught in the very clear figures of the Hayakawa and Sugai references advanced by Respondents and presumed to be known by a POSITA:





RX-1670 at Fig. 3; RX-1679 at Figs. 1, 2. Again, tellingly, Respondents advance these arguments without any mention of *Wands* factors or support from Ms. DuPriest (*see* RIB at 144-146) who, in an evaluation of prior art, readily and confidently identified the presence of hackled hair through simple observation (*see e.g.*, Hr’g Tr. (DuPriest) at 922:6-23 (“Based on how Ms. Martinez applied this, I did the same thing. It’s been hackled. I examined that by fanning out the fibers.”)), and at times appeared to simply assume it (*id.* at 929:16-930:1 (“Well, we know [Ganda Short]’s hackled . . . ”)). So there is no clear and convincing case of lack of enablement or indefiniteness here.

Respondents raise the same three challenges to the claim’s recitation of “first side,” “second side,” and “narrows.” RIB at 145-146. As determined above, “first side” and “second side” belong to *the* perimeter as recited in the claim and mean “an upper portion extending from the waist to the middle” and “a lower portion extending from the middle to the bottom,” respectively. *See, e.g.*, 616 patent at Fig. 4, 5:38-56 (associating “first side” with the location of the cusp and lobes and “second side” with the rounded end). This is broad but not difficult to understand. *Niazi*, 30 F.4th at 1347.

Respondents then complain that “the patent does not explain how [hackling] translates into a defined narrowing of a particular side of a perimeter rather than a general change in appearance.” RIB at 145. Respondents misunderstand the claim. It does not require that hackling on its own and without further manipulation produce the perimeter. Rather, the bundle “is hackled” and also “is arranged” to produce the perimeter. 616 patent at cl. 11 (“the bundled synthetic braiding hair is hackled and is arranged to define a perimeter having a first side and a second side that narrows as the second side of the bundled synthetic braiding hair extends distally from the first side”). So the premise of Respondents’ challenge is flawed and, again, Respondents make no reference to the

[REDACTED]

experience of a POSITA, *Wands* factors, or testimony from Ms. DuPriest to support their criticisms. RIB at 145-146. None of indefiniteness, lack of written description, or lack of enablement have been shown.

VIII. DOMESTIC INDUSTRY - ECONOMIC PRONG

In a patent-based complaint, a violation of Section 337 can be found “only if an industry in the United States, relating to the articles protected by the patent ... concerned, exists or is in the process of being established.” 19 U.S.C. § 1337(a)(2). Under Commission precedent, this “domestic industry requirement” of Section 337 consists of an economic prong and a technical prong. *Stringed Instruments*, Inv. No. 337-TA-586, Comm’n Op. at 12-14. The complainant bears the burden of establishing that the domestic industry requirement is satisfied. *See Certain Set-Top Boxes and Components Thereof*, Inv. No. 337-TA-454, Initial Determination at 294 (June 21, 2002) (not reviewed in relevant part).

The economic prong of the domestic industry requirement is defined in subsection (a)(3) of Section 337 as follows:

(3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark or mask work 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). The economic prong of the domestic industry requirement is satisfied by meeting the criteria of any one of the three factors listed above. Investments in plant and equipment and labor or capital that may fairly be considered investments in research and development are eligible for consideration under Subsections (A) and (B), in addition to

[REDACTED]

Subsection (C). *See Certain Solid State Storage Drives, Stacked Electronics Components, and Products Containing Same*, Inv. No. 337-TA-1097, Comm’n Op. at 14 (June 29, 2018) (“*Solid State Storage*”).

A. Calculating Domestic Investment

JBS contends a domestic industry exists under subsections (A), (B), and (C). CIB at 171. JBS describes its domestic activities, performed in support of the DI Products, all of which have been shown to practice every asserted claim, as “research and development, testing, marketing, sales, advertising, distribution, logistics, customer service, packaging, storage, shipment, graphics and design, patent prosecution and enforcement.” *Id.*

1. Subsection (A)

Under subsection (A), plant and equipment, JBS and its expert, Mr. Christopher Gerardi, point to JBS’s headquarters in Atlanta, GA with “more than [REDACTED] of storage, including over [REDACTED] racks dedicated to storage, packaging and distribution of the QB DI Products.” CIB at 174. JBS also makes reference to a related company, Jinny Beauty Supply, and its storage facility which adds another [REDACTED] of storage space (*id.* at 174-175 (citing Hr’g Tr. (Jhin) at 83:10-23; CX-0174C)), and its distribution facilities located in Atlanta, Cherry Hill, NJ, Wheeling, IL, Miami, FL, Dallas, TX and Los Angeles, CA (*id.* at 175 (citing Hr’g Tr. (Jhin) at 83:24-84:3, 47:5-8; CX-0167C; CX-2760C; CX-0166C)). JBS refers to its internal financial records kept in the ordinary course of business as the source of the expenses of these locations, then applies a sales-based allocation to arrive at the amount attributable to the DI Products (with a blanket 100% allocation for R&D/testing and patent prosecution and enforcement, and 100% for marketing from 2020 onwards), for both Group 1 and Group 2 DI Products, shown below:

Year	Plant and Equipment (Operating Expenses)
2017	
2018	
2019	
2020	
2021	
2022	
2023	
2024	
2025 (Q1)	
Total	

Asserted Patent	Plant and Equipment (2017 – 2025 (Q1))
'478 Patent	
'616 Patent	
'301 Patent (Claim 1)	
'301 Patent (Claim 8)	
'026 Patent	

CIB at 176, 177 (citing Hr’g Tr. (Gerardi) at 633:15-635:22; Hr’g Tr. (Jhin) at 88:22-89:3, 96:25-97:3; CX-0614C through CX-0622C); *see* Hr’g Tr. (Gerardi) at 616:4-22 (“We took all those screenshots. We transferred the information from those screenshots into this schedule.”); CX-0823C at Tabs 1.7, 1.8, 2.1. Staff finds these investment figures reliable. *See* SIB at 101-102, 107-108. The record shows the amounts in the tables above are sufficiently reliable and will be considered for purposes of economic prong domestic industry.

Respondents raise a number of disputes, some of which are relevant to subsection (A) and have some merit, but none warrant deviating from JBS’s calculations. First, they complain that JBS and Mr. Gerardi have relied only on “self-selected financial screenshots” from the record system employed by JBS. RIB at 149-152; RRB at 91-92. For support, Respondents themselves provide a series of screenshots, without pin cites, suggesting that expenses from non-JBS entities may be caught up in the plant and equipment calculations, contrary to what Mr. Jhin represented

[REDACTED]

at the hearing. RIB at 150-152, 153 (citing Hr’g Tr. (Jhin) at 161:19-23 (“the numbers I just gave you is just JBS Hair”)). There are two problems here. First, to the extent JBS’s screenshots are “self-selected,” Respondents were free to conduct their own discovery into JBS’s finances and provide counter-examples of domestic or foreign investments that had been skipped over or improperly counted. *See generally* Hr’g Tr. (Jhin) at 144:2-145:17 (“we gave you even all of the Jinny entity financial information[], and that was a mistake on our part”). Respondents provide none, however. RIB at 149-154. So the problem is likely minimal. *Certain Wet Dry Surface Cleaning Devices*, Inv. No. 337-TA-1304, Comm’n Op. at 83 n.24 (Jan. 8, 2024) (“*Surface Cleaning Devices*”) (“Although Respondents do not have the burden of proof on [economic prong], Respondents provided no contrary evidence, beyond opinion and conjecture, that JX-0001C is inaccurate or unreliable.”).

Second, the inclusion of expenses by other S corporation entities loosely associated with JBS (*see* CIB at 181 n.86; RIB at 152; RRB at 90-91; SIB at 106) is actually proper so long as they were incurred in support of the DI Products and authorized by JBS. *See Certain Magnetic Tape Cartridges*, Inv. No. 337-TA-1058, Comm’n Op. at 41; *Certain Wearable Monitoring Devices, Systems, and Components Thereof*, Inv. No. 337-TA-1190, Order No. 34 at 28 (Oct. 1, 2020), *aff’d in relevant part*, Comm’n Op. at 39 (May 5, 2021). And this appears to be the case. Mr. Jhin testified that CX-0177C is “the total spending of [] JBS Hair” and “it wasn’t just spent on Queen B. It was spent on JBS Hair expenses.” Hr’g Tr. (Jhin) at 78:13-20; *see id.* at 88:19-89:6; *see generally id.* at 89:15-90:8 (affiliate employees spend time on DI Products), 92:9-21 (payments go back and forth to reimburse inter-company efforts), 97:20-24 (Jinny Beauty backs up JBS), 129:25-130:9 (sharing inventory and expenses), 138:8-14 (JBS instructs entities on new products); Hr’g Tr. (Lee) at 194:16-195:9 (OTC personnel working on JBS products). Based on this

[REDACTED]

testimony it is fair to infer that any non-JBS affiliate contributions captured in the raw expenses were nonetheless made in direct support of JBS Hair activities (*i.e.*, inherently allocated to JBS). CX-0177C essentially matches the data found in Mr. Gerardi's schedule of raw expenses. *Compare CX-0177C with CX-0823C at Tabs 1.8, 2.1.*

The record shows the affiliates' activities were authorized by JBS. Respondents apparently dispute this because of "Mr. Jhin's testimony that the non-Complainant entities purchase the DI Products from Complainant and re-sell them." RRB at 91. Not so. The available evidence shows JBS and the entities are all co-owned by Mr. Jhin and/or his family (Hr'g Tr. (Jhin) at 159:2-160:16), making those intercompany sales, of however much value and volume, and not at arms-length. The natural reading is that there is joint control and coordination; *i.e.*, authorized spending. *See, e.g.*, Hr'g Tr. (Jhin) at 91:10-25 (all entities share same P21 accounting software). Overall then, it is reasonable to apply Mr. Gerardi's sales-based allocations against these JBS-supporting affiliate expenses to arrive at amounts attributable to the DI Products.

Next is Respondents' concern over the reimbursement check images between JBS and the affiliated entities being unreliable. RIB at 155 (citing CX-0603C at Tabs 2021-2025). It does not appear that the amounts of these checks (ranging in [REDACTED] of dollars (*see CX-0603C*)) are part of the economic prong calculus performed by Mr. Gerardi (*see CX-0823C at Tabs 2.1, 2.3*)). So the degree to which JBS has reimbursed the affiliated entities is not particularly relevant to whether their activities are both authorized and done in support of the products, although they are. Staff agrees. SIB at 106.

Next, Respondents' reply brief challenges whether any of the JBS locations other than Atlanta, GA are actually real. RRB at 89-90 ("no record evidence exists to corroborate whether these facilities are maintained or operated by Complainant or non-Complainant entities. . . . no

[REDACTED]

evidence for any other facilities exists.”). This is an odd argument to offer for the first time at the end of a reply post hearing brief, and to do so without any supporting testimony from Dr. Vander Veen. The facilities’ existence would have been easily verifiable one way or another during fact discovery. Regardless, the supposition is without merit. JBS produced planogram spreadsheets showing the number of storage bays in each location, evidencing the existence of each warehouse. *See* CX-0167C; Hr’g Tr. (Jhin) at 85:3-86:11. And the assertion is otherwise beside the point because the costs of these locations do not appear to have been figured into JBS and Mr. Gerardi’s subsection (A) calculations, which are limited to the two Atlanta facilities. CIB at 176 (“JBS has [REDACTED] were determined based on JBS’s internal financial records . . . and are as follows”); CX-0177C; Hr’g Tr. (Jhin) at 78:10-20 (stating CX-0177C represents unallocated JBS Hair-only expenses); CX-0823C at Tabs 1.8, 2.1; *compare* CX-0622C at Tab Operating Expenses ([REDACTED] rent total after allocation between JBS and Jinny Beauty for 2024) *with* CX-0823C at Tab 2.1 (total included rent for 2024 sums to [REDACTED]).

Respondents next challenge the sales allocation. Respondents fault the underlying sales data for not including DI Product sales from JBS to the other affiliated companies (RIB at 163-164), for not considering the companies’ “net sales of all products compared to the respective sales of the DI Products” (*id.* at 165-166), and for not considering all expenses from all affiliated companies (*id.* at 165). These are not problems, however. If JBS made additional DI Product sales—to *any* entity—that have not been counted in JBS’s sales allocation, then this only favors Respondents because it makes the proportion of JBS’s investments attributable to the DI Products lower, and expenses are not relevant to calculating a sales allocation by itself. Further, Mr. Gerardi is correct that there is no need to consider the affiliates’ total sales of their own products because

[REDACTED]

the subsection (A) analysis does not depend on any plant and equipment investments from these entities or, if it does, the investments were in direct support of JBS operations. So a sales allocation using those companies' sales data is not needed at all—the amounts have already been “allocated” by virtue of being in direct support of JBS. JBS sales data is the appropriate vehicle for determining how much JBS-supporting investment went to the DI Products.

Buried within a later discussion of significance, Respondents also take issue with a [REDACTED] allotment of rent from the Georgia facility with “no corroborating evidence or reasonable allocation exist[ing] to explain why [REDACTED] of the ‘rent total’ is attributable to Complainant.” RIB at 167 (citing Hr’g Tr. (Gerardi) at 661:11-25). Respondents’ point is well taken, but a complainant’s expenses are not expected to be in a format directly transferable to a domestic industry analysis. *Stringed Instruments*, Inv. No. 337-TA-586, Comm’n Op. at 25-26. And the raw billing records from 2017-2025, along with Mr. Gerardi’s spreadsheet, show that rent was [REDACTED] [REDACTED]. See CX-0614C through CX-0622C; CX-0823C at Tab 1.8 (most rent values are not [REDACTED]). It is true, however, that the [REDACTED] apportionment for 2024 and 2025 results in a rent payment that is [REDACTED] (see *id.* [REDACTED]), but the difference to the grand subsection (A) total is not material (see *id.* [REDACTED]).

Accordingly, the record shows cognizable subsection (A) investment of [REDACTED] for the 478 patent, 616 patent, and 301 patent, claim 1; and [REDACTED] for the 026 patent and 301 patent, claim 8.

2. Subsection (B)

Under subsection (B), labor and capital, JBS and Mr. Gerardi rely on all non-plant and equipment expenses incurred by JBS in support of the DI Products, and then all employee

[REDACTED]

compensation expenses incurred by JBS *and other related entities* in support of the DI Products. JBS explains the expenses related to “(i) distribution, logistics and customer service; (ii) graphics and design of packaging; (iii) handling, inspecting, packaging, storage and shipping; (iv) marketing; and (v) research and development and testing” incurred across 2017-2025 Q1. CIB at 180 (citing Hr’g Tr. (Jhin) at 94:20-95:4; CX-0177C). The expenses are pulled from the same internal record keeping system found reliable for subsection (A); and the sales allocation (with noted exceptions), also found reliable above, is applied to arrive at the amounts attributable to the DI Products as opposed to non-practicing products.

The employee salaries are a different matter. JBS contends, “[f]or the time period 2017 to 2025 (Q1), in the range of [REDACTED] employees per year have been paid by or on behalf of JBS for labor dedicated to the QB DI Products.” CIB at 180-181 (citing Hr’g Tr. (Jhin) at 82:23-83:9). JBS compiled the salaries of all these employees in a table, then applied a percent-of-time allocation to arrive at salary amounts attributable to the DI Products. The percent-of-time allocation was informed by Mr. Justin Lee, who oversees these employees, and was then applied to employees of JBS Hair *and* related entities who support the DI Products in one way or another. Hr’g Tr. (Jhin) at 89:4-91:5; Hr’g Tr. (Lee) at 192:9-195:18; Hr’g Tr. (Gerardi) at 631:8-632:3, 636:19-637:17, 675:8-676:25; CX-0175C; CX-0178C; CX-0823C at Tab 2.2. Then—and this is not clearly explained by Mr. Gerardi—these time-allocated salaries were allocated a second time using the same sales-based allocation applied to all other capital expenses. *See, e.g.*, CX-0823C at Tab 2.3 (raw salary data), 2.2 (time estimates multiplied by salary, example: field X91), Tab 1.8 (allocated salary added to capital expenses, example: field I16), Tab 1.7 (salary and capital multiplied by sales %, example: field I16).



The foregoing calculus results in the following proffered subsection (B) investments:

Year	Labor and Capital (Excluding Marketing)		Labor and Capital (Marketing Only)		Total Labor and Capital Expenses	
2017						
2018						
2019						
2020						
2021						
2022						
2023						
2024						
2025 (Q1)						
Total						

	Labor and Capital (Excluding Marketing)		Labor and Capital (Marketing Only)		Total Labor and Capital	
'478 Patent						
'616 Patent						

	Labor and Capital (Excluding Marketing)		Labor and Capital (Marketing Only)		Total Labor and Capital	
'301 Patent (Claim 1)						
'301 Patent (Claim 8)						
'026 Patent						

CIB at 182-183 (citing Hr'g Tr. (Gerardi) at 612:12-613:12, 638:1-9; CX-0603C through CX-0622C). JBS is largely persuasive. The amounts shown in the tables will be considered for purposes of economic prong domestic industry—with a handful of modifications based on Staff's and Respondents' disputes.

First, Staff finds economic prong under subsection (B) is met but objects to the inclusion of all capital expenses, and certain categories of labor; specifically R&D, testing, patent prosecution, and enforcement. Turning first to all capital expenses, Staff objects on the ground

[REDACTED]

that they “appear to be paid to third parties with no accounting of whether and how much of the expenses were domestic investments in labor and capital.” SIB at 103. Staff provides examples of overhead, freight, distribution, logistics, customer service, and graphic design expenses paid to these third parties. *Id.* (citing CX-0823C at Tab 2.1). Respondents lobby for many of these exclusions as well. RIB at 173-174 (citing Hr’g Tr. (Vander Veen) at 1116:22-1118:21, 1125:19-21), 177; RRB at 93.

Staff is persuasive with respect to R&D and patent prosecution/enforcement. The Federal Circuit has held, “[w]e agree with the Commission that expenditures on patent litigation do not automatically constitute evidence” under subsection (C). *Mezzalingua*, 660 F.3d at 1328. Given that subsection (C) specifically pertains to “exploitation” of the patent, investments for patent prosecution/enforcement are even further afield for subsection (B), which looks for investments made in support of the domestic industry articles themselves. *See* 19 U.S.C. § 1337(a)(3). Accordingly, these IP expenses are not counted, and while R&D would ordinarily qualify, it is comingled with IP in JBS’s and Mr. Gerardi’s data and cannot easily be extricated. *See* CX-0823C at Tabs 1.8, 1.7. So R&D must be excluded as well.

For freight and broker fees, Staff is persuasive. JBS does not dispute Dr. Vander Veen’s opinion that these “are amounts that were paid for overseas carriers—ocean carriers and ocean freight brokers. So these are payments to ship the products from the manufacturing sites, outside the United States, overseas, to the United States.” Hr’g Tr. (Vander Veen) at 1117:11-1118:21. So the prime activity behind these costs occurs outside the U.S. and they should not be counted as domestic investment. JBS’s rebuttal, that the fees were nonetheless paid to U.S. entities (CIB at 180 n.85; CRB at 88), is beside the point. If the nationality of the company behind the activity was the test, then any foreign activity by a domestic complainant would qualify as “an industry in

[REDACTED]

the United States.” This is nonsensical. So freight and broker fees are moved out of domestic spending and into foreign spending in the determination of significance, below.

With respect to the other capital expenses to which Staff objects, fees may be paid to third parties so long as they reflect domestic activity. *See generally Lelo*, 786 F.3d at 881 (“Of those components, the backbone material, rubber, pigment, and the wafers used in the microcontrollers are manufactured in the United States, but the record is not clear whether the U.S. suppliers of the components are also the manufacturers of the components. Apparently, all other components of the devices are produced and sourced abroad.”). Staff has not put forward any evidence or analysis to conclude the activities behind the challenged capital expenses are not domestic. And it is credible that many are domestic. *See* SIB at 103 (objecting to packaging vendors such as “[REDACTED]” and “[REDACTED],” or overhead vendors “[REDACTED]” and “[REDACTED]”).

Turning to Respondents, many of their objections are addressed above in subsection (A). JBS’s screenshots of accounting records are not wholly unreliable, investments made by the affiliate companies may be counted because they were authorized by and directly in support of JBS (subject to further allocation down to the DI Products), and use of JBS’s sales for a sales allocation is proper.

Respondents also challenge the employee time estimates used in the first of two labor allocations. RIB at 160. They argue that the employee list with time estimates is CX-0178C, but the document is unreliable because it was inconsistently characterized by Mr. Jhin and Mr. Gerardi. *See id.* at 160-161; *see* Hr’g Tr. (Jhin) at 139:16-140:21. But as determined above, the record supports that JBS and related entities to some extent share expenses and compensate one another for those expenses, and JBS is an overall much smaller entity than, for example, Jinny Beauty

[REDACTED]

Supply. Hr’g Tr. (Jhin) at 97:20-24, 139:16-140:21, 151:7-14. So it is understandable that the document was described both ways during the evidentiary hearing. What matters is whether the time estimates are reliable.

On that issue, Respondents contend they are not and state, “Mr. Jhin testified at his deposition that he only discussed the employee time estimates with Mr. Lee in preparing the alleged time estimates, and they did not refer to any documents, emails, or calendar entries in putting them together.” RIB a 161-162 (citing RX-4665C (Jhin) at 34:15-35:6, 69:5-12; CX-0178C). Respondents argue this is inadequate because Mr. Jhin did not recognize many of the employees and Mr. Lee “is only a director and employee of Complainant and is not a director or employee of any non-Complainant entity.” *Id.* (citing Hr’g Tr. (Jhin) at 127:25-128:18). Respondents raise further inconsistencies in the amount of outreach Mr. Lee may have done to the affiliated entities to learn employee time estimates. *Id.* at 162.

These are fair criticisms but do not disrupt the overall weight of the evidence, which shows that Mr. Jhin and Mr. Lee have first-hand knowledge of JBS employee activities and activities done directly on behalf of JBS, and Mr. Lee reached out to at least one similarly situated leader when he did not know that affiliate’s contribution. Hr’g Tr. (Jhin) at 53:6-10, 89:25-90:8, 137:12-20; Hr’g Tr. (Lee) at 194:4-195:18 (“I did talk with the graphic manager, and some of the employees do work with me, although they are employees of Jinny Beauty. So I am well aware of their activities.”). Given that Mr. Lee is a named inventor of the asserted patents, was employed by JBS for the entire 2017-2025 timeframe at issue, is in charge of R&D and generally all things JBS in the Atlanta headquarters, and has “full access” to other affiliates, it is fair to rely on CX-0178C. Hr’g Tr. (Jhin) at 49:24-50:12, 52:24-53:10, 67:14-16, 86:12-88:18 (“when it comes to JBS Hair, listen to [Mr. Lee] at all costs.”), 93:16-23; *see Certain Wearable Electronic Devices*

[REDACTED]

with ECG Functionality and Components Thereof, Inv. No. 337-TA-1266, Initial Determination at 170-175 (June 27, 2022) (finding time estimates unreliable when author had no personal knowledge), *aff'd in relevant part*, Comm'n Op. at 17 (Jan. 20, 2023). Mr. Jhin also credibly testified that there would have been no documents to consult for this data. Hr'g Tr. (Jhin) at 138:2-139:15. This is, after all, a hair braid importation business and not, say, pharmaceutical manufacturing or smartphone development. *Certain Solid State Storage Drives, Stacked Electronics Components, and Products Containing Same*, Inv. No. 337-TA-1097, Comm'n Op. at 21 (June 29, 2018) ("there is no Commission requirement that sworn witness testimony directed to the domestic industry requirement cannot be credited without further corroboration by underlying documentation.").

Relatedly, Respondents argue that it is not reliable to allocate 100% of JBS's marketing activities from 2020-2025 to the DI Products in lieu of a sales-based allocation. RIB at 163 (citing Hr'g Tr. (Vander Veen) at 1121:22-1123:3). Respondents and Dr. Vander Veen complain, "it's just based on Mr. Jhin's testimony." *Id.* Not so. JBS's sales records show the DI Products constitute an [REDACTED] of overall sales, growing from [REDACTED] over this timeframe. Hr'g Tr. (Gerardi) at 657:10-23; CDX-0112C; CX-2874C; Hr'g Tr. (Jhin) at 69:4-22, 73:14-25; CX-2750C; CX-0169C. Combined with Mr. Jhin's testimony that marketing goes towards newer products (Hr'g Tr. (Jhin) at 97:7-19), the expenses were credibly wholly directed to the Queen B DI Products at these times.

Finally, Respondents fault JBS for failing to acknowledge the salary of their apparently sole foreign employee, Mr. Hwang. RIB at 161. This has merit and Mr. Hwang's expenses will be considered foreign investment when evaluating significance. Respondents also complain that customer service expenditures do not actually result from customer service activities but are bank

[REDACTED]

fees. RIB at 174-175 (citing Hr’g Tr. (Vander Veen) at 1118:22-1119:18). It is not clear whether the Commission has directly addressed whether bank fees may contribute to economic prong domestic industry, but if the fees are for the maintenance of funds kept in the United States and coming from transactions arising in the United States, the activity behind the fee is arguably domestic. These fees will be counted for the purposes of this initial determination.²⁵

Accordingly, the amount of subsection (B) investment which will be considered for significance is [REDACTED] for the 478 patent, 616 patent, and 301 patent, claim 1; and [REDACTED] for the 026 patent and 301 patent, claim 8. *See* CX-0823C at Tabs 1.7 (remove patent prosecution/enforcement/R&D salary and freight and broker fees), 1.6 (applying sales-based allocation to 1.7).

3. Subsection (C)

Under subsection (C), exploitation of the asserted patents through engineering, research and development, or licensing, JBS and Mr. Gerardi essentially rely on a subset of subsection (B) expenses and add two new categories of expense: 1) cease and desist letters/litigation; and 2) patent prosecution. Overall, JBS characterizes the qualifying activities as “(i) marketing; (ii) graphics and design of packaging; (iii) research and development and testing; and (iv) patent prosecution and enforcement.” CIB at 186 (citing Hr’g Tr. (Jhin) at 94:22-95:16, 99:24-100:5). The expenses and salaries are pulled from the same internal record keeping system found reliable for subsections (A) and (B), above; and the time estimates and sales allocation also found sufficiently reliable are applied to arrive at the amounts attributable to the DI Products. *Id.* (“Using the same percent-of-sales allocation with exceptions set forth above, JBS’s total investments in

²⁵ Unlike freight and broker fees, the amount of customer service bank fees is low in Mr. Gerardi’s schedule (CX-0823C at Tab 1.7 ([REDACTED])). So the prejudice to Respondents from any error here is minimal.

[REDACTED]

exploitation of the Asserted Patents were determined based on JBS's internal financial records and are as follows . . .").

JBS has not met its burden. Subsection (C), while it allows for investment not directly tied to the articles which practice the patent, still requires a connection to the underlying asserted patent; *i.e.*, nexus. The Commission has held, "[a] complainant has the 'burden of proof to show these investments meet the nexus requirement, in particular by sufficiently tying the investments to the exploitation of one or more claims of each asserted patent.'" *Certain Soft Projectile Launching Devices, Components Thereof, Ammunition, and Products Containing Same*, Inv. No. 337-TA-1325, Comm'n Op. at 45 (Dec. 18, 2025) ("*Soft Projectile Launchers*") (citing *Certain Electronic Candle Products*, 337-TA-1195, Comm'n Op. at 23 (Oct. 4, 2022)). Indeed, in *Soft Projectile Launchers*, the Commission found no economic prong domestic industry under subsection (C) precisely because the complainant failed to tie the investments to the limitations of the asserted claims and because many of the claimed expenses were not engineering or research and development. *Id.* at 46 ("there is no evidence that Hasbro conducted 'engineering' or 'research and development' with respect to those specific [claimed] features."). The Federal Circuit has on many occasions reinforced this requirement. *Zircon Corp. v. Int'l Trade Comm'n*, 101 F.4th 817, 824 (Fed. Cir. 2024) (collecting cases).

JBS's theory suffers from both these problems. In no place in its briefing does it discuss the nexus between the domestic activities and any asserted patent claim. *See generally* CIB at 171-190; CRB at 82-90. And sales, marketing, graphic design, trade shows, sponsorships, patent prosecution, and patent enforcement are not on their face engineering or research and development. As noted above, JBS and Mr. Gerardi have lumped in what R&D there may genuinely be with

[REDACTED]

patent prosecution and enforcement investment. With these categories removed, there is no appreciable exploitation activity left. *See* CX-0823C at Tab 1.8.

Accordingly, JBS has not shown a domestic industry exists under subsection (C).

B. Significance

“Significant” and “substantial” are relative terms, so some sort of comparative investment analysis must be made to assess the “*relative importance of the domestic activities.*” *See, e.g., Certain Carburetors and Products Containing Such Carburetors*, Inv. No. 337-TA-1123, Comm’n Op. at 17-19 (Oct. 28, 2019) (emphasis in original). Although it is understood not to be mandatory, a compelling way to gauge how important domestic activity is to a product (*i.e.*, the value added by the United States) is to compare it to the one thing that is not domestic activity—foreign activity. *Wuhan Healthgen v. Int’l Trade Comm’n*, 127 F.4th 1334, 1339 (Fed. Cir. 2025) (“In *Lelo*, we recognized the comparison of domestic investments to total (*i.e.*, domestic plus foreign) investments as a valid quantitative analysis for assessing the significance of investments”); *Soft Projectile Launchers*, Inv. No. 337-TA-1325, Comm’n Op. at 26, 35; *Certain Photodynamic Therapy Systems, Components Thereof, and Pharmaceutical Products Used in Combination with the Same*, Inv. No. 337-TA-1411, Comm’n Op. at 48-49 (May 20, 2026); *Certain Semiconductor Devices and Products Containing the Same*, Inv. No. 337-TA-1414, Comm’n Op. at 39-40 (May 26, 2026).

1. Subsection (A)

To show significance under subsection (A), JBS first compares each domestic investment amount to sales of the respective DI Products (*i.e.*, Group 1, Group 2). In this context, JBS and Mr. Gerardi find that the cognizable plant and equipment investment reflects between [REDACTED] and [REDACTED] of sales as in the table below:

Asserted Patent	Plant & Equipment
'478 Patent	
'616 Patent	
'301 Patent (Claim 1)	
'301 Patent (Claim 8)	
'026 Patent	

CIB at 178 (citing Hr’g Tr. (Gerardi) at 634:23-635:5). JBS next offers a comparison between the domestic investment amounts and the amounts paid to the overseas manufacturer of the DI Products (cost of goods sold or “COGS”), respective to each group of DI Products. *Id.* at 178-179. JBS and Mr. Gerardi find that plant and equipment investment amounts are between [REDACTED] and [REDACTED] of the COGS as below:

Asserted Patent	Plant & Equipment
'478 Patent	
'616 Patent	
'301 Patent (Claim 1)	
'301 Patent (Claim 8)	
'026 Patent	

Id. at 179 (citing Hr’g Tr. (Gerardi) at 634:23-635:8). JBS notes that it elicited testimony from Dr. Vander Veen that he has no correction to these percentages under subsection (A). *Id.* at 179 n.84 (citing Hr’g Tr. (Vander Veen) at 1136:5-11); *see* Hr’g Tr. (Vander Veen) at 1137:20-1139:5. JBS presents additional significance contexts, such as the value added by the patented inventions to the marketplace (CIB at 188-190 (“significant cost and time savings for braiders and their

[REDACTED]

customers”); CRB at 88-90) and the importance of the DI Products to JBS itself (*id.* at 87 (“QB DI Products [REDACTED]”) which are far less pertinent to the question posed by statute and need not be considered. Staff agrees that the [REDACTED] of sales metrics demonstrate significance, “given that Complainant is a small company and in the context of the market for braiding hair products.” SIB at 108; *see* SRB at 13-15.

Respondents do not specifically address either metric but generally argue that “in a post-*Lashify* world, the nature of Complainant’s activities is important” and JBS does nothing more than basic importation, distribution, and sales. *See* RIB at 167-169 (citing Hr’g Tr. (Vander Veen) at 1126:3-1129:4); RR B at 94 (citing *Certain Cube Puzzles*, Inv. No. 337-TA-112, 1982 WL 974906, *12-13 (Dec. 30, 1982)). They also note that sales records show the Group 1 DI Products [REDACTED].” RIB at 169 (citing Hr’g Tr. (Vander Veen) at 1131:23-1132:6).

JBS and Mr. Gerardi are persuasive with respect to the domestic-foreign value add comparison. Slightly adjusted to demonstrate domestic investment as a percentage of total value added, the percentages become [REDACTED] for the Group 1 DI Products and Group 2 DI Products, respectively. CX-0823C at Tabs 1.1-1.4 (domestic ÷ (domestic + COGS)). This is arguably not a *de minimis* share, and in reality it would be higher because it can be assumed that the COGS reported by JBS (and not disputed by Respondents) includes a mixture of foreign plant and equipment and foreign labor and capital—and the Commission has instructed subsection (A) and (B) amounts should not be aggregated. *Certain Replacement Automotive Lamps*, Inv. No. 337-TA-1291, Comm’n Op. at 30, 30 n.44 (Mar. 7, 2024) (citing *Certain Carburetors*, Inv. No. 337-TA-1123, Comm’n Op. at 21). Thus, if foreign plant and equipment costs could be isolated (they cannot, given the record), the value added by domestic activity would only increase. So the record shows JBS’s domestic investment in plant and equipment under subsection (A) is

[REDACTED]

quantitatively significant. JBS’s alternative quantitative metric of investment-to-sales [REDACTED] and generally indicates how important the product line is to the company, with only an indirect connection to how important the United States is to the product line. *Wuhan*, 127 F.4th at 1338-39 (“The investment-to-revenue ratio can indicate whether an investment is significant and substantial. A high ratio signals the company is investing heavily in the industry despite comparatively low revenue, highlighting the industry's importance and value to the company, which can be predictive of a significant market.”).

Further, to the extent it is required for a holistic approach (*Wuhan*, 127 F.4th at 1339), the investments would appear to be qualitatively significant as well. The DI Products are physical products which must be delivered to customers before they can be used. Reception of the goods after importation, storage, and eventual distribution across the U.S. (*i.e.*, JBS’s primary domestic activities) are necessary and therefore qualitatively significant. *See, e.g., Lashify, Inc. v. Intern. Trade Comm’n*, 130 F.4th 948, 959 (Fed. Cir. 2025) (“Ensuring that products, specifically products of desired quality, are provided to customers (*i.e.*, warehousing, quality control, and distribution) is an aspect of, at least, ‘providing the services in demand.’”). Respondents’ comments about a “post-*Lashify*” world and the need to distinguish mere importers are noted but nothing in *Lashify* indicates the scrutiny should be heightened for mere importers. *See id.* at 958-59 (holding the language of subsections (A) and (B) “do not limit what enterprise functions the inputs must be used to perform.”).

Accordingly, JBS has shown the economic prong is met under subsection (A) for all asserted patents and claims.

2. Subsection (B)

To show significance under subsection (B), JBS follows the approach from subsection (A). It first compares each domestic investment amount to sales of the respective DI Products (*i.e.*,

[REDACTED]

Group 1, Group 2). JBS and Mr. Gerardi find that the labor and capital investment amounts to [REDACTED] of sales as in the table below:

Asserted Patent	Labor & Capital
'478 Patent	[REDACTED]
'616 Patent	
'301 Patent (Claim 1)	
'301 Patent (Claim 8)	
'026 Patent	

CIB at 183 (citing Hr'g Tr. (Gerardi) at 638:14-18). However, modifying these percentages to reflect the removal of R&D, patent prosecution and enforcement (as explained above), and freight and broker fees, reduces the percentages to [REDACTED] for the Group 1 DI Products and Group 2 DI Products, respectively. CX-0823C at Tabs 1.1-1.4. And for the comparison between domestic investments and COGS, JBS and Mr. Gerardi find that the labor and capital investment amounts to [REDACTED] of sales as in the table below:

Asserted Patent	Labor & Capital
'478 Patent	[REDACTED]
'616 Patent	
'301 Patent (Claim 1)	
'301 Patent (Claim 8)	
'026 Patent	

Id. at 184 (citing Hr'g Tr. (Gerardi) at 638:19-639:3). Modifying these percentages to reflect the removal of R&D, patent prosecution and enforcement (as explained above), moving freight and broker fees to foreign expenses, and adjusting to show investment as a percentage of worldwide value add, reduces the percentages. Respondents' point about JBS's contractor/employee Mr.

[REDACTED]

Hwang is another contributor to the foreign expenses. Mr. Jhin estimated he has been paid [REDACTED] per month since 2016. Hr’g Tr. (Jhin) at 157:10-17, 166:6-25. When these payments are added up across 2017 through 2025 Q1, allocated down to sales of all DI Products per year, and then allocated again to the Group 1 DI Products and Group 2 Products per year, the additional foreign expense becomes [REDACTED], respectively. CX-0823C at Tab 3.1. Freight expenses follow a similar allocation to those of Mr. Hwang. For the Group 2 DI Products, the full freight fee of [REDACTED] is considered foreign cost. For Group 1 DI Products, the full freight fee is each reported year of freight fee (CX-0823C at Tab 1.7) multiplied by that year’s Group 1 sales as a % of total DI Sales (*id.* at Tab 1.6). The amount for 2017 to 2025 Q1 sums to [REDACTED], which is considered foreign cost. When all of these corrections are made the domestic to worldwide value add becomes [REDACTED] respectively. CX-0823C at Tabs 1.1-1.4. So between [REDACTED] and [REDACTED] of the value of the DI Products is attributable to domestic labor and capital. Staff offers no opinion on the original or modified labor and capital value-add but presumably would find them indicative of significance. *See generally* SIB at 107-108; SRB at 13-15.

These percentages, [REDACTED] reflect significant value is added by JBS’s domestic labor and capital expenditures, especially considering the nature of the hair braid industry, which is largely foreign sourced. And, again, the true percentages are likely higher because some of JBS’s reported COGS could be imputed to foreign plant and equipment, which should be segregated off from the subsection (B) analysis. *Certain Replacement Automotive Lamps*, Inv. No. 337-TA-1291, Comm’n Op. at 30, 30 n.44. So the record shows JBS’s domestic investment in labor and capital under subsection (B) is quantitatively significant. And for all the reasons explained for subsection (A), the activities are qualitatively significant as well.

Accordingly, JBS has shown the economic prong is met under subsection (B) for all asserted patents and claims.

IX. RES JUDICATA / CLAIM PRECLUSION

Respondents assert that the doctrine of res judicata, or claim preclusion, applies based on *Braiding Hair*, which involved three of the same patents and many similar products. *See* RIB at 189-91. This assertion is rejected for two reasons. First, Respondents cite no authority for the proposition that traditional claim preclusion applies in this context. *See id.* The one case they cite involving the Commission, *The Young Engineers, Inc. v. ITC*, 721 F.2d 1305, 1314 (Fed. Cir. 1983), is about “what effect, under principles of *res judicata*, a final judgment of a federal district court in prior patent infringement litigation should be given in a subsequent” Commission proceeding. Although the Court did hold that an “infringement claim may also be barred” in a Section 337 proceeding based on a prior district court judgment, it ultimately held that claim preclusion did not apply, and in any event the prior litigation Respondents identify here is not district court litigation. *Id.* at 1316. Second, the Commission instituted the present investigation notwithstanding its similarity to *Braiding Hair*, so it is not clear that claim preclusion applies at all. Respondents thus have not proven this defense.

X. CONCLUSIONS OF LAW

1. Complainant has proven infringement of claim 1 of U.S. Patent No. 10,786,026.
2. Respondents have proven the invalidity of claim 1 of U.S. Patent No. 10,786,026.
3. Complainant has proven the existence of articles protected by claim 1 of U.S. Patent No. 10,786,026.
4. Complainant has proven the existence of an economic domestic industry as required by 19 U.S.C. § 1337(a)(2) for U.S. Patent No. 10,786,026.
5. Complainant has proven infringement of claims 1 and 8 of U.S. Patent No. 10,980,301.

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6. Respondents have proven the invalidity of claims 1 and 8 of U.S. Patent No. 10,980,301.
 7. Complainant has proven the existence of articles protected by claims 1, 4, 7, and 8 of U.S. Patent No. 10,980,301.
 8. Complainant has proven the existence of an economic domestic industry as required by 19 U.S.C. § 1337(a)(2) for U.S. Patent No. 10,980,301.
 9. Complainant has not proven infringement of claim 20 of U.S. Patent No. 10,945,478.
 10. Respondents have proven the invalidity of claim 20 of U.S. Patent No. 10,945,478.
 11. Complainant has proven the existence of articles protected by claims 17 and 20 of U.S. Patent No. 10,945,478.
 12. Complainant has proven the existence of an economic domestic industry as required by 19 U.S.C. § 1337(a)(2) for U.S. Patent No. 10,945,478.
 13. Complainant has proven infringement of claim 11 of U.S. Patent No. 12,127,616.
 14. Respondents have proven the invalidity of claim 11 of U.S. Patent No. 12,127,616.
 15. Complainant has proven the existence of articles protected by claim 11 of U.S. Patent No. 12,127,616.
 16. Complainant has proven the existence of an economic domestic industry as required by 19 U.S.C. § 1337(a)(2) for U.S. Patent No. 12,127,616.
 17. There is no violation of section 337 with respect to U.S. Patent No. 10,786,026.
 18. There is no violation of section 337 with respect to U.S. Patent No. 10,945,478.
 19. There is no violation of section 337 with respect to U.S. Patent No. 10,980,301.
 20. There is no violation of section 337 with respect to U.S. Patent No. 12,127,616.

XI. RECOMMENDED DETERMINATION ON REMEDY AND BOND

The Commission's Rules provide that subsequent to an initial determination on the question of violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, the administrative law judge shall issue a recommended determination concerning the appropriate remedy in the event that the Commission finds a violation of section 337, and the amount of bond to be posted during Presidential review of the Commission action under section 337(j). *See* 19 C.F.R. § 210.42(a)(1)(ii).

The Commission has broad discretion in selecting the form, scope, and extent of the remedy in a section 337 proceeding. *Viscofan, S.A. v. Int'l Trade Comm'n*, 787 F.2d 544, 548 (Fed. Cir. 1986). Under Section 337(d)(1), if the Commission determines as a result of an investigation that there is a violation of section 337, the Commission is authorized to enter either a limited or a general exclusion order. 19 U.S.C. § 1337(d)(1). A limited exclusion order ("LEO") instructs the U.S. Customs and Border Protection ("CBP") to exclude from entry all articles that are covered by the patent at issue and that originate from a named respondent in the investigation. Under section 337(f)(1), the Commission may issue a cease and desist order ("CDO") in addition to, or instead of, an exclusion order. 19 U.S.C. § 1337(f)(1). The Commission generally issues a cease and desist order directed to a domestic respondent when there is a "commercially significant" amount of infringing, imported product in the United States that could be sold, thereby undercutting the remedy provided by an exclusion order. *See Certain Crystalline Cefadroxil Monohydrate*, Inv. No. 337-TA-293, USITC Pub. 2391, Comm'n Op. on Remedy, the Public Interest and Bonding at 37-42 (June 1991); *Certain Condensers, Parts Thereof and Prods. Containing Same, Including Air Conditioners for Automobiles*, Inv. No. 337-TA-334 (Remand), Comm'n Op. at 26-28 (Sept. 10, 1997). Additionally, during the 60-day period of Presidential review under 19 U.S.C. § 1337(j), "articles directed to be excluded from entry under subsection

[REDACTED]

(d) . . . shall . . . be entitled to entry under bond prescribed by the Secretary in an amount determined by the Commission to be sufficient to protect the complainant from any injury.” *See* 19 U.S.C. § 1337(j)(3).

JBS seeks a general exclusion order (“GEO”), limited exclusion orders in the alternative, cease and desist orders, a bond of 100% for most Respondents, and a bond of no less than 6-8% of sales for three Respondents. *See* CIB at 190-197; CRB at 90-93. Staff agrees, except it urges a 7.5% bond for all Respondents. *See* SIB at 108-113. Complainant bears the burden to prove that cease and desist orders and general exclusion orders are warranted. *Certain Microfluidic Devices*, Inv. No. 337-TA-1068, Comm’n Op. at 23 (Jan. 10, 2020); *Certain Purple Protective Gloves*, Inv. No. 337-TA-500, Comm’n Op. at 7 (Dec. 22, 2004). “The complainant bears the burden of establishing the need for a bond” during the Presidential Review period. *See Certain Robotic Vacuum Cleaning Devices and Components Thereof Such as Spare Parts*, Inv. No. 337-TA-1057, Comm’n Op. at 68 (Feb. 1, 2019).

A. Limited Exclusion and Cease and Desist Orders

As to limited exclusion orders, Respondents argue for an exception for “warranty replacement,” but that consideration is applicable to the public interest analysis, and the public interest has not been delegated here. *See* RIB at 185; *Certain Cloud-Connected Wood Pellet Grills and Components Thereof*, Inv. No. 337-TA-1237, Comm’n Op. at 11 n.9 (May 24, 2022). Respondents also argue for a certification provision, which is a “general practice” with Commission exclusion orders. *See* RIB at 185; *Certain Plant-Derived Serum Albumins (“rHSA”) and Products Containing the Same*, Inv. No. 337-TA-1238, Comm’n Op. at 62-63 (October 11, 2022). So it is recommended that limited exclusion orders with certification provisions issue as to each Respondent that has been shown to have violated Section 337.

[REDACTED]

As to cease and desist orders, Respondents argue that the only concrete evidence of [REDACTED]. See RRB at 95-96 (citing Hr’g Tr. (Gerardi) at 650:22-653:8). Here again, JBS cites to exhibits that were either not admitted or not admitted for substantive purposes, so their case for cease and desist orders is largely unsubstantiated. See CIB at 195-96 (citing CDX-0153C, CDX-0154C, and CDX-0155C). And although Mr. Gerardi opined that [REDACTED], he admitted that his numbers were “a little stale,” and expressly did not opine that the “commercially significant” test was satisfied. Hr’g Tr. (Gerardi) at 650:22-653:8. The only Respondent he mentioned by name was Hair Zone, whose X-PRESSION Ruwa product has been shown to infringe, and he testified that its ratio of inventory to imported units was “[REDACTED]” *Id.* This is sufficient to show a commercially significant inventory as to that product and that product only, so it is recommended that a cease and desist order issue only as to Respondent Hair Zone.

B. General Exclusion Order

As to a general exclusion order, the relevant statutory provision is 19 U.S.C. § 1337(d), because many Respondents contested the investigation. *Certain Purple Protective Gloves*, Inv. No. 337-TA-500, Comm’n Op. at 6. Under that provision, a GEO is appropriate if JBS proves either that a GEO 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). JBS argues that both prongs have been proven, and although its points have been weighed, only the admitted substantive evidence it cites has been considered. See CIB at 190-195; CRB at 90-91. Staff also argues that both prongs

[REDACTED]

have been proven, and the evidence it relies on is generally proper, except for CX-331[6]C, which is Ms. Martinez's expert report. *See* SIB at 108-110.

The admissible expert testimony came mainly from Mr. Gerardi. He opined that: (1) Respondents are affiliated with [REDACTED] companies not named in the Complaint, often with shared directors, addresses, and service companies; (2) Respondents receive synthetic hair products from suppliers in [REDACTED] countries, which "operate under a number of DBA names"; (3) Respondents themselves use "a variety of DBA names or websites"; (4) the Accused Products "do not always" identify the manufacturer or source on their packaging, and some online suppliers have no physical addresses; (5) the top 10 suppliers to the Respondents provide about [REDACTED] of their synthetic hair products; and (6) the diversity of suppliers, and their names and locations, combined with their online presence, make it easy to "move product around." Hr'g Tr. (Gerardi) at 648:10-650:16. Beyond that, Mr. Jhin testified that it is "very, very difficult" to identify online distributors of competing products. Hr'g Tr. (Jhin) at 77:1-22.

Some of this evidence weighs in favor of finding a need to prevent circumvention, including the use of "DBA names," the large number of affiliates that can easily become the importers of record, the lack of consistent identification on packaging, and online sales which can quickly be shifted to other online retailers. *Certain Foldable Reusable Drinking Straws and Components and Accessories Thereof*, Inv. No. 337-TA-1183, Comm'n Op. at 8-9 (Feb. 10, 2021); *Certain Mobile Device Holders and Components Thereof*, Inv. No. 337-TA-1028, Comm'n Op at 22 (Mar. 22, 2018). The products are also apparently low-cost, so the barriers to entry are similarly low; Respondents' suggestion to the contrary appears to be based on aggregate costs rather than per-unit costs. *See* RRB at 95; RX-1584C.

[REDACTED]

On the other hand, the large number of suppliers is not clearly relevant, because there is little evidence the suppliers alone produce or import infringing products, and as Dr. Vander Veen noted, the fact that JBS was able to identify so many putative Respondents, and their affiliates and suppliers, undercuts the claim that identifying infringers is unduly difficult. *See* Hr’g Tr. (Vander Veen) at 1133:12-1134:9. Nor is it clear that the large number of affiliates is especially relevant, because limited exclusion orders normally cover such affiliates, as Respondents emphasize. *See* RIB at 183; EDIS Doc. ID 863272 at 2 (limited exclusion order in *Braiding Hair*, encompassing “affiliated companies, parents, subsidiaries, agents, or other related business entities, or their successors or assigns”). And although not mentioned by any party, infringement can seemingly be avoided with ease, by merely packaging the hair products differently—as shown above with respect to the prior art products found to not anticipate. This suggests that a potential infringer would have little incentive to “circumvent” an exclusion order, as opposed to simply modifying its products so that they no longer infringe. On balance, the evidence does not show a need to prevent exclusion order circumvention under 19 U.S.C. § 1337(d)(2)(A).

As for 19 U.S.C. § 1337(d)(2)(B), JBS points generally to the same evidence. *See* CIB at 191-93. JBS also argues that Respondents were unable “to identify any other market participants” beyond themselves and JBS, but taken at face value this weighs against a GEO, because if all the market participants are known then it should be straightforward to identify an infringer. CIB at 191 (citing CX-0674C). Staff adds that Respondents have admitted there are “knock-off products,” but that is not a fair reading of the cited passage of Respondents’ prehearing brief. SIB at 110 (citing RPB at 24).

On the whole, this evidence does not show the need for a GEO. That the Accused Products “do not always” identify the manufacturer on their packaging does show difficulty in identifying

[REDACTED]

the product's source. *See* Hr'g Tr. (Gerardi) at 648:10-650:16. But again, Mr. Gerardi's research was seemingly successful in identifying potential infringers, so it is not clear that problems with source identification are sufficiently severe to justify a GEO. And as for a "pattern of violation," Respondents are correct that there is "no evidence of any non-respondent infringing products," other than what was introduced in *Braiding Hair*, where the evidence of infringement involved defaulting parties and so was not tested by the adversarial process, or nullified by invalidity findings. RRB at 95. In this investigation there is evidence of violations, but not truly of a pattern of violations, because JBS did not establish representativeness, so infringement has been shown only as to a fraction of the total Respondents' products. Mr. Gerardi even admitted on cross examination that his analysis was not necessarily limited to infringing products. *See* RIB at 184 (citing Hr'g Tr. (Gerardi) at 673:17-674:5).

Taken together, the evidence is insufficient to warrant a finding either of a need to prevent circumvention of an exclusion order or of a pattern of violation and difficulty in identifying the source of infringing products. So a general exclusion order is not recommended.

C. Bond

Again, JBS seeks a 100% bond for most Respondents, but the only admitted and substantive evidence JBS cites is the testimony of Mr. Gerardi. *See* CIB at 196-197. Mr. Gerardi testified that: (1) there is a "[REDACTED]" for the Accused Products, so he could not do a "like-to-like comparison" to calculate a price differential; (2) he nonetheless calculated the average selling price of Accused Products from most Respondents, but not of DI Products; (3) Mr. Jhin agreed to three "oral" licenses, one of which had a "[REDACTED]"; and (4) Mr. Gerardi opined in related district court litigation that three alleged infringers should pay royalties of "[REDACTED]" percent, although he did not explain how he arrived at those numbers.

[REDACTED]

Hr’g Tr. (Gerardi) at 653:10-654:24, 670:7-671:10. Mr. Jhin testified that the oral licenses were with JMS, I&I, and Choix International, and he did not know how much the licensees were paying, nor did he provide a royalty rate. *See* Hr’g Tr. (Jhin) at 159:7-161:2, 167:1-168:10. Staff argues that because royalty information is available, it should be relied on rather than the default 100% rate, and cites Mr. Gerardi’s testimony regarding a [REDACTED] royalty. *See* SIB at 112-113. Respondents argue, citing Dr. Vander Veen, that no bond should be imposed because of a failure of proof and because Respondents’ average selling price is “[REDACTED]” than JBS’s. *See* RIB at 186-189 (citing Hr’g Tr. (Vander Veen) at 1134:10-1135:5). In its reply brief JBS argues that most Respondents “did not produce information necessary to calculate a reasonable royalty,” but this is belied by Dr. Vander Veen’s calculation, admitted in summary form as RX-1584C, confirming that most Respondents’ average selling price [REDACTED] [REDACTED]). CRB at 92-93; *see* RX-1584C.

Overall the record does not support any specific royalty, mainly because the license evidence is vague. One of the oral licenses has a royalty of [REDACTED], and the other relevant terms of the oral licenses are not in evidence. Mr. Gerardi opined regarding three alleged infringers in a district court case, although there is no cited evidence of record explaining which parties that applied to, how he calculated the proposed royalty rates, or whether the rates were accepted by the district court. The most concrete and relevant evidence is Dr. Vander Veen’s listing of average selling prices, which shows that for many Respondents no bond is appropriate because their [REDACTED] [REDACTED].” *Certain Magnetic Data Storage Tapes and Cartridges Containing the Same (II)*, Inv. No. 337-TA-1076, Comm’n Op. at 67 (June 20, 2019). Admittedly, the various products are not necessarily comparable, and Mr. Gerardi’s observation that an apples-to-apples comparison is difficult is entirely believable. But there is clearly some “price difference”

[REDACTED]

evidence, especially from 2024 (RX-1584C), and JBS has made literally no effort to analyze it (*Photodynamic Therapy*, Inv. No. 337-TA-1411, Comm’n Op. at 62). So JBS has not shown that “calculation of a price difference is impractical,” and its license evidence is too ambiguous and non-specific to support a reasonable royalty. *Id.* Particularly in view of the fact that [REDACTED] a blanket royalty of 100% for all but three Respondents is inappropriate.

On balance, JBS has not shown entitlement to any particular bond during the Presidential review period. Therefore, a bond of 0% is recommended.

D. Bar Clamps

Respondents argue that no remedy should issue in light of *Certain Bar Clamps*, Inv. No. 337-TA-429, Comm’n Op. at 8 (Jan. 4, 2001). *See* RIB at 191-92. In that investigation the Commission held that:

The facts of a given case also might enable a party to cite the complainant’s conduct in withdrawing and refiling the complaint as one factor among others supporting the argument that issuance of a remedial order would have an adverse impact on the public interest and should not be issued. The investigation of any refiled complaint could thus result in a determination of no violation of section 337 relief, or the denial of relief on public interest grounds, owing at least in part to the complainant’s conduct in withdrawing and then refiling its complaint.

Bar Clamps at 8. As Staff notes, consideration of the public interest has not been delegated here, so Respondents’ argument is technically irrelevant.

Inasmuch as factfinding might aid the Commission’s consideration of this issue, however, the parties’ points will be addressed. JBS withdrew its Complaint in *Braiding Hair*, and Respondents argue that JBS’s conduct and timing in connection with that withdrawal was “purely strategic.” RIB at 192. Respondents rely on several exhibits to show this, but four of those exhibits are transcripts of depositions of Dr. Singh and Mr. Hwang that, according to Respondents’ final

[REDACTED]

exhibit list, were not admitted in evidence. *See id.*; EDIS Doc. ID 876887 (Mar. 27, 2026) (showing no “Date Admitted” for RX-4624, RX-4641, RX-4643, and RX-4669). The other exhibits on which Respondents rely are a motion (RX-0798) and three orders (RX-0795 to RX-0797) that shed no light on the question, other than that the orders were generally adverse to JBS and issued shortly before JBS withdrew the *Braiding Hair* Complaint. The timing of the withdrawal is both curious and unusual, but in the absence of more concrete evidence it is not clearly purely strategic, so Respondents have not shown any basis to factor in JBS’s litigative conduct in *Braiding Hair* as part of the public interest analysis.

XII. INITIAL DETERMINATION AND ORDER

Based on the foregoing,²⁶ it is my Initial Determination that there is no violation of Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain pre-stretched synthetic braiding hair and packaging therefor in connection with the asserted claims of U.S. Patent No. 10,786,026, 10,980,301, 10,945,478, and 12,127,616.

The undersigned hereby certifies to the Commission this Initial Determination, together with the Record of the hearing in this investigation consisting of the following: the transcript of the evidentiary hearing, with appropriate corrections as may hereafter be ordered; and the exhibits accepted into evidence in this investigation.²⁷

²⁶ The failure to discuss any matter raised by the parties or any portion of the Record herein does not indicate that said matter was not considered. Rather, any such matter(s) or portion(s) of the Record has/have been determined to be irrelevant, immaterial or meritless. Arguments made on brief which were otherwise unsupported by Record evidence or legal precedent have been accorded no weight.

²⁷ The pleadings of the parties filed with the Secretary need not be certified as they are already in the Commission’s possession in accordance with Commission rules.



Pursuant to 19 C.F.R. § 210.42(h), this Initial Determination shall become the determination of the Commission sixty (60) days after the date of service of the Initial Determination, unless a party files a petition for review of the Initial Determination within twelve (12) days after service 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 therein. Any issue or argument not raised in a petition for review, or response thereto, will be deemed to have been abandoned and may be disregarded by the Commission in reviewing the Initial Determination pursuant to 19 C.F.R. § 210.43(b) and (c).

[REDACTED]

Confidentiality Notice:

This Initial Determination is being issued as confidential, and a public version will be issued pursuant to Commission Rule 210.5(f). Within seven (7) days of the date of this Initial Determination, the parties shall jointly submit: (1) a proposed public version of this opinion with any proposed redactions bracketed in red; and (2) a written justification for any proposed redactions specifically explaining why the piece of information sought to be redacted is confidential and why disclosure of the information would be likely to cause substantial harm or likely to have the effect of impairing the Commission's ability to obtain such information as is necessary to perform its statutory functions.²⁸

SO ORDERED.



Cameron Elliot
Administrative Law Judge

²⁸ Under Commission Rules 210.5 and 201.6(a), confidential business information includes: information which concerns or relates to the trade secrets, processes, operations, style of works, or apparatus, or to the production, sales, shipments, purchases, transfers, identification of customers, inventories, or amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or other organization, or other information of commercial value, the disclosure of which is likely to have the effect of either impairing the Commission's ability to obtain such information as is necessary to perform its statutory functions, or causing substantial harm to the competitive position of the person, firm, partnership, corporation, or other organization from which the information was obtained, unless the Commission is required by law to disclose such information. *See* 19 C.F.R. § 201.6(a). Thus, to constitute confidential business information the disclosure of the information sought to be designated confidential must likely have the effect of either: (1) impairing the Commission's ability to obtain such information as is necessary to perform its statutory functions; or (2) causing substantial harm to the competitive position of the person, firm, partnership, corporation, or other organization from which the information was obtained.