

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

STRIDE RITE CHILDREN'S GROUP, LLC,
Petitioner,

v.

SHOES BY FIREBUG LLC,
Patent Owner.

Case IPR2017-01809
Patent 8,992,038 B2

Before BRYAN F. MOORE, MATTHEW R. CLEMENTS, and
TERRENCE W. McMILLIN, *Administrative Patent Judges*.

CLEMENTS, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
Inter Partes Review
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, Stride Rite Children’s Group, LLC (“Petitioner”) challenges claims 1–10 (“the challenged claims”) of U.S. Patent No. 8,992,038 B2 (Ex. 1001, “the ’038 patent”), owned by Shoes by Firebug LLC (“Patent Owner”). We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, Petitioner has shown by a preponderance of the evidence that claims 1–10 are unpatentable. Petitioner’s Motion to Exclude is *denied*. Petitioner’s Motion to Strike the Declaration of Paul Barcroft is *granted*. Petitioner’s Motion to Strike Sections II.C and II.D of Patent Owner’s Sur-Reply is *denied*.

A. Procedural History

Petitioner filed a Petition requesting an *inter partes* review of claims 1–10 of the ’038 patent. Paper 1 (“Pet.”). Patent Owner filed a Preliminary Response. Paper 8. On January 19, 2018, we instituted *inter partes* review of claims 1–10 of the ’038 patent based on the asserted grounds of unpatentability. Paper 9 (“Inst. Dec.”), 50–51.

Thereafter, Patent Owner filed a Patent Owner Response (Paper 16, “PO Resp.”), to which Petitioner filed a Reply (Paper 25, “Pet. Reply”). Patent Owner filed a Sur-Reply (Paper 44, “PO Sur-Reply”), and a Motion to Seal (Paper 43) portions of the Sur-Reply.¹

¹ Patent Owner filed a redacted version of the Sur-Reply as Paper 45, and filed a Motion to Seal portions of its Sur-Reply as Paper 43. We granted this motion. Paper 63.

Between the filing of the Reply and Sur-Reply, Patent Owner filed, with authorization (Paper 29), a Motion to Seal (Paper 26), two licenses involving the '038 patent (Exs. 2040 and 2041) and portions of a Declaration of Ralph Shanks (Ex. 2042) pertaining to the licenses. Petitioner filed, with authorization (Paper 29), a Response to Patent Owner's Licenses and Declaration. Paper 48; Paper 49.²

Petitioner filed a Motion to Exclude (Paper 40, "Pet. MTE"), to which Patent Owner filed an Opposition (Paper 51, "PO Opp. to MTE"), and Petitioner filed a Reply (Paper 54, "Pet. Reply ISO MTE").³

Petitioner also filed, with authorization (Paper 21), a Motion to Strike the Declaration of Paul Barcroft (Ex. 2003). Paper 35 ("Pet. MTS Barcroft Decl."). Patent Owner filed an Opposition (Paper 38, "PO Opp. MTS

² Paper 48 was filed under seal and Paper 49 purports to be a redacted version of Paper 48. Petitioner did not, however, file a Motion to Seal Paper 48. Because it involves Patent Owner's confidential information in Exhibits 2040 and 2041, however, Paper 48 is addressed in our Decision on Patent Owner's Motion to Seal (Paper 26). Paper 63.

³ Petitioner filed its Motion to Exclude (Paper 40) as "Parties and Board Only," and filed a redacted version (Paper 41), but did not file an accompanying Motion to Seal. Patent Owner filed its Opposition (Paper 51) as "Parties and Board Only," and filed a redacted version (Paper 52), and filed a Motion to Seal its Opposition (Paper 50). Petitioner filed its Reply in support of its Motion to Exclude as "Parties and Board Only" (Paper 54) and filed a redacted version (Paper 55), but again did not file a Motion to Seal. Petitioner should have filed a Motion to Seal with its Motion to Exclude. However, because it is Patent Owner's confidential information at stake in Petitioner's Motion to Exclude, we address Petitioner's papers (Papers 40 and 54), as well as Patent Owner's opposition (Paper 51) in our Decision granting Patent Owner's Motion to Seal its Opposition (Paper 50). Paper 63.

Barcroft Decl.”), and Petitioner filed a Reply in support (Paper 47, “PET Reply ISO MTS Barcroft Decl.”).

Petitioner also filed, with authorization by email, a Motion to Strike Sections II.C and II.D of Patent Owner’s Sur-Reply. Paper 53. Patent Owner filed an Opposition (Paper 56), to which Petitioner filed a Reply (Paper 57).

On November 7, 2018, we held a hearing and a transcript of the hearing is included in the record. Paper 62 (“Tr.”).

B. Related Proceedings

The ’038 patent is the subject of a district court proceeding in the Northern District of Texas, captioned *Shoes by Firebug LLC v. Stride Rite Children’s Group, LLC*, No. 4:16-cv-00899 (E.D. Tex.). Pet. 1; Paper 7, 2. Petitioner also filed a petition seeking *inter partes* review of U.S. Patent No. 9,301,574 B2, which claims the benefit of the filing date of the application that issued as the ’038 patent. Pet. 2; *see* Case IPR2017-01810.

C. The ’038 patent

The ’038 patent is titled “Internally Illuminated Light Diffusing Footwear.” Ex. 1001, [54]. The patent issued on March 31, 2015, from an application filed on November 15, 2013, which claims the benefit of the filing date of a provisional application filed on December 28, 2012. *Id.* at [22], [45], [60], 1:4–6. The patent generally relates to footwear with an internal illumination system that “displays internally illuminated graphics, designs, and logos by diffusion of light.” *Id.* at 1:10–14.

The ’038 patent explains that, in recent decades, LED lights have been attached to footwear and exposed to an observer’s eye. *Id.* at 1:25–28. The patent further indicates that “there are a wide variety [of] applications of

illumination systems and constructions of footwear with illumination systems, both integrated and external.” *Id.* at 1:32–36. The ’038 patent describes “a new application of internally illuminated footwear” that provides diffused light from internal illumination sources. *Id.* at 1:38–42. By incorporating impermeable sections, aesthetic designs are created as part of the footwear. *Id.* at 1:42–43. As the patent explains, the “present invention is an internally illuminated footwear with light diffusing layers that results in the visual impression of radiant illumination.” *Id.* at 2:42–45 (referring to Figs. 1–4, 6A–6E, 7–9) (reference numeral removed).

According to the patent, the “invention comprises a footwear 1 and an illumination system 2” that is housed in footwear 1. *Id.* at 2:45–47. Figures 6A, 6B, and 6C of the challenged patent are set forth below:

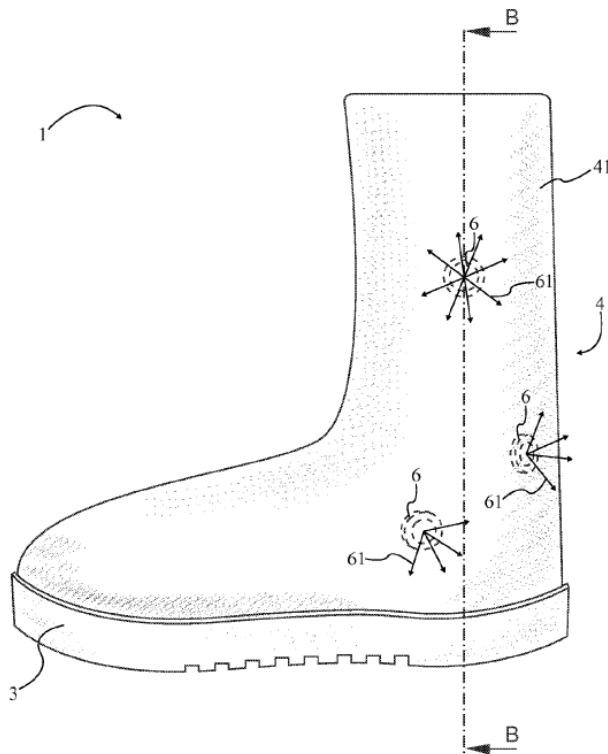


FIG. 6A

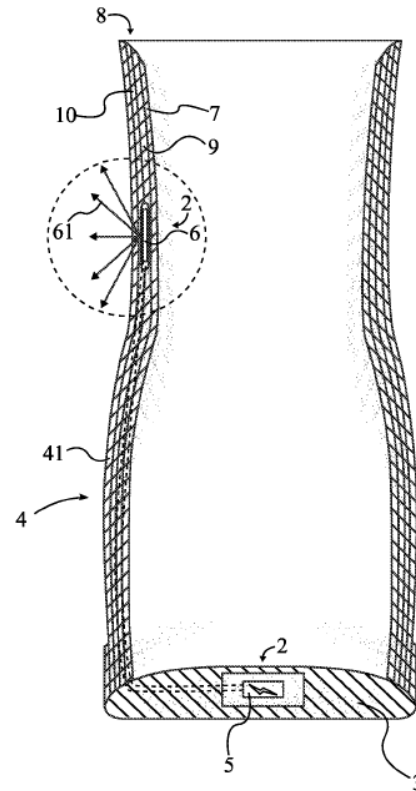


FIG. 6B

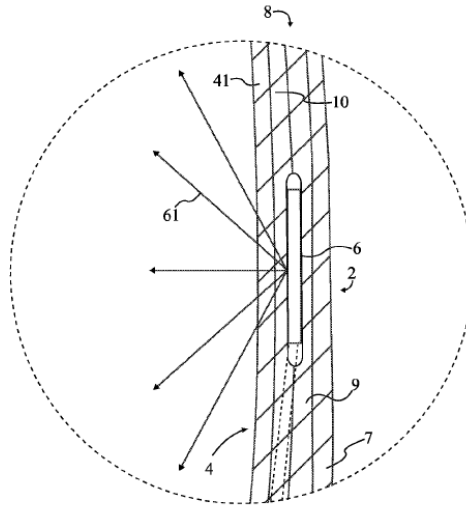


FIG. 6C

Figure 6A shows footwear 1 having “a sole 3 and an upper 4, with upper 4 being perimetrically connected to the sole 3.” *Id.* at 2:47–49.

Figure 6B illustrates a rear cross-sectional view of the footwear shown in Figure 6A.⁴ *Id.* at 1:65–2:4. Figure 6C depicts a magnified view of the upper and structure shown in Figure 6B. *Id.* at 2:4–5.

As shown in Figure 6B, illumination system 2 includes power source 5 and illumination sources 6, which in turn “are positioned between the liner 7 and the upper 4, interior to the footwear 1.” *Id.* at 2:49–53. As shown in Figures 6A and 6B, “illuminating light 61 itself is represented as arrows, providing a visual example of diffused light.” *Id.* at 2:53–55. Liner 7 and structure 8, “each of which are positioned in the interior of the footwear 1,” are shown in Figures 6B and 6C. *Id.* at 2:56–58.

⁴ Figure 6A shows the plane upon which the rear cross-sectional view of Figure 6B has been taken along the dotted line B–B of Figure 6A. Ex. 1001, 1:65–2:4.

“The structure 8 is designed to be adjacently connected to the inner surface of the upper 4, with the structure 8 resultantly being positioned between the liner 7 and the upper 4.” *Id.* at 2:59–61. “The structure 8 itself comprises an interfacing layer 9 and a batting 10, which enhance the visual aspects of the illumination sources 6.” *Id.* at 2:61–64. “The interfacing layer 9 is a reflective layer that serves as a connection point for the plurality of illumination sources 6, that are adjacently connected to the interfacing layer 9 opposite the liner 7.” *Id.* at 2:65–3:1. “Ultimately, the plurality of illumination sources 6 are positioned between the interfacing layer 9 and the batting 10.” *Id.* at 3:2–3.

The patent explains the light diffusion that results from the components:

The reflective interfacing layer 9 maximizes the amount of light 61 that exits through the batting 10, while the batting 10 serves as a first layer of light diffusion, distributing light over a larger area of batting 10, before the light 61 exits the batting 10 and into the diffusing section 41 of the upper 4. After entering the diffusing section 41 the light is once again diffused and spread out across a larger area of the upper 4 which creates the visual effect of diffused light sources.

Id. at 3:3–11.

The patent also describes an embodiment that uses a light impermeable section in contrast with a light diffusing section to create an aesthetic design. *Id.* at 3:46–51. An example of a light impermeable section is a leather section that blocks all passage of light and does not diffuse light. *Id.* at 3:39–43. An aesthetic design may be “a shape, a logo, or other visual component” or “could comprise graphics or logos, or even a combination thereof.” *Id.* at 3:37–40, 5:4–6. The patent provides several examples of

how aesthetic designs are produced. *Id.* at 5:20–6:36. For example, an aesthetic design of a heart may be formed by a heart-shaped light diffusing section with the rest of the upper being made from light impermeable material. *Id.* at 5:53–61. In another example, a heart aesthetic design may be produced by a light impermeable stencil layer in the shape of a heart such that the stencil layer blocks light from illumination sources. *Id.* at 6:19–32, Fig. 13. In yet another example, a light-impermeable stencil layer may include aesthetic cuts that traverse through the stencil layer and allow for the passage of light. *Id.* at 6:3–12.

D. Illustrative Claims

Petitioner challenges claims 1–10 of the '038 patent. Independent claim 1, reproduced below, is illustrative:

1. An internally illuminated textile footwear comprises:
 - a footwear;
 - the footwear comprises a sole and an upper;
 - an illumination system;
 - the illumination system comprises a power source and a plurality of illumination sources;
 - a liner;
 - a structure;
 - the structure comprises an interfacing layer and a batting;
 - the structure being adjacently connected to the upper;
 - the structure being positioned between the liner and the upper;
 - the interfacing layer being positioned adjacent to the liner;

the batting being adjacently connected to the interfacing layer opposite the liner;

the interfacing layer being reflective;

the batting being light diffusing;

the plurality of illumination sources being adjacently connected to the interfacing layer;

the plurality of illumination sources being positioned between the interfacing layer and the batting;

the upper being perimetrically connected to the sole;

the liner being positioned interior to the upper; the upper being light diffusing;

the illumination system being housed within the footwear;

the plurality of illumination sources emitting light, wherein the light first entering the batting and being diffused by the batting, the light diffused by batting exits the batting, enters the upper, diffused again by the upper and then exits the upper, the twice diffused light creating a visual impression of internal radiant illumination across an outer surface area of the upper.

Ex. 1001, 7:26–57.

A. Evidence Relied Upon

Petitioner relies upon the following prior art references (Pet. 3):

Parker	US 5,894,686	Apr. 20, 1999	Ex. 1003
Rosko	US 2011/0271558 A1	Nov. 10, 2011	Ex. 1004
Guerra	US 5,813,148	Sept. 29, 1998	Ex. 1005
Guzman	US 2005/0183294 A1	Aug. 25, 2005	Ex. 1006
Dua	US 6,910,288 B2	June 28, 2005	Ex. 1007

B. Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable based on the following grounds (Pet. 3):

References	Basis	Claim(s) challenged
Parker and Rosko	§ 103 ⁵	1, 5, 6, 8, and 9
Parker, Rosko, and Guerra	§ 103	3, 4, and 10
Parker, Rosko, and Dua	§ 103	2
Parker, Rosko, and Guzman	§ 103	7

II. ANALYSIS

A. Claim Construction

We interpret claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b)(2016);⁶ *see* *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2142–46 (2016). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). We must be careful not to read a particular embodiment appearing in the written

⁵ The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. § 100 *et seq.* effective on March 16, 2013. Because the ’038 patent issued from an application filed before March 16, 2013, we apply the pre-AIA versions of the statutory bases for unpatentability.

⁶ A recent amendment to this rule does not apply here because the Petition was filed before November 13, 2018. *See* “Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board,” 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to be codified at 37 C.F.R. pt. 42).

description into the claim if the claim language is broader than the embodiment. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

In our Decision on Institution, we construed “adjacently connected to” to mean “next to and contacting,” we determined “batting” did not require construction, and we construed “upper” to mean “only the exterior layer(s) of a shoe or boot above the sole.” Inst. Dec. 14–23. Neither party disputes our constructions of “adjacently connected to” or “upper,” or our determination that “batting” does not require construction. PO Resp. 28; Pet. Reply 4. Having considered the arguments and evidence, we maintain our construction of “adjacently connected to” to mean “next to and contacting,” and we maintain our construction of “upper” to mean “only the exterior layer(s) of a shoe or boot above the sole.”

Only the following additional terms require explicit construction.

1. “internally illuminated textile footwear”

In our Decision on Institution, we determined that “internally illuminated textile footwear,” recited in the preamble, is not a limitation of claim 1. Inst. Dec. 14–16.

In its post-institution papers, Patent Owner argues that “the preamble’s recitation of an ‘internally illuminated textile footwear’ is limiting.” PO Resp. 46–50; PO Sur-Reply 16–19. Patent Owner argues that the claims are limited to the invention described in the background section of the patent, citing the statement in the Specification that “[i]t is therefore the purpose of this invention to internally illuminate the textile components

of footwear.” PO Resp. 46 (quoting Ex. 1001, 1:44–47). According to Patent Owner, “the preamble is essential to understand limitations or terms in the claim body” and is “a fundamental characteristic of the claimed invention” as evidenced throughout the entire patent.” *Id.* at 47 (citing *See Poly-America, LP v. GSE Lining Technology, Inc.*, 383 F. 3d 1303, 1310 (Fed. Cir 2004)); *see also id.* at 47–48 (citing references to “textile components” and “light diffusing sections 41 (i.e., a sheer textile)” in the ’038 patent). According to Patent Owner, the preamble informs the claim limitation “the upper being light diffusing” and requires that “the claimed structure include textile material in the upper that is sufficiently sheer to allow light from the plurality of illumination sources to ‘creat[e] a visual impression of internal radiant illumination across an outer surface of the upper.”” *Id.* at 48–49 (quoting Ex. 1001, claim 1).

Petitioner counters that the preamble is not limiting because “[t]he body of the claims of the ’038 Patent recites a structurally complete invention.” Pet. Reply 2. According to Petitioner, “the recitation of ‘textile footwear’ is not necessary to inform the meaning of ‘light diffusing section’ because the specification provides examples of a ‘light diffusing section’ with a clear instruction that it not be limited to textile materials.” *Id.* at 3 (citing Ex. 1001, 4:49–53). According to Petitioner, the preamble of claim 1 merely “gives a name to the invention, extols its features or benefits, or describes a use for the invention.” *Id.* at 3–4 (quoting *Deere & Co. v. Bush Hog*, 703 F.3d 1349, 1358 (Fed. Cir. 2012)).

Patent Owner counters that Petitioner overlooks the fact that each dependent claim recites the preamble of claim 1 (PO Sur-Reply 16–17) and, therefore, “the preamble must be limiting because the recited ‘internally

illuminated textile footwear’ in each dependent claim derives its antecedent basis from the preamble to the independent claims” (*id.* at 18). Patent Owner also repeats that the preamble gives “context essential to understanding the meaning of the claims.” *Id.* at 18 (quoting *Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1376 (Fed. Cir. 2005)).

A preamble does not generally limit the claims. *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002) (citation omitted). A preamble may be limiting, however, if the preamble “recites essential structure or steps; claims depend on a particular preamble phrase for antecedent basis; the preamble is essential to understand limitations or terms in the claim body; the preamble recites additional structure or steps underscored as important by the specification; or there was clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art.” *Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017) (citing *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)) (internal quotation marks omitted). On the other hand, a “preamble is not a claim limitation if the claim body defines a structurally complete invention . . . and uses the preamble only to state a purpose or intended use for the invention.” *Id.* at 1236 (alteration in original) (quoting *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997)). Additionally, a preamble that “merely extol[s] benefits or features of the claimed invention does not limit the claim scope without clear reliance on those benefits or features as patentably significant.” *Id.* (internal quotation marks omitted) (citing *Catalina Mktg.*, 289 F.3d at 809).

Having considered the parties’ arguments and evidence, we maintain our initial determination that the preamble is not limiting. Patent Owner’s

argument is based on its contention that the preamble informs the claim limitation “the upper being light diffusing” and requires that “the claimed structure include textile material in the upper that is sufficiently sheer to allow light from the plurality of illumination sources to ‘creat[e] a visual impression of internal radiant illumination across an outer surface of the upper.’” *Id.* at 48–49 (quoting Ex. 1001, claim 1). As discussed below, however, we do not construe “the upper being light diffusing” to require a sheer textile. Moreover, we are not persuaded that such a requirement should be imported from the preamble.

We recognize that each challenged dependent claim (claims 2–10) repeats the preamble from claim 1—“The internally illuminated textile footwear as claimed in claim” None of the challenged dependent claims, however, includes a limitation in the claim body that refers to “the internally illuminated textile footwear” or even “the footwear.” Ex. 1001, 7:58–8:56. Thus, we determine that the repetition of the preamble of claim 1 in the dependent claims serves as the reference to a claim previously set forth to satisfy the requirements of U.S.C. § 112. *See* 35 U.S.C. § 112 (“[A] claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed.”).

We also determine that the bodies of the claims of the challenged patent recite a structurally complete invention and the preambles only state an intended use of the invention. For example, Claim 1 recites a “footwear” and an “illumination system,” and the manner in which that illumination system relates to other elements of the “footwear” (e.g., “being adjacently connected to the interfacing layer” and “being positioned between the interfacing layer and the batting.”) Claim 1 also recites explicitly that “the

footwear comprises . . . an upper,” and “the upper being light diffusing.” Claim 1 also recites “the plurality of illumination sources emitting light . . . the light diffused by batting exits the batting, enters the upper, diffused again by the upper and then exits the upper” These limitations define a structurally complete invention.

For these reasons, we conclude that “internally illuminated textile footwear” is not a limitation of the subject matter encompassed by any of the challenged claims (claims 1–10).

2. “*upper being light diffusing*”

This term was not construed in our Decision on Institution. Patent Owner argues that “the phrase ‘upper being light diffusing’ is defined by the specification as a ‘sheer textile’” because “the specification recites ‘the light diffusing sections 41 (i.e., a sheer textile) of the upper 4.’” PO Resp. 49 (quoting Ex. 1001, 3:44–46). Patent Owner contends that “i.e.,” as used in the quoted portion of the ’038 patent, is definitional. *Id.* Thus, concludes Patent Owner, “the upper as recited in claim 1, whether the preamble is given weight or not, should be construed as being a sheer textile since the upper is claimed to be ‘light diffusing.’” *Id.* at 49–50.

Petitioner counters that “i.e.,” is not definitional because the ’038 patent clearly states that textile materials are “just one possible material type” of its light diffusing section. Pet. Reply 2 (quoting Ex. 1001, 4:46–50 (“Textile materials, examples of which include but are not limited to fabric materials (whether synthetic, a blend of synthetic and natural, or a blend of synthetics) and nature materials, are *just one possible material type* which can be used for the light diffusing section 41.” (emphasis added))). Thus,

Petitioner concludes, the passage relied upon by Patent Owner describes only that embodiment, not all embodiments. *Id.*

Petitioner also argues that Patent Owner's proposed construction of "the upper being light diffusing" to mean a sheer textile is narrower than the construction of "light diffusing section" (Ex. 1001, claim 9) to which it agreed in the related district court litigation. Pet. Reply 3 (citing Ex. 1019, 5). There, Patent Owner agreed that "light diffusing section" means "a section that causes light to be spread out and that hides a plurality of illumination sources without blocking all light produced by the plurality of illumination sources" (Ex. 1019, 5) and the district court adopted that construction (Ex. 1020, 6).

Having considered the parties' arguments and evidence, we decline to construe "upper being light diffusing" to require that the upper be a sheer textile. As an initial matter, "the upper being light diffusing" cannot be read to require that the *entire* upper be light diffusing because dependent claim 8 depends directly from independent claim 1 and recites that "the upper further comprises a light *impermeable* section." Ex. 1001, 8:36–37. If the entire upper was "light diffusing," then none of the upper could comprise "a light *impermeable* section," as recited in dependent claim 8. Thus, we determine that "the upper being light diffusing" requires only that some *portion* of the upper is light diffusing. Because claim 1 requires only that some *portion* of the upper be "light diffusing," there is no basis to require the *entire* upper be a sheer textile.

Moreover, we are not persuaded that even the light diffusing *portion* of the upper is required to be a sheer textile. As Petitioner notes, the Specification states expressly that textile materials "are just one possible

material type which can be used for the light diffusing section 41.” Ex. 1001, 4:46–50. As a result, the passage relied upon by Patent Owner—“the light diffusing sections 41 (i.e., a sheer textile) of the upper 4” at lines 44 to 46 of column 3—is better understood to describe only that “variant” described at lines 39 to 61 of column 3, and illustrated at Figure 7.

Finally, our construction is consistent with the parties’ agreement in district court that “light diffusing section” means “a section that causes light to be spread out and that hides a plurality of illumination sources without blocking all light produced by the plurality of illumination sources.” Ex. 1019, 5.

Having considered the parties arguments and evidence, we decline to construe “upper being light diffusing” to mean the entire upper is a sheer textile.

3. “*interfacing layer*”

Patent Owner does not argue explicitly for a construction of “interfacing layer,” but distinguishes Parker’s “film, sheet or coating 15” on the grounds that it is “merely an optical layer, not a structural layer.” PO Resp. 38–41.

Petitioner counters that Patent Owner (1) offers no explicit construction of “interfacing layer;” (2) “offers no workable definition of ‘structural’ that would distinguish structural interfacing layers from non-structural interfacing layers;” and (3) agreed in district court to a construction of “interfacing layer” that does not require it to be structural. Pet. Reply 8 (citing Ex. 1019, 5 (“interfacing layer” means “reflective layer to which illumination sources are connected”)). Petitioner also argues that the provisional application to which the ’038 patent claims priority is

inconsistent with the requirement that the “interfacing layer” be structural. *Id.* at 8–9.

Patent Owner counters that the stipulated construction from district court is not binding on the panel and is not inconsistent with a requirement that the “interfacing layer” be structural. PO Sur-Reply 19–20. Patent Owner relies upon the disclosure in the Specification that “the interfacing layer 9 [is] used in the art to provide structural reinforcement” and argues that the “interfacing layer” is structural in every embodiment described in the ’038 patent. *Id.* at 20 (quoting Ex. 1001, 3:11–12). Finally, Patent Owner argues that Mr. Smith, the named inventor on the ’038 patent, stated during deposition that the “reflective foil” disclosed in the provisional application is not the “interfacing layer” recited in claim 1. *Id.* at 21–22 (citing Ex. 1022, 106:13–109:17).

As an initial matter, the Specification’s sole use of “structural” does not amount to a definition of “interfacing layer” as structural:

The interfacing layer 9, used in the art to provide *structural* reinforcement, is also beneficial as it adds virtually no bulk or weight to the present invention while reducing the difficulty of and increasing the efficiency of the manufacturing process as it relates to the installation of illumination sources 6.

Ex. 1001, 3:11–16 (emphasis added). This passage merely describes what was already known in the art about the use of interfacing layers to provide structural reinforcement and, in the same passage, describes interfacing layers as “add[ing] virtually no bulk or weight.”

The claims also do not require the “interfacing layer” to be structural. To the contrary, claim 1 separately recites a “structure” that “comprises an interfacing layer *and* batting” and is “adjacently connected to the upper” and

is “positioned between the liner and the upper.” The dependent claims add additional layers to the “structure.”

Moreover, we agree with Petitioner that Patent Owner has not provided a clear definition of “structural” that would permit us to distinguish a structural “interfacing layer” from a non-structural interfacing layer. Patent Owner appears to use the term to mean a layer that would survive the lasting process, but nothing in the claim requires the claimed “footwear” be made by a lasting process.

Finally, although Patent Owner is correct that the parties’ agreed construction in district court is not binding upon the panel, it is nevertheless informative. By adding a “structural” requirement to the “interfacing layer,” Patent Owner seeks a narrower construction in this proceeding, under the broadest reasonable interpretation standard, than it agreed to in the district court, under a *Phillips*-type construction. Patent Owner does not explain, however, why a narrower construction is warranted under the broadest reasonable interpretation standard than under the district court style claim construction standard. We are not persuaded that a narrower construction is warranted in this proceeding.

For the foregoing reasons, we construe “interfacing layer” to mean “reflective layer to which illumination sources are connected” and we decline to require that it be structural.

B. Level of Ordinary Skill in the Art

Petitioner contends, relying on Mr. Holden’s declaration testimony, that one of ordinary skill in the art relevant to the challenged patent would have had “at least several years’ experience in footwear design with familiarity in the integration of light sources into footwear.” Pet. 11 (citing

Ex. 1002 ¶ 12). Further relying on Mr. Holden’s declaration testimony, Petitioner contends that one of ordinary skill in the art also would have had “an understanding of the range of material choices and construction techniques that are used to create the various parts of footwear, as well as their functional requirements and impact on overall footwear appearance.” *Id.* at 11–12 (citing Ex. 1002 ¶ 12).

Patent Owner’s declarant adopts Mr. Holden’s level of ordinary skill. Ex. 2001 ¶ 62 (“For purposes of this declaration, I will apply Mr. Holden’s proposed standard without prejudice.”).

We determine that the level of ordinary skill proposed by Petitioner is consistent with the challenged patent and with the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

*C. Motion to Strike the
Declaration of Paul Barcroft*

Petitioner filed “Petitioner’s Motion to Strike the Declaration of Paul Barcroft.” Paper 35. Patent Owner filed a Response in opposition to the motion (Paper 38) and Petitioner filed a Reply in support of the motion (Paper 47). For the reasons stated below, the motion is granted.

The Declaration of Paul Barcroft (Ex. 2003) was filed by Patent Owner in support of the Response and is cited and quoted from repeatedly in the Response. PO Resp. 2, 15–19, 51–52, 54, 56–57. Patent Owner also cites and quotes from the Barcroft Declaration in its Sur-Reply. Sur-Reply 27.

Mr. Barcroft refused to sit for an in-person deposition and Patent Owner requested that Petitioner's deposition of Mr. Barcroft be conducted by written questions. Ex. 2039 (July 10, 2018, Teleconference Transcript), 4–6. Petitioner was unwilling to agree to Patent Owner's proposal to have Mr. Barcroft answer written questions in lieu of an in-person deposition. *Id.* at 6. A teleconference was held with the Board and attorneys for the parties and a transcript of that teleconference was entered into the record. *See Id.* The Board denied Patent Owner's request to conduct the deposition by written questions and ordered that "if Patent Owner fails to produce Paul Barcroft for in-person deposition on or before July 26, 2018, Petitioner is authorized to file a motion to strike the deposition of Paul Barcroft and the portions of the Patent Owner Responses that rely thereon." Paper 21, 4; *see also* Ex. 2039, 14. Mr. Barcroft was not produced for an in-person deposition and this motion was filed. *See* Paper 35, 1.

The right to cross-examine an adversarial witness is a long-standing and vital feature of the law in all cases including administrative actions. *Greene v McElroy*, 360 U.S. 474, 497 (1959). The Supreme Court has held that "[i]n almost every setting where important decisions turn on questions of fact, due process requires an opportunity to confront and cross-examine adverse witnesses." *Goldberg v. Kelly*, 397 U.S. 254, 269 (1970). The Administrative Procedure Act provides, "[a] party is entitled . . . to conduct such cross-examination as may be required for a full and true disclosure of the facts." 5 U.S.C. § 556(d). 37 C.F.R. § 42.51(b)(1)(ii) provides for "[c]ross examination of affidavit testimony prepared for this proceeding."

The only justification provided for the failure to produce Mr. Barcroft for an in-person deposition was that "he is concerned this may be damaging

to future career opportunities with respect to Wolverine⁷ and Stride Rite.” See Paper 21, 2–3. There is no evidence that Mr. Barcroft was threatened by Petitioner or anyone else. Ex. 2039, 11. Patent Owner did not submit any evidence to support its request that Mr. Barcroft’s deposition be limited to written questions. See generally Paper 38 (Patent Owner’s Response to Petitioner’s Motion to Strike the Declaration of Paul Barcroft).

As the proponent of the testimony, Patent Owner must make Mr. Barcroft available for cross-examination as a matter of routine discovery. 37 C.F.R. § 42.51. Although Patent Owner offered to make Mr. Barcroft available for written questions, we are not persuaded that Mr. Barcroft’s concerns about future career opportunities justify depriving Petitioner of the opportunity to cross-examine Mr. Barcroft in person. Accordingly, Petitioner’s Motion to Strike the Barcroft Declaration is *granted*. Mr. Barcroft’s declaration testimony is stricken from the record, and we shall accord no weight to the statements and arguments made by Patent Owner in reliance upon Mr. Barcroft’s testimony.

*D. Motion to Strike Sections II.C and II.D
of Patent Owner’s Sur-Reply*

Petitioner argues that we should strike Section II.C and II.D of Patent Owner’s Sur-Reply because these sections are not responsive to Petitioner’s Reply or to Mr. Holden’s Reply Declaration (Ex. 1021). Paper 53. Specifically, Petitioner argues that Section II.C addresses motivation for replacing Parker’s optical fibers with Rosko’s LED diffusers, which Petitioner did not address in its Reply (*id.* at 2) and argues that Section II.D

⁷ Wolverine World Wide, Inc. is the parent company of the Petitioner. Pet. 1.

addresses the obviousness of element 1[I]—“the structure being adjacently connected to the upper”—but cites exclusively to Mr. Holden’s original declaration, not to any portion of Petitioner’s Reply or to Mr. Holden’s Reply declaration (*id.* at 4).

Patent Owner opposes, arguing that the Sur-Reply discusses cross-examination testimony Mr. Holden gave in the deposition following his Reply Declaration. Paper 56, 1. According to Patent Owner, its “argument should not be stricken because Mr. Holden volunteered testimony unhelpful to the Petitioner when asked about a position he took in his Reply declaration.” *Id.* at 3. According to Patent Owner, striking these sections would be inconsistent with the Trial Practice Guide Update issued in August 2018. *Id.* at 8–10.

Petitioner counters that Patent Owner mischaracterizes Mr. Holden’s testimony, which was not “volunteered.” Paper 57, 1–2.

According to our Trial Practice Guide update, “[s]ur-replies should only respond to arguments made in reply briefs, comment on reply declaration testimony, *or point to cross-examination testimony.*” Trial Practice Guide (*see* 83 Fed. Reg. 39,989 (Aug. 13, 2018); *see also* full text of update at <https://go.usa.gov/xU7GP> (“Trial Practice Guide Update”) (emphasis added)). Here, even assuming that Section II.C and II.D do not respond to arguments made in reply briefs, they do “point to cross-examination testimony” and, therefore, are not beyond the scope of a proper sur-reply. As a result, we are not persuaded that it is appropriate, in these circumstances, to strike Section II.C and II.D of Patent Owner’s Sur-Reply. Petitioner’s Motion to Strike Sections II.C and II.D of Patent Owner’s Sur-Reply is *denied*.

E. The Parties' Post-Institution Arguments

In our Decision on Institution, we concluded that the arguments and evidence advanced by Petitioner demonstrated a reasonable likelihood that (1) claims 1, 5, 6, 8, and 9 of the '038 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Parker and Rosko; (2) claims 3, 4, and 10 of the '038 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Parker, Rosko, and Guerra; (3) claim 2 of the '038 patent is unpatentable under 35 U.S.C. § 103(a) as obvious over Parker, Rosko, and Dua; and (4) claim 7 of the '038 patent is unpatentable under 35 U.S.C. § 103(a) as obvious over Parker, Rosko, and Guzman. Inst. Dec. 50–51. We must now determine whether Petitioner has established by a preponderance of the evidence that claims 1–10 are unpatentable over the cited prior art. 35 U.S.C. § 316(e).

We previously instructed Patent Owner that “any arguments for patentability not raised in the [Patent Owner Response] will be deemed waived.” Paper 10, 6; *see also* 37 C.F.R. § 42.23(a) (“Any material fact not specifically denied may be considered admitted.”); *In re Nuvasive, Inc.*, 842 F.3d 1376, 1379–1382 (Fed. Cir. 2016) (holding Patent Owner waived an argument addressed in Preliminary Response by not raising the same argument in the Patent Owner Response). Additionally, the Board’s Trial Practice Guide states that the Patent Owner Response “should identify all the involved claims that are believed to be patentable and state the basis for that belief.” Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).

With a complete record before us, we note that we have reviewed arguments and evidence advanced by Petitioner to support its unpatentability

contentions where Patent Owner chose not to address certain limitations in its Patent Owner Response or Patent Owner Sur-Reply. In this regard, the record now contains persuasive, un rebutted arguments and evidence presented by Petitioner regarding the manner in which the asserted prior art teaches corresponding limitations of the claims against which that prior art is asserted. Based on the preponderance of the evidence before us, we conclude that the prior art identified by Petitioner teaches or suggests all uncontested limitations of the reviewed claims. The limitations that Patent Owner contests in the Patent Owner Response are addressed below.

F. Obviousness of Parker and Rosko

Petitioner contends that claims 1, 5, 6, 8, and 9 are unpatentable under 35 U.S.C. § 103 as obvious over Parker and Rosko. Pet. 3, 18–38. Relying in part on the testimony of Mr. Holden and numerous citations to the references, Petitioner explains how the references purportedly would have conveyed the claim limitations and provides purported reasoning for combining the teachings of the references. *Id.* at 18–38.

1. Principles of Law

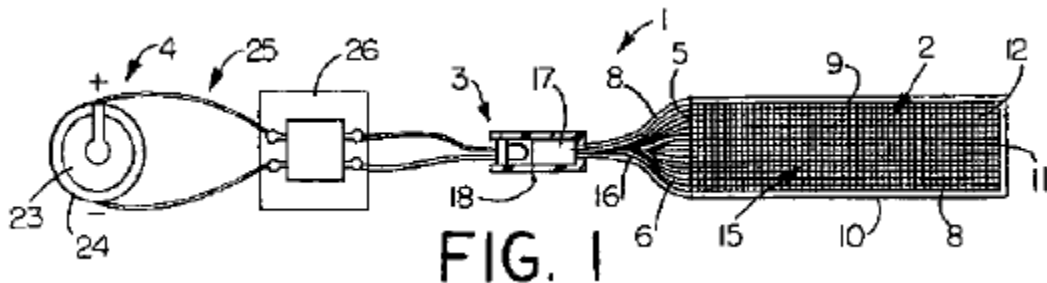
A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e.,

secondary considerations). *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We analyze this asserted ground based on obviousness with the principles identified above in mind.

2. *Parker (Ex. 1003)*

Parker describes a light distribution system that includes “a light emitting portion, a light source for supplying light to the light emitting portion and a power source for the light source.” Ex. 1003, Abstract. Parker indicates that the “light emitting portion may be located on an upper portion of a shoe.” *Id.*; *see id.* at 1:6–9 (“This invention relates generally to light distribution systems for distributing light to one or more areas of an object for decorative and/or safety reasons including but not limited to footwear . . .”).

Figure 1 is set forth below

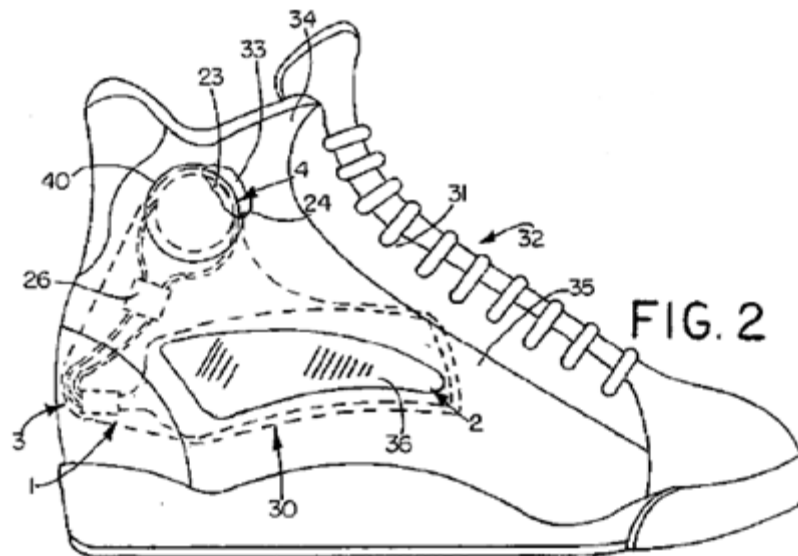


Parker’s Figure 1 depicts light distribution system 1 that includes light emitting portion 2, light source 3, and power source 4. *Id.* at 3:41–45. Light emitting portion 2 includes “layers of woven or non-woven optical fibers 8 each consisting of . . . optical fiber strands.” *Id.* at 3:51–55. “[A] thin film, sheet or coating 15 may be applied to one or both sides of the light emitting portion and joined thereto as by heat sealing, ultrasonic welding, laminating, gluing, epoxying or other suitable method.” *Id.* at 4:18–27. “The coating on the back side of the light emitting portion may comprise a back reflector for

reflecting light back through the light emitting portion such that light is emitting from only the front side of the light emitting portion.” *Id.* at 4:31–34.

Figure 1 shows power source 4 that powers light source 3, which may be a light emitting diode (LED). *Id.* at 4:63–65, 5:6–7. Figure 1 shows power source 4 is a coin type battery 23 . . . held in place by a battery holder 24,” which is connected to light source 3 by circuitry 25. *Id.* at 5:6–10.

Parker’s Figure 2 shows an athletic shoe including the light distribution system of Figure 1 and is set forth below.



Id. at 2:42–44 (identifying shoe as an athletic shoe). In Parker’s Figure 2, athletic shoe 32 has “light distribution system 1 . . . installed in pocket 30 on or in the upper portion 31.” *Id.* at 5:39–42. “The pocket 30 may be provided between the shoe lining 33 and outer shoe covering 34 at any desired location on the upper portion of the shoe, for example, on a side 35 of the shoe, for receipt of the various components of the light distribution system 1.” *Id.* at 5:42–46. Further regarding the pocket, Parker discloses that, to permit removal and replacement of battery 23, “a zipper, closeable

flap or removable cap 40 is desirably provided in the pocket [30] exterior in overlying relation to the battery holder 24.” *Id.* at 5:52–55.

“In the outer surface of the pocket 30 is a window 36 which overlies a sufficient area of the light emitting portion 2 for light emission.” *Id.* at 5:46–48. The window 36 “may be made of a clear or translucent material” and “may be provided with a diffuser or prismatic surface for diffusing or directing the light output from the light emitting portion.” *Id.* at 7:50–54. In addition, “[t]he window 36 may have a logo or other text either printed directly on the window or on an adhesive overlay applied thereto for ease of changing of the text as desired.” *Id.* at 5:48–51.

3. *Rosko (Ex. 1004)*

Rosko is titled “Lighted Panel for an Article of Footwear.” Ex. 1004, [54]. It describes “[a] lighted panel in combination with an article of footwear wherein the lighted panel includes a translucent display panel, a foam sheet, at least one primary light diffuser, and a reflective sheet that together act to illuminate, and distribute light uniformly throughout, the translucent display panel without any concentrated points of light.” *Id.* at Abstract. Figure 1 is set forth below.

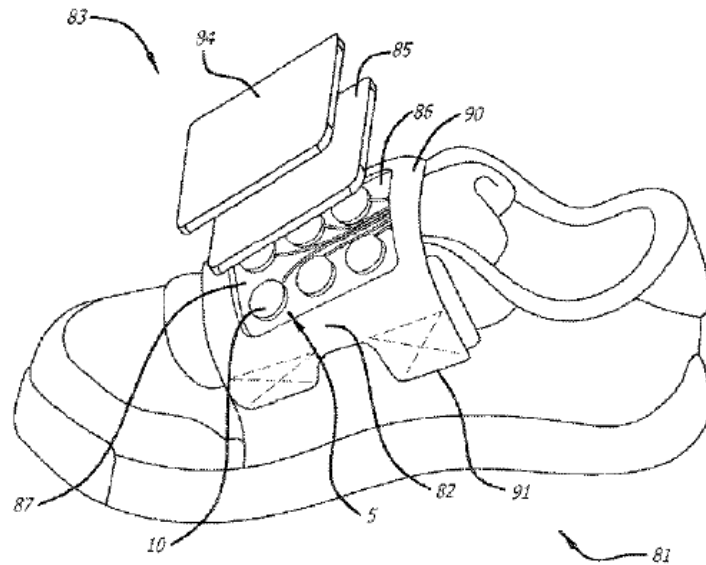


FIG. 1

Rosko's Figure 1 depicts a shoe 81 having a closure flap 82 combined with a lighted panel 83. *Id.* ¶ 21. "The lighted panel 83 comprises a translucent display panel 84, a foam sheet 85, a reflective sheet 86, and a lighting unit 40." *Id.* ¶ 22.

Rosko discloses that "[t]he translucent display panel may include any graphic image such as that of a cartoon character, person, animal, inanimate object or the like" or "may be in any shape, where the panel's shape itself is in the form of a character, person, animal, or object." *Id.* ¶ 8. Rosko further discloses that "[t]he translucent display panel may also be in the shape of at least one number and/or at least one letter." *Id.*

4. *Petitioner's Contentions Regarding Claim 1*

Relying on Mr. Holden's declaration testimony, Petitioner contends the combination of Parker and Rosko would have conveyed to one of ordinary skill in the art all of the limitations recited in claim 1. Pet. 18–33 (citing Ex. 1002). Petitioner contends that Parker would have conveyed to one of ordinary skill in the art the structures recited in claim 1, except for the

recited batting, which according to Petitioner is disclosed by Rosko. *Id.* at 19. Petitioner also provides purported reasons why one of ordinary skill in the art would have combined the references in the manner set forth by Petitioner. *Id.* at 24.

a. Reliance on Parker

Petitioner contends that Parker's shoe 32, which includes a sole and an outer shoe covering 34, would have conveyed the recited footwear that has a sole and upper (i.e., "outer shoe covering 34"). *Id.* at 20 (citing Ex. 1003, Fig. 2; Ex. 1002 ¶ 69). Petitioner contends Parker's window 36 is part of the outer layer of the shoe above the sole. *Id.* at 27 (citing Ex. 1002 ¶ 88). Petitioner further contends that Parker's window 36 "overlies a sufficient area of the light emitting portion 2 for light emission," is made of "translucent material," and has "a diffuser or prismatic surface for diffusing or directing the light output from the light emitting portion." *Id.* at 31–32 (quoting Ex. 1003, 5:47–48, 7:52–54). Thus, Petitioner concludes, relying on Mr. Holden's declaration testimony, that "Parker therefore discloses an upper (i.e., the exterior layer(s) of the shoe above the sole) having a light diffusing section (the window 36)" and so would have conveyed the required "upper being light diffusing," as recited by claim 1. *Id.* at 32 (citing Ex. 1002 ¶ 76); *see* Ex. 1001, 7:49.

Petitioner also contends that Parker's light distribution system 1 (which includes power source 4 and light emitting portion 2 that includes further includes optical fibers 8) would have conveyed to one of ordinary skill in the art the recited power source and illumination sources of the illumination system. *Id.* at 20–21 (citing Ex. 1003, 3:43–44, 3:52–54, 5:2–4, 5:7–9, Fig. 1; Ex. 1002 ¶ 70). Based on Parker's Figure 2 and Parker's

express disclosure that a battery holder could be “mounted in the bottom portion of the shoe” (Ex. 1003, 7:14–16), Petitioner contends that “Parker therefore discloses an illumination system housed within footwear” as required by claim 1. Pet. 32 (citing Ex. 1002 ¶ 77).

In addition, Petitioner contends that Parker’s shoe lining 33 would have conveyed to one of ordinary skill in the art the recited liner. *Id.* at 22 (citing Ex. 1003, 5:42–43; Ex. 1002 ¶ 72). Petitioner further contends that Parker’s back reflector, which is one embodiment of a coating on the back side of the light emitting portion 2 of Parker’s light distribution system, would have conveyed to one of ordinary skill in the art the recited reflective interfacing layer. *Id.* at 24 (citing Ex. 1003, 4:32), 29; Ex. 1003, 4:30–34 (“The coating on the back side of the light emitting portion may comprise a back reflector for reflecting light back through the light emitting portion such that the light is emitted from only the front side of the light emitting portion.”).

b. Petitioner’s Combination of Parker and Rosko

i. Recited Batting

Petitioner relies on the combination of Parker and Rosko as conveying, to one of ordinary skill in the art, batting that is “light diffusing” and “adjacently connected to the interfacing layer opposite the liner,” as required by claim 1. Pet. 24; Ex. 1001, 7:39–40, 43. More specifically, Petitioner contends that Rosko’s woven or non-woven porous material used in Rosko’s lighted panel on a shoe would have conveyed to one of ordinary skill in the art the recited batting. Pet. 24 (citing Ex. 1004 ¶ 22, Fig. 1; Ex. 1002 ¶ 73). As Petitioner notes, Rosko indicates that such woven or non-woven porous “material would further assist in diffusing light because

its porosity would tend to spread, disperse, and diffuse light.” Ex. 1004 ¶ 22; *see* Pet. 24 (quoting Ex. 1004 ¶ 22).

According to Petitioner and Mr. Holden, one of ordinary skill in the art would have modified “Parker’s athletic shoe to include Rosko’s woven or non-woven porous material, as a batting, in order to achieve a more uniform light output by interposing a light diffusing medium between [Parker’s] window 36 and the underlying light source 8.” Pet. 24 (citing Ex. 1002 ¶ 86; Ex. 1004 ¶¶ 6, 22). According to Petitioner, “Rosko provides an express motivation for the inclusion of a woven or non-woven material in Parker: to ‘assist in diffusing light because its porosity would tend to spread, disperse, and diffuse light.’” *Id.* (quoting Ex. 1004 ¶ 22). Petitioner further contends that “‘multiple means of diffusion’ are expressly disclosed in Rosko as preferred in order to ‘provide uniform and even distribution of light over a relatively large area.’” *Id.* at 25 (citing Ex. 1004 ¶ 6).

Petitioner, with support of Mr. Holden, contends that one of ordinary skill in the art “would have positioned the woven or non-woven porous material between [Parker’s] light emitting element 2 and an outer window 26” because that configuration “is precisely the configuration disclosed in Rosko.” *Id.* (citing Ex. 1002 ¶ 86; Ex. 1004, Fig. 1).

ii. Additional Configuration of Elements

Relying again on the declaration testimony of Mr. Holden, Petitioner contends that the combination of Parker and Rosko would have conveyed to one of ordinary skill in the art the recited elements in the configuration required by the plain language of the claim. *Id.* at 25–31 (citing Ex. 1002). Mr. Holden provides various diagrams to illustrate his opinions as to how the combination of Parker and Rosko would have conveyed to one of

ordinary skill in the art the configuration of the elements required by claim 1.

In the combination of Parker and Rosko set forth by Petitioner, Petitioner contends one of ordinary skill in the art would have substituted Rosko's array of LEDs (within light diffusers) in place of Parker's optical fibers. *See, e.g.*, Pet. 27–29 (regarding “the batting being adjacently connected to the interfacing layer opposite the liner”); *id.* at 29–30 (regarding “illumination sources being adjacently connected to the interfacing layer”); *id.* at 30 (regarding “illumination sources being positioned between the interfacing layer and the batting”). Relying on Mr. Holden's declaration testimony, Petitioner contends that one of ordinary skill in the art would have made that combination “in order to provide a robust alternative to Parker's fragile and wrinkle-prone optical fibers 8 and to reduce the material costs of the shoe in Parker.” *Id.* at 27–28 (citing Ex. 1002 ¶ 87).

Petitioner contends that both Parker and Rosko individually disclose the concept of “twice diffused light” from within a shoe or boot. *Id.* at 18. Petitioner contends that (i) substituting Rosko's array of LEDs (within light diffusers) in place of Parker's optical fibers and (ii) including Rosko's woven or non-woven porous material as a batting in Parker's shoe would have conveyed that light emitted by Rosko's LEDs and light diffusers would

enter[] the woven or non-woven porous material, exiting as diffused light, and enter[] the window 36, exiting as twice diffused light, thereby creating a visual impression of internal radiant illumination across an outer surface of the side of the athletic shoe 32 of FIG. 2.

Pet. 32 (citing Ex. 1002 ¶¶ 78, 89; Ex. 1003, 7:51–54). Thus, Petitioner contends that the combination of Parker and Rosko would have conveyed to

one of ordinary skill in the art the functionality of light diffusion recited in claim 1 (Ex. 1001, 7:51–57).

Accordingly, based on the disclosures of Parker and Rosko, and on the cited declaration testimony of Mr. Holden, and notwithstanding Patent Owner’s arguments, which we address below, we conclude Petitioner has demonstrated by a preponderance of the evidence that the combination of Parker and Rosko teaches all of the limitations recited in independent claim 1 and that one of ordinary skill in the art would have had reason to combine the disclosures of Parker and Rosko in the manner proposed by Petitioner.

5. Patent Owner’s Contentions

Patent Owner argues that the combination of Parker and Rosko does not teach the recited “interfacing layer.” PO Resp. 31–46; PO Sur-Reply 3–16, 22–23.

Patent Owner also argues that the proposed combination does not illuminate a textile portion of the upper and, therefore, does not teach an “internally illuminated textile footwear,” as recited in the preamble, or a “light diffusing section,” as recited in claim 1. PO Resp. 46–50; PO Sur-Reply 16–19.

Finally, Patent Owner argues that Petitioner’s evidence of obviousness is outweighed by objective indicia of non-obviousness. PO Resp. 16–23, 50–58; PO Sur-Reply 23–28.

We address each argument in turn.

a. The “interfacing layer” is taught by Petitioner’s proposed combination

Patent Owner argues that “neither Parker nor Rosko describes an interfacing layer as recited in claim 1.” PO Resp. 30. According to Patent

Owner, a person of ordinary skill in the art would not have extended Parker's back reflector 15 into the seam between the upper and the liner because "such a shoe could not have survived the manufacturing process or ordinary wear." *Id.* at 31. Patent Owner presents a number of supporting arguments, which we address in turn.

i. Other layers of Parker & Rosko

Patent Owner argues Petitioner does not explain why a person of ordinary skill in the art would have removed Rosko's reflective layer 86 or Parker's backing 70. PO Resp. 31–37. Specifically, Patent Owner argues that Rosko's shoe already has a reflective layer, reflective sheet 86, but "Petitioner does not even mention the reflective layer 86 or provide any rationale or reasoning for removing it from the Rosko lighting system." *Id.* at 33. Patent Owner argues that "Petitioner's complete failure to address the reflective layer 86 militates in favor of a finding that Petitioner failed to carry its burden of proving obviousness" because "petitioner does not even address the reason for departing from the structure expressly taught in the prior art." *Id.* at 34. According to Patent Owner, "the real motivation for discarding Rosko's reflective layer 86 was merely that it did not meet the limitations of the claims," which "is the very embodiment of impermissible hindsight." *Id.*

Petitioner counters that the combination of Parker and Rosko teaches the recited "interfacing layer" under the construction of that term agreed to by Patent Owner and adopted by the district court. Pet. Reply 6–8.

Patent Owner's arguments are not persuasive because, for this element, Petitioner relies upon Rosko only for teaching a batting. *See, e.g.*, Pet. 24 (citing Ex. 1004 ¶ 22 ("In lieu of a foam sheet 85, any woven or non-

woven porous material may be used since such material would assist in diffusing light by providing spacing between the translucent display panel 84 and a primary light diffuser 5.”); *see also id.* (“It would have been obvious to modify Parker’s athletic shoe to include Rosko’s woven or non-woven porous material, as a batting, in order to achieve a more uniform light output by interposing a light diffusing medium between the window 36 and the underlying light source 8.”). This point does not appear to be contested. Pet. Reply 11. We agree that Rosko shows that the recited “batting” was known in the art.

The fact that Rosko also teaches a reflective layer 86 is not relevant and Petitioner need not explain how Rosko’s shoe would be bodily incorporated with Parker’s shoe. “It is well-established that a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements.” *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012); *see also Intellectual Ventures II LLC v. Ericsson Inc.*, 685 Fed. App’x 913, 919 (Fed. Cir. 2017). Similarly, the skilled artisan is “[a] person of ordinary creativity, not an automaton” and “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416, 421; *see also id.* at 417 (“If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.”). Moreover, there is no evidence in the record that it would have been “uniquely challenging or difficult for one of ordinary skill in the art” to combine the teachings of the references. *See Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418).

Patent Owner similarly argues that Petitioner does not explain why a person of ordinary skill in the art would have omitted Parker's backing 70, described in connection with an embodiment illustrated in Figure 7. PO Resp. 35–37. This argument also is not persuasive because Petitioner relies upon Parker's back reflector 15, not Parker's back side 70 of sealed holder 66. Pet. 22–24. Whereas back reflector 15 is illustrated in Figure 2 and described with respect to that embodiment, back side 70 of sealed holder 66 is illustrated in Figure 7, which shows “another form of light distribution system 65 in accordance with this invention which may be generally the same as the light distribution systems previously described except that the entire light distribution system . . . are contained in a sealed holder 66.” Ex. 1003, 7:20–27. Because Figure 7 shows an alternative embodiment, we are not persuaded that Petitioner needed to account for back side 70 of sealed holder 66 when relying upon back reflector 15.

Patent Owner similarly argues that Petitioner has not explained (1) why Parker's back reflector 15 would have been removed from Parker's optical fibers 8; (2) why Rosko's diffusers 5 would have been removed from reflective sheet 86; (3) why Parker's back reflector 15 would have been thickened and extended into the seam between the outer covering 34 and lining 33; and (4) why back reflector 15 would have been attached to outer covering 34 and lining 33. PO Resp. 39–41. Petitioner counters that the claims do not require attachment of the interfacing layer to the liner. Pet. Reply 12–15. Patent Owner's arguments are not persuasive because “[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. . . . Rather, the test is what the combined teachings of those references would

have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). “Combining the *teachings* of references does not involve an ability to combine their specific structures.” *In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973). Moreover, Patent Owner’s argument that back reflector 15 would not have been attached to lining 33 is not commensurate with the scope of the claims, which do not require the interfacing layer be attached to the liner.

*ii. “interfacing layer”
need not be structural*

Patent Owner also argues that Parker’s film, sheet, or coating 15 is not an “interfacing layer” because it is not structural. PO Resp. 38–39; PO Sur-Reply 3–6, 22–23. This argument is not persuasive because it is based upon Patent Owner’s proposed claim construction of “interfacing layer,” which we declined to adopt for the reasons discussed above. We are persuaded by Petitioner’s arguments and evidence that back reflector 15 teaches an “interfacing layer,” as we have construed that term.

*iii. Petitioner explained why
a person of ordinary skill in the art
would have modified Parker to include Rosko’s LEDs*

Patent Owner argues that Petitioner has provided no reasoned explanation for why a person of ordinary skill in the art would have substituted Rosko’s LEDs for Parker’s optical fibers. PO Sur-Reply 9–12.

This argument is not persuasive. The Petition states explicitly:

POSITA would have found it obvious, as a matter of routine design choice, to substitute the optical fibers 8 in Parker with an array of spaced-apart LEDs, for example the LEDs contained within Rosko’s diffusers 5, in order to provide a robust alternative to Parker’s fragile and wrinkle-prone optical fibers 8

and to reduce the material costs of the shoe in Parker. (Ex. 1002 at ¶87).

Pet. 27–28. In the cited portion of Mr. Holden’s declaration, he testifies that:

A person of ordinary skill in the art would also have found it obvious to substitute Parker's optical fibers 8 with an array of LEDs, for example the array of LEDs in Rosko, in order to increase the durability of the shoe in Parker and decrease material costs. Optical fibers were known by persons of ordinary skill in the art at the time of the invention to be generally more expensive than LED lights. In addition, Parker already discloses an LED as the preferred light source for its optical fibers, and consequently the powering and control of two or more LEDs would have been well within the grasp of a person of ordinary skill in the art. (Parker, 4:63-64).

Ex. 1002 ¶ 87. In the testimony highlighted by Patent Owner in its Sur-Reply (PO Sur-Reply 10–12), Mr. Holden testifies that a person of ordinary skill in the art would have been able to combine the teachings of the two references in many different ways. That testimony, however, does not contradict Petitioner’s argument, and Mr. Holden’s testimony, that such a substitution was a routine design choice within the level of one of ordinary skill in the art.

*iv. Petitioner explained why
a person of ordinary skill in the art would have
modified attached back reflector 15 to the upper*

Patent Owner argues that Petitioner’s proposed combination of Parker and Rosko is hindsight because the teachings of the two references could have been combined in a way that back reflector 15 is not “adjacently connected to” the upper. PO Sur-Reply 12–16. According to Patent Owner, “Mr. Holden admitted that the back reflector could be reduced as needed to

light the shoe.” *Id.* at 15 (citing Ex. 2043, 85:25–86:9). Thus, concludes Patent Owner, because “either way would have worked for the skilled artisan,” Petitioner’s proposed combination is motivated solely by hindsight.

This argument is not persuasive because it ignores Mr. Holden’s testimony that

A person of ordinary skill in the art would have joined the window 36 and the outer shoe covering 34 to the back reflector 15 and joined the back reflector 15 to the lining 33 in the modified construction in order to achieve a compact pocket, i.e., a “fixed attachment” (Rosko, ¶0025), that does not bulge during flexing of Parker’s footwear.

Ex. 1002 ¶ 83. Thus, Mr. Holden has articulated a reason why a person of ordinary skill in the art would have joined back reflector 15 to outer shoe covering 34. Patent Owner challenges the merits of that reason, which we address below, but that does not make the proposed combination hindsight. Thus, Petitioner has provided “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l. Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

v. Whether certain advantages are illusory

With respect to why a person of ordinary skill in the art would have positioned Rosko’s diffusers 5 between Parker’s back reflector 15 and Rosko’s batting, Mr. Holden testified that

[a] person of ordinary skill in the art would have found it obvious to retain Parker’s back reflector 15 in the modified construction in order to maximize the distribution of light from within Parker’s pocket, which is also disclosed in Ro[sk]o. A person of ordinary skill in the art would have joined the window 36 and the outer shoe covering 34 to the back reflector 15 and joined the back reflector 15 to the lining 33 in the modified construction in

order to achieve a compact pocket, i.e., a "fixed attachment" (Rosko, ¶0025), that does not bulge during flexing of Parker's footwear. In addition, a person of ordinary skill in the art would have attached the back reflector 15 to the window 36 and to the outer shoe covering 34 and would have attached the diffusers 5 to the back reflector 15 in order to maintain the diffusers in alignment with the window 36 and in order to achieve a compact pocket, i.e., a "fixed attachment." (Rosko, ¶0025). Various means of attachment are disclosed in Parker at 4:24-25.

Ex. 1002 ¶ 83; Pet. 30. Patent Owner argues that the advantages alleged in paragraph 83 of Mr. Holden's declaration are illusory for two reasons. PO Resp. 41-46.

First, Patent Owner argues the first reason—bulge prevention—is illusory because “[a] skilled artisan would not glue a layer to a translucent or transparent window 36” for a host of reasons and applying glue only to the periphery “doesn’t change the fact that the remainder of the window can still bulge just as it did before the gluing.” PO Resp. 42-43. This argument is not persuasive because it is not responsive to Mr. Holden’s testimony. Mr. Holden does not testify that a layer should be glued. On the contrary, he alludes to “[v]arious means of attachment” disclosed in Parker, including gluing, but also including heat sealing, ultrasonic welding, laminating, epoxying, “or other suitable method.” Ex. 1002 ¶ 83; Ex. 1003, 4:24-25. Thus, even assuming that Patent Owner is correct that a person of ordinary skill in the art would not have glued a layer, we are nevertheless persuaded that a person of ordinary skill in the art knew of other suitable techniques, such as those taught explicitly in the cited portion of Parker.

Second, Patent Owner argues that the second reason—i.e., “in order to maintain the diffusers in alignment with the window 35 and in order to achieve a compact pocket”—was already achieved by the Parker and Rosko

open pocket constructions. PO Resp. 43. Specifically, Patent Owner argues that the structure taught in Rosko already provides a fixed attachment. *Id.* (discussing Rosko’s translucent display panel 84, reflective sheet 86, and recessed area 87). This argument is not persuasive, however, because the proposed combination is not based upon incorporating any of these elements into Parker. Patent Owner also argues that the “modified system (below right) is, if anything, bulkier than Parker’s unmodified design (below left)” and faults Mr. Holden for not explaining how the modified system has improved compactness. *Id.* at 43 (citing Ex. 1002 ¶¶ 79–80). This argument also is not persuasive because Mr. Holden does not testify that the modified design is more compact than Parker’s unmodified design, and obviousness does not require it. Mr. Holden testifies, and we are persuaded, that a person of ordinary skill in the art would have known how to combine, and would have been motivated to combine, Rosko’s batting and diffusers 5 into the structure of Parker in such a way as to maintain a compact pocket. Ex. 1002 ¶ 83; *see also id.* at ¶ 88. Patent Owner introduces no evidence to suggest that the proposed modification, even if less compact than Parker’s unmodified design, is nevertheless compact enough to provide a “fixed attachment” as taught in Rosko.

Finally, Patent Owner argues that gluing Parker’s back reflector 15 to the window 36, lining 33, and outer covering 34 would have several disadvantages. PO Resp. 44–46. Specifically, Patent Owner argues that doing so (1) would be aesthetically unacceptable; (2) would tear during the lasting process if affixed to the upper and lining as proposed by Holden; and (3) would be extremely expensive to produce. *Id.*

We agree with Petitioner that Patent Owner's arguments are not commensurate with the scope of the claims, which do not require attaching back reflector 15 to the liner. Pet. Reply 12. While claim 1 requires that "the interfacing layer being positioned adjacent to the liner," it does not require the interfacing layer be affixed to the liner.

Similarly, Patent Owner's argument that gluing is aesthetically unacceptable is not persuasive because Mr. Holden did not rely on gluing and Parker explicitly teaches a number of alternative methods.

Patent Owner's arguments about the lasting process are not persuasive because they are predicated on Patent Owner's unsupported contention that Parker's back reflector 15 is made of "thin reflective layers such as foil" and, as such, would not survive the lasting process. Pet. Reply 12–13. As Petitioner points out, Patent Owner's declarant admitted that he had not experimented with foil, admitted that lasting forces can be applied by hand, and admitted that components that are glued together can survive the lasting process. *Id.* at 12–14 (citing Ex. 1023, 29:23–25, 55:9–15, 55:23–56:10).

Finally, Patent Owner's argument about expense is not persuasive because, even if true, it does not make the proposed combination non-obvious. The focus of 35 U.S.C. § 103 is on the obviousness of an invention to a person of ordinary skill in the art. *Environmental Design, Ltd. v. Union Oil Co.*, 713 F.2d 693, 697 (Fed. Cir. 1983). "That a given combination would not be made by businessmen for economic reasons does not mean that persons skilled in the art would not make the combination because of some technological incompatibility. Only the latter fact would be relevant." *In re Farrenkopf*, 713 F.2d 714, 718 (Fed. Cir. 1983) (citing *Orthopedic Equipment Co. v. United States*, 702 F.2d 1005, 1013 (Fed. Cir. 1983)).

*vi. Material selection was within
the level of ordinary skill in the art*

Patent Owner argues that Petitioner did not meet its burden because it “provided no real specifics regarding how to produce the proposed combination.” PO Sur-Reply 6–9. “Critically, it did not disclose the type of material used for the claimed ‘interfacing layer.’” *Id.* at 6. According to Patent Owner, “[t]o establish the requisite reasonable expectation of success, therefore, Petitioner was required to identify the appropriate materials.” *Id.*

Petitioner contends that a person of ordinary skill in the art would have been capable of selecting an appropriate material. Pet. Reply 14. Petitioner points out that the level of ordinary skill, which Patent Owner did not contest, includes “understanding of the range of material choices and construction techniques that are used to create the various parts of footwear, as well as their functional requirements.” *Id.* (quoting Inst. Dec. 13).

Petitioner is correct that, in our Institution Decision, we determined that “one of ordinary skill in the art relevant to the challenged patent would have had ‘at least several years’ experience in footwear design with familiarity in the integration of light sources into footwear” and “an understanding of the range of material choices and construction techniques that are used to create the various parts of footwear, as well as their functional requirements and impact on overall footwear appearance.” Inst. Dec. 12–13 (adopting Petitioner’s proposed level of ordinary skill). Patent Owner’s declarant also adopted Mr. Holden’s level of ordinary skill. Ex. 2001 ¶ 62 (“For purposes of this declaration, I will apply Mr. Holden’s proposed standard without prejudice.”). Because the level of ordinary skill in the art includes several years of experience and an understanding of the

range of material choices and construction techniques . . . as well as their functional requirements and impact on overall footwear appearance,” we agree with Petitioner that the choice of a suitable material for back reflector 15 would have been within the level of ordinary skill in the art.

*b. “internally illuminated textile footwear” /
“upper being light diffusing”*

Patent Owner argues that the proposed combination does not illuminate a textile portion of the upper and, therefore, does not teach an “internally illuminated textile footwear,” as recited in the preamble, or an “upper being light diffusing,” as recited in claim 1. PO Resp. 46–50; PO Sur-Reply 16–19.

Patent Owner’s arguments are not persuasive because they rely on its contentions that the claims require footwear that is both internally illuminated and textile. As explained above, however, we do not construe the preamble—“[a]n internally illuminated textile footwear”—to limit the claims and so do not agree with Patent Owner’s contentions that Petitioner’s combination must disclose a “light diffusing textile upper.” As also explained above, we do not construe “upper being light diffusing” to require a sheer textile even in the portion of the upper that is light diffusing.

c. Objective indicia of non-obviousness

Patent Owner argues that Petitioner’s evidence of obviousness is outweighed by Patent Owner’s evidence of objective indicia of non-obviousness, i.e., secondary considerations. PO Resp. 16–23, 50–58 (citing Exs. 2001, 2002, 2009, 2010, 2012, 2013, 2019, 2023, 2024, 2028).⁸

⁸ Patent Owner also cites the Declaration of Paul Barcroft (Ex. 2003), but we strike that Declaration for the reasons given above.

Petitioner disagrees. Pet. Reply 16–22 (citing Exs. 1002, 1004, 1009, 1022, 2001, 2005, 2009).

i. Law – Objective Indicia of Nonobviousness

Factual inquiries for an obviousness determination include secondary considerations based on objective evidence of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the art at the time of the invention, the totality of the evidence submitted, including objective evidence of non-obviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill in the art. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984).

We note that it is not sufficient that a product or its use merely be within the scope of a claim in order for objective evidence of nonobviousness tied to that product to be given substantial weight. There must also be a causal relationship, termed a “nexus,” between the evidence and the claimed invention. *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1376 (Fed. Cir. 2005). A nexus is required in order to establish that the evidence relied upon traces its basis to a novel element in the claim, not to something in the prior art. *Institut Pasteur v. Focarino*, 738 F.3d 1337, 1347 (Fed. Cir. 2013). Objective evidence that results from something that is not “both claimed and *novel* in the claim” lacks a nexus to the merits of the invention. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011).

All types of objective evidence of nonobviousness must be shown to have nexus. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995) (nexus generally); *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996) (commercial success); *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*, 683 F.3d 1356,

1364 (Fed. Cir. 2012) (copying); *Rambus Inc. v. Rea*, 731 F.3d 1248, 1256 (Fed. Cir. 2013) (long-felt need); *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 (Fed. Cir. 2008) (praise). The stronger the showing of nexus, the greater the weight accorded the objective evidence of nonobviousness. *See Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 306 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986).

“Where the allegedly obvious patent claim is a combination of prior art elements, . . . the patent owner can show that it is the claimed combination as a whole that serves as a nexus for the objective evidence” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1330 (Fed. Cir. 2016) (citing *Rambus*, 731 F.3d at 1258). “[T]here is a presumption of nexus for objective considerations when the patentee shows that the asserted objective evidence is tied to a specific product and that product is the invention disclosed and claimed in the patent.” *WBIP*, 829 F.3d at 1329. Secondary consideration evidence is accorded less weight for claims that are considerably broader than the particular features in the merits of the claimed invention. *See ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1221 (Fed. Circ. 2016).

ii. Industry Praise

Patent Owner asserts that its proffered evidence of industry-wide praise suggests that the aforementioned claims are non-obvious. PO Resp. 16–20, 51–52, 56 (citing Exs. 2001, 2028). Specifically, Patent Owner contends that “industry react[ion] . . . is traceable directly to the inventive interfacing layer which is recited in the claims and completely missing from the prior art.” PO Resp. 31; *see also* PO Sur-Reply 27 (“The ability to light up the shoe from within stems directly from the patented features—most

prominently the use of an interfacing layer having illumination sources attached thereto and being adjacently connected to the upper and the lining.”). According to Patent Owner, it “has thus made the required showing of nexus here because ‘the marketed product embodies the claimed features, and is coextensive with them,’ such that “nexus is presumed and the burden shift[s to Petitioner] to present evidence to rebut the presumed nexus.” *Id.* at 27–28 (citing *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000)).

Petitioner disagrees. Pet. Reply 16–17. Petitioner argues that evidence of industry praise should receive little weight because “Patent Owner has not demonstrated that ‘the novel elements in the claim, not prior-art elements, account for the objective evidence of non-obviousness.’” Pet. Reply 21 (citing *Gnosis S.p.A. v. Merck & Cie*, Case IPR2013-00117, slip op. 31 (PTAB June 20, 2014) (paper 71) (citing *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011))).

We agree that Patent Owner’s evidence of nexus does not account adequately for the limitations of independent claim 1 of the ’038 patent. Even assuming a nexus between the Firebug product and the challenged claims of the ’038 patent, Patent Owner’s evidence of industry praise would still be very weak because Patent Owner relies almost exclusively on the Declaration of Paul Barcroft, which we have struck for the reasons discussed above. Patent Owner’s only other evidence of industry praise is paragraphs 36 and 37 of Mr. Smith’s declaration. PO Resp. 19–20, 52 (citing Ex. 2001 ¶¶ 36–37). According to Mr. Smith,

Reaction from buyers was dramatic. Internally illuminated fur astonished buyers, and predictions of commercial success were unanimous. Buyers from both “big box” stores as well as small

independent retailers were surprised and delighted. As reported by Mia's primary salesperson at the FFANY Shoe Expo, Vance Williamson, many potential buyers, indicating a strong interest in purchasing Firebugs newest technology once the boot's design moved from prototype to commercial product. They were enthusiastic regarding the breadth of the lighting display, the internal diffused illumination of the fur outer, and the lightweight soft-sided designs supported by the soon-to-be-patent-pending Firebug lighting system technology. Numerous big box retailers collectively representing thousands of store locations, expressed their excitement in now having a product which combined two of their most popular categories of footwear, fur boots and lighted footwear. These major retailers expressed interest in the soon-to-be patent-pending lighting system design, because it supported such a unique internal diffusion of the lighting through the faux fur textile, and it provided support for illumination in a light-weight, soft-sided design. It was this reaction, to this conceptual prototype, that over the next year development of the '038 and '574 technology was completed.

Ex. 2001 ¶ 37. Even assuming this testimony is admissible, it deserves very little weight because it is merely the named inventor characterizing the reaction of industry as reported to him by a non-declarant who was actually there. As a result, we find that Patent Owner has proffered very weak evidence of industry praise for and, hence, non-obviousness of, the invention set forth in independent claim 1.

iii. Commercial Success

Patent Owner asserts the following concerning the commercial success of their lighted boots:

The instant case involves a hardened industry in which “[i]t’s nearly impossible to come up with product that’s different enough that the big box retailers can actually get excited about and want to buy.” (Ex. 2001 ¶45; Ex. 2028.) Against that backdrop, it is remarkable that a tiny company like Firebugs would be able to penetrate the market and generate well over one

million dollars in sales. (Ex. 2001 ¶48.) Still further, multiple companies were competing for the right to be the exclusive licensee of the technology and Firebugs products. (*Id.* ¶45.) The market’s acute interest in the Firebugs products was created by the claimed layered manufacturing technique, which permits lights to be embedded and hidden within a textile upper. (*Id.* ¶¶36-37; Ex. 2002 ¶13; Ex. 2003 ¶¶10-13, 15, 17.)

PO Resp. 56–57; *see also id.* at 20–21 (citing Exs. 2001, 2024, 2028).

Petitioner counters that “Patent provides no comparative sales data to provide any meaningful context to these sales figures,” such as “showing that these sales numbers are significant in the footwear industry.” Pet. Reply 17 (citing *In re Huang*, 100 F.3d 135 (Fed. Cir. 1996) and *In re Baxter Travenol Labs*, 952 F.2d 388, 392 (Fed. Cir. 1991)). Petitioner also points out that Mr. Smith acknowledged, on cross-examination, that the sales figures include shoes not embodying the claimed invention. *Id.* at 18 (citing Ex. 1022, 101:12–24). Moreover, Petitioner points out, “there is no evidence that shoes covered by ‘038 Patent were sold by the Patent Owner or its licensees in the years after 2014, undercutting its contention that the claimed invention achieved commercial success.” *Id.* at 18.

Even assuming a nexus between the Firebug boot and the challenged claims of the ‘038 patent, Patent Owner’s evidence of commercial success is weak. Patent Owner provides a single sales figure—1.3 million U.S. dollars for the Fall 2014 season. PO Resp. 20. The only evidence of this figure, however, is the declaration of Mr. Smith. Ex. 2001 ¶ 48. Moreover, this figure includes sales of rain boots not covered by the challenged claims. Ex. 1022, 101:12–24. For this single data point, Patent Owner does not provide any context relative to the industry at large or to competitors within the industry. Patent Owner also does not provide sales data for any time period

other than Fall 2014. Patent Owner relies upon Exhibits 2024 and 2028, which are emails from Mr. Vance Williamson. These emails, however, appear to be out-of-court statements by a non-declarant offered for the truth of the matters asserted. Exhibit 2024 is, at least, a contemporaneous email dated February 9, 2014. Exhibit 2028, however, is an email from Mr. Williamson to Mr. Smith dated February 10, 2018, i.e., shortly after institution of this proceeding. We find these emails deserve little weight.

In summary, for the reasons set forth above, we discount heavily the weight to be accorded Exhibits 2001, Exhibits 2024, and 2028. After considering all of Patent Owner's assertions and evidence in the aggregate, in view of Petitioner's assertions, we find that Patent Owner has provided very weak evidence of commercial success of their lighted boot.

iv. Copying

Patent Owner asserts that Petitioner copied the "Firebug's patented layered structure for embedding illumination in textile footwear":

Petitioner Stride Rite has introduced multiple models of footwear that embody Firebug's patented layered structure for embedding illumination in textile footwear. (Ex. 2023.) Between Fall of 2013 and early 2015, Shoes by Firebug provided Stride Rite Corporation and parent company Wolverine World Wide with marketing materials, samples, and submissions in an effort to establish a licensing agreement. (Ex. 2001 ¶¶54-57; Ex. 2009; Ex. 2010; Ex. 2012; Ex. 2013.) Despite evidence of interest by Wolverine World Wide, Stride Rite in the end chose to ignore Firebug's patents, instead proceeding to infringe by copying the patented technology. (Ex. 2001 ¶¶58-61; Ex. 2009; Ex. 2010; Ex. 2019 (January 2016 letter providing notice to Stride Rite of infringement); Ex. 2023 (complaint filed in related litigation) ¶¶13-38.).

PO Resp. 23; *see also id.* at 55–56 (repeating same argument).

Petitioner asserts that “Patent Owner provides no evidence that anyone undertook to replicate, or even examine, this fur boot.” Pet. Reply 20. Petitioner points out that Patent Owner’s declarant, Mr. Smith, “acknowledged in cross-examination, the YouTube video did not provide the recipient with access to the interior of the fur boot” and that “[n]o physical samples were sent to Wolverine World Wide.” Pet. Reply 19 (citing Ex. 1022, 92:13–21, 104:11–21; Ex. 2009, 27). Petitioner also points out that “there is no finding that any of Stride Rite’s products infringe any claim of the ’038 Patent.” *Id.* at 20.

We agree with Petitioner. As an initial matter, Patent Owner provides no persuasive evidence that its product embodies the challenged claims. Patent Owner cites Exhibit 2023, but that is merely the complaint filed by Patent Owner in district court, alleging that Petitioner’s products infringe. Patent Owner also relies upon Mr. Smith’s testimony about Exhibits 2009 (an email), 2010 (an idea submission letter agreement), 2012 (marketing material with images of boots and a URL for “FirebugShoes.com”), and 2013 (an email from Vance Williamson to a striderite.com email address with links to videos on YouTube.com). As Petitioner points out, however, none of this evidence shows that Petitioner had access to a boot such that Petitioner could reverse engineer it for copying.

Even assuming that Patent Owner’s sample shoe embodies the challenged claims, Patent Owner has not shown that one of Petitioner’s shoes is substantially similar to Patent Owner’s sample. The evidence cited by Patent Owner consists of correspondence sent by Patent Owner to Petitioner—i.e., Mr. Smith’s testimony about Exhibits 2009 (an email), 2010 (an idea submission letter agreement)—and Patent Owner’s allegations that

Petitioner's products infringe—i.e., Exhibits 2019 (a letter from Patent Owner to Petitioner requesting a patent licensing negotiation) and 2023 (the complaint filed by Patent Owner against Petitioner in district court). None of this establishes, however, that a shoe of Petitioner's is substantially similar to Patent Owner's sample.

In summary, we find that Patent Owner has not provided sufficient supporting evidence and analysis to show adequately that Petitioner copied the footwear claimed in the '038 patent. Accordingly, we find that Patent Owner has proffered very weak evidence of copying of the footwear claimed in the '038 patent.

v. Overall Weighing of Relevant Factors Concerning Obviousness, Including Secondary Considerations

We now weigh Patent Owner's evidence of secondary consideration in conjunction with the other factors relevant to obviousness for independent claim 1. In summary, we find, for the reasons set forth above, that Parker and Rosko account for all of the limitations of independent claim 1. We find further that Petitioner has identified sufficient evidence, in the cited prior art, that the modification itself, as well as the rationale for the modification, were well known to one of ordinary skill in the art, at the time of the invention.

Against the above findings, we weigh the Patent Owner's evidence of secondary considerations, each of which we have analyzed above, and summarize as follows: (1) very weak evidence of industry praise; (2) very weak evidence of commercial success; and (3) very weak evidence of copying.

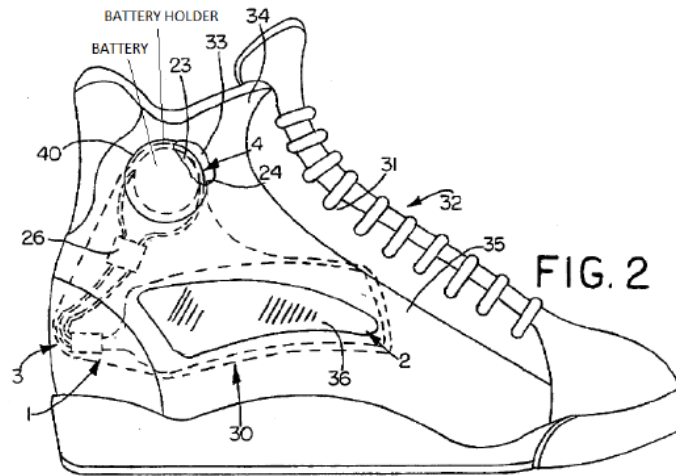
Overall, upon weighing the *Graham* factors, we determine that the very weak evidence of each of industry praise, commercial success, and copying does not outweigh our finding, based on strong evidence, that the footwear of Parker/Rosko accounts for every limitation of independent claim 1.

Accordingly, for these reasons, we determine that Petitioner has met its burden of showing that the subject matter of claim 1 would have been obvious in view of the combination of Parker and Rosko for the reasons discussed above.

6. Dependent Claims 5, 6, 8 and 9

Claim 5 depends from claim 1 and additionally recites “the power source being housed within the sole.” Ex. 1001, 8:24–25. According to Petitioner, “Parker discloses a battery that is contained within a ‘battery holder . . . mounted in the bottom portion of the shoe.’” Pet. 34 (citing Ex. 1003, 7:13–16). Patent Owner does not address this claim separately.

Claim 6 depends from claim 1 and additionally recites “the power source being adjacently connected to the liner; and the power source being positioned between the liner and the upper.” Ex. 1001, 8:26–31. Petitioner relies on Parker’s “coin type battery 23” and a “battery holder 24” for the recited power source. Pet. 34 (citing Ex. 1003, 5:6–8). Relying on declaration testimony by Mr. Holden and Parker’s Figure 2, Petitioner contends that Parker’s coin type battery 23 and battery holder 24 are both “next to and contacting the liner 33” and “between the liner 33 and the outer shoe covering 34.” *Id.* (citing Ex. 1002 ¶ 92; Ex. 1003, Fig. 2). Petitioner provides annotations to Parker’s Figure 2 to further support its position. *Id.* at 35. Petitioner’s annotated Figure 2 of Parker is set forth below.



As shown in Petitioner’s annotation of Parker’s Figure 2, Petitioner identifies battery 23 and battery holder 24, which make up Parker’s power source 4. *Id.* According to Petitioner, Parker’s Figure 2 shows battery 23 and battery holder 24 as (i) being next to and contacting liner 33 and (ii) being between the liner 33 and outer shoe covering 34. *Id.* Patent Owner does not address claim 6 separately.

Claim 8 depends from claim 1 and additionally recites “the upper further comprises a light impermeable section.” Ex. 1001, 8:36–38. Petitioner contends, based on Mr. Holden’s declaration testimony, that Parker’s “outer shoe covering 34 is inherently light impermeable except in the region of the window 36 of Figure 2.” Pet. 35 (citing Ex. 1003, 2:42–43, 5:43; Ex. 1002 ¶ 93). Patent Owner does not claim 8 separately.

Claim 9, which depends directly from claim 8 and indirectly from claim 1, additionally recites “the light diffusing section being configured as an aesthetic design, wherein the plurality of illumination sources illuminate the aesthetic design; the aesthetic design being delineated by the light impermeable section; and the plurality of illumination sources being overlapped by the light diffusing section.” Ex. 1001, 8:39–47. Petitioner

relies, in part, on Rosko's description that its translucent display panel 84 may include a graphic image, or be in the shape of, a cartoon character, person, animal, or inanimate object. Pet. 36–37 (citing Ex. 1004 ¶ 8). Petitioner contends that such images correspond to the recited aesthetic design. *Id.* Petitioner further contends that “Rosko's illumination sources (light source 72 within light diffusers 5) illuminate the aesthetic design.” *Id.* Petitioner further contends that one of ordinary skill in the art would have been motivated to modify Parker's window 36 to be configured as an illuminated aesthetic design for various reasons, including “to enhance the visual appeal of Parker's shoe.” *Id.* at 37 (citing Ex. 1002 ¶ 96). Such a modification, according to Petitioner, would have resulted in “the aesthetic design being delineated by the light impermeable section; and the plurality of illumination sources being overlapped by the light diffusing section,” as required by claim 9. *Id.* at 38. Patent Owner does not address claim 9 separately.

7. Conclusion

For the foregoing reasons, we are persuaded that Petitioner has established, by a preponderance of the evidence, that claims 1, 5, 6, 8, and 9 are unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Parker and Rosko.

G. Obviousness over Parker, Rosko, and Guerra

Petitioner contends that claims 3, 4, and 10 are unpatentable under 35 U.S.C. § 103 as obvious over Parker, Rosko, and Guerra. Pet. 38–46. Petitioner, relying on citations to the references and declaration testimony of Mr. Holden, sets forth how the references purportedly would have conveyed

the claim limitations and provides purported reasoning for combining the teachings of the references. *Id.* at 38–46.

1. Guerra

Guerra is a U.S. patent directed to Footwear with optical fiber illuminating display areas. Ex. 1005, [54], Title. Guerra’s illuminated display areas provide “emphasis on illuminating certain features of the footwear, such as trademarks, logos, team sports, cartoon characters, and other artistic designs primarily for advertising, decoration and enhancing the visibility of the wearer.” *Id.* at Abstract. Guerra’s Figure 1 is set forth below.

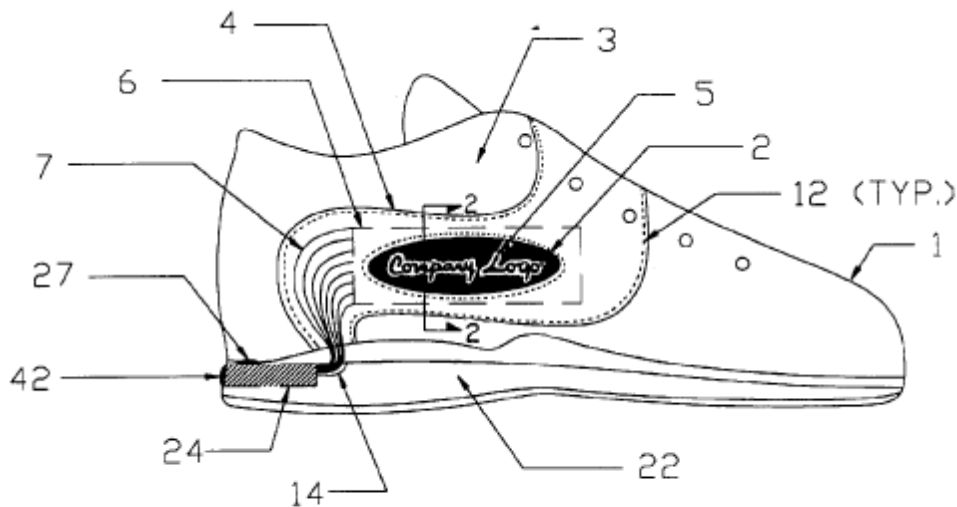


FIG.1

Figure 1 depicts “an athletic shoe 1, showing an optical fiber illuminating display area 2 on the upper portion 3 of the footwear.” *Id.* at 6:64–65; *see id.* at 5:26–29. The display area “is decorated with ‘Company Logo’ 5” that in some embodiments is made by “adding a decorative layer 11 containing this design.” *Id.* at 6:65–7:4. “The decorative layer 11 can consist of an opaque material, die-cut with letters, numbers, etc. to make visible the

underlying illuminated display areas.” *Id.* at 7:4–6. The decorative layer 11 additionally “can consist of a translucent layer of film . . . which can contain a design with opaque/translucent letters, numbers, etc.” *Id.* at 7:7–10. The “decorative layer 11 [can] contain[] a design, such as trademarks, logos, names, numbers, words, cartoons, pictures, etc. to further decorate and embellish the footwear.” *Id.* at 7:42–44. “Another method to further decorate the illuminating display area is by adding an[] opaque film, preferably die-cut with letters, numbers, etc., and placed underneath the clear or translucent layer 11.” *Id.* at 7:52–55.

2. *Petitioner’s Contentions*

Claim 3 depends from independent claim 1 and additionally requires the structure to include a stencil layer having certain characteristics. *See* Ex. 1001, 8:3–14. Petitioner contends that Guerra’s opaque film placed underneath the translucent layer 11 would have conveyed to one of ordinary skill in the art the recited stencil layer. Pet. 39 (citing Ex. 1005, 7:53–55; Ex. 1002 ¶ 99). Petitioner further contends that Guerra’s opaque film die-cut with letters, in the context of Guerra’s additional disclosure that “trademarks, logos, names, numbers, words, cartoons, pictures, etc. . . . further decorate and embellish the footwear,” would have conveyed to one of ordinary skill in the art the recited stencil layer including at least one aesthetic cut. *Id.* at 40. Petitioner contends, with support of Mr. Holden, that one of ordinary skill in the art “would have been motivated to modify Parker to include Guerra’s opaque film with die-cut letters, such that light[] shines through the die-cut letters, in order to display the brand origin and enhance the fashion and design detail of Parker’s shoe.” Pet. 39–40 (citing Ex. 1002 ¶ 101). Petitioner contends that the “inclusion of an

opaque film with die-letters would have been a known solution to Parker's goal of providing 'a logo or text . . . to the window.'" *Id.* at 40 (quoting Ex. 1003, 7:56–57).

With support of Mr. Holden, Petitioner contends that one of ordinary skill in the art would have found it obvious (i) to position Guerra's opaque film adjacent to Parker's window 36 and between Parker's outer window 36 and back reflector 15, (ii) to adjacently connect the opaque film to the batting, between the batting and the window, in order to ensure light emanating from Parker's shoe escapes through the die-cut portions of the opaque film, and (iii) to position the opaque film beneath Parker's window to protect the opaque film from the environment and lessen the risk of delamination. *Id.* at 39–41 (citing Ex. 1002 ¶¶ 100–101).

Petitioner further contends that Guerra's opaque film "by definition is light impermeable" and one of ordinary skill in the art "would include illumination sources (light diffusers 5 containing LEDs [as described previously with regard to the combination of Parker and Rosko]) adjacent the die-cut portions of the opaque film, in order to ensure light emanating from Parker's shoe escapes through the die-cut portions of the opaque film." *Id.* at 41–42 (citing Ex. 1005, 7:53–54; Ex. 1002 ¶¶ 99–100).

Claim 4 depends from claim 1 and additionally requires the structure to include a stencil layer having certain characteristics. *See* Ex. 1001, 8:14–22. Petitioner relies upon Guerra's teaching of a "translucent layer of film . . . which can contain a design with opaque/translucent letters, numbers, etc." Pet. 42 (quoting Ex. 1005, 7:7–10). Petitioner contends Guerra's translucent film teaches the recited "stencil layer" and that Guerra's opaque letters/numbers constitute the recited "aesthetic design." Pet. 42–44.

According to Petitioner, a person of ordinary skill in the art would have been motivated to modify Parker to include Guerra's translucent film "in order to display the shoe brand or shoe name and to enhance the fashion and design detail of Parker's shoe." Pet. 42–43; Ex. 1002 ¶¶ 103–104.

Claim 10 depends from dependent claim 8 which depends from independent claim 1, and additionally requires the upper to have a light impermeable section configured as an aesthetic design and a light diffusing section that delineates the aesthetic design. *See* Ex. 1001, 8:48–56.

Petitioner relies upon Guerra's teaching of decorative layer 11 applied to illuminated display area 2. Pet. 44. Petitioner contends Guerra teaches "a light impermeable section configured as an aesthetic design (opaque letters, numbers, etc.) and a light diffusing section (translucent film) that delineates the aesthetic design." Pet. 44–46 (citing Ex. 1005, Fig. 1). Petitioner contends it would have been obvious "to apply Guerra's decorative layer 11 comprising a translucent film and opaque lettering to Parker's light diffusing window 36," in which case "the underlying illumination sources (diffusers 5) would be overlapped by Guerra's light impermeable section, e.g., portions of Guerra's 'opaque letters, numbers, etc.'" *Id.* at 46; (citing Ex. 1002 ¶¶ 106, 108).

Notwithstanding Patent Owner's arguments, which we have considered and which we address below, we are persuaded that Petitioner has established by a preponderance of the evidence that claims 3, 4, and 10 of the '038 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Parker, Rosko, and Guerra.

3. *Patent Owner's Arguments*

Patent Owner argues that a person of ordinary skill in the art would not have positioned Guerra's opaque film with die-cut letters between Parker's window 36 and back reflector 15 because "[a]pplying a graphic to the window 36 would be far less expensive and time consuming than layering the die cut portions beneath a translucent window, as illustrated above. PO Resp. 59–60 (citing Ex. 2001 ¶ 83). According to Patent Owner, a person of ordinary skill in the art would not have done what Petitioner proposes "due to the unreasonable added time and expense of adding a die-cut opaque film above the diffusers and the likelihood of failure of the connection during the lasting process." *Id.* at 60.

Petitioner counters with testimony from Mr. Holden that "adding an opaque film beneath a window adds little time or cost to the manufacture of Parker's shoe" and that the proposed modification would "increase the outward reflection of the lighted feature, thus increasing the inherent value of the product to the consumer, even in view of a very limited increase in cost and production time." Pet. Reply 23 (quoting Ex. 1021 ¶ 9). Petitioner also argues that the references are in the same field of endeavor, and that the combination was within the technical ability of a person of ordinary skill in the art. Pet. Reply 23 (citing Ex. 1002 ¶ 7).

Patent Owner's argument is not persuasive because the focus of 35 U.S.C. § 103 is on the obviousness of an invention to a person of ordinary skill in the art. *Environmental Design*, 713 F.2d at 697; *see also Farrenkopf*, 713 F.2d at 718. Even assuming that the proposed combination would have required additional work or expense over other alternatives, neither makes the combination nonobvious. Obviousness does not require

that the proposed combination would have been the least expensive or fastest of all possible combinations.

4. Conclusion

For the foregoing reasons, we are persuaded that Petitioner has established, by a preponderance of the evidence, that claims 3, 4, and 10 are unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Parker, Rosko, and Guerra.

H. Obviousness over Parker, Rosko, and Dua

Petitioner contends that claim 2, which depends from independent claim 1, is unpatentable under 35 U.S.C. § 103 as obvious over Parker, Rosko, and Dua. Pet. 3, 47–49.

1. *Dua (Ex. 1007)*

Dua teaches “an upper for an article of footwear that includes a textile having fusible filaments or fibers.” Ex. 1007, Abstract. Dua indicates that “[i]n comparison with unfused areas of the upper, the fused areas may impart properties that include greater stretch-resistance, stability, support, abrasion-resistance, durability, and stiffness, for example.” *Id.* Dua further indicates that additionally “the fused areas generally provide air-permeability without significantly increasing the weight of the footwear.” *Id.*

2. *Analysis*

Claim 2 depends from independent claim 1 and requires that the structure further comprise a light diffusing layer configured as an aesthetic design and a light diffusing layer configured as at least one aesthetic cut traversing through the upper and being adjacently connected to the batting and perimetrically aligned with the aesthetic cut. Ex. 1001, 7:48–8:2.

Petitioner contends that Parker's window 36 would have conveyed to one of ordinary skill in the art the recited light diffusing layer. Pet. 47. Petitioner further contends that the combination of Parker's opening in an outer shoe covering 34, Rosko's disclosure of a shaped recess for a translucent panel, and Dua's textile covering of the outer shoe would have conveyed to one of ordinary skill in the art the additional limitations recited in claim 2 and provides reasons that one of ordinary skill in the art would have combined the references in the manner proposed by Petitioner. *Id.* at 47–49 (citing Ex. 1002 ¶¶ 110, 112–114).

Patent Owner argues that, although Dua teaches a textile upper, it does not teach that it is light diffusing because, for example, “light from an LED cannot penetrate a heavy canvas material.” PO Resp. 61–62. Patent Owner concedes that “sheer textile materials existed prior to the '038 patent's priority date,” but contends that Rosko's “window 1) is not a textile material as required by the preamble, and 2) in assembly on the outer of the shoe, would lack required structural integrity to survive both manufacturing and daily wear.” PO Resp. 62; *see also id.* at 63–64 (“Doing so . . . would not survive the lasting process.”). These arguments were addressed with respect to claim 1 and are not persuasive for the reasons described above.

Patent Owner also argues that a person of ordinary skill in the art would not have been motivated to combine the references as proposed because “[d]oing so would be expensive [and] would unnecessarily complicate manufacturing.” PO Resp. 63–64. This argument is not persuasive because, as discussed above for claims 3, 4, and 10, obviousness does not require that the proposed combination would have been the least expensive or fastest of all possible combinations.

3. Summary

For the foregoing reasons, we are persuaded that Petitioner has established, by a preponderance of the evidence, that claim 2 of the '038 patent is unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Parker, Rosko, and Dua.

I. Obviousness over Parker, Rosko, and Guzman

Petitioner contends that claim 7, which depends from independent claim 1, is unpatentable under 35 U.S.C. § 103 as obvious over Parker, Rosko, and Guzman. Pet. 49–50.

1. Guzman (Ex. 1006)

Guzman is a U.S. patent application publication that “is directed to an article of footwear having both one or more light sources such as LEDs, and a loudspeaker, which are activated either by a manual switch or an inertia switch.” Ex. 1006, Abstract. Guzman discloses “an array of LEDs is mounted in a decorative pattern on the upper of the shoe.” *Id.* ¶ 8.

2. Analysis

Claim 7 depends from claim 1 and recites “the plurality of illumination sources being configured into an aesthetic design.” Petitioner relies on Guzman’s decorative pattern of LEDs. Pet. 49 (citing Ex. 1006 ¶ 8; Ex. 1002 ¶ 117). Petitioner contends, with the support of Mr. Holden, that one of ordinary skill in the art “would have been motivated to modify Parker in view of Rosko to enhance the commercial appeal of the resulting shoe by arranging the light diffusers 5 in a ‘decorative pattern’ as disclosed in Guzman.” *Id.* at 49–50 (citing Ex. 1002 ¶ 118).

Patent Owner concedes that it would have been obvious to arrange LED lights in a pattern on the surface of a shoe, as taught in Guzman, but

argues it would not have been obvious “to arrange an LED array beneath a diffuse material or even a light-diffusing window in an aesthetic pattern.”

PO Resp. 65 (citing Ex. 1002 ¶ 118; Ex. 2001 ¶ 90).

Having considered the testimony of both declarants, we consider Mr. Holden’s testimony more credible. Mr. Holden testifies that

[w]ithin the pocket in Parker’s athletic shoe, a person of ordinary skill in the art would have been motivated to arrange the LED lights from Rosko or the LED lights from Guzman in order to enhance the commercial appeal of the resulting shoe. In the case of children being the intended audience, for example, a person of ordinary skill in the art would have found it obvious to arrange LED lights in the outline of a star, a heart, a flower, or other shape of general interest to children. This technique was well within the grasp of a person of skill in the art as evidenced by Guzman, which as noted above discloses “an array of LEDs . . . mounted in a decorative pattern.” (Guzman, ¶0008).

Ex. 1002 ¶ 118. In contrast, Mr. Smith’s testimony at paragraph 90 of his Declaration merely repeats what is in the Petition. In particular, Mr. Smith does not explain why arranging LEDs beneath a diffuse material would have been less obvious than arranging LEDs on a surface, as taught in Guzman. Patent Owner did not dispute the finding, in our Decision on Institution, that a person of ordinary skill in the art would have had “at least several years’ experience in footwear design with familiarity in the integration of light sources into footwear” and “an understanding of the range of material choices and construction techniques that are used to create the various parts of footwear, as well as their functional requirements and impact on overall footwear appearance.” Inst. Dec. 12–13. In light of that level of skill in the art, we are persuaded by Petitioner’s arguments and evidence that a person of ordinary skill in the art would have found it obvious to arrange LEDs in a

pattern even if those LEDs were positioned between the interfacing layer and the batting, as required by claim 1.

3. Summary

For the foregoing reasons, we are persuaded that Petitioner has established, by a preponderance of the evidence, that claim 7 of the '038 patent is unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Parker, Rosko, and Guzman.

III. PETITIONER'S MOTION TO EXCLUDE

Petitioner filed a Motion to Exclude (Paper 40, "Mot."). Patent Owner filed an Opposition (Paper 51, "Opp."), and Petitioner filed a Reply in support of its Motion (Paper 54). As movant, Petitioner has the burden of proof to establish that it is entitled to the requested relief. *See* 37 C.F.R. § 42.20(c).

Petitioner moves to exclude (1) paragraphs 5–10 of the Declaration of Ralph Shanks (Exhibit 2042) under Federal Rules of Evidence 801 and 802 as containing inadmissible hearsay to which no relevant exception applies (Mot. 1–7); and (2) paragraphs 4 and 11 of the Declaration of Ralph Shanks (Exhibit 2042) because they are outside the agreed-upon scope of the Declaration of Ralph Shanks (*id.* at 7–8).

Patent Owner opposes, arguing that Mr. Shanks' testimony either (1) is not an out-of-court statement, but merely an observation by Mr. Shanks; or (2) is not offered for the truth of the matter asserted, but as "evidence of industry praise." Opp. 2–8. Patent Owner also argues that Mr. Shanks' testimony is admissible under the residual hearsay exception. *Id.* at 9–11. With respect to paragraphs 4 and 11, Patent Owner argues that they "are

relevant to establish the nexus between the licenses and the claimed features.” *Id.* at 11-12.

In Reply, Petitioner acknowledges that out-of-court statements that show industry praise, such as newspaper articles and press releases, have been deemed admissible in some instances, but argues that those are distinct from Mr. Shanks’ testimony describing allegedly favorable reactions from distributors’ representatives. Paper 54, 2. Petitioner also argues that the residual hearsay exception does not apply.

We agree with Petitioner that much of Mr. Shanks’ testimony in paragraphs 5–10 is hearsay, but we are not persuaded that we should exclude paragraphs 5–10 entirely. We are similarly not persuaded that we should exclude paragraphs 4 and 11 entirely. Rather, it is within our discretion to assign the appropriate weight to be accorded evidence. *See* 37 C.F.R. § 42.65(a); *see also, e.g., Yorkey v. Diab*, 601 F.3d 1279, 1284 (Fed. Cir. 2010) (holding the Board has discretion to give more weight to one item of evidence over another “unless no reasonable trier of fact could have done so”); *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) (“[T]he Board is entitled to weigh the declarations and conclude that the lack of factual corroboration warrants discounting the opinions expressed in the declarations.”); and *Velandar v. Garner*, 348 F.3d 1359, 1371 (Fed. Cir. 2003) (“In giving more weight to prior publications than to subsequent conclusory statements by experts, the Board acted well within [its] discretion.”).

The Board acts as both the gatekeeper of evidence and as the weigher of evidence. Rather than excluding evidence that is allegedly confusing, misleading, untimely, and/or irrelevant, we will simply not rely on it or give

it little weight, as appropriate, in our analysis. Similar to a district court in a bench trial, the Board, sitting as a non-jury tribunal with administrative expertise, is well positioned to determine and assign appropriate weight to evidence presented, including giving it no weight. *See, e.g., Donnelly Garment Co. v. NLRB*, 123 F.2d 215, 224 (8th Cir. 1941) (“One who is capable of ruling accurately upon the admissibility of evidence is equally capable of sifting it accurately after it has been received . . .”). Thus, in this *inter partes* review, the better course is to have a complete record of the evidence to facilitate public access as well as appellate review. Thus, Petitioner’s Motion to Exclude is *denied*.

IV. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–10 of the ’038 patent are unpatentable under 35 U.S.C. § 103(a).

V. ORDER

Accordingly, it is

ORDERED that claims 1–10 of the ’038 patent are held *unpatentable*;

FURTHER ORDERED that Petitioner’s Motion to Exclude is *denied*;

FURTHER ORDERED that Petitioner’s Motion to Strike the

Declaration of Paul Barcroft is *granted*;

FURTHER ORDERED that Petitioner’s Motion to Strike Sections II.C and II.D of Patent Owner’s Sur-Reply is *denied*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2017-01809
Patent 8,992,038 B2

For PETITIONER:

R. Michael Azzi
Vito A. Ciaravino
WARNER NORCROSS & JUDD LLP
mazzi@wnj.com
vciaravino@wnj.com

For PATENT OWNER:

Greg H. Gardella
Natalie J. Grace
Ming Chow
GARDELLA GRACE P.A.
ggardella@gardellagrace.com
ngrace@gardellagrace.com
calciati@gardellagrace.com
patent@sinorica.com