

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NEW BALANCE ATHLETICS, INC.,

Petitioner,

v.

NIKE, INC.,

Patent Owner.

Case IPR2025-00020

Patent No. 8,898,932

PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBITS

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2001	Declaration of M. Coleman Horn

I. INTRODUCTION

Patent Owner Nike, Inc. (“Nike”) submits this Preliminary Response to the Petition of New Balance Athletics, Inc. (“New Balance”) challenging the patentability of Claims 11–15 (the “Challenged Claims”) of U.S. Patent No. 8,898,932 (the “’932 patent”; Ex. 1001). The Board should deny institution because New Balance has not established a reasonable likelihood that it will prevail for any claim in any Ground raised in the Petition.

New Balance asserts three grounds of invalidity—Grounds 1, 2, and 3—against independent claim 11 of the ’932 patent. In each ground, New Balance asserts that the challenged claims are invalid as obvious. Ground 1 is based on U.S. Patent Application Publication No. 2010/0313447 A1 (“Becker”; Ex. 1007) in view of U.S. Patent Application Publication No. 2011/0088285 A1 (“Dojan”; Ex. 1010). Ground 2 is based on Becker in view of International Patent Application Publication WO 2004/012544 (“Wildeman”; Ex. 1013). Ground 3 is based on U.S. Patent No. 6,862,820 (“Farys”; Ex. 1011) in view of the knowledge of a person of ordinary skill in the art.

Grounds 1 and 2 fail for two independent reasons. First, Grounds 1 and 2 fail because New Balance has not shown that Becker teaches “the skin layer being absent from the ankle part of the knitted component,” as required by each of the Challenged Claims. The “skin layer” identified by New Balance—Becker’s outer lining—

extends up to and covers the ankle part of the knitted component. Second, Grounds 1 and 2 fail because New Balance has not shown that a person of ordinary skill in the art would have been motivated to combine Becker with either Dojan or Wildeman to teach or suggest “a skin layer that is thermally bonded to the knitted component,” as required by each of the Challenged Claims. New Balance alleges simply that thermal bonding provides certain advantages over other techniques, and thus a skilled artisan would have been motivated to use Dojan’s and Wildeman’s thermal bonding techniques to attach the layers described in Becker. But New Balance never addresses how thermal bonding would be used in Becker specifically. New Balance provides no analysis of how the thermal bonding technique described in Dojan or Wildeman would work with a non-flat (or irregularly) shaped component, such as Becker’s outer lining. And New Balance provides no support for its conclusory assertion that a skilled artisan would have been motivated to combine Becker with the specific teachings of Dojan or Wildeman—or have a reasonable expectation of success in doing so.

Ground 3 also fails for two independent reasons. First, New Balance fails to establish (or even address) that Farys teaches or suggests “a sole structure *secured to the upper*,” as required by each of the Challenged Claims. Second, Ground 3 fails because New Balance fails to show a reasonable likelihood that Farys, either alone or in combination with the knowledge of a person of ordinary skill in the art, teaches

or suggests a “skin layer being absent from the ankle part of the knitted component,” as required by each of the Challenged Claims. New Balance improperly relies on unsupported and conclusory assertions of obviousness in alleging that Farys’s elastic tightening system would not extend up to an ankle portion of Farys’s upper in its briefly mentioned “mid-high” embodiment, underscoring an attempt to supply limitations that Farys does not otherwise teach or suggest.

For these reasons and those discussed below, Nike respectfully requests that the Board decline to institute review.

II. OVERVIEW OF THE ’932 PATENT

The ’932 patent is directed to an article of footwear having an upper that includes a knitted component and a skin layer. Ex. 1001, 3:66-67. The ’932 patent explains that the knitted component is formed of a unitary knit construction, which involves a knitting process that substantially forms the knitted component without the need for significant additional manufacturing steps or processes. *Id.* at 6:45-51. In some embodiments, the knitted component includes a plurality of protruding areas that extend outward and away from a void within the upper for receiving the foot of a wearer. *Id.* at 5:8-12, 9:61-63. The skin layer is secured to the knitted component to form a portion of an exterior surface of the article of footwear. *Id.* at 9:2-4. In various embodiments, the skin layer is secured to the knitted component by thermally bonding the skin layer to the knitted component. *Id.* at 11:51-55.

An article of footwear having both a skin layer and knitted component offers many advantages over conventional footwear. For example, the combination of the knitted component and skin layer may “impart a relatively tight and glove-like fit” to the upper that secures the foot within the footwear, such as during walking, running, and other ambulatory activities. *Id.* at 6:11-16. “When formed as a soccer shoe, for example, the relatively tight and glove-like fit may provide the wearer with enhanced feel and control of a ball.” *Id.* at 6:16-18. The skin layer may also be utilized to reinforce areas of the upper by inhibiting stretch in the knitted component and enhancing the wear-resistance or abrasion-resistance of the upper. *Id.* at 6:18-22. This configuration may also “provide a relatively light weight or mass, support for the foot, uniform fit and conformance to a shape of the foot, and a relatively seamless interior with enhanced comfort for the wearer.” *Id.* at 6:23-27.

Figure 12 of the '932 patent, which is reproduced below, shows an example embodiment of an article of footwear having an upper 120 comprising a knitted component 130 and a skin layer 140, and a sole structure 110 secured to upper 120. *See generally id.* at 14:25-15:50 (describing aspects of the embodiment depicted in Figure 12).

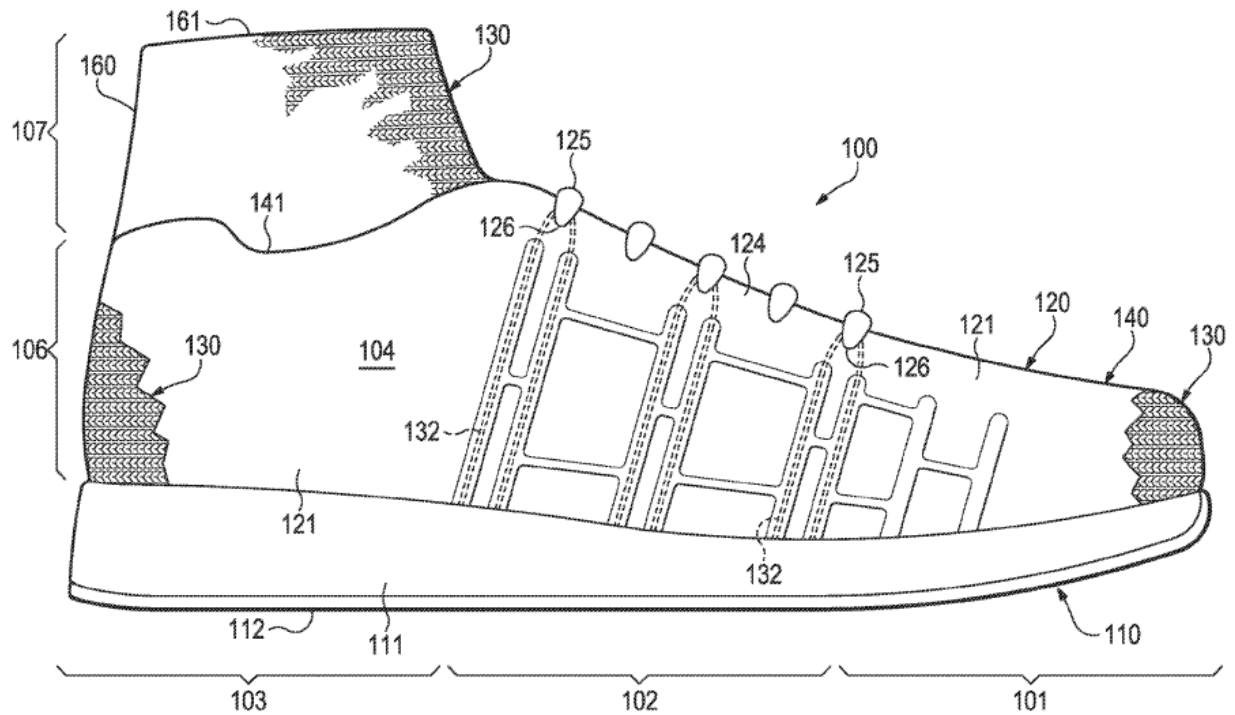


Figure 12

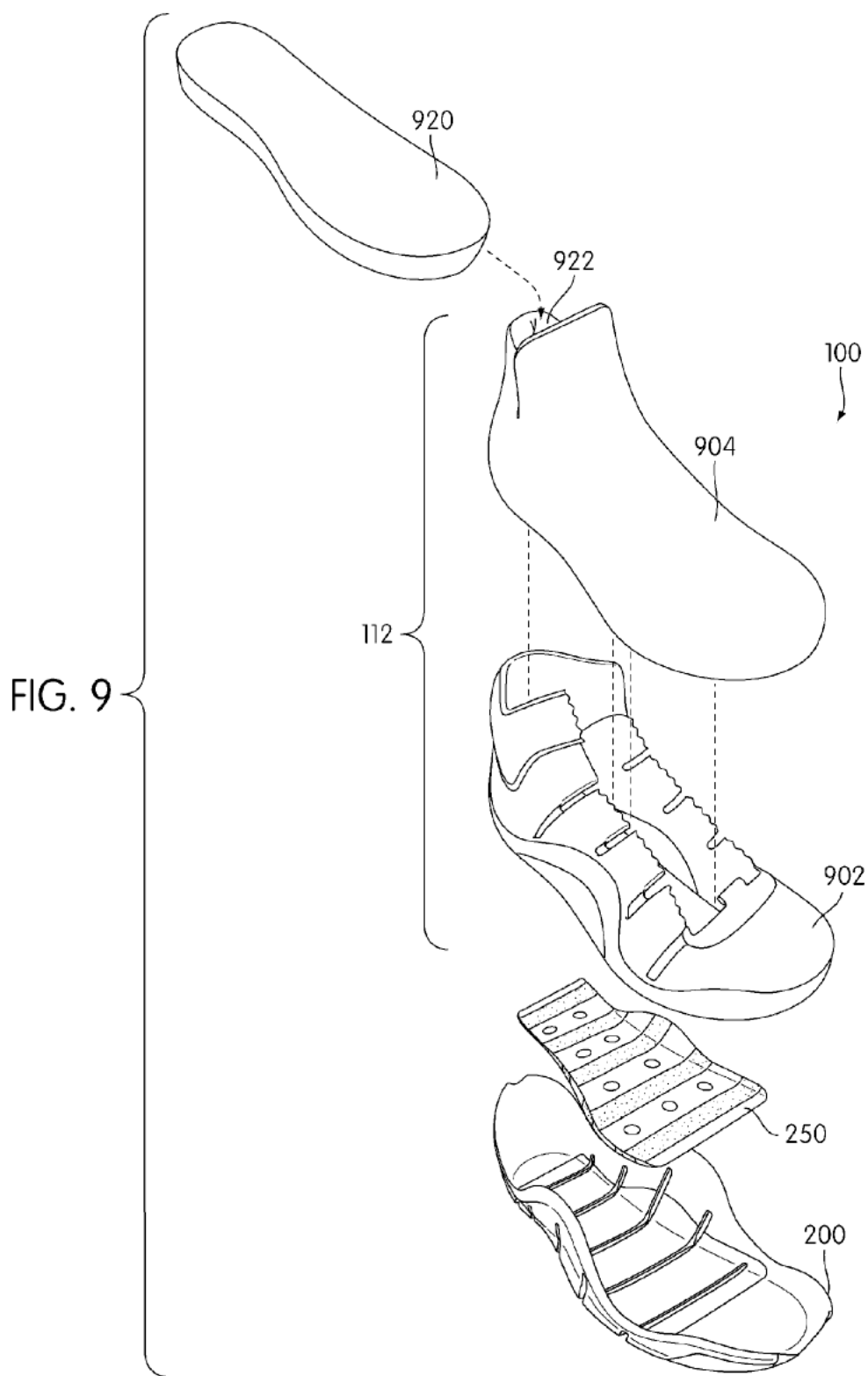
As shown in Figure 12, upper 120 may include a foot region that forms a foot part of knitted component 130 covering at least a portion of the foot of the wearer, and ankle region 107 forming an ankle part of knitted component 130 covering at least a portion of the ankle of the wearer. *Id.* at 14:45-54. The ankle part of knitted component 130 may have a continuous structure for extending entirely around the ankle of the wearer. *Id.* at 14:55-57. In some embodiments, foot region 106 has less stretch than ankle region 107. *Id.* at 15:14-18. In some embodiments, the ankle part of knitted component 130 forms a portion of an exterior surface 121 and an interior surface 122 in ankle region 107. *Id.* at 15:22-25. As depicted in Figure 12, skin

layer 140 may be absent from the ankle part of knitted component 130. *See, e.g., id.* at 15:21-22, 15:31-36.

III. ALLEGED PRIOR ART REFERENCES

A. Becker

U.S. Patent Application Publication No. 2010/0313447 A1 (“Becker”; Ex. 1007) is titled “Lightweight and Flexible Article of Footwear” and published December 16, 2010. Becker is generally directed to an article of footwear with a lightweight and flexible outer member. Ex. 1007, [0008]. Becker explains that the article of footwear preferably includes an upper 112, an outer member 200, and an inner plate disposed between outer member 200 and upper 112. *Id.* at [0079]. A preferred embodiment of Becker is depicted in Becker’s Figure 9 (reproduced on the next page) and Figure 10. *Id.* In this embodiment, Becker explains that article of footwear 100 includes an outer lining 902 and an inner lining 904. *Id.* at [0080]. Becker explains that “inner lining 904 may be a sock-like bootie that wraps around a wearer’s foot within outer lining 902,” and that “outer lining 902 may be configured to provide additional support or to reinforce inner lining 904.” *Id.* at [0080], [0081].



Ex. 1007 ("Becker"), Figure 9

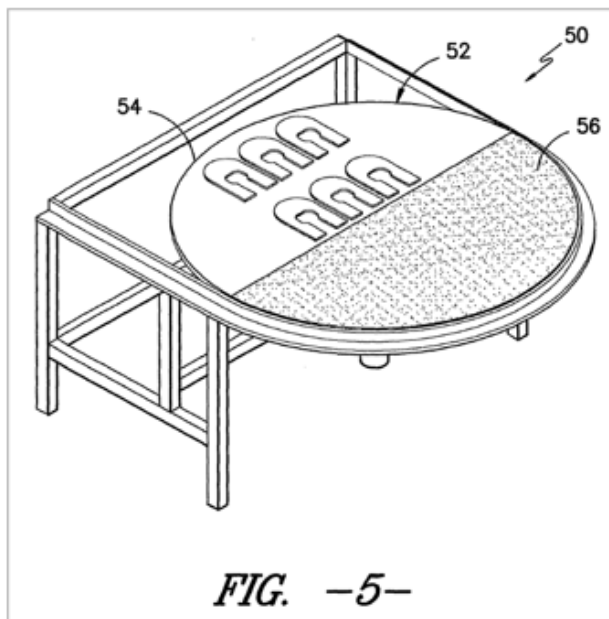
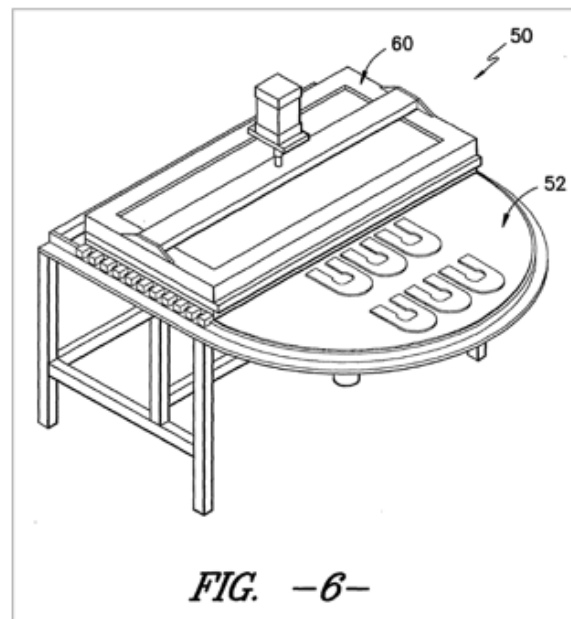
B. Dojan

U.S. Patent Application Publication No. 2011/0088285 A1 (“Dojan”; Ex. 1010) is titled “Composite Shoe Upper and Method of Making Same” and published April 21, 2011. Dojan is generally directed to techniques for creating a multi-layer bonded mesh composite panel to be included in the upper of a shoe. Ex. 1010, [0004], [0034]. To do so, Dojan describes tacking a substrate layer, a mesh layer, and skin layer panels together, placing the tacked layers together in a heated press, and applying heat and pressure to cause the various layers to bond to become a one-piece panel. *Id.* at [0034]. Dojan explains that creating the bonded mesh composite panel includes “assembling individual panels of material for the various layers in a flat configuration.” *Id.* at [0046]. Dojan explains that this “assembly undergoes a series of pressing operations to bond the assembled elements,” resulting in “a flat, one-piece unibody upper shell.” *Id.*

C. Wildeman

International Patent Application Publication WO 2004/012544 (“Wildeman”; Ex. 1013) is titled “Shoe Manufacturing and Recycling System” and published February 12, 2004. Wildeman is generally directed to the production of textile materials with incorporated heat activated coatings for use in shoe assembly. Ex. 1013, 1:10-16. Wildeman describes using heat and pressure, “such as in a hot press or the like,” to melt bond a base textile to a second surface material. *Id.* at

3:6-13, FIG. 6. Wildeman explains that “during the actual shoe manufacturing process the blanks of material cut from the coated substrate may be adhered in bonded juxtaposed relation to other surfaces such as leather, plastic, fabric, foam and the like to make up multi-layered structures suitable for formation into portions of a shoe.” *Id.* at 8:13-16. Wildeman indicates that the procedure is performed at an assembly station 50 (such as depicted in Figures 5 and 6 below), which “includes a large turntable work top 52 divided into two substantially identical hemispheres 54, 56.” *Id.* at 8:16-20.



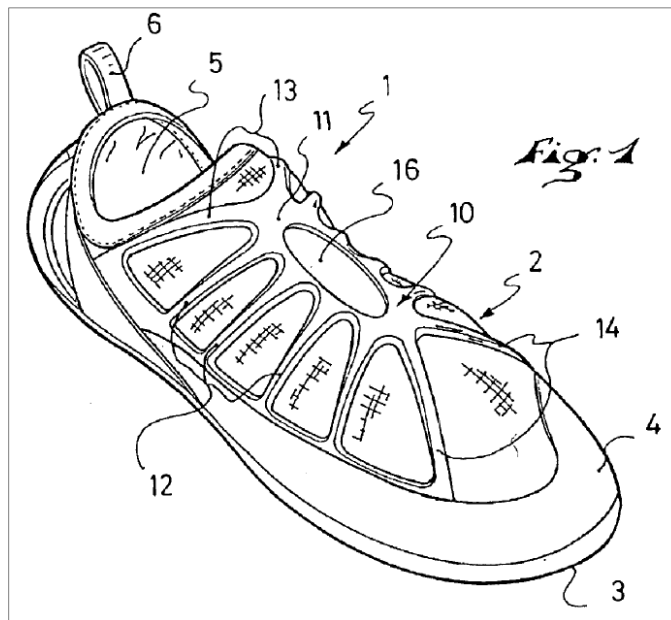
“During operation, one or more operators places parts for lamination such as shoe uppers or the like in a pattern across one of the hemispheres. The precut blanks of coated substrate material are thereafter placed on top of these parts in a desired spatial relation with the hot melt adhesive copolyester oriented in sandwiched

relation between the layers. The work top 52 is then rotated through a 180 degree angle and a hot plate 60 is activated to apply heat and pressure to the arranged parts.”

Id. at 8:20-26.

D. Farys

U.S. Patent No. 6,862,820 (“Farys”; Ex. 1011) is titled “Footwear Article Having an Elastic Tightening” and issued March 8, 2005. Farys is generally directed to an article of footwear having a sole, a low upper that is at least partially elastic, and an elastic tightening system extending almost over the entire volume of the foot, from the top of the instep to the sole area. Ex. 1011, 1:51-59. An embodiment having each of the foregoing component parts is depicts in Farys’s Figure 1, reproduced below. *Id.* at 30-33.



Farys explains that “upper 2 is low, meaning that it extends below the malleoli so

as not to hinder the ankle articulation.” *Id.* at 2:34-35. However, Farys also explains that “the upper 2 could also be mid-high, i.e, covering the malleoli without nevertheless hindering the mobility of the ankle.” *Id.* at 2:35-38.

IV. DEFINITION OF A PERSON OF ORDINARY SKILL IN THE ART

For the purposes of this Preliminary Response only, Nike applies New Balance’s definition for a person of ordinary skill in the art (“POSITA”), namely a person with at least a bachelor’s degree in design, footwear design, textile design and technology, or a similar technical degree with at least 3 years of experience working with knitted textiles for use in fabric-based articles, including apparel such as footwear. Petition at 13; Ex. 1003, ¶25. New Balance asserts that such a POSITA would have worked with team members including those with knowledge and experience in garment manufacturing. *Id.* New Balance also asserts that the team would have included individuals with a bachelor’s degree in chemical engineering, textile engineering, mechanical engineering, or a similar degree and at least 3 years of experience working with different methods of applications for securing material to knitted textiles, including footwear. *Id.* For individuals with different educational backgrounds, a person could still be of ordinary skill in the art provided that person’s additional experience compensates for any differences in that person’s education as stated above. *Id.* For individuals with different educational backgrounds, a person could still be of ordinary skill in the art provided that

person's additional experience compensates for any differences in that person's education as stated above. *Id.* Nike reserves the right to further address New Balance's definition of a POSITA if trial is instituted.

V. CLAIM CONSTRUCTION

Claims challenged in *inter partes* review proceedings "shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b)." 37 C.F.R. § 42.100(b). Under this standard, claims "are generally given their ordinary and customary meaning," as understood by a person of ordinary skill. *Phillips v. AWH Corp.*, 415 F.3d 1303 at 1312–13 (Fed. Cir. 2005) (citation omitted).

As New Balance notes, Nike previously agreed in a proceeding before the International Trade Commission to the constructions of the following terms of the '932 patent:

Term	Construction
unitary knit construction	formed as a one-piece element through a knitting process
thermally bonded	a securing technique between two elements that involves a softening or melting of a thermoplastic polymer material within at least one of the elements such that the materials of the elements are secured to each other when cooled

Petition at 13-14. New Balance and Nike also agreed to these proposed constructions in the parallel district court litigation. *Nike, Inc. v. New Balance Athletics, Inc.*, 1:23-cv-12666, ECF No. 73, 2-3 (D. Mass. Feb. 4, 2025). For the purposes of this Preliminary Response, Nike contends that no terms require construction. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms ... in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). Nike reserves the right to further address claim construction if trial is instituted.

VI. NEW BALANCE HAS NOT ESTABLISHED A REASONABLE LIKELIHOOD OF PREVAILING FOR ANY CHALLENGED CLAIM

New Balance bears the burden on institution of “demonstrating a reasonable likelihood that it will prevail in showing the unpatentability of at least one claim.” *SMIC, Ams. v. Innovative Foundry Techs., LLC*, IPR2020-00837, Paper 13 at 13–14 (PTAB Oct. 9, 2020) (citing 35 U.S.C. §§ 314(a) and 312(a)(3)). In making this showing, New Balance’s Petition must identify “the evidence that supports the grounds for the challenge to each claim.” *Id.* New Balance has not met that burden, and has not shown a reasonable likelihood of success for any challenged claim under any ground of unpatentability. The Board should thus deny institution.

A. Grounds 1 and 2: New Balance Fails to Show a Reasonable Likelihood that the Combination of Becker and either Dojan or Wildeman Renders Obvious Any of the Challenged Claims

New Balance fails to show that multiple limitations required in independent claim 11 are disclosed by either the Ground 1 or Ground 2 combinations. Ex. 2001, ¶30.

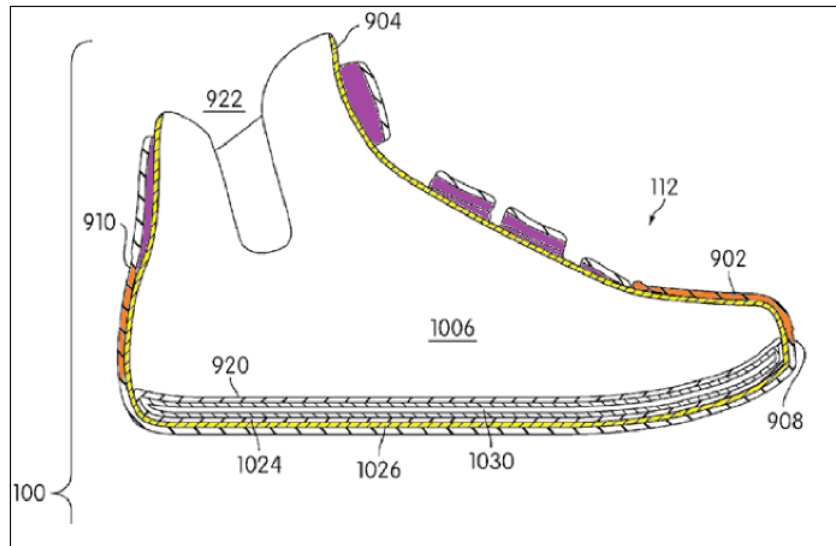
1. Becker does not disclose or render obvious a “skin layer being absent from the ankle part of the knitted component,” as recited in claim 11

New Balance fails to show a reasonable likelihood that Becker, Dojan, or Wildeman, either alone or in combination, teach or suggest a “skin layer being absent from the ankle part of the knitted component,” as required by independent claim 11 (and every challenged claim).¹ Ex. 2001, ¶¶31-38.

New Balance asserts that Becker teaches this limitation. Petition at 31-34. In particular, New Balance asserts that Becker’s outer lining 902 discloses the claimed “skin layer” (*id.* at 28), but that Becker’s outer lining 902 does not cover the ankle portion of the shoe (*id.* at 31). To force its argument, New Balance incorrectly

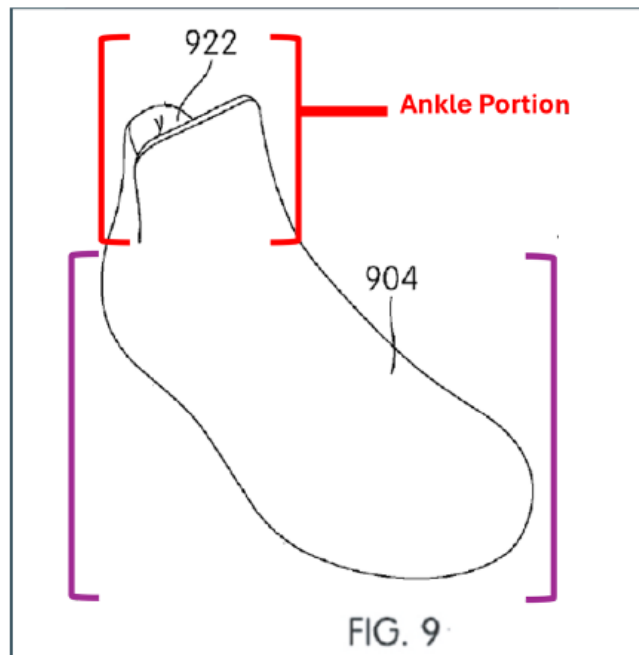
¹ In Ground 2, New Balance alleges this limitation is disclosed by Becker for the same reasons as explained in Ground 1, without any additional arguments or reasoning. Petition at 50. Accordingly, only citations to Ground 1 discussion in Petition are included herein.

annotates Becker's Figure 10 to identify only a portion of outer lining 902. *Id.* at 32; Ex. 2001, ¶32. For illustrative purposes, New Balance's annotated version of Becker's Figure 10—identifying only a portion of outer lining 902 in orange—is reproduced below.



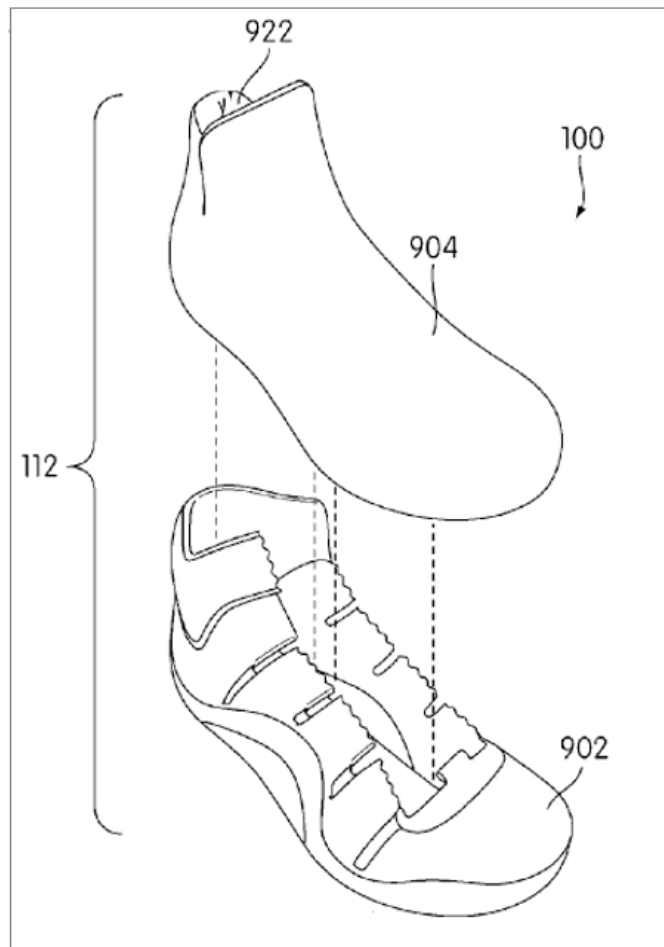
Petition at 32 (annotated Fig. 10). But the figures of Becker make clear that outer lining 902, like inner lining 904, extends up to cover at least a portion of the ankle portion of a wearer. Ex. 2001, ¶32.

Indeed, New Balance alleges that “it would have been obvious to a [POSITA] that the embodiment disclosed in Figures 9 and 10 of Becker would cover at least a portion of the ankle of a wearer.” Petition at 24. New Balance asserts that Figure 9 (reproduced below) shows an ankle portion (in red) and a foot portion (in purple) of inner lining 904.



Petition at 25 (annotated Fig. 9). However, to the extent Figures 9 and 10 depict inner lining 904 covering at least a portion of the ankle of a wearer, Figures 9 and 10 also depict outer lining 902 similarly covering at least a portion of the ankle of a wearer. Ex. 2001, ¶33.

Like inner lining 904, Figure 9 (reproduced below) also depicts outer lining 904 including a portion shaped to cover at least a portion of the ankle of a wearer.



Ex. 1007, Fig. 9. Meanwhile, Figure 10 depicts the same outer lining 902 as extending up towards an upper edge of inner lining 904 and covering the portion of inner lining 904. Ex. 2001, ¶34. Thus, to the extent New Balance alleges that inner lining 904 includes an ankle portion corresponding to the claimed “ankle part of the knitted component” (*see* Petition at 24-26), so too must outer lining 902 include an ankle portion.

In support of the annotation of Becker’s Figure 10 described above, New Balance seemingly asserts that the upper portion of outer lining 902 is not part of the

skin layer because it “is not bound to inner lining 904 around the ankle.” Petition at 32. However, Becker does not describe outer lining 902 as attached to inner lining 904. Ex. 2001, ¶35. Rather, Becker discloses only that “[i]nner lining 904 may be a sock-like bootie that wraps around a wearer’s foot within outer lining 902.” Ex. 1007, [0080]. And Becker discloses that “outer lining 902 may be configured to provide additional support or to reinforce inner lining 904.” *Id.* at [0081]. New Balance does not assert that a POSITA would have understood Becker to disclose securing outer lining 902 to inner lining 904. Accordingly, absent some rationale to modify the disclosure of Becker to adhere or otherwise attach outer lining 902 to inner lining 904 (which New Balance does not provide), whether outer lining 902 is attached to (or in contact with) inner lining 904 has no bearing on whether outer lining 902 is present at the ankle part of inner lining 904. Ex. 2001, ¶35.

Notably, Becker discloses that upper 112 may include an ankle strap 140 configured to wrap around upper 112 at an ankle portion 142. Ex. 1007, [0053]. While not described with respect to the embodiment of Figures 9 and 10 reproduced above, New Balance asserts that ankle strap is nevertheless depicted at least in Figure 10. Petition at 25 n.1 (acknowledging the same); Ex. 2001, ¶36. New Balance alleges, however, that “ankle strap is not part of the skin layer because it is not attached to the knitted component.” Petition at 33. To the contrary, a skin layer may be present (*i.e.*, not “absent”) at the ankle part of the knitted component without

necessarily being attached to (or in contact with) the knitted component at the ankle part. Ex. 2001, ¶36. Moreover, to the extent New Balance is relying on the alleged depiction of a gap in Figure 10 of Becker between outer lining 902 and inner lining 904 around the ankle (Petition at 33), such a gap would not be present when the ankle strap is used to tighten opening 102 around a wearer's ankle. Ex. 1007, [0053].

New Balance seemingly acknowledges the foregoing deficiencies, as it alternatively argues that a POSITA would have considered removing the ankle strap of Becker. Petition at 34. In particular, New Balance argues that a POSITA would have been motivated to remove the ankle strap “to allow for greater mobility of the ankle.” *Id.* However, New Balance asserts that the foregoing is already achieved by the outer lining not being adhered to the ankle portion. *Id.* at 33; Ex. 2001, ¶37. This argument is also flawed because New Balance relies on the inclusion of the ankle strap in support of the assertion that “the upper must necessarily cover at least a portion of the ankle.” Petition at 25-26. To the extent the ankle strap was removed, New Balance has not explained why the “ankle portion” of inner lining 904 would not also be removed. Ex. 2001, ¶37. And finally, even assuming the ankle strap of Becker were removed, New Balance provides no rationale for removing the remainder of the upper portion of outer lining 902 extending up towards an upper edge of inner lining 904 and covering the portion of inner lining 904 that New

Balance alleges corresponds to the claimed “ankle part.” Ex. 2001, ¶37 (discussing Becker’s Figure 9).

Ultimately, New Balance asserts that Becker’s outer lining 902 comprises the claimed “skin layer,” and Figures 9 and 10 of Becker clearly depict outer lining 902 extending up to and covering at least a portion of the inner lining 904 allegedly comprising the “ankle part” of inner lining 904. Accordingly, Becker does not disclose outer lining 902 absent from the ankle part of inner lining 904. Ex. 2001, ¶38.

2. New Balance fails to establish that the combination of Becker and either Dojan or Wildeman renders obvious “a skin layer that is thermally bonded to the knitted component,” as recited in claim 11

New Balance alleges that the combination of Becker and Dojan and the combination of Becker and Wildeman teach or suggest “a skin layer that is thermally bonded to the knitted component,” as required by independent claim 11 (and every challenged claim). Petition at 28-31, 47-49. However, New Balance fails to establish that a POSITA would have been motivated to combine Becker with either Dojan or Wildeman to arrive at the claimed limitation. Ex. 2001, ¶¶39-46. New Balance fails to make this showing for four independent reasons: (i) New Balance provides no rationale for affixing Becker’s outer lining 902 to inner lining 904; (ii) New Balance fails to explain *how* a skilled artisan would combine the thermal

bonding techniques of Dojan or Wildeman with Becker's irregularly shaped component; (iii) New Balance fails to identify any motivation to combine that would apply specifically to Becker; and (iv) New Balance fails to establish that a POSITA would have a reasonable expectation of success in using the thermal bonding methods to attach the layers in Becker.

a) New Balance provides no rationale for affixing Becker's outer lining 902 to inner lining 904

New Balance asserts that Becker's inner lining 904 discloses a knitted component with a foot part for covering the foot of a wearer (*id.* at 22) and an ankle part that covers at least a portion of the ankle of the wearer (*id.* at 24-25 (identifying a portion of inner lining 904 as the "ankle portion" in FIG. 9)). New Balance also asserts that Becker's outer lining 902 discloses the claimed "skin layer" (*id.* at 28), and that a POSITA would have been motivated to attach outer lining 902 to inner lining 904 "us[ing] thermal bonding over other methods of adhesion such as stitching or adhesive bonding because of the advantages it would provide" (*id.* at 29).

However, as noted previously, Becker's outer lining 902 is not attached to inner lining 904.² *See supra* § VI.A.1. Rather, Becker discloses only that "[i]nner lining 904 may be a sock-like bootie that wraps around a wearer's foot within outer lining 902," and that "outer lining 902 may be configured to provide additional support or to reinforce inner lining 904." Ex. 1007, [0080], [0081]. New Balance does not assert that a POSITA would have understood Becker to disclose securing outer lining 902 to inner lining 904. And while New Balance alleges that a POSITA would have preferred to use thermal bonding over other methods of affixing outer lining 902 to inner lining 904—New Balance never explains why a POSITA would have been motivated to affix outer lining 902 to inner lining 904 to begin with. For at least this reason alone, New Balance has failed to establish that the combination of Becker and either Dojan or Wildeman renders obvious "a skin layer that is thermally bonded to the knitted component," as recited in claim 11 and required by each of the Challenged Claims. Ex. 2001, ¶40.

² New Balance asserts, in Ground 2, that "Becker discloses an upper with an outer lining attached to a knitted inner lining" for the same reasons as explained in Ground 1, without more. Petition at 48. However, no such reasons in Ground 1 are provided.

b) New Balance fails to explain how a skilled artisan would combine the thermal bonding techniques of Dojan or Wildeman with Becker’s irregularly shaped component

New Balance also fails to explain *how* Becker would be modified to utilize thermal bonding to attach Becker’s outer lining 902 to inner lining 904 based on the teachings of either Dojan or Wildeman. Ex. 2001, ¶41. To support an obviousness argument, a petitioner must offer “a clear, evidence-supported account of the contemplated workings of the combination” to support “a conclusion that a relevant skilled artisan would have been motivated to make the combination and reasonably expect success in doing so.” *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017). Stated differently, it is a petitioner’s burden to explain specifically “how ... the references would be combined to produce the claimed invention.” *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016).

Here, for both Grounds 1 and 2, New Balance alleges simply that a POSITA would have been motivated to use thermal bonding to attach the layers described in Becker in light of the advantages of thermal bonding over those techniques generally. Petition at 28-31, 47-49. But New Balance never addresses how a skilled artisan would apply thermal bonding to Becker specifically. Ex. 2001, ¶41. For example, New Balance asserts that “thermal bonding was known to provide ‘fast, relatively easy, and economical bonds that are generally 80-100 percent the strength

of the parent plastic,”” and that, as a result, a POSITA would be motivated to use the thermal bonding as taught by Dojan or Wildeman over other methods of adhesion. *Id.* at 29-30 (quoting Ex. 1005, ¶ 29). However, New Balance provides no analysis of how the thermal bonding technique described in Dojan or Wildeman would work when used to combine a non-flat (or irregularly) shaped component, such as Becker’s outer lining 902, with another component, such as Becker’s inner lining 904. Ex. 2001, ¶41.

Indeed, both Dojan and Wildeman disclose thermal bonding techniques that involve applying heat and pressure to multiple generally flat components to bond the components together. For example, Dojan describes techniques for creating a multi-layer bonded mesh composite panel to be included in the upper of a shoe. Ex. 1010, [0004], [0034]. To do so, Dojan describes tacking a substrate layer, a mesh layer, and skin layer panels together, placing the tacked layers together in a heated press, and applying heat and pressure to cause the various layers to bond to become a one-piece panel. *Id.* at [0034]. To be sure, Dojan explains that creating the bonded mesh composite panel includes “assembling individual panels of material for the various layers in a flat configuration.” *Id.* at [0046]. Dojan explains that this “assembly undergoes a series of pressing operations to bond the assembled elements,” resulting in “a flat, one-piece unibody upper shell.” *Id.*; Ex. 2001, ¶42. Meanwhile, Wildeman is directed to “textile materials incorporating heat activated coatings for

use in shoe assembly.” Ex. 1013, 1:10-16. Like Dojan, Wildeman similarly describes using heat and pressure, “such as in a hot press or the like,” to melt bond a base textile to a second surface material. *Id.* at 3:6-13, FIG. 6; Ex. 2001, ¶42.

As described in Dojan and Wildeman, a POSITA would have understood that thermal bonding generally involves bonding two or more flat layers together using a press. Ex. 2001, ¶43. This is further supported by the '932 patent itself, which similarly describes thermal bonding as including use of a press with substantially planar press portions to compress the knitted component and skin layer together. Ex. 1001 at 12:18-24; Ex. 2001, ¶43. By completely failing to address *how* a POSITA would have used thermal bonding to affix Becker’s outer lining 902 to inner lining 904, New Balance fails to provide “a clear, evidence-supported account of the contemplated workings of the combination.” *Personal Web Techs.*, 848 F.3d at 994.

c) New Balance fails to identify any motivation to combine that would apply specifically to Becker

New Balance also fails to identify any motivation to combine that would apply to Becker. Ex. 2001, ¶44. It is axiomatic that a motivation to combine must address the specific references a petitioner seeks to combine. *See ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012) (asserted motivation to combine is insufficient if it is “generic and bears no relation to any specific combination of prior art elements” and “fails to explain why a person of

ordinary skill in the art would have combined elements from specific references in the way the claimed invention does”). Generalized motivations are insufficient. *See Hyundai Motor Co. v. Blitzsafe Texas, LLC*, Case IPR2016–01476, Paper 12 at 33 (P.T.A.B. Jan. 24, 2017) (“A determination of obviousness cannot be reached where the record lacks ‘explanation as to *how or why the references would be combined* to produce the claimed invention.’”) (quoting *Trivascular*, 812 F.3d at 1066 (emphasis added)).

Here, New Balance identifies several advantages of thermal bonding generally. Ex. 2001, ¶44. For example, as stated previously, New Balance asserts that “thermal bonding was known to provide ‘fast, relatively easy, and economical bonds that are generally 80-100 percent the strength of the parent plastic.’” Petition at 29, 48 (quoting Ex. 1005, ¶¶ 29). New Balance also notes that “a [POSITA] would have been aware of the advantages of thermal bonding, including time, efficiency, and decreased environmental damage and health concerns.” Petition at 29 (citing Ex. 1005, ¶ 44-45); *see also* Petition at 49 (noting generalized benefits of thermal bonding technique described in Wildeman, including “allowing for unused portions of the thermoplastic coated textile to be recycled back into the useable fiber”). However, New Balance provides no explanation of how these benefits would apply specifically to the system disclosed in Barker. For this additional reason alone, New Balance fails to establish the requisite motivation to combine. Ex. 2001, ¶44.

d) New Balance fails to establish that a POSITA would have a reasonable expectation of success in using the thermal bonding methods to attach the layers in Becker

Finally, New Balance asserts that a POSITA would have had a reasonable expectation of success in using the thermal bonding methods to attach the layers in Becker based on the teachings of Dojan or Wildeman. Petition at 30, 49. However, Petitioner's assertion is unsupported and, again, fails to take into account the differences between the components to be bonded in Becker as compared to the prior art. Ex. 2001, ¶45.

* * *

For each of the foregoing reasons, New Balance fails to establish that the combination of Becker and either Dojan or Wildeman renders obvious “a skin layer that is thermally bonded to the knitted component,” as recited in claim 11 (and required by each of the Challenged Claims). Ex. 2001, ¶46.

B. Ground 3: New Balance Fails to Show a Reasonable Likelihood that the Combination of Farys and the Knowledge of a POSITA Renders Obvious Claims 11-14

New Balance fails to show that multiple limitations required in independent claim 11 are disclosed by the Ground 3 combination. Ex. 2001, ¶47.

1. New Balance fails to show that Farys teaches or suggests “an upper and a sole structure secured to the upper,” as recited in claim 11

New Balance fails to establish that Farys teaches or suggests “[a]n article of footwear having an upper and a sole structure *secured to the upper*,” as recited in the preamble of independent claim 11 (and required by every challenged claim). Ex. 2001, ¶48. The preamble of claim 11 is limiting because it provides antecedent basis for the limitation “the upper” appearing later in the body of the claim. *See SIMO Holdings, Inc. v. Hong Kong uCloudlink Network Tech. Ltd.*, 983 F.3d 1367, 1375–76 (Fed. Cir. 2021) (“We have repeatedly held a preamble limiting when it serves as the antecedent basis for a term appearing in the body of a claim.”). For example, claim limitation 11[d] recites “the skin layer covering at least a portion of the foot part of the knitted component and forming a portion of an exterior surface *of the upper*.” Ex. 1001 at 19:35-20:1 (emphasis added).

With respect to the preamble of independent claim 11 in Ground 3, New Balance asserts only that “Farys recites a shoe with a sole and upper” and “Figure 1 portrays the upper 2 and outer soul [*sic*] 3.” Petition at 53. New Balance does not establish that Farys teaches or suggests outer sole 3 being secured to upper 2. Indeed, New Balance does not address this limitation at all. Accordingly, New Balance fails to establish that all of the limitations required by independent claim 11 (and each of the Challenged Claims) are disclosed by the Ground 3 combination. Ex. 2001, ¶48.

2. New Balance fails to establish that the combination of Farys and the knowledge of a POSITA renders obvious a “skin layer being absent from the ankle part of the knitted component,” as recited in claim 11

New Balance also fails to show a reasonable likelihood that Farys, either alone or in combination with the knowledge of a POSITA, teaches or suggests a “skin layer being absent from the ankle part of the knitted component,” as required by independent claim 11 (and every challenged claim). Ex. 2001, ¶¶49-52.

New Balance asserts this limitation would have been obvious in light of Farys and the knowledge of a POSITA. Petition at 61-63. In particular, New Balance asserts that Farys discloses that upper 2 may be “mid-high” and that such an upper would cover the malleoli without hindering the mobility of the ankle. *Id.* at 56, 62; *see also* Ex. 1011, 2:34-39 (“The upper 2 is low, meaning that it extends below the malleoli so as not to hinder the ankle articulation. As the case may be, the upper 2 could also be mid-high, i.e., covering the malleoli without nevertheless hindering the mobility of the ankle.”). New Balance asserts that a POSITA “would have understood that, to avoid impeding the mobility of the ankle, the elastic tightening system of Farys’s ‘mid-high’ upper would not extend up the ankle portion.” Petition at 62. In support of this assertion, New Balance alleges that a POSITA would have known that “the elastic tightening system was used to tighten and secure the shoe to the foot of the wearer and would thus restrict some degree of movement,” and, as

such, “would have been motivated to refrain from adding the tightening system to the ankle portion to keep the stretch and mobility provided by the knitted component, so as not to impede the mobility of the ankle.” Petition at 62 (citing Ex. 1003, ¶ 193).

It is well-established that a petitioner must offer evidence to support assertions of obviousness. “To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016); *see also, e.g., In re Nuvasive, Inc.*, 842 F.3d 1376, 1383 (Fed. Cir. 2016) (holding that “conclusory statements” alone are insufficient to articulate a motivation to combine—instead, “the finding must be supported by a ‘reasoned explanation’”) (citing *In re Lee*, 277 F.3d 1338, 1342, 1345 (Fed. Cir. 2002)); *Belvac Prod. Mach., Inc. v. Crown Packaging Tech., Inc.*, Case IPR2019-01076, Paper 9 at 23 (P.T.A.B. Oct. 29, 2019) (denying institution, noting that “assertion[s] of obviousness cannot be sustained by mere conclusory statements”).

Here, New Balance relies entirely on conclusory assertions of obviousness in alleging that Farys’s elastic tightening system would not extend up to the ankle portion in the briefly mentioned “mid-high” embodiment. Accompanying each of these conclusory statements, New Balance cites the expert declaration of Ann

Williams as evidence of what a POSITA “would have understood” or “would have also known.” *See* Petition at 62 (citing Ex. 1003, ¶ 193). Ann Williams, however, does not cite any supporting evidence for the assertions; nor does Ms. Williams endeavor to elaborate or explain why the assertions are correct based on her expertise.

New Balance uses the unsupported and conclusory assertions about what a POSITA “would have known” to supply limitations that Farys does not otherwise teach or suggest. Indeed, while Farys does briefly describe an embodiment where the upper may be “mid-high” and that such the upper would cover the malleoli, Farys does not disclose that the elastic tightening system would not also extend up to this part of the upper. Ex. 2001, ¶50. Notably, Farys does describe that the elastic tightening system extends substantially over the entire volume and length of the foot in embodiments where the upper only covers the foot and does not extend up to cover the malleoli. *See, e.g.*, Ex. 1011, 1:56-59 (describing “the elastic tightening system extend[ing] almost over the entire volume of the foot”), 2:42-46 (describing the elastic tightening system 10 “extending over the top of the instep and substantially over the entire length thereof”), 2:57-61 (describing the elastic tightening system as “a type of elastic ‘cage’ that completely envelops the foot from the area of the instep toward the heel and toes”); *see also* Ex. 2001, ¶50.

Ann Williams cites only one piece of evidence—the Nadler reference—in support of the assertion that a POSITA “would have been aware of shoe designs wherein the outer linings do not cover the entire inner lining and provide an inner component that extended above the outer lining allowing for greater mobility.” Ex. 1003, ¶ 193 (citing U.S. Patent No. 3,319,360 (“Nadler”; Ex. 1012)). But Nadler does not teach or suggest the described “upper 14 of the foot covering” as extending above the outer lining, as alleged, but instead describes a separate sock-like liner 21b that extends upwardly beyond the top edge 15b of a leg cover 1211. Ex. 1012, 2:62-64 (describing Figure 5); Ex. 2001, ¶51. New Balance’s failure to provide any other evidence or any relevant prior art underscores their attempt to supply limitations that Farys does not otherwise teach or suggest.

For at least the foregoing reasons, New Balance has not established that Farys, either alone or in combination with the knowledge of a POSITA, renders obvious “the skin layer being absent from the ankle part of the knitted component,” as recited in claim 11 and required by each of the Challenged Claims. Ex. 2001, ¶52

VII. CONCLUSION

For the reasons set forth above, Nike respectfully requests that the Board deny institution of the Petition for all Challenged Claims of the ‘932 patent.

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/s/ Michael J. Harris
Michael J. Harris (Reg. No. 62,957)

Aaron P. Bowling (Reg. No. 67,311)
Arnold & Porter Kaye Scholer LLP
70 West Madison Street, Suite 4200
Chicago, IL 60602-4231
Tel: (312) 583-2300
Fax: (312) 583-2360
Email: michael.harris@arnoldporter.com
aaron.bowling@arnoldporter.com

Lindsey C. Staubach (Reg. No. 76,738)
Mark A. Patrick (Reg. No. 72,958)
Arnold & Porter Kaye Scholer LLP
601 Massachusetts Ave, NW
Washington, DC 20001-3743
Tel: (202) 942-5000
Fax: (202) 942-5999
Email: lindsey.staubach@arnoldporter.com

Attorneys for Patent Owner Nike, Inc.

CERTIFICATE OF WORD COUNT

Under the provisions of 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the Microsoft Office word count including all footnotes for the foregoing Patent Owner's Preliminary Response, excluding the table of contents, table of authorities, certificate of word count, appendix and certificate of service, totals 6,637 words, which is less than the 14,000 words allowed under 37 C.F.R. § 42.24(b)(1).

Dated: March 20, 2025

/s/ Michael J. Harris

Michael J. Harris (Reg. No. 62,957)
Aaron P. Bowling (Reg. No. 67,311)
Arnold & Porter Kaye Scholer LLP
70 West Madison Street, Suite 4200
Chicago, IL 60602-4231
Tel: (312) 583-2300
Fax: (312) 583-2360
Email: michael.harris@arnoldporter.com
aaron.bowling@arnoldporter.com

Lindsey C. Staubach (Reg. No. 76,738)
Mark A. Patrick (Reg. No. 72,958)
Arnold & Porter Kaye Scholer LLP
601 Massachusetts Ave, NW
Washington, DC 20001-3743
Tel: (202) 942-5000
Fax: (202) 942-5999
Email: lindsey.staubach@arnoldporter.com

CERTIFICATE OF SERVICE

The undersigned hereby certifies service on the Petitioner, pursuant to 37 C.F.R. § 42.6(e) and by agreement of counsel, by electronic (e-mail) delivery of a true copy of the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE**, which was served on March 20, 2025 to the following Counsel for Petitioner via e-mail:

Linnea Cipriano (Reg. No. 67,729)
Douglas J. Kline (Reg. No. 35,574)
Goodwin Procter LLP
620 Eighth Ave
New York, NY 10018
lcipriano@goodwinlaw.com
dkline@goodwinlaw.com
DG-NB-NIKE@goodwinlaw.com

/s/ Timothy Haugh
Timothy Haugh