

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNDER ARMOUR, INC.,

Petitioner,

v.

ATHALONZ, LLC,

Patent Owner.

IPR2024-00636
Patent 10,674,786 B2

PATENT OWNER'S NOTICE OF APPEAL

Via EMAIL
eFileSO@uspto.gov

Via P-TACTS
Patent Trial and Appeal Board

Via CM/ECF
United States Court of Appeals for the Federal Circuit

Notice is hereby given, pursuant to 35 U.S.C. §§ 141, 142, and 319, and 37 C.F.R. §§ 90.2-90.3, that Patent Owner Athalonz, LLC hereby appeals to the United States Court of Appeals for the Federal Circuit from the Final Written Decision entered on September 11, 2025, (Paper 39), and from all underlying findings, determinations, rulings, opinions, orders, and decisions decided adversely to Patent Owner regarding this *inter partes* review of U.S. Patent No. 10,674,786 (“the ’786 patent”). A copy of the Final Written Decision is attached.

In accordance with 37 C.F.R. §90.2(a)(3)(ii), Athalonz, LLC further indicates that the issues on appeal include, but are not limited to, the following: (1) the Board’s determination that claims 1-8 of the ’786 patent are unpatentable; (2) the Board’s determination that Petitioner demonstrated by a preponderance of evidence that claims 1-8 of the ’786 patent are unpatentable; (3) the Board’s claim construction ruling and failure to construe other claim terms proposed for construction; (4) whether the Board’s final written decision complies with the requirements of the Administrative Procedure Act and whether it otherwise permits meaningful judicial review; (5) the Board’s consideration of (and failures to consider) the expert testimony, prior art, and other evidence in the record, and failure to consider such evidence as a whole; (6) the Board’s factual findings, conclusions of law or other determinations supporting or relating to the aforementioned issues, including the Board’s application of the applicable burdens of proof and production and its

application of the law of obviousness, as well as (7) all other issues decided adversely to Athalonz, LLC in any orders, decisions, rulings, and opinions.

Pursuant to 35 U.S.C. § 142 and 37 C.F.R. § 90.2(a), this Notice is being filed with the Director of the United States Patent and Trademark Office, and a copy of this Notice is being filed concurrently with the Patent Trial and Appeal Board. In addition, a copy of this Notice and the required docketing fees are being filed with the Clerk's Office for the United States Court of Appeals for the Federal Circuit via CM/ECF.

Respectfully Submitted,

Dated: November 11, 2025
Connor Houghton (Reg. No.
77,830)
REICHMAN JORGENSEN
LEHMAN & FELDBERG LLP
1909 K Street, NW, Suite 800
Washington, DC 20006
Telephone: (202) 894-7310
Facsimile: (650) 623-1449
choughton@reichmanjorgensen.com

By: /Stephen P. Bosco/
Stephen P. Bosco (*pro hac vice*)
100 Orchard Park Dr.
Unit 25621
Greenville, SC 29616
Telephone: (202) 250-1960

CERTIFICATE OF SERVICE

I hereby certify that on this date, a true and correct copy of the foregoing Patent Owner's Notice of Appeal was served via email to the following addresses:

Frank Cimino; fccimino@venable.com
Megan Woodworth; mswoodworth@venable.com
Robert Bugg; rebugg@venable.com
Justin J. Oliver; JJOliver@venable.com

In accordance with 37 C.F.R. §§ 90.2(a)(1) and 104.2(b), the undersigned hereby certifies that, in addition to being filed electronically through the Board's PTACTS System, **Patent Owner's Notice of Appeal** was filed and served by email on November 11, 2025 with the Director of the United States Patent and Trademark Office, at the following address: efileSO@uspto.gov.

In accordance with 37 C.F.R. § 90.2(a)(2), the undersigned hereby certifies that on November 11, 2025 a true and correct copy of Patent Owner's Notice of Appeal was filed electronically with the Clerk's Office of the United States Court of Appeals for the Federal Circuit via CM/ECF.

Respectfully Submitted,

Dated: November 11, 2025
Connor Houghton (Reg. No.
77,830)
REICHMAN JORGENSEN
LEHMAN & FELDBERG LLP
1909 K Street, NW, Suite 800
Washington, DC 20006
Telephone: (202) 894-7310
Facsimile: (650) 623-1449
choughton@reichmanjorgensen.com

By: /Stephen P. Bosco/
Stephen P. Bosco (*pro hac vice*)
100 Orchard Park Dr.
Unit 25621
Greenville, SC 29616
Telephone: (202) 250-1960

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNDER ARMOUR, INC.,
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ATHALONZ, LLC,
Patent Owner.

IPR2024-00636
Patent 10,674,786 B2

Before HYUN J. JUNG, CARL M. DeFRANCO, and
MATTHEW S. MEYERS *Administrative Patent Judges*.

MEYERS, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)
Dismissing Patent Owner's Motion to Exclude
37 C.F.R. § 42.64(c)

I. INTRODUCTION

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) (2024) and 37 C.F.R. § 42.73 (2023). For the reasons that follow, we determine that Under Armour, Inc. (“Petitioner”) has shown by a preponderance of the evidence that claims 1–8 of U.S. Patent No. 10,674,786 B2 (Ex. 1001, “the ’786 patent”) are unpatentable.

A. *Background and Summary*

Petitioner filed a Petition (Paper 1, “Pet.”) requesting institution of an *inter partes* review of claims 1–8 of the ’786 patent. Athalonz, LLC (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Pursuant to 35 U.S.C. § 314, we instituted an *inter partes* review of claims 1–8 of the ’786 patent on all presented challenges. Paper 8 (“Inst. Dec.”), 14.

After institution, Patent Owner filed a Response (Paper 12, “PO Resp.”), to which Petitioner filed a Reply (Paper 15, “Pet. Reply”), and Patent Owner thereafter filed a Sur-reply (Paper 23, “PO Sur-reply”). In addition, Patent Owner filed a Motion to Exclude (Paper 29, “Mot.”), Petitioner filed an Opposition to the Motion to Exclude (Paper 30, “Opp.”), and Patent Owner filed a Reply in Support of the Motion to Exclude. Paper 33 (“Mot. Reply”). An oral hearing in this proceeding was held on June 17, 2025; a transcript of the hearing is included in the record. Paper 38.

B. *Real Parties in Interest*

The parties both assert that they are the sole real parties in interest. Pet. ix; Paper 4, 1 (Patent Owner’s Mandatory Notice).

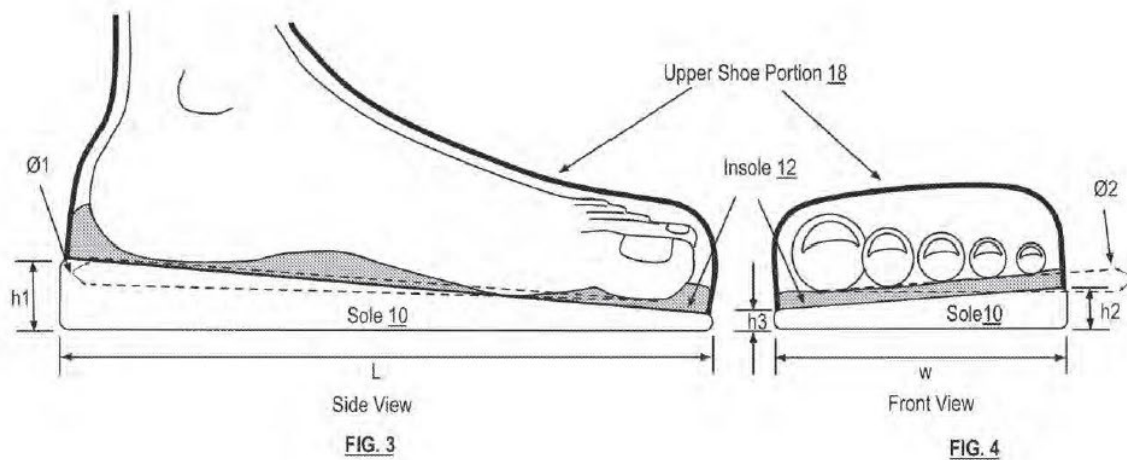
C. Related Matters

The parties both identify *Athalonz, LLC v. Under Armour*, Case No. 2:23-cv-00193 (E.D. Tex.) as a related matter. Pet. ix; PO Resp. 25; Paper 4, 1.

Patent Owner also identifies several of its patents challenged by Petitioner in: IPR2024-00637 (U.S. Pat. No. 11,013,291); IPR2024-00638 (U.S. Pat. No. 11,064,760); IPR2024-00639 (U.S. Pat. No. 11,375,768); and IPR2024-00640 (U.S. Pat. No. 11,510,456). Prelim. Resp. 18.

D. Overview of the '786 Patent (Ex. 1001)

The '786 patent is directed to a shoe or insole that positions a big toe lower than an outer toe, both of which are lower than the heel. Ex. 1001, code (57). Figures 3 and 4, reproduced below, are illustrative:



Figures 3 and 4 depict a left foot atop sole 10 where, due to the slope of the sole, the heel is at height $h1$, the little toe is at height $h2$, and the big toe is at height $h3$, where $h3 < h2 < h1$. Ex. 1001, 8:60–9:8.

E. Illustrative Claims

Claims 1–8 are challenged. Claims 1 and 5 are independent. Claims 1 and 5 are reproduced below.

1. An apparatus comprises:

- a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus;
- a mid-foot section juxtaposed to the heel platform section; and
- a toe section juxtaposed to the mid-foot section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the apparatus from a front edge of the apparatus to the heel platform section, a second slope along the front edge of the apparatus from the inner edge to the outer edge of the apparatus, and a third slope along the outer edge of the apparatus from the front edge of the apparatus to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope, wherein the toe section is lower than the heel platform section as a result of the first, second, and third slopes.

Ex. 1001, 42:59–43:13.

5. A shoe comprises:

- an upper shoe section; and
- a sole coupled to the upper shoe section, wherein the sole includes:
 - a specific bottom; and
 - an athletic positioning sole section having:
 - a heel platform section that has a uniform height from an outer edge to an inner edge of the athletic positioning sole section at a rear edge of the athletic positioning sole section, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the sole;
 - a mid-foot section; and

a toe section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the athletic positioning sole section from a front edge of the athletic positioning sole section to the heel platform section, a second slope along the front edge of the athletic positioning sole section from the inner edge to the outer edge of the athletic positioning sole section, and a third slope along the outer edge of the athletic positioning sole section from the front edge of the athletic positioning sole section to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope.

Ex. 1001, 43:32–44:14.

F. Instituted Grounds of Unpatentability

We instituted *inter partes* review of all challenged claims based on the five grounds of unpatentability, which are provided in the table below:

Claim(s) Challenged	35 U.S.C. §¹	Reference(s)/Basis
1–8	103	Kim ²
1–3, 5, 6, 8	103	Dufour ³
1–3, 5, 6, 8	103	Rubin ⁴
2, 4, 7	103	Dufour, Kim
2, 4, 7	103	Rubin, Kim

¹ The relevant sections of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284 (Sept. 16, 2011), took effect on March 16, 2013. Because the ’786 patent claims priority to an application filed before that date, our citations to 35 U.S.C. §§ 102 and 103 in this Decision are to their pre-AIA versions. *See* Pet. 5 (noting that “the ’786 patent, claims the benefit of U.S. Provisional Patent Application No. 61/450,485, filed March 8, 2011”); *see also* PO Resp. 23 (stating the same).

² US 2004/0040181 A1, published Mar. 4, 2004 (Ex. 1005, “Kim”).

³ US 4,754,561, issued July 5, 1988 (Ex. 1006, “Dufour”).

⁴ US 3,789,523, issued Feb. 5, 1974 (Ex. 1007, “Rubin”).

Pet. 2. Petitioner also relies on a Declaration of Grant Delgatty (Ex. 1002) and Supplemental Declaration of Mr. Delgatty (Ex. 1022). Patent Owner provides a Declaration of Timothy Markison. Ex. 2008.

Mr. Markison was cross-examined. *See* Ex. 1023 (deposition transcript of Mr. Markison). Mr. Delgatty was also cross-examined. *See* Ex. 2010 (first deposition transcript of Mr. Delgatty); Ex. 2022 (second deposition transcript of Mr. Delgatty).

II. ANALYSIS

A. Legal Standards

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent [claim] it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). This burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail in an *inter partes* review, the petitioner must support its challenges by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d).

Petitioner contends that the challenged claims of the ’786 patent are unpatentable under § 103. Pet. 2. A claim is unpatentable under § 103 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) where in evidence, so-called

secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). When evaluating a combination of teachings, we must also “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Whether a combination of elements produces a predictable result weighs in the ultimate determination of obviousness. *Id.* at 416–417.

B. Level of Ordinary Skill in the Art

Petitioner asserts that:

A person of ordinary skill in the art would have (1) at least a B.S. or equivalent degree related to industrial or product design and at least two years’ experience designing or developing athletic shoes; or (2) at least five years designing or developing athletic shoes.

Pet. 15 (citing Ex. 1002 ¶ 31). Petitioner adds, however, that “the claims are obvious in view of any reasonable definition of a POSITA [(Person of Skill in the Art)].” *Id.*

Patent Owner responds that “[f]or purposes of this proceeding, Patent Owner does not dispute Petitioner’s level of ordinary skill.” PO Resp. 23 (citing Pet. 15). Patent Owner adds that Mr. Markison’s “knowledge and experience, which includes 13 years of designing and developing athletic shoes that embody the patent at issue here, far exceeds the proposed level of ordinary skill in the art.” *Id.* at 24 (citing Ex. 2008 ¶¶ 43–44).

Based on the full record, we determine that Petitioner’s proposed level of skill is reasonable and consistent with the ’786 patent and the asserted prior art. Thus, for these reasons, we adopt Petitioner’s level of skill in the art for purposes of this Decision.

C. Claim Construction

Under 37 C.F.R. § 42.100(b), we apply the claim construction standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). That is, “the words of a claim ‘are generally given their ordinary and customary meaning’ . . . that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1312–13.

Petitioner argues that all claim limitations are met in the prior art under any interpretation of the challenged claims. Pet. 12. Petitioner does, however, draw our attention to the way Patent Owner has allegedly characterized some of the limitations in the claims of the ’786 patent related to construction of what constitutes an “inner edge” and “outer edge” of a “heel platform section.” *Id.* at 12–14. Petitioner asserts that Patent Owner appears “to mean the edges of the portion of the shoe where the heel of the foot sits, not the inner and outer-most edges of the shoe or apparatus,” and “construe[s] these limitations to include a heel platform section that includes some degree of curvature and height change from its inner edge to its outer edge and from front to back, and differences in shape between the top and bottom surfaces of the heel.” *Id.* (citing Ex. 1009, Ex. C, pp. 17, 41 (excerpt from Patent Owner’s Infringement Contentions)).

Patent Owner agrees that “Petitioner’s construction of ‘inner edge’ and ‘outer edge’ to mean the ‘edges of the portion of the shoe where the foot sits’ is consistent with how a POSITA would understand those terms in light of the specification.” PO Resp. 26 (citing Ex. 2008 ¶¶ 85–89, 90–91). Patent Owner adds that “[i]n light of the specification, the ‘inner’ and ‘outer edges’ in the claims do not refer to the edges of the exterior of the shoe.” *Id.* (citing Ex. 2008 ¶¶ 90–91).

Based on the full record, the parties' agreed-upon construction of the terms "inner edge" and "outer edge" appears consistent with the plain language of the claims and Specification. Thus, we adopt it.

1. "Athletic Positioning"

Patent Owner argues that the term "athletic positioning" in independent claim 5 should be construed to mean "a heel section higher than the toe section and the outside edge of the toe section higher than the inside edge of the toe section." PO Resp. 27; PO Sur-reply 24. According to Patent Owner, "[a]llowing 'athletic positioning' to have some broader or different meaning, or no meaning because of other limitations, is inconsistent with the patent's own description." PO Resp. 29.

In the Institution Decision, we declined to explicitly construe "athletic positioning" because we determined it was unnecessary in view of the claim language. Inst. Dec. 8–9. More particularly, we stated

independent claim 5 already appears to give the term "athletic positioning" this meaning, where it describes the various slopes. In particular, the claim recites that the toe section forms an angled support platform that has a first slope along the inner edge of the sole and a third slope along the outer edge of the sole, each of which extend from the toe to the heel.

Id.

Based on the full record, we maintain that it is unnecessary to explicitly construe "athletic positioning" because its meaning is already captured in the claim through the recitation of the relationship between the various slopes of the sole that provide "athletic positioning" of the foot. *See* Ex. 1001, 44:2–14. The recitations of a "first slope," "second slope," "third slope," and "reference slope" translate into the relative heights proposed in

Patent Owner's construction. Patent Owner contends that the Board should adopt Patent Owner's proposed construction because it

incorporates the specification's consistent descriptions of "athletic positioning" in terms of relative heights and slopes. For example, one embodiment of an "athletic positioning shape" is where "the heel platform may be 10 to 30 mm higher" than "the toe cup and/or the ball of foot cup." [Ex. 1001], 13:38–45. Another embodiment discloses "an athletic positioning sole that includes an overall geometric shape" including "the heel of the sole [at] a particular height (e.g., h1, which may be 1's to 10's of mm) that slopes at an angle (e.g., Ø1) to the toe on the inside edge of the sole" which "may have a height of zero to a few millimeters." *Id.*, 17:54–62.

PO Resp. 29. However, we find Patent Owner's contention regarding particular heights and specific angles attempts to import limitations from the Specification into claims. *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) ("Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim.").

Based on the full record, we determine that express claim construction of "athletic positioning" is not necessary to resolve the present dispute. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) ("The Board is required to construe 'only those terms . . . that are 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))).

2. Other Terms

Based on the full record, express construction of other terms is not necessary to resolve the parties' disputes. *Realtime Data*, 912 F.3d at 1375.

D. Obviousness Over Kim (Ground 1: Claims 1–8)

Petitioner contends that claims 1–8 would have been obvious over Kim. Pet. 15–30. Petitioner also relies on the testimony of Mr. Delgatty to support its arguments. *Id.* (citing Ex. 1002). Patent Owner responds to Petitioner’s assertions. *See* PO Resp. 31–43 (citing Ex. 2008); PO Sur-reply 12–15.

We address Petitioner’s contentions and Patent Owner’s arguments below, beginning with a brief overview of Kim. We then address the evidence and arguments related to secondary considerations.

1. Kim (Ex. 1005)

Kim is directed to a pair of golf shoes having an outsole with the lower surface inclined between its outer and inner edges. Ex. 1005 ¶ 2. Kim states that the inclination assists a golfer in concentrating their weight balance on the inner edges of their feet during the swing motion, which Kim states allows the golfer to maintain a more stable position. *Id.* ¶ 12. Figure 2 depicts an exploded perspective view of the outsole of the golf shoe according to Kim’s invention:

FIG. 2

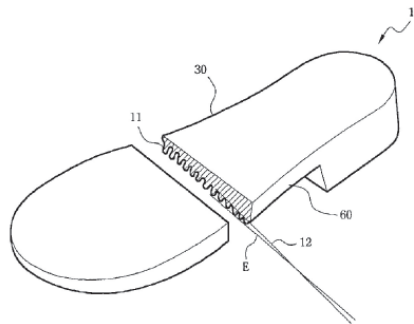


Figure 2 depicts a perspective view of the outsole of a golf shoe. Ex. 1005 ¶ 19. Kim discloses that

The outsole 10 includes a lower surface 12 inclined from its outer edge 60 to its inner edge 30 so that the outer edge 60 has a thickness larger than that of the inner edge 30. Except for the outsole 10 including the inclined lower surface 12, the golf shoe 100 of the present invention is substantially the same as conventional golf shoes.

Id. ¶ 27.

In order to provide that inclination during the swing but allow a golfer to walk stably on hard ground, the slope across the front edge of the shoe in Kim is complemented by the length of the spikes. Ex. 1005 ¶¶ 14–15.

Figure 3b depicts a cross-section of the sole of the golf shoe according to Kim's invention:

FIG. 3b

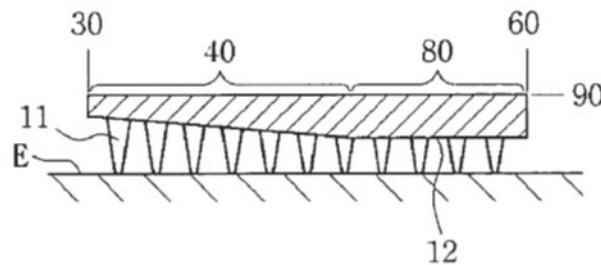


Figure 3b depicts a cross-section of an outsole of a golf shoe. *Id.* ¶ 21. The height of spikes 11 at inner edge 30 of the sole is shown larger than that of spikes 11 at outer edge 60 of the sole, while the thickness of the sole is thinner at inner edge 30 than outer edge 60. *Id.* ¶ 36. Accordingly, the combination of the sole's slope and the spikes' lengths makes it so the golfer can walk around normally on hard surfaces on the tips of the spikes, but adopt a more balanced position when swinging a golf club once those spikes sink into the softer grass. *Id.* ¶ 38. Figures 5a and 5b of Kim show these positions:

FIG. 5a

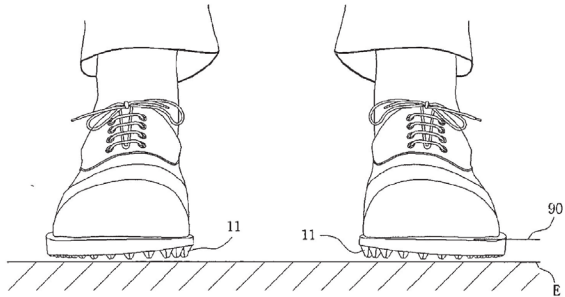


FIG. 5b

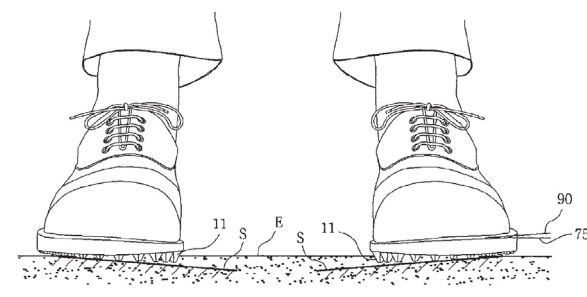


Figure 5a (left) illustrates the feet of a golfer in a pair of golf shoes standing on hard ground. *Id.* ¶ 38. The lengths of the spikes on the ground ensure that the golfer's feet are parallel with the ground (despite the sloped sole). *Id.* Figure 5b (right) illustrates the feet of a golfer in a pair of golf shoes standing on a green with their feet sloped inward. *Id.* ¶ 36. Figure 5b depicts the spikes sunk into the ground (line S) up to the sole, such that the golfer has their feet sloped inwardly. This position provides more grip for the golfer. *Id.*

2. Petitioner's Assertions for Claim 1

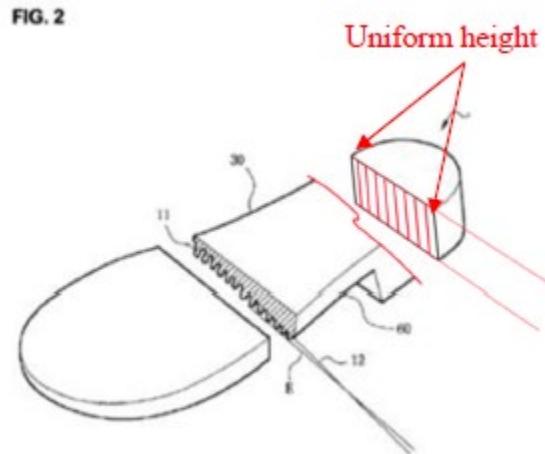
a) [1.0] "An apparatus comprises:"

Petitioner asserts that, to the extent the preamble is limiting, "Kim discloses 'a pair of golf shoes' for 'assisting a golfer in taking a stable position during address and swing motions.'" Pet. 15 (citing Ex. 1005, Abstract, Fig. 5b; Ex. 1002, § IX.A.a).

b) [1.1] "a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus,"

Petitioner asserts that Kim teaches or suggests "a heel platform section that has a uniform height from the outer edge to the inner edge at the rear edge of the shoe." Pet. 16 (citing Ex. 1002 § IX.A.b, ¶ 54; Ex. 1005,

Figs. 1, 3a). Petitioner provides the following copy of Figure 2 of Kim, modified and annotated to identify, a heel platform with a uniform height. *Id.* (citing Ex. 1005, Fig. 2).

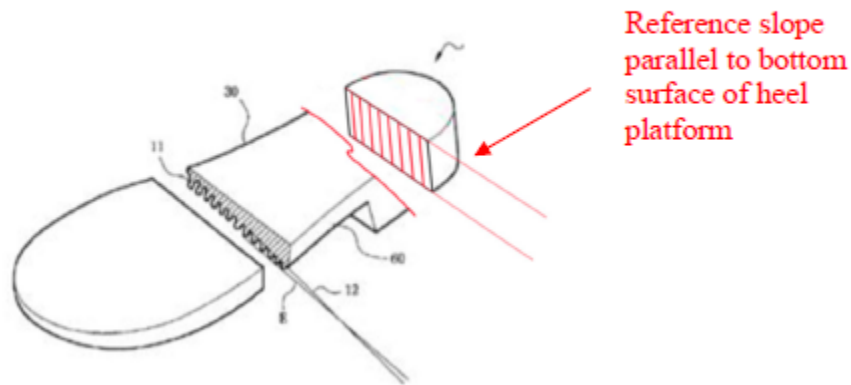


Modified Figure 2 illustrates a perspective view of the outsole of Kim’s golf shoe. Ex. 1005 ¶ 19, Fig. 2. Petitioner asserts that Kim discloses “that ‘the inclined plane may be formed only at the front portion of the outsole.’” *Id.* (citing Ex. 1005 ¶ 46; Ex. 1002 ¶ 55). Petitioner identifies that Kim teaches that its golf shoe “is substantially the same as conventional golf shoes,” “[e]xcept for the outsole 10 including the inclined lower surface.” *Id.* at 16–17 (citing Ex. 1005 ¶ 27). And, relying on the Declaration testimony of Mr. Delgatty, Petitioner contends that one of ordinary skill in the art “would have known that conventional athletic shoes, including golf, basketball, running and skateboard shoes, included a heel platform with a uniform height from the outer edge to the inner edge.” *Id.* at 17 (citing Ex. 1002 ¶¶ 47–52, 56).

- c) [1.2] “wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus;”

Petitioner asserts that Kim teaches “a heel platform section that has a uniform height from the outer edge to the inner edge,” and one of ordinary skill in the art “would understand that a uniform height of the heel platform establishes a reference slope from the outer edge to the inner edge of the heel platform that is substantially parallel to the bottom of the shoe.” Pet. 17 (citing Ex. 1002 ¶ 57). Petitioner provides the following copy of Figure 2 of Kim, modified and annotated to identify, a heel platform with a reference slope. *Id.* (citing Ex. 1005, Fig. 2).

FIG. 2

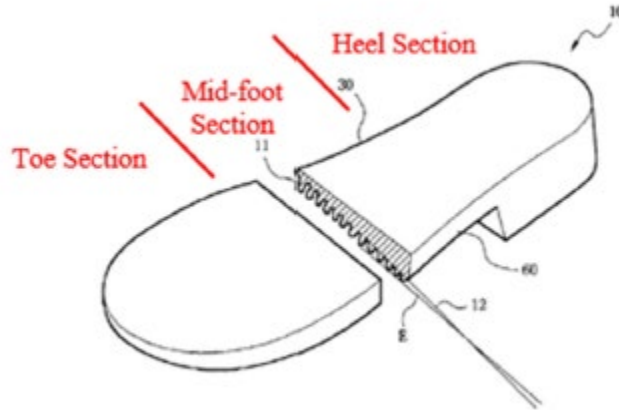


Modified Figure 2 illustrates a perspective view of the outsole of Kim’s golf shoe. Ex. 1005 ¶ 19, Fig. 2.

- d) [1.3] “a mid-foot section juxtaposed to the heel platform section; and” [1.4] “a toe section juxtaposed to the mid-foot section,”

Petitioner asserts that Kim teaches or suggests “a midfoot section juxtaposed to the heel platform section” and “a toe section juxtaposed to the mid-foot section.” Pet. 18 (citing Ex. 1002 § IX.A.d; ¶¶ 58–59). To support its assertion, Petitioner provides the following copy of Figure 2 of Kim,

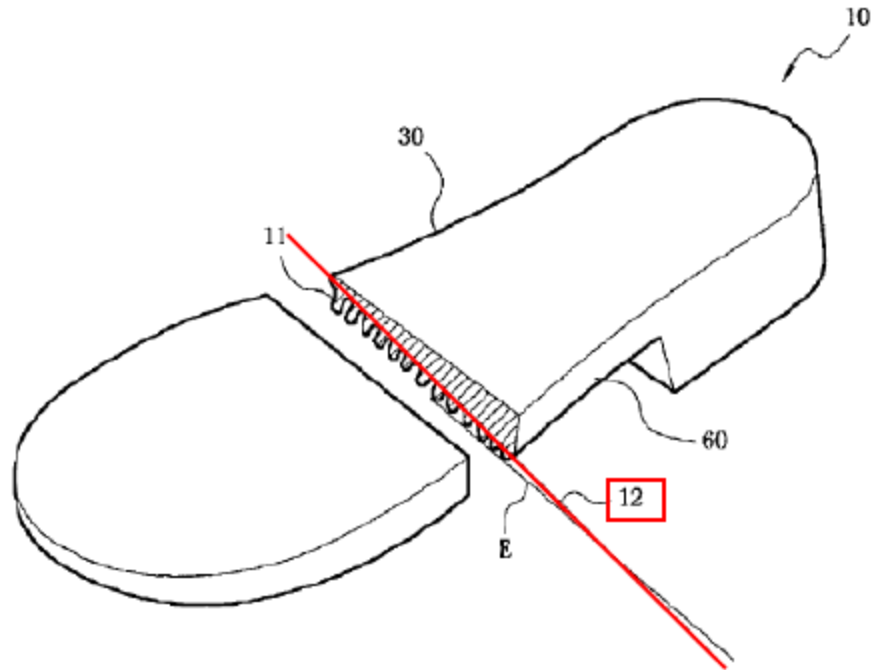
annotated to identify, a toe section, mid-foot section, and heel section. *Id.* (citing Ex. 1005, Fig. 2).



Annotated Figure 2 illustrates a perspective view of the outsole of Kim's golf shoe. Ex. 1005 ¶ 19, Fig. 2.

- e) [1.5] “wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the apparatus from a front edge of the apparatus to the heel platform section, a second slope along the front edge of the apparatus from the inner edge to the outer edge of the apparatus, and a third slope along the outer edge of the apparatus from the front edge of the apparatus to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope,”

Petitioner asserts that “Kim teaches and/or suggests an angled support platform as claimed.” Pet. 18 (citing Ex. 1002 § IX.A.f; ¶ 60). Petitioner provides the following copy of Figure 2 of Kim, annotated to identify, lower surface 12. *Id.* at 19 (citing Ex. 1005, Fig. 2).



Annotated Figure 2 illustrates a perspective view of the outsole of Kim’s golf shoe. Ex. 1005 ¶ 19, Fig. 2. Petitioner contends that Kim’s angled support platform “is accomplished by the outer edge having a larger thickness than the inner edge, which causes lower surface 12 to be inclined, as shown e.g., in Figure 2, above.” *Id.* at 19–21 (citing Ex. 1005 ¶¶ 15, 27, 36, 41, Abstract, Figs. 3a, 3b, 5b).

In addition, Petitioner asserts that Kim “discloses an alternate embodiment shown in Figures 3a and 3b that includes an outsole that is thicker at its outer edge than its inner edge in addition to spikes that become longer at the outer edge.” Pet. 21 (citing Ex. 1005 ¶ 41). Petitioner reproduces Figures 3a and 3b.

FIG. 3a

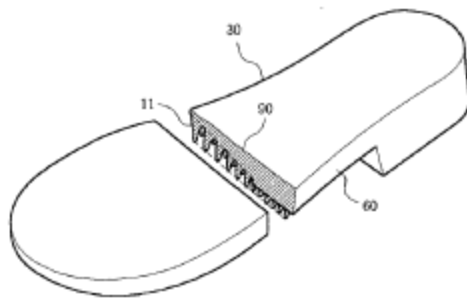


FIG. 3b

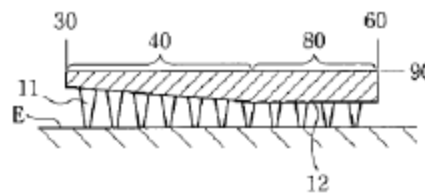


Figure 3a illustrates another perspective view of the outsole of Kim's golf shoe according to another embodiment. Ex. 1005 ¶ 20, Fig. 3a. Figure 3b illustrates a cross-sectional view of the outsole of Kim's golf shoe according to another embodiment. *Id.* ¶ 51, Fig. 3b. Petitioner identifies that “the heel area is also elevated as compared to the front portion of the outsole” (Pet. 21 (citing Ex. 1005 ¶ 41, Figs. 2, 3a), and as such, argues that,

in each embodiment, Kim discloses a first slope along the inner edge of the shoe from the toe section to the heel platform section, a second slope at the toe section of the shoe from the inner edge to the outer edge, and a third slope along the outer edge of the shoe from the toe section to the heel platform section.

Id. Thus, relying on the Declaration testimony of Mr. Delgatty, Petitioner argues that one of ordinary skill in the art “would have known that slopes inherently form between areas of incline and/or different thickness in a shoe sole” (*id.* (citing Ex. 1002 ¶ 61; Ex. 1009, Ex. A at 42–43)), and understood “that each the first, second, and third slopes are greater than the reference slope (*see* limitation 1.1 above), which is substantially parallel to the bottom surface of the shoe” (*id.* at 23 (citing Ex. 1002 ¶ 62)).

f) [1.6] “wherein the toe section is lower than the heel platform section as a result of the first, second, and third slopes.”

Petitioner asserts that Kim's discloses “a heel section that is elevated as compared to the toe section.” Pet. 23 (citing Ex. 1005, Figs. 2, 3a, 5b).

Relying on Petitioner’s assertions with respect to limitation [1.5] above, and the Declaration testimony of Mr. Delgatty, Petitioner argues that one of ordinary skill in the art “would understand that the toe section is lower than the heel section a result of the first, second, and third slopes.” *Id.* (citing Ex. 1002 ¶ 63).

3. *Patent Owner’s Contentions for Claim 1*

Patent Owner contends that Petitioner’s ground of unpatentability based on Kim is deficient. PO Resp. 31–43; PO Sur-reply 12–15. Patent Owner argues that the Petition fails to show that Kim “discloses or renders obvious a first, second, or third slope greater than a reference slope,” as recited by limitation [1.5].⁵ PO Resp. 31–35. In addition, Patent Owner argues that the Petition fails to show that Kim “disclose[s] or render[s] obvious a toe section lower than a heel platform section,” as recited by limitation [1.6]. *Id.* at 31. We address Patent Owner’s arguments in greater detail below.⁶

4. *Analysis of Claim 1*

Patent Owner contends that Kim fails to disclose “a first, second, or third slope greater than a reference slope,” as recited by limitation [1.5], because Kim fails to disclose “a reference slope that is ‘substantially parallel

⁵ Limitation [5.7] includes a substantially similar limitation. *See* Pet. 29 (Petitioner relying on its assertions for limitations [1.4]–[1.6] to address the substantially similar limitations of claim 5.).

⁶ Patent Owner presents no specific argument or evidence directed to independent claim 5 other than noting its similarities to claim 1. *See, e.g.*, PO Resp. 31 (“Ground 1 must fail as to all claims because Petitioner has not shown that Kim discloses or renders obvious a first, second, or third slope greater than a reference slope, limitations found in both challenged independent claims (claims 1 and 5).”).

to the bottom surface of the' apparatus (claim 1) or sole (claim 5).” PO Resp. 32 (citing Ex. 1001, 42:64–65, 43:42–45). More particularly, Patent Owner argues that the claims require that “the reference slope is measured against the bottom surface of the shoe, not the ground.” *Id.* (citing Ex. 2008 ¶¶ 179–180); *see also* PO Sur-reply 7–12 (arguing the same).

In response, Petitioner argues that Patent Owner fails to rebut Petitioner’s showing that the claims are obvious because Patent Owner “improperly measure[s] the claimed slopes with respect to the bottom of the cleats.” Pet. Reply 10 (citing Ex. 1022 ¶ 18). According to Petitioner, one of ordinary skill in the art “would understand that the claimed first, second, and third slopes would be measured with respect to the bottom of the sole, not with respect to the bottom of the cleats.” *Id.* at 15–16. Petitioner argues that measuring slopes with respect to the bottom of the sole is supported by “the intrinsic record, the prior art, and [Patent Owner’s] prior analysis of the claim’s scope.” *Id.* at 5 (citing Ex. 1022 ¶¶ 10–17).

Patent Owner disagrees, and reaffirms its position that “the claims require measuring various slopes against the bottom surface of the shoe, not the ground.” PO Sur-reply 7 (citing PO Resp. 32–35). Relying on the Declaration testimony of Mr. Markison, Patent Owner responds that “[t]he claims, specification, and extrinsic evidence are clear that the slopes are measured against the bottom surface of the shoe and not the ground.” *Id.* at 8 (citing Ex. 2008 ¶¶ 179–182). Patent Owner explains that “[t]he purpose of the invention is to put an athlete into a better athletic position with a shoe that independently manipulates foot position to create the slopes and angles in the claims.” *Id.* at 9 (citing Ex. 2008 ¶¶ 58–59).

We have considered Petitioner’s arguments and evidence, and Patent Owner’s counterarguments and, on the complete trial record, agree with

Petitioner that the claims do not require the claimed slopes to be measured with respect to the bottom of the cleats. *See* Pet. Reply 5–9. Instead, we credit the Declaration testimony of Mr. Delgatty that one of ordinary skill in the art “would understand that the shape and orientation of the sole (i.e., the platform on which an athlete stands) in relation to the **ground** is what determines if the foot is placed in an athletic position when in use,” and that “[c]leats serve to provide traction, not athletic positioning.” *Id.* at 7 (citing Ex. 1022 ¶ 15). We also agree with Mr. Delgatty’s opinion that one of ordinary skill in the art would “understand that because the cleats’ height does not contribute to the athletic positioning shape when in use on soft ground (the surface on which golf is played), it would not be included as the reference point for measuring the claimed slopes.” *Id.* at 8 (citing Ex. 1022 ¶ 16).

We find Mr. Delgatty’s opinion credible and supported by the complete record. For example, Petitioner identifies that “claim 5 explains that the ‘sole’ includes two distinct parts: a ‘specific bottom’ and an ‘athletic positioning sole section’ that includes ‘an angled support platform.’ The first, second, and third slopes of are specifically found in the athletic positioning sole section—not the specific bottom (i.e., cleats or spikes).” Pet. Reply 5 (citing Ex. 1001, claim 5). Petitioner identifies that “the ’786 patent specification distinguishes between the ‘sole’ and ‘cleats’ as separate components of the shoe.” *Id.* at 6 (citing Ex. 1001, 1:51–53). Petitioner also points out that Kim similarly “describes the sole and cleats as separate components of a shoe, illustrating the industry understanding of these terms.” *Id.* (citing Ex. 1022 ¶ 14); *see also id.* at 6–7 (citing Ex. 1005 ¶¶ 9, 14–15, 30, Figs. 1–2, claim 1) (Petitioner stating that the spikes, in Kim,

“‘protrude’ or ‘extend’ from the ‘outsole’ and are located below the outsole’s ‘lower surface.’”).

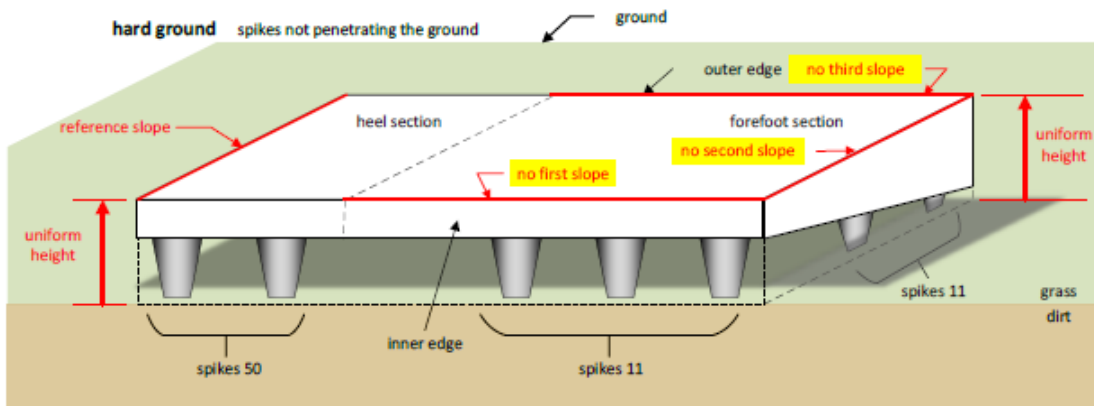
We also agree with Petitioner that Patent Owner’s contention that the claimed slopes must be measured with respect to the bottom of the cleats appears to be “inconsistent with its own litigation position.” Pet. Reply 9. Petitioner identifies that Patent Owner’s infringement contentions “did not include the height of the cleats in the measurement of the claimed slopes.” *Id.* (citing Ex. 1025, 222–224, 288–289 (Patent Owner’s infringement contentions regarding limitations [1.5] and [5.7])).

Patent Owner responds arguing that Petitioner’s contention regarding Patent Owner’s infringement contentions “is irrelevant and wrong.” PO Sur-reply 11. Patent Owner contends that its “infringement contentions are extrinsic evidence that should be afforded little weight.” *Id.* at 12 (citing *Ocado Grp. PLC v. AutoStore Tech. AS*, PGR2021-00038, 2021 WL 3412974, at *13 (P.T.A.B. Aug. 4, 2021). Moreover, Patent Owner argues that Petitioner’s allegations are wrong, the lines, on which Petitioner relies, “simply show the horizontal position where measurements were taken, not the absolute height measurement.” *Id.* (citing Ex. 1025, 208).

While we agree with Patent Owner that its infringement contentions are extrinsic evidence, we nevertheless find they “provide an indication of Patent Owner’s understanding and application of the claims.” *CL Industries Holding Co. v. ParkerVision Inc.*, IPR2021-00990, Paper 18 at 4 (P.T.A.B. May 3, 2022). Therefore, we find Patent Owner’s infringement contentions together with the language of the claims, the Specification, and the Declaration testimony of Mr. Delgatty (*see, e.g.*, Ex. 1022 ¶¶ 10–17) supports Petitioner’s assertion that one of ordinary skill in the art at the time of the invention would have understood that the claimed slopes “would be

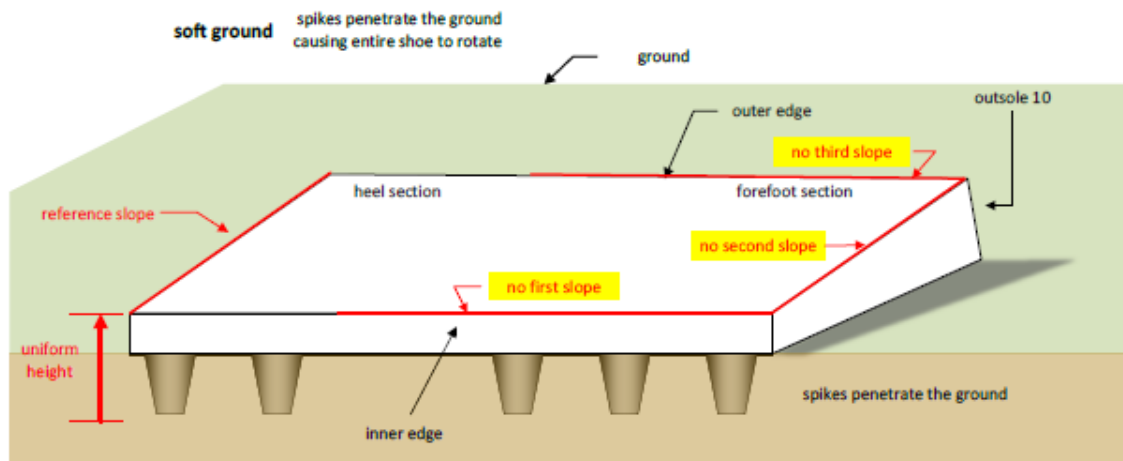
measured with respect to the bottom of the sole, not with respect to the bottom of the cleats.” Pet. Reply 15–16.

Patent Owner further contends that Kim fails to disclose “a first, second, or third slope greater than a reference slope,” as recited by limitation [1.5], because “Kim’s outsole is level—parallel to the bottom surface of the apparatus—from the heel forward.” PO Resp. 31–39. With respect to Kim’s “hard surface” arrangement (PO Resp. 13–14 (citing Ex. 1005, Fig. 5a)), Patent Owner argues that because Kim’s “outsole is parallel to the bottom of the spikes across its surface, lines along any of its edges will be parallel to the bottom surface of Kim’s shoe” (*id.* at 37 (citing Ex. 2008 ¶ 187)). Patent Owner provides the following diagram illustrating Kim’s shoe on hard ground (*Id.* (citing Ex. 2008 ¶ 182)):



According to Patent Owner, this diagram represents Kim’s shoe on hard ground, and “identif[ies] where the reference, first, second, and third slopes are.” *Id.* Relying on the Declaration testimony of Mr. Markison, Patent Owner argues that this diagram shows that each of the lines where the first, second, and third slopes are determined is parallel to the bottom of the shoe, and thus, none of these slopes can be greater than the reference slope. *Id.* (citing Ex. 2008 ¶¶ 187–188).

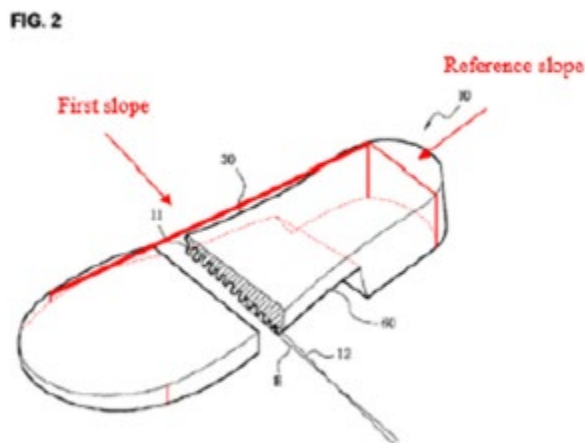
And, with respect to Kim’s “soft ground” arrangement (PO Resp. 14–16 (citing Ex. 1005, Fig. 5b)), Patent Owner argues that “Kim still fails to disclose any of the three slopes” because “the entire foot platform of Kim remains parallel to the bottom of the cleats” (*id.* 38 (citing Ex. 2008 ¶¶ 191, 195)). To support its argument, Patent Owner provides the following diagram illustrating Kim’s shoe on soft ground (*Id.* (citing Ex. 2008 ¶ 189)):



According to Patent Owner, this diagram represents Kim’s shoe on soft ground, and identifies the reference, first, second, and third slopes. *Id.* Relying on the Declaration testimony of Mr. Markison, Patent Owner argues that “[b]ecause the shoes are being worn on soft ground in Figure 5b, the longer spikes on the inside edge sink further into the ground, with the result that the shoes are at an angle relative to the ground.” *Id.* (citing Ex. 2008 ¶ 189). Therefore, “even if the slopes of the claims are measured relative to the *ground* and not the bottom surface of the shoes,” Patent Owner argues that Kim still fails to disclose the required slopes at least because “the reference slope is no longer substantially parallel when the cleats sink into the ground.” *Id.* (citing Ex. 2008 ¶¶ 192–194).

However, we agree with Petitioner that Patent Owner’s “hard ground” and “soft surface” diagrams misrepresent “Kim’s heel section [as] being at

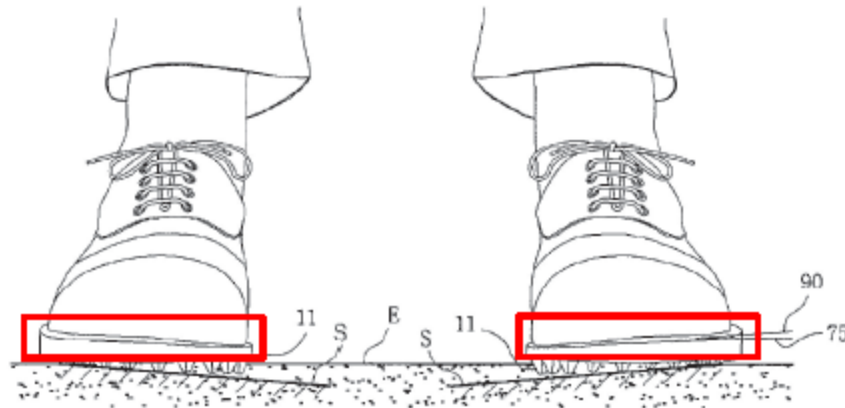
the same level as the toe section and as having an identical thickness and inclined surface as the forefoot section.” Pet. Reply 11. Petitioner provides the following copy of Figure 2 of Kim, annotated to identify, a first slope and a reference slope. Pet. Reply 12 (citing Pet. 22; Ex. 1005, Fig. 2).



Annotated Figure 2 illustrates a perspective view of the outsole of Kim’s golf shoe. Ex. 1005 ¶ 19, Fig. 2. With reference to Annotated Figure 2, Petitioner asserts, and we agree, that one of ordinary skill in the art would not reasonably interpret the outsole shown in Figure 2 of Kim to support Patent Owner’s position that Kim’s heel section is “at the same level as the toe section and as having an identical thickness and inclined surface as the forefoot section.” *Id.* at 11–12.

Petitioner also provides the following copy of Figure 5b of Kim, annotated to identify, the slope in the soles of Kim’s golf shoes. Pet. Reply 13 (citing Ex. 1005, Fig. 5b; Ex. 1022 ¶ 21).

FIG. 5b



Annotated Figure 5b illustrates a schematic view of Kim’s golf shoes on soft ground. *Id.* ¶ 24, Fig. 5b. Relying on the Declaration testimony of Mr. Delgatty, Petitioner argues that Figure 5b “shows the top of a surface area on the part of the sole that sticks out beyond the upper, suggesting the shoes are tilted forward.” Pet. Reply 13 (citing Ex. 1022 ¶ 21; Ex. 2010, 80:14–81:22).

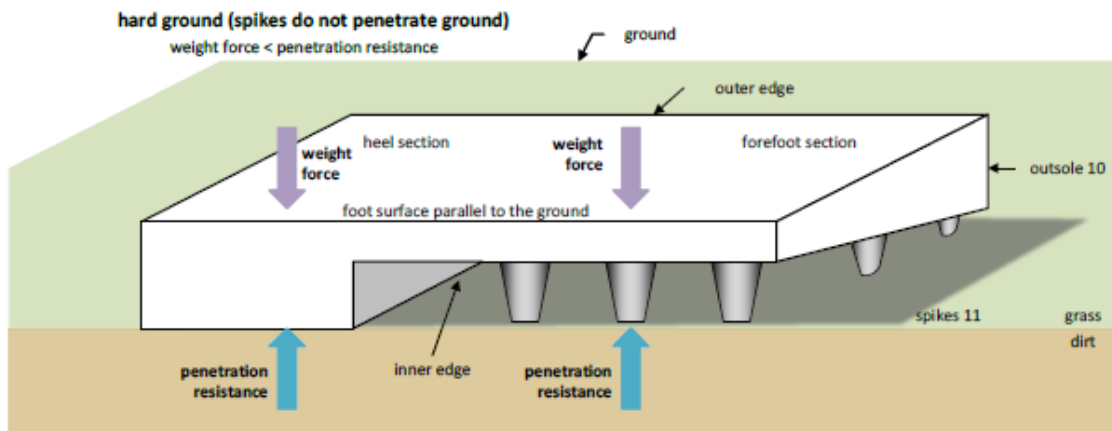
We find the record supports Petitioner’s assertion that one of ordinary skill in the art at the time of the invention would have appreciated that “Kim depict[s] a conventional flat heel section in Figure 2 that is taller than the toe section.” Pet. Reply 13. We also find Mr. Delgatty’s Declaration testimony to be supported by Kim’s disclosure. In this regard, Kim discloses that “‘the inclined plane may be formed only at the front portion of the outsole,’ and that ‘[e]xcept for the outsole 10 including the inclined lower surface 12, the golf shoe 100 of the present invention is substantially the same as conventional golf shoes.’” *Id.* (citing Ex. 1022 ¶¶ 19–20; Ex. 1005 ¶¶ 27, 46). Therefore, we are not persuaded that Kim fails to teach or suggest the argued limitation because “Kim’s outsole is level—parallel to the bottom surface of the apparatus—from the heel forward.” PO Resp. 31–39.

Additionally, with respect to what Patent Owner characterizes as Petitioner's "what if" embodiments, Patent Owner asserts that

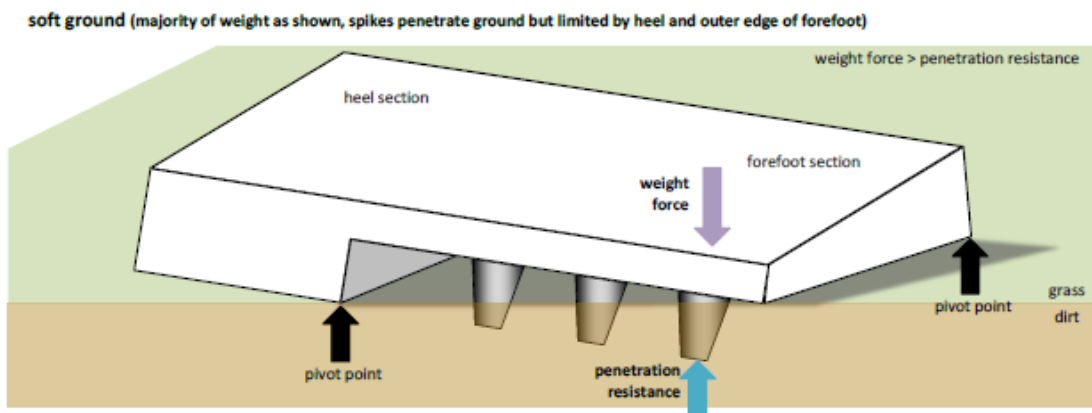
Petitioner's expert incorrectly interpret[s] Kim's suggestion (in a single paragraph at the end of the specification) that the incline plane can be formed only at the front portion of the outsole (EX1005 ¶46) to mean that Kim could show a shoe with a heel higher than the toe or a heel without the spikes that are disclosed throughout Kim as extending through the heel.

PO Resp. 39–40 (citing Ex. 2008 ¶¶ 196–200). Patent Owner argues that Mr. Delgatty's "interpretation is inconsistent with what Kim actually discloses and would result in an illogical design." *Id.* at 40 (citing Ex. 2008 ¶ 201). According to Patent Owner, one of ordinary skill in the art would understand that such a configuration "would result in either a large gap between the forefoot and the ground or between a portion of the heel and the ground." *Id.* (citing Ex. 2008 ¶¶ 201–204).

Patent Owner contends that "[i]f there were no spikes in the heel of Kim, nothing would change about the analysis in the previous section; the entire foot surface would remain parallel to the bottom surface of the shoe." *Id.* at 42 (citing Ex. 2008 ¶ 118). Patent Owner provides the following diagram illustrating Kim's shoe on hard ground without spikes on the heel (*Id.* (citing Ex. 2008 ¶¶ 117–118)):

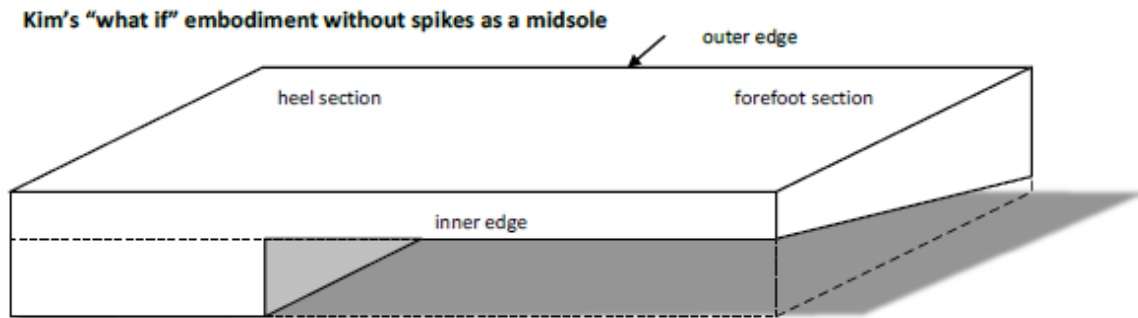


According to Patent Owner, this diagram represents Kim's shoe on hard ground without spikes in the heel. *Id.* And, even if "the slopes of the claims are measured relative to the ground," Patent Owner argues that Kim still fails to render obvious the claims because, "[a]s Mr. Markison explains, this would result in the heel lifting off the ground, leaving the heel section of the shoe parallel with the toe section and no 'second slope.'" *Id.* (citing Ex. 2008 ¶¶ 119–120). To support its argument, Patent Owner provides the following diagram illustrating Kim's shoe on soft ground without spikes on the heel (*Id.* (citing Ex. 2008 ¶¶ 117–118)):



According to Patent Owner, this diagram represents Kim's shoe on soft ground without spikes in the heel. *Id.*

Patent Owner also contends that even if Kim suggests an embodiment without any spikes in the midsole, Kim would still fail to render obvious the claims, because one of ordinary skill in the art "would understand that there are no slopes formed by the foot platform in this embodiment because any slopes are only present on the bottom outsole of the shoe and not on the support platform." *Id.* at 43 (citing Ex. 2008 ¶¶ 213–214). Patent Owner provides the following diagram illustrating Kim's shoe without spikes in the midsole (*id.* (citing Ex. 2008 ¶¶ 212)):



According to Patent Owner, this diagram represents Kim’s shoe without spikes in the midsole. *Id.*

Petitioner responds arguing that Patent Owner’s “what if” diagrams still fail to rebut Petitioner’s showing of obviousness because they improperly measure the claimed slopes with respect to the bottom of the cleats. Pet. Reply 15. Petitioner disagrees with Patent Owner’s contention that Kim does not teach or suggest “a conventional flat heel section in Figure 2 that is taller than the toe section . . . because there would be a gap between the bottom of the forefoot and the ground, or ‘only a small portion of the heel would be in contact with the ground.’” *Id.* at 13 (citing PO Resp. 40–41; Ex. 2008 ¶¶ 201–204). Petitioner argues that Patent Owner’s contention is incorrectly premised on its assumption that Kim’s “sole is rigid and would not flex.” *Id.* Instead, Petitioner points out that “Kim expressly discloses that the ‘outsole 10 of the golf shoe 10 is made of synthetic rubber.’” *Id.* (citing Ex. 1005 ¶ 40; Ex. 1022 ¶ 22).

We have considered Petitioner’s arguments and evidence, and Patent Owner’s counterarguments and find, on the complete trial record, that Petitioner demonstrates, by a preponderance of the evidence, that Kim teaches or suggests “‘a first, second, or third slope greater than a reference slope,” as recited by limitation [1.5]. In this regard, we credit Mr. Delgatty’s Declaration testimony that one of ordinary skill in the art

would understand that a shoe sole made of synthetic rubber would flex rather than pivot due to the golfer's downward weight forces on the heel and toe sections, allowing the toe section to extend downwards into the ground while the heel section also remains flat on the ground. Indeed, this is the only reasonable interpretation of Kim's disclosure that when standing on soft ground, "the golfer can maintain his/her stable position during and after the swing motion."

Pet. Reply 16 (citing Ex. 1002 ¶¶ 27–28; Ex. 1005 ¶ 37). We also credit Mr. Delgatty's opinion that one of ordinary skill "would understand Kim's shoe to be designed such that the downward weight force on the heel section would keep the heel in place flat on the ground while the cleats in the forefoot section depress into the ground." Ex. 1022 ¶ 28.

We find Mr. Delgatty's opinion to be reasonable and supported by Kim's disclosure. *See, e.g.*, Ex. 1005 ¶¶ 37, 40, 44. We also note that during deposition, Mr. Markison "recognized that to pivot in this manner, Kim's sole must be rigid," and "admitted that he 'hadn't considered' whether the pivot points would exist for a flexible rubber sole." Pet. Reply 16 (citing Ex. 1023, 104:21–105:2). In view of Mr. Delgatty's Declaration testimony and Kim's disclosure, we agree with Petitioner that "Kim's heel would remain flat on soft ground," and as such, "Kim discloses a reference slope substantially parallel to the bottom of the sole, and first, second, and third slopes each greater than the reference slope." Pet. Reply 17 (citing Ex. 1022 ¶ 28).

Accordingly, upon review of the information in the Petition and corresponding evidence, and considering Patent Owner's arguments, we find Petitioner has proven, by a preponderance of the evidence, on the complete trial record, that Kim teaches or suggests the subject matter of claim 1.

5. *Claim 1: Conclusion*⁷

For the foregoing reasons, we find Petitioner has demonstrated persuasively that Kim teaches or suggests all of the limitations of claim 1. We address *infra*, in Section II.D.7, the parties' arguments and evidence pertaining to secondary considerations.

6. *Additional Claims 2–8*

Claim 5 is the other independent claim of the '786 patent. Ex. 1001, 43:33–44:13. Claim 5 is substantially similar to, and argued by Patent Owner based on claim 1. *See, e.g.*, PO Resp. 31 (“Ground 1 must fail as to all claims because Petitioner has not shown that Kim discloses or renders obvious a first, second, or third slope greater than a reference slope, limitations found in both challenged independent claims (claims 1 and 5).”).

Claims 2–4 depend from claim 1 (Ex. 1001, 43:14–32) and claims 6–8 depend from claim 5 (*id.* at 44:14–40). Petitioner contends that the additional limitations of dependent claims 2–4 and 6–8 are rendered obvious by Kim. Pet. 23–26, 29–30 (citing Ex. 1005). Petitioner also relies on the Declaration testimony of Mr. Delgatty to support its arguments. *Id.* (citing Ex. 1002).

Patent Owner does not make any specific arguments regarding these claims. Instead, Patent Owner states simply that “[b]ecause independent claims 1 and 5 are patentable over Kim, the more specific dependent claims are also patentable for the same reasons.” PO Resp. 43 (citing Ex. 2008 ¶ 216).

⁷ For the sake of convenience, we have organized the Decision by addressing the claim limitations first and later addressing the secondary considerations. We note that our conclusions are in view of the entire record, including taking secondary considerations into account.

After our review of Petitioner’s assertions and the supporting evidence, we determine that Petitioner has shown by a preponderance of the evidence that Kim teaches or suggests the subject matter of claims 2–8.

*7. Alleged Objective Evidence of Nonobviousness
(Secondary Considerations)*

Patent Owner argues that Petitioner’s arguments for obviousness are outweighed in light of Patent Owner’s evidence of secondary considerations, such as long-felt need, skepticism by others, industry praise and unexpected results, and copying. PO Resp. 70–78 (citing Ex. 2008); PO Sur-reply 25–28. At the outset, Patent Owner argues that Mr. Delgatty admitted that he “did not perform any analysis of any of the secondary considerations.” *Id.* at 71–72 (citing Ex. 2010, 117:14–118:2, 120:17–121:22). Petitioner replies that Mr. Delgatty has considered Patent Owner’s objective indicia of nonobviousness and maintains that the claims are unpatentable. Pet. Reply 28 (citing Ex. 1022 ¶ 51). Patent Owner replies that Petitioner’s reply declaration is entitled to no weight because it parrots arguments in Petitioner’s Reply, and Mr. Delgatty “has no proffered expertise or personal knowledge in commercial success, golfer’s performance, or copying to render him an expert in these areas.” PO Sur-reply 25.

Based on the full record, we are satisfied that Petitioner’s declarant has adequately considered Patent Owner’s asserted objective indicia of nonobviousness that was presented for the first time in Patent Owner’s Response and could not have been considered for the Petition. Ex. 1022 ¶ 51.

a) Nexus

Patent Owner argues that “the requisite nexus exists here, owing to the legally and factually sufficient connection between the evidence of non-

obviousness and the patented invention.” PO Resp. 71. According to Patent Owner, “Mr. Markison has provided unrebutted evidence that [Patent Owner]’s products practice and are coextensive with the claims of the ’786 patent, entitling it to a presumption of nexus.” *Id.* (citing Ex. 2008 ¶ 322; Ex. 2014).

Petitioner does not present any arguments regarding nexus. *See* Pet. Reply.

Based on the full record, we determine that Patent Owner fails to show nexus between the claimed invention and the asserted objective indicia of nonobviousness. PO Resp. 70–78; PO Sur-reply 25–28. Other than asserting that “the requisite nexus exists here” (PO Resp. 71), and citing to the Declaration testimony of Mr. Markison (*id.* (citing Ex. 2008 ¶ 322)), the Patent Owner response does not provide an analysis of Patent Owner’s product with respect to the claims of the ’768 patent, and thus does not demonstrate nexus. To the extent Patent Owner references Mr. Markison’s testimony, Mr. Markison’s testimony consists solely of the statement that Patent Owner “sells and markets golf and baseball shoes that embody the claims of the ’786 patent” with reference to an exhibit from district court litigation. *See* Ex. 2008 ¶ 322 (citing Ex. 2014). We find Patent Owner’s reliance on Mr. Markison’s testimony to be insufficient to establish a rebuttable presumption of nexus. Thus, Patent Owner is not entitled to a rebuttable presumption of nexus, because Patent Owner has not shown that the asserted evidence is tied to a specific product that is the disclosed and claimed invention. *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019).

Patent Owner also does not provide any evidence that the asserted objective indicia of nonobviousness is the direct result of unique

characteristics of the claimed invention. *Fox Factory*, 944 F.3d at 1373–75; PO Resp. 70–78; PO Sur-reply 25–28. At best, Patent Owner merely implies that they are the result of unique characteristics of the claimed shoe.

For our analysis below, even if nexus were shown, we identify additional reasons why we would give little weight to the asserted objective indicia of nonobviousness.

b) Long-Felt Need

Patent Owner argues that Petitioner’s asserted references show “that there was a long-felt need for an athletic shoe that put an athlete in a better athletic position,” but the shoes of the asserted prior art “are not prevalent in the market,” thereby indicating that there is still a “need for putting the golfer into a better athletic position.” PO Resp. 72–73 (citing Ex. 2008 ¶ 324; Ex. 2010:123:8–124:6). Patent Owner, thus, argues that “there was a long-felt and [unmet need] until the ’786 Patent was filed.” *Id.* at 73.

Petitioner replies that Patent Owner “fails to show a persistent need recognized by a POSITA, why the cited prior art in the grounds above did not meet such a need, nor evidence of how the alleged invention did.” Pet. Reply 28 (citing Ex. 2008 ¶ 52). Patent Owner replies that none of the prior art was used in commercial products and failed to solve industry needs, thus demonstrating a long-felt need for the claimed invention. PO Sur-reply 25–26 (citing Ex. 2008 ¶¶ 323–324).

Based on the full record, we agree with Petitioner that Patent Owner fails to show a recognized persistent need, fails to explain why the cited prior art did not meet the need, and fails to show that the claimed invention met the need. Pet. Reply 28. We also determine that prior art shoes would have met Patent Owner’s alleged long-felt “need for putting athletes into a better athletic position.” *See, e.g.*, Ex. 1005 ¶ 12 (“[I]t is an object of the

present invention to provide a pair of golf shoes, which assist a golfer in concentrating his/her proper weight balance on the inner edges of soles of feet during the address and swing motions, thus allowing the golfer to perform the swing motion while maintaining his/her stable position.”). Thus, even if nexus were shown, we would give little or no weight to Patent Owner’s evidence of long-felt need.

c) Skepticism by Others

Patent Owner contends that it “introduced a baseball shoe in 2015 that embodied the invention of the ’786 Patent, and was met with limited success” because “the industry did not believe that the shoes would improve athletic positioning.” PO Resp. 73 (citing Ex. 2008 ¶ 325). According to Patent Owner, this was because up until this time, “achieving a better athletic position was viewed primarily as a problem for the athlete to solve with their body.” *Id.* (citing Ex. 2008 ¶ 325).

Petitioner responds arguing that Patent Owner’s contention “relies entirely on the unsupported personal beliefs of Mr. Markison for why its baseball shoe was met with limited success in 2015.” Pet. Reply 29 (citing PO Resp. 73). Petitioner argues that Patent Owner “fails to demonstrate a skepticism by others regarding the patented invention.” *Id.* (citing Ex. 1022 ¶ 53).

Based on the full record, we agree with Petitioner that Patent Owner fails to show skepticism by others based on the uncorroborated Declaration testimony of Mr. Markison. Patent Owner asserts that a product embodying the ’786 patent “was met with limited success” (PO Resp. 73 (citing Ex. 2008 ¶ 325), but neither Patent Owner nor Mr. Markison establishes that this “limited support” was due to the claimed features of the ’768 patent, as opposed to economic or commercial factors.

Thus, even if nexus were shown, there is insufficient evidence to establish skepticism by others.

d) Industry Praise and Unexpected Results

Patent Owner asserts that in 2018, it “released the EnVe golf shoe, which embodied the invention of the ’786 Patent.” PO Resp. 73 (citing Ex. 2008 ¶ 322). Patent Owner argues that its “golf shoes were praised by people in the industry, including by Bernhard Langer and professional World Long Drive (WLD) athletes.” *Id.* (citing Ex. 2013 (article titled, “Athalonz Golf Shoes: The Golf Shoe for Distance?”)). According to Patent Owner, at a competition in the summer of 2018, a golf pro named Mitch McDowell was wearing “a prototype of the EnVe golf shoes, which embodied the ’786 Patent’s invention,” and

[a]nother golfer, Ryan Steenberg, who was at the event, asked Mr. McDowell if he could try [Patent Owner’s] golf shoes, and Mr. McDowell agreed to let him try them. At the time, Mr. Steenberg had been competing in WLD for 8 years, was ranked number 6 in the world, but had never won an event. Mr. Steenberg got his first WLD win while wearing [Patent Owner’s] shoes. Mr. Steenberg won the next event, as well, again while wearing [Patent Owner’s] shoes. When other players asked him what he had changed, he responded that it was his shoes.

Id. at 73–74 (citing Ex. 2008 ¶¶ 327–330).

Petitioner replies that Patent Owner’s “evidence of alleged industry praise and unexpected results is unreliable,” and based on “hearsay statements that Mitch McDowell and Ryan Steenberg allegedly made to one another, with no supporting evidence for their truthfulness or accuracy.” Pet. Reply 29. In addition, Petitioner asserts that “Mr. Markison admitted that the article on which [Patent Owner] relies purporting to praise [Patent Owner]’s shoes was written as a result of [Patent Owner]’s marketing

department’s solicitation for reviews.” *Id.* at 30 (citing Ex. 1023, 217:20–219:1; Ex. 1022 ¶ 54; Ex. 2013).

Based on the full record, we are not persuaded that Patent Owner establishes the requisite showing that the alleged industry praise has a nexus to the claimed invention. Patent Owner does not identify whether the praise in Exhibit 2013 is due to specific features that are present in the claims or due to unclaimed features. For example, Exhibit 2013 identifies that benefits come from using “EnVe technology paired with their Grip & Glide Technology.” Ex. 2013, 3. Industry praise that is general or directed towards unclaimed features, or that is simply a result of pre-existing market share, will not carry significant weight in demonstrating non-obviousness.

We note that Mr. Markison’s testimony concerning statements made between Mitch McDowell and Ryan Steenberg at a competition in the summer of 2018 is unsubstantiated, and therefore entitled to little weight. Moreover, it is unclear as to whether the industry praise was directed to claimed features.

We also are not persuaded that Patent Owner establishes a difference between its alleged “unexpected results” and the closest prior art. “To be particularly probative, evidence of unexpected results must establish that there is a difference between the results obtained and those of the closest prior art, and that the difference would not have been expected by one of ordinary skill in the art at the time of the invention.” *Bristol-Meyers Squibb Co. v. Teva Pharms. USA, Inc.*, 752 F.3d 967, 977 (Fed. Cir. 2014). Also, “[w]hen assessing unexpected properties, . . . we must evaluate the significance and ‘kind’ of expected results along with the unexpected results.” *Id.* Here, we find the record establishes that the results alleged by Patent Owner as unexpected, were in fact, expected and known results in the

art. *See, e.g.*, Ex. 1005 ¶ 46 (explaining that Kim’s golf shoes allow a “golfer to correctly hit (impact) a golf ball and to strengthen his/her force imposed on the swing motion, and prevents the soles of the golfer’s feet from being pushed toward the outer edges of the outsoles of the golf shoes.”).

Thus, even if nexus were shown, we would give little weight to Patent Owner’s evidence of “industry praise” or “unexpected results.”

e) Copying

Patent Owner argues that it met with personnel from Petitioner and gave a presentation about the patent. PO Resp. 75–78 (citing Ex. 2008 ¶¶ 333–340; Ex. 2012 (Presentation Titled “Athletic Positioning Shoe: Presentation to Under Armour, August 22, 2013”), 13, 54). According to Patent Owner, it offered Petitioner an opportunity to acquire or license the technology, and Petitioner received physical samples for testing. *Id.* at 77 (citing Ex. 2013, 47–49; Ex. 2008 ¶ 337). Also, according to Patent Owner, Petitioner stopped responding and released a product that copied the athletic positioning claimed by the ’786 patent. *Id.* at 77 (citing Ex. 2008 ¶ 339; Ex. 1009).

Petitioner replies that Patent Owner fails to provide any analysis of Petitioner’s products, any evidence that Petitioner’s product practices the claims, and any evidence that Petitioner’s products are similar to Patent Owner’s products. Pet. Reply 30 (citing Ex. 1022 ¶ 55; Ex. 1023, 220:3–223:12). Patent Owner replies that infringement contentions provide analysis of Petitioner’s products, there is no requirement for direct evidence of copying, and there is ample evidence that Petitioner had access to Patent Owner’s “patents and products and the infringing products are substantially

similar.” PO Sur-reply 27–28 (citing Ex. 2008 ¶¶ 333–340; Ex. 2012; Ex. 1031 ¶¶ 33–44).

There is no dispute that a presentation was given, and subsequently Petitioner produced a shoe that has been accused of infringement. PO Resp. 68–71; Pet. Reply 25. Evidence of copying is more persuasive of nonobviousness when it shows that the other manufacturer has expended great effort to develop its own solution. The full record does not include such evidence. And, even if this were probative evidence of similarity, “[n]ot every competing product that arguably falls within the scope of a patent is evidence of copying” because “[o]therwise every infringement suit would automatically confirm the nonobviousness of the patent.” *Iron Grip Barbell Co. v. USA Sports Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004).

Thus, even if nexus were shown, we would give little weight to Patent Owner’s evidence of copying.

8. *Conclusion for Ground 1*

We have considered all of the arguments and evidence adduced at trial. For the reasons explained, we find Petitioner has persuasively demonstrated that Kim teaches or suggests all limitations of claims 1–8. We also find that the value of Patent Owner’s objective evidence of non-obviousness is weak in comparison to the evidence regarding the prior art under the first three Graham factors.

Accordingly, we find Petitioner has shown by a preponderance of the evidence that claims 1–8 of the ’786 patent would have been obvious over Kim.

E. Other Proposed Grounds under 35 U.S.C. § 103 (Grounds 2–5)

As noted previously, Petitioner presents a number of other grounds of unpatentability of the challenged claims. *See e.g.*, Pet. 2, 30–59. However,

as we have determined that claims 1–8 are unpatentable as obvious over Kim, it is unnecessary to address the additional grounds. *See* 35 U.S.C. § 318(a); *see also SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359 (2018) (holding that a petitioner “is entitled to a final written decision addressing all of the claims it has challenged”); *Bos. Sci. Scimed, Inc. v. Cook Grp. Inc.*, 809 F. App’x 984, 990 (Fed. Cir. 2020) (non-precedential) (recognizing that the “Board need not address issues that are not necessary to the resolution of the proceeding” and, thus, agreeing that the Board has “discretion to decline to decide additional instituted grounds once the petitioner has prevailed on all its challenged claims”).

Thus, there is no additional dispute to resolve between the parties regarding these claims, and we decline to separately address these additional asserted grounds of unpatentability.

III. PATENT OWNER’S MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude the Exhibits 1032–1034. Mot. 1. Exhibits 1032 and 1033 are purported to be dictionary definitions of the terms “cross section” and “perspective,” respectively. *Id.* at 2. Exhibit 1034 is purported to a “‘compil[ation]’ of ‘the PGA tour’s official stats.’” *Id.* at 4. Petitioner filed an Opposition (Opp.) and Patent Owner filed a Reply to the Opposition (Mot. Reply).

Our Decision does not rely on any of the challenged evidence, and we therefore dismiss Patent Owner's Motion to Exclude as moot.

IV. CONCLUSION⁸

In summary:

Claims	35 U.S.C. §	References/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–8	103(a)	Kim	1–8	
1–3, 5, 6, 8	103(a)	Dufour ⁹		
1–3, 5, 6, 8	103(a)	Rubin ¹⁰		
2, 4, 7	103(a)	Dufour, Kim ¹¹		
2, 4, 7	103(a)	Rubin, Kim ¹²		
Overall Outcome			1–8	

⁸ Should Patent Owner wish to pursue amendment of the challenged claim in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

⁹ As explained in Section II.E, we do not reach this ground.

¹⁰ As explained in Section II.E, we do not reach this ground.

¹¹ As explained in Section II.E, we do not reach this ground.

¹² As explained in Section II.E, we do not reach this ground.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–8 of U.S. Patent No. 10,674,786 B2 have been shown, by a preponderance of the evidence, to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, the 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.

For PETITIONER:

Frank Cimino
Megan Woodworth
Justin Oliver
Robert Bugg
VENABLE LLP
fccimino@venable.com
mswoodworth@venable.com
joliver@venable.com
rebugg@venable.com

FOR PATENT OWNER:

Michael Matulewicz-Crowley
Christine Lehman
Connor Houghton
REICHMAN JORGENSEN LEHMAN & FELDBERG LLP
mmatulewicz-crowley@reichmanjorgensen.com
clehman@reichmanjorgensen.com
choughton@reichmanjorgensen.com