

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNDER ARMOUR, INC.,
Petitioner,

v.

ATHALONZ, LLC,
Patent Owner.

Case IPR2024-00637
Patent No. 11,013,291

PATENT OWNER'S SUR-REPLY

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Docket Control Order (Dkt. 35) in <i>Athalonz LLC v. Under Armour, Inc.</i> , No. 2:23-cv-00193-JRG (E.D. Tex.)
2002	United States District Court Judicial Case Profiles, as of December 2023
2003	Under Armour's Invalidity Contentions in <i>Athalonz LLC v. Under Armour, Inc.</i> , No. 2:23-cv-00193-JRG (E.D. Tex.)
2004	Exhibit A ('291 Patent Invalidity Chart Based on Kim) to Under Armour's Invalidity Contentions in <i>Athalonz LLC v. Under Armour, Inc.</i> , No. 2:23-cv-00193-JRG (E.D. Tex.)
2005	Exhibit B ('291 Patent Invalidity Chart Based on Rubin) to Under Armour's Invalidity Contentions in <i>Athalonz LLC v. Under Armour, Inc.</i> , No. 2:23-cv-00193-JRG (E.D. Tex.)
2006	Exhibit C ('291 Patent Invalidity Chart Based on Dufour) to Under Armour's Invalidity Contentions in <i>Athalonz LLC v. Under Armour, Inc.</i> , No. 2:23-cv-00193-JRG (E.D. Tex.)
2007	Exhibit R ('291 Patent Obviousness Chart) to Under Armour's Invalidity Contentions in <i>Athalonz LLC v. Under Armour, Inc.</i> , No. 2:23-cv-00193-JRG (E.D. Tex.)
2008	Declaration of Mr. Timothy Markison in Support of Patent Owner's Response Regarding U.S. Patent No. 11,013,291
2009	CV of Mr. Timothy Markison
2010	Transcript of the 12/19/24 Deposition of Mr. Grant Delgatty in IPR2024-00636, IPR2024-00637, IPR2024-00638, IPR2024-00639, and IPR2024-00640
2011	Excerpts from Holt, Serway & Faughin, Physics (1st ed. 2002)

Exhibit	Description
2012	Presentation Titled “Athletic Positioning Shoe: Presentation to Under Armour, August 22, 2013”
2013	Article Titled “Athalonz Golf Shoes: The Golf Shoe for Distance?” downloaded from https://thelefttrough.com/athalonz-golf-shoes-review/ on December 30, 2024
2014	Claim Charts for U.S. Patent No. 10,674,786; 11,013,291; and 11,064,760 for Athalonz Products
2015	RESERVED
2016	RESERVED
2017	RESERVED
2018	RESERVED
2019	RESERVED
2020	RESERVED
2021	Declaration of Stephen P. Bosco
2022	Transcript of the 5/13/25 Deposition of Mr. Grant Delgatty in IPR2024-00636, IPR2024-00637, IPR2024-00638, IPR2024-00639, and IPR2024-00640

I. INTRODUCTION

Petitioner's Reply is riddled with misquotes, misrepresentations, and conclusory arguments that fail to meet its burden of proving unpatentability. Petitioner relies on new evidence and arguments to try and fill gaps in the Petition, but none of its hindsight-biased assertions or cherry-picked descriptions of the prior art are sufficient.

First, Petitioner argues the Board should discredit Patent Owner's expert. That Petitioner opens with personal attacks on Mr. Markison—rather than disputing the merits of his opinions—says it all. Mr. Markison is undisputedly a qualified expert (and a duty-bound patent attorney), and he provided detailed, helpful opinions for the Board's determination. It is Petitioner's expert that parrots conclusory assertions from the Petition and Reply and fails to consider the proper construction of the claims and evidence supporting their patentability. Mr. Markison's affiliation with Athalonz and the patented technology does not make his opinions unreliable, particularly under the circumstances of this case.

Next, Petitioner seeks a new, overbroad claim construction in an attempt to save its flawed measurements of the claimed heights and slopes. It is undisputed that when the claims are interpreted to measure the heights and slopes relative to the bottom surface of the shoes, rather than the ground, none of the prior art meets the limitations. Petitioner's arguments require ignoring the claim language and the fact

that cleats are integral to the entire purpose and design of the prior art golf shoes. Applying these errors, Petitioner proposes measuring heights and slopes in a vacuum by removing those cleats from the shoes altogether. The claims, specification, and other evidence all support Patent Owner's interpretation, which is dispositive of all issues in the Petition.

On the merits, each of Petitioner's arguments and criticisms fall away when the claims are properly interpreted as described above. But Patent Owner went further and provided detailed responses to Petitioner's hypothetical, modified versions of the prior art, proving that even these "what if" embodiments fail to render the claims obvious. Petitioner's Reply pushes these modified theories not with legitimate arguments, but instead by repeatedly misrepresenting Mr. Markison's deposition testimony. And when the term "athletic positioning" is construed correctly—a construction Petitioner fails to provide any contrary evidence for—all claims are independently patentable.

Finally, Petitioner fails to rebut any of Patent Owner's evidence showing secondary considerations of nonobviousness. Petitioner does not dispute the nexus between this evidence and the claims, argues waived and meritless objections to Patent Owner's evidence of industry praise, and attempts to sidestep its copying of Athalonz's patents and products—all while failing to provide any evidence supporting its positions.

Because Petitioner cannot meet its burden of proving obviousness, the Board should confirm the patentability of the challenged claims.

II. PETITIONER’S ATTACKS ON MR. MARKISON ARE UNFOUNDED

Rather than addressing the merits, Petitioner’s Reply opens with unsupported, ad hominem attacks on Patent Owner’s expert, claiming that Mr. Markison’s opinions should be afforded “little, if any, weight” due to his alleged bias and position at Athalonz. Petitioner’s attacks are unfounded, but highlight Petitioner’s goal to have the Board ignore Mr. Markison’s opinions—which logically and properly interpret the art in view of the law and point out the issues with Petitioner’s hindsight-driven arguments—rather than consider them on the merits. The Board should weigh the expert testimony in this case as it would any other. *See* CTPG, 35 (citing *Yorkey v. Diab*, 601 F.3d 1279, 1284 (Fed. Cir. 2010) (“The Board has broad discretion to assign weight to be accorded expert testimony.”)).

Importantly, Petitioner has not challenged Mr. Markison’s expert qualifications. Mr. Markison has 13 years of experience designing, developing, and manufacturing athletic shoes, EX2008 ¶44, far exceeding Petitioner’s proposed level of skill in the art, *id.* ¶40. Mr. Markison is also a named inventor on the challenged patents and their prosecuting attorney, as well as the CEO of Athalonz, but this strengthens his qualifications, rather than diminishing them. He invented and wrote these patents and has been working directly on making products embodying the

patents since the formation of Athalonz, providing him unique and powerful insight into the prior art, the scope of the claims, and the knowledge of a POSITA that will assist the Board. EX2008 ¶¶17-29.

Mr. Markison’s opinions are based on extensive facts and data and are the product of reliable principles and methods. *See* CTPG, 35. He spent 300-500 hours drafting his declarations across the five IPRs. EX1023, 25:13-26:17. Petitioner asserts Mr. Markison has a financial interest in the proceeding, but that interest is far-removed—it would require IPR and district court victories, success on appeal, collection of a verdict, and then Athalonz deciding to pay out shareholders before he ever receives a dime.¹ Moreover, Petitioner’s claims of bias ignore Mr. Markison’s testimony under oath explaining how he is duty-bound as a patent attorney to be ethical and truthful, and stating that he is rendering an objective opinion from the viewpoint of a POSITA. EX2008 ¶¶2, 30; EX1023, 230:3-231:9.

Petitioner’s argument essentially states that any employee-expert should be discredited, but that is directly contrary to law. *Sw. Constr. Corp. v. West*, 82 F.3d 435 (Fed. Cir. 1996) (“[T]hat an expert witness was an employee of a party does not

¹ In contrast, Petitioner’s expert is being paid \$400/hour to parrot invalidity theories from the Petition, and has spent significantly less time than Mr. Markison working on these proceedings. EX2010, 15:17-17:12; EX2022, 8:3-13.

disqualify his testimony, but would merely be a factor to be taken into consideration...” (citation omitted). While the Board is free to consider his employment status in weighing his testimony, it should not prejudice its determination by handicapping Mr. Markison’s opinions at the outset. *Iriusrisk, Inc. v. Threatmodeler Software Inc.*, IPR2023-00821, 2024 WL 4795022, at *16 n.9 (P.T.A.B. Nov. 14, 2024) (“[W]e assess the credibility of both parties’ experts based on the plausibility of and support for their testimony, and weigh such testimony accordingly”) (citation omitted)); *Draftkings Inc. v. Ag 18, LLC*, IPR2022-01448, 2024 WL 1080011, at *46 (P.T.A.B. Mar. 12, 2024) (refusing to disregard expert and instead “evaluat[ing] each of his assertions on their own”).

The Board should also consider the purpose of AIA proceedings in promoting fairness and efficiency and allowing “each party to determine the preferred manner of putting forward its case.” CTPG, 2. Athalonz is a two-person operating company that has yet to turn a profit, trying to compete in the marketplace against multi-billion-dollar juggernauts like Petitioner based on the protections afforded by its patents. *See* EX1031 ¶¶1-44; EX1023, 18:5-16. Athalonz does not have the resources to pay an “independent” expert tens or hundreds of thousands of dollars, simply to defend the patents it already spent years of time and effort obtaining from the PTO. It would be fundamentally unfair to small patent owners to discredit Mr. Markison’s testimony just because Athalonz cannot afford a hired gun.

Finally, given Petitioner’s direct attacks on his credibility and the importance of his testimony, Patent Owner believes it would be helpful to the Board to hear Mr. Markison’s testimony live and have its own opportunity to ask questions. *See* CTPG, 85. While Patent Owner understands that live expert testimony is uncommon, this case is different and exactly the type of case where it is appropriate—Petitioner has lodged a direct attack on Mr. Markison’s credibility as a witness, rather than simply disputing the merits of his expert opinions.

III. PETITIONER’S NEW ARGUMENTS REGARDING “CONVENTIONAL” SHOES ARE IMPROPER AND IRRELEVANT

Recognizing deficiencies in the Petition, Petitioner relies on improper new reply evidence from Mr. Delgatty to try and fill gaps regarding “conventional” shoes. Specifically, Mr. Delgatty cut apart and photographed seven pairs of shoes to support his conclusory opinion that it was “conventional” to have heel platforms with a uniform height from inner to outer edge and from front to rear. EX1022 ¶¶3-9. These photographs and opinions are procedurally improper—Mr. Delgatty failed to include any such cutaways in his original declaration and admitted that without them, it was impossible to know what features these allegedly “conventional” shoes had. EX2010, 32:10-22, 35:7-36:8, 38:19-39:2 (agreeing you cannot tell what the interior dimensions of the shoe are based on exterior photographs); EX2022, 11:6-13:1 (agreeing he created new cutouts because of issues with original declarations). Moreover, Mr. Delgatty included at least three physical new shoes that he did not

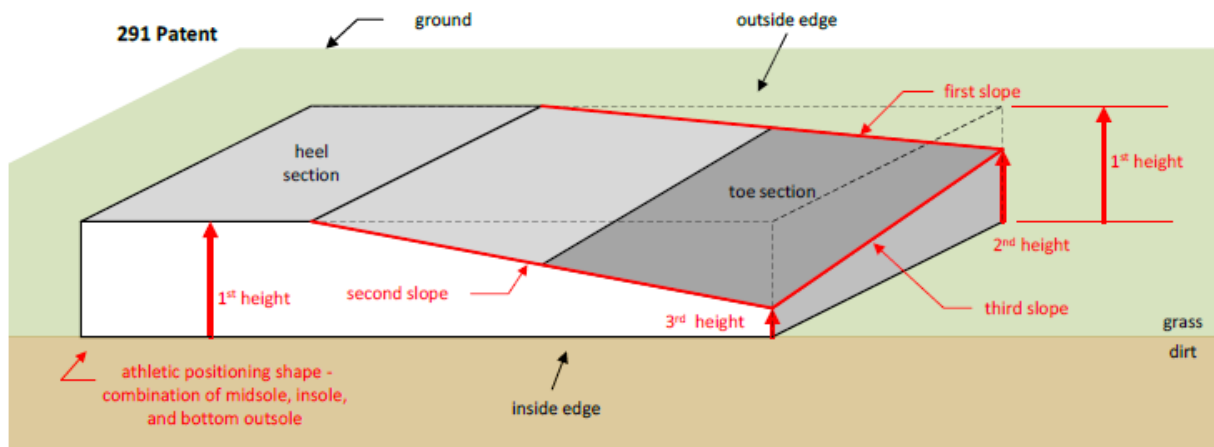
even photograph the *exterior* of before. Compare EX1022 ¶¶5, 6, 9, with EX1002 ¶¶47-52. Mr. Delgatty’s photographs are also deficient on the merits, as Petitioner 1) fails to prove any of the shoes are prior art; 2) does not assert any of these shoes as prior art in the Petition; and 3) includes no measurements or annotations that actually show that the cutaways have the dimensions Petitioner claims they do.²

Regardless, the dispute over “conventional” features is irrelevant to this proceeding. Petitioner must prove that the prior art it actually asserts—here, Kim, Dufour, and Rubin—renders the claims obvious. Petitioner’s reliance on extrinsic evidence about Athalonz’s own products changes nothing—the fact that Athalonz’s shoes practice the patents, when they were designed to embody the claims, has nothing to do with whether Petitioner’s prior art meets the claim limitations. The fact that some conventional golf shoes have a “flat” heel from inner to outer edge does not change the disclosures in any of Petitioner’s prior art.

² This is in striking contrast to Patent Owner’s district court infringement contentions, which contain detailed measurements and analysis to show how Under Armour and Athalonz’s shoes fall within the scope of the claims. See EX1025; EX1036.

IV. PETITIONER'S NEW CLAIM CONSTRUCTION ARGUMENTS REGARDING THE CLAIMED HEIGHT MEASUREMENTS FAIL

As explained in Patent Owner's Response, the claims require measuring various heights against the bottom surface of the shoe, not the ground. POR, 30-34. Specifically, claim 1 requires an "athletic positioning shape" consisting of a midsole, insole, and bottom outsole, with a first, second, and third height measured at different parts of the heel and toe sections of the shoe. The claims, specification, and extrinsic evidence are clear that the heights are measured against the bottom surface of the shoe and not the ground. EX2008 ¶¶179-187; *see also* POR 31-33; EX2015. Petitioner never challenges Mr. Markison's diagram illustrating the claim:



EX2008 ¶179.

Petitioner now argues that the heights should be measured with reference to the ground, and not the bottom surface of the shoes in the claims, since according to Petitioner the cleats are irrelevant to an athlete's foot position and serve only to

provide traction.³ However, this claim construction argument defies logic, runs afoul of several canons of claim construction, and should be rejected.

First, while Petitioner argues that the cleats are separate components from the sole, this is incorrect and changes nothing about the height measurements.⁴ The patent claims an “athletic positioning apparatus” with particular heights and slopes. EX1001, Title. The 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 heights, slopes, and angles in the claims. EX2008 ¶¶58-59. Both the patent and the prior art also make clear that the cleats are considered integral to the sole. *See* EX1005 ¶[0029]; EX1001, claim 1.

Petitioner’s assertion that the cleats should be ignored when determining whether a given shoe falls within the scope of the claims is illogical, ignores the plain meaning of the claim language, casts aside basic principles of physics, and would produce absurd results that read out every embodiment in the patent. *See*

³ Petitioner’s expert admitted he did not do any claim construction analysis for this issue or offer any opinion that said you had to measure the heights or slopes relative to the ground in his declaration submitted with the Petition. EX2010, 110:19-112:11.

⁴ Petitioner’s argument is also incorrect at least as to Kim, which makes clear that the cleats are part of the sole. EX2008 ¶¶200-210.

Kaufman v. Microsoft Corp., 34 F.4th 1360, 1372 (Fed. Cir. 2022) (“A claim construction that excludes a preferred embodiment is rarely, if ever correct[.]”). For example, Petitioner’s new argument that “whether or not a shoe has cleats, an athlete’s foot will be positioned the same with respect to the surface of the ground when in use” is clearly wrong. Reply, 8. Indeed, Petitioner’s main prior art references—Kim and Rubin—teach exactly the opposite: both references use longer cleats on the inner edge of the shoe so that the athlete’s foot sinks into the soft ground when in use and do not sink into hard ground when in use. These shoes—and any shoe with cleats—provide meaningful “traction” only when the cleats at least partially penetrate the ground. The cleats impact the position of the wearer’s foot with respect to the ground any time the cleats have not fully penetrated the ground such that the bottom surface of the midsole is flush with the ground.⁵

Further, as Mr. Markison explained, removing the cleats from Kim and Rubin would result in shoes that both do not work in practice, and lack the claimed

⁵ The amount the cleats sink into the ground depends on many factors, including the penetration resistance of the ground, the amount and position of the weight force applied to the shoe, and the quantity, shape, length, and contact area of the cleats. See EX2008 ¶¶47-55, 110-121. Mr. Delgatty did not consider these factors. EX2022, 35:17-38:9.

heights regardless. EX2008 ¶¶197-217, 297-311. The Institution Decision's finding that Kim depicts the claimed heights when a golfer is attempting a swing did not consider the need to measure the heights with reference to the shoe itself and not the ground.⁶ And Mr. Delgatty's claim that the cleats' height does not contribute to athletic positioning on soft ground again misses the point, as the claims require athletic positioning regardless of ground surface. Indeed, Mr. Delgatty admitted that he thinks these patents only apply to shoes on a flat, soft surface that sink into the ground; he was unable to answer whether the same shoe worn on a different surface like an upslope would fall within the scope of the claims. EX2022, 43:12-44:3.

Petitioner's citation to extrinsic evidence, such as the Athalonz marketing document regarding ground reaction force (Reply, 9) supports Patent Owner's point. That image shows that the Athalonz shoes that practice the claims themselves put the athlete in an athletic position on all surfaces, contrary to the conditional

⁶ This also incorrectly assumes these apparatus claims should be interpreted to cover shoes that change properties when in use. But an interpretation that requires physically manipulating or modifying the claimed shoes would mean any shoe that could be pushed into the ground at a particular angle could meet the claims, which cannot be the case where the claims require particular properties without being used.

positioning in Kim and Rubin that requires ignoring the cleats that actually engage the ground.

Finally, Petitioner's argument that Patent Owner's height measurements here are inconsistent with its litigation position is irrelevant and wrong. For one, to the extent they are relevant at all, Athalonz's infringement contentions are extrinsic evidence that should be afforded little weight in construing the claims. *Ocado Grp. PLC v. AutoStore Tech. AS*, PGR2021-00038, 2021 WL 3412974, at *13 (P.T.A.B. Aug. 4, 2021). But regardless, Petitioner's allegations are wrong on the merits. Petitioner points to vertical red lines where heights were measured to argue Patent Owner left out the cleats, but those lines simply show the horizontal position where measurements were taken, not the absolute height measurement (EX1025, 51):



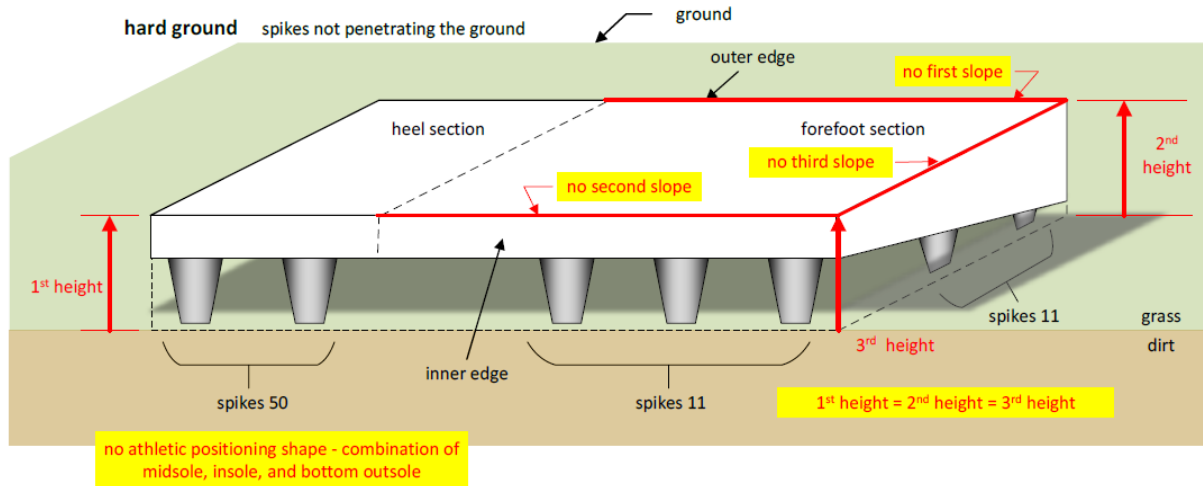
This belies Petitioner's bald assertion that Athalonz "did not include the height of the cleats" when measuring the claimed heights. In fact, Petitioner never inspected or otherwise looked at the cutaways that Patent Owner used for its infringement contentions during discovery so has no basis to say how they were measured.

V. GROUND 1

A. Patent Owner Correctly Analyzes Kim's Primary Embodiment.

Petitioner's criticism of the block diagram of Kim's primary embodiment relies on a half-sentence in the last paragraph of Kim stating that "the inclined plane *may* be formed only at the front portion of the outsole." EX1005 ¶[0046] (emphasis added). Petitioner selectively removed the rest of the sentence, which reads: "For example, the inclined plane may be formed only at the front portion of the outsole, or only at parts of the front and/or *rear portions of the outsole.*" *Id.* (emphasis added). Petitioner claims this half-sentence somehow cancels out not only the rest of the sentence, but also Kim's entire specification and figures that consistently describe a shoe where the entire upper surface of the sole is parallel on hard ground and tilted on soft ground. POR, 12-15 (collecting evidence). That is, Kim's preferred embodiment—the one pictured in Figures 1-5 and Mr. Markison's diagram—does *not* have an inclined plane only at the front portion of the outsole, and instead has the inclined plane throughout the shoe from front to back, as Patent Owner explained. Mr. Markison also explained in detail why the modified version of Kim with the inclined plane only at the front of the shoe fails to render the claims obvious—the "what if" embodiment discussed below. As such, Kim's primary embodiment does not have any of the claimed heights or slopes, because as shown

in the block diagrams, it has inverse-length spikes running throughout the shoe that maintain the foot substantially level to the ground.



EX2008 ¶189.

Petitioner relies heavily on the perspective drawing in Figure 2 to assert that Kim's heel is higher than the toe, but ignores the inconsistencies between that drawing and the rest of Kim's disclosure, including Figure 1 which makes clear that Kim has the claimed spikes with changing lengths in its heel and that Figure 2 is another view of the shoe in Figure 1. EX2008 ¶¶204-217. And regardless, even if the heel were higher than the toe, Kim would still not disclose the second slope between the inner and outer edge of the toe section as shown above, because Kim makes clear that its incline plane runs through the entire shoe, not just the front portion.

B. Kim's What-If Embodiment Fails to Meet the Claims.

Petitioner's arguments regarding the what-if embodiments fare no better. Petitioner begins by falsely claiming that Mr. Markison "admitted that the conventional heel disclosed in Kim" had a flat heel. Reply, 13. Mr. Markison made no such admission. EX1023, 99:1-17 (explaining that hypothetically, "*if* they put a conventional heel like they have on a dress shoe" on Kim, it would be flat from inner to outer edge). If Kim were modified to remove the incline plane disclosed in every figure to add a heel without spikes and an incline plane, Patent Owner's Response explained in detail why this "what-if embodiment" would still not meet the claims. POR, 37-47.

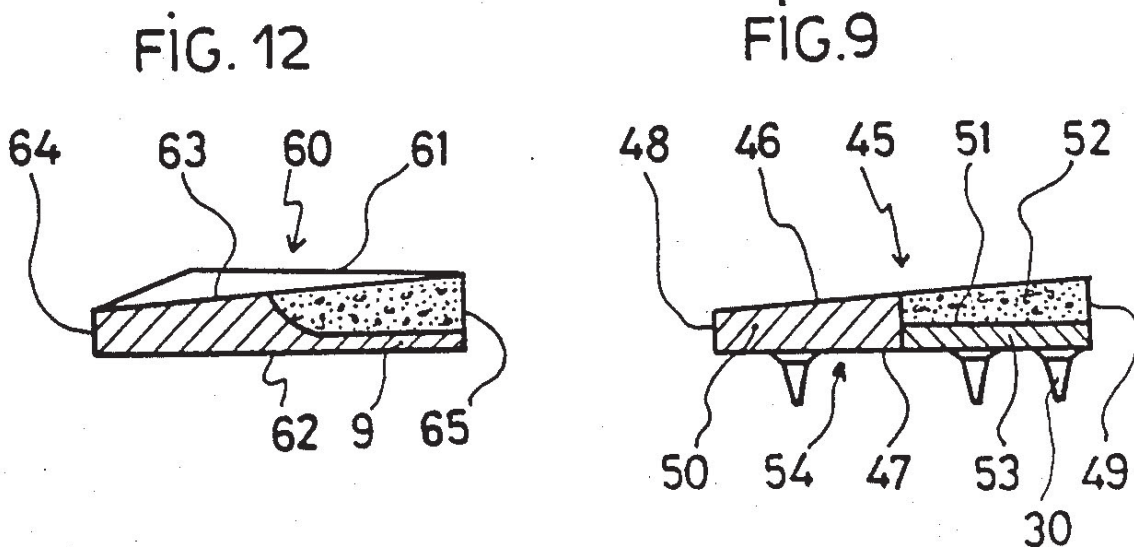
Importantly, Petitioner concedes that its argument fails unless the cleat height is excluded from Kim and the slopes are measured relative to the ground, not the bottom of the shoe (and only measured on soft ground, not on hard ground). Reply, 13-15. That should end the matter. Petitioner also newly argues that Kim's sole must have some kind of material that would allow the toe section to flex while the heel remains flat on the ground. This ignores Kim's disclosure that its spikes are "integrally formed with the outsole," EX1005 ¶[0030], EX2008 ¶¶200-210; if the outsole were flexible, the spikes would be too, meaning that they would flex under the weight of the athlete, which is implausible. Regardless, this argument was nowhere in the Petition, requires modification of Kim to remove the spikes and

change its material, and represents an entirely new ground of unpatentability that should not be considered.

VI. GROUND 2

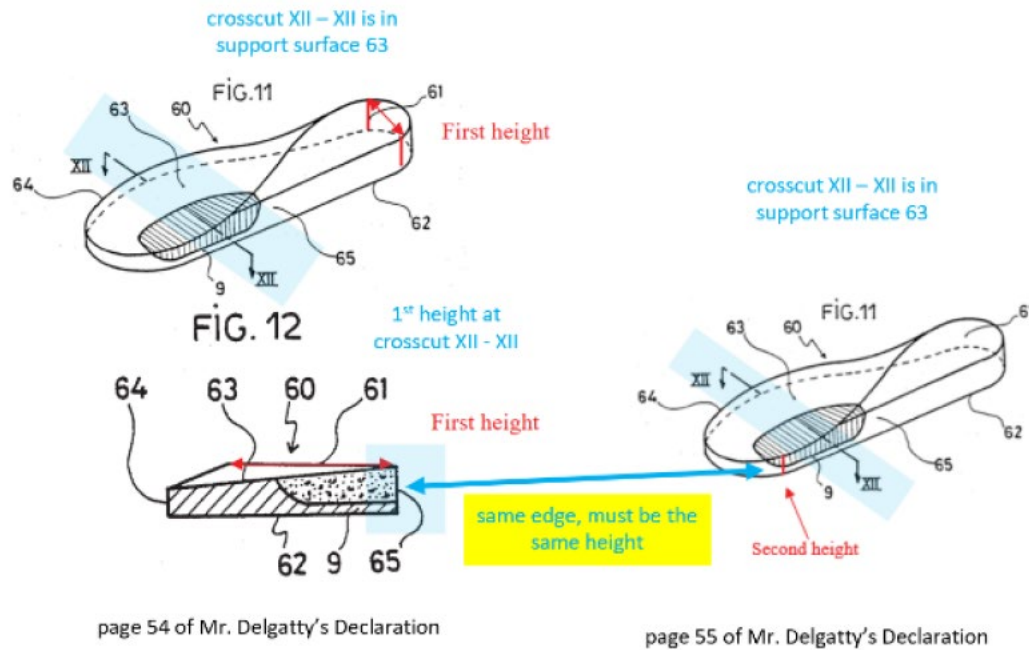
A. Petitioner's New Arguments Regarding Figures 11 and 12 Fail.

There is no dispute that Figures 11 and 12 of Dufour represent the same embodiment, EX2010, 102:8-103:3, 105:17-19, and that this is a different embodiment than Figures 8-10, EX1006, 3:12-29. Those differences are clear in the figures. The Figures 8-10 embodiment, represented by Figure 9 below, has a consistent slope from inner to outer edge throughout the shoe. In contrast, the Figures 11-12 embodiment, represented by Figure 12 below, has a consistent height at the outer length of the shoe (65), a flat plantar section (61) at the same height as the outer edge, and a downward slope only in the angled platform section (63):

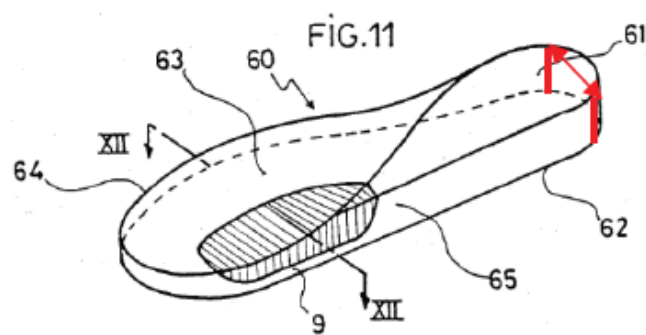


POR, 48-55; EX2008 ¶¶238-244.

Even Petitioner's expert previously correctly interpreted Figure 12 as showing the heel at the same height as the outer edge of the shoe throughout all of his declarations:

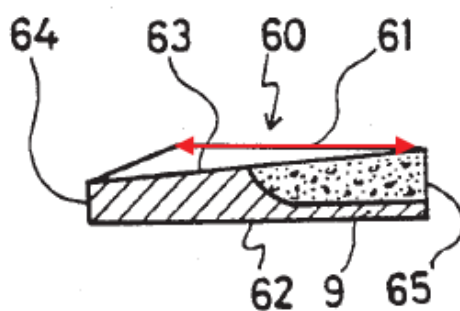


EX2008 ¶¶243-244 (annotating EX1002, 54-55).



Uniform height

FIG. 12



IPR2024-00636, EX1002, 50.

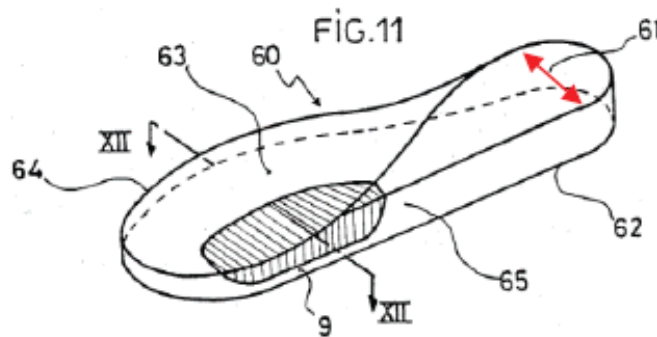
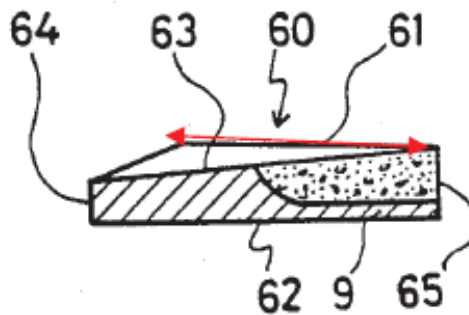
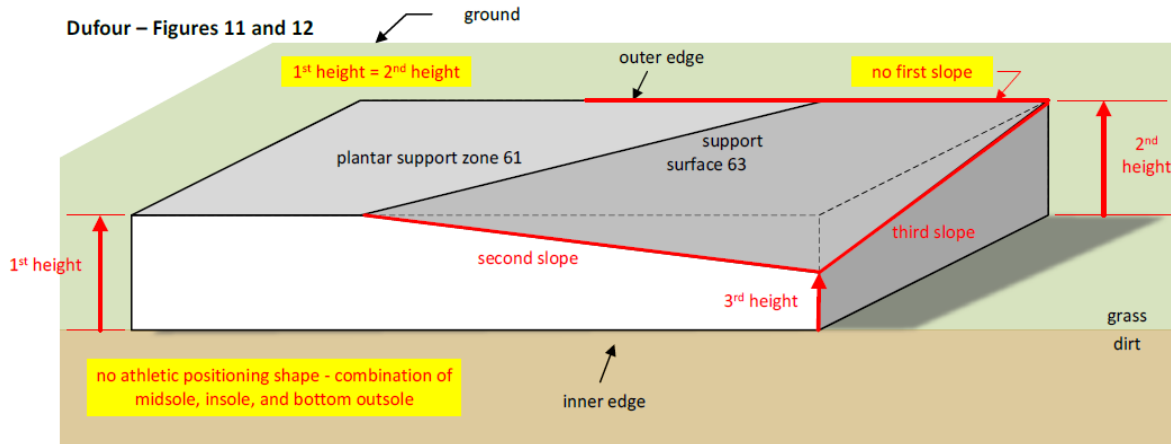


FIG. 12



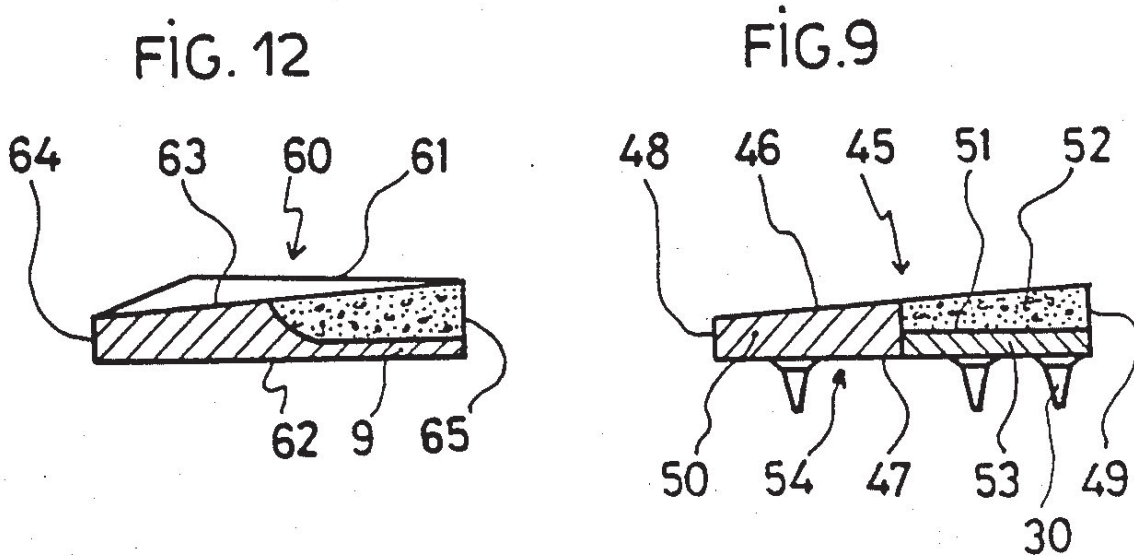
IPR2024-00638, EX1002, 61. Now, in an attempt to cure the obvious flaws in Petitioner's theory, Mr. Delgatty has contradicted his previous opinions in a new reply declaration to claim that Figure 12 actually has errors, and Figure 11 must be correct. EX1022 ¶¶29-31. The Board should discredit this inconsistent testimony. Mr. Markison's explanation of Figures 11 and 12—which is consistent and supported by detailed analysis of the specification, and summarized in the block diagram below (EX2008 ¶239)—is far more credible than Mr. Delgatty's shifting-sands approach. *See id.* ¶¶238-244.



Petitioner’s argument that “Mr. Markison admitted that the height of the toe section (line C) is smaller than the thickness of the heel section at line A” or that he “admits that the embodiment shown in Figure 11 has all the claimed slopes” (Reply, 17-18) mischaracterizes his testimony. Mr. Markison made clear that only “in a vacuum, Figure 11, without context of what the patent is teaching” shows line C smaller than line A, “but that’s not what Figure 12 shows.” EX1023, 117:3-119:11. And he made clear his opinion that based on Dufour’s disclosure, the Figure 11/12 embodiment has the heel at the same height as the outer toe. EX2008 ¶¶129-137, 238-244. Petitioner provides no meaningful response to any of the contradictions in Dufour explained by Mr. Markison; it relies solely on cherry-picking its preferred way of viewing one figure over another. This is insufficient to meet its burden.

B. Figures 1 and 9 Also Fail to Show the Claimed Slopes.

Petitioner's arguments about Figures 1 and 9 and the meaning of "cross-section" also fail. Figure 9 is clearly different from Figure 12—there is a reason Figure 9 does not show the consistent heel height from inner to outer edge:



Petitioner's new reliance on Figure 1—which was nowhere in the Petition—fails to change anything. Petitioner misleadingly quotes Dufour's disclosure stating that "plantar support zone 61 at the level of the heel remains substantially parallel to the walking surface." EX1006, 5:7-14. While accurate, this disclosure expressly applies to *Figures 11 and 12*, which as shown above does have a flat heel section, and does not apply to the separate embodiment of Figures 1-10. And Petitioner's citation to Mr. Markison's deposition tellingly leaves out his explanation that Figure 1 is inaccurate and inconsistent with the embodiments disclosed in the rest of Dufour. EX1023, 109:13-114:12.

Finally, Petitioner concedes that it has no evidence to support combining the disclosures of Dufour's Figures 8-10 and Figures 11-12 embodiments by failing to respond to that part of the Response. *See* POR, 55; EX2008 ¶¶245-258.

C. Petitioner Fails to Show Combining Kim and Dufour Would Have Been Obvious.

Petitioner's assertion that Patent Owner is violating the bodily incorporation doctrine improperly shifts the burden of proving obviousness. Mr. Markison's diagrams were used to illustrate his opinion as to why combining Dufour's bottom outsole with Kim's midsole and insole would not have been obvious to a POSITA. POR, 55-60; EX2008 ¶¶261-270. Patent Owner does not contend that obviousness requires physical placement on top of embodiments, but that Petitioner must meet its burden of proving why a combination would be obvious, which it failed to do.

VII. GROUND 3

A. Patent Owner Accurately Described Rubin's Primary Embodiment, Which Fails to Meet the Claims.

Petitioner takes a single figure out of context to dismiss the bulk of Rubin's disclosures as irrelevant. Specifically, Petitioner relies exclusively on Figure 3 to claim Rubin has no cleats in its heel, ignoring Figures 2 and 4—and the entire rest of the specification—that makes clear that the entire upper surface of the wearer's foot remains parallel to the ground on hard surfaces and tilts inward on soft ground. POR, 56-59. Patent Owner explained in detail why Rubin tilts the entire foot inward

on soft ground, and Petitioner's only retort is a footnote that fails to substantively engage with the inconsistency between Figures 3 and 2/4. Reply, 25 n.6.

Regardless, Petitioner's arguments on Rubin admittedly all require measuring the heights and slopes in the claims with reference to the ground and not the bottom of the shoe. EX2010, 109:13-110:18. Properly measured, Rubin does not disclose a second height greater than a third height, even accepting Petitioner's view that the heel is higher than the toe. Thus, Petitioner cannot meet its burden on Ground 3.

B. Rubin's What-If Embodiments Fail to Meet the Claims.

Petitioner also fails to rebut Patent Owner's arguments regarding the "what-if" embodiments of Rubin with a flat heel without spikes.

Petitioner's primary argument is that Patent Owner "improperly includes the cleat height in measuring the claimed second and third heights." Reply §VIII.B. Petitioner concedes that when properly measured, even the what-if embodiments do not disclose the claimed second and third heights.

Petitioner's new argument that Rubin discloses a shoe with a flexible sole that allows the heel section to remain flat on the ground also fails. Reply §VIII.C.⁷ Even

⁷ This new argument was nowhere in the Petition and represents a new unpatentability ground that should not be considered.

if the midsole portion of Rubin flexed as described, that still ignores the height of the cleats, which is necessary when measuring the slopes.

Finally, Petitioner also argues that Rubin has a first height greater than a second height, largely repeating its conclusory arguments regarding the embodiments above. Reply §VIII.D. Petitioner once again misquotes Mr. Markison’s deposition, where he did *not* admit that Rubin’s heel section has a greater height than the toe section—he specifically said that Petitioner’s line B is “not an accurate representation” of the height of the toe section, as explained in detail in his declaration. EX2008 ¶¶312-314.

C. Petitioner Fails to Show Combining Kim and Rubin Would Have Been Obvious.

As discussed above, Patent Owner is not violating the bodily incorporation doctrine and Mr. Markison’s diagrams were used to illustrate his opinion as to why combining Dufour’s bottom outsole with Kim’s midsole and insole would not have been obvious to a POSITA. POR, 73-77; EX2008 ¶¶317-344. Petitioner failed to meet its burden of proving why making this combination would have been obvious.

VIII. PETITIONER HAS NO ARGUMENTS UNDER THE CORRECT CONSTRUCTION OF “ATHLETIC POSITIONING”

Petitioner’s only answer to Patent Owner’s construction of “athletic positioning” is to ask the Board not to address it at all. But Patent Owner put forth extensive evidence in the Response for why its construction is correct, POR, 25-29,

and Petitioner has no response on the merits. Indeed, its expert—despite recognizing that “athletic positioning” had to limit the claims somehow—acknowledged he put forth no evidence as to how that limitation was met. EX2010, 53:1-54:7. Under the correct construction, “athletic positioning” requires 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. Patent Owner explained in detail why none of the prior art meets this limitation under its construction. POR, 77-80; EX2008 ¶¶337-338. The Board should adopt Patent Owner’s construction and reject Petitioner’s arguments on all claims.

IX. SECONDARY CONSIDERATIONS WEIGH STRONGLY IN FAVOR OF NONOBVIOUSNESS

Petitioner fails to rebut Patent Owner’s evidence of nonobviousness, which strongly supports the validity of the challenged claims.

Nexus: Patent Owner is entitled to a presumption of nexus because its evidence is “tied to a specific product that embodies the claimed features, and is coextensive with them.” *Volvo Penta of the Ams., LLC v. Brunswick Corp.*, 81 F.4th 1202, 1210 (Fed. Cir. 2023) (cleaned up). Patent Owner showed that Athalonz’s shoes practice and are coextensive with the claimed features (POR, 81; EX2008 ¶341; EX2014); Petitioner does not even attempt to rebut this evidence.

Petitioner’s Expert Declaration is Entitled to No Weight: Mr. Delgatty’s reply declaration parrots arguments in the Reply—almost word-for-word—with no

expert analysis. *Compare* Reply 27-29, with EX1022 ¶¶51-55. His testimony is not based on “scientific, technical, or other specialized knowledge” and is not helpful to the Board. *See* CTPG, 34 (citing Fed. R. Evid. 702(a)). Mr. Delgatty also has no proffered expertise or personal knowledge in commercial success, golfer’s performance, or copying to render him an expert in these areas.

Long-Felt Need: Petitioner ignores that none of its prior art was ever used in commercial products and it failed to solve industry needs. EX2010, 123:8-124:6; EX2008 ¶343. The prior art tried to solve problems with athletic stances in golf shoes with different, unsatisfactory solutions that did not work in the market. EX2008 ¶¶342-343. This demonstrates a long-felt need for the patented invention. *See Volvo Penta*, 81 F.4th at 1214-15 (finding long-felt need where prior art attempted unsuccessfully to solve same problem as patent owner’s product).

Industry Praise and Unexpected Results: Petitioner complains about Patent Owner’s evidence that Mitch McDowell and Ryan Steenberg—professional World Long Drivers—praised the invention. Petitioner waived any objections by failing to challenge that evidence when submitted, 37 C.F.R. § 42.64(b)(1), preventing any supplemental evidence. Regardless, these statements are not hearsay because they are “cited only as evidence of industry praise . . . not in whether that praise is true or accurate.” *Cisco Sys., Inc. v. Centripetal Networks, Inc.*, IPR2018-01436, 2020 WL 402817, at *27 (P.T.A.B. Jan. 23, 2020). Petitioner does not otherwise rebut Mr.

Markison's testimony describing praise from the long-drive industry. EX2008 ¶¶345-348.

Petitioner's reliance on unauthenticated internet statistics allegedly relating to Bernhard Langer's performance since switching to Athalonz shoes changes nothing. Mr. Markison explained how Langer switched to Athalonz golf shoes because he felt they improved his ball-striking and how Langer praised the shoes repeatedly, EX2008 ¶350—the fact that a professional golfer in his mid-60s improved in any statistical category only highlights unexpected results.

Finally, the fact that an independent, third-party article praising Athalonz's products resulted from marketing efforts changes nothing—even the patent owner's own marketing material can be informative. *See Volvo Penta*, 81 F.4th at 1215.

Copying: Petitioner has no answer to the substance of Patent Owner's copying allegations. Mr. Markison presented the details of Athalonz's inventions to Under Armour in 2013, including a 79-slide presentation showing figures directly out of the patents; provided Under Armour with a physical prototype of patent-practicing Athalonz shoes to test; and that after all this Under Armour refused to engage with Athalonz and instead released infringing shoes. EX2008 ¶¶352-359; EX2012; *see also* EX1031 ¶¶33-44. Petitioner claims there is no technical analysis of Petitioner's products showing infringement or similarity to Athalonz's products, but there is ample such evidence—including Athalonz's district court complaint,

infringement contentions with hundreds of pages of detail, and claim charts regarding practice by the Athalonz shoes—all of which Petitioner itself put in the record. *See* EX1031 ¶¶35-89; EX1025; EX1036.

Petitioner’s only other argument is that Athalonz has not shown direct evidence of copying through Under Armour’s internal documents, but there is no such requirement. *See Medtronic, Inc. v. Teleflex Innovations S.a.r.l.*, 70 F.4th 1331, 1340 (Fed. Cir. 2023). Here, like in *Medtronic*, Under Armour had access to Athalonz’s patents and products and the infringing products are substantially similar to the Athalonz products. Combined with Mr. Markison’s testimony and evidence showing Athalonz’s presentations to Under Armour, this is more than sufficient circumstantial evidence to prove copying. Finally, Patent Owner’s evidence is undisputed—despite Petitioner having every opportunity to provide rebuttal evidence, such as a declaration from its own employees, it failed to do so.

Dated: May 21, 2025

Respectfully submitted,

/Connor Houghton/
Connor Houghton
Counsel for Patent Owner

CERTIFICATE OF COMPLIANCE

The undersigned hereby certifies that Patent Owner's Sur-Reply consists of 5,333 words, excluding the table of contents, certificate of service, this certificate of compliance, or table of exhibits. The Sur-Reply complies with the type-volume limitation of 5,600 words as mandated in 37 C.F.R. § 42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare this paper (Microsoft Word).

Dated: May 21, 2025

/Connor Houghton/
Connor Houghton
Counsel for Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, the undersigned certifies that on May 21, 2025
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