

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNDER ARMOUR, INC.
Petitioner

v.

ATHALONZ, LLC
Athalonz

Case No. IPR2024-00639
Patent No. 11,375,768

PETITION'S REPLY TO ATHALONZ RESPONSE

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PETITIONER’S EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No 11,375, 768 (“the ‘768 patent”)
1002	Declaration of Grant Delgatty
1003	Curriculum Vitae of Grant Delgatty
1004	RESERVED
1005	U.S. Patent No. 6,158,151 (“Won”)
1006	U.S. Patent Publication No. 2007/0107258 (“Umezawa”)
1007	U.S. Patent No. 7,464,428 (“Norton”)
1008	U.S. Patent No. 4,642,911 (“Talarico ‘911”)
1009	U.S. Patent No. 4,615,126 (“Mathews”)
1010	U.S. Patent No. 5,025,573 (“Giese”)
1011	Prosecution History Excerpts of U.S. Patent Application No. 16/555,171
1012	Excerpts from Athalonz’s Infringement Contentions, served in <i>Athalonz, LLC v. Under Armour</i> , Case No. 2:23-cv-00193 (E.D. Tex.).
1013	1977 Nike Boston Running Shoe

1014	FootJoy 51409
1015	FootJoy 1970 Product Catalog
1016	U.S. Patent No. D275146
1017	U.S. Patent No. D310294
1018	1971 Nike Cortez
1019	Merriam-Webster’s Collegiate Dictionary Definition of “Gradient”
1020	RESERVED
1021	CAD Image of Heel Platform of UA HOVR Drive
1022	Supplemental Declaration of Grant Delgatty
1023	Transcript from the March 18, 2025, Deposition of Timothy Markison in IPR2024-00636, IPR2024-00637, IPR2024-00638, IPR2024-00639, and IPR2024-00640
1024	U.S. Patent No. 11,206,878
1025	Athalonz’s Second Supplemental Infringement Contentions, served in <i>Athalonz, LLC v. Under Armour</i> , Case No. 2:23-cv-00193 (E.D. Tex.)
1026	Markison Ex. 10 - UA000000077 (redacted)
1027	“Athalonz Golf Shoes,” produced in <i>Athalonz, LLC v. Under Armour</i> , Case No. 2:23-cv-00193 (E.D. Tex.) at ATHALONZ0007372

1028	“From the ground up,” 2019 Sports Illustrated, M. Purkey, https://www.si.com/golf/gear/feature-2019-11-21-from-the-ground-up
1029	Transcript of Athalonz YouTube Channel Video Titled “Athalonz Technology Explained,” downloaded from https://www.youtube.com/watch?v=FNLc3D-5SZg
1030	Athalonz Blog Titled “Athalonz Shoes – Leveraging the Laws of Physics,” downloaded from https://www.athalonz.com/blogs/news/athalonz-shoes-leveraging-the-laws-of-physics-1?srsltid=AfmBOorlUcXLaaaGPUOPk35_JqoKeSAHebj9yRAB%E2%80%A6
1031	RESERVED
1032	RESERVED
1033	RESERVED
1034	RESERVED
1035	Markison Ex. 3 - US2847769
1036	Claim Charts for U.S. Patent No. 10,674,786; 11,013,291; and 11,064,760 for Athalonz Products, served in <i>Athalonz, LLC v. Under Armour</i> , Case No. 2:23-cv-00193 (E.D. Tex.)

I. CLAIM CONSTRUCTION

A. “First Material” and “Second Material”¹

Petitioner originally believed the parties agreed that the “first material” in the heel and the “second material” in the forefoot could be the same or different materials, which was consistent with Athalonz’s infringement contentions. See Petition, 25 n.1. Athalonz’s proposed construction in this proceeding—that the “first material” must be a different material, or different combination of materials, than the “second material”—contradicts both the intrinsic record and Athalonz’s own statements.²

Claim Language. Claim 1 recites “a heel platform ... constructed of a first material” and “a forefoot platform ... constructed of a second material,” without limitation on what these materials are. Claim 6, which depends from claim 1, expressly states that “the first and second materials are constructed of the same one or more materials.” This claim language dictates that the “first material” and “second material” in claim 1 cannot be limited to different materials because claim 6 states the opposite—they may be the same material.³ Mr. Markison, the patent’s

¹ Athalonz does not dispute the remaining terms at issue.

² Athalonz’s suggestion that Petitioner had “notice of the (allegedly) correct construction” (POR, 24) is incorrect, as claim construction briefing had not occurred in the related litigation, and the record supports Petitioner’s proposed construction.

³ Claim 7 of the ’768 patent similarly requires that the first compression factor of the first material is “equal to” the gradient compression factor of the second material.

inventor and prosecuting attorney, confirmed that claim 6 discloses that the first and second materials can be the same. EX1023, 224:13-225:19. This alone should end the inquiry.

Specification. Nowhere does the specification state that the first and second materials must be different. Rather, the specification indicates that materials described as “first” and “second” may be the same. For example, with respect to Figure 43, the specification states that “the first compressible material ***may be*** more compressible [] than that of the second compressible material,” (EX1001, 17:60-62), indicating that it also “may not be” more compressible.

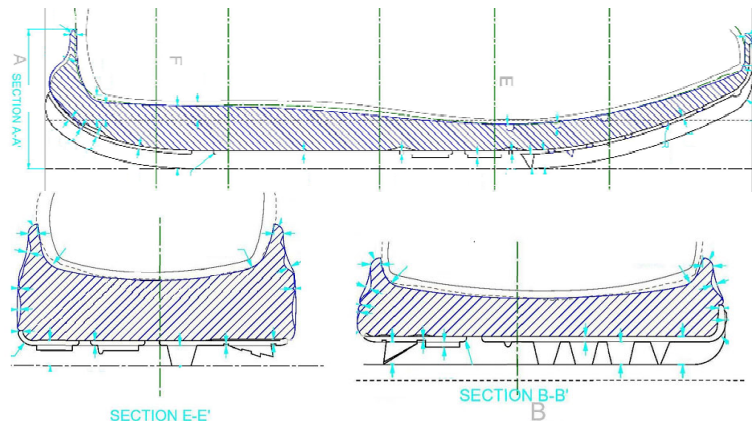
In Figure 93, which Athalonz suggests is directed to these claims (POR, 4), both the heel and forefoot may be comprised of “one material.” EX1001, 27:50-54. And Mr. Markison agreed that the challenged patents disclose a heel platform and a forefoot platform constructed of the same material. EX1023, 47:1-48:1.

Petitioner’s construction is also consistent with the specification’s use of “first” and “second” in other contexts, such as “first” and “second” dimensions that may be the same height (EX1001, 10:17-26) and “first” and “second” angles that may be the same degree (*id.*, 22:4-11).⁴

⁴ Another Athalonz/Markison patent further supports Petitioner’s proposal wherein first and second materials are described as being the same or different in the specification and claims. EX1024, 23:35-36 (“In an embodiment, the first and second material compositions are the same”), claims 10-11.

Athalonz’s cases regarding “first” and “second” elements or components (POR, 16; POPR, 20) are easily distinguishable. Here, the claim terms recite an *attribute* of a component, *i.e.* the type of material, and the modifier delineates multiple instances of that attribute, which could be the same or different. In Athalonz’s cases, “first” and “second” were enumerating and differentiating multiple members of a group (e.g., pivot points; razor blades; sidewall surfaces; or opposed ends, as in *Free Motion*, *Gillette*, *3M* and *Springs Window*, respectively).

Athalonz’s Infringement Contentions. In the corresponding litigation, Athalonz tacitly admitted that the heel and forefoot materials need not be different. Specifically, Athalonz accuses UA’s Charged Curry shoe of infringing the ’768 patent, but as shown below, and as Mr. Markison admitted at deposition, the heel and the forefoot are made of the same material:



UPDATE		
UNIT	PART	MATERIAL
	OUTSOLE	RB 67±3
	MIDSOLE	IMEVA 48±3

EX1025, 580; EX1026; EX1023, 215:6-217:12.

As the Board knows, “[i]t is axiomatic that claims are construed the same way for both invalidity and infringement.” *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003); see also *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) (a “patent may not, like a nose of wax, be twisted one way to avoid anticipation and another to find infringement”). Federal Courts and the PTAB often rely on a patent owner’s contentions when construing claims and determining proper claim scope. See *L.A. Biomedical Research Inst. at Harbor-UCLA Med. Ctr. v. Eli Lilly & Co.*, 849 F.3d 1049, 1061-62 (Fed. Cir. 2017) (considering infringement contentions when construing claim limitation); *Lighting Def. Grp. LLC v. Shanghai Sansi Elec. Eng’g Co. Ltd.*, No. CV-22-01476-PHX-SMB, 2024 WL 4905222, at *3-6, 8-9 (D. Ariz. Nov. 27, 2024) (construing claims and rejecting expert’s opinion on claim construction based on infringement contentions); *10x Genomics, Inc. v. NanoString Techn’s, Inc. et al.*, IPR2023-01300, Paper 25 at 22, 28, 29, 37 (P.T.A.B. Sept. 5, 2024) (construing claim terms “consistent[ly] with patent owner’s infringement contentions...”); *IKEA Supply AG v. Everlight Electronics Co., Ltd.*, IPR2024-00972, Paper 6 at 19-20 (P.T.A.B. Dec. 10, 2024) (determining claim scope and instituting review based, *inter alia*, on “Patent Owner’s infringement contentions”); *Samsung Elecs. Co., Ltd. et al v. Resonant Sys., Inc.*, IPR2023-00992, Paper 47 at

52, 123 (P.T.A.B. Jan. 8, 2025) (determining claim scope based on infringement contentions).

II. ATHALONZ’S BIASED “EXPERT” OPINION IS ENTITLED TO LITTLE, IF ANY, WEIGHT

In assessing the probative value of an expert’s opinion, the Board must consider, *inter alia*, “the interest of the expert in the outcome of the case.” *EC Data Sys., Inc. v. J2 Global, Inc.*, 2014 WL 7171966, at *4 (P.T.A.B. Dec. 15, 2014). Here, Mr. Markison is: 1) Athalonz’s Founder and CEO; 2) Athalonz’s largest shareholder; 3) a named inventor of the challenged patents; and 4) the prosecuting attorney of the challenged patents. EX1023, 11:11-18, 12:10-17. Mr. Markison will receive 30% of any compensation related to the underlying litigation if Athalonz’s shareholders are paid. *Id.*, 15:15-1, 16:2-8. Mr. Markison admitted that the challenged patents provide Athalonz with a competitive advantage that would be negatively impacted if they were invalidated. *Id.*, 18:5-16. Mr. Markison acknowledged having both personal and professional interests in the challenged patents being found valid. *Id.*, 16:9-18.

With these conflicting interests at stake, Mr. Markison has an unmistakable bias and self-interest in the proceeding’s outcome. *See Ex Parte Magna Elecs., Inc.*, 2014 WL 2360424, at *3 (P.T.A.B. May 28, 2014) *EC Data Sys., Inc.*, 2014 WL 7171966, at *4. Mr. Markison’s inability to provide an objective opinion is demonstrated by his testimony and Athalonz documents that directly contradict

numerous statements in his declaration, as explained below. Thus, the Board should afford Mr. Markison's undeniably biased and unsupported opinions little, if any, weight. *See, eBay Inc. et al. v. Global Equity Management (SA) Pty. Ltd.*, No. IPR2016-01829, Paper 63 at 15 (P.T.A.B. Apr. 19, 2018) (giving less weight to testimony where expert was named inventor and a Director of Patent Owner); *VSR Indus. Inc. v. Cole Kepro Intern'l, LLC*, IPR2015-00182, Paper 33 at 43 (P.T.A.B. May. 25, 2016) (testimony from the CEO of Patent Owner "is due less weight than a more objective source."); *Ex Parte Magna*, 2014 WL 2360424, at *3 (the probative value of Petitioner's expert opinion outweighed that of Patent Owner's due to the expert's employment by Patent Owner).

III. MR. DELGATTY'S OPINIONS ARE CONSISTENT AND WELL-SUPPORTED

As the Board previously recognized, Mr. Delgatty provided "ampl[e] support" and "evidence" supporting his conclusion that conventional shoes included a consistent height heel. IPR2024-00640, Paper 8, 10. Mr. Delgatty also provided ample support for his conclusion that conventional shoes include a sole that is thicker at a position proximal to the front edge of the heel platform than at the toe portion, and that this feature was in fact included the Background section of the '768 patent as admitted prior art. EX1002, ¶¶62-69, 76, 102; *see also* EX2023, 150:21-152:22 (Markison acknowledging that the Background section discloses shoes wherein "the heel is higher than the toe" or include a "drop" from the back of the heel to the toe

section). Regardless, Mr. Delgatty provides additional evidence further supporting his conclusions as to the commonality of these design traits and their inclusion in the shoes he cited in his initial declaration. EX1022 ¶¶3-10.

While Athalonz suggests that Mr. Delgatty provides no basis for his opinions on “conventional” traits (POR, 25-30), and Mr. Markison argues that “conventional” shoes do not include such a design (EX2008, ¶165), Athalonz’s documents and Mr. Markison’s testimony (both before and after his declaration) prove otherwise.

For example, Mr. Markison confirmed that all heel limitations in the ‘760, ‘291 and ‘786 patents are practiced by Athalonz’ EnVe shoe. EX2023, 172:4-173:2; 176:6-180:16; 181:16-183:7. Athalonz, however, has consistently described the EnVe golf shoe as having a “conventional” heel and a “conventional” slope from the heel to the toe on the lateral/outer side. See EX1027 (the EnVe “includes *a conventional heel section* and an athletic positioning forefoot section that has *a conventional heel to toe section slope on the lateral side*”); EX1028 (Mr. Markison explaining that the heel of the EnVe “*is conventional* but as you go forward in the shoe, it transitions you to the inside of your foot”). This “conventional” EnVe heel has a consistent height of 20.6 mm “throughout” the heel section. EX1036 (IPR2024-00636, EX2014), 14-15.

Similarly, Mr. Markison confirmed that he believes Athalonz’s Mana Mangrove shoe also practices the claims of the asserted ’760, ’291 and ’786 patents

(EX1023, 175:3-19) and thus has a consistent height heel section. Yet Mr. Markison previously described this shoe as including a “platform in the heel section [that is] flat *just like a normal heel in any kind of golf shoe.*” EX1029.

During his deposition, Mr. Markison directly contradicted his declaration by admitting that a “conventional” heel is “flat from the inside edge to the outside edge” (EX1023, 99:1-16; 139:7-15), and described a “conventional” sole or insole as being “flat” or as having “roughly the same thickness” from the inside of the sole to the outside of the sole. *Id.*, 86:16-89:12; *see also* EX1030 (contrasting Athalonz’ shoes with “a conventional pair of shoes with a flat sole”).

The only reference Mr. Markison cites to support his argument that a shoe’s toe section is not “conventionally lower than the heel section” (EX2008 ¶175) describes a shoe having a toe section higher than the heel as “novel,” *i.e.* “not conventional.” EX1035, 1:36-40; 3:49-4:5; EX1023, 153:10-155:18 (Markison agreeing to same).

Mr. Delgatty, on the other hand, is consistent. Petitioner and Mr. Delgatty have explained that Umezawa discloses a consistent height *midsole*, and a consistent height heel platform, but that Umezawa also discloses that the forefoot platform (which includes *the insole, midsole and outsole*) has a greater thickness at a position proximal to the front edge of the heel platform than at a toe portion. Likewise, Norton discloses a “sole element” (*e.g.* midsole) with a consistent thickness throughout, as does Talarico ‘911. One component of the sole having a consistent

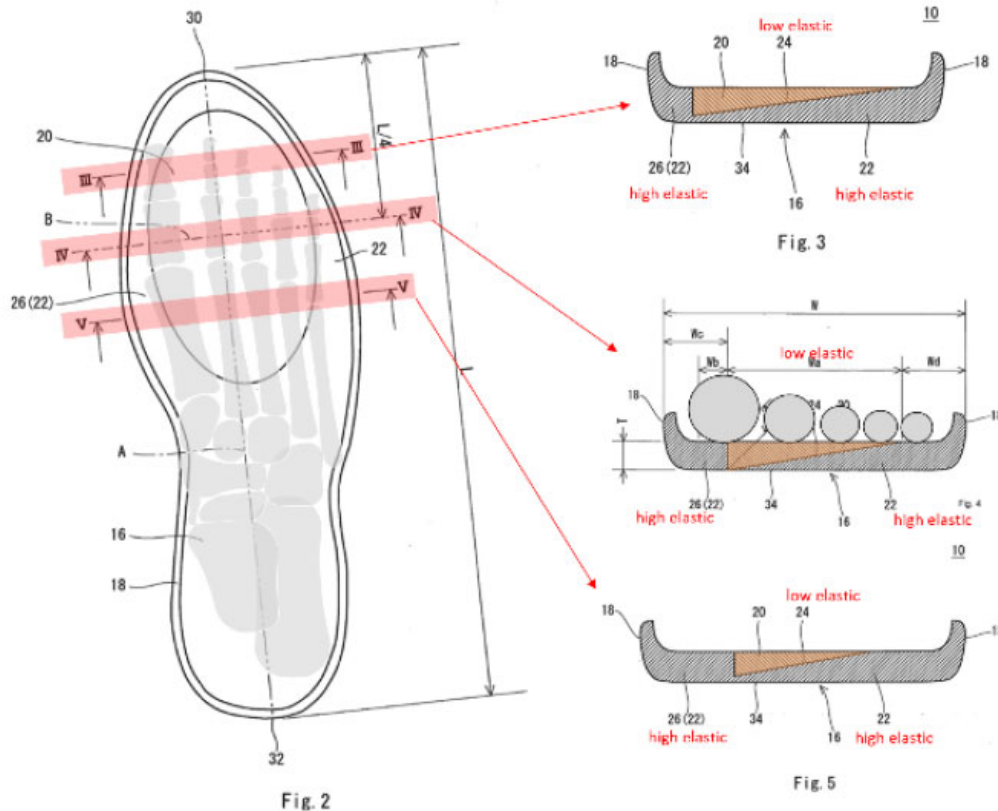
height does not prevent the other elements of the sole, *e.g.* the outsole, from providing a shoe that has a conventional drop from the heel section to the toe section. There is no inconsistency.

IV. GROUND 1 – UMEZAWA

A. Forefoot Platform Having a Gradient Compression Factor and a Greater Compression Near the Inner Edge than the Outer Edge

The Board has already considered and rejected Athalonz's arguments regarding this ground, finding that "Umezawa makes clear that the player's foot must be on top of the compression deformation to cause [] deformation and, thus, must necessarily be 'near an inner edge' and 'near an outer edge of the sole section....'" Paper 8, 19-21. Nothing has changed. As the Board recognized, the claims only require that the forefoot platform have more compression "near" the inner edge of the sole or shoe, where "edge" has been defined as "the portion of the shoe where the foot sits."⁵ Umezawa plainly discloses this design, as shown in Athalonz's annotated Figures 2-5 below.

⁵ Petitioner's proposed construction for "gradient compression factor" does not alter this analysis, as Athalonz urges. POR, 33-34. A POSITA would understand that the proposed construction requiring that the forefoot platform be "increasingly less compressible" does not change the position at which the claimed compressibility is measured and does not require that the gradient extend to the "edges" of the forefoot, but rather that the forefoot platform gets increasingly less compressible as you move from the inside to the outside between those measurement positions.



POR, 35.

As shown in Figure 2, the big and small toes fall partially, or predominantly, on low elastic part 20 on Cross Sections III-III, IV-IV and V-V, shown in Figures 3-5. EX1022, ¶¶11-12; EX1023, 57:2-59:16 (Markison confirming). Athalonz's suggestion that the 3mm measurement of Wb shown in Figure 4 as the relevant point of measure is incorrect because: 1) Wb represents the width of "inner high elastic part 26" which does not correlate to the measurement between a point "near" or "proximal to" the portion of the shoe where the foot sits; and 2) the big toe actually falls on cross section III-III shown in Figure 3, not IV-IV shown in Figure 4, and

Mr. Markison agrees that low elastic part 20 extends closer to the edge of the midsole in Figure 3.⁶ EX1023, 55:8-21. Thus, Athalonz's annotated Figure 3 (POR, 37) is admittedly incorrect as the big toe would actually fall squarely upon low elastic part 20, as shown in superimposed annotated images from the POR below and in Athalonz's annotated Figure 2, above:

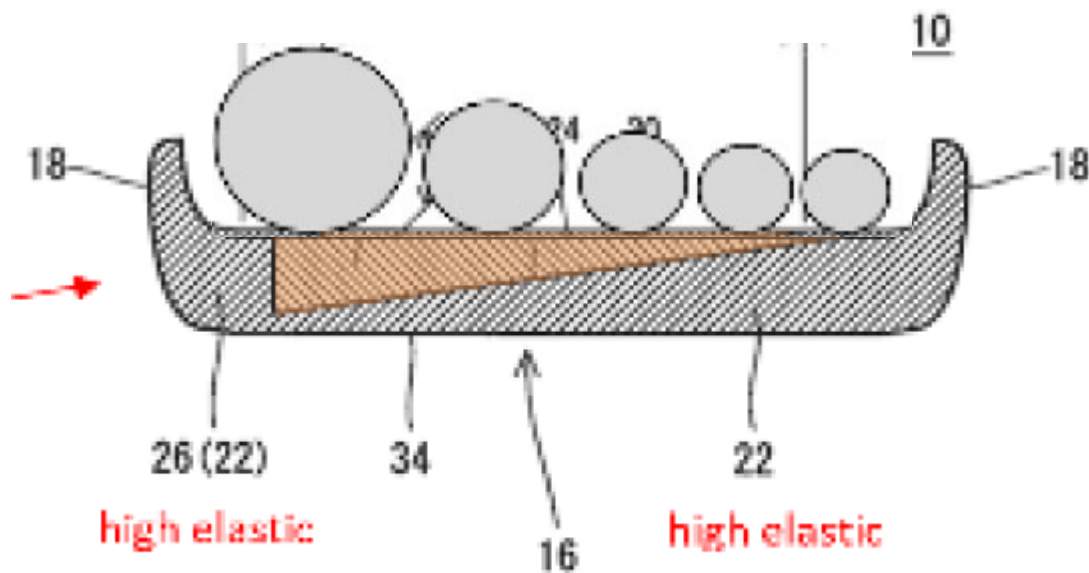


Fig. 3

EX1022, ¶13.

Mr. Markison also admits that Umezawa discloses that the midsole compresses more on the inside than the outside of the forefoot when in use, and that

⁶ Even if Wb were the proper measurement, a POSITA would understand that 3mm is “near” or “proximal to” where the edge of the foot sits when compared to the overall width of the shoe W being 100 mm, as described in Par. 78 and shown in Figure 4. EX1022, ¶15.

the wearer's foot inclines upward toward the outside of the shoe based on this variance (EX1023, 60:11-16; 61:13-63:5), further confirming the placement of the wearer's foot on low elastic part 20. EX1022, ¶14.

B. Substantially Uniform Heel Platform Height Around its Perimeter

Umezawa expressly states that “T” is “the thickness of the midsole 10 ... except for sidewall 18.” EX1006, ¶52. Nowhere does Umezawa suggest that the midsole has any thickness other than T or that it changes in thickness. As Mr. Delgatty explained, a POSITA would understand that Umezawa's disclosure of a golf shoe having a known or typical outsole and insole, along with a midsole having a consistent thickness heel section would result in a heel platform with a substantially uniform height around its perimeter. EX1002, ¶72. As established in the Petition and further confirmed above, “known” or “conventional” shoes include this design trait.⁷ Mr. Markison's reliance on Fig. 1 (EX2008, ¶193) is misplaced because it only depicts the side view of the sole, not a cross section of the heel, and does not show height T.

C. Forefoot Platform- Outer Edge Thicker Near Heel than Toe

Athalonz's suggestion that there is “no disclosure” of this limitation in Umezawa (POR, 44) is wrong. *See* Petition, 28-29, citing annotated Figure 1, Ex.

⁷ Petitioner is not relying on inherency. POR, 40-41. Petitioner is relying on what the term “known insole” and “known outsole” means to a POSITA.

1002, IX.A.f. Mr. Delgatty explained that a POSITA would understand from Umezawa's disclosure that the "material and structure for the outsole 12 are equal to those of known outsole(s)" that the sole is thicker near the front edge of the heel platform than at the toe portion (EX1002, ¶75). Athalonz's suggestion that Petitioner's analysis is inconsistent or contradictory (POR, 44-45) is also wrong. See Section III.

V. GROUND 2 – UMEZAWA + GALLAS

Athalonz's argument that Gallas fails to disclose a heel platform having a first height that is "substantially uniform" around its perimeter (POR, 41-42) contradicts Gallas' express teachings that the "rear portion 110" of sole 106 has "*an elevation*," or "*the elevation* of the rear portion 110," *i.e.*, a *singular* elevation. EX1020, ¶¶21, 28, 30. Gallas also discloses that the rear portion "may" taper, which Mr. Markison agrees means "optional." EX1023, 79:11-81:6. Thus, Gallas discloses that the heel platform *may not* taper, but rather be flat from front to back. EX1022, ¶16.

Gallas' figures also disclose the claimed heel platform. As the Board recognized, this limitation encompasses "a heel platform that includes some degree of curvature and height change from its inner edge to its outer edge, and from the front to the rear." Paper 8, 11; Petition, 18-19. A POSITA would understand that Gallas' heel platform in Figures 2-3, 5, meet this limitation by showing a heel having only a small degree of height change from the front to the back. EX1022, ¶17. A

POSITA would also understand Gallas' disclosure that the "angle of the shoe slant[s] down from the back to the front" refers to the height change between the heel and the toe section, not that the heel platform itself must be slanted. *Id.*

Athalonz does not refute that Gallas discloses a thicker forefoot platform at the outer edge proximal the heel platform than at a toe portion. POR, 45. Thus, Athalonz's fails to demonstrate that claims 1-5 and 8 are not obvious over Umezawa in view of Gallas.

VI. GROUND 3 – NORTON

A. Forefoot Platform Constructed of a Second, Distinct, Material

The "first material" in the heel and the "second material" in the forefoot should be construed to include the same one or more materials. *See supra* Section IA. If the Board disagrees and requires that the first and second materials be different, however, Norton still renders this design obvious.⁸

As the Board recognized, "[b]ecause Norton describes using its sole element as part of a sole, and not as the entire sole, ... Norton discloses the recited forefoot platform made of a second material." Paper 8, 31; *see also* EX1007, 5:63-67;

⁸ Athalonz is wrong that Petitioner cannot address this claim construction. POR, 24-25. "The Board cannot adopt a new claim construction without giving the petitioner an opportunity to respond." *Axonics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374, 1384 (Fed. Cir. 2023); *Apple Inc. v. Andrea Elecs. Corp.*, 949 F.3d 697, 706-07 (Fed. Cir. 2020) ("the petitioner ... may introduce new evidence after the petition stage if the evidence is a legitimate reply to evidence introduced by the patent owner."); 37 C.F.R. § 42.23(b).

EX1022, ¶¶18-19. Nothing in Athalonz’s Response alters that conclusion. Mr. Markison also agreed that one could make the heel portion of Norton’s sole element of the same material as the forefoot but without a compression gradient, which would meet the Board’s suggestion that the first and second materials be “different in some manner.” Paper 8, 13; EX1023, 48:10-50:14; EX1022, ¶20.

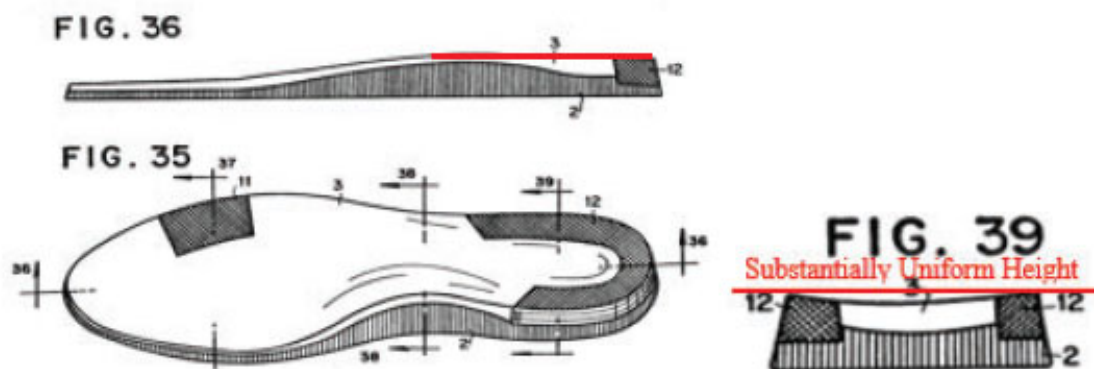
B. Substantially Uniform Heel Platform Height Around its Perimeter

Norton’s inventive sole element is typically a midsole that may be located in just a portion of an athletic shoe’s complete sole ensemble. EX1007, 5:57-65. It would be obvious to a POSITA that the remainder of the shoe would be a conventional design, including a heel platform with a consistent height throughout. EX1002, ¶¶61-69, 92, 97-98; Section III. This expected, conventional design trait is consistent with Giese, which is expressly incorporated by reference in Norton and discloses a heel platform with consistent thickness. EX1010, 1:10-27 (conventionally “shoe bottoms have consisted primarily of flat surfaces on both their top and bottom” and more recently a “slight arch” on the top surface for contouring).⁹

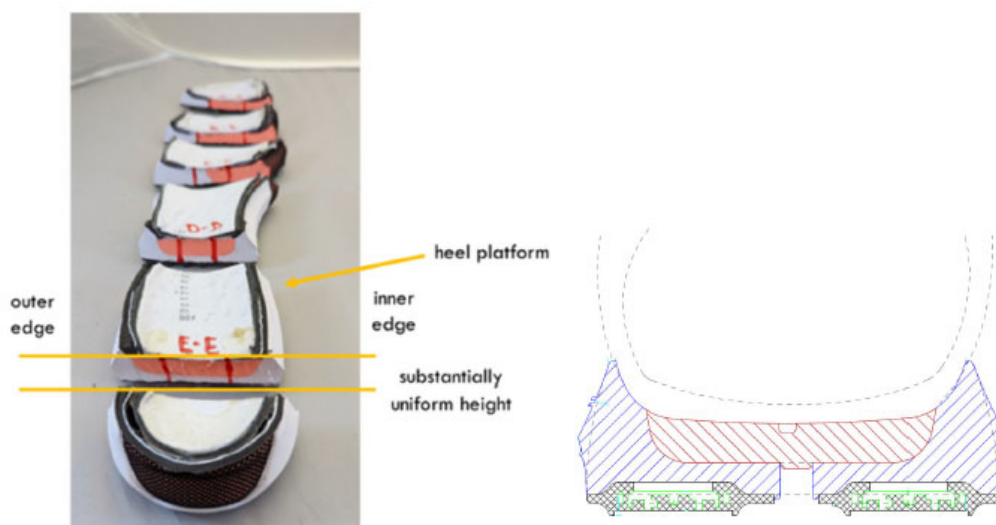
While Athalonz suggests that Giese fails to disclose the “substantially uniform” heel platform (POR, 51), this position is clearly unsupported as the heels

⁹ Although his declaration suggests “shoe bottom” is only an outsole (EX2008, ¶233), Mr. Markison agreed that Giese discloses it could be a midsole-outsole combination. EX1023, 67:7-69:7.

in Giese are substantially flat from back to front with less curvature and change in height from inside to outside than the accused products:



EX1002, ¶93.



Petition, 19; EX1022, ¶21. Considering the entirety of Norton's disclosure (including the incorporated material), a POSITA would envision implementing

Norton's sole element in a shoe with a conventionally uniform heel design (like that in Giese).¹⁰ EX1022, ¶22.

C. Forefoot Platform- Outer Edge Thicker Near Heel than Toe

As above, a POSITA would understand Norton's sole element is to be used with "sports shoes" having conventional design traits. These traits would include "a sole that is thicker at a position proximal to the front edge of the heel platform than at the toe portion" because "it places the foot in a more natural position and is more comfortable for...sports-related activities." Ex. 1002, ¶¶61-69, 98.

This knowledge and expectation of a POSITA is further confirmed by Giese and Matthews (which are both expressly incorporated into Norton), as well as Athalonz's admitted prior art. Petition, 43-45; Ex. 1002, ¶¶99-102. Mr. Delgatty explained why a POSITA applying Norton's teachings would incorporate this feature and expect success in doing so. EX1002, ¶103. Athalonz cannot show that Norton teaches away from this limitation simply because it is improving the art in other ways. POR, 53. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) ("A reference does not teach away ... if it merely

¹⁰ Athalonz' rigid requirement for a "motivation to combine" (POR, 50-51) is not appropriate here, particularly where the material incorporated by reference is used to illustrate a POSITA's knowledge. Nevertheless, Mr. Delgatty's explanation of the obviousness of this design to a POSITA is well-explained. EX1002, ¶¶61-69; 92-103. Norton does not in any way "teach away" from using a conventional heel design, rather it merely suggests adding a particular "sole element" into "sports shoes." EX1007, Abstract; 4:19-21 ("adapted to different sports"). EX1022, ¶23.

expresses a general preference for an alternative invention....”). Nor is it inconsistent with Norton’s disclosure that the sole element (typically a portion of a midsole in a sole ensemble) has a consistent thickness. POR, 52-53; EX1022, ¶24.

Athalonz’s claim 5 argument also takes an improperly narrow view of obviousness. Mr. Delgatty detailed why a POSITA would find claim 5 obvious (EX1002, ¶105), and Athalonz’s suggestion that a POSITA would only understand Norton as disclosing the benefits of using a “single material sole” (POR, 53-54) is wrong. A POSITA would also understand that Norton taught advantages of including a compression gradient in the forefoot, regardless of material(s), (Petition, 49-50) and Talarico ‘911 discloses a dual-material forefoot having that beneficial design. Thus, a POSITA would know to incorporate a dual-material forefoot like that in Talarico ‘911 having a compression gradient, as described in Claim 5. EX1022, ¶25.

VII. GROUND 4 – WON + NORTON

A. Forefoot Platform Constructed of a Second, Distinct, Material

Even if the Board construes the first and second materials to be different, the Won and Norton combination render this design obvious. As the Board recognized, “[b]ecause Norton describes using its sole element as part of a sole, and not as the entire sole, ... Norton discloses the recited forefoot platform made of a second material.” Paper 8, 31. The Board also recognized that “the soft surface on the

inside of [Won's] sole sufficiently shows a forefoot platform made of a material different from its heel" and that "Figure 5 appears to show that Won's heel and soft surface are made of materials different in some manner, such as softness." *Id.*, 37. Thus, "the proposed combination would have had different materials for Norton's sole element that Petitioner proposes to use in Won's forefoot and the 'conventional' heel disclosed in Won." *Id.*, 37-38. Nothing in Athalonz's Response alters that conclusion.

Athalonz's suggestion that Won fails to disclose a "forefoot platform" and that Won's forefoot materials have "no appreciable thickness" are wrong. POR, 55-56; EX1022, ¶26. Won discloses that the dual-compression forefoot platform can include a longitudinal axis dividing the two elastic materials in either the sole or the midsole. Petition, 56-59; EX1005, 3:14-15 ("FIG. 5 is a plan view showing the sole or mid sole of the golf shoes according to the present invention."). Mr. Markison acknowledged that it can be either Won's sole or midsole that is constructed of the softer forefoot material, and that his suggestion that the softer material is only in an outsole surface having "no appreciable thickness" has no support in Won. EX1023, 21:2-19; 22:19-22; EX1022, ¶¶26-33.

Moreover, Won discloses that its shoe design improves weight distribution, stability, and balance (EX1005, 1:5-8, 2:36-63, claim 1) which require the forefoot platform—not just its surface—to have the compressive differential. Mr. Markison

admits that Won discloses that the sole of the shoe is tilted inward toward the “softer and more elastic material” on the inside of the forefoot (EX1023, 24:22-25:12; 35:13-18; 38:1-6), also confirming a softer material compressing more than the harder material on the outside. EX1022, ¶¶30-33.

Finally, Mr. Markison’s suggestion that Won is not enabling is based only on his misunderstanding of Won’s teachings. Won does not suggest that the more compressible material would result in the spikes on that side of the forefoot being pressed further into the ground. POR, 57-58. As Mr. Markison admits, that interpretation makes no sense and would not work as elsewhere described and claimed. *Id.*, EX2008, ¶¶140-45; EX1022, ¶34.

Mr. Delgatty explained, “Won’s multi-material sole or midsole could easily be replaced with a single material sole element disclosed in Norton.” EX1002, ¶114. And a POSITA would know that only the forefoot portion of the sole or midsole could be altered or replaced. EX1022, ¶¶35-37; Ex. 1023, 47:1-19 (Mr. Markison acknowledging the only two choices are using the same or different materials). Both Norton and Won expressly teach that the heel portions may be different than the forefoot (EX1002, Fig. 5, 6:28-36, 4:46-58; EX1007, 5:63-67), as Mr. Markison admitted. EX1023, 32:8-33:9. Thus, it would have been obvious to replace Won’s forefoot platform, or some element thereof (including either the outsole or midsole), with Norton’s sole element. EX1022, ¶¶38-49.

Mr. Markison also agreed that if the entire midsole or sole of Won was replaced with Norton's sole element wherein the heel portion is made of the same material as the forefoot but lacks the compression gradient, this embodiment would meet the Board's proposal suggesting that the first and second materials be "different in some manner." Paper 8, 13; EX1023, 48:10-50:14; EX1022, ¶40.

B. A POSITA Would Expect Success

Athalonz's argument that a POSITA replacing Won's "exterior surface" with Norton's "interior sole element" would not expect success (POR, 60) ignores what the references suggest to a POSITA, and a POSITA's knowledge. First, as explained above, Mr. Markison agrees that Won discloses that its *sole or midsole* can be constructed of a softer material in the forefoot, and agrees that Norton describes a "sole element" that could alternatively be the shoe's outsole or insole. EX1023, 39:19-41:2. A POSITA would know how to incorporate Norton's variably-compressible insole, midsole or outsole with the sole or midsole in Won, and expect success in doing so. EX1022, ¶¶38-40.

Second, Athalonz's argument is legally flawed because "[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference...." *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). "Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *Id.* Here,

Athalonz's overly narrow view considers only one way to bodily incorporate the teachings from Norton into Won, and fails to consider all the references' teachings or the modifications that a POSITA would make when combining.

C. Substantially Uniform Heel Platform Height Around its Perimeter

The Board already correctly rejected Athalonz's argument that Won does not disclose a substantially uniform-height heel platform. IPR2024-00640, Paper 8, 9-10 ("the heel portion is 'flat (0°)' and of uniform thickness as is the 'standard' with conventional golf shoes."). Athalonz's suggestion that Won fails to teach a substantially flat portion from the rear to the front of the heel (POR, 62) is also wrong, as illustrated, for example, in Won's Figs 2-3, 6-7. *See also* EX1002, ¶¶118-122. Thus, Won discloses a consistent-height heel platform, including "around its perimeter." That conclusion is supported by "conventional" shoes including this design trait. See Section III.

D. Forefoot Platform - Outer Edge Thicker Near Heel than Toe

Mr. Delgatty's annotations of Figure 6 are not misleading. POR, 63. A POSITA can plainly see that the forefoot is thicker at a position proximal to the heel than at the toe.

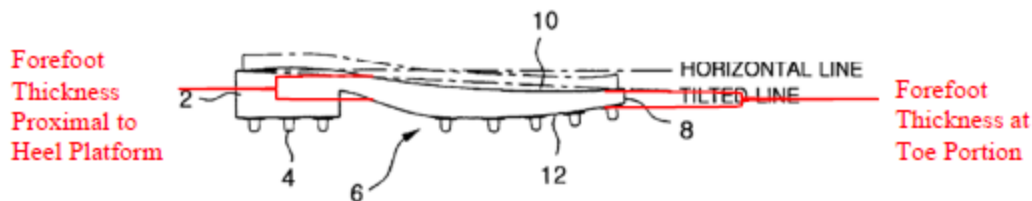


FIG. 6

Petition, 59.

And contrary to Athalonz’s suggestion (POR, 64), Mr. Delgatty explained why the conventional forefoot platform, depicted in Figures 6 and 7 could be used with the Figure 5 embodiment. EX1002, ¶¶124-125. Petitioner has provided further evidence of this design being included in the “conventional” shoes shown in Figure 6 and 7. See Section III.

Athalonz never addresses that Won teaches that the bottom surface of the toe portion may be parallel with the bottom surface of the heel portion, and that the upper surface of the toe portion is lower than that of the upper surface of the heel portion (EX1008, 1:46-53), thereby confirming that the thickness of the forefoot platform proximal to the heel portion is greater than the thickness at the toe portion. Petition, 60. Finally, Mr. Delgatty disproves Athalonz’s suggestion that there is “no appreciable difference” in the thickness of the forefoot platform in the FootJoy shoe (POR, 64). EX1022, ¶8.

VIII. GROUND 5 – WON + TALARICO ‘911

A. Forefoot Platform Constructed of a Second, Distinct, Material

Even if the Board construes the first and second materials to be different, the Won and Talarico ‘911 combination renders this design obvious. Talarico ‘911 discloses that the inventive features may be incorporated into “the midsole, outsole, or innersole” (EX1008, 1:14-16), and both Won and Talarico ‘911 disclose that the heel portions may be different than the forefoot. EX1002, Fig. 5, 6:28-36, 4:46-58; EX1008, Figs. 8-15; 11:42-68; 15:15-22; 20:1-13; EX1023, 70:11-71:19; 73:11-75:7; EX1022, ¶¶41-47.

It would have been obvious to a POSITA to replace the forefoot platform of Won, or some portion thereof, including either the outsole or the midsole, with Talarico ‘911’s variable-compression sole element. EX1022, ¶45; *see also* Paper 8, 44 (“the proposed combination [Won/Talarico ‘911] would have resulted in materials different in some manner for the forefoot and heel, as shown, for example, in Figure 5 of Won.”). Alternatively, a POSITA would recognize that the entire midsole of Won could be replaced with Talarico ‘911’s midsole made of differing compression EVA in the forefoot, and a single material in heel. EX1022, ¶46.

B. A POSITA Would Expect Success

Athalonz’s suggestion that a POSITA would not expect success “using Talarico ‘911’s sole to replace Won’s outer surface with affixed spikes” (POR, 66)

ignores what the references would suggest to a POSITA and a POSITA's knowledge. As above, a POSITA would know how to incorporate Talarico '911's variably-compressible sole element with the sole or midsole of Won, and expect success in doing so. EX1022, ¶47. Athalonz's bodily incorporation argument is legally flawed for the same reasons above. *Keller*, 642 F.2d at 425.

C. Substantially Uniform Heel Platform Height Around its Perimeter

Won discloses this limitation. See Ground 4. Athalonz also never addresses Petitioner's showing that the combination of Won and Talarico '911 further disclose this limitation. POR, 65.

D. Forefoot Platform - Outer Edge Thicker Near Heel than Toe

Won discloses this limitation. See Ground 4.

IX. GROUND 6

Gallas discloses the claimed heel platform. See Ground 2.

X. SECONDARY CONSIDERATIONS

Mr. Delgatty has considered the POR's alleged secondary considerations of nonobviousness, and he maintains that the challenged claims are obvious.¹¹ EX1022, ¶48.

¹¹ Athalonz bears the burden to produce evidence of secondary considerations. *ZUP, LLC v. Nash Mfg.*, 896 F.3d 1365, 1373 (Fed. Cir. 2018). Mr. Delgatty had no ability or obligation to address evidence of secondary considerations preemptively in his initial declaration.

Long-Felt, Unmet Need - to show a long-felt, unmet need requires: (1) a persistent need that was recognized by skilled artisans; (2) the need must remain unsatisfied before the applicant's invention; and (3) the invention must in fact satisfy the long-felt need. MPEP § 716.04. Athalonz 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. EX1022, ¶49. In fact, there are *no* products in the industry, including Athalonz's own products, that practice the claims of the '768 patent. *Id.*, ¶50.

Copying - "copying requires evidence of efforts to replicate a specific product, which may be demonstrated through internal company documents, direct evidence such as disassembling a patented prototype, photographing its features, and using the photograph as a blueprint to build a replica, or access to the patented product combined with substantial similarity to the patented product." *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010). Athalonz provides no such evidence. In fact, Athalonz failed to include *any* technical analysis of Petitioner's products, or any evidence that Petitioner's shoes practice the asserted patents. EX1022, ¶51; EX1023, 220:3-223:12.

XI. CONCLUSION

Claims 1-5 and 8 of the '768 patent are unpatentable.

DATED: April 9, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE, together with all exhibits and other documents filed therewith, was served to Patent Owner by causing it to be sent by email to counsel for Patent Owner at the following email addresses:

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CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the foregoing PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE contains 5538 words according to the word processing program used to prepare it.

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