



**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ATHALONZ, LLC,

Plaintiff,

v.

UNDER ARMOUR, INC.,

Defendant.

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Case No. 2:23-cv-00193-JRG

Demand for Jury Trial

**DEFENDANT UNDER ARMOUR, INC.'S
RESPONSIVE CLAIM CONSTRUCTION BRIEF**



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I. INTRODUCTION

The Asserted Patents, U.S. Patent Nos. 10,674,786 (“the ’786 patent,” Ex. A); 11,013,291 (“the ’291 patent,” Ex. B); 11,064,760 (“the ’760 patent,” Ex. C); 11,510,456 (“the ’456 patent,” Ex. D); and 11,375,768 (“the ’768 patent,” Ex. E) relate to athletic shoes that promote optimal athletic positioning. The Asserted Patents disclose two ways to achieve this allegedly novel positioning: 1) to slope the soles of the shoes downward from the heel section to the toe section and from the outside of the toe section to the inside of the toe section; and 2) to include a forefoot platform that is more compressible near an inner edge of the shoe than an outer edge of the shoe. The disputed claim terms represent characteristics of the claimed soles, including how to define “athletic positioning,” what materials are claimed, and how to measure the sole’s slope.

As shown below, Under Armour’s constructions flow directly from a consistent application of the canons of claim construction to the intrinsic record: the plain language of the claims, the specification, and the prosecution history. And Under Armour’s constructions are buttressed by substantial extrinsic evidence in the form of Athalonz’s documents describing the claimed features. Athalonz’s constructions, on the other hand, conflict with the intrinsic record, the inventor’s testimony and Athalonz’s own non-litigation inspired statements describing the inventions. The Court should adopt Under Armour’s constructions.

II. DISPUTED CLAIM TERMS

A. “athletic positioning sole section” / “athletic positioning shape” / “a foot platform of the left/right sole provides an athletic positioning”

Claim Term	Athalonz’s Proposal	Under Armour’s Proposal
“athletic positioning sole section” (’786 patent, claim 5)	“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”	“a sole section that places more weight on the inside of the wearer’s legs and feet than the outside” (’786 patent, claim 5)
“athletic positioning shape” (’291 patent, claim 1)		

“a foot platform of the left/right sole provides an athletic positioning” (’760 patent, claim 1)		“a shape that places more weight on the inside of the wearer’s legs and feet than the outside” (’291 patent, claim 1) “a foot platform that places more weight on the inside of the wearer’s legs and feet than the outside” (’760 patent, claim 1)
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The dispute is whether “athletic positioning” relates to the shape of the shoe, as Athalonz proposes, or to weight distribution, as Under Armour contends. Under Armour’s proposal should be adopted because it is consistent with Athalonz’s unequivocal, consistent explanation of what this term means in the context of its invention and because Athalonz’s proposal violates the canon prohibiting constructions that render claim language superfluous.

Claim Language. Every claim reciting “athletic positioning” already includes the language of Athalonz’s proposed construction, *i.e.*, “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.” *See* Ex. A, cl. 5; Ex. C, cl. 1; and Ex. B, cl. 1. For example, claim 1 of the ’760 patent expressly recites a higher heel section and a higher outer toe section:

a foot platform of the left sole provides ***an athletic positioning*** of a left big ***toe area*** of the left shoe ***at a lower position than a left heel*** area of the left shoe ***and at a lower position than an outer small toe*** area of the left shoe, ...

a foot platform of the right sole provides ***an athletic positioning*** of a right big ***toe area*** of the right shoe ***at a lower position than a right heel*** area of the right shoe ***and at a lower position than an outer small toe*** area of the right shoe ...

Ex. C, cl. 1.

Thus, adopting Athalonz’s construction would improperly render those limitations superfluous. *Cephalon, Inc. v. Abraxis Bioscience, LLC*, 618 F. App’x 663, 666 (Fed. Cir. 2015);

Merck & Co. v. Teva Pharms. USA, Inc., 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.”); *cf. Pulsifier v. United States*, 601 U.S. 124, 143 (2024) (“When a statutory construction ‘render[s] an entire subparagraph meaningless,’ this Court has noted, the canon against surplusage applies with special force.”). “Athletic positioning” must mean something more than higher heel and outer toe sections because the claim already requires those things.

Specification. The specification supports Under Armour’s proposal, describing “athletic positioning” as placing more weight on the inside of the wearer’s legs and feet than the outside:

When a person wears such a shoe, ***the athletic positioning shape of the insole and/or sole, places the person in an athletic position (e.g., knees slightly bent, weight more on the inside of the legs than the outside of the legs,*** knees position aligned with ankles and hips, and/or other athletic positioning characteristics). For example, *when a pitcher wears a pair of baseball spikes that include the athletic positioning shape insole 12 and/or sole 10, the pitcher’s toe and ball of foot are a primary contact point with the ground, which shifts the pitcher’s weight to the inside of his/her legs* and slightly bends the pitcher’s knees. In this position, the pitcher’s lower half is in a more optimal position for pitching.

Ex. C, 9:25-37.

As another example, a batter may wear a pair of baseball spikes that include the ***athletic positioning shape insole 12 and/or sole 10***. When in the batter’s box, the baseball spikes enable the batter ***to place more weight on his/her big toe and ball of foot than on the outer edge of the foot***. In addition, the batter’s knees are flexed and ***his/her weight is shifted to the inside portion of the leg as opposed to the outside portion of the leg***, which promotes a better hitting stance.

Id., 9:38-45.

Accordingly, when a shoe that includes the present insole/sole assembly is worn, the more compressible areas on the insole/sole assembly compress more than the less compressible areas, putting the wearer in an ***athletic position*** (e.g., one or more of heel higher than toes, knees bent, ***more weight on big toe &/or ball-foot, more weight on inside of leg versus- outside of leg, etc.***).

Id., 28:29-35.

While the description of “athletic positioning” in the specification mentions other possible body positions, *e.g.* knees bent or aligned with ankles and hips, the shifting of the wearer’s weight to the inside is the only result that applies across all sports. *Compare* batting vs. pitching described in *id.*, 9:25-37 and 9:38-45; *see also* Athalonz’s statements regarding athletic positioning, Ex. F, ATHALONZ0003123 [REDACTED]

[REDACTED];
Ex. G, ATHALONZ0007729 [REDACTED]

[REDACTED]. Athalonz’s suggestion that Under Armour focuses on “just one possible result” (Dkt. 64 at 6) ignores the uniqueness of this attribute and its direct connection to the shape limitations. The *Bristol–Myers Squibb* decision cited by Athalonz (*id.*) is inapposite as it only addresses whether a statement of intended result in a claim **preamble** should be deemed limiting—that is not an issue present here as “athletic positioning” is a claim limitation and as a matter of law must mean something more than the other language the claims already recite.

Athalonz also suggests that the specification defines “athletic positioning” consistent with its construction (Dkt. 64 at 5 citing Ex. A at 8:65-9:8), but that passage is not lexicography; it is descriptive “in general.” Regardless, because the claim already recites those shape limitations, the additional claim limitation “athletic positioning” must mean something different. *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950-51 (Fed. Cir. 2006).

IPRs: In its Patent Owner’s Preliminary Response to Under Armour’s *Inter Partes* Review Petitions challenging the Asserted Patents Athalonz states, “[t]he patent claims a specific arrangement of a shoe that allows for ‘athletic positioning’. . . .” Ex. H, p. 20. This statement supports Under Armour’s proposal and undermines Athalonz’s, as it is nonsensical for the “specific arrangement” of a shoe to “allow for” the shape of the shoe, as Athalonz’s construction

would require. Rather, the specific arrangement of the shoe *is* the shape of the shoe; but that arrangement allows for the weight distribution representative of an athletic position (*i.e.*, increased weight on the inside of the wearer’s legs and feet).

Objective Inventor Testimony. During his deposition, Michael “Rick” Adair—a co-inventor of the Asserted Patents—described athletic positioning [REDACTED]

[REDACTED].¹ For example, in ADAIR0000169, Mr. Adair’s inventive concept is described [REDACTED]

[REDACTED] Ex. I. When asked about that position, he stated [REDACTED]

[REDACTED] Ex. J, 25:14-26:4. Similarly, when referencing ATHALONZ0002848, Mr. Adair was asked about [REDACTED]

[REDACTED] He explained that [REDACTED]

[REDACTED] *Id.*, 45:16-46:20.

Mr. Adair also described the difference between a conventional stance vs. an optimal athletic stance [REDACTED]

¹ Under Armour anticipates that Athalonz will try to discount certain admissions of its inventor’s testimony based on Federal Circuit precedent like *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112 (Fed. Cir. 1996) or *Bell & Howell Document Management v. Altek Sys.*, 132 F.3d 701 (Fed. Cir. 1997). But this line of cases is inapposite. Here, Mr. Adair is not providing “self-serving” statements on behalf of the patentee, but rather is providing testimony against the interest of the patent owner, and therefore satisfying any question of veracity or reliability.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
Id. 47:13-48:9; see also *id.* 93:7-25 ([REDACTED])

[REDACTED]
[REDACTED]). Not once did Mr. Adair mention any other body positioning (*e.g.*, the wearer’s knees being bent or knees being aligned with the wearer’s hips or ankles) when describing athletic positioning.

Athalonz’s description of the invention. Any question about how a person of skill would understand the term “athletic positioning” in the context of this invention is resolved by Athalonz’s own repeated and consistent explanation that it means a weight distribution favoring the inside of the feet and legs. For example, in this litigation Athalonz equates athletic positioning with a shifted weight distribution.

Athalonz’s inventors developed breakthrough technology in sports footwear to immediately help athletes improve their athletic performance. Dkt. 23 ¶ 1. They did this with innovative footwear that shifts athletes’ weight so that they naturally adopt an athletic stance that efficiently transfers force during movement. *Id.*

Dkt. 64 at 1; Amended Complaint, Dkt. 23 at ¶ 1.

Athalonz’s inventors developed footwear that naturally encourages athletes to adopt optimal athletic positions. When an athlete wears the innovative footwear, the particularly three-dimensional sloped shape and compressibility of the shoe shifts the athlete’s weight into an ideal athletic stance. Optimal athletic positioning becomes one less thing competing for an athlete’s attention.

Amended Complaint, Dkt. 23 at ¶ 15.

Athalonz’s pre-litigation documents are unequivocal that “athletic positioning” refers to placing more weight on the inside of the wearer’s feet and legs. For example, in one presentation

[REDACTED]

[REDACTED]

[REDACTED]

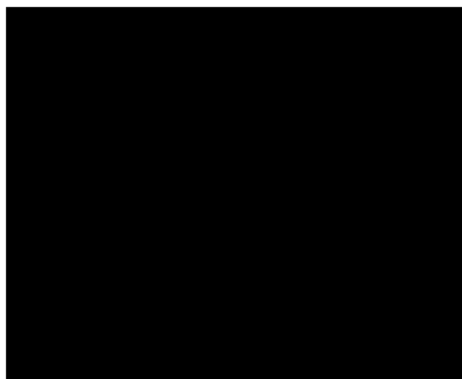
[REDACTED]

[REDACTED] Ex. K, ATHALONZ0005924-30 (emphasis added). Athalonz compared this to [REDACTED]

[REDACTED]

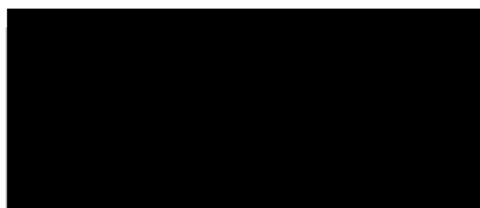
[REDACTED] *Id.*, at ATHALONZ0005930.

In a similar a white paper entitled [REDACTED] published by Athalonz's predecessor company Admark Athletic Ventures, athletic positioning is consistently described as placing the weight of the wearer's body on the inside of the balls of the feet and on the inside of the wearer's legs.



[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

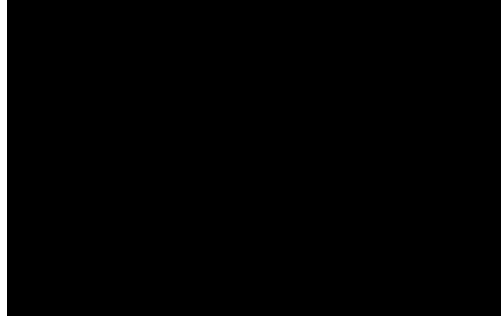
Ex. L, ATHALONZ0002849-50.



[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Id., at ATHALONZ0002850.

This white paper also distinguished between a conventional position with equal weight distribution compared to the optimal athletic positioning allegedly created by the invention where the athlete's weight is on the inside balls of the feet:



[REDACTED]

Id., at ATHALONZ0002853.

The remainder of Athalonz documents that address athletic positioning are consistent, describing it as placing more weight on the inside of the wearer's feet and legs. For example:

➤ [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Ex. M, ATHALONZ0008342.

➤ ***“Athalonz Shoes - Weight forces on inside of feet.*** Leading Competitor – Weight forces on outside of feet.” Ex. N, ATHALONZ0007392

➤ [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Ex. O, ATHALONZ0006423-25.

➤ [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED] Ex. P,
 ATHALONZ0007763.

B. “inside edge” and “outside edge” / “inner edge” and “outer edge”

Claim Term	Athalonz’s Proposal	Under Armour’s Proposal
“inside edge” / “outside edge” (’291 patent, claim 1)	“the edges of the portion of the shoe where the foot sits”	Plain meaning
“inner edge” / “outer edge” (’786 patent, claims 1 and 5; ’760 patent, claim 1; ’768 patent, claim 1; ’456 patent, claims 1 and 10)		

The dispute is whether the well-understood, plain English words describing an inside and outside edge need any specific construction. Under Armour contends they do not. Athalonz attempts to change the meaning of inside/outside *edges* to “the portion of the shoe where the foot sits.” Dkt. 64, p. 7. This unsupported proposal adds ambiguity that otherwise does not exist.

The plain meaning of “edge” is the outer limit where something begins or ends. *See* Ex. Q, p. 366 (Merriam Webster’s Dictionary defining “edge” as “the line where an object or area begins or ends”); Ex. R, p. 429 (Oxford American Collegiate Dictionary defining “edge” as “the outside limit of an object, area, or surface; a place or part farthest away from the center of something”). So a shoe’s inside/outside edge is the inside/outside boundary of that shoe.

Athalonz’s attempts to depart from this plain meaning by arguing that the “‘inner’ and ‘outer’ edges have a specific meaning within the patents,” (Dkt. 64, p. 7), but the Federal Circuit has held repeatedly that the plain and ordinary meaning controls except in cases of lexicography or disavowal. *See, e.g., Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 967 (Fed. Cir. 2022) (“We depart

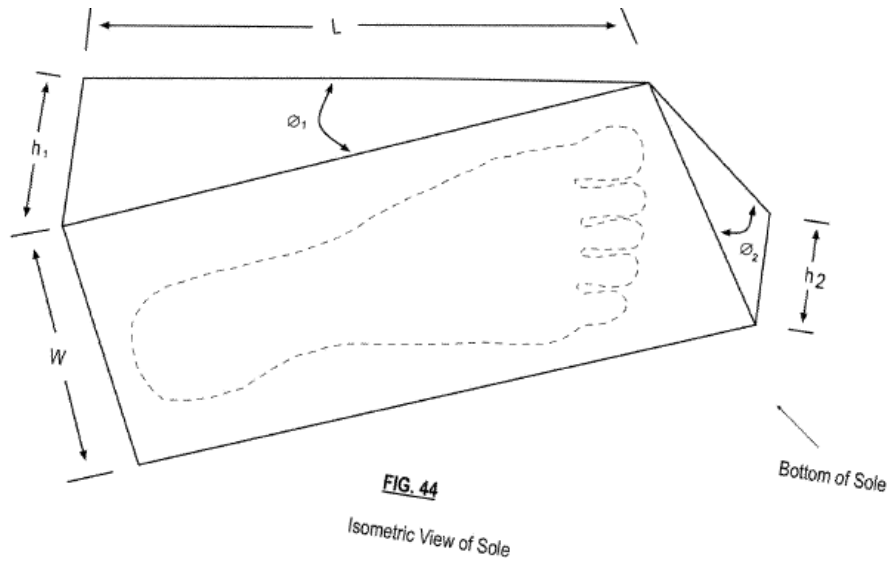
from the plain and ordinary meaning of claim terms based on the specification in only two instances: lexicography and disavowal.”) (quoting *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014)); *Cellular Comm’s Equipment LLC v. LG Elecs., Inc.*, No. 6:14-CV-982, 2016 WL 2808887, at *14-15 (E.D. Tex. May 13, 2016). Athalonz does not argue lexicography or disavowal. Nor could it credibly do so, because there is nothing even close to either here. “The standards for finding lexicography and disavowal are exacting.” *Hill-Rom*, 755 F.3d at 1371. “To act as its own lexicographer, a patentee must clearly set forth a definition of the disputed claim term other than its plain and ordinary meaning and must clearly express an intent to redefine the term.” *Id.* (internal quotation marks omitted). At most, Athalonz points to the references about common shoe sizes, but that alone is not enough to limit the plain and ordinary meaning. Athalonz’s attorney argument regarding standard shoe sizes and shoes having varied toe shapes (Dkt. 64, p. 8) is similarly insufficient. “Disavowal requires that the specification or prosecution history make clear that the invention does not include a particular feature ... or is clearly limited to a particular form of the invention.” *Id.* at 1372 (internal quotations marks, brackets, and citations omitted). The intrinsic record does not support Athalonz’s construction.

Claim Language. The claims use the phrases “inside edge” and “outside edge” / “inner edge” and “outer edge” to reference the shoe’s boundary. Ex. C, cl. 1 (“from the inner edge to the outer edge **of the left shoe**”); Ex. B, cl. 1 (“a first height at an inside edge and at an outside edge **of the shoe**”); Ex. A, cl. 1 (“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”); Ex. D, cl. 1 (“an outer edge **of the sole section** and the second material compresses to a second level near an inner edge **of the sole section**”). Nowhere are these terms used to describe where or how the foot sits in a shoe.

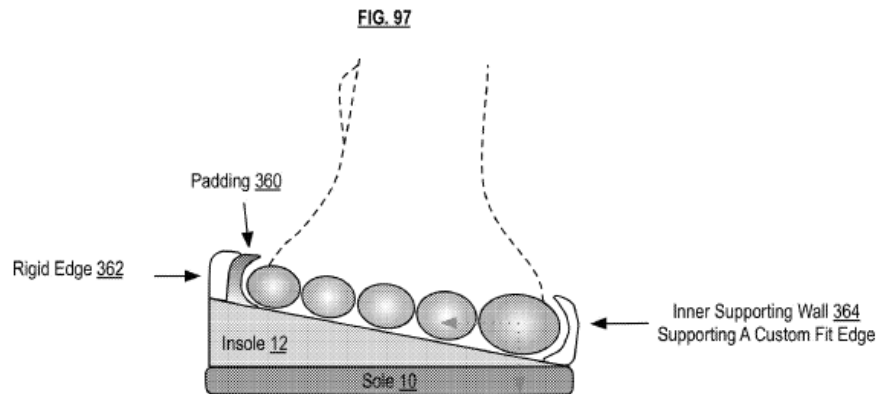
If anything, the claims confirm Athalonz's construction is not correct. For example, claim 1 of the '760 patent recites that "from the inner edge to the outer edge of the left shoe at a cross section at a ball of ball [sic], a bottom of the left sole is substantially linear." Ex. C, cl. 1. This element is describing the bottom of a shoe. It would be nonsensical to define the "edges" of the shoe as places where the foot sits when talking about the bottom of the sole. Additionally, claim 1 of the '456 patent recites, "the second material compresses to a first level **near** an outer edge of the sole section and the second material compresses to a second level **near** an inner edge of the sole section." Ex. D, cl. 1 (emphasis added). Similarly, claim 10 recites, "a first level of compression **proximal** to the outer edge of the shoe and a second level of compression **proximal** to an inner edge of the shoe." *Id.*, cl. 10 (emphasis added). The inventors' use of "near" and "proximal" show that when they wanted to specify an area close but not colinear with the outer boundary (*e.g.*, where the foot sits), they knew how to do so and would do so. But not by changing the plain meaning of "edge."

Specification. The specification supports Under Armour's proposal by using the terms inner and outer edge to denote the beginning or end boundary of various referenced portions, and not to refer to positions where a foot sits in a shoe.

For example, Figure 44 is a diagram of a "geometric shape that corresponds to the shape of a shoe." Ex. C, 17:62-65. In that diagram, the shoe's slope is described in terms of heel section heights and "the inside edge" and "the outer edge" of the sole." *Id.*, 17:6-18:8. The referenced height measurements, taken at the edges, are not taken with respect to where the foot sits, but where the end of the shoe is, *i.e.*, at the edge.

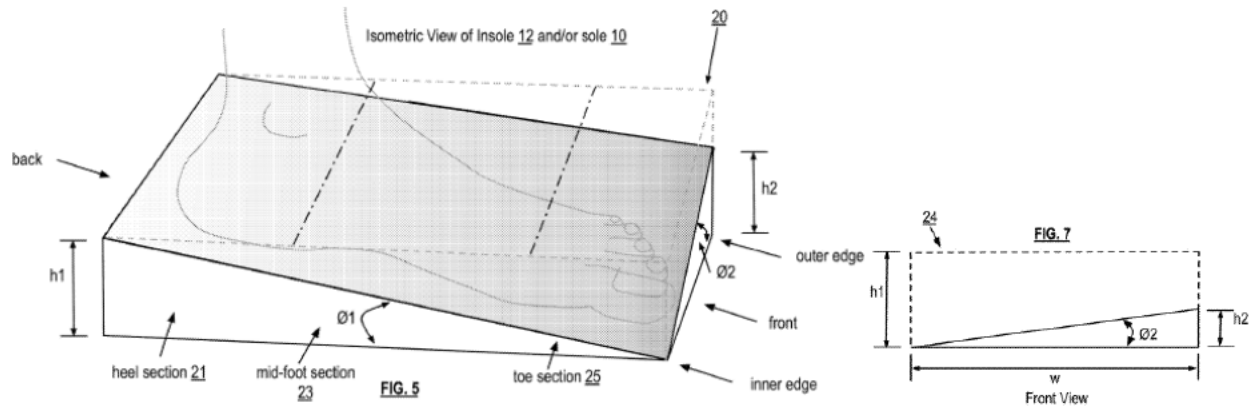


Athalonz's proposed construction ignores the specification's use of "edge" to mean the boundary of the shoe structure, and not of the foot. Figure 97 (below) destroys any notion that "edge" refers to the foot's boundary. There, the figure labels the "edges" at the sole's boundaries, not the foot's.



Id., 28:66-29:9, 29:16-39, Fig. 97; *see also id.*, 28:23-35, Fig. 95.

This embodiment includes padding 360 at both the inner and outer sides of the foot, yet it refers to only the outermost and innermost points of the sole as the "edge." Similarly, Figures 5-7 show that the inner and outer edge extend beyond where the foot sits.



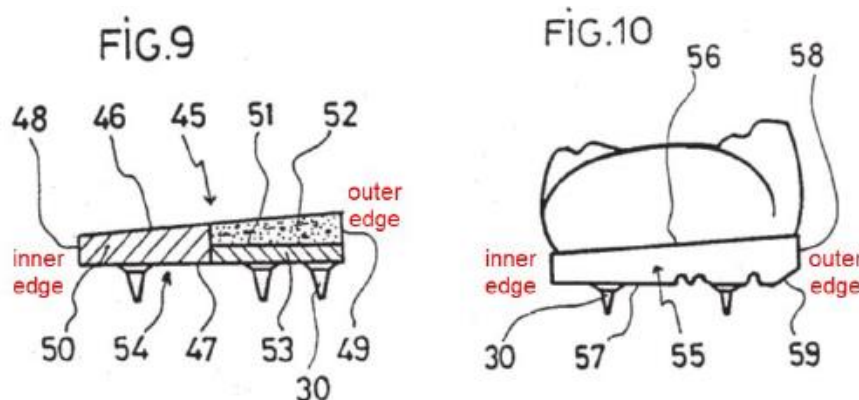
On the other hand, when the inventors wanted to specify the portion of the shoe where the foot sits, they did so explicitly. *See, e.g., id.*, at Fig. 11 (specifying the toe area 42), 11:25-32 (differentiating between the “outer edge of the shoe” and the “edge of the toe area”).

Athalonz’s proposed construction also imparts ambiguity into an otherwise unambiguous term because it is dependent on the size and shape of the wearer’s feet independent of the shoe, which can vary substantially from wearer to wearer. In other words, if Athalonz’s construction is adopted, whether a particular shoe falls within the scope of the claim would depend on who wears the shoe. A claim construction that adds such ambiguity is improper. *Canon, Inc. v. TCL Electronics Holdings Ltd.*, No. 2:18-CV-546-JRG, 2020 WL 2098197, at *11 (E.D. Tex. May 1, 2020) (declining to adopt proposed construction that “adds increased ambiguity to the claim”); *Estech Sys., Inc. v. Burnco Tex. LLC*, No. , 2021 WL 2530959, at *9 (E.D. Tex. June 18, 2021) (declining to adopt proposed construction where it “injects ambiguity into otherwise plain claim language”). In fact, Athalonz’s proposed construction would impermissibly render the claims indefinite for lacking an objective boundary. *See also Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371-72 (Fed. Cir. 2014) (affirming decision finding term indefinite where it depended on the user and offered no objective boundaries).

IPRs. Contrary to Athalonz’s assertion, Under Armour is not arguing a different construction before the PTAB. Dkt. 64 at 9. Under Armour did not argue for a claim construction

in the IPR, and it likewise suggests “plain meaning” here. Ex. S, p. 12 (“Petitioner does not propose that these terms require construction for purposes of this IPR.”).² Accordingly, Under Armour’s position is not inconsistent, much less “clearly inconsistent,” with its IPR position making judicial estoppel inapplicable (even if the IPR was complete, which is another requirement for judicial estoppel). Under Armour has not gained an unfair advantage because the section that Athalonz cites is discussing Athalonz’s apparent understanding of the term to show that it is invalid.³

It is Athalonz that is being inconsistent here. In its Preliminary Patent Owner Response, Athalonz applies outer and inner edge consistent with Under Armour’s current proposed construction. As shown below, Athalonz annotated certain prior art to show both the inner and outer edges as the shoe boundaries, not where the foot sits.



Ex. H, p. 42. Athalonz similarly relied on an understanding that “edges” are the boundaries of the shoe when urging that the prior art does not read on Athalonz’s patent. More specifically, Athalonz argued that “low elastic part 20” does not extend to the “inner edge” of the sole, as indicated by

² Under Armour’s application of Athalonz’s “apparent construction” related to the uniformity of the height across the heel platform, not where the inside and outside edges are located.

³ Athalonz’s cite to *Willis Elec. Co. v. Polygroup Macau Ltd. (BVI)*, No. 15- CV-3443-WMW-KMM, 2021 WL 5769389, *7 (D. Minn. Dec. 6, 2021) is also unavailing because the court analyzed prior IPR positions *patentee* took as a factor to determine whether a preamble should be limiting. It did not apply estoppel.

the blue line in Athalonz's annotated drawing below. Ex. T, p. 48. Thus, if the Court considers the IPR arguments relevant, it further supports Under Armour, not Athalonz.

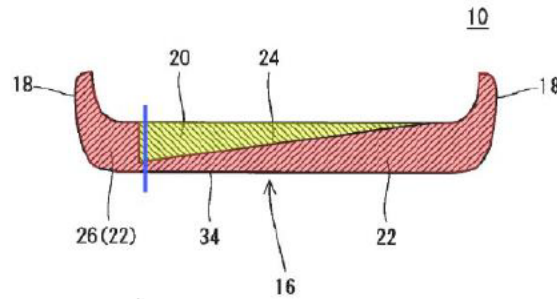


Fig. 3

Inventor Testimony. During his deposition, Mr. Adair confirmed that he understands that an edge is the outside part of the sole and not merely where the foot ends. Ex. J, 65:24-66:2 [REDACTED] Mr. Adair made no reference to the position of the foot, or its boundaries, when providing his testimony about what “edge” means in the context of shoes.

C. “first material” / “second material”

Claim Term	Athalonz's Proposal	Under Armour's Proposal
“first material” / “second material” (’768 patent, claim 1; ’456 patent, claim 1)	The “first material” and the “second material” must be different materials (e.g., be composed of different materials or different combinations of materials)	Plain meaning

The dispute is whether the “first material” in the heel platform must be a different material, or different combination of materials, than the “second material” in the forefoot platform, as Athalonz proposes. The Court should adopt the plain meaning here because the intrinsic record and Athalonz's own statements expressly contradict its narrower proposal. Thus, the first and second materials should be construed to be either the same or different materials.

Claim Language. Independent claim 1 of the ’768 patent 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 evidence proves that the “first material” and “second material” in claim 1 cannot be defined to require different materials because claim 6 states the opposite—they may be the same material.⁴ This alone can end the inquiry.

Specification. Nowhere does the specification state that the first and second materials must be different. Athalonz’s Opening Brief referred to the embodiment depicted in Figures 42-43 as support for its construction, where the specification describes that the first material “may be” more compressible than the second material, but the language “may be” indicates that it also “may not be” more compressible.⁵

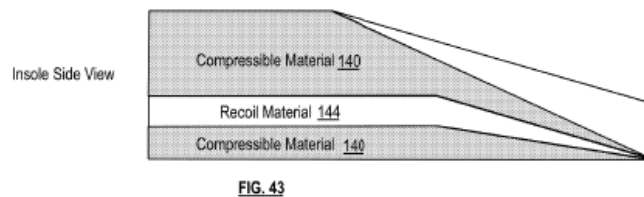


FIG. 43 illustrates a ... sole 10 ... that includes a first compressible material section 150, a second compressible material section 152, and a recoil material section 144.⁶ ***For example, the first compressible material may be more compressible material than that of the second compressible material.***

Ex. D, 17:40-54.

Another embodiment depicted in Figures 93 and 94, which Athalonz suggests is directed to these claims (Dkt. 64 at 3), includes an “integrated sole 10 and insole 12” shown as having both

⁴ Claim 7 of the ’768 patent further supports Under Armour as it requires that the first compression factor of the first material in the heel platform is “equal to” the gradient compression factor of the second material in the forefoot platform.

⁵ Indeed, this figure was one that Athalonz referenced as providing written description for claim 6 during prosecution of the ’768 patent. Ex. U, at 4.

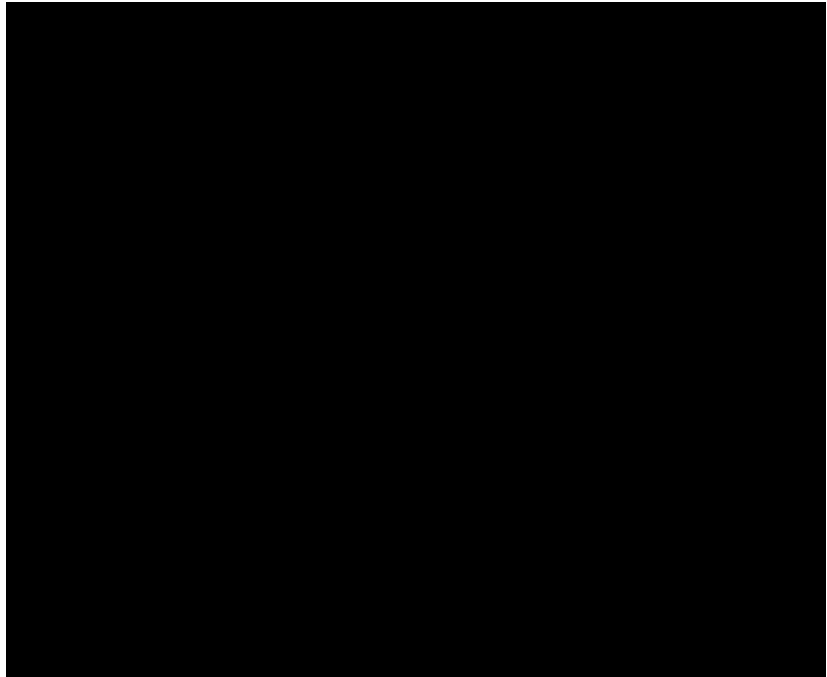
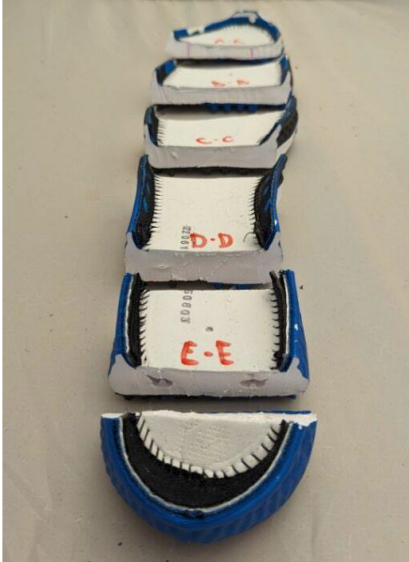
⁶ Note, the numbered materials in the drawing and in the specification do not match.

the heel and forefoot that may be comprised of “one material.” Ex. D, 27:47-51. That the first and second material may be the same 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 (*id.*, 10:9-19) and “first” and “second” angles that may be the same degree (*id.*, 21:58- 22:7). In the context of the specification, the words “first” and “second” repeatedly refer to things that may be the same.

Athalonz’s cases regarding “first” and “second” elements or components (Dkt. 64 at 11) are easily distinguishable. Here, the claim terms at issue recite an **attribute** of a component, *i.e.* the type of material, and the modifier is used to delineate multiple instances of that attribute, which could be the same or different. By contrast, the claims in Athalonz’s cases were enumerating and differentiating multiple members of a group (like a first and second pivot point; first and second razor blades; first and second end portions; or second and third circuits, at issue in *Free Motion*, *Gillette*, *Stone Basket* and *Linear Tech*, respectively).⁷

Athalonz’s Infringement Contentions. Athalonz’s appears to have admitted (tacitly) that the heel and forefoot materials need not be different when attempting to show the Accused Products infringe. For example, Athalonz accuses the UA Charged Curry shoe of infringing the ’456 and ’768 patents, which requires first and second materials for the heel and forefoot, but as shown below the sole is a single piece of the same [REDACTED] material, including the heel platform and the forefoot platform:

⁷ The *3M* case is also distinguishable as the issue was whether a “first pattern” and “second pattern” needed to be created sequentially. The Court held that they did not, but did not suggest that the patterns themselves needed to be different.



Ex. V, Athalonz's Second Supplemental Infringement Contentions, Exhibit D, pp. 25-41; Ex. W, Athalonz's Second Supplemental Infringement Contentions, Ex. E pp. 35-52.; Ex. X, UA0009110.

Other Patents Show a First Material and a Second Material Can be the Same. Other Athalonz patents, including U.S. Patent No. 11,206,878, also support Under Armour's proposal wherein claimed first and second materials are described as being the same, either expressly, or by virtue of claim differentiation. *See, e.g.* Ex. Y, claims 10, 11 (describing first and second material compositions that are either the same or different materials). In fact, claiming first and second materials that can be the same or different materials is common practice. *See, e.g.* Ex. Z, U.S. Patent No. 8,286,789 claims 1, 2; Ex. AA, U.S. Patent No. 10,629,844 claims 1, 4; Ex. AB, U.S. Patent No. 11,628,517 claims 19, 20; Ex. AC, U.S. Patent Publication No. 2008/0270157 claims 24, 27, 28; Ex. AD, U.S. Patent Publication No. 2010/0212346 claims 18, 31; Ex. AE, U.S. Patent Publication No. 2020/0129441 claims 117, 118; Ex. AF, Patent No. WO2019231841 claims 1, 5; and Ex. AG, Patent No. WO2023237642 claims 1-4.

D. Height, Position and Slope Terms

Claim Term	Athalonz's Proposal	Under Armour's Proposal
"a second height on the outside edge of the shoe at a toe section of the shoe, a third height on the inside edge of the shoe at the toe section of the shoe, . . . the second height being greater than the third height" ('291 patent, claim 1)	Plain and ordinary meaning	"a second height on the outside edge of the shoe measured at a cross-section of a toe section of the shoe, a third height on the inside edge of the shoe measured at the cross-section of the toe section of the shoe, . . . the second height being greater than the third height"
"a foot platform of the left/right sole provides . . . a left/right big toe area of the left/right shoe at a . . . lower position than an outer small toe area of the left/right shoe" ('760 patent, claim 1) "a toe section that provides the left big toe area of the left shoe . . . at the lower position than the outer small toe area of the left shoe" ('760 patent, claim 2) "a toe section that provides the right big toe area of the right shoe . . . at the lower position than the outer small toe edge area of the right shoe" ('760 patent, claim 7)	Plain and ordinary meaning	"a foot platform of the left/right sole provides . . . a left/right big toe area of the left/right shoe at a . . . lower position than an outer small toe area of the left/right shoe measured at a cross section of the foot platform" ('760 patent, claim 1) "a toe section that provides the left big toe area of the left shoe . . . at the lower position than the outer small toe area of the left shoe measured at a cross section of the toe section" ('760 patent, claim 2) "a toe section that provides the right big toe area of the right shoe . . . at the lower position than the outer small toe edge area of the right shoe measured at a cross section of the toe section" ('760 patent, claim 7)
"a second slope along the front edge of the apparatus from the inner edge to the outer edge of the apparatus, . . . the . . . second slope . . . greater than the reference slope" ('786 patent, claim 1) "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, the . . . second slope, . . . greater than the reference slope"	Plain and ordinary meaning	"a second slope along the front edge of the apparatus from the inner edge to the outer edge of the apparatus, measured at a cross section of the apparatus . . . the . . . second slope . . . greater than the reference slope" ('786 patent, claim 1) "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, measured at a cross section of the sole"

('786 patent, claim 5)		section, the . . . second slope, . . . greater than the reference slope” ('786 patent, claim 5)
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The dispute here is whether the specific height, position or slope measurements that result in the inside of the toe section being lower than the outside of the toe section should be construed to require that the measurements be taken at a cross-section of the toe section, *i.e.* perpendicular to the shoe's axis.⁸ Athalonz argues that the measurements do not need to be taken at a cross-section and that Under Armour's proposal is improperly reading elements into the claims. But Under Armour's proposal is necessary to provide definiteness to the claims and is consistent with the intrinsic record and Athalonz's own interpretation of these limitations outside of litigation.

Claim Language. Every claim wherein the disputed height, position or slope terms are found also requires that the heel platform, heel section or heel area be at a higher position than the toe section of the shoe, *see, e.g.*:

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. A, cl. 1.

a first height at an inside edge and at an outside edge of the shoe along a heel section of the shoe, a second height on the outside edge of the shoe at a toe section of the shoe, a third height on the inside edge of the shoe at the toe section of the shoe, and the first height being greater than the second height and the second height being greater than the third height ...

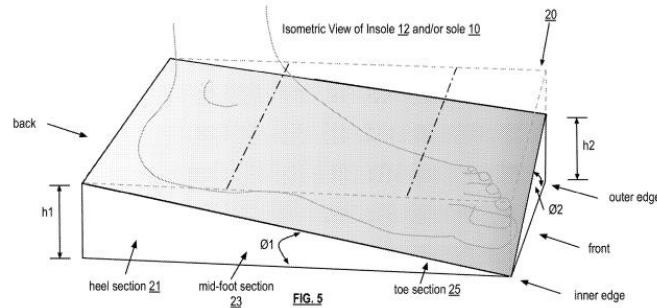
Ex. B, cl. 1.

⁸ See Ex. Q, p. 278 (Merriam-Webster's Collegiate Dictionary defining cross section as "a cutting or piece of something cut off at right angles to an axis").

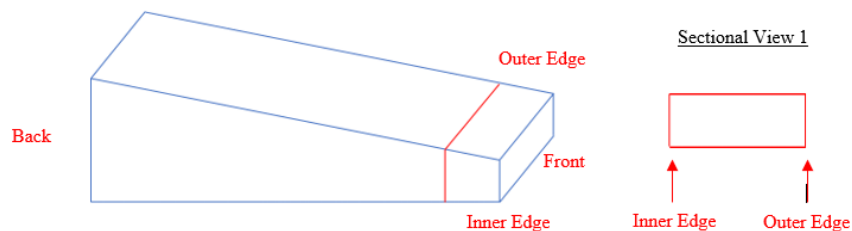
a left/right sole coupled to the left/right upper shoe portion, wherein a foot platform of the left/right sole provides an athletic positioning of a ***left/right big toe area of the left/right shoe at a lower position than a left/right heel area of the left/right shoe and at a lower position than an outer small toe area of the left/right shoe ...***

Ex. C, cl. 1.

Thus, there are two independent slope requirements: 1) a downward slope from the heel section to the toe section ($\Theta 1$ in Fig. 5 below); and 2) a downward slope from the outer edge to the inner edge of the toe section ($\Theta 2$ below). These two slope requirements are shown, for example, in Figure 5.

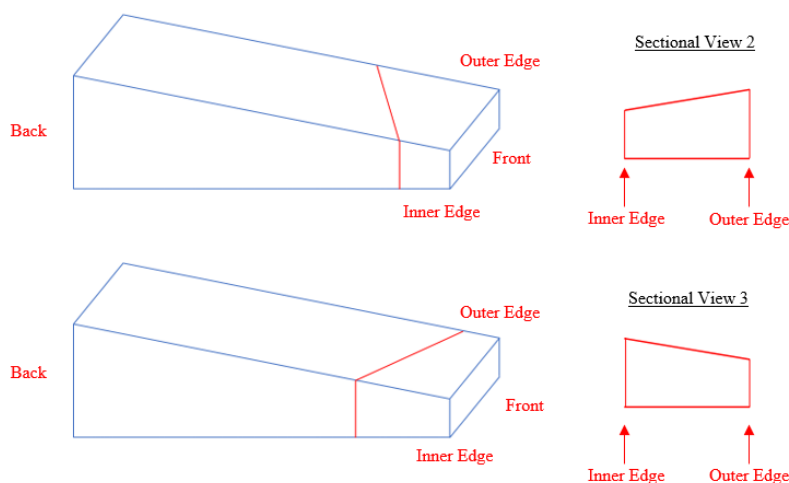


The fundamental flaw in Athalonz's proposal is that taking a measurement at an angle other than at the shoe's cross-section allows for the slopes to be manipulated. For example, a shoe that only has a downward slope from the heel to the toe, if measured at a cross-section, shows no slope from the outer edge to the inner edge of the shoe, as shown in Sectional View 1 below.



However, allowing a measurement at places other than the cross-section permits manipulation of the resulting slope. For example, the same shoe (which shows no slope across the toe when measured at a cross-section), can be measured to show ***either*** a downward slope from

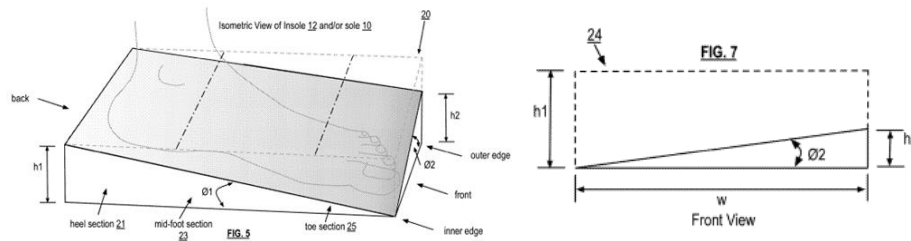
the outer edge to the inner edge of the toe section, as claimed, or the **opposite** (an upward slope), as depicted in Sectional Views 2 and 3 below.



Indefiniteness. Allowing for measurement of the heights, positions or slopes at any angle other than at a perpendicular cross-section of the shoe would render the claims indefinite because it would be impossible for a POSA to determine the boundaries of the protected subject matter. *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999) (“[T]he determination whether a claim is invalid as indefinite depends on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the specification.”). While the correct answer is that the sole depicted in the images above does not infringe because there is no downward slope from the outer edge to the inner edge of the sole (only a uniform downward slope from the heel to the toe), measurements can be taken as shown in Cross Section 2 to show infringement, or at Cross Sections 1 and 3 to show non-infringement. Accordingly, the test for infringement becomes manipulatable based on which non-perpendicular section is measured. Because the same shoe could be found both to fall within and outside the claim scope depending on how it is measured, it would be indefinite. *See Teva Pharms v. Sandoz, Inc.*, 789 F.3d 1335, 1344-45 (Fed. Cir. 2015) (holding term “molecular weight” term indefinite where it could be measured three different ways that could lead to different results); *see generally Gen.*

Elec. Co. v. Wabash Appliance Corp., 304 U.S. 364, 369 (1938) (explaining the goal of the definiteness requirement is that “the limits of a patent must be known...so that it may be known which features may be safely used or manufactured without a license and which may not.”).

Specification. Not surprisingly, the specification only describes and shows perpendicular cross-sections of the toe section. For example:

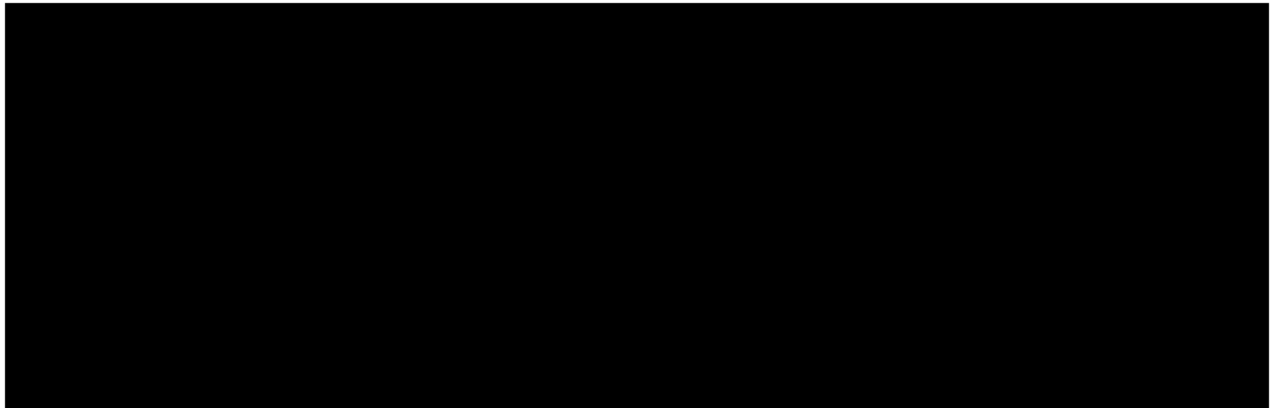


FIGS. 5-7 illustrate an isometric diagram 20, a cross-sectional side view diagram 22, and a **cross-sectional front view diagram 24** of an embodiment of an athletic positioning shape, which may be used in an insole 12 and/or sole 10 of a shoe. ... **The toe section 25 has a second dimension at the front outer edge of the apparatus and a third dimension at the front inner edge of the apparatus. The first dimension has a magnitude that is greater than or equal to a magnitude of the second dimension and the magnitude of the second dimension is greater than a magnitude of the third dimension.**

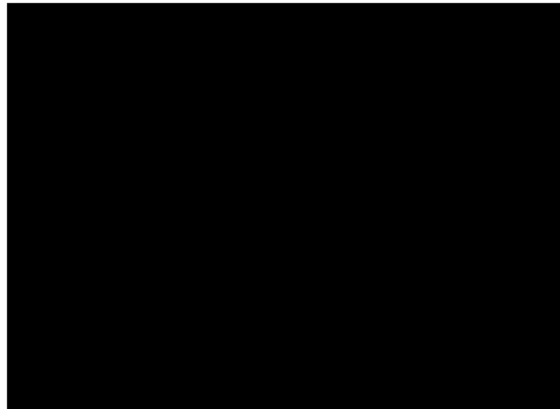
Ex. B, 9:56-10:10.

Similar descriptions are included of the embodiments depicted in Figures 3, 4, 8-10, 11-18, 35, 37, 51, 62, 63, 65-67, 68, 70, 78, 87-93, 95-103, 106, 107, 112-115, 120 and 123. For each of these embodiments, the specification describes the claimed slope from the outer to the inner edge of the toe section by using a cross-sectional view. *See id.*, 9:65-10:19; 10:53-62; 13:27-46; 15:13-26; 15:36-51; 19:7-17; 20:20-36; 20:56-21:3; 21:14-28; 21:44-57; 23:3-17; 23:18-33; 23:34-47; 25:46-53; 25:58-26:2; 26:17-29; 26:49-59; 27:1-10; 27:29-27; 27:47-67; 28:12-26; 28:40-58; 29:3-12; 29:45-67; 30:30-37; 30:65-31:10; 31:36-49; 32:4-18; 33:21-40; 33:60-67; 34:20-38; 34:59-67; 36:53-64; 38:42-53.

Athalonz's Analysis of its Own and Competitor's Products. Outside of the context of litigation, when Athalonz or its manufacturer describes the sole shape of Athalonz's products, or when Athalonz analyzes the sole shape of competitor products, it is consistently measured perpendicular to the axis of the shoe. For example, the drawings below exchanged between Athalonz and its manufacturer describe the desired slope and shape of Athalonz shoes using cross-sections of the sole:



Ex. AH, ATHALONZ0003312, 17.



Ex. AI, ATHALONZ00003294; *see also* Ex. AJ, ATHALONZ0003420, Ex. AK ATHALONZ0003442 (Athalonz technical drawings including cross-sectional cutaways).

Similarly, when Athalonz was attempting to get its shoes allowed for use on the PGA tour, Athalonz wanted to show that other shoe manufacturers had sloping forefoot platforms similar to its own. [REDACTED]

[REDACTED]

[REDACTED]. Ex. AL, ATHALONZ0006391. As shown below, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Ex. AM, ATHALONZ0006476, 6483. [REDACTED]

[REDACTED] And when Athalonz cut and tested the shoes at issue, Athalonz consistently measured the “forefoot lateral measurement” at a cross-section to the shoe’s axis.

[REDACTED]

Ex. AN, ATHALONZ0006292, 6297, 6302; *see also* Ex. AL ATHALONZ0006391.

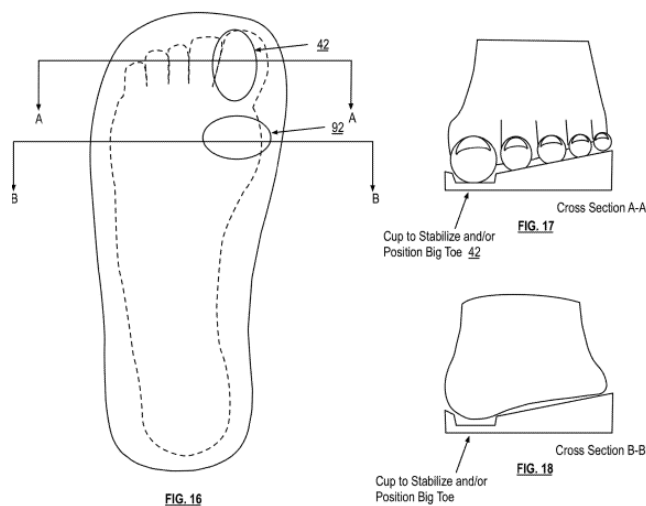
E. “stabilizing cup”

Claim Term	Athalonz’s Proposal	Under Armour’s Proposal
“stabilizing cup”	Plain and ordinary meaning	“indentation in the foot platform”

('760 patent, claims 4, 5, 9, 10)		
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Athalonz suggests that “stabilizing cup” should be given its plain and ordinary meaning. Under Armour’s construction does just that: defining it as an “indentation in the foot platform.” In this context, the relevant, well-understood meaning of “cup” is an indentation (as in a concave surface). Ex. AO. Athalonz disagrees, and instead seeks to give this term an overly broad meaning to maintain infringement allegations against shoes with no stabilizing cup. The Court should adopt Under Armour’s well-supported construction.

Claims and Specification. The claims of the '760 Patent require the “stabilizing cup” to “stabilize and position a left big toe of a wearer in a particular location in the left big toe area.” In Figures 16-18 and the related text, the specification confirms the “stabilizing cup” is an “indentation in the foot platform.”



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FIG. 16 illustrates a top view diagram of an embodiment of an athletic positioning insole 12 and/or sole 10 having one or more positioning and/or **stabilizing cups**. . . . In this example embodiment, the athletic positioning insole 12 and/or sole 10 includes **a big toe stabilizing and/or positioning cup 90 and an inner-ball of foot stabilizing and/or positioning cup 92**. . . . **Each of the cups may be a few millimeters in depth, have sloped sides**, may be of a different material than the insole and/or sole, and/or a combination thereof. Ex. C, 13:17-43.

In the specification, whenever it shows a stabilizing cup, it depicts it as an indentation in the foot platform that stabilizes the wearer's toe. *Id.*, at Figs. 16-18, 13:23-26.

Athalonz's proposed construction reads "cup" out of the term entirely by only focusing on its described purpose of "providing positioning and/or stabilization to the foot." Dkt. 64, p. 14. In other words, Athalonz's proposal would interpret "cup" as any structure that positions and stabilizes the foot. That is too broad and incorrect.

IPRs. Under Armour did not "previously agree no construction was necessary" in its IPR petition (Dkt. 64, p. 20), Under Armour simply did not propose an explicit one. And Under Armour applied this claim term in a manner consistent with its current proposed construction, against prior art toe indentations (namely "toe recess 24" and "recess 26") as stabilizing cups. Ex. S, pp. 52-53.

F. "forefoot platform . . . having a gradient compression factor"

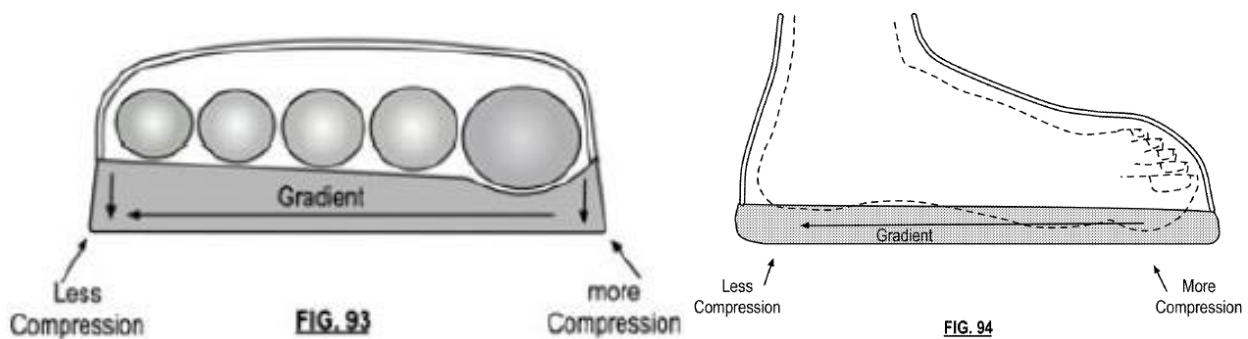
Claim Term	Athalonz's Proposal	Under Armour's Proposal
"forefoot platform . . . having a gradient compression factor" ('456 patent, claim 1, '768 patent, claim 1)	Plain and ordinary meaning	"forefoot platform that becomes increasingly less compressible from the inner edge to the outer edge"

The parties dispute whether "gradient" means the forefoot platform becomes increasingly less compressible from one side to another. This Court should find that it does, consistent with the plain meaning of the word and the intrinsic evidence.

The plain meaning of gradient is "change in the value of a quantity (such as temperature, pressure, or concentration) with change in a given variable and esp[ecially] per unit distance in a specified direction." Ex. Q, p. 505. In the context of the claim limitation as a whole, this would mean the compressibility is increasing with a change in the distance across the forefoot platform. Athalonz instead contends that "gradient" need only refer to any change in the compressibility at

any point along the platform. Athalonz's binary proposal is unsupported, gives no meaning to the word "gradient," and should be rejected.

Claims and Specification. Only one passage in the specification discusses a compressible gradient. Ex. D, 27:47-67. In that passage, Figures 93 and 94 (both labeled with the word "gradient" across the sole) are described as being cross-sectional views of a sole that provides a more compressible area towards the big toe/ball of foot area that becomes increasingly less compressible away from the big toe/ball of foot area. *Id.* The specification goes on to explain that this layer of the sole is made "of varying density to provide a compressible gradient." *Id.*, 27:60-63. Under Armour's construction is consistent with this description of the compression gradient.



"FIGS. 93 and 94 illustrate a cross-sectional front view diagram and a cross-sectional side view diagram of another embodiment of an integrated athletic positioning sole and insole. The integrated sole 10 and insole 12 is comprised of one or more materials that provides a **more compressible area towards the big toe/ball of foot area and increasingly less compressible away from the big toe/ball of foot area to facilitate an athletic position.** On top of the base, the integrated sole and **insole includes one or more varying compressible materials.** For example, the next layer is a single resilient material . . . of **varying density to provide a compressible gradient.**

Id., at 27:47-67. Contrary to Athalonz's assertion, Under Armour's proposal does not restrict the claims to having a "uniform gradient compression factor across the entire platform." Dkt. 64, 15-16. Under Armour's proposal only requires that the forefoot becomes increasingly less compressible; it does not require any particular rate (including a "uniform" rate) at which it becomes less compressible.

Referencing Figures 112 and 113, Athalonz argues that Under Armour’s proposal reads embodiments out of the specification. But as explained above, the only embodiment that the specification describes as having a compression “gradient” is shown in Figures 93 and 94. Figures 112 and 113, on the other hand, show two different areas with distinct compressibility levels, but nothing in the specification suggests that this constitutes a “gradient.” *See, e.g., id.*, at 33:60-34:30. Accordingly, that embodiment is not relevant to the “gradient” claims. In fact, the Figure 112-113 embodiment relates to a different set of claims—namely, claim 10 of the ’456 Patent, which recites a first level of compression near an outer edge and a second level of compression near the inner edge, but does not require a gradient. Ex. D, cl. 10.

Claim 1 Excerpt

a forefoot platform juxtaposed to the heel platform, wherein the forefoot platform is ***constructed of a second material having a gradient compression factor***, wherein, when the athletic shoe is worn by an athlete and weight of the athlete is applied to the athlete shoe, the second material compresses to a first level near an outer edge of the sole section and the second material compresses to a second level near an inner edge of the sole section, wherein the second level of compression is greater than the first level of compression.

Claim 10 Excerpt

a forefoot platform juxtaposed to the heel platform, wherein the forefoot platform is ***constructed to have a first level of compression proximal to the outer edge of the shoe and a second level of compression proximal to an inner edge of the shoe***, wherein the second level of compression is greater than the first level of compression.

The patent specification describes the compression in these embodiments differently, and Athalonz’s differently worded claims reflect that difference.

IPRs. Although Athalonz now argues that there only needs to be “some change in compressibility,” (Dkt. 64, p. 16), Athalonz argued differently in its Preliminary Patent Owner Response in IPR 2024-00639. There, Athalonz argued the prior art’s “two areas with different compressions” was not a gradient. Ex. AP, p. 15. (“[T]hese surfaces do not disclose a material with a ‘gradient compression factor,’ as Petitioner acknowledges, but two areas with different

compressions (and no gradient).”). By arguing that “two areas with different compressions” is not a gradient to avoid the prior art during the IPR proceeding, Athalonz should be held to have disclaimed its current proposed construction. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353 (Fed. Cir. 2017) (statements made by a patent owner during an IPR proceeding, whether before or after an institution decision, can be relied upon to support a finding of prosecution disclaimer).

III. CONCLUSION

Under Armour respectfully requests that the Court issue an Order construing the claim terms as proposed above.

Dated: August 21, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that all counsel of record who are deemed to have consented to electronic service are being served this 21st day of August, 2024, with a copy of this document via email per Local Rule CV-5(a)(7)(D).

/s/ J. Thad Heartfield
J. Thad Heartfield

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

I certify that this document and attachments thereto are filed under seal pursuant to the Protective Order in this matter.

/s/ J. Thad Heartfield
J. Thad Heartfield