

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LULULEMON USA INC.,

Petitioner,

v.

NIKE, INC.,

Patent Owner.

Case IPR2024-00460

Patent No. 8,266,749

PATENT OWNER'S SUR-REPLY

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	CLAIM CONSTRUCTION	3
III.	GROUND 1: LULULEMON FAILS TO SHOW THAT NISHIDA ANTICIPATES CLAIMS 1–8 AND 12–18.....	8
	A. Nishida’s pattern pieces are not “simultaneously knitt[ed]” with a “surrounding textile structure”	9
	B. Nishida fails to disclose that its pattern pieces have a “substantially planar configuration” when removed from the material web	14
IV.	GROUND 2: LULULEMON FAILS TO SHOW THAT NISHIDA IN VIEW OF A POSITA’S KNOWLEDGE RENDERS OBVIOUS CLAIMS 9, 10, 19, AND 20	15
V.	GROUND 3: LULULEMON FAILS TO SHOW THAT ZUCKERMAN ANTICIPATES CLAIMS 1–3, 5–8, 11, 13–17, AND 21	15
	A. Zuckerman’s blank is not knitted with a “surrounding textile structure”	16
	B. Zuckerman’s blank is not “incorporated” into an “article of footwear”	18
	C. Zuckerman fails to disclose “knitting an outline” of the blank	21
	D. Zuckerman fails to disclose that its blank has a “substantially planar configuration” when removed from the knitted strip.....	22
VI.	GROUND 4: LULULEMON FAILS TO SHOW THAT ZUCKERMAN IN VIEW OF A POSITA’S KNOWLEDGE RENDERS OBVIOUS CLAIMS 3, 9–10, 14, AND 19–20	23
	A. Zuckerman, in view of a POSITA’s knowledge, fails to teach or suggest “knitting an outline” of the “knitted textile element”	24

VII. GROUND 5: LULULEMON FAILS TO SHOW THAT ZUCKERMAN IN VIEW OF DOUGHTY RENDERS OBVIOUS CLAIM 12	26
A. A POSITA would not have been motivated to combine Zuckerman with Doughty to “secur[e] the upper to a sole structure”	26
VIII. GROUND 6: LULULEMON FAILS TO SHOW THAT NISHIDA IN VIEW OF ZUCKERMAN RENDERS OBVIOUS CLAIMS 11 OR 21	27
IX. CONCLUSION.....	28

TABLE OF AUTHORITIES

<u>Cases</u>	<u>Page(s)</u>
<i>Arlington Indus., Inc. v. Bridgeport Fittings, Inc.</i> , 290 F.Supp.2d 508 (M.D. Pa. 2003).....	4, 5
<i>Curver Lux., SARL v. Home Expressions Inc.</i> , 938 F.3d 1334 (Fed. Cir. 2019)	14
<i>Kastigar v. U.S.</i> , 406 U.S. 441 (1972).....	13
<i>Kennametal, Inc. v. Ingersoll Cutting Tool Co.</i> , 780 F.3d 1376 (Fed. Cir. 2015)	13
<i>Micron Tech., Inc. v. Yangtze Memory Techs. Co., Ltd.</i> , No. IPR2024-00910, Paper 13 (P.T.A.B. Dec. 10, 2024)	17
<i>NetMoneyIn, Inc. v. Verisign, Inc.</i> , 545 F.3d 1359 (Fed. Cir. 2008)	23
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303, 1314 (Fed. Cir. 2005)	4
<i>South-Tek Sys., LLC v. Eng. Corrosion Sols., LLC</i> , 748 Fed. Appx. 1003 (Fed. Cir. 2018).....	27

EXHIBITS

Exhibit No.	Description
2001	Excerpts of Prosecution History for U.S. Patent No. 8,266,749
2002	05/13/24 Declaration of Dr. Christopher M. Pastore
2003	10/30/24 Declaration of Dr. Christopher M. Pastore
2004	10/18/24 Deposition Transcript of Dr. David S. Brookstein
2005	06/05/24 Deposition Transcript of Dr. David S. Brookstein in <i>Nike, Inc. v. lululemon usa, inc.</i> , No. 2023-cv-00771 (S.D.N.Y.)
2006	<i>Nike, Inc. v. New Balance Athletics, Inc.</i> , No. IPR2024-00778, Paper 10 (PTAB Sept. 26, 2024)
2007	<i>Nike, Inc. v. New Balance Athletics, Inc.</i> , No. IPR2024-00778, Paper 6 (PTAB Aug. 9, 2024)
2008	<i>Nike, Inc. v. New Balance Athletics, Inc.</i> , No. IPR2024-00778, Ex. 2003 (PTAB Aug. 9, 2024)
2009	U.S. Patent No. 4,540,311 (“Leach”)
2010	Christopher M. Pastore & Frank K. Ko, <i>Near Net Shape Manufacturing of Composite Engine Components by 3-D Fiber Architecture</i> (Gas Turbine and Aeroengine Congress and Exposition 1989)

I. INTRODUCTION

Neither the Petition nor Petitioner’s Reply (Paper 17; “Reply”) demonstrates by a preponderance of the evidence that any Challenged Claim of the ’749 patent is unpatentable.

lululemon’s challenges based on Nishida (Grounds 1, 2, and 6) fail in their entirety because Nishida does not disclose “simultaneously knitting a textile element with a surrounding textile structure,” as recited in independent claims 1 and 13. Nishida’s material web base and pattern pieces—which together form Nishida’s material web—are not produced during the same knitting process. lululemon’s expert admitted this during his deposition. lululemon cannot avoid or explain away its expert’s admission. lululemon points to a couple of phrases in Nishida that pattern pieces 2 are produced “at the same time as” or “during” production of material web 1. But these phrases, in the context of Nishida, don’t support lululemon’s position. Even in those same sentences, Nishida consistently discloses “using different manufacturing techniques,” like weaving, knitting, embroidery, and printing to build the material web. Thus, these disclosures support that Nishida’s material base and pattern pieces are made during separate and distinct processes, while both still being produced during production of the *entire* material web. Nishida also fails to disclose that its pattern pieces have a “substantially planar configuration” upon removal from the material web, as required by dependent claims 5 and 15.

lululemon’s challenges based on Zuckerman (Grounds 3, 4, and 5) fail in their entirety because Zuckerman fails to disclose “surrounding textile structure,” as recited by independent claims 1 and 13, and as properly construed. lululemon’s arguments for this limitation are based on an improper claim construction in which *any* material outside of the textile element—even material abutting only a tiny portion of the textile element—constitutes “*surrounding* textile structure.” This construction is at odds with the widely accepted meaning of “surrounding” and is unsupported by the specification. Indeed, the court in the parties’ parallel litigation recently considered the same dispute and rejected lululemon’s construction. The court adopted Nike’s construction that “surrounding textile structure” must “completely or mostly surround the textile element.” The Board should reach the same conclusion here.

The Zuckerman-based grounds fail in their entirety for another independent reason. Zuckerman fails to disclose “incorporating the textile element into an article of footwear,” as recited in independent claims 1 and 13. The Board already construed “article of footwear,” in the context of the ’749 patent, to include an upper and a sole structure. Thus, “incorporating the textile element into an article of footwear” includes incorporating the textile element into a sole structure. Zuckerman’s knitted blank—which forms both the upper and sole of Zuckerman’s slipper—is therefore not incorporated into an article of footwear.

Zuckerman also fails to teach or suggest “knitting an outline” of its knitted blank, as recited in dependent claims 3 and 14, or that the knitted blank has a “substantially planar configuration” upon removal from Zuckerman’s knitted strip, as recited in dependent claims 5 and 15.

For at least these reasons, lululemon has not carried its burden of proving by a preponderance of the evidence that any Challenged Claim of the ’749 patent is unpatentable.

II. CLAIM CONSTRUCTION

The parties agree that “surrounding textile structure” refers to waste material that’s outside of the textile element. *See* Reply, 2, 3. But the parties dispute the extent to which a textile structure must extend around the textile element to be “surrounding.” In Nike’s view, “surrounding textile structure” must completely or mostly surround the textile element. lululemon, by contrast, contends that *any* textile area outside of the textile element meets this limitation. *See e.g.*, Reply, 3 (arguing that the specification “imposes no specific threshold but merely indicates excess material”); *id.*, 5 (“The ’749 patent and its claims do not require the surrounding textile structure to contact ‘most’ of the textile element’s perimeter.”). This construction impacts all of lululemon’s Zuckerman-based grounds, because Zuckerman’s textile structures—which lululemon identifies as the “surrounding

textile structure”—each abut only about 25% of the periphery of Zuckerman’s blank (which lululemon identifies as the “textile element”).

The court in the parties’ parallel district court litigation recently construed “surrounding textile structure.” *See* Ex. 1027. Nike and lululemon each proposed the same constructions they propose here. *Id.* The court rejected lululemon’s proposed construction and adopted Nike’s. *See* Ex. 1027. The Board should do the same here. As that court explained, Nike’s construction—unlike lululemon’s—is consistent with the “widely accepted meaning” of “surrounding,” and is consistent with and supported by the ’749 patent specification:

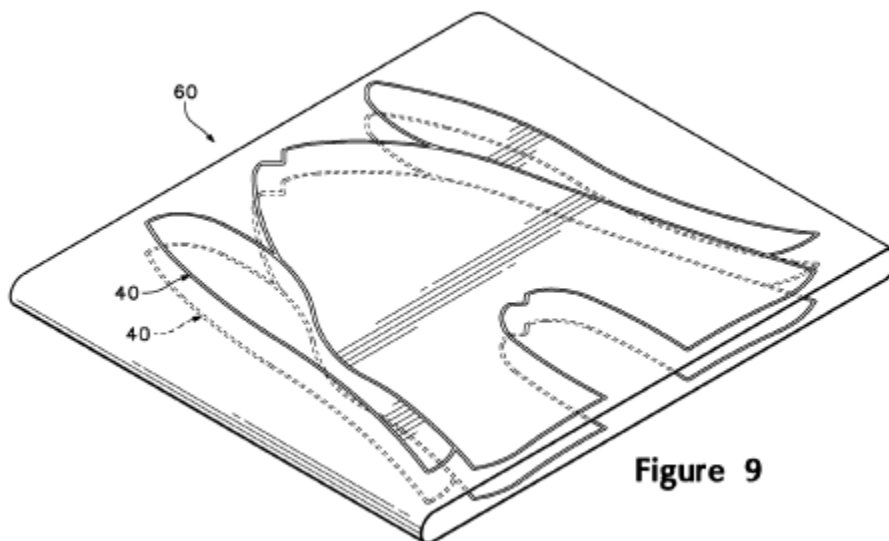
The Court adopts Nike’s proposed construction based on the plain and ordinary meaning of the term ‘surrounding’; the well-understood definition of the term as not simply referring to what is ‘outside’ or ‘adjacent,’ but rather what is around or encircling ... and the lack of any intrinsic evidence supporting a broader understanding of the term.”

Id., 4.

For commonly understood, non-technical terms, proper construction involves “little more than the application of the widely accepted meaning.” *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005). Laypersons use the word “surrounding” in everyday parlance to mean “enclosing or encircling.” *See* Ex. 1027, 2; *see also Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 290 F.Supp.2d 508, 521 (M.D. Pa. Nov. 7, 2003) (relying on general purpose dictionaries defining

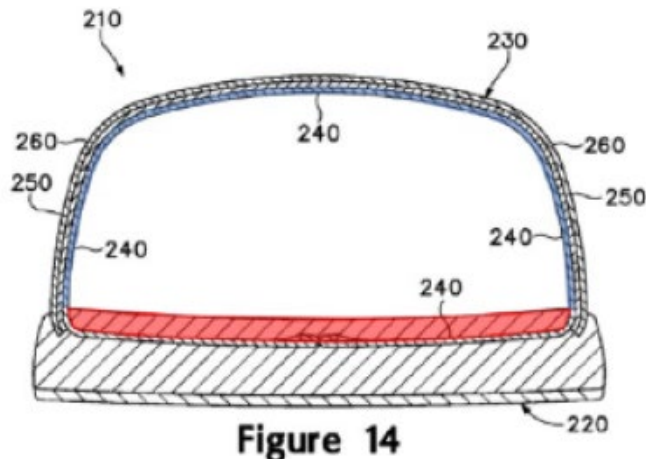
“surrounding” as “to be situated or found around, about, or in a ring around” or “to cause to be encompassed, encircled, or enclosed with something”). The terms “enclosing” and “encircling” confirm that “surrounding textile structure” must completely or mostly surround the claimed textile element, as Nike proposes. *See Arlington Indus.*, 290 F.Supp.2d at 521 (finding “surrounding” describes situations where “an outer boundary significantly borders an underlying entity.”).

The specification also supports Nike’s proposed construction. For example, Figure 9 shows a “textile element” (40) that is completely encircled by a “textile structure” (60).



Ex. 1001, Fig. 9. As another example, the '749 patent explains that “interior layer” (240) of Figure 14 “removes perspiration from the area immediately *surrounding*

the foot.” *Id.*, 10:45–48. The “interior layer” (annotated in blue) abuts the wearer’s foot on three sides, i.e., it mostly surrounds the wearer’s foot.



Although these examples are non-limiting, a POSITA reading the claim language in light of the specification would have understood that a “surrounding textile structure” at least mostly surrounds the textile element.

The specification gives no indication that textile structure abutting only a small fraction of the textile element constitutes “surrounding textile structure.” lululemon points to the ’749 patent’s disclosure that “[t]extile element 40 may be formed as a part of a **larger** textile element.” Reply, 3 (citing Ex. 1001, 5:45–48) (emphasis in original). But this sentence is consistent with Nike’s construction. And lululemon’s inference from this sentence that the specification “imposes no specific threshold but merely indicates excess material” is divorced from the language of the disputed claim term. *Id.*

lululemon's reliance on Dr. Pastore's testimony in the parties' parallel litigation also supports Nike's proposed construction, not lululemon's. Dr. Pastore testified that, if one end of the textile element 40 shown in Figure 9 of the '749 patent extended to the edge of the textile structure, the textile element could still have surrounding textile structure. Reply, 4 (citing Ex. 1025, 74:9–75:16). This is because even if one edge had no abutting textile structure, “that would still be mostly surrounded.” Ex. 1025, 74:9–75:16. This testimony is consistent with “surrounding textile structure” “mostly or completely surrounding the textile element.” And Dr. Pastore opined in this *inter partes* review that a skilled artisan would understand “surrounding textile structure” as Nike proposes. Ex. 2003, ¶¶53–54; Ex. 1026, 51:7–52:5.

lululemon also incorrectly argues that Nike's proposed construction “conflicts with the goals of the '749 patent.” Reply, 5. Specifically, lululemon argues that “requiring the surrounding textile structure to encircle ‘most’ of the textile element's perimeter” would “increas[e] waste and inefficiency.” *Id.* lululemon overlooks the broader context of “waste and inefficiency.” For example, the '749 patent specification discloses that conventional processes that “utilize[e] multiple materials to impart different properties to an article of footwear may be an inefficient process.” Ex. 1001, 4–6. The claims of the '749 patent, by contrast, are directed to manufacturing a single knitted component having different properties during a single

knitting process. *E.g., id.*, 11:43–52. In this way, the invention of the ’749 patent reduces the numbers of components in the upper, and thereby reduces the number of production processes, suppliers, waste, etc.

For at least these reasons, the Board should adopt Nike’s proposed construction.

III. GROUND 1: LULULEMON FAILS TO SHOW THAT NISHIDA ANTICIPATES CLAIMS 1–8 AND 12–18

lululemon’s Ground 1 fails in its entirety because Nishida fails to disclose “simultaneously knitting a textile element with a surrounding textile structure,” as recited in independent claims 1 and 13. In other words, Nishida fails to disclose knitting its pattern pieces¹ and material web base during a *single* knitting process.² Nishida further fails to disclose that its pattern pieces have a “substantially planar configuration” upon removal from the material web, as required by dependent claims 5 and 15.

¹ Nishida refers to item number 2 as “patterns” or “unwound web parts.” Nike refers to this component as “pattern pieces” herein.

² Both parties agree that the claimed textile element and surrounding textile structure must be knitted as part of a “single knitting process.” Petition, 18; Ex.1003, ¶63.

A. Nishida’s pattern pieces are not “simultaneously knitt[ed]” with a “surrounding textile structure”

Nishida fails to disclose that material web base 4 and pattern pieces 2 are knitted in the same knitting process. lululemon’s own expert agreed:

Q: So this document, Exhibit 9, is what you referred to in your report as the Nishida reference; is that right?

A: That is correct.

Q: It’s actually an English translation of the Nishida reference?

A: It’s a certified English translation, yes.

Q: Is it your opinion, Dr. Brookstein, that unwound parts number two disclosed in Nishida are simultaneously knit with the base material?

A: Not with the base material, no.

Q: No?

A: No.

See Ex. 2005, 257:5–24. lululemon can’t avoid or explain away Dr. Brookstein’s clear testimony. Reply, 12–13. The best lululemon can muster is that Dr. Brookstein was asked about “base material,” a phrase that does not appear exactly in Nishida. But there are only three components of Nishida at issue for this limitation: pattern pieces 2, material web **base** 4, and material web 1 (pattern pieces 2 and material web base 4 combined). Dr. Brookstein exhibited no issue understanding what Nike asked him. *See* Ex. 2005, 257:5–24. Indeed, counsel for lululemon did not even lodge an

objection to these questions. *Id.* lululemon also argues that “Dr. Brookstein understood ‘base material’ to refer to Nike’s ‘pre-existing base’ theory.” Reply, 12. But lululemon does not explain how, if at all, that changes the substance of Dr. Brookstein’s testimony.

Nishida’s “express” disclosures: lululemon’s contention that Nishida “expressly” discloses this limitation (Reply, 6) is belied by the very disclosures it relies on. For example, lululemon points to the following disclosure from Nishida’s abstract: “To this end, the invention proposes that, when the strip of material (1) is manufactured, the patterns (2) of the uppers are produced, at the same time as the strip of material (1) is produced, using different manufacturing techniques ...”. Ex. 1005, Abstract. But, as Nike discussed in its Response, this sentence does not say that Nishida’s pattern pieces 2 are produced at the same time as material web base 4. Response, 18–19.

At best, this sentence says that pattern pieces 2 are produced during production of material web 1, where—as both experts agree—material web 1 includes *both* material web base 4 and pattern pieces 2. Ex. 2004, 88:17–21; Ex. 1026, 26:16–21. This sentence continues that pattern pieces 2 are produced “using different manufacturing techniques.” Ex. 1005, Abstract. This supports Nike’s position that Nishida uses multiple distinct processes to form material web 1,

including separate processes to produce the material web base 4 and pattern pieces

2. *See* Response, 18–20 (citing Ex. 2003, ¶¶41–42).

lululemon also incorrectly argues that Nishida discloses embodiments where material web 1 is a “single-layer material.” Reply, 8. lululemon again points to the same sentence in the Abstract. But this sentence merely says that “the patterns (2) of the uppers are produced ... using different manufacturing techniques, such as ... single- or multi-layer material.” Ex. 1005, Abstract. Thus, Nishida discloses that the pattern pieces 2 may be constructed using a manufacturing technique employing a single-layer material, not that the entire material web 1 is a single-layer material.

Nishida’s multiple production processes: lululemon also incorrectly argues that Nishida’s “alternative production processes,” like weaving, knitting, embroidering, and printing, “do not negate Nishida’s repeated references to knitting as an option for simultaneous production.” Reply, 9. lululemon tries to use Nishida’s disclosure of “a common woven or knitted fabric” as support for material web 1 being made during a single knitting process. *Id.* (citing Ex. 1005, 5). But this sentence says nothing about material web 1 or whether it’s knitted during a single knitting process. It simply says that “material web base 4”—not material web 1—“may be a common woven or knitted fabric.” Ex. 1005, 5. This sentence has no bearing on whether material web 1 is made using a single knitting process.

lululemon also incorrectly argues that Nike misinterprets Nishida to “*require* only multi-step methods.” Reply, 9 (citing Ex. 1026, 31:3–11). But Nike does not misinterpret Nishida. Nishida never discloses that material web 1 and pattern pieces 2 are produced together in the same knitting process. Instead, Nishida exclusively discloses using a variety of processes to form material web base 4 and pattern pieces 2. Response, 18–20. In this same vein, lululemon incorrectly argues that testimony from Dr. Pastore—entirely unrelated to Nishida—somehow shows that Nishida’s “multilayered” fabrics could be formed in the same production process. Reply, 11. Specifically, Dr. Pastore agreed that “spacer mesh,” which is a type of multilayered fabric, could be made during a single knitting process. Ex. 1026, 17:10–18:4. But Nishida never discloses spacer mesh, and lululemon failed to tie spacer mesh to the types of fabrics that are created in Nishida.

lululemon fails to rebut Nike’s argument that pattern pieces 2 may be knitted over an existing material web base 4. Reply, 10. Instead, lululemon points to Dr. Pastore’s testimony that knitting over a fabric “damages” the underlying fabric. *Id.* (citing Ex. 1026, 48:3–16). Of course, running yarns through an underlying fabric will impact the structure of the underlying fabric, but lululemon has not shown that impact would destroy the end result, i.e., the creation of the pattern pieces 2.

lululemon also incorrectly argues that Nishida’s disclosure of other textile production processes (e.g., printing or embroidery) “does not undermine its

disclosure of simultaneously knitting a textile element and surrounding textile structure.”³ Reply at 10. lululemon’s reliance on *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381–82 (Fed. Cir. 2015) to support this proposition that “disclosing the patented system as one of many options is still anticipation” is misplaced. *Id.* Unlike in *Kennametal*, where the prior art disclosed several potential material combinations, some of which undoubtedly met the claim limitation at issue, here, Nishida *never* discloses the option that the material web base 4 and pattern pieces 2 are knitted during the same knitting process.

Examination and adidas IPR: lululemon’s assertion that “Nike provides no rationale supporting the Examiner’s analysis of Nishida-US” is plainly wrong. Nike’s entire position for this limitation set forth in the Response and in this Sur-Reply provide that rationale. And as Nike argued in the Preliminary Response, the statements the Board made in dicta in the *adidas IPR* should be afforded little weight as they were unnecessary to the decision in that case. Paper 7, 25; *See Kastigar v. U.S.*, 406 U.S. 441, 454–55 (1972). adidas did not ask the Board to review a

³ Nike doesn’t dispute Nishida discloses that both the material web base 4 and pattern elements 2 may be knitted. Nike contends, however, that even if that is the case, those two components are formed in *separate* knitting processes, i.e., they are not simultaneously knitted, as recited in the claims.

determination of anticipation over Nishida. *See Curver Lux., SARL v. Home Expressions Inc.*, 938 F.3d 1334, 1342 (Fed. Cir. 2019) (“[W]e note that the statement about anticipation in *Glavas* is dictum and thus not binding. Because the *Glavas* court was asked only to review a determination of obviousness, the statement about anticipation was unnecessary to reach its holding about obviousness.”).

For these reasons and for those discussed in Nike’s Response, Nishida fails to anticipate any challenged claim in Ground 1.

B. Nishida fails to disclose that its pattern pieces have a “substantially planar configuration” when removed from the material web

Nishida never depicts or otherwise describes pattern pieces 2 after removal from material web 1, other than to show a pattern piece after assembly into a shoe. Response, 23; Ex. 1026, 39:3–8, 41:2–6. lululemon can’t dispute this. Instead, lululemon incorrectly argues that the depiction of pattern pieces 2 within material web 1 in Nishida’s Figure 1 and 2 is good enough to assume that the pattern pieces are planar upon removal. Reply, 13–14. lululemon says that “neither Nike nor Dr. Pastore disputes that these figures depict the material web as being substantially planar.” *Id.* As alleged support, lululemon points to testimony from Dr. Pastore’s deposition that Figure 1 and 2 “appear[] to contain a planar structure.” *Id.* But lululemon grossly mischaracterizes Dr. Pastore’s testimony. Dr. Pastore testified in this same line of questioning that these figures are “drawn as a [two-dimensional]

production” and “so we can’t really judge” the extent of three-dimensionality. Ex. 1026, 40:1–13.

lululemon also picks at Dr. Pastore’s opinion that Nishida’s pattern pieces may be three-dimensional upon removal as allegedly “unsupported by Nishida’s disclosure.” Reply, 14–15. But lululemon’s argument only emphasizes Nishida’s failure to disclose this limitation. Because Nishida never discloses that the pattern pieces 2 are substantially planar upon removal, lululemon falls short of the standard for anticipation. *See Net MoneyIN*, 545 F.3d at 1371.

For these reasons and for those discussed in Nike’s Response, lululemon has not shown that Nishida anticipates dependent claims 5 or 15.

IV. GROUND 2: LULULEMON FAILS TO SHOW THAT NISHIDA IN VIEW OF A POSITA’S KNOWLEDGE RENDERS OBVIOUS CLAIMS 9, 10, 19, AND 20

For at least the reasons discussed with respect to Ground 1, Nishida does not disclose independent claims 1 and 13. For at least the same reasons, lululemon’s Ground 2 fails.

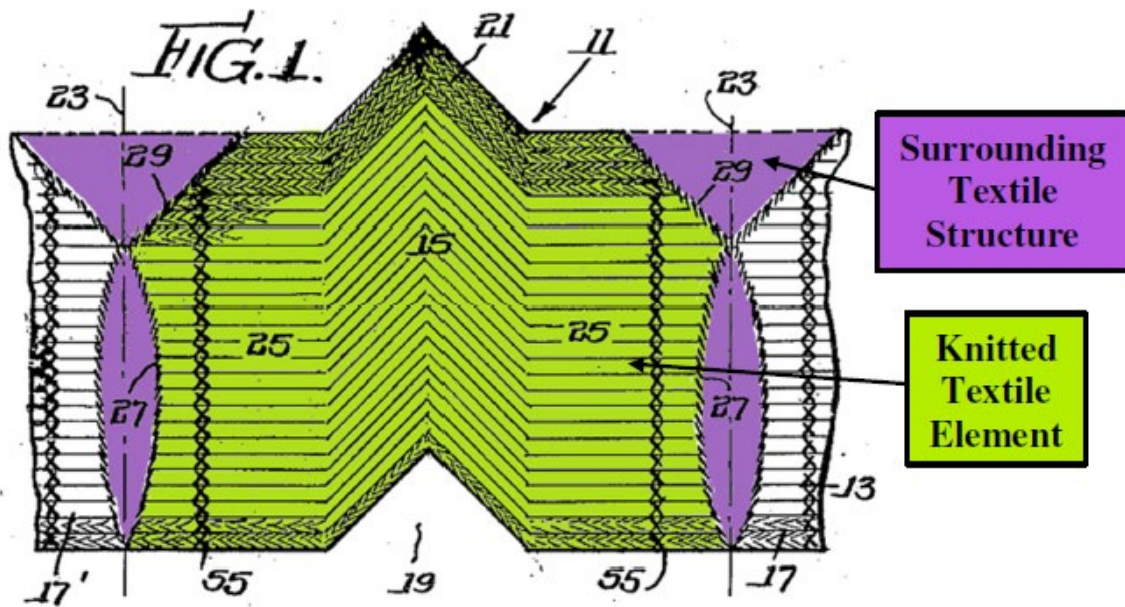
V. GROUND 3: LULULEMON FAILS TO SHOW THAT ZUCKERMAN ANTICIPATES CLAIMS 1–3, 5–8, 11, 13–17, AND 21

lululemon’s Ground 3 fails in its entirety for two reasons. First, Zuckerman does not disclose “surrounding textile structure,” recited in independent claims 1 and 13, as properly construed. Second, Zuckerman does not disclose the step of

“incorporating the textile element into the article of footwear,” also recited in independent claims 1 and 13. Zuckerman also fails to disclose “knitting an outline” of the textile element, as recited in dependent claims 3 and 14, or that the knitted textile element has a “substantially planar configuration” when removed from the surrounding textile structure, as recited in dependent claims 5 and 15.

A. Zuckerman’s blank is not knitted with a “surrounding textile structure”

Zuckerman fails to disclose that the claimed textile element is knitted with a “surrounding textile structure,” as recited in independent claims 1 and 13, and as properly construed. lululemon contends that the purple portions shown on the right and left side of Zuckerman’s blank 11 (green) in annotated Figure 1 below meet this limitation. But lululemon’s arguments for this limitation rely on a flawed construction of “surrounding textile structure” in which *any* amount of textile structure abutting the textile element meets this limitation. *See supra* § II.



Ex. 1008 at Fig. 1 (annotated). Under the proper construction of this term, “surrounding textile structure” must mostly or completely surround the textile element. *See supra* § II. Because the purple portions to the right and the left of Zuckerman’s blank, separately or combined, do not mostly or completely surround the blank, Zuckerman fails to disclose this limitation and lululemon’s Ground 3 fails.⁴ *See Micron Tech., Inc. v. Yangtze Memory Techs. Co., Ltd.*, No. IPR2024-00910, Paper 13 at 15 (P.T.A.B. Dec. 10, 2024) (finding that “surrounding” requires “more than structures on two sides of the [surrounded] object”).

⁴ Although Nike disagrees that the “surrounding textile structure” need not be a “single, continuous structure,” Ground 3 fails regardless. *See Reply*, 18.

For these reasons and those discussed in Nike’s Response, Zuckerman fails to anticipate any challenged claim in Ground 3.

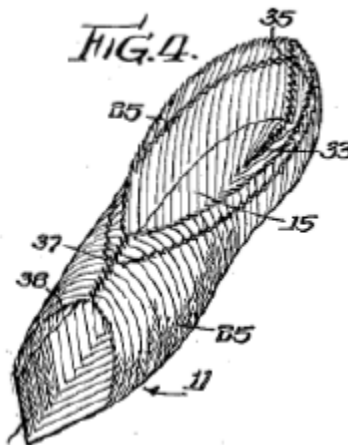
B. Zuckerman’s blank is not “incorporated” into an “article of footwear”

Zuckerman fails to disclose “incorporating the textile element into the article of footwear,” as recited in independent claims 1 and 13. An “article of footwear,” in the context of the ’749 patent, has two primary elements: an upper and a sole structure. *E.g.*, Ex. 1001, 4:43–44 (“The primary elements of footwear 10 are depicted in FIG. 1 as being a sole structure 20 and an upper 30.”). The Board agreed in its decision denying institution of New Balance’s petition challenging the ’749 patent. Ex. 2006, 18 (“[W]e conclude that the claims require an article of footwear, and that such footwear is characterized as having a sole structure and an upper.”).

There is no dispute that Zuckerman’s slipper constitutes an “article of footwear” that includes both an upper and a sole structure. *See* Reply, 20; Ex. 1026, 56:4–7. The parties dispute, however, whether claims 1 and 13 require incorporation of the textile element into a *separate* sole structure. Nike contends that, in the context of the ’749 patent, they do. This understanding is consistent with and supported by the plain language of the claims and the specification.

Claims 1 and 13 disclose “incorporating” a “textile element” into an “article of footwear,” where a properly construed “article of footwear” primarily includes an

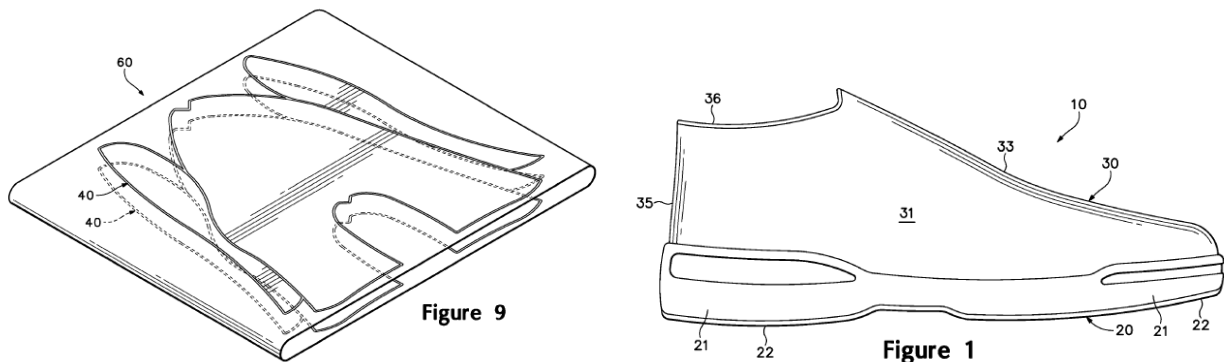
upper and a sole structure. Thus, the textile element, which forms in part or in whole the upper, is combined with a separate sole structure to create an “article of footwear.” *See* Ex. 2003, ¶61. lululemon incorrectly argues that the addition of a toe-cap or other decorative finishings to Zuckerman’s slipper satisfies the “incorporating” step. *See* Petition, 62–63. But as Dr. Pastore testified, Zuckerman’s slipper became a “completed article of footwear” once it was assembled into the slipper configuration shown in Figure 4.



Ex. 1026, 58:8–17; Ex. 1008, Fig. 4.

The specification also supports that the “textile element” is “incorporate[ed] into a separate sole structure. First, the specification repeatedly refers to the “sole structure” being “secured to the upper.” *E.g.*, Ex. 1001, 3:48–49, 4:44–45. And the specification discloses that the sole structure “has a generally conventional configuration that includes a midsole 21 and an outsole 22,” where the midsole is “formed of a polymer foam material.” *Id.*, 4:55–59. Thus, the sole structure is formed

of an entirely different material from the upper, signifying that it is a separate structure all together. Second, the specification discloses embodiments where the footwear includes only the textile element and the sole structure. For example, the specification discloses that “[o]nce textile element 40 is removed from textile structure 60, seams 51–54 may be formed and textile element 40 may be incorporated into footwear 10.” Ex. 1001, 8:6–8. Textile element 40 and footwear 10 are shown in Figures 9 (below left) and 1 (below right).

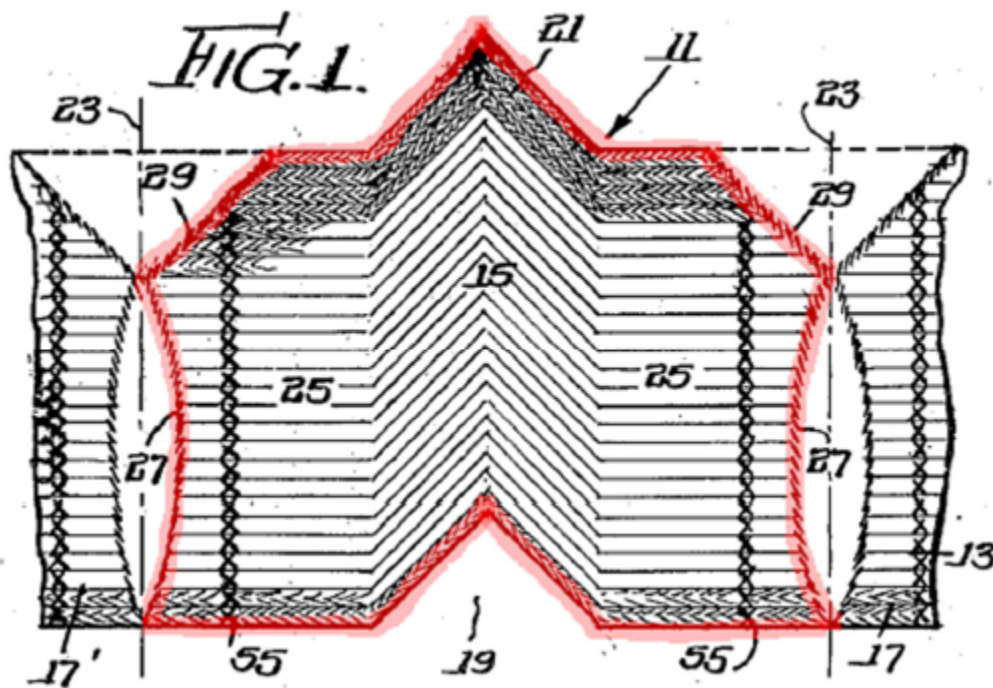


Ex. 1001, Figs. 1, 9. In Figure 1, “textile element 40 [] form[s] substantially all of upper 30.” *Id.*, 4:43–54. Thus, when textile element is incorporated into footwear, it is incorporated into sole structure 20.

Because Zuckerman’s blank, i.e., “textile element,” is not incorporated into a separate sole structure, Zuckerman fails to disclose this limitation. For these reasons and those discussed in Nike’s Response, Zuckerman fails to anticipate any challenged claim in Ground 3.

C. Zuckerman fails to disclose “knitting an outline” of the blank

Zuckerman fails to disclose knitting an outline of the textile element within a surrounding textile structure at least because Zuckerman fails to teach a surrounding textile structure. Response, 29–30. lululemon fails to even address this argument in its Reply. Reply, 21–22. But even assuming Zuckerman taught a surrounding textile structure (it does not), lululemon’s only alleged support that Zuckerman teaches a knitted outline is an arbitrary annotation added by lululemon (shown in red below).



lululemon again points to Dr. Brookstein’s testimony that Figure 1 “shows varying stitches throughout continuous strip 13, forming an outline of the knitted textile element (blank 11) along lines 27 and 29.” But, as Nike previously explained, Dr. Brookstein provides no support for this opinion. See Ex. 1003, ¶¶152–154. And

Zuckerman never discloses that edges 27 and 29 represent any sort of varying stitch configuration or knitted outline within continuous strip 13. Response, 31.

lululemon points to a new passage from Zuckerman that also fails to support its argument for this limitation. lululemon says that “Zuckerman also describes cutting textile elements along lines of varied stitches, ... further confirming the outline.” Reply, 22 (citing Ex. 1008, 2(L):22–34). But the only thing this passage says about “varied stitches” is that “the edges” are “curved inwardly toward the herring bone portion 15.” Ex. 1008, 2(L):22–34. This says nothing of whether edges 27 and 29 were cut along a knitted outline, only that those edges are oriented toward portion 15 of blank 11.

For these reasons and those discussed in Nike’s Response, Zuckerman fails to anticipate dependent claims 3 or 14.

D. Zuckerman fails to disclose that its blank has a “substantially planar configuration” when removed from the knitted strip

lululemon fails to show that Zuckerman’s blank is “substantially planar” upon removal from knitted strip 13. The reason is simple: Zuckerman never depicts blank 11 upon removal from knitted strip 13 but before edges of blank 11 are seamed together, nor mentions the shape blank 11 would have.

lululemon focuses on Dr. Brookstein’s unsupported opinion that “strip of fabric” must be flat. Reply, 23. Dr. Brookstein opined that “strip” means “a long,

narrow piece,” and “fabric” means “the piece has length and width but limited thickness.” Ex. 1003, ¶155. He then somehow combines these two definitions to yield a “flat piece of fabric and a plane.” *Id.* But Dr. Brookstein’s definitions for “strip” and “fabric” don’t have anything to do with “flat” or “planar,” so it’s nonsensical that combining them would yield such requirements.

lululemon also argues that Zuckerman anticipates this limitation because “Dr. Pastore identifies nothing in Zuckerman suggesting that the ‘continuously knitted strip’ [] is not planar or that removing a piece would render it non-planar.” Reply at 24. But lululemon turns the burden of proving anticipation on its head. To show that Zuckerman anticipates claims 3 and 4, lululemon must show that Zuckerman discloses, explicitly or inherently, every claimed element. *See NetMoneyIn, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369–71 (Fed. Cir. 2008). lululemon hasn’t shown either.

For these reasons and those discussed in Nike’s Response, Zuckerman fails to anticipate dependent claims 5 or 15.

VI. GROUND 4: LULULEMON FAILS TO SHOW THAT ZUCKERMAN IN VIEW OF A POSITA’S KNOWLEDGE RENDERS OBVIOUS CLAIMS 3, 9–10, 14, AND 19–20

For at least the reasons discussed above and in Nike’s Response with respect to Ground 3, Zuckerman does not disclose independent claims 1 and 13. For at least the same reasons, lululemon’s Ground 4 fails. lululemon further fails to show that

“knitting an outline,” as recited by dependent claims 3 and 14, would have been obvious over Zuckerman.

A. Zuckerman, in view of a POSITA’s knowledge, fails to teach or suggest “knitting an outline” of the “knitted textile element”

Zuckerman, in view of a POSITA’s knowledge, fails to teach or suggest “knitting an outline” of the textile element. lululemon again points to a few pages from Spencer (Ex. 1009) mentioning “outlines.” Reply, 25. lululemon incorrectly argues that “Spencer explains that outlines were known to facilitate cutting knitted articles.” *Id.* (citing Ex. 1009, 30, 90). But Dr. Brookstein testified that these pages in Spencer don’t even disclose a knitted outline. *E.g.*, Ex. 2004, 61:12–62:7; 63:17–64:22; *see also* Ex. 2003, ¶75.

lululemon also argues that varying stitches in Zuckerman’s strip 13 along blank 11’s edges would “enhance structural integrity” by “prevent[ing] laddering or unroving.” Reply, 25 (citing Ex. 1009, 106). This argument might make sense in the context of a lace, like what is shown in Spencer, where the outline denotes the edge of the fabric. Ex. 1009, 106. It makes no sense, however, when applied to Zuckerman’s strip 13, where, as lululemon alleges, the outline is meant to “facilitate cutting knitted articles” from adjacent textile material. *Id.*

lululemon, relying on Dr. Brookstein, also argues that varying stitches in Zuckerman’s strip 13 along blank 11’s edges would (1) improve efficiency, (2)

minimize errors, and (3) reduce waste. Reply, 26 (citing Ex. 1003, ¶183). None of these motivations hold water. First, Dr. Brookstein says that efficiency can be improved by “reducing time spent by marking or creating a precise edge identifier.” Ex. 1003, ¶183. But, as lululemon points out, it’s Dr. Brookstein’s opinion that a knitted outline would indicate where to “put a marker on [the textile structure] and then follow that and cut it.” Reply, 26 (citing Ex. 2004, 65:12–66:2). Thus, Dr. Brookstein’s own testimony confirms that a knitted outline would not eliminate the need for a marker. And as Dr. Pastore opined, the geometry of Zuckerman’s knit strip 13 already includes self-aligning features for orienting a die (or marker). Ex. 2003, ¶74.

Second, Dr. Brookstein says that a knitted outline will “increase likelihood that desired boundaries are followed or simplifying quality control by facilitating identification of deviations and defects.” Ex. 1003, ¶183. But again, the self-aligning features of Zuckerman’s knit strip 13 ensure that desired boundaries will be followed when cutting, or will allow identification of deviations and defects. Third, Dr. Brookstein opines that knitting an outline will “minimize[e] the amount of surrounding structure material used and subsequently trimmed away during manufacturing.” *Id.* But knitting an outline won’t reduce the amount of surrounding structure material versus cutting the textile element out using a die measured against self-aligning features.

For these reasons and those discussed in Nike's Response, Zuckerman, in view of a POSITA's knowledge, fails to render obvious dependent claims 3 or 14.

VII. GROUND 5: LULULEMON FAILS TO SHOW THAT ZUCKERMAN IN VIEW OF DOUGHTY RENDERS OBVIOUS CLAIM 12

For at least the reasons discussed above and in Nike's Response with respect to Ground 3, Zuckerman does not disclose independent claims 1 and 13. For at least the same reasons, Zuckerman in view of a POSITA's general knowledge does not teach or suggest dependent claim 12. lululemon further fails to show that a POSITA would have been motivated to combine Zuckerman with Doughty for the step of "securing the upper to a sole structure."

A. A POSITA would not have been motivated to combine Zuckerman with Doughty to "secur[e] the upper to a sole structure"

lululemon fails to establish that a POSITA would have been motivated to secure Doughty's detachable sole structure to Zuckerman's slipper. lululemon contends that Nike did not address two alleged motivations for making lululemon's proposed combination: (1) added protection for Zuckerman's textile element and (2) extending the knit upper's life by permitting changing of the sole structure. Reply, 27. But Nike did rebut these alleged motivations by addressing whether a POSITA would have been motivated to reduce wear on or increase durability of Zuckerman's knit upper. Response, 37–38. Each of these alleged motivations has the same thrust: protecting Zuckerman's knit slipper. As Nike explained, Zuckerman already has a

sole structure designed to withstand “heavy wear.” *Id.* (citing Ex. 1008, 2(L):39–44; Ex. 2003, ¶79. Therefore, attaching Doughty’s sole yields only redundant functions, and does not support obviousness. *See South-Tek Sys., LLC v. Eng. Corrosion Sols., LLC*, 748 Fed. Appx. 1003, 1007 (Fed. Cir. 2018) (affirming Board’s finding of nonobviousness because the proposed modification would yield “redundant functions”).

lululemon also doubles down on its nonsensical argument that adding Doughty’s sole structure allows Zuckerman’s knit slipper “to be detached and washed separately.” Reply, 27. This is not a motivation to add Doughty’s sole structure, as Zuckerman’s slipper could have already (and more easily) been separately washed on its own.

For these reasons and those discussed in Nike’s Response, lululemon fails to show that Zuckerman in view of Doughty renders obvious dependent claim 12.

VIII. GROUND 6: LULULEMON FAILS TO SHOW THAT NISHIDA IN VIEW OF ZUCKERMAN RENDERS OBVIOUS CLAIMS 11 OR 21

For at least the reasons discussed above and in Nike’s Response with respect to Ground 1, Nishida does not disclose independent claims 1 and 13. For at least the same reasons, lululemon’s Ground 6 fails.

IX. CONCLUSION

lululemon has failed to prove by a preponderance of the evidence that any challenged claim of the '749 patent is unpatentable. Nike requests that the Board enter a final written decision affirming the patentability of those claims.

Dated: March 5, 2025

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CERTIFICATE OF WORD COUNT

Under the provisions of 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the Microsoft Office word count including all footnotes for the foregoing Patent Owner's Sur-reply, excluding the table of contents, table of authorities, certificate of word count, appendix and certificate of service, totals 5,553 words, which is less than the 5,600 words allowed under 37 C.F.R. § 42.24(c)(4).

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CERTIFICATE OF SERVICE

The undersigned hereby certifies service on the Petitioner, pursuant to 37 C.F.R. § 42.6(e) and by agreement of counsel, by electronic (e-mail) delivery of a true copy of the foregoing **PATENT OWNER'S SUR-REPLY**, which was served on March 5, 2025 to the following Counsel for Petitioner via e-mail:

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