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On behalf of **lululemon usa inc.**

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LULULEMON USA INC.,
Petitioner,

v.

NIKE, INC.,
Patent Owner.

Case IPR2024-00159
Patent 9,375,046

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 9,375,046**

TABLE OF CONTENTS

Page No.

I.	MANDATORY NOTICES, GROUNDS FOR STANDING, AND FEE PAYMENT	1
A.	Real Party-In-Interest (37 C.F.R. §42.8(b)(1))	1
B.	Related Matters (37 C.F.R. §42.8(b)(2)).....	1
C.	Lead and Backup Counsel (37 C.F.R. §42.8(b)(3))	2
D.	Service Information (37 C.F.R. §42.8(b)(4))	2
E.	Grounds for Standing (37 C.F.R. §42.104).....	2
F.	Payment of Fees (37 C.F.R. §42.15(a))	3
II.	INTRODUCTION	4
III.	THE '046 PATENT	8
A.	Specification.....	8
B.	Claims.....	11
C.	Prosecution History	12
IV.	LEVEL OF ORDINARY SKILL	13
V.	CLAIM CONSTRUCTION	14
A.	“tubular structures/tubular rib structures”	14
B.	“neutral position”	17
C.	“extended position”	17
D.	“unitary knit construction”	17

TABLE OF CONTENTS
(cont'd)

	Page No.
VI. RELIEF REQUESTED	18
VII. GROUND 1: GOOD RENDERS CLAIMS 1–3, 7, 16–18, AND 20 UNPATENTABLE.....	19
A. Overview of Good.....	19
B. Good Anticipates Claim 1	21
1. Preamble.....	21
2. Limitation 1[a]	23
3. Limitation 1[a][i].....	24
4. Limitation 1[a][ii]	26
5. Limitation 1[b]	28
6. Limitation 1[c]	31
7. Limitation 1[d]	31
8. Limitation 1[e]	32
C. Good Anticipates Claim 2	33
D. Good Anticipates and Renders Obvious Claim 3	36
E. Good Anticipates Claim 7	38
F. Good Anticipates Claim 16	40
G. Good Anticipates Claim 17	41
H. Good Anticipates Claim 18	41

TABLE OF CONTENTS

(cont'd)

	Page No.
I. Good Anticipates Claim 20	42
VIII. GROUND 2: MUNSING ANTICIPATES CLAIMS 1–3, 7, 17, 18, AND 20.....	43
A. Tubular Structures	43
B. Overview of Munsing.....	44
C. Munsing Anticipates Claim 1.....	47
1. Preamble.....	47
2. Limitation 1[a]	47
3. Limitation 1[a][i].....	48
4. Limitation 1[a][ii]	49
5. Limitation 1[b]	50
6. Limitation 1[c]	51
7. Limitation 1[d]	51
8. Limitation 1[e]	52
D. Munsing Anticipates Claim 2.....	53
E. Munsing Anticipates Claim 3.....	55
F. Munsing Anticipates Claim 7.....	55
G. Munsing Anticipates Claim 17.....	56
H. Munsing Anticipates Claim 18.....	56

TABLE OF CONTENTS

(*cont'd*)

	Page No.
I. Munsing Anticipates Claim 20.....	57
IX. GROUND 3: MINAMI RENDERS CLAIMS 8, 9, 14, 15, AND 19 UNPATENTABLE.....	58
A. Overview of Minami	58
B. Minami Anticipates Claim 8	60
1. Preamble.....	60
2. Limitation 8[a]	60
3. Limitation 8[b]	61
4. Limitation 8[c]	62
5. Limitation 8[d]	63
6. Limitation 8[e]	66
7. Limitation 8[f].....	67
C. Minami Anticipates and Renders Obvious Claim 9.....	68
D. Minami Anticipates Claim 14	72
E. Minami Anticipates and Renders Obvious Claim 15.....	73
F. Minami Anticipates Claim 19	74
X. THE BOARD SHOULD NOT EXERCISE DISCRETION TO DENY INSTITUTION	74
A. Board Should Not Decline Institution Pursuant to 35 U.S.C. § 325(d)	74

TABLE OF CONTENTS
(cont'd)

	Page No.
B. Board Should Not Decline Institution Pursuant to 35 U.S.C. § 314(a).....	75
XI. CONCLUSION.....	78

TABLE OF AUTHORITIES

Page No(s).

<i>Apple Inc. v. Fintiv, Inc.</i> , IPR2020-00019 Paper 11, 6 (P.T.A.B. Mar. 20, 2020)	75, 77
<i>Nike, Inc. v. Puma North America, Inc.</i> , C.A. No. 18-10876-LTS (D.Mass.)	1, 14, 15
<i>Qualcomm Inc. v. Apple Inc.</i> , No. 3:17-CV-2402-CAB-MDD, 2018 WL 4104951 (S.D. Cal. Aug. 29, 2018)	76
<i>Sotera Wireless, Inc. v. Masimo Corp.</i> , IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020)	77
<i>TAS Energy, Inc. v. San Diego Gas & Elec. Co.</i> , No. 12CV2777-GPC BGS, 2014 WL 794215 (S.D. Cal. Feb. 26, 2014)	76

OTHER AUTHORITIES

35 U.S.C. §314	75
35 U.S.C. §315	76
35 U.S.C. §325	74
37 C.F.R. §42.8	1, 2
37 C.F.R. §42.15	3
37 C.F.R. §42.100	14
37 C.F.R. §42.104	2

LIST OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 9,375,046 to Meir
1002	Excerpts of Prosecution History for U.S. Patent No. 9,375,046
1003	Declaration of Dr. David S. Brookstein
1004	Curriculum Vitae of Dr. David S. Brookstein
1005	U.S. Patent No. 4,702,091 to Good, et al. (“Good”)
1006	U.S. Patent No. 391,005 to Munsing (“Munsing”)
1007	U.S. Patent App. Publ. No. 2014/0130374 to Minami, et al. (“Minami”)
1008	U.S. Patent No. 5,118,569 to Kuroda, et al. (“Kuroda”)
1009	U.S. Patent No. 3,307,379 to Woolley, et al. (“Woolley”)
1010	U.S. Patent App. Publ. No. 2010/0154256 to Dua, et al. (“Dua”)
1011	Tortora et al., Excerpts of Fairchild’s Dictionary of Textiles, Seventh Edition, 1996
1012	Memorandum and Order on Claim Construction, <i>Nike, Inc. v. Puma North America, Inc.</i> , C.A. No. 18-10876-LTS (D.Mass.)
1013	Spencer, David J., Knitting Technology: A Comprehensive Handbook and Practical Guide, Chapters 6, 7, and 18, Third Edition, 2001
1014	Joint Disputed Claim Terms Chart, <i>Nike, Inc. v. lululemon usa inc.</i> , C.A. No. 1:23-cv-00771-AS (S.D.N.Y.)

Petitioner lululemon usa inc. (“lululemon”) requests *inter partes* review (“IPR”) of claims 1–3, 7–9, and 14–20 (“challenged claims”) of U.S. Patent 9,375,046 (“the ’046 patent,” Ex.1001).

**I. MANDATORY NOTICES, GROUNDS FOR STANDING,
AND FEE PAYMENT**

Pursuant to 37 C.F.R. §42.8(a)(1), the mandatory notices identified in 37 C.F.R. § 42.8(b) are provided below as part of this Petition.

A. Real Party-In-Interest (37 C.F.R. §42.8(b)(1))

lululemon usa inc. is the real party in interest for Petitioner. The parent company for lululemon usa inc. is lululemon athletica inc.

B. Related Matters (37 C.F.R. §42.8(b)(2))

The parties are currently engaged in district court litigation in the case captioned *Nike, Inc. v. lululemon usa inc.*, C.A. No. 1:23-cv-00771-AS (S.D.N.Y.) (“district court case”). Nike, Inc. (“Nike” or “Patent Owner”) has asserted the ’046 patent against Petitioner in the district court litigation.

Nike also asserted the ’046 patent against Puma North America, Inc. in the case captioned *Nike, Inc. v. Puma North America, Inc.*, C.A. No. 18-10876-LTS (D.Mass.) (“Puma Litigation”). This case settled after claim construction and was voluntarily dismissed in January 2020. Puma also filed an IPR Petition challenging claims of the ’046 patent (IPR2019-01059), but that IPR settled and was terminated before institution.

C. Lead and Backup Counsel (37 C.F.R. §42.8(b)(3))

Petitioner provides the following designation of counsel, all of whom are included in Customer No. 20,995 identified in Petitioner's Power of Attorney.

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D. Service Information (37 C.F.R. §42.8(b)(4))

Please direct all correspondence to lead counsel and back-up counsel at the addresses shown above. Petitioner also consents to electronic service by email to lululemonIPR-046@knobbe.com.

E. Grounds for Standing (37 C.F.R. §42.104)

Petitioner certifies that the '046 patent is available for IPR and is not barred or estopped from requesting IPR on the identified grounds.

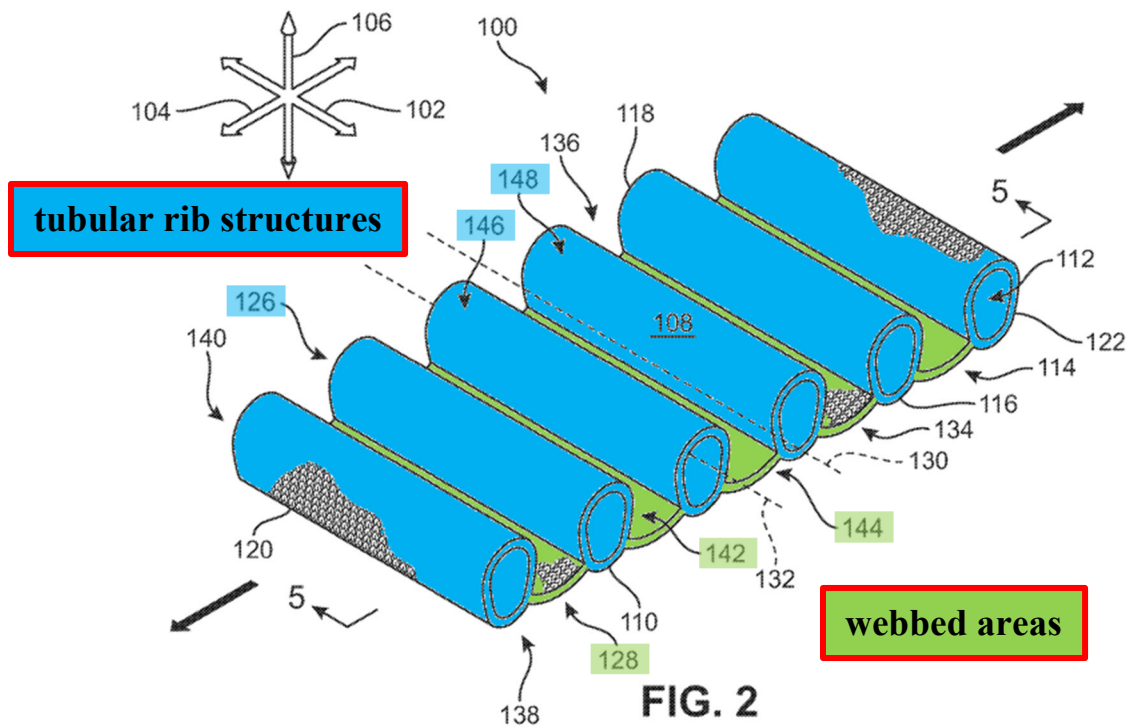
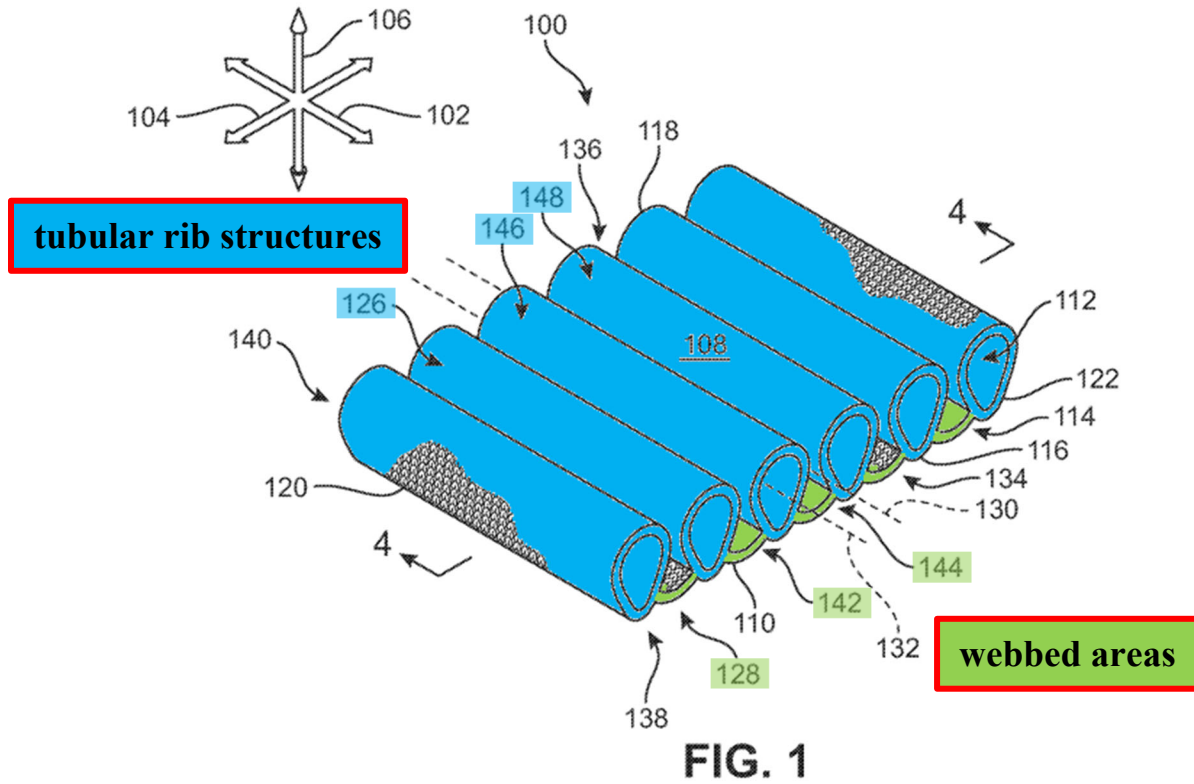
F. Payment of Fees (37 C.F.R. §42.15(a))

The Office may charge the §42.15(a) fee to Deposit Account No. 11-1410. Review of thirteen claims is requested. Payment for any additional fees due may be charged to the above-referenced Deposit Account.

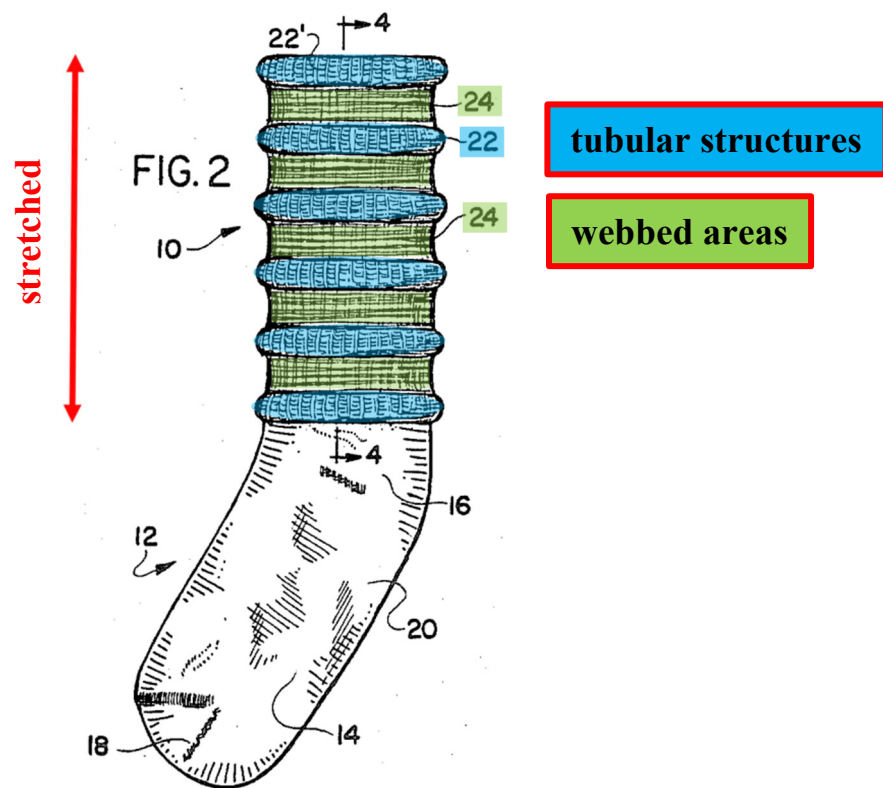
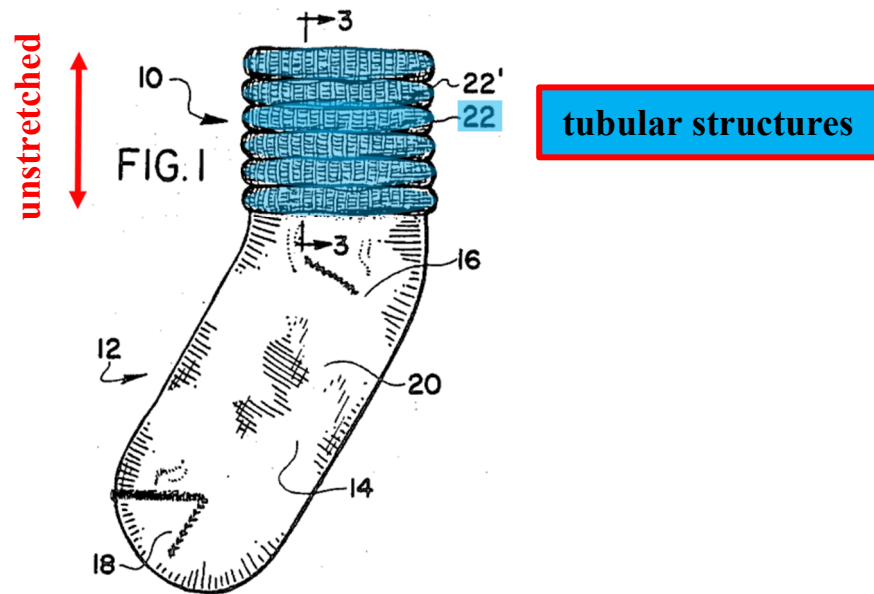
II. INTRODUCTION

The '046 patent is directed to knitted articles that have tubular structures separated by connecting portions called webbed areas. While the disclosed embodiments relate to footwear uppers, many of the '046 patent's claims are directed generally to “articles” and not limited to footwear. The articles can have an unstretched position wherein the webbed areas are at least partially hidden. When the articles are stretched, the tubular structures separate to reveal portions of the webbed areas that were hidden. Such hide-and-reveal articles were commonly used in apparel and other textiles long before the '046 patent.

The '046 patent's figures below show a representative knitted article with webbed areas (green) and tubular rib structures (blue) adjacent to the webbed areas. The illustrated rib structures have a tubular shape and are arranged to achieve the hide-and-reveal function.



The '046 patent claims nothing new. Textile articles with the claimed webbed areas and tubular structures were well-known for decades before the '046 patent. For example, Good discloses a knitted article that stretches to reveal webbed areas (green) between tubular structures (blue):



In the parallel district court case, Nike's claim construction position is that the claimed "tubular structures" do not need to be hollow like a tube. But under such an interpretation, the claims would also read on knitted ribbed articles that have been

known for over a century. For example, Munsing (1888) describes knitted fabric with common rib structures for use in apparel articles. When the fabric is stretched, areas between the ribs are revealed. Under Nike’s broad interpretation, independent claims 1 and 20 and certain dependent claims would be anticipated by Munsing’s hide-and-reveal article.

Independent claim 8 is different from the other independent claims. Rather than reciting an article, claim 8 is directed to a shoe upper with tubular rib structures. But such uppers were also not new. Minami, a Nike prior art publication, discloses an upper with the claimed tubular rib structures, as well as other limitations of claim 8 and the challenged claims depending therefrom.

The prior art confirms there is nothing new or inventive in the challenged claims and it would have been obvious to include webbed areas and tubular structures in articles for known structural and visual benefits. Thus, the challenged claims of the ’046 patent should be cancelled.

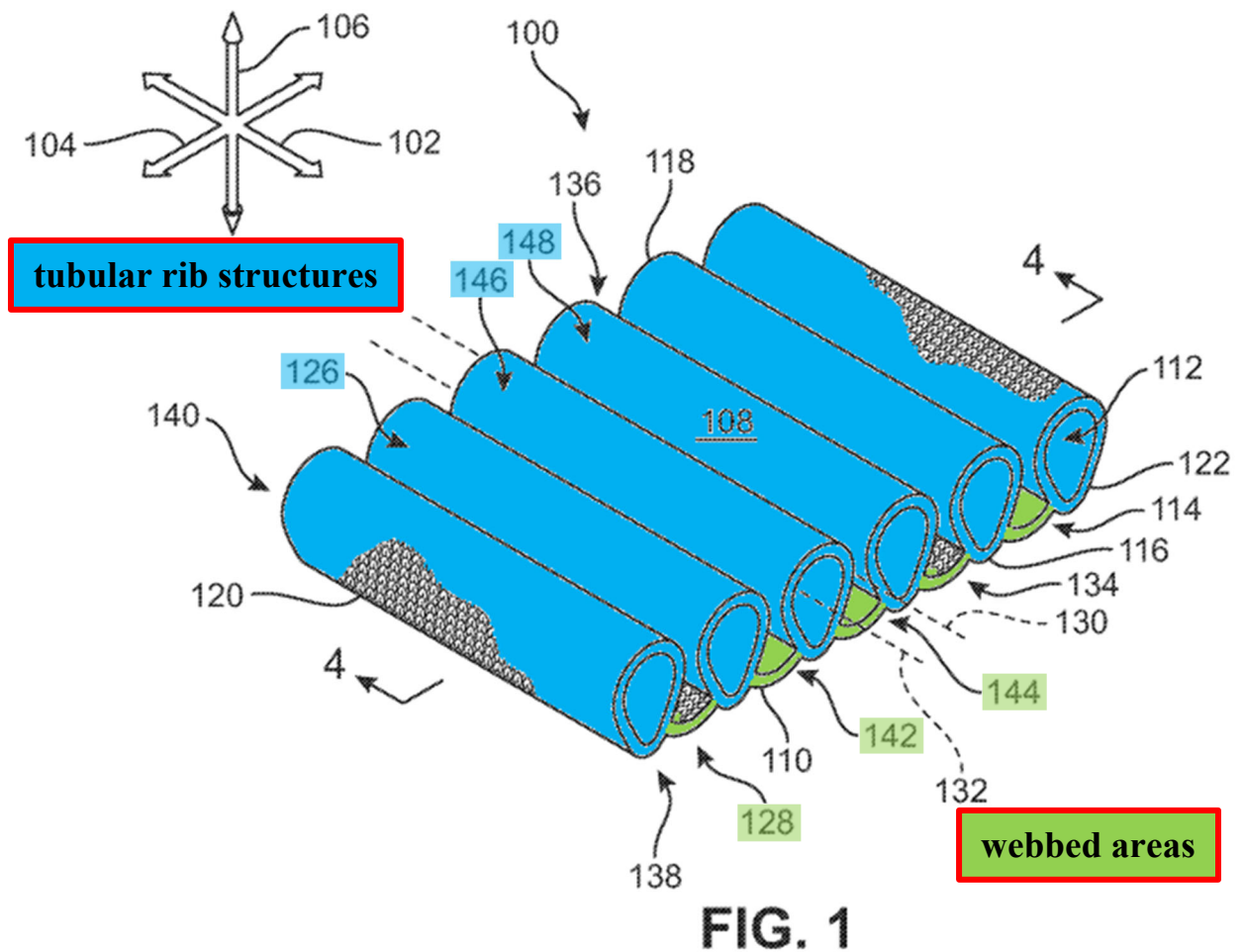
III. THE ’046 PATENT

A. Specification

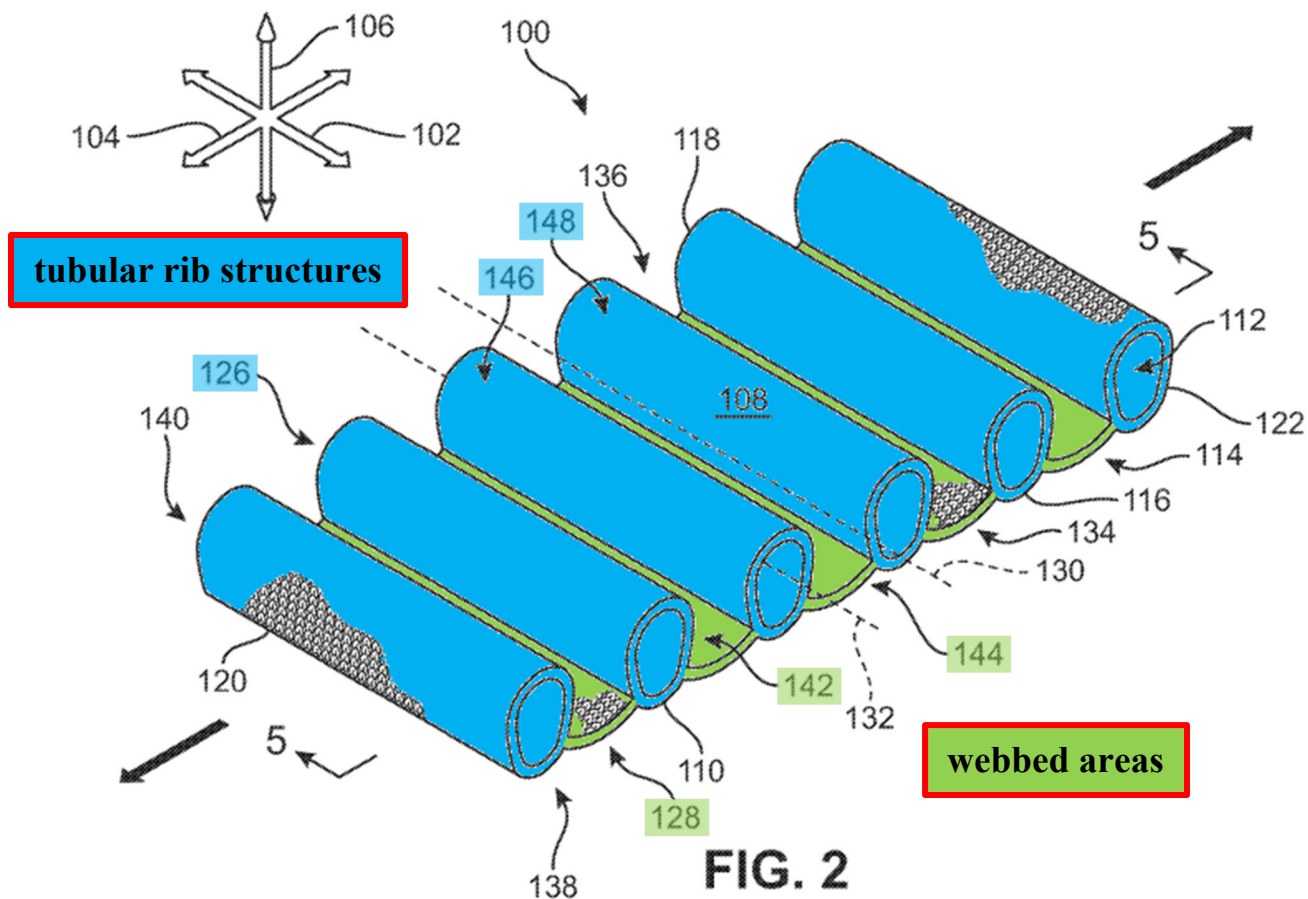
The ’046 patent discloses ribbed knitted articles, such as “apparel (e.g., shirts, pants, socks, jackets, undergarments), athletic equipment (e.g., golf bags, baseball and football gloves, soccer ball restriction structures), containers (e.g., backpacks, bags), and upholstery for furniture (e.g., chairs, couches, car seats).” Ex.1001, 4:34-

40; Ex.1003, ¶23. Per the specification, the rib structures provide strength and/or support to a knitted component. Ex.1001, 4:55-58. The “rib structures can be hollow tubes formed in knitted component 100 by co-extensive and overlapping knit layers that are closed to form the tube.” *Id.*, 4:58-61.

Figure 1 below shows knitted component 100 in an unstretched or neutral position. *Id.*, 8:28-30.



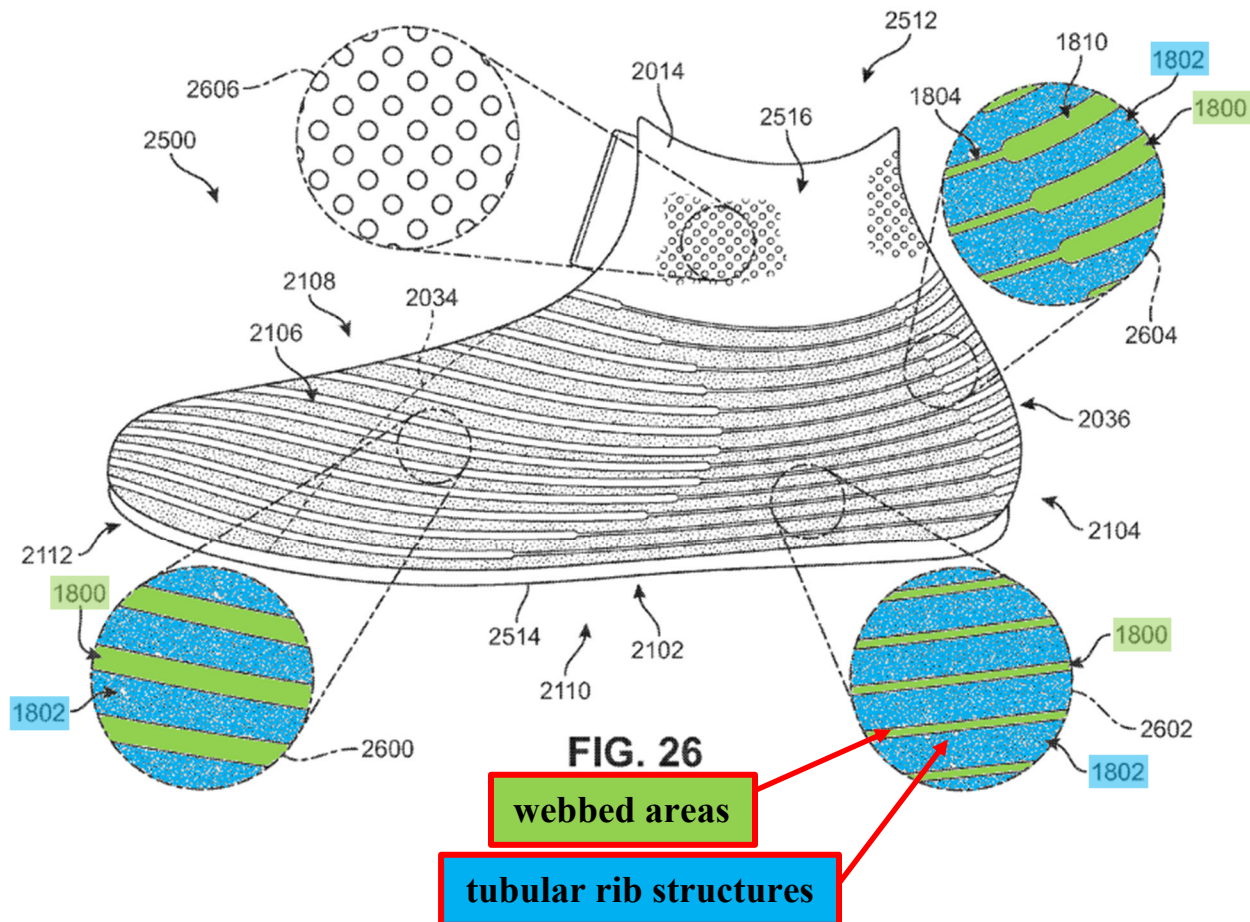
Id., Fig. 1 (annotated); Ex.1003, ¶¶24, 26. Figure 2 below illustrates a different position in which knitted component 100 is stretched or extended. Ex.1001, 5:5-20.



Id., Fig. 2 (annotated); Ex.1003, ¶¶24, 26.

Knitted component 100 includes a “front surface 108 and a back surface 110 ... [and] peripheral edge 114.” Ex.1001, 6:35-47. Knitted component 100 also includes “a plurality of tubular rib structures 126 and a plurality of webbed areas 128.” *Id.*, 7:9-12. The central area of tubular rib structures 126 may incorporate another element (e.g., a tensile element) that passes through the hollow between the two knit layers forming tubular rib structures 126. *Id.*, 7:26-30; Ex.1003, ¶25. The “[w]ebbed areas 128 and/or tubular rib structures 126 can flex, deform, or otherwise move as knitted component 100 stretches.” Ex.1001, 8:17-20.

Some disclosed embodiments are directed to an article of footwear that has webbed areas (green) and tubular structures (blue). *Id.*, 4:22-23, 29:35-38.



Id., Fig. 26 (annotated); Ex.1003, ¶27.

B. Claims

Claim 1, a representative article claim of the '046 patent, is set forth below (with bracketed labels added for reference and the two primary elements emphasized). Ex.1003, ¶28; *see also id.*, ¶¶29-30.

Claim 1	
1[pre]	An article comprising:
1[a]	a plurality of <i>webbed areas</i> that include a plurality of courses formed from a first yarn,
1[a][i]	the webbed areas having a front surface,
1[a][ii]	the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position and
1[b]	a plurality of <i>tubular structures</i> that are adjacent to the webbed areas, the tubular structures including a plurality of courses;
1[c]	wherein at least one of the webbed areas or tubular structures is configured to stretch to move the webbed areas to the extended position in response to a force applied to the article
1[d]	wherein in the neutral position, a first area of the front surface is hidden from visual observation from a first viewing perspective, and
1[e]	wherein in the extended position, the first area of the front surface is revealed for visual observation from the first viewing perspective.

C. Prosecution History

The Patent Office issued only one substantive Office Action during prosecution, rejecting the pending claims as anticipated by Kuroda (Ex.1008) or Woolley (Ex.1009) or obvious over Dua (Ex.1010) in view of Woolley. Ex.1002, 50-60; Ex.1003, ¶31.

After Patent Owner filed a Response to the Office Action, Patent Owner conducted an interview with the Examiner where the Examiner “favorably received”

two proposals. Ex.1002, 30-31; Ex.1003, ¶32. The first proposal involved amending the **article** claims to “include the feature that the first area of the front surface is hidden from visual observation from a first viewing perspective, and in the extended position, the first area of the front surface is revealed for visual observation from the first viewing perspective.” Ex.1002, 30-31. The second proposal involved amending the **upper** claims to “include the feature that a first curved portion with a first curve length extends from the front side of the webbed areas, and a second curved portion with a second curve length extends from a back side of the webbed areas, the first curve length being greater than the second curve length.” *Id.* Patent Owner subsequently filed a Supplemental Response to present article and upper claims consistent with the two proposals. *Id.*, 24-31.

The Examiner issued a Notice of Allowance without further comments. *Id.*, 11-15.

IV. LEVEL OF ORDINARY SKILL

The '046 patent relates to articles with knitted components, including “articles of footwear incorporating knitted components.” Ex.1001, 1:20-22, 4:34-50. A hypothetical person of ordinary skill in the art (“POSA”) would have had at least a bachelor’s degree in mechanical engineering, textile engineering, or similar technical degree and at least 3 years of experience working with knitted textiles for use in fabric-based articles, including apparel such as footwear. Ex.1003, ¶¶33-35;

see also id., ¶¶1-22. For individuals with different educational backgrounds, a person could still be of ordinary skill in the art provided that person’s additional experience compensates for any differences in that person’s education as stated above. *Id.*, ¶35.

This Petition does not turn on this specific definition of the level of ordinary skill. The claims are anticipated and would be obvious from the perspective of any reasonable definition of a POSA.

V. CLAIM CONSTRUCTION

The Board construes the claims “using the same claim construction standard that would be used” in district court. 37 C.F.R. § 42.100.

In the district court case, Petitioner and Patent Owner agreed on constructions for several claim terms and proposed different constructions for other terms. Ex.1014, 1-11. Similarly, in the Puma Litigation, the parties, Puma and Nike (Patent Owner), proposed constructions for several claim terms of the ’046 patent, and the court issued a claim construction order (Ex.1012).

A. “tubular structures/tubular rib structures”

Independent claims 1 and 20 are directed to an article comprising “a plurality of *tubular structures* that are adjacent to the webbed areas.”¹ Independent claim 8 is directed to an upper comprising “a plurality of *tubular rib structures* ... disposed

¹ Emphasis added unless otherwise noted.

adjacent to the webbed areas.” In the district court case, Patent Owner proposes that “tubular structures” should be given its “[o]rdinary and customary meaning; i.e., tube-like structures.” Ex.1014, 3-6.² Patent Owner has taken the position in the district court case that a “tube-like” structure need not be hollow like a tube. Rather, Patent Owner contends the ’046 patent claims encompass a simple knitted ribbed article without regard to whether the ribs have the shape of a tube.

Petitioner agrees that the “tubular structures” term should be given its plain and ordinary meaning, but disagrees with Patent Owner regarding what the plain meaning is. Ex.1003, ¶¶38-39. Specifically, Petitioner submits that “tubular structure” must have the shape of a tube. Thus, “tubular structures” should be construed as “elongated hollow structures.” *Id.* This construction is consistent with the claim language and specification. The ’046 patent provides that “tubular structures” refer to the same structures as “tubular rib structures.” Ex.1001, 10:16-19; Ex.1003, ¶127.

² In the previous Puma Litigation, Patent Owner argued that the term should be given its “ordinary and customary meaning” without proposing any construction. Ex.1012, 16. The district court construed the term to mean “tube-like structures.” *Id.*, 15-17. Puma had argued that the “tubular structures” should be construed as “tube shaped structure, *i.e.*, having the structure of a hollow elongated cylinder.” *Id.*, 16. The district court rejected that proposed construction. The Puma Litigation was settled without any final judgment and the district court’s interlocutory construction was never reviewed.

The '046 patent explains that the knitted component 100 can include rib structures, and in some cases the “rib structures can be hollow tubes.” Ex.1001, 4:55-61. The '046 patent later confirms that the knitted component 100 can include ribs, and in some specific embodiments the “knitted component 100 can include a plurality of tubular rib structures 126.” *Id.*, 7:4-12. Thus, the term “tubular” describes a specific type of rib and clarifies that the tubular structure cannot be a non-tubular rib. Ex.1003, ¶40. The '046 patent further explains that “[g]enerally, tubular rib structures 126 can be areas of knitted component 100 constructed with two or more co-extensive and overlapping knit layers ... [which] may be formed of unitary knit construction in such a manner so as to form tubes or tunnels, identified as tubular rib structures 126 ... a central area is generally unsecured to form a hollow between the two layers of knitted material forming each knit layer.” Ex.1001, 7:14-30. Moreover, “the central area of tubular rib structures 126 may be configured such that another element (e.g., a tensile element) may be located between and pass through the hollow between the two knit layers forming tubular rib structures 126.” *Id.* As described herein, the challenged claims are unpatentable as anticipated and obvious regardless of which construction is adopted. Ground 2 addresses the invalidity of the claims 1–3, 7, 17, 18, and 20 under Patent Owner’s overbroad proposed construction.

B. “neutral position”

Independent claims 1, 8, and 20 recite “the webbed areas configured to move between a *neutral position* and an extended position.”

In the district court case, the parties have agreed that this term means “position in the absence of applied force.” Ex.1014, 11.

C. “extended position”

Independent claims 1, 8, and 20 recite “the webbed areas configured to move between a neutral position and an *extended position*.”

In the district court case, the parties have agreed that this term means “position in response to applied force.” Ex.1014, 11.

D. “unitary knit construction”

Dependent claim 18 recites “wherein the knitted component is formed of *unitary knit construction*.”

In the district court case, the parties have agreed that this term means “formed as a one-piece element through a knitting process.” Ex.1014, 11.

As explained in the grounds below, the challenged claims are unpatentable under any reasonable construction of these claim terms. Ex.1003, ¶¶36-44.

VI. RELIEF REQUESTED

Petitioner requests that the Board cancel claims 1–3, 7–9, and 14–20 of the '046 patent as anticipated and/or obvious in view of the following prior art references:

Ex.	Reference	Date	Art Type
1005	Good	Issued: October 27, 1987	§102(a)(1) and §102(a)(2)
1006	Munsing	Issued: October 9, 1888	§102(a)(1) and §102(a)(2)
1007	Minami	Published: May 15, 2014	§102(a)(1) and §102(a)(2)

IPR is requested for the following grounds of unpatentability:

Ground	Reference(s)	Basis	Challenged Claims
1	Good	§102 / §103	1–3, 7, 16–18, 20
2	Munsing	§102	1–3, 7, 17, 18, 20
3	Minami	§102 / §103	8, 9, 14, 15, 19

The Petition is supported by the expert declaration of Dr. David S. Brookstein.

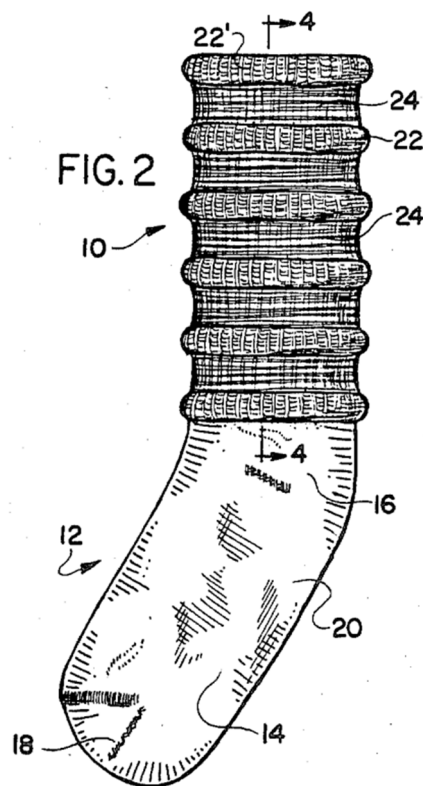
Ex.1003.

**VII. GROUND 1: GOOD RENDERS CLAIMS 1–3, 7, 16–18, AND 20
UNPATENTABLE**

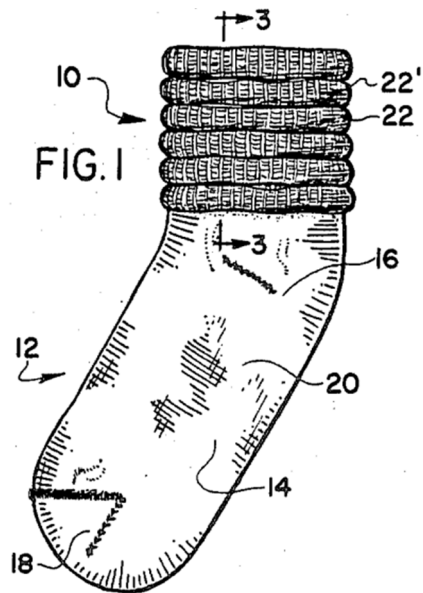
A. Overview of Good

Good (Ex.1005) dates back to 1987 and describes an article with tubular structures separated by webbed areas. Ex.1005, Front Page; Ex.1003, ¶¶46-47. Good was neither cited nor considered during prosecution of the '046 patent. Ex.1001.

Good discloses knitted cuff members utilized in socks, wrist bands, leg warmers, and the like. Ex.1005, 1:5-7. Figure 2 from Good shows a cuff member 10:



Id., Fig. 2. As illustrated, Good’s cuff member 10 includes “rib portions 22” and “connecting portions 24” separating the rib portions. *Id.*, 3:67-4:8; Ex.1003, ¶47. Good discloses that its cuff member 10 is stretchable between (i) a “relaxed condition” where the rib portions 22 are closely adjacent one another and the connecting portions 24 are generally not visible and (ii) an “extended or elongated condition” where the rib portions 22 and the connecting portions 24 are elongated to space apart the rib portions 22. Ex.1005, 4:8-18. Figure 2 above illustrates the extended condition while Figure 1 below illustrates the relaxed condition.



Id., Fig. 1.

The rib portions 22 are tubular structures. Ex.1003, ¶48. As shown in the cross-sectional view in Figure 3, the rib portions 22 (blue) have the shape of a tube, namely they form elongate hollow tunnels extending around the article. *Id.*

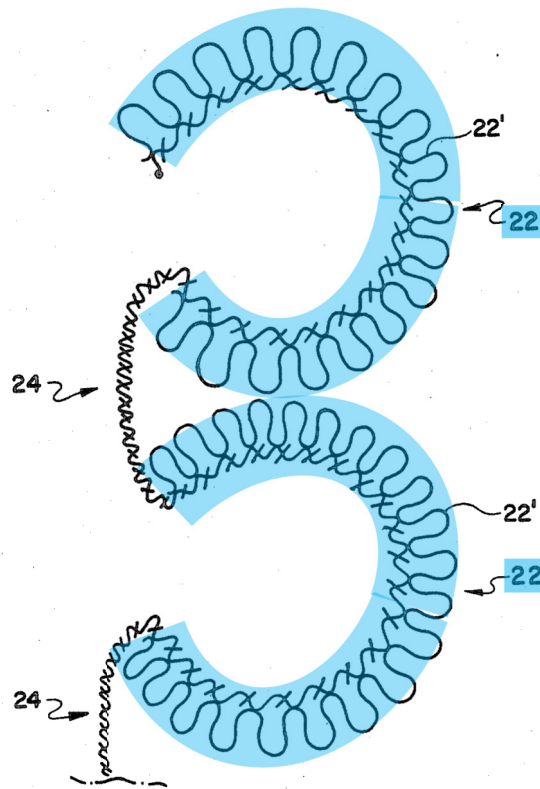


FIG.3

Ex.1005, Fig. 3 (annotated); Ex.1003, ¶48.

B. Good Anticipates Claim 1

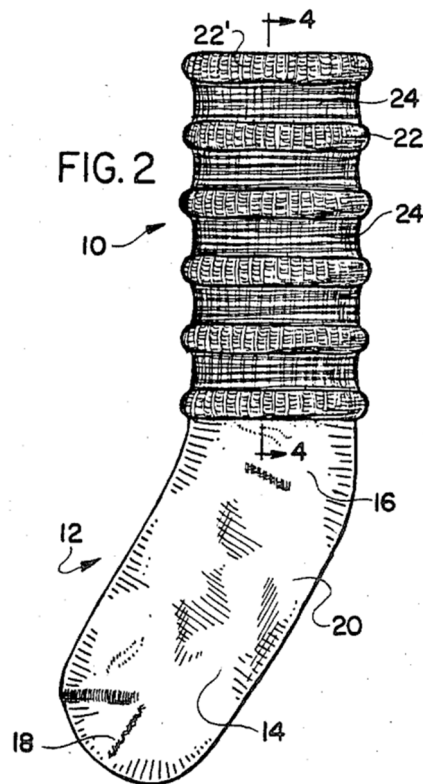
Good discloses an article of clothing, such as a sock, with tubular structures adjacent to webbed areas. Ex.1005, 1:5-10; Ex.1003, ¶49. The article stretches to an extended position in which part of the webbed area's front surface is revealed. Ex.1005, Abstract, Figs. 1-2; Ex.1003, ¶49. Thus, Good discloses an article having all limitations of claim 1.

1. Preamble

The preamble of claim 1 recites “[a]n article.”

The '046 patent identifies a sock as a type of article for the claimed invention. Ex.1001, 4:34-40 (“the knitted component may be used in other types of apparel (e.g., shirts, pants, **socks**, jackets, undergarments)”); Ex.1003, ¶50.

Good plainly discloses an article, e.g., a sock 12 with a cuff 10, as shown in Figure 2. Ex.1005, 3:49-53; Ex.1003, ¶51.

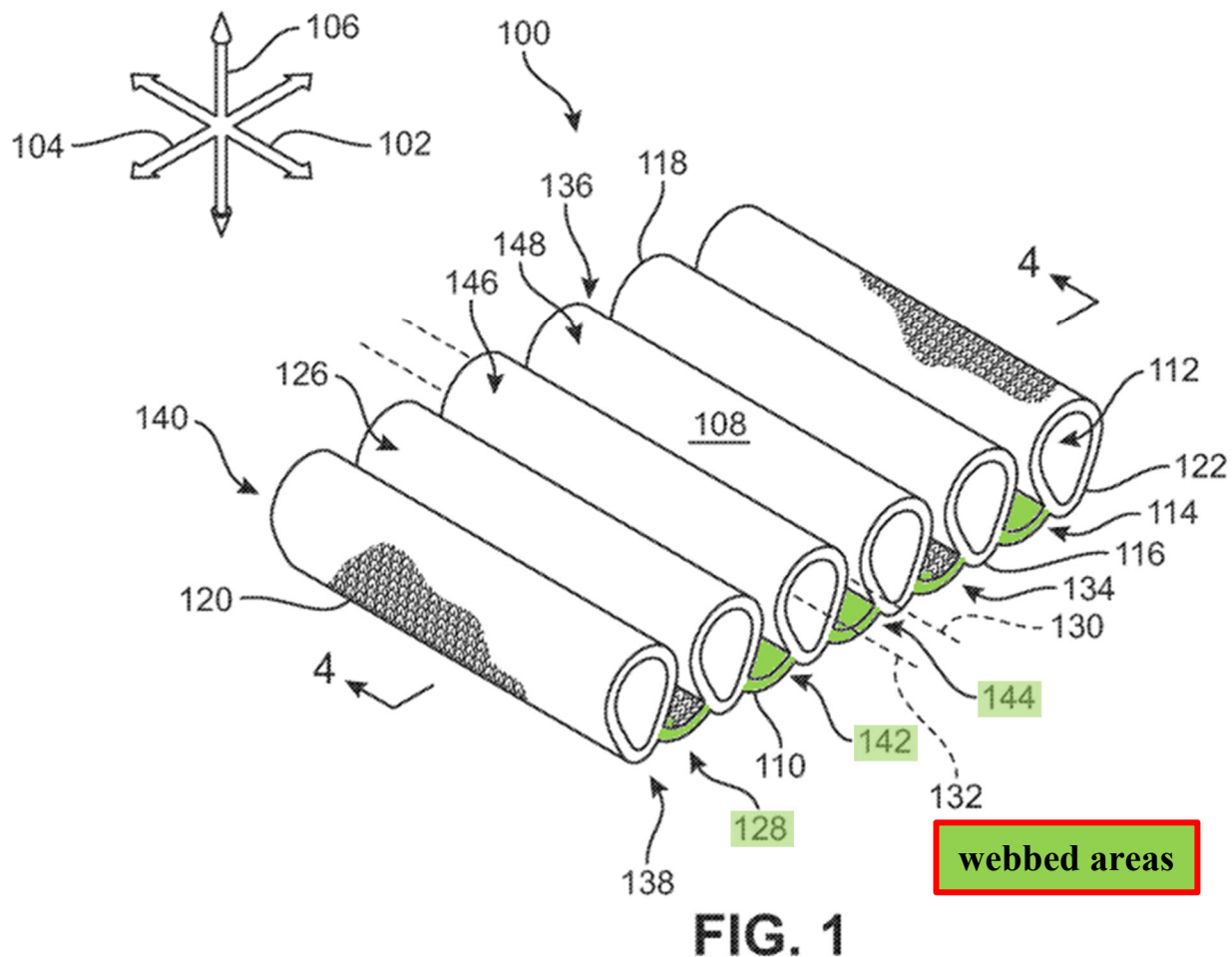


Ex.1005, Fig. 2. Good also discloses “the cuff member 10 of the present invention may be equally well adapted for use in a wide variety of other knitted articles, e.g., wrist bands, leg warmers, etc.” *Id.*, 3:53-57.

2. Limitation 1[a]

This limitation recites “a plurality of webbed areas that include a plurality of courses formed from a first yarn.”

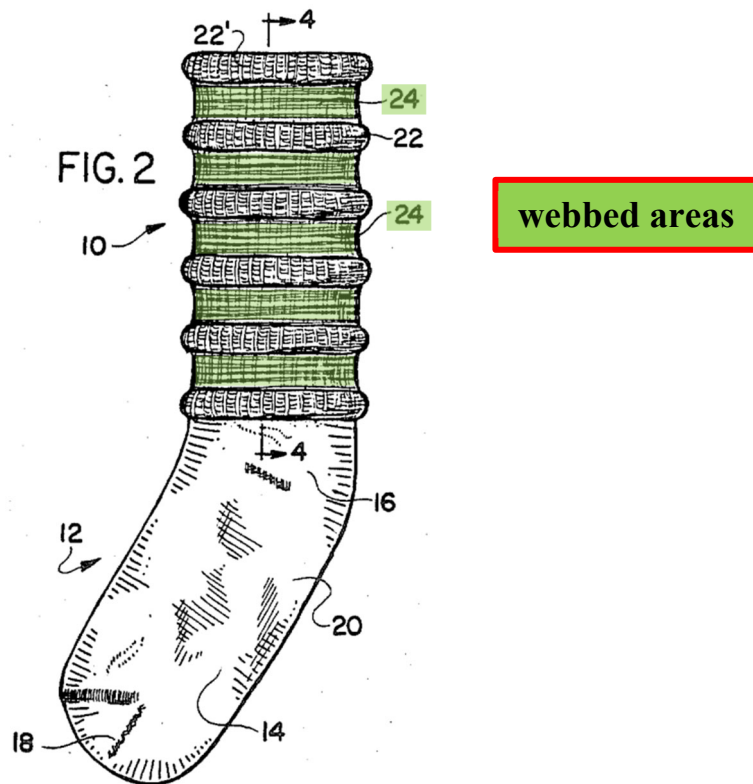
In the '046 patent, the webbed areas (green) are connecting portions between tubular structures, as shown in Figure 1 below. Ex.1001, 7:45-62.



Id., Fig. 1 (annotated); Ex.1003, ¶52.

Good discloses this limitation. Ex.1003, ¶53. For example, Good discloses rib portions 22 “in axially alternating arrangement along the cuff member 10” and

connecting portions 24 “formed in the spaced groups of successive courses intermediate the course groups forming the rib portions 22.” Ex.1005, 3:67-4:4, 4:25-31. Good provides that the courses of the connecting portions 24 are knitted from at least one yarn. *Id.*, 4:35-37, 2:54-61, 12:34-44, Abstract, Claims 1, 5. Good’s Figure 2 below illustrates the webbed areas (green). *Id.*, 4:19-44.

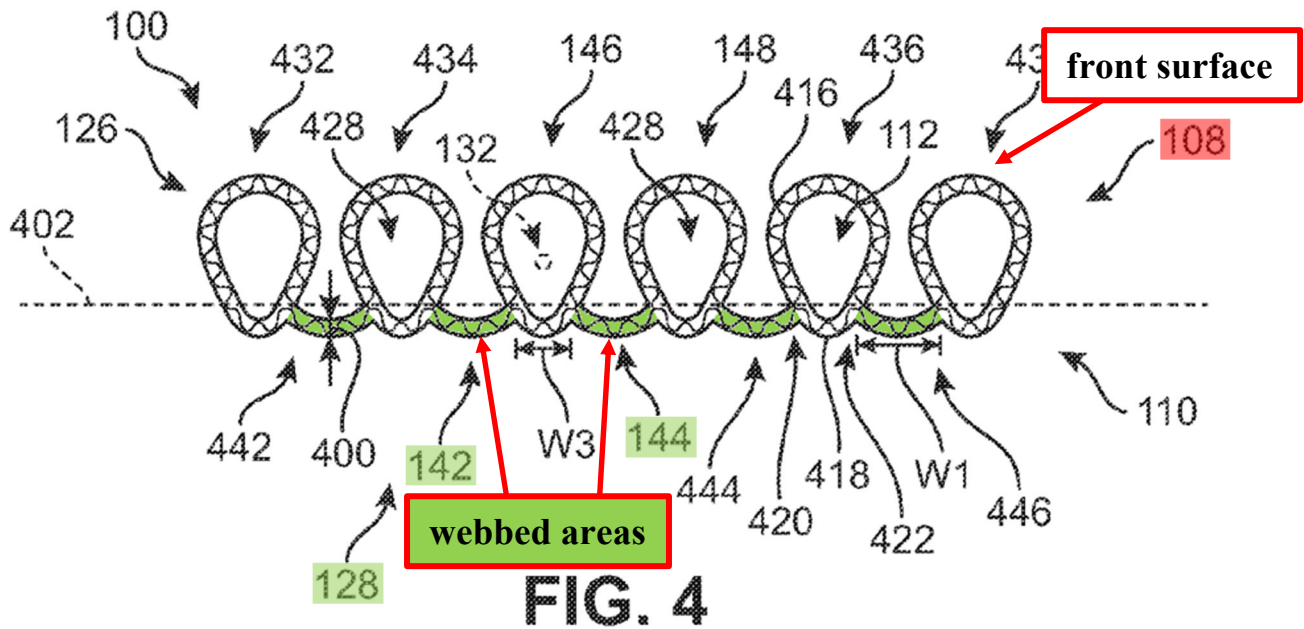


Id., Fig. 2 (annotated); Ex.1003, ¶53.

3. Limitation 1[a][i]

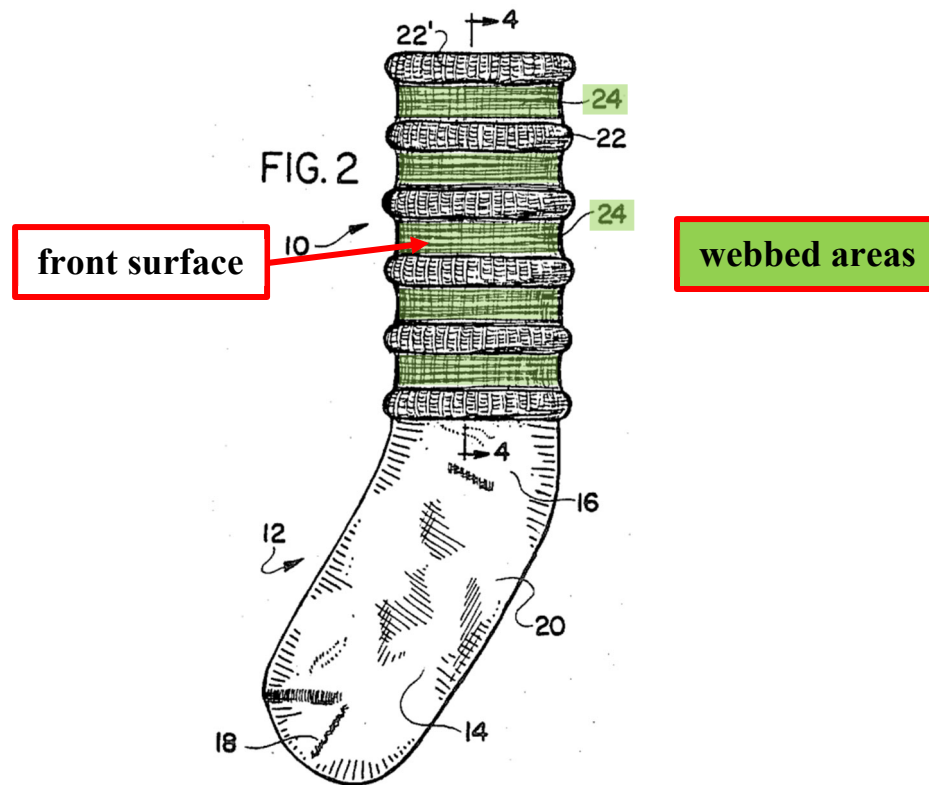
This limitation recites “the webbed areas having a front surface.”

The '046 patent explains that the knitted component 100 has a front surface 108, as shown below in Figure 4. Ex.1001, 6:35-37.



Id., Fig. 4 (annotated); Ex.1003, ¶54.

Good discloses this limitation. Ex.1003, ¶55. For example, Good's Figure 2 below shows a front surface of the webbed areas (green), i.e., the surface seen from outside of the sock/cuff member.



Ex.1005, Fig. 2 (annotated); Ex.1003, ¶55.

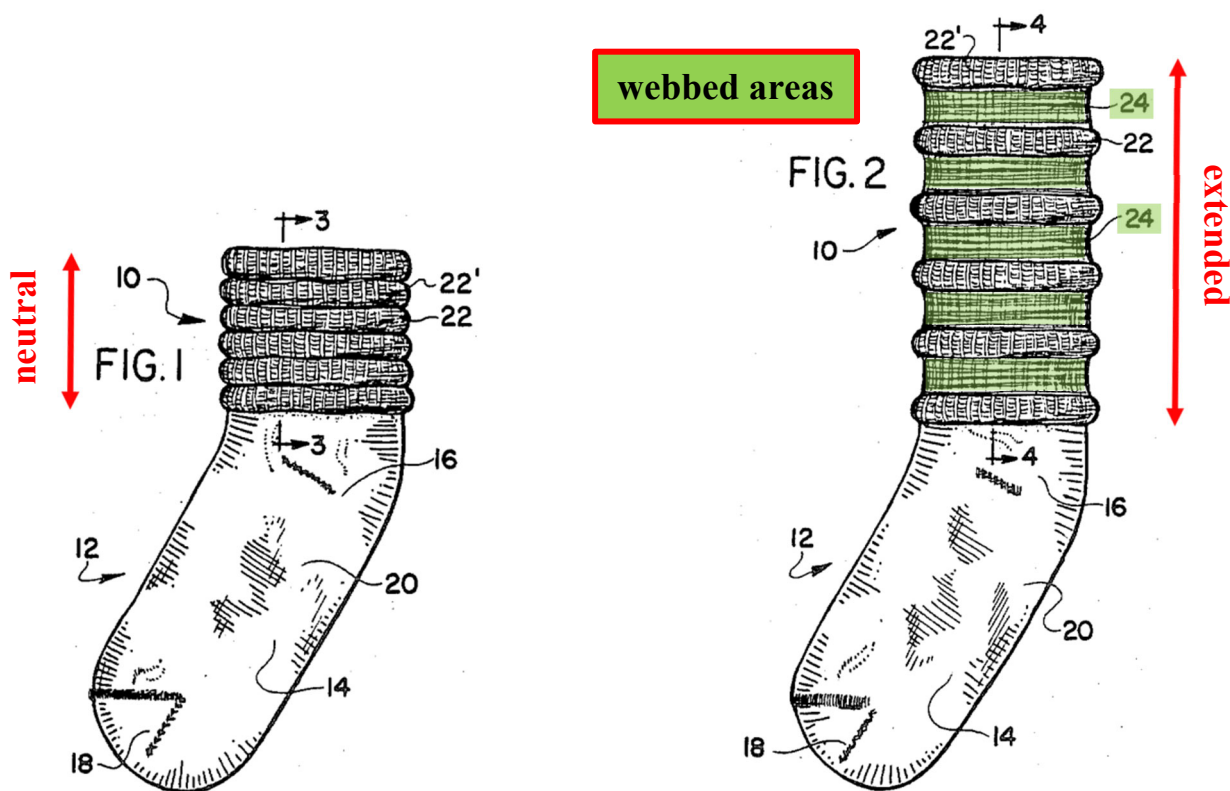
4. Limitation 1[a][ii]

This limitation recites “the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position.”

Good discloses this limitation. Ex.1003, ¶56. For example, Good discloses that “the cuff member 10 is stretchable axially between a relaxed condition shown in FIG. 1 [below left] wherein the rib portions 22 are disposed closely axially adjacent one another making the connecting portions 24 [green] generally not visible from outwardly of the cuff member 10 and an extended or elongated condition

shown in FIG. 2 [below right] wherein the rib portions 22 and the connecting portions 24 are elongated with the rib portions 22 spaced axially from one another.”

Ex.1005, 4:8-18; *see also id.*, 1:51-58, 2:54-61, 12:11-59, Abstract, Claims 1, 5.



Id., Figs. 1-2 (annotated); Ex.1003, ¶56. Thus, Good’s article has webbed areas (connecting portions 24) that are configured to move between a neutral position (relaxed condition) and an extended position (elongated condition). Ex.1003, ¶56.

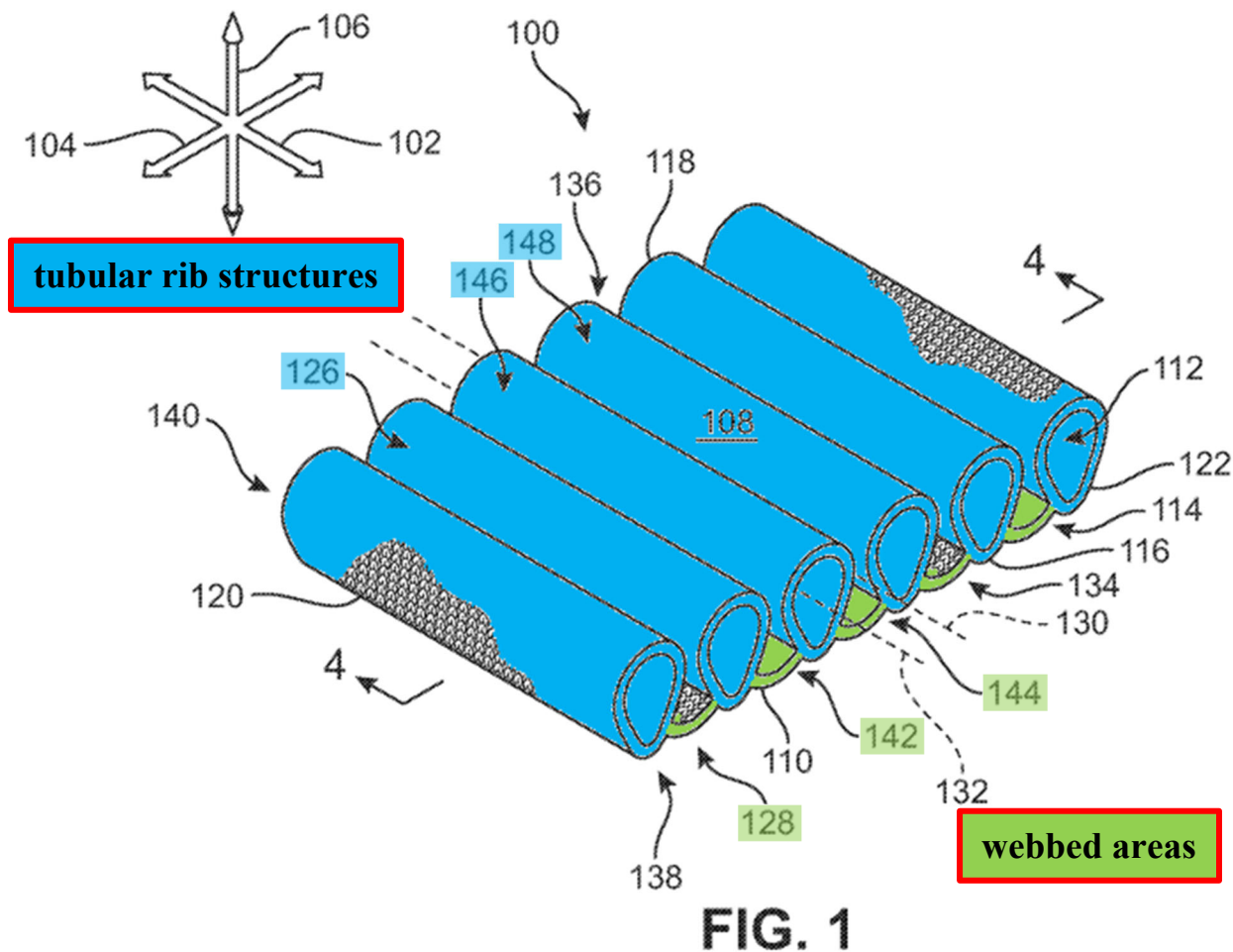
Good discloses that “the connecting portions 24 contract in the relaxed condition.” Ex.1005, 12:27-34. Good also describes the condition of the article shown in Figure 1 as “relaxed,” which contrasts with the condition shown in Figure 2 that Good describes as “extended” or “elongated.” Ex.1003, ¶57. Because the

article requires an applied force to extend or elongate and, absent the applied force, remains in the neutral position (relaxed condition), Good's webbed areas (connecting portions 24) are biased to return to the neutral position (relaxed condition). *Id.*

5. Limitation 1[b]

This limitation recites “a plurality of tubular structures that are adjacent to the webbed areas, the tubular structures including a plurality of courses.”

In the '046 patent, the “tubular structures” (blue) are positioned adjacent to and between the webbed areas (green), as shown below. Ex.1001, 7:14-30.



Id., Fig. 1 (annotated); Ex.1003, ¶58.

Good discloses this limitation. Ex.1003, ¶59. For example, Good discloses “each rib portion 22 is formed of a selected predetermined number of courses sufficient to enable the axial ends of each rib portion 22 to roll substantially together in the relaxed condition.” Ex.1005, 12:34-44; *see also id.*, 12:55-59 (“the rib portions 22 maintain their outwardly rolled configuration”), 12:14-20 (“the rib portions 22 to roll axially upon themselves”). The rib portions 22 are tubular structures at least because each of the rib portions 22 has the shape of a tube, namely

an elongate hollow structure. Ex.1003, ¶59. The cross-section of Good’s rib portions 22 (blue) and connecting portions 24 (green) are depicted in Figure 3. *Id.*

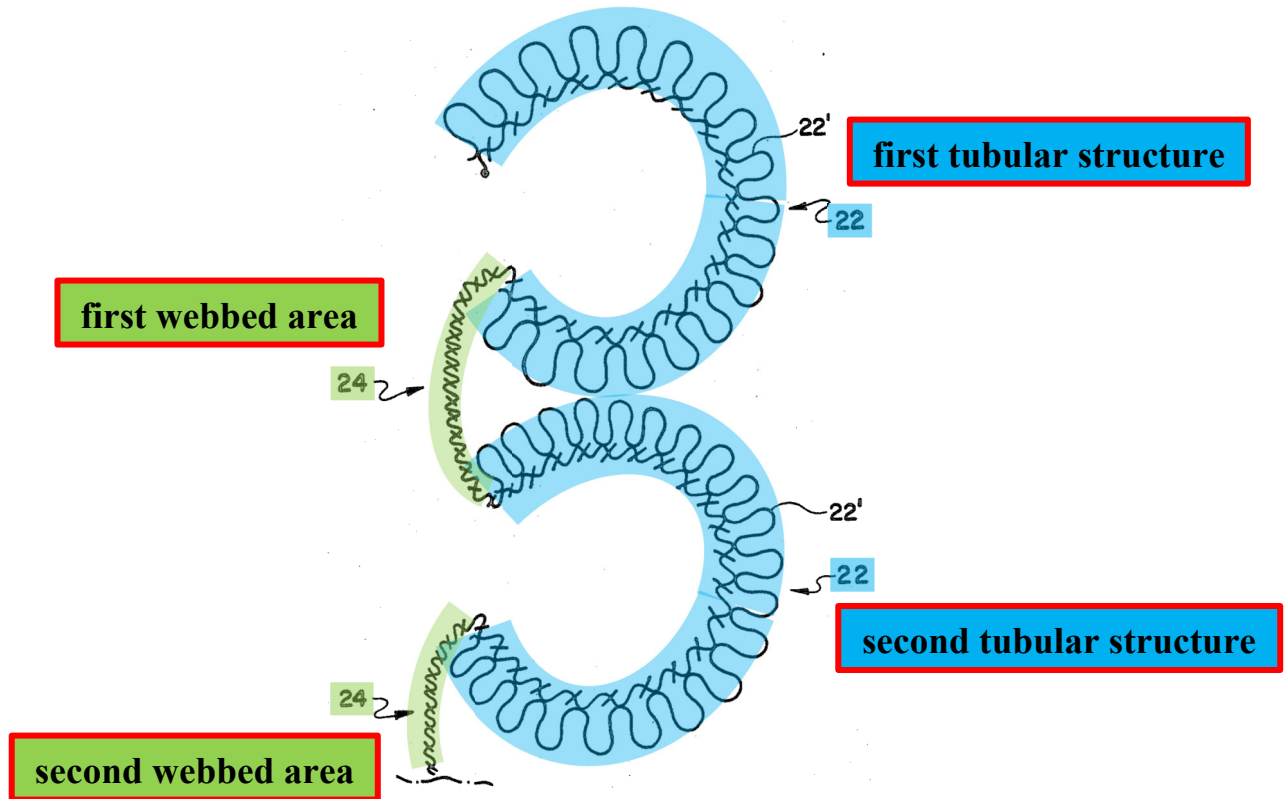


FIG.3

Ex.1005, Fig. 3 (annotated); Ex.1003, ¶59.

The tubular structures (rib portions 22) are “formed in several spaced groups of courses each including a plurality of successive courses.” Ex.1005, 4:25-28. The tubular structures (rib portions 22) are adjacent to the webbed areas (connecting portions 24). *Id.*, 4:28-31. Thus, Good’s tubular structures (rib portions 22) include a plurality of courses and are adjacent to the webbed areas (connecting portions 24). Ex.1003, ¶60.

6. Limitation 1[c]

This limitation recites “wherein at least one of the webbed areas or tubular structures is configured to stretch to move the webbed areas to the extended position in response to a force applied to the article.”

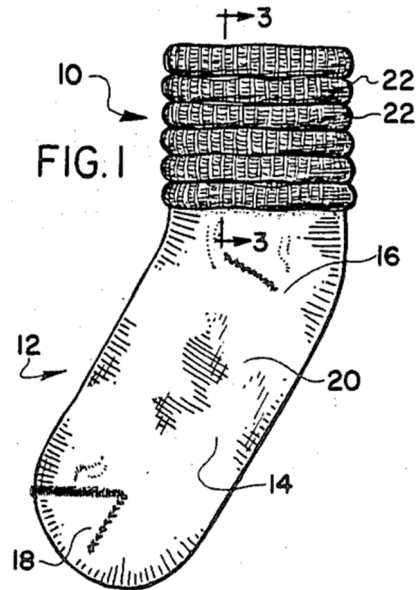
Good discloses this limitation. Ex.1003, ¶61. For example, as discussed with respect to limitation 1[a][ii] in this ground, Good discloses that its article may be in the relaxed condition where the tubular structures are positioned close together or the extended condition where the webbed areas between the tubular structures are exposed from stretching the article. *Id.*, ¶61; *see* Section VII.B.4. Thus, at least one of Good’s webbed areas or tubular structures is configured to stretch to move the webbed areas to the extended position (extended condition) responsive to a force applied to Good’s article. Ex.1003, ¶61.

7. Limitation 1[d]

This limitation recites “wherein in the neutral position, a first area of the front surface [of the webbed areas] is hidden from visual observation from a first viewing perspective.”

Good discloses this limitation. Ex.1003, ¶62. For example, Figure 1 from Good shows the cuff member 10 in the relaxed condition where the front surface of the webbed areas between the tubular structures are “generally not visible from

outwardly of the cuff member 10.” Ex.1005, 4:8-18; *see also id.*, 1:51-58, 10:32-41, 12:34-44, Abstract, Claims 1, 5; Ex.1003, ¶62.



Ex.1005, Fig. 1. Thus, in Good’s neutral position (relaxed condition), a first area of the front surface of the webbed areas (connecting portions 24) is hidden from visual observation from a first viewing perspective. Ex.1003, ¶62.

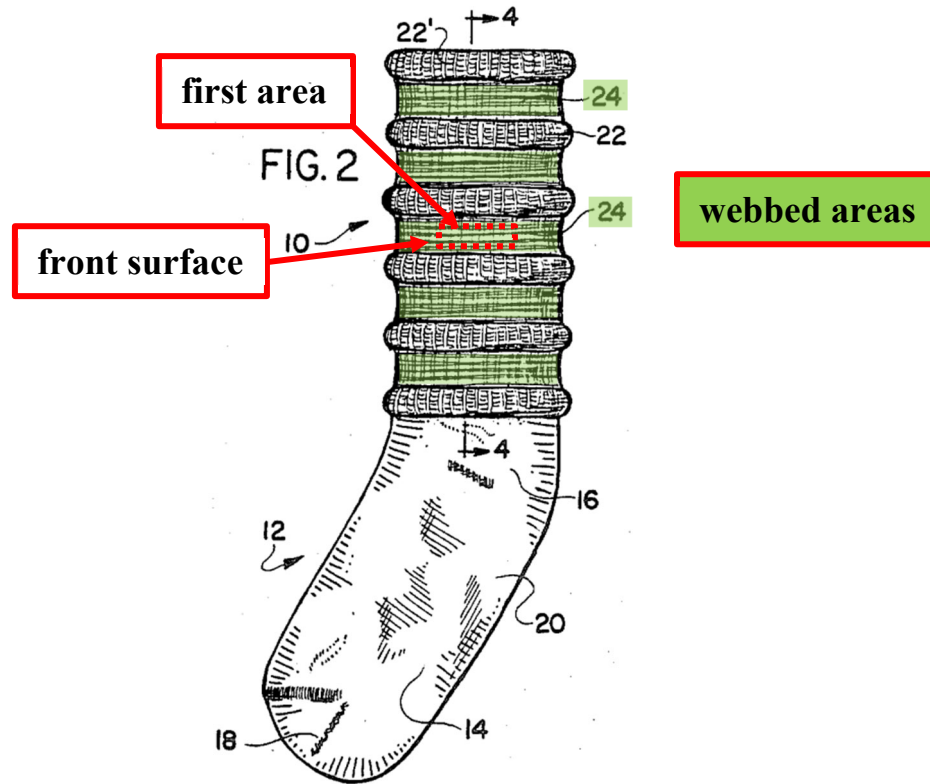
8. Limitation 1[e]

This limitation recites “wherein in the extended position, the first area of the front surface [of the webbed areas] is revealed for visual observation from the first viewing perspective.”

Good discloses this limitation. Ex.1003, ¶63. For example, Figure 2 from Good shows the cuff member 10 in the extended condition where the tubular structures are spaced apart and a first area of the front surface of the webbed areas

(green) between the tubular structures is visible from outwardly of the cuff member

10. Ex.1005, 4:8-18, 1:51-58, 12:44-55, Abstract, Claims 1, 5; Ex.1003, ¶63.



Ex.1005, Fig. 2 (annotated); Ex.1003, ¶63. Thus, in Good's extended position (extended condition), a first area of the front surface of the webbed areas (connecting portions 24) is revealed for visual observation from the first viewing perspective.

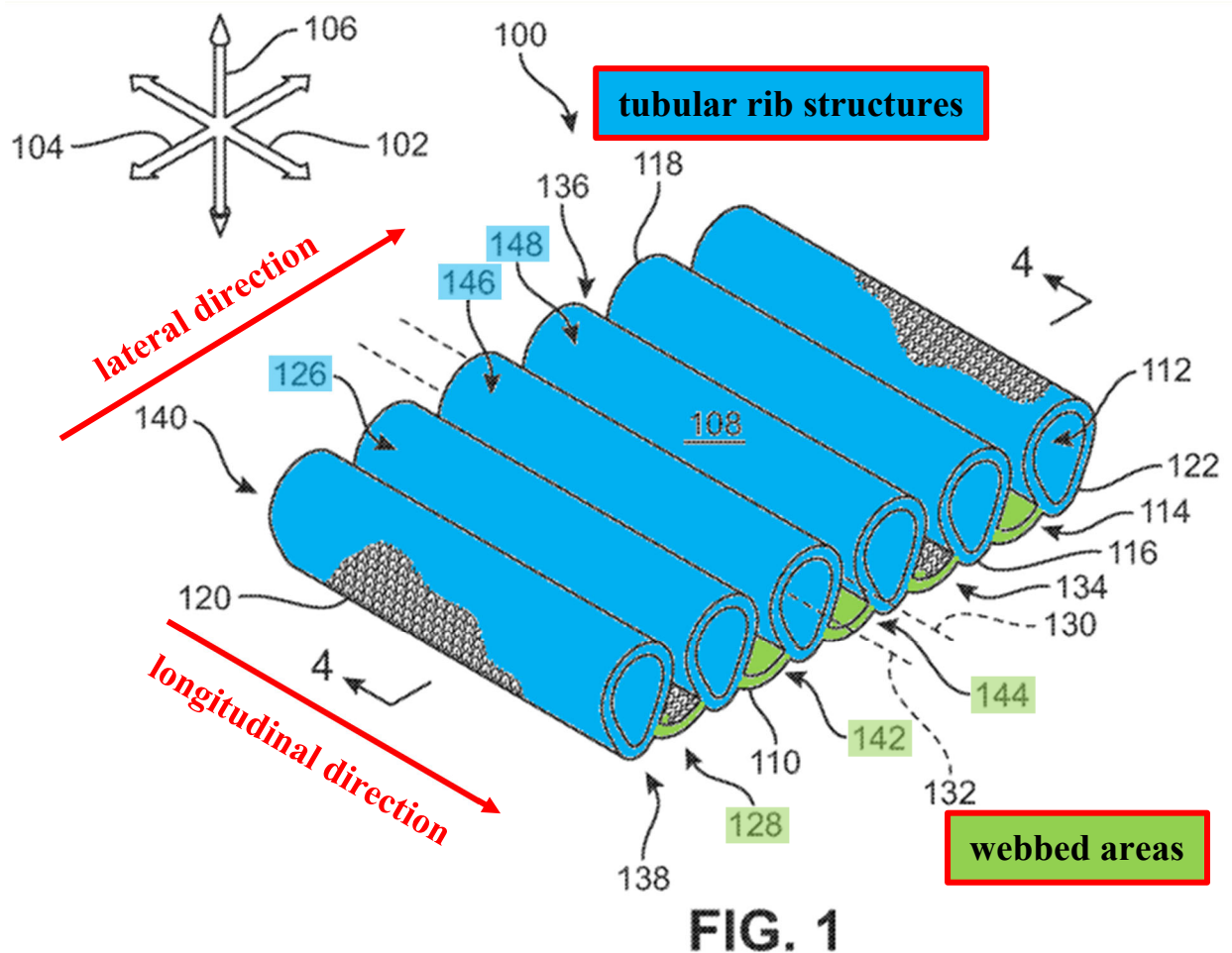
Ex.1003, ¶63.

C. Good Anticipates Claim 2

Claim 2 depends from claim 1 and recites “wherein the article is associated with a longitudinal direction and a lateral direction; wherein the plurality of webbed areas and the plurality of tubular structures extend along the longitudinal direction,

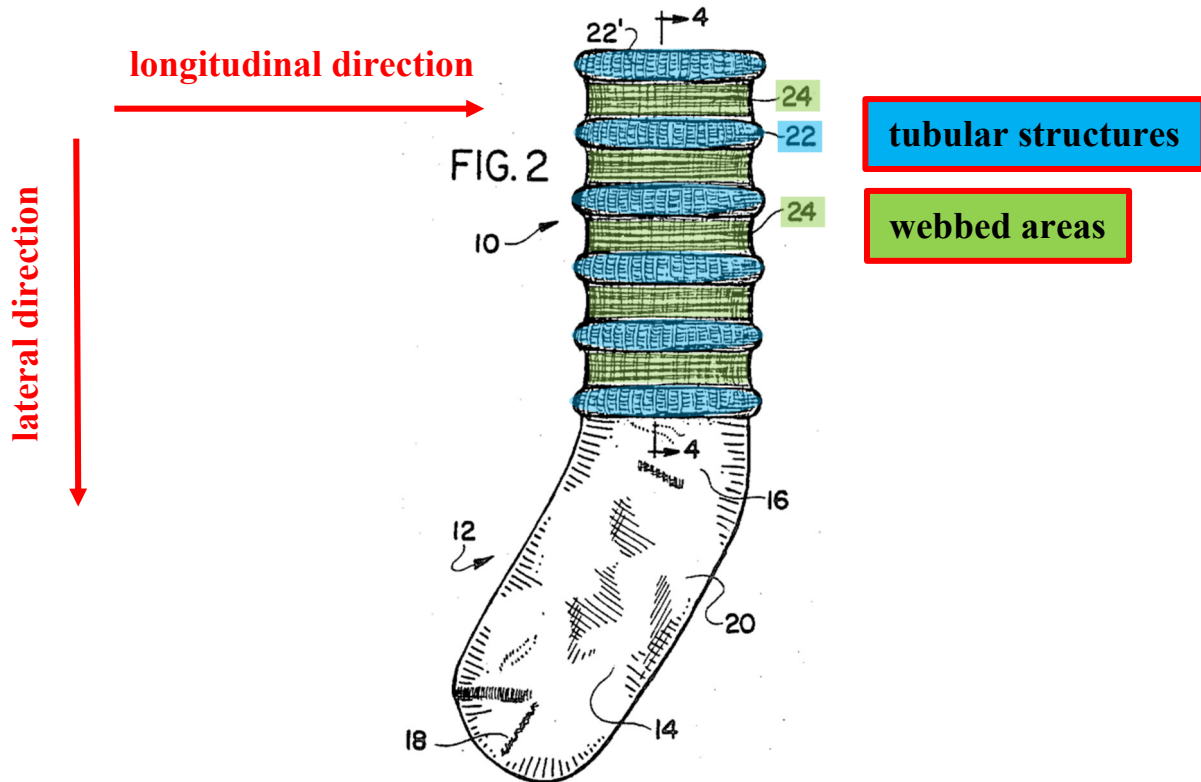
wherein the plurality of webbed areas and the plurality of tubular structures are spaced apart in the lateral direction, and wherein the article is configured to stretch in the lateral direction between the neutral position and the stretched position, the article biased toward the neutral position.”

The '046 patent describes the longitudinal direction 102 as a direction parallel to the axes of the tubular structures (blue) and the lateral direction 104 as a direction perpendicular to the axes of the tubular structures, as shown in Figure 1:



Ex.1001, Fig. 1 (annotated); Ex.1003, ¶65.

Good discloses these limitations. Ex.1003, ¶¶64-67. For example, Good’s Figure 2 below illustrates a “side elevational view of the cuff member [10] and sock of FIG. 1, showing the cuff member in its elongated condition.” Ex.1005, 3:13-15.



Id., Fig. 2 (annotated); Ex.1003, ¶66. As shown, Good’s article is associated with longitudinal and lateral directions, and the tubular structures (blue) and the webbed areas (green) extend along the longitudinal direction and are spaced apart in the lateral direction. Ex.1003, ¶66.

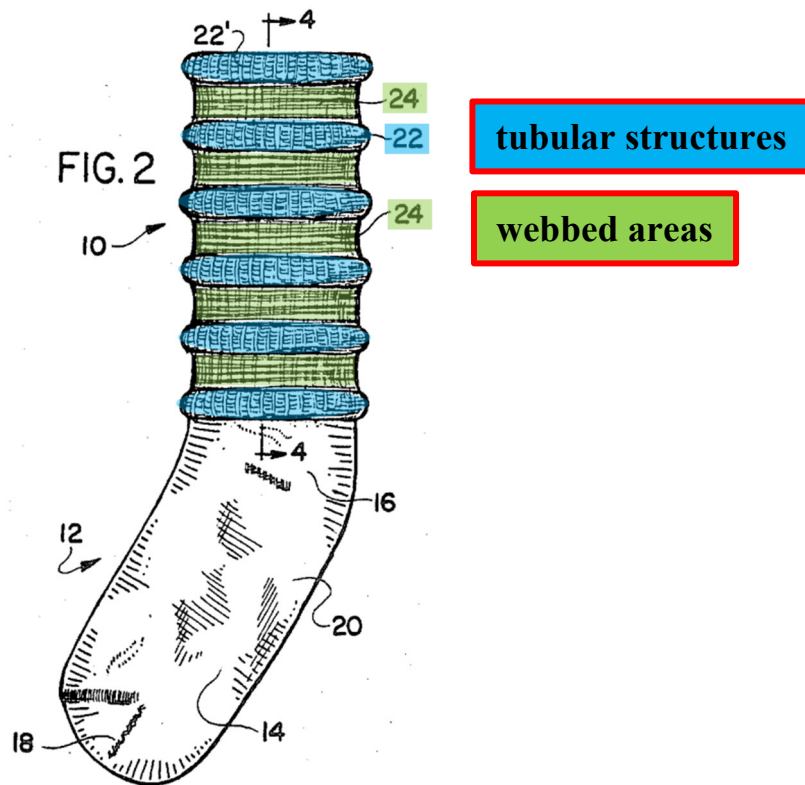
As explained above for limitation 1[a][ii], Good’s article stretches between the neutral position (relaxed condition) and the extended position (extended condition) and is biased to the neutral position, and the webbed areas between the

tubular structures are exposed in the extended position. Ex.1003, ¶67; *see* Section VII.B.4. This means that the article is stretched in the lateral direction from the neutral position to the extended position so that the webbed areas are exposed in the extended position. Ex.1003, ¶67.

D. Good Anticipates and Renders Obvious Claim 3

Claim 3 depends from claim 2 and recites “wherein the plurality of webbed areas and the plurality of tubular structures are disposed in an alternating manner across the majority of the article.”

Good discloses this limitation. Ex.1003, ¶¶68-69. For example, Good’s Figure 2 illustrates the webbed areas (connecting portions 24) and the tubular structures (rib portions 22) relative to a combination of the cuff member 10 and the sock 12:



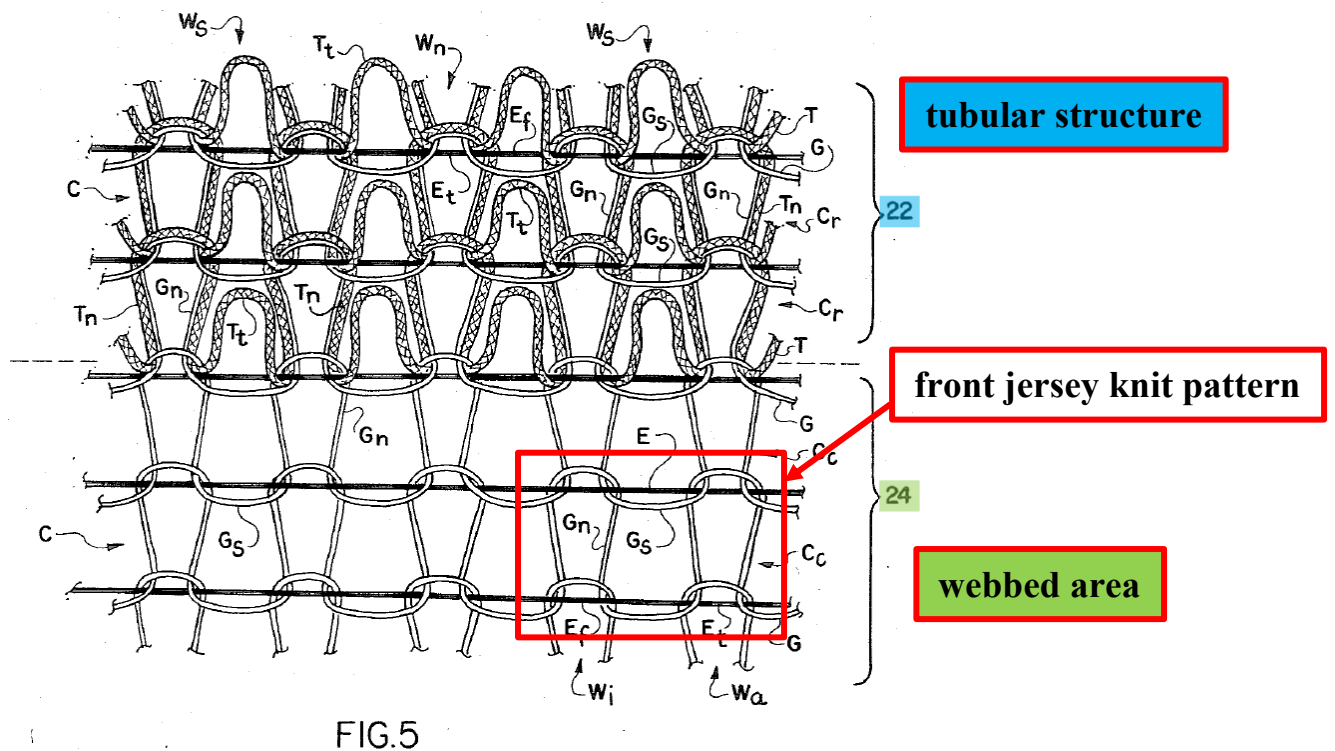
Ex.1005, Fig. 2 (annotated); Ex.1003, ¶69. The webbed areas and tubular structures are shown as disposed in an alternating manner across the majority of the combination of the cuff member and the sock. Ex.1003, ¶69. Good also teaches that the cuff member 10 is desirably lengthened in some embodiments to include additional tubular structures and additional webbed areas, such as to cover more of a wearer's leg. Ex.1005, 10:42-48; Ex.1003, ¶69. Moreover, Good discloses the cuff member 10 is adapted for use in leg warmers. Ex.1005, 3:53-57. The cuff member 10 would extend across the majority of the leg warmer in such a design. Ex.1003, ¶69. Thus, Good discloses the limitations of claim 3. *Id.*

To the extent Patent Owner argues that Good fails to disclose the webbed areas and the tubular structures are disposed across the majority of the article, it would have also been obvious to increase the portion of Good’s article with the tubular structures and webbed areas so that the portion covers the majority of the article. *Id.*, ¶¶70, 154-155. Good discloses alternately forming successive additional rib portions 22 and connection portions 24 “in the same manner as described above for the first rib and connecting portions 22, 24 to produce the cuff member 10 of a desired length.” Ex.1005, 10:42-48. A POSA would have been motivated to increase the length of the cuff member 10 because this would have been known to provide various benefits, including adjusting the aesthetic of the article, increasing the cushioning or warming provided by the cuff member 10, and customizing the fit or feel of the article for different wearers. Ex.1003, ¶70. Good also discloses that the cuff member 10 is desirably used in embodiments including leg warmers, which a POSA would have understood should be formed so that a majority of the article is the cuff member 10 to extend along a substantial portion of a wearer’s leg. Ex.1005, 3:53-57; Ex.1003, ¶70.

E. Good Anticipates Claim 7

Claim 7 depends from claim 1 and recites “wherein the plurality of webbed areas include one of a front jersey knit pattern and a reverse jersey knit pattern.”

Good discloses this limitation. Ex.1003, ¶¶71-73. For example, Good discloses each of the webbed areas (connecting portions 24) “includes a plurality of courses having in each thereof the ground yarn *knitted* in a single *jersey* stitch construction and the elastic yarn inlaid periodically in the stitches of the ground yarn.” Ex.1005, 1:68-2:4; *see also id.*, 2:54-61, 4:23-25, 5:1-6, 10:32-41, Abstract, Claim 5; *see also* Ex.1011, 4 (jersey is “[a] plain knit fabric made on a single set of knitting needles; all the knitted loops are pulled from the face side to the back side of the fabric so the two sides look different.”). Good’s Figure 5 also illustrates that the webbed areas (green) include a front jersey knitted pattern. Ex.1003, ¶73.



Ex.1005, Fig. 5 (annotated); Ex.1003, ¶73.

F. Good Anticipates Claim 16

Claim 16 depends from claim 1 and recites “wherein the plurality of tubular structures comprise (i) two co-extensive and overlapping knit layers and (ii) a central area that is generally unsecured to form a hollow between two knit layers.”

Good discloses this limitation. Ex.1003, ¶¶74-75. For example, Good’s Figure 3 shows that each of the tubular structures (rib portions 22) comprises a first layer (grey) and a second layer (orange):

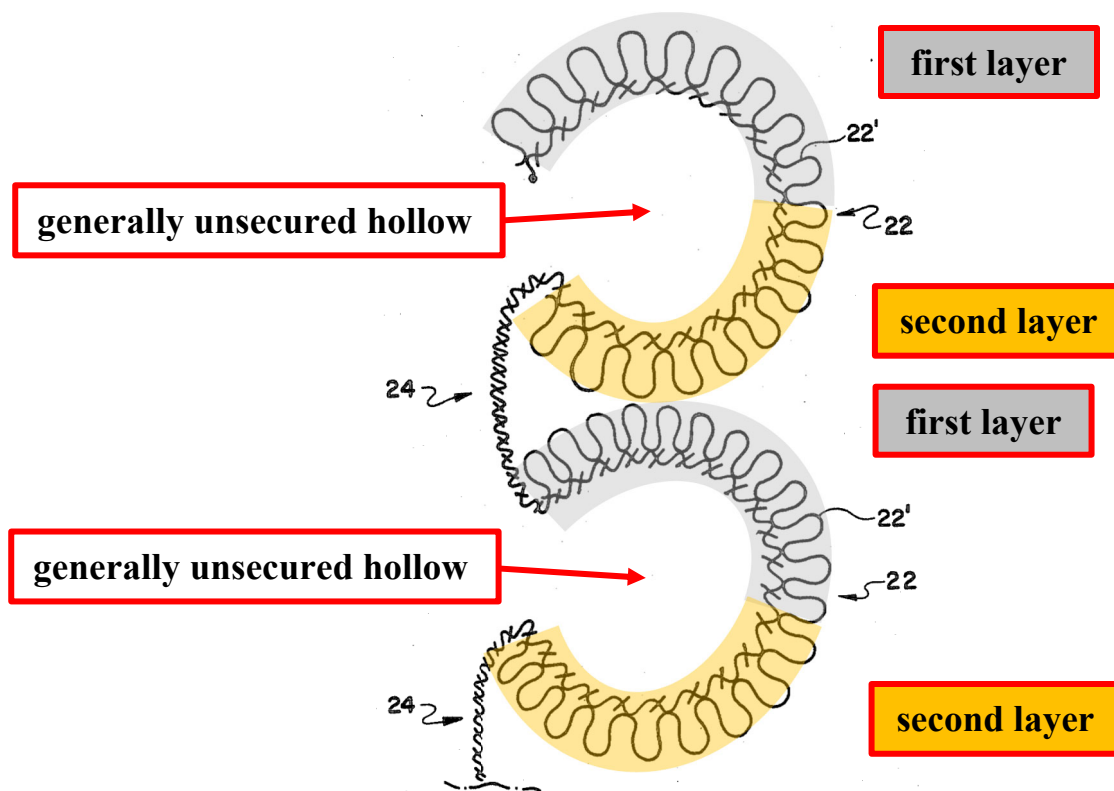


FIG.3

Id., Fig. 3 (annotated); Ex.1003, ¶75. As shown, the first and second layers of each of the tubular structures are co-extensive (e.g., equal in size, share a common

boundry, or have same extent or coverage) and overlapping. Ex.1003, ¶75. Good also discloses “the rib portions 22 [] roll axially upon themselves” and “the axial ends of each rib portion 22 to roll substantially together in the relaxed condition.” Ex.1005, 12:14-20, 12:34-44; *see also id.*, 12:55-59. Thus, each of the tubular structures comprises a central area that is generally unsecured to form a hollow between the first and second layers of each tubular structure. Ex.1003, ¶75. Accordingly, Good discloses the limitations of claim 16. *Id.*

G. Good Anticipates Claim 17

Claim 17 depends from claim 1 and recites “wherein the article includes a knitted component, the knitted component comprising the plurality of webbed areas and the plurality of tubular structures.”

Good discloses this limitation for the reasons provided above for the preamble of claim 1 and limitations 1[a] and [b]. Ex.1003, ¶¶76-77; *see* Sections VII.B.1-2, VII.B.5; *see also* Ex.1005, 1:59-2:4.

H. Good Anticipates Claim 18

Claim 18 depends from claim 17 and recites “wherein the knitted component is formed of unitary knit construction.”

The '046 patent explains a knitted component is “defined as being formed of ‘unitary knit construction’ when formed as a one-piece element through a knitting

process.” Ex.1001, 5:56-63. The parties agreed in the district court case that this definition is the correct construction for “unitary knit construction.” Ex.1014, 11.

Good discloses this limitation. Ex.1003, ¶¶78-80. Good discloses that “the first connecting portion 24 is knitted integrally with the first rib portion 22” and “several successive additional rib portions 22 and connecting portions 24 are alternately formed in the same manner as described [] for the first rib and connecting portions 22, 24.” Ex.1005, 10:5-7, 10:42-48. Good also discloses that its “method includes the knitting of a socktype foot portion integrally with the cuff member to form the aforementioned preferred anklet-type sock.” *Id.*, 3:3-6; *see also id.*, 1:59-2:24. Thus, Good’s knitted component is integrally knitted and formed of a unitary knit construction. Ex.1003, ¶80.

I. Good Anticipates Claim 20

All limitations of claim 20 are included in claim 1 and addressed above. The below table shows which claim 1 limitations correspond to each claim 20 limitation. For the reasons provided above for claim 1, Good discloses an article having all limitations of claim 20. Ex.1003, ¶81; *see* Section VII.B.

Claim 20	Claim 1
20. An article comprising:	Preamble
a plurality of webbed areas having a front surface,	1[a] and 1[a][i]
the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position, and	1[a][ii]
a plurality of tubular structures that are adjacent to the webbed areas, the tubular structures;	1[b]
wherein at least one of the webbed areas or tubular structures is configured to stretch to move the webbed areas to the extended position in response to a force applied to the article	1[c]
wherein in the neutral position, a first area of the front surface is hidden from visual observation from a first viewing perspective, and	1[d]
wherein in the extended position, the first area of the front surface is revealed for visual observation from the first viewing perspective.	1[e]

VIII. GROUND 2: MUNSING ANTICIPATES CLAIMS 1–3, 7, 17, 18, AND 20

A. Tubular Structures

Independent claims 1 and 20 of the '046 patent each recite “a plurality of tubular structures.” In the parallel district court case, Patent Owner proposes that the term be construed as “tube-*like* structures.” Ex. 1014, 3-6. Patent Owner

contends “tube-like” does not require the structures to be hollow like a tube. Patent Owner further contends that its interpretation of “tubular structures” is so broad as to encompass a knitted, ribbed article that can be stretched or separated to reveal portions between the ribs. If the ’046 patent claims were interpreted to have such scope, the claims are invalid as anticipated based on knitted articles known since the 1800’s. Ex.1003, ¶¶82-83. In particular, Petitioner demonstrates in this ground that claims 1–3, 7, 17, 18, and 20 are anticipated by an 1888 patent to Munsing (Ex.1006) if one were to accept Patent Owner’s interpretation of the claims. Ex.1003, ¶83.

B. Overview of Munsing

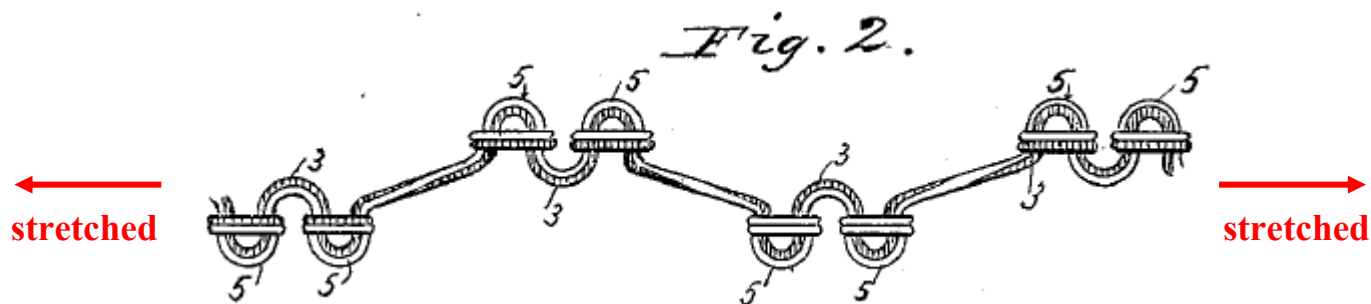
Munsing was neither cited nor considered during prosecution of the ’046 patent. Ex.1001. Munsing discloses knitted, ribbed fabrics for use in articles such as underwear. Ex.1006, 1:7-10; *see also id.*, 1:36-44, 1:80-85. The article is ribbed such that ribs on one side of the article can be stretched or separated to reveal portions of the underside of ribs on the article’s opposite side. Ex.1003, ¶¶84-91.

Munsing explains the desirability of fabrics that are “heavy enough to be sufficiently warm ... [and] have a fine, attractive, and handsomely finished outer surface and a soft but smooth under surface that will not irritate the flesh of the wearer.” Ex.1006, 1:11-17. For example, a “fabric that is composed entirely of wool possesses the requisite weight and is sufficiently warm for this purpose; but it cannot be given a finely-finished outer surface.” *Id.*, 1:18-35. On the other hand, a

“fabric that is formed entirely of silk possesses the requisite handsome finish and smooth under surface, but is too light to be worn by the majority of people in cold weather.” *Id.*

Munsing improved upon fabrics composed entirely of a single material by providing a fabric “formed of a combination of wool or other heavy inexpensive material and silk or other fine or superior material ... [in which] the silk or superior thread is thrown to the surface on both sides of the fabric.” *Id.* Munsing calls this fabric “double-ribbed jersey fabric.” *Id.*, 1:39-44; Ex.1003, ¶86.

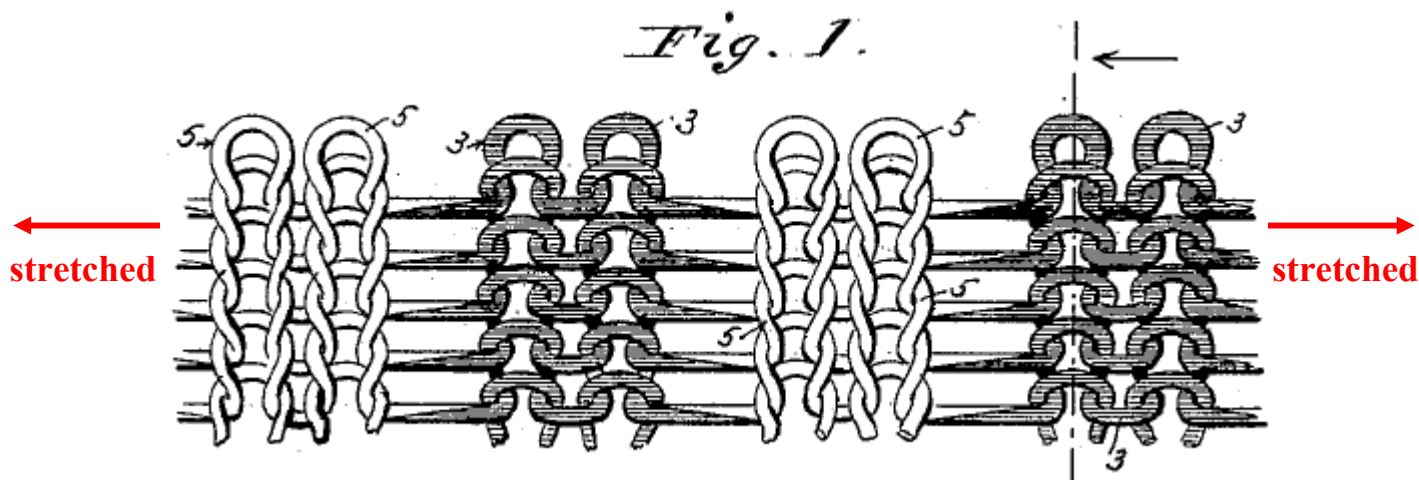
Figure 2 is a top edge view of Munsing’s fabric (in a stretched configuration) with ribs on both sides.



Ex.1006, Fig. 2 (annotated); Ex.1003, ¶87. As illustrated, woolen thread 3 is positioned on the inside of the ribs, and silk thread 5 is positioned on the outer surface of the ribs on both sides of the fabric. Ex.1003, ¶87; *see also* Ex.1006, 1:28-35, 1:80-85, 1:90-91, 2:26-37. When, as shown in Figure 2, the fabric “is stretched as the garments are worn, the uncovered portions of the woolen thread [3] between the ribs will be exposed.” Ex.1006, 2:1-4; Ex.1003, ¶87. However, “[w]hen the

fabric is removed from the needles and is in its normal condition, the ribs lie close together and the fabric has the appearance of a silk surface,” which is how the fabric looks when on display for sale. Ex.1006, 1:99-104. The fabric in the normal condition will have “a finished glossy appearance” and “a smooth surface that may be worn next to the flesh without irritation” because silk thread 5 hides woolen thread 3 and prevents woolen thread 3 from contacting the flesh. *Id.*, 1:93-102, 2:10-37; *see also id.*, 1:61-65.

Figure 1 shows a plan view of Munsing’s fabric in the stretched position. Ex.1003, ¶88.



Ex.1006, Fig. 1 (annotated); Ex.1003, ¶88. Munsing’s “silk [thread 5] of the tops of the ribs on the under surface of the garments will be against the flesh of the wearer when the garments are in use, while the uncovered portions of the woolen thread [3], being at the bottoms of the valleys between the ribs, will not ordinarily come against the flesh.” Ex.1006, 2:10-16.

C. Munsing Anticipates Claim 1

Munsing discloses an article of apparel made of a knitted fabric with ribbed structures. Ex.1006, 1:7-10, 1:36-44, 1:80-85; Ex.1003, ¶92. Munsing’s article stretches to an extended position in which a portion of a webbed area’s front surface is revealed between the ribs.³ Ex.1006, 1:99-2:4; Ex.1003, ¶92. As described below, Munsing discloses an article having all limitations of claim 1. Ex.1003, ¶93.

1. Preamble

The preamble of claim 1 recites “[a]n article.” Among a broad range of articles, the ’046 patent identifies apparel, including undergarments, as a type of article covered by the patent’s disclosure. Ex.1001, 4:34-40; Ex.1003, ¶94. Munsing discloses articles including “knit fabrics that are designed especially for use in the manufacture of underwear.” Ex.1006, 1:7-10.

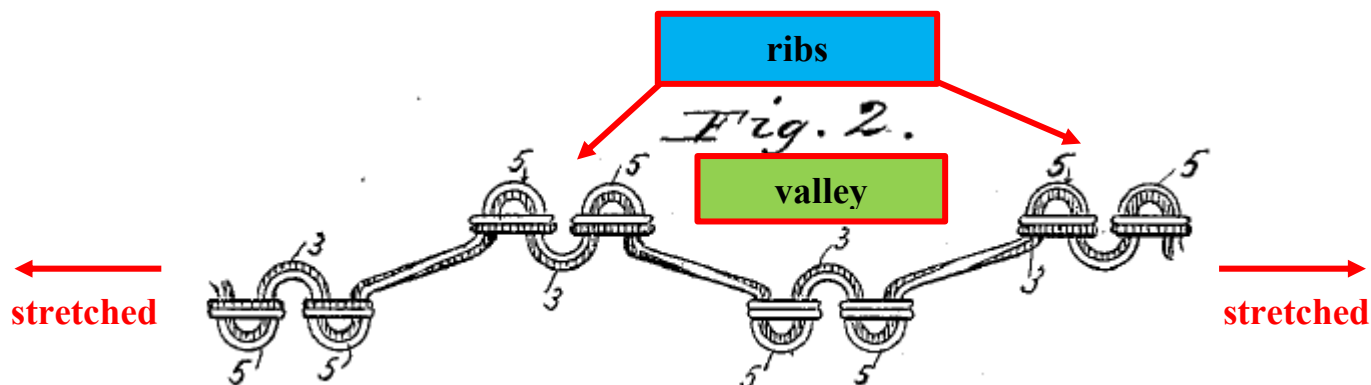
2. Limitation 1[a]

This limitation recites “a plurality of webbed areas that include a plurality of courses formed from a first yarn.”

Munsing discloses this limitation. Ex.1003, ¶¶95-97. For example, Munsing discloses that its fabric is formed of ribs and valleys between the ribs. Ex.1006, 2:26-47, 2:10-16 (“woolen thread [3], being at the bottoms of the valleys between

³ Consistent with Nike’s broad claim interpretation, Petitioner treats “ribs” or “rib structures” as “tubular structures” for the analysis in this ground. Ex.1003, ¶93.

the ribs, will not ordinarily come against the flesh.”). The valleys between the ribs are webbed areas (connecting portions) between the ribs. Ex.1003, ¶95.



Ex.1006, Fig. 2 (annotated); Ex.1003, ¶95.

Munsing also discloses that its fabric is knit from at least one yarn. Ex.1006, 2:48-65. The yarn of the fabric forms rows of loops, i.e., courses. *Id.*, Figs. 1-5; Ex.1011, 3 (“rows of loops or stitches running across the width of a knitted fabric”); Ex.1003, ¶96; *see also e.g.*, Ex.1007, [0048] (“Knit element 131 is formed from at least one yarn that is manipulated ... to form a plurality of intermeshed loops that define a variety of courses and wales.”). The webbed areas in Munsing’s article thus include courses. Ex.1003, ¶96.

Accordingly, Munsing discloses a plurality of webbed areas (valleys between ribs) that include a plurality of courses formed from a first yarn. *Id.*, ¶97.

3. Limitation 1[a][i]

This limitation recites “the webbed areas having a front surface.”

Munsing discloses this limitation. Ex.1003, ¶98. For example, Munsing discloses “[t]he two surfaces of the fabric are substantially alike, and either may form the outer surface of the garment when in use.” Ex.1006, 1:90-92. Consistent with the discussion in limitation 1[a] in this ground, the side of Munsing’s fabric that is referred to as having the ribs forms a front surface. Ex.1003, ¶98; *see* Section VIII.C.2. The valleys between the ribs on the same side of the fabric thus also have a front surface. Ex.1003, ¶98.

4. Limitation 1[a][ii]

This limitation recites “the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position.”

Munsing discloses this limitation. Ex.1003, ¶¶99-100. For example, Munsing discloses its fabric moves between a normal condition and a stretched condition. Ex.1006, 1:99-2:4. “When the fabric is removed from the needles and is in its normal condition, the ribs lie close together.” *Id.*, 1:99-102. “[T]his will generally be the condition of the fabric when the garments are exposed for sale.” *Id.*, 1:102-2:1. “When the fabric is stretched as the garments are worn, the uncovered portions of the woolen thread between the ribs will be exposed.” *Id.*, 2:1-4. Thus, Munsing’s webbed areas (valleys between ribs) move between a neutral position (normal condition) and an extended position (stretched condition). Ex.1003, ¶99.

Munsing’s article and webbed areas require an applied force to stretch. Ex.1006, 2:1-4. Absent the applied force, the article and its webbed areas (valleys between ribs) remain in the neutral position (normal condition) and are thus biased to return to the neutral position (normal condition). Ex.1003, ¶100.

5. Limitation 1[b]

This limitation recites “a plurality of tubular structures that are adjacent to the webbed areas, the tubular structures including a plurality of courses.”

Munsing discloses this limitation. Ex.1003, ¶¶101-103. For example, as discussed with respect to limitation 1[a] in this ground, Munsing’s fabric is formed of ribs and valleys (webbed areas) between the ribs. *Id.*, ¶101; *see* Section VIII.C.2. The ribs separating the valleys are tubular structures positioned adjacent to the webbed areas (valleys between ribs). Ex.1003, ¶101.

Munsing’s fabric is knit and includes rows of loops, i.e., courses. Ex.1006, 2:48-65, Figs. 1-5; Ex.1011, 3; Ex.1003, ¶102; *see also e.g.*, Ex.1007, [0048]. The tubular structures (ribs) in Munsing’s article are part of the knit fabric and include courses. Ex.1003, ¶102.

Accordingly, Munsing discloses a plurality of tubular structures (ribs) that are adjacent to the webbed areas (valleys between ribs), the tubular structures (ribs) including a plurality of courses. *Id.*, ¶103.

6. Limitation 1[c]

This limitation recites “wherein at least one of the webbed areas or tubular structures is configured to stretch to move the webbed areas to the extended position in response to a force applied to the article.” Munsing discloses this limitation for at least the reasons provided with respect to limitation 1[a][ii] in this ground. Ex.1003, ¶104; *see* Section VIII.C.4. For example, the fabric “is stretched as the garments are worn, the uncovered portions of the woolen thread [3] between the ribs will be exposed.” Ex.1006, 2:1-4.

7. Limitation 1[d]

This limitation recites “wherein in the neutral position, a first area of the front surface is hidden from visual observation from a first viewing perspective.”

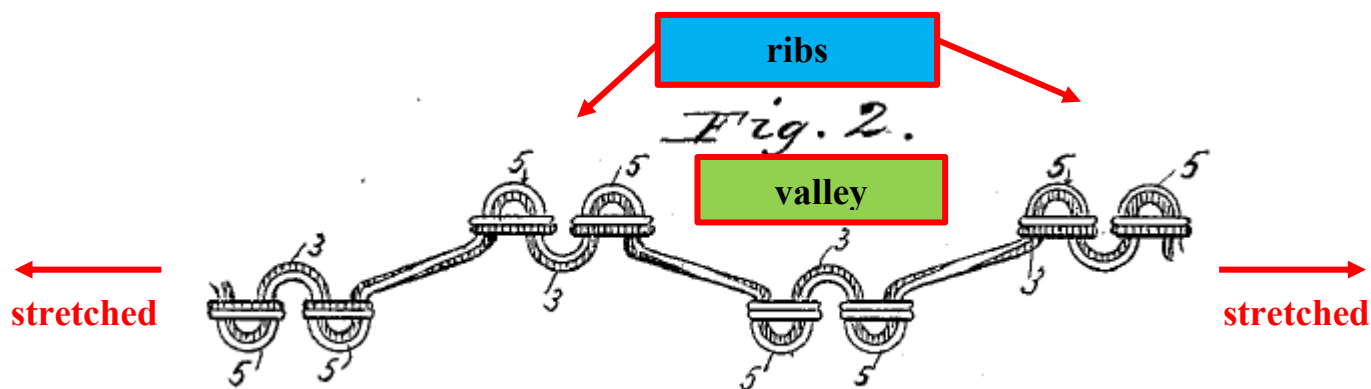
Munsing discloses this limitation. Ex.1003, ¶105. For example, Munsing discloses that in the fabric’s normal or unstretched condition the “ribs lie close together and the fabric has the appearance of a silk surface.” Ex.1006, 1:99-102. This is because the silk thread “l[ies] over the [woolen thread], giv[ing] [the fabric] a finished glossy appearance, and form[ing] a smooth surface that may be worn next to the flesh without irritation.” *Id.*, 1:93-98. Then, when the fabric “is stretched as the garments are worn, the uncovered portions of the woolen thread [3] between the ribs will be exposed.” *Id.*, 2:1-4. The bottoms of the valleys between the ribs are a first area on the front surface that is at least partly hidden from a first viewing

perspective in the normal (neutral) condition. Ex.1003, ¶105. Accordingly, Munsing discloses the neutral position (normal condition) in which a first area of the front surface (valleys between ribs) is hidden from visual observation from a first viewing perspective. *Id.*

8. Limitation 1[e]

This limitation recites “wherein in the extended position, the first area of the front surface is revealed for visual observation from the first viewing perspective.”

Munsing discloses this limitation. Ex.1003, ¶106. Specifically, Munsing discloses that “[w]hen the fabric is stretched as the garments are worn, the uncovered portions of the woolen thread between the ribs will be exposed.” Ex.1006, 2:1-4. The uncovered portions are the valleys between the ribs, and they are at least partly revealed from the first viewing perspective in the stretched condition:



Id., Fig. 2 (annotated); Ex.1003, ¶106.

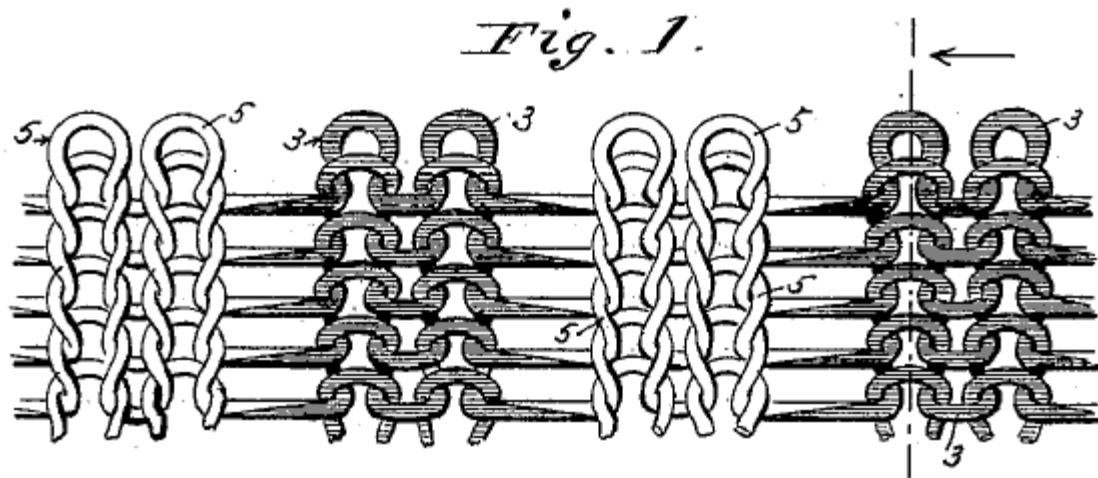
Accordingly, Munsing discloses limitation 1[e], namely in the extended position (stretched condition), the first area of the front surface (valleys between

ribs) is revealed for visual observation from the first viewing perspective. Ex.1003, ¶106.

D. Munsing Anticipates Claim 2

Claim 2 depends from claim 1 and recites “wherein the article is associated with a longitudinal direction and a lateral direction; wherein the plurality of webbed areas and the plurality of tubular structures extend along the longitudinal direction, wherein the plurality of webbed areas and the plurality of tubular structures are spaced apart in the lateral direction, and wherein the article is configured to stretch in the lateral direction between the neutral position and the stretched position, the article biased toward the neutral position.”

Munsing discloses this limitation. Ex.1003, ¶¶107-111. As discussed for limitations 1[a] and 1[b] in this ground, Munsing’s fabric is formed of webbed areas (valleys between ribs) and tubular structures (ribs). *Id.*, ¶109; *see* Sections VIII.C.2, VIII.C.5. The webbed areas and the tubular structures extend along a longitudinal direction of the fabric and are spaced apart in a lateral direction for the fabric:



Ex.1006, Fig. 1.

As discussed with respect to limitation 1[a][ii] in this ground, Munsing's webbed areas (valleys between ribs) move between the neutral position (normal condition) and the extended position (stretched condition) in response to the applied force to the article, and Munsing's article is biased to return to the neutral position (normal condition). Ex.1003, ¶110; see Section VIII.C.4. Munsing also discloses that its article stretches in the lateral direction (direction in which ribs and valleys between ribs are spaced apart) between the neutral position and the stretched position because Munsing provides that "the uncovered portions of the woolen thread between the ribs will be exposed" in the stretched condition. Ex.1006, 2:1-4.

Accordingly, Munsing discloses the limitations of claim 2. Ex.1003, ¶111.

E. Munsing Anticipates Claim 3

Claim 3 depends from claim 2 and recites “wherein the plurality of webbed areas and the plurality of tubular structures are disposed in an alternating manner across the majority of the article.”

Munsing discloses this limitation. Ex.1003, ¶¶112-113. For example, Munsing discloses an undergarment formed of the disclosed fabric. Ex.1006, 2:4-25. Munsing provides that it is “especially desirable that [the fabric designed for underwear] should present an attractive appearance when not in use, thus making them more salable.” *Id.*, 2:4-9. Also, “[t]he silk surface of the tops of the ribs on the under surface of the garments will be against the flesh of the wearer when the garments are in use, while the uncovered portions of the woolen thread, being at the bottoms of the valleys between the ribs, will not ordinarily come against the flesh.” *Id.*, 2:10-16. Munsing also provides that “the silk or superior thread appears on or forms the tops of the ribs on both sides of the fabric *throughout the entire fabric.*” *Id.*, 2:66-81. This disclosure confirms that the tubular structures (ribs) and the webbed areas (valleys between ribs) are disposed in an alternating manner across the majority of the article. Ex.1003, ¶113.

F. Munsing Anticipates Claim 7

Claim 7 depends from claim 1 and recites “wherein the plurality of webbed areas include one of a front jersey knit pattern and a reverse jersey knit pattern.”

Munsing discloses this limitation. Ex.1003, ¶¶114-115. For example, Munsing discloses the “fabric that I produce to fulfill these requirements and to which this application is confined I have termed a ‘double-ribbed *jersey fabric*,’ as contradistinguished to other double-ribbed fabrics.” Ex.1006, 1:39-44. Munsing’s Figures 1-6 also confirm that the webbed areas of the knitted fabric include a front jersey knit pattern. Ex.1003, ¶115. Accordingly, Munsing discloses the limitations of claim 7. *Id.*

G. Munsing Anticipates Claim 17

Claim 17 depends from claim 1 and recites “wherein the article includes a knitted component, the knitted component comprising the plurality of webbed areas and the plurality of tubular structures.”

Munsing discloses this limitation. Ex.1003, ¶¶116-117. Munsing plainly discloses an article comprising a knitted component. Ex.1006, 1:1-44, Figs. 1-6; Ex.1003, ¶117. And as described above for limitations 1[a] and 1[b] in this ground, Munsing’s knitted component comprises webbed areas and tubular structures. Ex.1003, ¶117; *see* Sections VIII.C.2, VIII.C.5; *see also* Ex.1006, 1:7-10, 1:45-98 (describing knit fabrics disclosed in Munsing).

H. Munsing Anticipates Claim 18

Claim 18 depends from claim 17 and recites “wherein the knitted component is formed of unitary knit construction.” In the district court case, the parties have

agreed that “unitary knit construction” means “formed as a one-piece element through a knitting process.” Ex.1014, 11.

Munsing discloses this limitation. Ex.1003, ¶¶118-119. For example, Munsing discloses “a fabric that is formed of a combination of wool or other heavy inexpensive material and silk or other fine or superior material, the two materials being so knit together.” Ex.1006, 1:28-35. Munsing explains that “[a]n undergarment formed of this fabric will therefore combine the desirable qualities of both woolen and silk garments without the undesirable features of either.” *Id.*, 2:22-25. Munsing also discloses that “the silk or superior thread appears on or forms the tops of the ribs on both sides of the fabric *throughout the entire fabric.*” *Id.*, 2:66-81. Thus, Munsing’s knitted component is formed of unitary knit construction. Ex.1003, ¶119.

I. Munsing Anticipates Claim 20

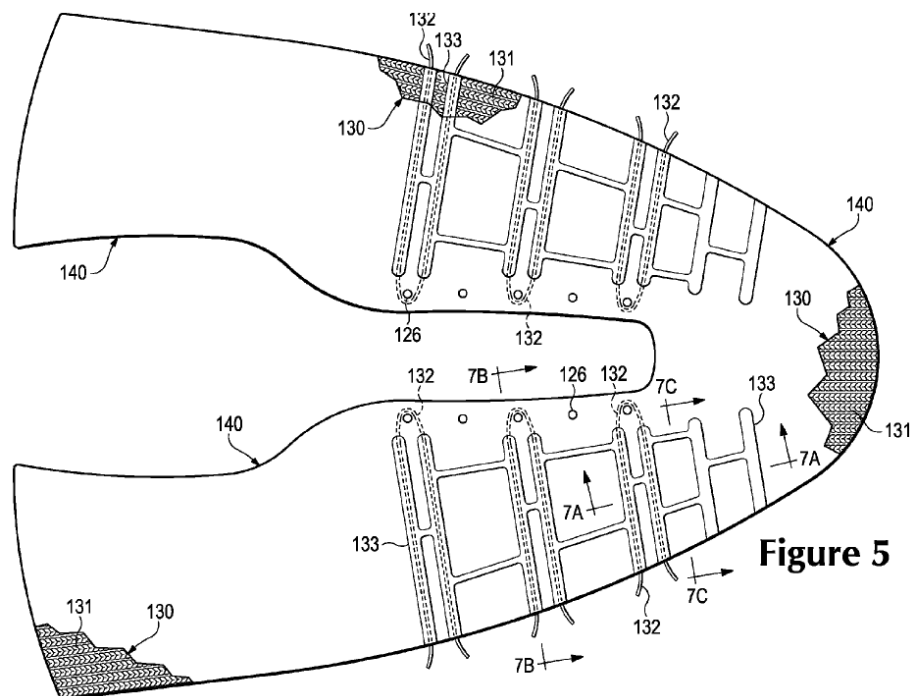
All limitations of claim 20 are included in claim 1 and addressed above. The below table shows which claim 1 limitations correspond to each claim 20 limitation. For at least the reasons provided for claim 1 in this ground, Munsing discloses an article having all limitations of claim 20. Ex.1003, ¶120; *see* Section VIII.C.

Claim 20	Claim 1
20[pre]	1[pre]
20[a]	1[a], 1[a][i], 1[a][ii]
20[b]	1[b]
20[c]	1[c]
20[d]	1[d]
20[e]	1[e]

IX. GROUND 3: MINAMI RENDERS CLAIMS 8, 9, 14, 15, AND 19 UNPATENTABLE

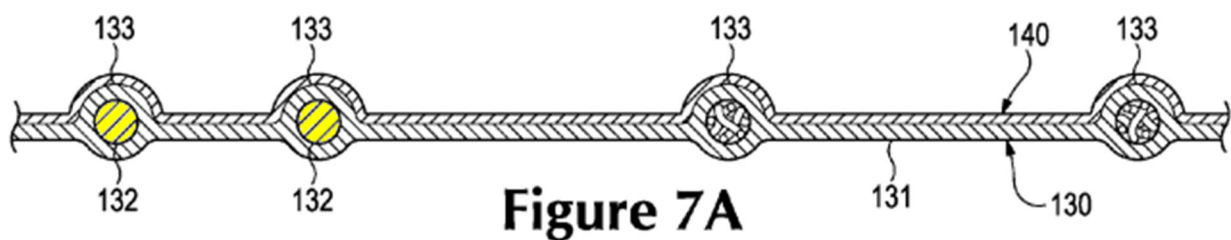
A. Overview of Minami

Minami (Ex.1007) describes an article of footwear that includes an upper. Ex.1007, Abstract. The upper is formed from a knitted component 130 that has a knit element 131, as shown in Figure 5. *Id.*, [0042], [0048]; *see also id.*, [0054].



Id., Fig. 5. The physical properties of the knit element 131, including its stretch, vary according to the types of stitches and yarns used in its construction. *Id.*, [0049]. Minami’s knit element 131 includes “a plurality of protruding areas 133 that extend outward and away from the void within upper 120” and “may impart additional thickness or loft to upper 120, while also varying the stretch properties of upper 120.” *Id.*, [0061], [0054]. The size and positioning of the protruding areas 133 may impact an upper’s aesthetic. *Id.*, [0061], [0067]-[0068]. In addition, Minami discloses that these “protruding areas 133 may enhance the strength of upper 120 or impart a variety of different properties to upper 120.” *Id.*, [0061]. This is consistent with the disclosure of the ’046 patent, which discloses that its rib structures “provide strength and/or support to [the] knitted component.” Ex.1001, 4:55-58; Ex.1003, ¶121.

Figure 7A shows a cross-section of Minami’s upper.



Ex.1007, Fig. 7A (annotated); Ex.1003, ¶122. As illustrated, the “knit element 131 forms two separate and spaced textile layers, which effectively define a channel or

tubular structure, and inlaid strand 132 [yellow] is located between the spaced textile layers.” Ex.1007, [0051].

Minami was not cited nor considered during prosecution of the '046 patent.
Ex.1001.

B. Minami Anticipates Claim 8

Minami discloses an upper with webbed areas and tubular rib structures. Ex.1003, ¶125. The upper stretches between a neutral position and an extended position. *Id.* Minami’s tubular rib structures are formed of curved portions that have a greater curve length on a front side of the upper than a back side. *Id.* Thus, Minami discloses an upper having all limitations of claim 8. *Id.*

1. Preamble

The preamble of claim 8 recites “[a]n upper.”

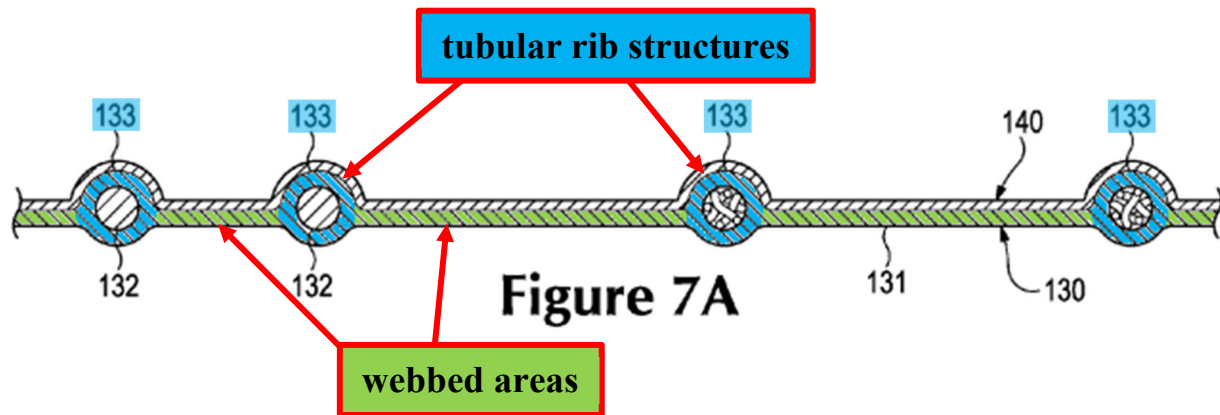
Minami discloses this limitation. Ex.1003, ¶126. Specifically, Minami discloses an article of footwear having an upper that includes a knitted component. Ex.1007, Abstract.

2. Limitation 8[a]

This limitation recites “a plurality of webbed areas and a plurality of tubular rib structures.”

Minami discloses this limitation. Ex.1003, ¶¶127-128. For example, Minami’s Figure 7A below illustrates a cross-sectional view of a knitted component

130, showing connecting portions of a knit element 131 between protruding portions 133 of the knit element 131. Ex.1007, [0048], [0051].



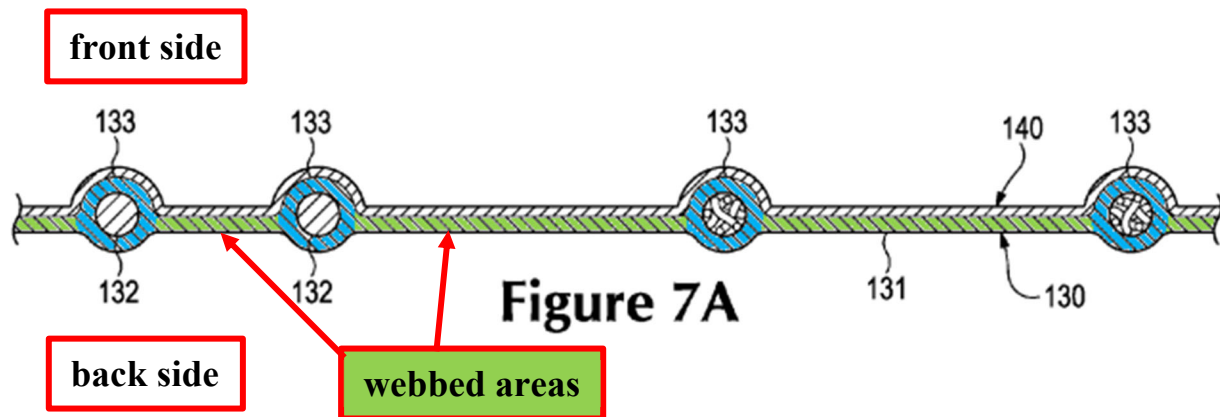
Id., Fig. 7A (annotated); Ex.1003, ¶127. The connecting portions of the knit element 131 between the protruding portions 133 are webbed areas (green). Ex.1003, ¶127. Minami expressly describes the spaced layers of the protruding areas 133 as “tubular structure[s]” (blue), explaining the protruding areas 133 are formed of “two separate and spaced textile layers, which effectively define a channel or *tubular structure*.” Ex.1007, [0051]; *see also id.*, [0063]-[0066], Abstract. The ’046 patent provides that “tubular structures” refer to the same structures as “tubular rib structures.” Ex.1001, 10:16-19; Ex.1003, ¶127.

Accordingly, Minami discloses its upper comprises webbed areas and tubular rib structures. Ex.1003, ¶128.

3. Limitation 8[b]

This limitation recites “the plurality of webbed areas having a front side and a back side.”

Minami discloses this limitation. Ex.1003, ¶129. For example, Minami's Figure 7A below is a cross-section of the knit element 131 which shows that the webbed areas (green), which plainly have a front side (e.g., viewed from top of figure) and a back side (e.g., viewed from bottom of figure). *Id.*

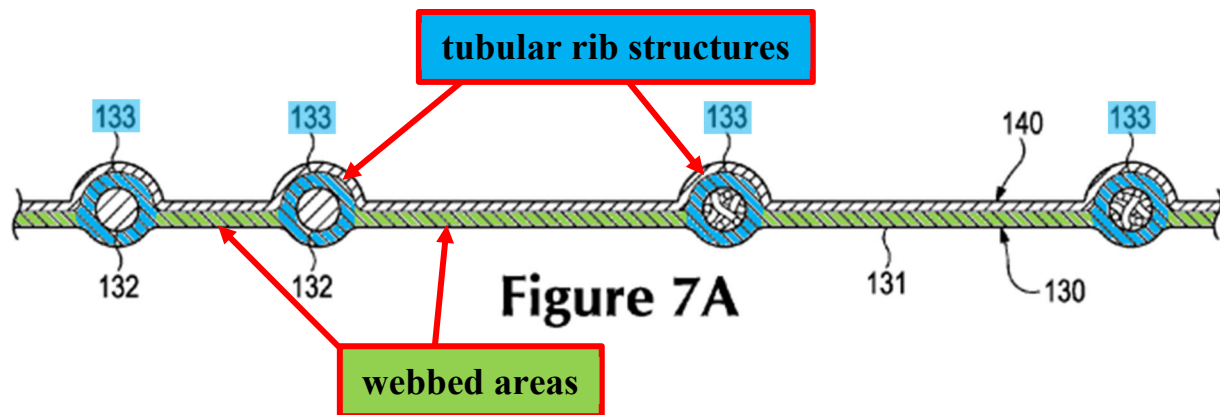


Ex.1007, Fig. 7A (annotated); Ex.1003, ¶129.

4. Limitation 8[c]

This limitation recites “the tubular rib structures being disposed adjacent to the webbed areas.”

Minami discloses this limitation. Ex.1003, ¶130. For example, Minami's Figure 7A below illustrates the knit element 131 with the tubular rib structures (blue) disposed adjacent to the webbed areas (green). *Id.*

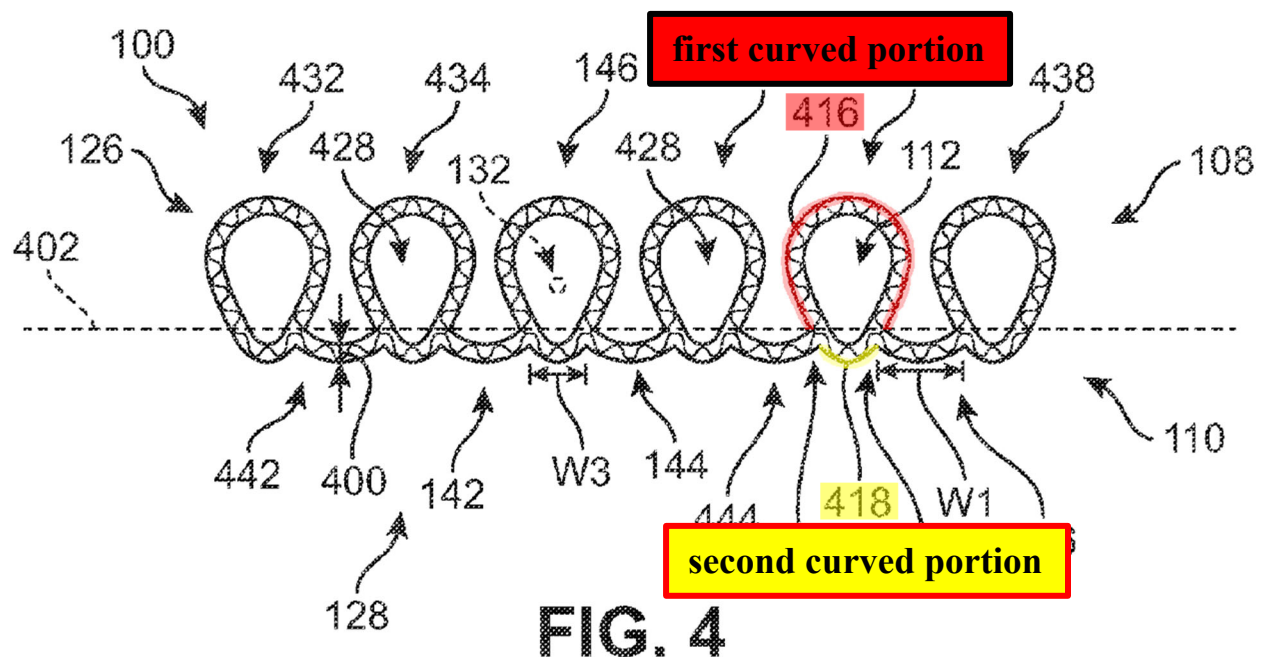


Ex.1007, Fig. 7A (annotated); Ex.1003, ¶130.

5. Limitation 8[d]

This limitation recites “the tubular rib structures having a first curved portion with a first curve length extending from the front side of the webbed areas, and a second curved portion with a second curve length extending from the back side of the webbed areas, the first curve length being greater than the second curve length.”

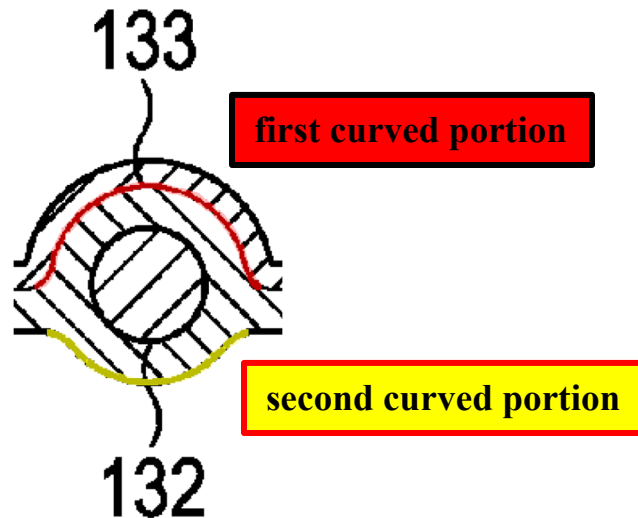
The '046 patent illustrates and describes an article with these limitations in Figure 4 and the corresponding description. Ex.1003, ¶131.



Ex.1001, Fig. 4 (annotated); Ex.1003, ¶131. As shown, the “tubular rib structures 126 can include a first curved portion 416 [red] and a second curved portion 418 [yellow]. In an exemplary embodiment, first curved portion 416 is disposed opposite of second curved portion 418 on the respective top and bottom of tubular rib structures 126.... [F]irst curved portion 416 and second curved portion 418 meet along a first transition 420 edge and also along a second transition 422 edge, forming a tunnel or tube shape.” Ex.1001, 10:20-32. The first curved portion 416 is illustrated as having a greater curve length than the second curved portion 418. Ex.1003, ¶131.

Minami also discloses tubular rib structures with curved portions extending from the front side and the back side of webbed areas, and wherein the curved

portions have different lengths. *Id.*, ¶¶131-133. The below annotated excerpt of Minami's Figure 7A shows a close-up of one representative tubular rib structure.



Excerpt of Minami's Fig. 7A Showing Tubular Rib Structure (annotated)

Id., ¶132. As shown, this tubular rib structure has two curved portions, including a first curved portion (red) extending from the front side of adjacent webbed areas and a second curved portion (yellow) extending from the back side of adjacent webbed areas. Ex.1007, [0061]; Ex.1003, ¶132. Because the first curved portion protrudes farther and extends a greater distance between the adjacent webbed areas than the second curved portion, the first curved portion's curve length is greater than the second curved portion's curve length. Ex.1003, ¶132.

Thus, Minami discloses the tubular rib structures have a first curved portion with a first curve length extending from the front side of the webbed areas, and a second curved portion with a second curve length extending from the back side of

the webbed areas, where the first curve length is greater than the second curve length.
Id., ¶133.

6. Limitation 8[e]

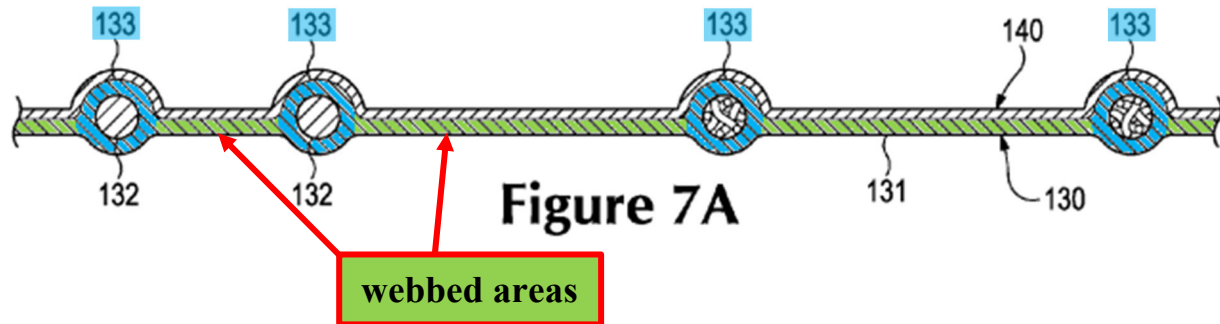
This limitation recites “the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position.”

Minami discloses this limitation. Ex.1003, ¶¶134-137. For example, Minami provides that its knit element 131 stretches and may include different types of yarn that facilitate the stretching. Ex.1007, [0048]-[0049], [0052], Claim 1; Ex.1003, ¶134. Knitted elements like the knit element 131 stretch because of the loop structure of knitting and the physical properties of the yarn (e.g., elasticity or twist in yarn). Ex.1003, ¶134. Minami states, for example, that:

Depending upon the types and combinations of stitches utilized, areas of knit element 131 may have a plain knit structure, a mesh knit structure, or a rib knit structure, for example. The different types of stitches may affect the physical properties of knit element 131, including aesthetics [and] stretch ... of knit element 131.

Ex.1007, [0049]. In addition, Minami goes on to disclose that knit element 131, which includes the connecting portions that correspond to the '046 patent's webbed areas, will have varying stretch properties depending on the type of yarn used to make it: “The different types of yarns may affect the physical properties of knit element 131, including aesthetics [and] stretch ... of knit element 131.” *Id.*

Minami's Figure 7A below shows the knit element 131 with the webbed areas (green) in an unstretched, neutral position. Ex.1003, ¶135.



Ex.1007, Fig. 7A (annotated); Ex.1003, ¶135. The webbed areas remain in this neutral position when no force is applied to stretch the knit element 131. Ex.1003, ¶135.

When a force is applied to stretch the knit element 131, the webbed areas are stretched to an extended position. Ex.1003, ¶136. Once the force is released, the webbed areas return to the neutral position. *Id.* Thus, the webbed areas of the knit element 131 are biased toward the neutral position. *Id.*

Accordingly, Minami's webbed areas are configured to move between a neutral position and an extended position and biased to move toward the neutral position. *Id.*, ¶137.

7. Limitation 8[f]

This limitation recites “at least one of the webbed areas and the tubular rib structures configured to stretch from the neutral position to the extended position in response to a force applied to the upper.”

Minami discloses this limitation. Ex.1003, ¶138. For example, as discussed above with respect to limitation 8[e] in this ground, Minami discloses that its webbed areas are configured to move between a neutral position and an extended position and biased to move toward the neutral position. *Id.*; see Section IX.B.6. This movement is due to stretching of the knit element 131. Ex.1003, ¶138. Thus, at least one of Minami’s webbed areas or tubular rib structures is configured to stretch from the neutral position to the extended position responsive to a force applied to Minami’s upper. *Id.*

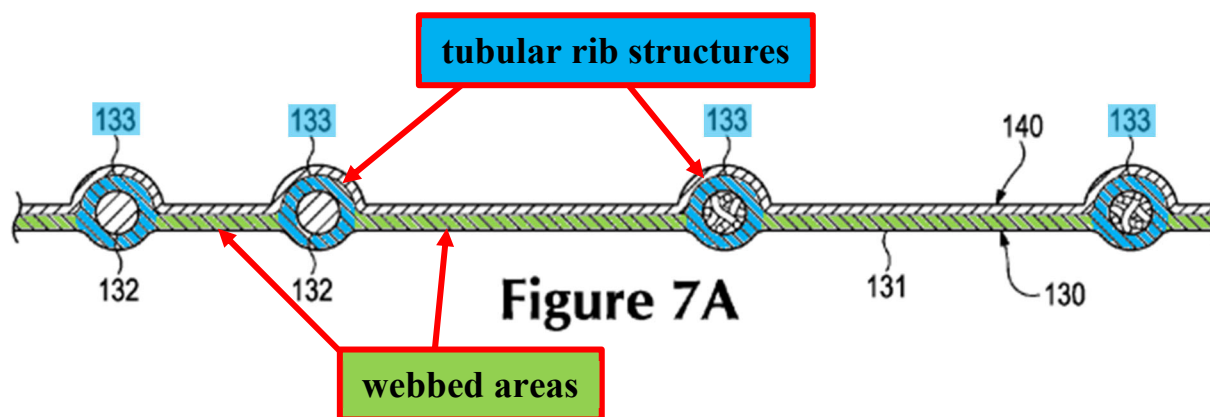
C. Minami Anticipates and Renders Obvious Claim 9

Claim 9 depends from claim 8 and recites:

wherein the webbed areas include a plurality of courses formed from a first yarn,
wherein the tubular rib structures include a plurality of courses formed from a second yarn,
wherein the first yarn and the second yarn are different; and
wherein at least one course of one of the plurality of webbed areas formed with the first yarn is connected with at least one course of one of the plurality of tubular rib structures formed with the second yarn.

Minami discloses this limitation. Ex.1003, ¶¶139-141. For example, Minami discloses its knit element 131, which includes the webbed areas and tubular rib structures, “is formed from at least one yarn that is manipulated (e.g., with a knitting machine) to form a plurality of intermeshed loops that define a variety of courses [i.e., rows of loops] and wales.” Ex.1007, [0048]; Ex.1003, ¶140; *see also* Ex.1011,

3 (“rows of loops or stitches running across the width of a knitted fabric”). The knit element 131 is also described as formed of a “unitary knit construction.” Ex.1007, [0047]-[0048]. Minami’s Figure 7A below illustrates that at least one course of the webbed areas (green) is connected to at least one course of the tubular rib structures (blue). Ex.1003, ¶140.



Ex.1007, Fig. 7A (annotated); Ex.1003, ¶140.

Minami discloses “[w]ith regard to yarns, knit element 131 may have **one type of yarn** in one area of knit element 131 and **another type of yarn** in another area of knit element 131.” Ex.1007, [0049]; *see also id.*, [0067]-[0068]. Minami provides “[t]he different types of yarns may affect the physical properties of knit element 131, including aesthetics, stretch, thickness, air permeability, and abrasion-resistance of knit element 131.” *Id.*, [0049]. “Depending upon various design criteria, knit element 131 may incorporate yarns with different deniers, materials (e.g., cotton, elastane, polyester, rayon, wool, and nylon), and degrees of twist, for example.” *Id.* Minami also expressly provides that “the different types of yarns may impart

different properties to different areas of knitted component 130.” *Id.* Thus, Minami discloses the limitations of claim 9. Ex.1003, ¶141.

To the extent Patent Owner argues Minami does not expressly disclose using one yarn for the webbed areas and a different yarn for the tubular rib structures, this would have been obvious to a POSA for three different reasons. *Id.*, ¶¶142-146, 154-155.

First, Minami discloses that its upper may be used in a soccer shoe and that the protruding areas 133 in the upper may provide enhanced ball control when the protruding areas 133 influence contact with a soccer ball. Ex.1007, [0062]. A POSA would have understood that such ball contact subjects the protruding areas 133 to significant wear, particularly in designs where Minami’s skin layer 140 is absent. *Id.*, [0054]; Ex.1003, ¶143. Minami discloses that an upper’s materials can be selected based upon wear-resistance. Ex.1007, [0004]. A POSA would have known and desired to construct the webbed areas to have different wear-resistance than the tubular rib structures (e.g., so that the tubular rib structures have greater wear-resistance than the webbed areas) and would have used different yarns to achieve that goal. *Id.*, [0049]; Ex.1003, ¶143.

Second, Minami discloses that its inlaid strand 132 within the protruding areas 133 provides support, stability, and structure, which “assists with securing upper 120 around the foot, limits deformation in areas of upper 120 (e.g., imparts stretch-

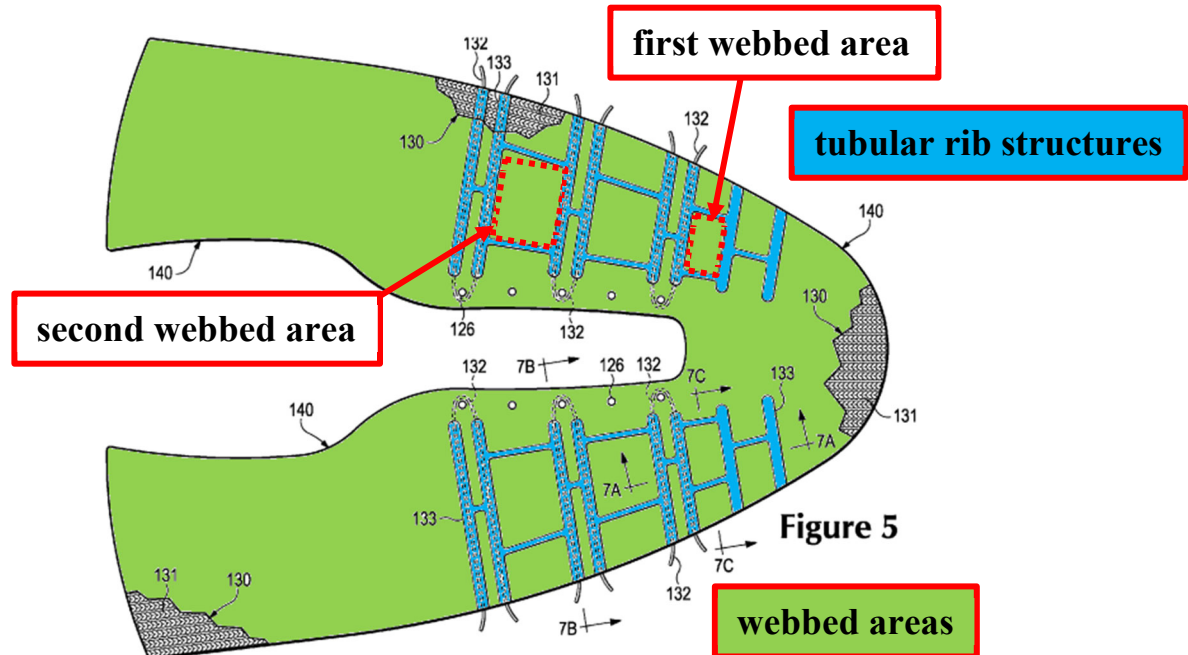
resistance), and operates in connection with lace 125 to enhance the fit of footwear 100.” Ex.1007, [0048]. A POSA would have understood that selecting a yarn for the protruding areas 133 that also provides support, stability, and structure would desirably increase those benefits or provide such benefits where no inlaid strand 132 is positioned within the protruding areas 133. *Id.*, [0063]-[0065]; Ex.1003, ¶144. Minami confirms that a POSA would have selected from different types of yarn to control the stretch, thickness, and abrasion-resistance of knit element 131. Ex.1007, [0049]; Ex.1003, ¶144. A POSA would thus have known and desired to construct the tubular rib structures from a different yarn with a more limited stretch, greater thickness, or greater abrasion-resistance than a yarn used for the webbed areas. Ex.1003, ¶144.

Third, Minami discloses that the protruding areas 133 are incorporated in part to vary the stretch properties and aesthetics of Minami’s upper. Ex.1007, [0054], [0061]. Different yarns were known to provide different stretch properties and aesthetics. *Id.*, [0049]; Ex.1003, ¶145. A POSA would have known and desired to construct the webbed areas to have different aesthetics or stretch than the tubular rib structures and would have used different yarns for the webbed areas and tubular rib structures to achieve that goal. Ex.1003, ¶145.

D. Minami Anticipates Claim 14

Claim 14 depends from claim 8 and recites “wherein the plurality of webbed areas comprises a first webbed area and a second webbed area; wherein the first webbed area has a first width, and the second webbed area has a second width, the first width being less than the second width.”

Minami discloses this limitation. Ex.1003, ¶¶147-148. For example, Figure 5 below illustrates Minami’s webbed areas (green) include first and second webbed areas where a first width of the first webbed area is less than a second width of the second area. *Id.*, ¶148; *see also* Ex.1007, [0068] (“specific pattern that protruding areas 133 form in upper 120 may vary significantly”).

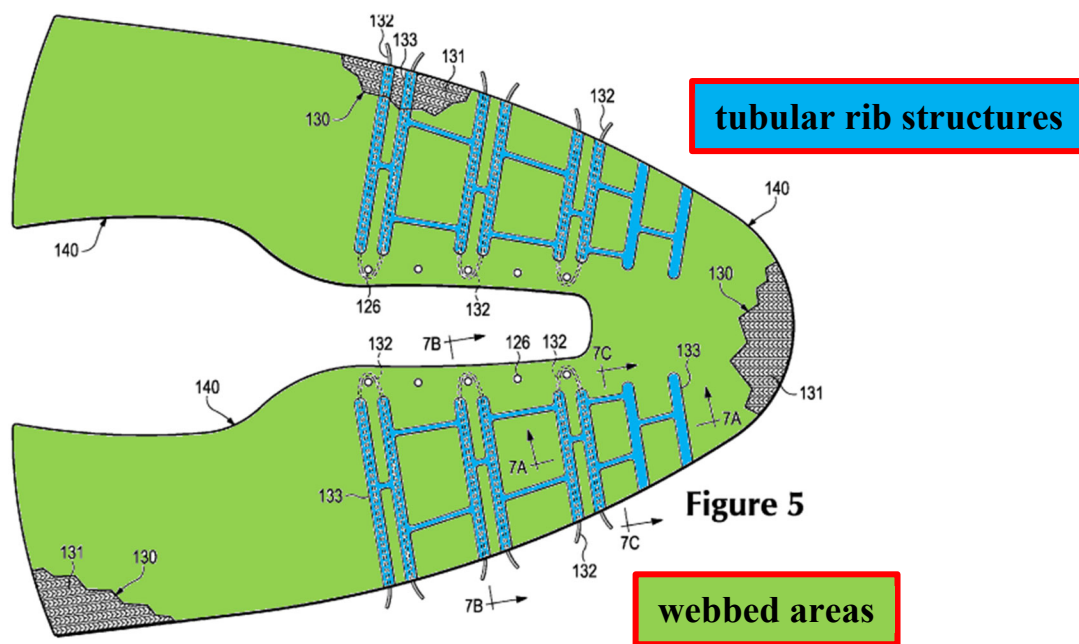


Ex.1007, Fig. 5 (annotated); Ex.1003, ¶148.

E. Minami Anticipates and Renders Obvious Claim 15

Claim 15 depends from claim 8 and recites “wherein the plurality of webbed areas and the plurality of tubular rib structures are disposed in an alternating manner across the majority of the upper.”

Minami discloses this limitation. Ex.1003, ¶¶149-150. For example, Figure 5 below illustrates the webbed areas (green) and the tubular rib structures (blue) are disposed in an alternating manner across the majority of Minami’s upper. *Id.*, ¶150.



Ex.1007, Fig. 5 (annotated); Ex.1003, ¶150.

It also would have been obvious to construct Minami’s upper so that even more of the majority of Minami’s upper is covered by the alternating webbed areas and tubular rib structures. Ex.1003, ¶¶151, 154-155. Minami discloses that the protruding areas 133 are incorporated in part to vary the stretch properties and

aesthetics of Minami’s upper, as well as to provide enhanced soccer ball control when incorporated in a soccer shoe. Ex.1007, [0054], [0061]-[0062]. Minami discloses “[t]he locations and configurations of protruding areas 133 may ... vary significantly.” *Id.*, [0068]. A POSA would have desired to construct an upper with even more of the majority of the upper covered by alternating webbed areas and tubular rib structures to control the upper’s aesthetic, enhance the upper’s support and strength, and/or increase the portion of the upper which provides better soccer ball control. Ex.1003, ¶151.

F. Minami Anticipates Claim 19

Claim 19 depends from claim 8 and recites “wherein the upper includes a knitted component, the knitted component comprising the plurality of webbed areas and the plurality of tubular rib structures.”

Minami discloses this limitation for the reasons provided with respect to the preamble of claim 8 and limitation 8[a]. Ex.1003, ¶¶152-153; *see* Sections IX.B.1-2.

X. THE BOARD SHOULD NOT EXERCISE DISCRETION TO DENY INSTITUTION

A. Board Should Not Decline Institution Pursuant to 35 U.S.C. § 325(d)

This is the first petition from Petitioner challenging the ’046 patent. The prior art and arguments set forth in Grounds 1-3 were not considered during examination of the ’046 patent. The Petition makes a strong showing that all challenged claims

are unpatentable. Accordingly, the factors do not favor exercising discretionary denial.

B. Board Should Not Decline Institution Pursuant to 35 U.S.C. § 314(a)

This Petition raises a compelling case of unpatentability for all challenged claims of the '046 patent. Per the Director's June 21, 2022, Memorandum on the "Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation" ("Guidance Memorandum"), this fact "alone demonstrates that the [Board] should not discretionarily deny institution under *Fintiv*." Guidance Memo. at 5. Further, as described below, Petitioner stipulates that if IPR is instituted Petitioner will not pursue in the district court proceeding the same grounds of invalidity raised in this Petition or any grounds that it could have reasonably raised in this Petition. And per the Guidance Memorandum, the Board also should not discretionarily deny institution for this additional reason. Guidance Memo. at 7. These factors are dispositive against any discretionary denial, but for completeness each of the *Fintiv* factors⁴ are addressed below.

Factor 1: Institution Will Increase Likelihood of Stay

Institution will enable the Board to resolve the issue of validity, and a finding of invalidity will relieve the district court of the need to continue litigation related to

⁴ *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019 Paper 11, 6 (P.T.A.B. Mar. 20, 2020) (precedential).

this patent. Petitioner intends to file a motion to stay upon institution of IPR. The district court case is still in its relatively early stages. The district court has not conducted a claim construction hearing (now scheduled for December 11, 2023) and no trial date has been set. The opportunity for such simplification increases the likelihood that the court will grant a stay in view of IPR institution. *Qualcomm Inc. v. Apple Inc.*, No. 3:17-CV-2402-CAB-MDD, 2018 WL 4104951 (S.D. Cal. Aug. 29, 2018); *TAS Energy, Inc. v. San Diego Gas & Elec. Co.*, No. 12CV2777-GPC BGS, 2014 WL 794215 (S.D. Cal. Feb. 26, 2014).

Factor 2: District Court Schedule

No trial date is scheduled in the district court case. Based on the 18-month IPR schedule, a Final Written Decision (“FWD”) in an IPR arising from the present Petition would issue around April 2025.

Factor 3: Investment In The District Court Proceeding

The district court case is still at an early phase. No *Markman* hearing has been conducted. In addition, discovery is not scheduled to close until March 2024.

Patent Owner first asserted the ’046 patent against Petitioner on January 30, 2023 when it filed a complaint in the district court case. Petitioner prepared and filed the instant Petition prior to the statutory period provided by Congress under 35 U.S.C. § 315(b).

Factor 4: The Petition Raises Unique Issues

Petitioner hereby stipulates that it will not assert in the district court case that the challenged claims are invalid based on any ground raised or that could have reasonably been raised in this Petition if the Petition is instituted. Thus, there will be no overlap of invalidity issues between the district court case and the IPR. *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020). This factor militates against any discretionary denial. Guidance Memo. at 7.

Factor 5: Overlap Between The Parties In The Parallel Proceeding

While the same parties are involved here and the district court case, this factor is not determinative.

Factor 6: Other Circumstances Support Institution

Petitioner has presented a compelling case of invalidity for all challenged claims. This fact “alone demonstrates that the [Board] should not discretionarily deny institution under *Fintiv*.” Guidance Memo. at 5.

XI. CONCLUSION

Petitioner respectfully requests that the Board institute IPR and cancel claims 1–3, 7–9, and 14–20 of the '046 patent.

Dated: November 8, 2023 By: /Ali S. Razai/
Ali S. Razai (Reg. No. 60,771)
KNOBBE MARTENS OLSON & BEAR, LLP

Attorney for Petitioner lululemon usa inc.

APPENDIX 1

Listing of Challenged Claims of U.S. 9,375,046	
Claim 1 ⁵	
1[pre]	An article comprising:
1[a]	a plurality of webbed areas that include a plurality of courses formed from a first yarn,
1[a][i]	the webbed areas having a front surface,
1[a][ii]	the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position and
1[b]	a plurality of tubular structures that are adjacent to the webbed areas, the tubular structures including a plurality of courses;
1[c]	wherein at least one of the webbed areas or tubular structures is configured to stretch to move the webbed areas to the extended position in response to a force applied to the article
1[d]	wherein in the neutral position, a first area of the front surface is hidden from visual observation from a first viewing perspective, and
1[e]	wherein in the extended position, the first area of the front surface is revealed for visual observation from the first viewing perspective.

⁵ Bracketed labels have been added for convenient referencing to the claim limitations.

Listing of Challenged Claims of U.S. 9,375,046	
Claim 2	
--	The article of claim 1, wherein the article is associated with a longitudinal direction and a lateral direction; wherein the plurality of webbed areas and the plurality of tubular structures extend along the longitudinal direction, wherein the plurality of webbed areas and the plurality of tubular structures are spaced apart in the lateral direction, and wherein the article is configured to stretch in the lateral direction between the neutral position and the stretched position, the article biased toward the neutral position.
Claim 3	
--	The article of claim 2, wherein the plurality of webbed areas and the plurality of tubular structures are disposed in an alternating manner across the majority of the article.
Claim 7	
--	The article of claim 1, wherein the plurality of webbed areas include one of a front jersey knit pattern and a reverse jersey knit pattern.
Claim 8	
8[pre]	An upper comprising:
[8a]	a plurality of webbed areas and a plurality of tubular rib structures;
[8b]	the plurality of webbed areas having a front side and a back side;
[8c]	the tubular rib structures being disposed adjacent to the webbed areas;
[8d]	the tubular rib structures having a first curved portion with a first curve length extending from the front side of the webbed areas, and a second curved portion with a second curve length extending from the back side of the webbed areas, the first curve length being greater than the second curve length;

Listing of Challenged Claims of U.S. 9,375,046	
[8e]	the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position; and
[8f]	at least one of the webbed areas and the tubular rib structures configured to stretch from the neutral position to the extended position in response to a force applied to the upper.
Claim 9	
--	The upper of claim 8, wherein the webbed areas include a plurality of courses formed from a first yarn, wherein the tubular rib structures include a plurality of courses formed from a second yarn, wherein the first yarn and the second yarn are different; and wherein at least one course of one of the plurality of webbed areas formed with the first yarn is connected with at least one course of one of the plurality of tubular rib structures formed with the second yarn.
Claim 14	
--	The upper of claim 8, wherein the plurality of webbed areas comprises a first webbed area and a second webbed area; wherein the first webbed area has a first width, and the second webbed area has a second width, the first width being less than the second width.
Claim 15	
--	The upper of claim 8, wherein the plurality of webbed areas and the plurality of tubular rib structures are disposed in an alternating manner across the majority of the upper.

Listing of Challenged Claims of U.S. 9,375,046	
Claim 16	
--	The article of claim 1, wherein the plurality of tubular structures comprise (i) two co-extensive and overlapping knit layers and (ii) a central area that is generally unsecured to form a hollow between two knit layers.
Claim 17	
--	The article of claim 1, wherein the article includes a knitted component, the knitted component comprising the plurality of webbed areas and the plurality of tubular structures.
Claim 18	
--	The article of claim 17, wherein the knitted component is formed of unitary knit construction.
Claim 19	
--	The upper of claim 8, wherein the upper includes a knitted component, the knitted component comprising the plurality of webbed areas and the plurality of tubular rib structures.
Claim 20	
[20pre]	An article comprising:
[20a]	a plurality of webbed areas having a front surface, the webbed areas configured to move between a neutral position and an extended position, the webbed areas being biased to move toward the neutral position, and
[20b]	a plurality of tubular structures that are adjacent to the webbed areas, the tubular structures;
[20c]	wherein at least one of the webbed areas or tubular structures is configured to stretch to move the webbed areas to the extended position in response to a force applied to the article.

Listing of Challenged Claims of U.S. 9,375,046	
[20d]	wherein in the neutral position, a first area of the front surface is hidden from visual observation from a first viewing perspective, and
[20e]	wherein in the extended position, the first area of the front surface is revealed for visual observation from the first viewing perspective.

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,375,046 contains 11,282 words according to the word-processing program used to prepare this paper. The foregoing word count complies with the 14,000-word type-volume limit specified by 37 C.F.R. § 42.24(a)(1).

Dated: November 8, 2023 By: /Ali S. Razai/
Ali S. Razai (Reg. No. 60,771)
KNOBBE MARTENS OLSON & BEAR, LLP

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the date below a copy of this PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,375,046, PETITIONER’S POWER OF ATTORNEY, AND EXHIBITS 1001-1014, were served by FedEx on the Patent Owner at the correspondence address of record for the subject patent as follows:

78342 - SHOOK, HARDY & BACON LLP/NIKE, INC.
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A courtesy copy has been sent by email on this day to Patent Owner’s counsel of record in the matter identified in Section I.B of the Petition as follows:

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Dated: November 8, 2023 By: /Ali S. Razai/
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