Paper 60 Entered: April 28, 2014

# UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

adidas AG Petitioner

v.

NIKE, Inc. Patent Owner

Case IPR2013-00067 Patent 7,347,011 B2

Before JOSIAH C. COCKS, MICHAEL J. FITZPATRICK, and JAMES B. ARPIN, *Administrative Patent Judges*.

ARPIN, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

### I. INTRODUCTION

On December 10, 2012, adidas AG ("Petitioner") filed a revised petition (Paper 7) challenging claims 1-46 of Patent No. US 7,347,011 B2 (Ex. 1002, "the '011 Patent"). Petitioner relied upon the following prior art references:

Glidden	US 2,147,197	Feb. 14, 1939	(Ex. 1007)
McDonald	US 2,314,098	Mar. 16, 1943	(Ex. 1008)
Whiting	US 2,641,004	June 9, 1953	(Ex. 1009)
Shiomura	US 4,785,558	Nov. 22, 1988	(Ex. 1011)
Curley	WO 90/03744	Apr. 19, 1990	(Ex. 1010)
Osamu	JP H06-113905	Apr. 26, 1994	(Ex. 1006)
Nishida	US 5,345,638	Sep. 13, 1994	(Ex. 1005)

On February 28, 2013, Nike, Inc. ("Patent Owner") filed a patent owner preliminary response (Paper 12). In a decision to institute (Paper 18) issued May 17, 2013, we<sup>1</sup> instituted *inter partes* review of all of the challenged claims as to the following grounds for review:

claims 1-16, 19-34, 36, and 39-46 as anticipated by Nishida; claims 16-18 as anticipated by Glidden; claims 1-16 and 19-46 as obvious over Nishida; and claims 16-18 as obvious over Glidden.

On August 18, 2013, Patent Owner filed a motion to amend (Paper 31), accompanied by certain testimony of Patent Owner's expert, Dr. Tonkel

<sup>&</sup>lt;sup>1</sup> After issuance of the decision to institute, Judge Cocks replaced Judge Tierney as the administrative patent judge managing this proceeding. Paper 30.

(Ex. 2010), but elected not to file a patent owner response. In the scheduling order (Paper 19, 2-3), Patent Owner had been cautioned that any arguments for patentability not raised in the patent owner response are deemed waived. On November 12, 2013, Petitioner filed an opposition (Paper 37) to the motion to amend, including three additional exhibits: declaration of Sabit Adanur Ph.D. (Ex. 1016) and Patent Nos. US 2,178,941 (Ex. 1020, "Schuessler I") and US 2,150,730 (Ex. 1021, "Schuessler II"). On December 11, 2013, Patent Owner filed a reply (Paper 44) to Petitioner's opposition to the motion to amend.

On January 7, 2014, Petitioner filed a motion to exclude evidence (Paper 49). Specifically, Petitioner moved to exclude (1) certain testimony elicited on cross-examination of Petitioner's expert, Dr. Frederick (Ex. 2009 (deposition testimony of Dr. Frederick)), as allegedly beyond the scope of Dr. Frederick's direct testimony (Ex. 1001 (declaration of Dr. Frederick)); and (2) certain testimony of Patent Owner's expert, Dr. Tonkel, which allegedly relied on the challenged, cross-examination testimony of Dr. Frederick. On January 21, 2014, Patent Owner filed Patent Owner's opposition (Paper 51) to Petitioner's motion to exclude evidence; and, on January 28, 2014, Petitioner filed Petitioner's reply (Paper 54) to Patent Owner's opposition to Petitioner's motion to exclude evidence.

Both parties requested oral argument. Papers 47 and 48. In the trial hearing order (Paper 50), we gave each party thirty (30) minutes to argue its case. Because Patent Owner did not file a patent owner response, we ordered (1) that the parties would not present arguments regarding whether

original claims 1-46 are unpatentable based on the instituted grounds and (2) that Patent Owner, rather than Petitioner, would argue first. Paper 50, 2. The oral hearing was conducted on February 10, 2014.<sup>2</sup>

We have jurisdiction under 35 U.S.C. § 6(c). This final written decision is entered pursuant to 35 U.S.C. § 318(a).

For the reasons that follow, the portion of Patent Owner's motion to amend requesting cancellation of claims  $1-46^3$  is *granted*; however, the portion of the motion requesting entry of substitute claims 47-50 is *denied*.

Petitioner's motion to exclude evidence is *dismissed* as moot.

## A. Related Proceedings

Petitioner does not identify related proceedings. Paper 7, 1. Patent Owner identifies three related patents, identified by Patent Nos. US 7,814,598 B2; US 8,042,288 B2, and US 8,266,749 B2; and one related U.S. patent application, identified by U.S. Patent Application No. 13/413,233. Paper 9, 2.

#### B. The '011 Patent

The '011 Patent relates to articles of footwear having a textile "upper." Ex. 1002, col. 1, ll. 7-10. In particular, the patent describes articles of footwear having an upper incorporating a knitted textile element and having a sole structure secured to the upper. *Id.* at col. 3, ll. 20-47.

 $<sup>^{2}</sup>$  A transcript of the hearing is included in the record as Paper 59.

<sup>&</sup>lt;sup>3</sup> *See* Paper 31, 1.

Conventional articles of athletic footwear may include two primary elements: an upper and a sole structure. *Id.* at col. 1, ll. 12-15. The upper may form a void on the interior of the footwear for receiving a wearer's foot, and the upper may extend over the instep and toe areas, along the medial and lateral sides, and around the heel area of the wearer's foot. *Id.* at ll. 30-35. The upper may be formed of multiple layers of materials, which may be selected for properties of wear resistance, flexibility, and air permeability. *Id.* at ll. 43-50. Thus, different areas of the exterior layer of the upper may be formed of different materials with differing properties. *Id.* at ll. 51-60. In that regard, the '011 Patent explains that:

A textile may be defined as any manufacture from fibers, filaments, or yarns characterized by flexibility, fineness, and a high ratio of length to thickness. *Textiles generally fall into two categories*. The first category includes textiles produced directly from webs of filaments or fibers by randomly interlocking to construct non-woven fabrics and felts. The second category includes textiles formed through a mechanical manipulation of yarn, thereby producing a woven fabric, for example.

*Id.* at col. 2, ll. 6-14 (emphasis added). Techniques for the mechanical manipulation of yarn into a textile include weaving (e.g., producing a woven material) and knitting (e.g., producing a knitted material). *Id.* at ll. 36-46. Further, textiles for uppers may be formed of weft or warp, woven or knitted materials. *Id.* at ll. 40-41; *see also id.* at col. 3, ll. 30-32 (describing weft knitted and warp knitted "textile elements").

Figure 8 of the '011 Patent is reproduced below.

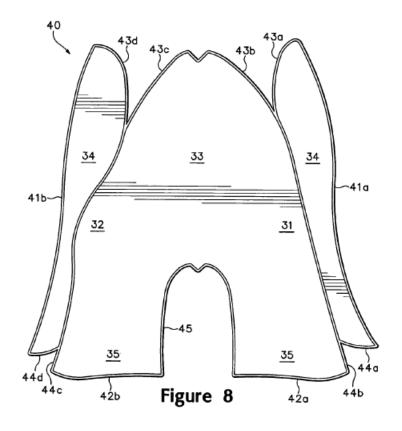


Figure 8 illustrates an embodiment of an upper according to the '011 Patent. *Id.* at col. 5, 1. 58-col. 6, 1. 65. Textile element 40 is a single material element with a unitary (i.e., one-piece) construction. *Id.* at col. 5, ll. 38-41; *see also id.* at figs. 10 (depicting textile element 40') and 11 (depicting textile element 40"). Consequently, textile element 40 is configured, such that portions of the textile element are not joined together with seams or other connections. *Id.* at col. 5, ll. 38-41; col. 6, ll. 41-46. Edges 41a-44d, which are *free* in Figure 8, are joined together as shown in Figures 3-5 to form seams 51-54, thereby forming at least a portion of a void for receiving the foot. In contrast, lateral region 31, medial region 32, instep

region 33, lower regions 34, and heel regions 35 together have a unitary construction without seams (*id.* at col. 5, ll. 44-57; col. 6, ll. 47-50).

Figure 11 of the '011 Patent is reproduced below.

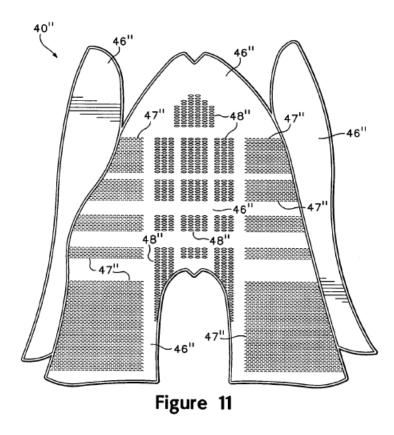


Figure 11 illustrates another embodiment of an upper according to the '011 Patent. *Id.* at col. 9, 1. 36-col. 10, 1. 14. Textile element 40" includes three different areas with three different textures. *Id.* at col. 9, 11. 38-39. First texture 46" is generally smooth and extends in strips across lateral region 31, medial region 32, and instep region 33 of the upper. *Id.* at 11. 39-42. In addition, textile element 40" includes second texture 47" and third texture 48". *Id.* at 11. 42-46. Moreover, the '011 Patent describes that:

The different textures 46"-48" are formed by merely varying the type of stitch formed by the wide-tube circular knitting machine at each location of textile element 40". Textures 46"-48" may exhibit aesthetic differences, or the differences may be structural. For example, the degree of stretch in areas with textures 46"-48" may be different, or the wear resistance of the areas may vary depending upon the stitch utilized. The airpermeability of textile element 40" may also vary in the different areas.

*Id.* at ll. 46-54 (emphases added). Similarly, the type of yarn used in different areas may impart different properties to each area. *Id.* at col. 9, 1. 65-col. 10, 1. 14. Thus, the textures and properties of different areas of the upper may be varied by altering the stitching or yarn used in those areas.

#### C. Status of the Claims

Of the challenged claims, claims 1, 16, 24, 36, and 44 are independent. Independent claims 1, 24, and 36 recite similar limitations describing the formation of a void to receive the foot, and independent claims 16 and 44 recite similar limitations describing the unitary construction of the textile element. As to the dependent claims, claims 2-15 depend from claim 1, claims 17-23 depend from claim 16, claims 25-35 depend from claim 24, claims 37-43 depend from claim 36, and claims 45 and 46 depend from claim 44. In its motion to amend, Patent Owner states that "[i]ssued claims 1-46 are cancelled" (Paper 31, 1), and proposes four (4) substitute claims, claims 47-50, based on original claims 16, 19, and 20 (*id*. at 1-2). The substitute claims are reproduced below:<sup>4</sup>

Claim 47. (Substitute for independent claim 16) An article of footwear comprising

an upper incorporating a [weft-knitted] <u>flat knit</u> textile element, the <u>flat knit</u> textile element

(1) having flat knit edges free of surrounding textile structure such that the flat knit edges are not surrounded by textile structure from which the textile element must be removed, some of the flat knit edges joined together to form an ankle opening in the upper for receiving a foot, the ankle opening having an edge comprised of one of the flat knit edges; and

(2) having a first area and a second area with a unitary construction, the first area being formed of a first stitch configuration, and the second area being formed of a second stitch configuration that is different from the first stitch configuration to impart varying properties to the textile element; and

a sole structure secured to the upper.

Claim 48. (Substitute for dependent claim 19) The article of footwear recited in claim [16] <u>47</u>, wherein at least one of the first stitch configuration and the second stitch configuration forms an aperture in the [weft-knitted] <u>flat knit</u> textile element and the joined edges shape the flat knit textile element to form a lateral region, a medial region, an instep region and a heel region of the upper.

Claim 49. (Second substitute for dependent claim 19) The article of footwear recited in claim [16] 47, wherein at least one of the first stitch configuration and the second stitch configuration forms [an aperture] <u>a plurality of apertures</u> in the

<sup>&</sup>lt;sup>4</sup> Subject matter deleted from original claims 16, 19, and 20 is enclosed by brackets; subject matter added to those claims is underlined.

[weft-knitted] <u>flat knit</u> textile element, <u>the apertures formed by</u> <u>omitting stitches in the flat knit textile element and positioned</u> <u>in the upper for receiving laces</u>.

Claim 50. (Substitute for dependent claim 20) The article of footwear recited in claim [16] <u>47</u>, wherein the [weft-knitted] <u>flat knit</u> textile element is one of an exterior layer, an intermediate layer, and an interior layer of the upper, and the joined edges shape the flat knit textile element to form a lateral region, a medial region, an instep region and a heel region of the upper.

Paper 31, 1-2. Thus, Patent Owner proposes amending original claim 16 to recite one of two sub-types of a *weft-knitted* textile element, namely a *flat knit* textile element. Paper 31, 1. Further, substitute claim 47 recites a negative limitation regarding the flat knit edges in terms of their method of manufacture. *See* Paper 37, 4; Paper 59, 20-21 and 23-25. Specifically, the "flat knit edges" are themselves flat knit and *not* cut from a flat knit textile. Paper 37, 9. Thus, the upper is recited as "having flat knit edges *free of surrounding textile structure* such that the flat knit edges *are not surrounded by textile structure* from which the textile element must be removed" (emphases added). Finally, some of the "flat knit edges" of the upper are joined to form an ankle opening. *Id.* at 10.

#### II. DISCUSSION

Because Patent Owner did not file a response to the petition, we focus our discussion on Patent Owner's motion to amend. As noted above, in the motion to amend, Patent Owner requests the cancellation of claims 1-46 and

the entry of one independent substitute claim, claim 47, and three dependent substitute claims, claims 48-50. Paper 31, 1-2. In support of its motion, Patent Owner filed a declaration of Dr. Tonkel (Ex. 2010).

An *inter partes* review is more adjudicatory than examinational, in nature. *See Abbott Labs. v. Cordis Corp.*, 710 F.3d 1318, 1326 (Fed. Cir. 2013). A *motion* to amend in an *inter partes* review is not itself an amendment. As the moving party, Patent Owner bears the burden of establishing that it is entitled to the relief requested. 37 C.F.R. § 42.20(c). Thus, Patent Owner's proposed substitute claims are not entered automatically, but may be entered upon Patent Owner's having demonstrated the patentability of the substitute claims.

#### A. Claim Construction

Claim construction is an important step in a patentability determination. *Medichem, S.A. v. Rolabo, S.L.*, 353 F.3d 928, 933 (Fed. Cir. 2003) ("Both anticipation under § 102 and obviousness under § 103 are twostep inquiries. The first step in both analyses is a proper construction of the claims. . . . The second step in the analyses requires a comparison of the properly construed claim to the prior art." (internal citations omitted)). Thus, a motion to amend must identify how the proposed substitute claims are to be construed, especially when the proposed substitute claims introduce new claim terms or features. *See Research in Motion Corp. v. MobileMedia Ideas LLC*, IPR2013-00016, Paper 32, 6. The motion to amend also must explain how the construed claim is distinguishable over the art.

Neither Patent Owner nor Petitioner challenges our interpretation of certain terms of claim 16, as set forth in the decision to institute, which terms also appear in substitute claims 47-50. Paper 18, 10-17. The interpretations of those terms are adopted for purposes of this final decision. In particular, in the decision to institute, we construed expressly the claim terms: a "weft-knitted textile element," a "flat-knitted textile element," and "unitary construction." Paper 18, 11-15. Although the original claims are no longer at issue, the interpretation of terms in the decision to institute is relevant to the interpretation of those terms in the substitute claims.

## 1. A Single Type of Textile

Independent claims 1, 24, and 36 recite that a textile element incorporates "a single type of textile." In its petition, Petitioner pointed out that "[t]extile element 40 is primarily formed from one or more yarns that are mechanically-manipulated through either an interweaving, intertwining and twisting, or interlooping process." Paper 7, 10 (quoting '011 Patent, col. 6, ll. 51-54). "A single type of textile" is not defined expressly in the Specification of the '011 Patent. Nevertheless, we noted that a pertinent definition of the term "textile" is "any cloth or goods produced by weaving, knitting, or felting." RANDOM HOUSE WEBSTER'S COLLEGE DICTIONARY 1351 (2nd Random House ed. 1996) (Ex. 3001); *cf.* Ex. 1002, col. 2, ll. 6-14 (defining "textiles"). In addition, the term "textile" is defined more broadly as "[a] material made of natural or artificial fibers and used for the manufacture of items such as clothing or furniture fittings." MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS 1911 (4th ed. 1989)

(Ex. 3002). As noted above, the '011 Patent states that textiles generally fall into two categories: fabrics formed of randomly locked filaments or fibers, such as felts; and fabrics formed of mechanically manipulated yarn, such as woven or knitted fabrics. Ex. 1002, col. 2, ll. 9-14.

The '011 Patent describes various techniques for mechanically manipulating yarn into woven fabrics or textiles, including interweaving (e.g., weaving), intertwining and twisting (e.g., braiding and knotting), and interlooping (e.g., knitting). *Id.* at ll. 36-46. In the decision to institute, we noted that claim 16 recites that the "textile element" is "knitted" and, in particular, "weft-knitted." Paper 18, 11-13.

#### 2. Weft-Knitted Textile Element and Flat-Knitted Textile Element

According to Patent Owner, substitute claim 47 incorporates the limitations of challenged, independent claim 16. Paper 31, 1. In its petition, Petitioner argued that the terms "weft-knitted" and "flat-knitted" are wellknown in the art. Paper 7, 10. We agreed.

As noted above, the Specification of the '011 Patent describes that various textile types (e.g., weft knitting textiles) and sub-types (e.g., circular and flat knitted) may be used to manufacture textile elements for incorporation into the uppers of the claimed articles of footwear. Ex. 1002, col. 6, 1. 66-col. 7, 1. 10. In the "Detailed Description of the Invention" portion of the Specification, the '011 Patent further describes that:

A variety of mechanical processes have been developed to manufacture a textile. *In general, the mechanical processes may be classified as either warp knitting or weft knitting.* With regard to warp knitting, various specific *sub-types* that may be utilized to manufacture a textile include tricot, raschel, and double needle-bar raschel (which further includes jacquard double needle-bar raschel). With regard to weft knitting, various specific sub-types that may be utilized to manufacture a textile include circular knitting and flat knitting. Various types of circular knitting include sock knitting (narrow tube), body garment (seamless or wide tube), and jacquard.

*Id.* at col. 6, l. 66-col. 7, l. 10 (emphases added).

Although the '011 Patent does not include a definition of either the term "weft knitting" or "warp knitting," a pertinent definition of "weft knitting" is "[a] knitting process in which *a continuous yarn* is carried *in crosswise rows.*" MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS at 2054 (Ex. 3002; emphases added); *see also* Ex. 1001 ¶ 56 (reproducing H. Eberle et al., CLOTHING TECHNOLOGY, Sec. 3.3.1 (3rd English ed. 2002) (weft knitted fabric "[m]ay be made from a single yarn")). By comparison, a pertinent definition of the term "warp knitting" is "[a] knitting process in which *a group of yarns form rows running lengthwise* by an interlocking process." MCGRAW-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS at 2045 (Ex. 3002; emphasis added). Similarly, flat knitting is described in the '011 Patent as a sub-type of weft knitting, in which the textile is knit as a sheet or flat piece of textile (Ex. 1002, col. 7, 11. 5-8), in contrast to, for example, circular knitting, which is another sub-type of weft knitting (*see* Ex. 1002, fig. 9).

In its opposition to the motion to amend, Petitioner argues that, although flat knitting may be a sub-type of weft knitting, flat knitting is broader than that and describes any "knitted textile that is knit in a flat

form," and necessarily includes other types of knitted textiles, including warp knit textiles. Paper 37, 1-2. In the context of this Specification, we are not persuaded that flat knitting should be construed so broadly.

In construing the term "flat knitting," we apply the broadest reasonable interpretation of the words in their ordinary usage, as those words would be understood by one of ordinary skill in the art, taking into account any definitions supplied by the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). The Specification of the '011 Patent expressly describes flat knitting as a *sub-type* of weft knitting. Ex. 1002, col. 7, ll. 5-8. Ultimately, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be . . . the correct construction." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

Further, Patent Owner presents evidence that a person of ordinary skill in the art would understand flat knitting to describe a sub-type of weft knitting. Paper 44, 1 (quoting a textile dictionary (Ex. 2011, 6) to state that "the trade uses the term flat knit fabric to refer to weft knit fabrics made on a flat machine, rather than warp-knit fabrics"); *see also* Ex 2017, 5; Ex. 2018, 6. Despite its argument, Petitioner identifies no portion of the Specification of the '011 Patent that describes flat knitting. *See* Paper 37, 2-3. In addition, *before* the filing date of the motion to amend, Dr. Frederick, Petitioner's expert, testified that "[f]lat knitting would be another type of weft knitting that would involve an end result that was . . . on a curved

surface, but more or less flat." Ex. 2009, 89, ll. 6-11. Therefore, we determine that the term "weft knitting" describes a type of knitting in which a continuous yarn is carried in crosswise rows, and we construe the term "flat knit" to recite a sub-type of weft knitting, in which the weft knit textile is produced as a sheet of more or less flat material.<sup>5</sup>

#### 3. The Textile Element Having First and Second Areas

In its petition, Petitioner argued that the phrase "the textile element *having a first area and a second area* with a unitary construction" in original claim 16 should be construed to require a textile element (1) having a unitary construction *and* (2) having a first area and a second area, each area having stitching that imparts different properties to its area. Paper 7, 11-12 (emphasis added). Thus, Petitioner argued that the textile element has a *single* unitary construction containing different areas. Petitioner also argued, however, that separate unitary constructions in *different* areas of the textile element would be inconsistent with the invention, as described in the Specification. *Id.* at 12.

The '011 Patent expressly defines the term "unitary construction." Ex. 1002, col. 6, ll. 41-46. The '011 Patent states that, "[*a*]*s defined for purposes of the present invention*, unitary construction is intended to express a configuration wherein portions of a textile element are not joined together

<sup>&</sup>lt;sup>5</sup> Although not dispositive for purposes of our construction of this term, we are mindful that Patent Owner proposed the replacement of "weft-knitted" with "flat knit" in original claim 16 in order to narrow the scope of substitute claim 47 in a manner consistent with the language of the Specification.

by seams or other connections, *as depicted with textile element 40 in FIG.* 8." *Id.* (emphases added); *see* Paper 18, 10-11 (citing *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994)). Consequently, we construe the phrase "the textile element having a first area and a second area with a unitary construction" to require a textile element having a unitary construction *and* having a first area and a second area.

# 4. Flat Knit Edges Free Of Surrounding Textile Structure Such That The Flat Knit Edges Are Not Surrounded By Textile Structure From Which The Textile Element Must Be Removed

Patent Owner proposes adding these limitations to original claim 16 in substitute claim 47 in order to distinguish the substitute claims over the references cited by Petitioner in its petition and over other references known to Patent Owner. Paper 31, 3. The Specification of the '011 Patent describes a textile element with "edges" (*e.g.*, Ex. 1002, Abstract; col. 6, 11. 47-50 (describing edges 41a-44d of textile element 40)), and such edges were recited in the challenged claims (*see id.* at Claims 1, 3, 4, 6, 24, 36, and 39-41). In substitute claim 47, however, Patent Owner proposes to limit further those edges as (1) "flat knit" edges and (2) edges "free of surrounding textile structure such that the flat knit edges are not surrounded by textile structure from which the textile element must be removed." We address the construction of each of these limitations in turn.

#### a. Flat Knit Edges

Patent Owner argues that "flat knit edges" are edges that are themselves "flat knit," as opposed to edges that are formed by cutting a textile element from a textile structure that has been created by flat knitting. Paper 31, 7-8. In particular, Patent Owner argues that cutting a textile element from a larger textile structure, such as is taught by Nishida (see Ex. 1005, col. 2, ll. 1-10), requires that the stitches at the textile element edges are broken, e.g., by a knife, die cutter, or other cutting technique, in order to separate the textile element from the surrounding textile structure. Paper 31, 7-8 (citing Ex. 2010 ¶¶ 101-105). Moreover, Patent Owner argues that, if untreated, such cut edges are subject to fraying or unraveling. Id.; see also Ex. 2010 ¶ 46 (citing Ex. 1007, 2, col. 1, ll. 56-63; Ex. 1009, col. 3, l. 68-col. 4, l. 16). Conversely, if the edges, like the textile of the flat knit textile element, are flat knit, Patent Owner argues that such edges inherently have a stable configuration in which the yarn of stitches at the edges of the textile element is unbroken and joined from one row to the next row. Id. at 8 (citing Ex. 2010 ¶ 105); see also McGraw-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS at 2054 (Ex. 3002); Ex. 1001 ¶ 56. Thus, Patent Owner argues that the yarns forming the flat knit edges of the flat knit textile element, as recited in substitute claim 47, retain their integrity, e.g., are unbroken and remain joined between rows. See Ex. 2010 ¶ 105. Therefore, according to Patent Owner, a *flat knit* edge of a flat knit textile element is structurally different from a *cut* edge of a flat knit textile element.

Petitioner contends that the term "flat knit edges" has two plausible meanings. First, flat knit edges may be edges created when a textile element is cut from a larger flat knit textile structure. Second, flat knit edges may be edges created when a flat knit textile element is knit to shape. In an absolute sense, we agree. Nevertheless, we must determine what the term means in the context of *this* claim (including surrounding claim language) and in the context of the Specification of *this* patent. Here, we construe a flat knit edge to be an edge of a flat knit textile element, which is itself flat knit, e.g., which is not formed by cutting from a flat knit textile element.

## b. Edges Free Of Surrounding Textile Structure Such That The Flat Knit Edges Are Not Surrounded By Textile Structure From Which The Textile Element Must Be Removed

Figures 8, 10, and 11 of the Specification of the '011 Patent depict textile elements 40, 40', and 40", respectively, without any textile structure surrounding the textile elements. Patent Owner argues that these figures depict a flat knit textile element with flat knit edges and without any textile structure surrounding the textile elements, as recited in substitute claim 47. Paper 31, 3-4; *see, e.g.,* Ex. 1002, col. 6, ll. 41-50 (describing the unitary construction of textile element 40). In contrast, Figure 9 of the Specification depicts an embodiment of the disclosed invention in which a plurality of textile elements 40 is cut from a *circular knit* textile structure 60. Ex. 1002, col. 7, ll. 41-48. Thus, as noted above, Patent Owner argues that, unlike the cut out textile elements depicted in Figure 9, flat knit textile elements having

flat knit edges are depicted in and disclosed by Figures 8, 10, and 11. Paper 31, 4 (citing Ex. 2010 ¶¶ 36, 37, 40-41, and 62-67).

Petitioner argues that this limitation of substitute claim 47 properly is construed as a negative limitation and that the negative limitation lacks sufficient written description. Paper 37, 4. As the U.S. Court of Appeals for the Federal Circuit explained,

[t]he test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, *rather than the presence or absence of literal support in the specification for the claim language* . . . The content of the drawings may also be considered in determining compliance with the written description requirement.

*In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983) (emphasis added; citations omitted). To the extent that the language of substitute claim 47 recites a negative limitation, we conclude that this negative limitation is supported by the positive disclosure of the various forms of the textile element, including a flat knit textile element, with "edges free of surrounding textile structure such that the flat knit edges are not surrounded by textile structure from which the textile element must be removed," in Figures 8, 10, and 11 of the '011 Patent. *See Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1351 (2012) ("it is possible for the patentee to support both the inclusion and exclusion of the same material."). In view of the positive disclosure of this feature, the Specification need not disclose a reason to exclude. *Ex Parte Lazaridis and Brown*, Appeal No. 2010-

005137, 2013 WL 1331529 (2013) (discussing an alternative basis for excluding a limitation in the absence of a positive recitation). Thus, we are persuaded that the Specification discloses flat knit edges free of surrounding material, as recited in substitute claim 47.

The language added to substitute claim 47 arguably recites the claimed invention in terms of the manner in which it is made, i.e., as a product-by-process limitation. During the oral hearing, the parties disagreed as to whether the added language is a product-by-process limitation. Paper 59, 10-11 and 20. We determined above that the process of creating a flat knit textile element with flat knit edges having no surrounding material creates an edge that is *structurally* different from a cut edge. Therefore, because the described process imparts structural differences to the textile element and, hence, to the claimed article of footwear, this limitation may be used to distinguish substitute claim 47 over the prior art. *See Greenliant Sys., Inc. v. Xicor LLC*, 692 F.3d 1261, 1265 (2012) ("[T]he process limitations in product-by-process claims . . . cannot be used to distinguish prior art *unless the process imparts structural differences to the product.*" (emphasis added)).

As noted above, we construe the claims in view of the Specification. The Specification need not present every embodiment or permutation of the invention, and the claims are not limited to a preferred embodiment of the invention. *See Comark Commc'ns, Inc. v. Harris Corp.,* 156 F.3d 1182, 1186 (Fed. Cir. 1998). The claims, however, may not enlarge the scope of what is patented beyond what the inventor has described as the invention.

Claim construction is the judicial statement of what is and is not covered by the technical terms and other words of the claims. *See United States Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). Here, the Specification broadly discloses the structure of the textile elements, e.g., textile elements 40, 40', and 40", from which a shoe upper may be formed. Moreover, the Specification describes an embodiment of a method for cutting a plurality of textile elements from a *weft* knit, and, in particular, a *circular* knit, textile structure (see Ex. 1002, fig. 9), but the disclosed invention is not limited to textile elements manufactured according to this embodiment. The Specification teaches that textile structure 60, from which textile elements 40, 40', or 40" may be cut, "may be formed" according to the embodiment depicted in Figure 9, but we conclude that those textile elements also may be made according to other embodiments. Ex. 1002, col. 8, ll. 1-14.

For example, Patent Owner's expert, Mr. Tonkel, testifies that, based on his reading of the Specification, textile elements 40, 40', and 40" may be made by the flat knitting of yarn by the known process of "knit[ting] to shape." Ex 2010 ¶¶ 36, 37, 40-42, and 62-67. Petitioner's expert does not disagree. Ex. 1001 ¶ 28 ("The '011 Patent describes that the textile element may be formed *any number of ways* with one or more yarns that are mechanically manipulated *using a variety of existing processes* . . ." (emphases added)); *see also* Ex. 1001 ¶ 53 ("Significantly, the '011 Patent states that the textile element may be formed *through any of the mechanical processes discussed in the specification.*" (emphasis added)). Thus, we

conclude that this language of substitute claim 47 is construed properly to describe a knit to shape textile element formed by flat knitting, having flat knit edges. Such flat knit edges are knit, such that the yarns and fibers forming the flat knit edges of the flat knit textile element, as recited in substitute claim 47, are unbroken and remain joined between rows forming the edges.

#### 5. Remaining Claim Terms or Phrases

All remaining claim terms and phrases recited in substitute claims 47-50 are given their ordinary and customary meaning, consistent with the Specification, as would be understood by one with ordinary skill in the art.

#### B. A Reasonable Number Of Substitute Claims

Under 35 U.S.C. § 316(d)(1), a patent owner may, for each challenged claim, propose a reasonable number of substitute claims in a motion to amend. Each proposed claim should be traceable to an original, challenged claim as a proposed substitute claim for that challenged claim. Absent special circumstances, a challenged claim can be replaced by only one claim. The presumption is that only one substitute claim would be needed to replace each challenged claim, although the presumption may be rebutted by a demonstration of need. 37 C.F.R. § 42.121(a)(3).

In its motion to amend, Patent Owner proposes substitute, independent claim 47 for original, independent claim 16; *two*, substitute, dependent claims, claims 48 and 49, for original, dependent claim 19; and substitute, dependent claim 50 for original, dependent claim 20. Paper 31, 2. Thus, Patent Owner has proposed more than one substitute claim for original claim 19.

In the order acknowledging that Patent Owner complied with the requirement of 37 C.F.R. § 42.121(a) to confer with us prior to filing a motion to amend, we noted that, if more than one substitute claim is proposed for a challenged claim, for each proposed substitute claim, the patent owner is expected to make a showing of patentable distinction over all other proposed substitute claims for the same challenged claim. Paper 29, 2-3 (quoting *Idle Free Sys., Inc. v. Bergstrom, Inc.*, IPR2012-00027, Paper 26, 8-9 (emphasis added)).

If more than one substitute claim is proposed for the same challenged claim, the motion to amend must show that these multiple substitute claims are patentably distinct from each other. If shown to be patentably distinct from each other, the multiple claims are likely not unreasonable in number. Paper 29, 2-3. If, however, no such patentable distinction is shown in the motion, then we, in our discretion, may deny entry of the excess claims *or* group the multiple substitute claims together for common treatment over the prior art. *Id.* at 3.

Patent Owner argues that dependent claims 48 and 49, each of which is a substitute for claim 19, are patentably distinct from each other. Paper 31, 15 (citing Ex. 2010 ¶¶ 169-176). According to Patent Owner, "[c]laim 49 does not teach or suggest 'joined edges [that] shape the flat knit textile element to form a lateral region, a medial region, an instep region and a heel region of the upper," as recited in claim 48. Paper 31, 15 (citing Ex. 2010

¶ 174). Similarly, Patent Owner argues that "[c]laim 48 does not teach or suggest 'apertures formed by omitting stitches in the flat knit textile element and positioned in the upper for receiving laces," as recited in claim 49. *Id.* (citing Ex. 2010 ¶176).

Initially, we note that each of claims 48 and 49 depends directly from independent claim 47 and incorporates the limitations of claim 47 and original claim 19. With respect to the additional limitations of claim 48, Nishida describes joining the edges of the layout to form various portions of the upper, as recited. Ex. 1002, col. 2, ll. 6-10; col. 3, ll. 27-42; fig. 3; see also Paper 18, 20-25 (discussing original claims 3, 4, 6, 24, 39-41); Paper 37, 14-15 (claim chart for claim 48). With respect to the additional limitations of claim 49, Nishida describes forming lacing areas by knitting. Ex. 1002, col. 3, l. 66-col. 4, l. 5; see also Paper 18, 24-25 (discussing original claim 26); Paper 37, 15 (claim chart for claim 49). Further, the Specification of the '011 Patent describes the omission of stitches, as recited in claim 49, to provide air permeability to the upper. Ex. 1002, col. 9, 11. 57-62; cf. Ex. 1005, col. 3, 11. 43-52 ("This type of production can, additionally, insure that the toe area 14 has a good air exchange capability. For example, this can be achieved by a net-like woven or knitted structure.").

In view of limitations of claim 47 and original claim 19 *shared* by claims 48 and 49 and the teachings of Nishida, Patent Owner has not shown that claims 48 and 49 would not be obvious over each other, and Patent Owner does not persuade us that claims 48 and 49 are patentably distinct from each other. Thus, Patent Owner has failed to demonstrate that it proposes a reasonable number of substitute claims for original claim 19 in accordance with 37 C.F.R. § 42.121(a)(3). Nevertheless, in our discretion, we do not deny entry of claims 48 and 49 on this basis, but instead group claim 49 with claim 48, for patentability purposes. Further, we determine that Patent Owner does not argue separately that the limitations of claims 48 and 50 render them patentable over the prior art. *See* Paper 31, 6-10. Consequently, we group claims 48-50 with claim 47 for purposes of considering their patentability over prior art.

#### C. Scope of Motion to Amend

Pursuant to 37 C.F.R. § 42.121(a)(2), a motion to amend may be denied if: (1) the amendments seek to enlarge the scope of the original claims; (2) the amendments introduce new subject matter; or (3) the amendments do not respond to a ground of unpatentability, upon which trial was instituted. For the reasons discussed below, we determine that the substitute claims presented in Patent Owner's motion to amend are definite and narrow the scope of the original claims and do not introduce new subject matter. Further, we conclude that the substitute claims presented in Patent Owner's motion to amend respond to grounds of unpatentability, upon which trial was instituted, especially, anticipation by and obviousness over Nishida. *See* Paper 18, 37. Nevertheless, because, as set forth below, we deny Patent Owner's motion to amend for other reasons, we do not discuss further Patent Owner's arguments regarding the patentability of the

substitute claims over Nishida alone or Petitioner's opposition to those arguments. *See* Paper 31, 6-10; Paper 37, 8-10.

#### 1. Narrowing Amendments

With respect to substitute claim 47, Patent Owner proposes to replace the term "weft knit" with the term "flat knit" in original claim 16 and to add certain additional limitations to original claim 16. Paper 31, 1. Specifically, Patent Owner argues that "flat knitting" is a sub-type of "weft knitting." *Id.* at 3; Paper 44, 1-2. As noted above, we construe the term "flat knit textile element" in substitute claim 47 to mean a "flat *weft* knit textile element." Hence, it is narrower than the corresponding limitation of claim 16. Further, the additional limitations of substitute claim 47, reciting (1) "flat knit edges" and (2) the manner in which such edges are *not* formed, together provide structural limitations that were not present in original claim 16.

For the foregoing reasons, we determine that Patent Owner's proposed substitute claims 47-50 comply with 37 C.F.R. § 42.121(a)(2).

#### 2. Written Description for Substitute Claims

The purpose of the written description requirement is to convey with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). We note that "the written description requirement is satisfied by the patentee's disclosure of 'such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention." *Enzo Biochem, Inc. v. Gen*-

Probe Inc., 323 F.3d 956, 969 (Fed. Cir. 2002) (quoting Lockwood v.
American Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997)). Patent
Owner argues that the additional limitations of substitute claim 47 are
supported by the disclosure of the patent application, U.S. Patent
Application No. 10/791,289 ("the '289 Application"), from which the '011
Patent issued. Paper 31, 3-4 (citing Ex. 1003, 168-9, 173-5, 179, 181, and
184). We agree.

#### a. Flat Knit Textile Element

Patent Owner argues that, as with the '011 Patent, the '289 Application discloses that "weft knitting . . . include[s] circular knitting and flat knitting." *Id.* at 3 (citing Ex. 1003, 168); *cf.* Ex. 1002, col. 7, ll. 5-8. Further, claim 65 of the '289 Application recites that "an upper incorporating a textile element [is] formed through a *flat knitting* process" (emphasis added). *Id.* (citing Ex. 1003, 184); *see also* Ex. 1003, 179, 181 (claims 19 and 38 of the '289 Application recite "flat knitting"). It is well established that subject matter recited in a claim and embraced in an application, as originally filed, is itself a part of the disclosure, even though it may not be defined in the specification. *Application of Frey*, 166 F.2d 572, 575 (CCPA 1948).

Petitioner contends that "[t]he Board has yet to provide a construction of 'flat knitting,' and [that] the Board's construction of 'weft knitting' and 'warp knitting' does not indicate that 'flat knit' is *exclusively* a sub-type of 'weft knitting.'" Paper 37, 2 (emphasis added). Initially, we note that we provide a construction of the term "flat knitting" above. Specifically, in the

context of this Specification, flat knitting is a sub-type of weft knitting, in which the textile is weft knit as a sheet or flat piece of textile. Ex. 1002, col. 7, ll. 5-8; *see also* Ex. 2010 ¶ 60 ("[I]n flat knitting a fabric is produced on a machine in generally flat form, with yarn alternating back and forth across the fabric. [*E.g.*, Ex. 2011, 8.] Moreover, a flat knit fabric is a fabric that has been knit on a flat knitting machine. [*E.g.*, *id.* at 6.]"); Ex. 1001 ¶ 56 ("weft knits may be made with flat *or* circular machines" (emphasis added)). Therefore, we conclude that Patent Owner has demonstrated support for the term "flat knit textile element" in the application from which the '011 Patent claims benefit, and that, as both Patent Owner's and Petitioner's experts agree, the meaning of flat knitting, as construed herein, was well-known at the time of the invention. *See* Ex. 2010 ¶¶ 49-50; Ex. 1001 ¶ 54.

### b. Edges Free Of Surrounding Textile Structure Such That The Flat Knit Edges Are Not Surrounded By Textile Structure From Which The Textile Element Must Be Removed

Patent Owner argues that, as with the '011 Patent, the '289 Application discloses that "flat knit edges [are] free of surrounding textile structure such that the flat knit edges are not surrounded by textile structure from which the textile element must be removed." Paper 31, 4. In particular, Patent Owner argues that Figures 8, 10, and 11 depict textile elements 40, 40′, and 40″, respectively, "free of surrounding textile structure such that the flat knit edges are not surrounded by textile structure from which the textile element must be removed." *Id.* In contrast, Patent Owner argues that Figure 9 depicts a different embodiment of the invention than that recited in the substitute claims. *Id*.

Figure 9 depicts "a perspective view of a textile structure that incorporates two of the textile elements." Ex. 1003, 164 ('289 Application ¶ 24). In particular, the Specification of the '289 Application describes that:

An example of a textile structure 60 that may be formed with a wide-tube circular knitting machine is depicted in Figure 9. Textile structure 60 has a generally cylindrical configuration, and the types of stitches vary throughout textile structure 60 so that a pattern is formed with the outline of textile element 40. That is, differences in the stitches within textile structure 60 form an outline with the shape and proportions of textile element 40.

*Id.* at 169 ('289 Application ¶ 45 (emphasis added)). Thus, Patent Owner argues that the embodiment depicted in Figure 9 does not limit the textile elements depicted in Figures 8, 10, and 11 to those manufactured according to the process of Figure 9 and that a textile element may or may not be formed by removing it from a larger textile structure, such as textile structure 60. Paper 31, 4. Further, referring to Figures 8, 10, and 11, Dr. Tonkel opines that the '289 Application "illustrates multiple examples in which the textile element is shown in its final shape and is not described as being formed as part of a larger textile structure from which it must be removed." Ex. 2010 ¶ 63; *see also* Ex. 2010 ¶ 37. Moreover, Dr. Tonkel asserts that his opinions are from the perspective of a person of ordinary skill in the art. Ex. 2010 ¶ 52-53.

Petitioner disagrees and argues that Patent Owner's contention that this limitation is described sufficiently in the '289 Application rests on a single phrase, and, perhaps, on a single word in that phrase, that textile element 40 "*may* be formed as a part of a larger textile element." Paper 37, 3-4 (citing Paper 31, 4; Ex. 2010 ¶ 63 (emphasis added)). According to Petitioner, Patent Owner argues that, based on this disclosure, textile element 40 may be formed as part of a larger textile structure *or* may be knit to shape. *Id.* In view of the depiction of the textile element, without surrounding material, in Figures 8, 10, and 11 of the '289 Application and the non-limiting language used with respect to the embodiment, with surrounding material, depicted in Figure 9, we are persuaded that the Specification of the '289 Application adequately supports the language added to original claim 16 in substitute claim 47.

#### 3. Definiteness of Substitute Claims

Petitioner argues that the substitute claims are indefinite. Paper 37, 6-8. The test for definiteness under 35 U.S.C. § 112, ¶ 2, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations omitted). More specifically, "if a claim is amenable to two or more plausible claim constructions, the USPTO is justified in requiring the applicant to more precisely define the metes and bounds of the claimed invention by holding the claim unpatentable under 35 U.S.C. § 112, [¶ 2], as indefinite." *Ex parte Miyazaki*, 89 USPQ2d 1207, 1211 (BPAI 2008) (precedential). Citing

*Miyazaki*, Petitioner contends that the substitute claims, in particular, substitute claim 47, are "amenable to two or more plausible claim constructions." Paper 37, 6-8. We disagree.

Petitioner contends that the limitations added to original claim 16 reciting that "flat knit edges free of surrounding textile structure such that the flat knit edges are not surrounded by textile structure from which the textile element must be removed" have two plausible claim constructions. *Id.* at 6. First, Petitioner contends that this language may be construed to recite a flat knit textile element having flat knit edges, which has been removed from a surrounding textile structure. *Id.* Second, Petitioner contends that this language may be construed to recite a flat knit textile element having flat knit to shape. *Id.* at 6-7; *see also* Ex. 1015, 68-98 (transcript of deposition of Dr. Tonkel).

Petitioner contends that only the first construction is supported by the disclosure of the Specification of the '011 Patent. *Id.* at 6. We disagree, and, for the reasons set forth above, we determine that the second construction is supported. Figure 9 of the '011 Patent depicts a single embodiment of a process for forming textile elements, in which a pair of textile elements 40 is cut from *circular* knit textile structure 60. *See* Ex. 1002, col. 7, ll. 41-48. Although circular knitting, like flat knitting, is a type of weft knitting, circular knitting is not the same as flat knitting. Moreover, as depicted in Figure 9, the process is intended to produce multiple textile elements from a single textile structure. *Id.* at ll. 56-58. Petitioner fails to identify any disclosure in the Specification of the '011 Patent that would

limit the formation of textile elements 40, 40', and 40" of Figures 8, 10, and 11, respectively, solely to the process of Figure 9. Although the substitute claims are interpreted in light of the Specification, limitations from the Specification are not read into the substitute claims. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). Thus, we are not persuaded that the disclosure of the textile elements of Figures 8, 10, and 11 should be limited by the process embodiment depicted in Figure 9.

Petitioner notes that its textile expert, Dr. Adanur, opines that a person of ordinary skill in the art at the time of the priority date of the '011 Patent would understand that, under the broadest reasonable interpretation, "flat knit edges" means "edges of a knitted textile that are knit in flat form," whether or not knit to shape. Paper 37, 7-8 (citing Ex. 1016 ¶ 38). This also does not demonstrate that the claim language of the substitute claims may be construed to recite *both* that the textile element is removed from a larger textile structure and that the textile element is knit to shape. Therefore, construing the language of the substitute claims in accordance with the disclosure of the Specification, we determine that the substitute claims recite a flat knit textile element having flat knit edges, which has been knit to shape, and that the substitute claims are not susceptible to two plausible constructions. Thus, the substitute claims are not indefinite for the reasons proposed by Petitioner.

#### D. Patentability over Prior Art

An *inter partes* review is neither a patent examination proceeding nor a patent reexamination proceeding. The substitute claims proposed in a motion to amend are not entered automatically and then subjected to examination. Rather, the proposed substitute claims will be added directly to the patent, without examination, *if* the patent owner's motion to amend claims is granted. In a motion to amend, the patent owner is not rebutting a rejection in an office action, as though this proceeding were a patent examination or a reexamination. Instead, the patent owner, as the movant, bears the burden of establishing the patentability of the proposed substitute claims over the prior art of record and also other prior art known to Patent Owner. We deny the motion to amend because (1) Patent Owner has not met this burden and (2) Petitioner has shown that the substitute claims would have been rendered obvious over the combination of the teachings of Nishida and Schuessler I and II.

1. Patentability Over Other Art Known To Patent Owner

In the motion to amend, Patent Owner states that:

The proposed claims are patentable over the prior art, including prior art identified by the Board in its Decision on whether to institute a trial *and other prior art known to NIKE*.

Paper 31, 3 (emphasis added). Such a conclusory statement that the proposed claims are patentable over "other prior art known to [Patent Owner]" is facially inadequate. Patent Owner's motion does not discuss (1) the level of ordinary skill in the art, explaining the basic knowledge and skill set already possessed by one of ordinary skill in the art, with respect to the new claim features or (2) the other known prior art. Moreover, failing to identify the "other prior art" and limiting the discussion to the references relied upon in the petition or raised in Petitioner's opposition to the motion to amend does not provide a meaningful analysis of such art.

In a prior order (Paper 22), we directed Patent Owner to *Idle Free*, IPR2012-00027, Paper 26, dated June 11, 2013, as providing guidance on motions to amend. Paper 22, 2-3. In *Idle Free*, the Board advised the patent owner that, in a motion to amend:

A patent owner should identify specifically the feature or features added to each substitute claim, as compared to the challenged claim it replaces, and come forward with technical facts and reasoning about those feature(s), including construction of new claim terms, sufficient to persuade the Board that the proposed substitute claim is patentable over the prior art of record, and over prior art not of record but known to the patent owner. The burden is not on the petitioner to show unpatentability, but on the patent owner to show patentable distinction over the prior art of record and also prior art known to the patent owner. Some representation should be made about the specific technical disclosure of the closest prior art known to the patent owner, and not just a conclusory remark that no prior art known to the patent owner renders obvious the proposed substitute claims.

A showing of patentable distinction can rely on declaration testimony of a technical expert about the significance and usefulness of the feature(s) added by the proposed substitute claim, from the perspective of one with ordinary skill in the art, and also on the level of ordinary skill, in terms of ordinary creativity and the basic skill set. A mere conclusory statement by counsel, in the motion to amend, to the effect that one or more added features are not described in any prior art, and would not have been suggested or rendered

obvious by prior art, is on its face inadequate.

*Idle Free*, IPR2012-00027, Paper 26, 7-8 (emphasis added); *see also Idle Free*, IPR2012-00027, Paper 66, 33-38 (denying motion to amend in final written decision). Yet, in its motion to amend, Patent Owner addresses only the references asserted in the petition and in the opposition to the motion to amend. Paper 31, 6-15; *see also* Paper 44, 4-5. As the Board explained, "[d]istinguishing the proposed substitute claims only from the prior art references applied to the original patent claims, however, is insufficient to demonstrate general patentability over prior art." *Idle Free*, IPR2012-00027, Paper 66, 33. Consequently, the portion of Patent Owner's motion to amend requesting entry of substitute claims 47-50 is *denied*.

#### 2. Obviousness over Nishida and Schuessler I and II

For the reasons below, we also are not persuaded that Patent Owner has demonstrated the patentability of the proposed substitute claims over a ground of unpatentability presented by Petitioner, in particular, the ground involving Nishida and Schuessler I and II. As noted above, we instituted *inter partes* review of claims 16, 19, and 20 because we determined that Petitioner had demonstrated a reasonable likelihood of showing that these claims were rendered obvious by Nishida. Paper 18, 31. Petitioner now argues that substitute claims 47-50 are unpatentable as rendered obvious by Nishida in view of the additional teachings of Schuessler I and II. Paper 37, 10-11. Moreover, because Patent Owner did not file a patent owner response to the petition, in this final decision, we accept as unchallenged that Nishida teaches or suggests all of the limitations of original claims 16, 19,

and 20. *See* Paper 19, 2-3 ("The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived."). Thus, we now consider only whether Schuessler I and II teach or suggest the limitations added in substitute claims 47-50 and whether Petitioner has shown some reasoning supported by a rational underpinning for combining the teachings of Nishida with those of Schuessler I and II to achieve the invention recited in the substitute claims. For the reasons set forth below, we are persuaded that Nishida and Schuessler I and II render substitute claims 47-50 obvious.

Petitioner argues that Schuessler I and II teach or suggest "flat knit edges free of surrounding textile structure such that the flat knit edges are not surrounded by textile structure from which the textile element must be removed." Paper 37, 11. In particular, Schuessler I teaches a method of producing a knitted helmet, e.g., a knitted cap. Ex. 1020, col. 1, ll. 15-22. The knitted helmet may be formed from a swatch knit on a flat knitting machine, such as that described in Schuessler II (Ex. 1021, col. 1, ll. 39-42), "as knitted *without requiring cutting*" (Ex. 1020, col. 1, ll. 25-26 (emphasis added); *see also* Ex. 1020, col. 1, ll. 17-18). *See* Paper 37, 10. The swatch is a two-dimensional shape the edges of which may be joined to form a three-dimensional shape, including an opening to receive the helmet wearer's head. Paper 37, 10-11 (citing Ex. 1020, col. 2, ll. 41-45); *see also* Ex. 1020, col. 1, ll. 32-36; fig. 2 (depicting a finished helmet). Thus, Schuessler I teaches or suggests knitting the swatch to shape. Ex. 1020, col. 1, l. 48-col. 2, l. 2.

Petitioner contends that Nishida and Schuessler I are in similar fields and address the same problem, namely the formation of two-dimensional textile elements having edges that are joined to form three-dimensional, wearable items. Paper 37, 11; *cf.* Ex. 1005, figs. 1 (two-dimensional layout 2) and 3 (three-dimensional, shoe upper 3); Ex. 1020, figs. 1 (twodimensional helmet swatch) and 2 (three-dimensional helmet). Further, Schuessler II teaches that the two-dimensional helmet swatch of Figure 1 of Schuessler I may be knit to shape on a flat knitting machine. Paper 37, 11 (citing Ex. 1023 ¶ 15). Petitioner contends, therefore, that a person of ordinary skill in the art would have reason to combine the teachings of these three references to achieve the invention recited in substitute claim 47. *Id*.

Patent Owner does not argue Petitioner's assessment of the teachings of these references. Patent Owner also does not dispute that all of the limitations of the claims are taught in the prior art. Instead, Patent Owner argues that Petitioner's contention that a person of ordinary skill in the art would combine Nishida's teaching regarding the reduction of waste by placing layouts in adjoining positions and Schuessler I's teaching regarding knitting textile elements to shape is illogical. Paper 44, 5. Specifically, Patent Owner argues that Petitioner's reason for combining these teachings is somehow flawed because "*after* they are combined the elements of each reference serve the same purpose." *Id.* As the U.S. Supreme Court explained, however, "if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious

unless its actual application is beyond his or her skill." *KSR Int'l Co. v. Teleflex Inc.*, 555 U.S. 398, 417 (2007). In this case, that the elements of the prior art references would "serve the same purpose" when combined is a factor in favor of an obviousness determination, and not a suggestion of nonobviousness, as urged by Patent Owner.

Because we are persuaded that Petitioner has demonstrated that the teachings of Nishida and Schuessler I and II teach or suggest all of the limitations of substitute claim 47 and that a person of ordinary skill in the art would have had reason to combine the teachings of these references to achieve the recited article of footwear, we determine that Patent Owner fails to meet its burden of showing that it is entitled to the relief requested in its motion to amend. Because we group substitute claims 48-50 with claim 47 for purposes of assessing patentability, we also determine that Patent Owner fails to meet its burden of showing that it is entitled to the relief requested in its motion to amend with respect to substitute claims 48-50. Consequently, the portion of Patent Owner's motion to amend requesting entry of substitute claims 47-50 also is *denied* for failing to demonstrate that the substitute claims are patentable over Nishida and Schuessler I and II.

#### E. Petitioner's Motion to Exclude

Petitioner has filed a motion seeking to exclude the following evidence: (1) certain portions of the transcript of the cross-examination of Dr. Frederick (Ex. 2009, pg. 116, ll. 3-25); and (2) references to this testimony by Patent Owner's expert, Dr. Tonkel (Ex. 2010 ¶ 65). Paper 44, 3-5. As the movant, Petitioner has the burden of establishing that it is entitled to the requested relief. 37 C.F.R. § 42.20(c).

Petitioner seeks to exclude certain portions of the testimonial evidence obtained by Patent Owner during the cross-examination of Petitioner's expert, Dr. Frederick. Paper 49, 1. In particular, Petitioner argues that, contrary to the requirements of 37 C.F.R. § 42.53(d)(5)(ii), Patent Owner's cross-examination of Dr. Frederick exceeded the scope of Dr. Frederick's direct testimony (Ex. 1001), which was limited to the construction of terms of original claims 1-46 and to the unpatentability of those original claims in view of grounds identified by Petitioner. Paper 49, 1. Petitioner argues that Patent Owner questioned Dr. Frederick regarding "flat knit edges," a term that did not appear in original claims 1-46, but which Patent Owner included in the substitute claims of its motion to amend. *Id.*; *see also* Paper 54, 3-4.

Although Petitioner argues that Patent Owner's questioning of Dr. Frederick exceeded the scope of his direct testimony, Petitioner only objected to one of several questions in the testimony that it seeks to exclude, and Petitioner stated an "*[o]bjection to form*" with respect to that question, not an objection that the question or any of the preceding questions sought testimony that was *beyond the scope* of the Dr. Frederick's direct testimony. Ex. 2009, pg. 116, l. 24 (emphasis added); *see* Paper 54, 2-3.

Moreover, Petitioner requests that we grant its motion to exclude the portions of the transcript of the cross-examination of Dr. Frederick *preceding* the question that was the subject of Petitioner's objection. *Id.* at 5-6 (citing Ex. 2009, pg. 116, ll. 3-25). As a result of the grant of this

motion, references to this challenged testimony by Patent Owner's expert, Dr. Tonkel, (Ex. 2010  $\P$  65) also presumably would be excluded.

Patent Owner opposes Petitioner's motion to exclude. In particular, Parent Owner argues that: (1) Petitioner did not object to most of the questions or testimony that it now seeks to exclude, objecting only to a single question; (2) the elicited testimony related to aspects of Dr. Frederick's direct testimony; (3) the elicited testimony pertained to Dr. Frederick's credibility as an expert witness regarding the patented technology; and (4) Patent Owner elicited the testimony without the use of leading questions, i.e., in the proper form. Paper 51, 1.

The current situation does not require us to assess the merits of Petitioner's motion to exclude. As discussed above, even without relying upon the aforementioned portions of the cross-examination testimony of Dr. Frederick, we have concluded that Patent Owner has demonstrated that the term "flat knit edges" of substitute claims 47-50 is supported by the disclosure of the '289 Application. Accordingly, Petitioner's motion to exclude evidence is *dismissed* as moot.

#### III. CONCLUSION

For the reasons set forth above, we grant the portion of Patent Owner's motion to amend requesting cancellation of claims 1-46 of the '011 Patent. In its motion to amend, Patent Owner has not met its burden of establishing the patentability of substitute claims 47-50. Therefore, we deny the portion of Patent Owner's motion to amend requesting entry of substitute claims 47-50.

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

#### IV. ORDER

In consideration of the foregoing, it is

ORDERED that the portion of Patent Owner's motion to amend requesting cancellation of claims 1-46 of the '011 Patent is *granted*;

FURTHER ORDERED that the portion of Patent Owner's motion to amend requesting entry of substitute claims 47-50 is *denied*; and

FURTHER ORDERED that Petitioner's motion to exclude evidence is *dismissed* as moot.

#### **PETITIONER:**

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