

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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SKECHERS U.S.A., INC.,  
Petitioner

v.

NIKE, INC.,  
Patent Owner

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Patent No. 9,918,511

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**PETITION FOR INTER PARTES REVIEW  
OF U.S. PATENT NO. 9,918,511**

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U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

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**EXHIBIT LIST**

| Exhibit No. | Document                                                                                                                                                                                      |
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| EX1001      | U.S. Patent No. 9,918,511 (the “511”)                                                                                                                                                         |
| EX1002      | Declaration of Sabit Adanur, Ph.D.                                                                                                                                                            |
| EX1003      | Declaration of Grant Delgatty                                                                                                                                                                 |
| EX1004      | Declaration of Ingrid Hsieh-Yee                                                                                                                                                               |
| EX1005      | Joint Claim Construction and Prehearing Statement, <i>Nike, Inc. v. Skechers U.S.A., Inc.</i> , Dkt. 50, Case No. 2:23-cv-09356 (C.D. Cal.)                                                   |
| EX1006      | Exhibit A to Joint Claim Construction and Prehearing Statement – Chart of Disputed Constructions, <i>Nike, Inc. v. Skechers U.S.A., Inc.</i> , Dkt. 50-1, Case No. 2:23-cv-09356 (C.D. Cal.)  |
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| EX1008      | Skechers U.S.A., Inc.'s Opening Claim Construction Brief, <i>Nike, Inc. v. Skechers U.S.A., Inc.</i> , Dkt. 56, Case No. 2:23-cv-09356 (C.D. Cal.)                                            |
| EX1009      | Nike, Inc.'s Responsive Claim Construction Brief, <i>Nike, Inc. v. Skechers U.S.A., Inc.</i> , Dkt. 60, Case No. 2:23-cv-09356 (C.D. Cal.)                                                    |
| EX1010      | Skechers U.S.A., Inc.'s Responsive Claim Construction Brief, <i>Nike, Inc. v. Skechers U.S.A., Inc.</i> , Dkt. 61, Case No. 2:23-cv-09356 (C.D. Cal.)                                         |
| EX1011      | Nike, Inc.'s Initial Infringement Contentions for U.S. Patent No. 9,918,511, <i>Nike, Inc. v. Skechers U.S.A., Inc.</i> , Case No. 2:23-cv-09356 (C.D. Cal.) (served March 1, 2024)           |
| EX1012      | Director Vidal's June 21, 2022 Memorandum regarding Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation ("Guidance Memorandum") |
| EX1013      | File history of U.S. Patent No. 9,918,511                                                                                                                                                     |

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| EX1015            | U.S. Patent No. 2,440,393 (“Clark”)                                                                                                                                                                                                                           |
| EX1016            | U.S. Patent No. 2,400,692 (“Herbert”)                                                                                                                                                                                                                         |
| EX1017            | U.S. Patent No. 2,147,197 (“Glidden”)                                                                                                                                                                                                                         |
| EX1018            | <i>Air Jordan 1 retro &amp; OG archive collection</i> , Nike,<br><a href="https://www.nike.com/jordan/air-jordan-1">https://www.nike.com/jordan/air-jordan-1</a>                                                                                              |
| EX1019            | <i>Lyrical Fabrics Heathered Camel - Cotton Sweater Wide Rib Knit</i> , Lyrical Fabrics,<br><a href="https://lyricalfabrics.com/product/heathered-camel-sweater-wide-rib-knit/">https://lyricalfabrics.com/product/heathered-camel-sweater-wide-rib-knit/</a> |
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| EX1023-<br>EX1049 | RESERVED                                                                                                                                                                                                                                                      |
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| EX1051            | U.S. Patent No. 1,803,554 (“Knilians”)                                                                                                                                                                                                                        |
| EX1052            | U.S. Patent No. 2,047,724 (“Zuckerman”)                                                                                                                                                                                                                       |
| EX1053            | U.S. Patent No. 2,675,631 (“Doughty”)                                                                                                                                                                                                                         |
| EX1054            | Excerpts of Sandy Black, <i>KNITWEAR IN FASHION</i> (Thames & Hudson 2002)                                                                                                                                                                                    |
| EX1055            | CN 2187379Y (“Li”) - Translation                                                                                                                                                                                                                              |
| EX1056            | CN 2187379Y (“Li”)                                                                                                                                                                                                                                            |
| EX1057            | Excerpts of Man-Made Fiber and Textile Dictionary (4th ed.) (Celanese Corporation, December 1978)                                                                                                                                                             |
| EX1058            | M. Legner, <i>3D-Products for Fashion and Technical Textile Applications from Flat Knitting Machines</i> , MELLIAND INTERNATIONAL (September 2003), 238-241                                                                                                   |

| Exhibit No. | Document                                                                                                                |
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| EX1060      | Oswald Rieder, <i>Flat and Circular Knitting Machine Trends</i> , INTERNATIONAL TEXTILE BULLETIN (December 2003), 49-51 |
| EX1061      | Derek T. Ward, <i>The Future of Knitting</i> , INTERNATIONAL TEXTILE BULLETIN (May 2023), 46-50                         |
| EX1062      | Sabit Adanur, <i>Wellington Sears Handbook of Industrial Textiles</i> (JOHNSTON INDUSTRIES GROUP 1995)                  |

**CLAIM LISTING**

| <b>Claim/<br/>Element</b> | <b>Text of Claim</b>                                                                                                                                                                                                                                                              |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1[pre]                    | An upper for an article of footwear, the upper comprising:                                                                                                                                                                                                                        |
| 1[a1]                     | a flat knit textile element comprising (1) 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, at least one flat knit edge being a curved flat knit edge, |
| 1[a2]                     | and (2) a first knit strip having a first property and a second knit strip having a second property that is different from the first property;                                                                                                                                    |
| 1[b]                      | wherein the first knit strip and the second knit strip are positioned adjacent to each other along one or more of a lateral side and a medial side of the upper.                                                                                                                  |
| 2                         | The upper of claim 1, wherein one or both of the first knit strip and the second knit strip comprises a plurality of knit strips.                                                                                                                                                 |
| 3                         | The upper of claim 2, wherein the first and second knit strips alternate with one another along one or more of the lateral side and the medial side of the upper.                                                                                                                 |
| 4                         | The upper of claim 2, wherein the flat knit textile element comprises at least two first knit strips and at least two second knit strips.                                                                                                                                         |
| 5                         | The upper of claim 1, wherein the first knit strip and the second knit strip extend along the lateral side of the upper from an instep region of the upper to an area proximate to a lower region of the upper.                                                                   |
| 6                         | The upper of claim 1, wherein the first knit strip and the second knit strip extend along the medial side of the upper from an instep region of the upper to an area proximate to a lower region of the upper.                                                                    |
| 7                         | The upper of claim 1, wherein the first property comprises a first knit construction and the second property comprises a second knit construction.                                                                                                                                |
| 8                         | The upper of claim 1, wherein the first property of the first knit strip comprises a smooth texture, and the second property of the second knit strip comprises a rough texture.                                                                                                  |
| 9                         | The upper of claim 1, wherein the flat knit textile element further comprises a plurality of apertures in an instep region of the upper.                                                                                                                                          |
| 10                        | The upper of claim 1, wherein the first property of the first knit strip comprises a higher degree of stretch than the second property of the second knit strip.                                                                                                                  |

| <b>Claim/<br/>Element</b> | <b>Text of Claim</b>                                                                                                                                                                                                                                                                             |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11                        | The upper of claim 1, wherein the second property of the second knit strip comprises a higher degree of stretch than the first property of the first knit strip.                                                                                                                                 |
| 12                        | The upper of claim 1, wherein the first property comprises a first yarn type and the second property comprises a second yarn type.                                                                                                                                                               |
| 13                        | The upper of claim 12, wherein the first yarn type of the first knit strip comprises at least one of a higher biodegradability, moisture absorption, insulation, durability, and/or hydrophobicity than the second yarn type of the second knit strip.                                           |
| 14                        | The upper of claim 12, wherein the first yarn type of the first knit strip comprises at least one of a higher strength, support, stiffness, recovery, fit and/or form than the second yarn type of the second knit strip.                                                                        |
| 15[pre]                   | An article of footwear comprising:<br>an upper comprising:                                                                                                                                                                                                                                       |
| 15[a1]                    | a flat knit textile element comprising (1) 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, at least one flat knit edge being a curved flat knit edge,                |
| 15[a2]                    | and (2) a first knit strip having a first property and a second knit strip having a second property that is different from the first property;                                                                                                                                                   |
| 15[b]                     | wherein the first knit strip and the second knit strip are positioned adjacent to each other along one or more of a lateral side and a medial side of the upper; and                                                                                                                             |
| 15[c]                     | a sole structure secured to the upper.                                                                                                                                                                                                                                                           |
| 16                        | The article of footwear of claim 15, wherein the first property comprises one or more of a first knit construction and a first yarn type and wherein the second property comprises one or more of a first knit construction and a second yarn type.                                              |
| 17                        | The article of footwear of claim 15, wherein the flat knit textile element comprises a plurality of first knit strips extending along the lateral side and the medial side of the upper and a plurality of second knit strips extending along the lateral side and the medial side of the upper. |
| 18                        | The article of footwear of claim 15, wherein the first knit strip is parallel to the second knit strip.                                                                                                                                                                                          |

| <b>Claim/<br/>Element</b> | <b>Text of Claim</b>                                                                                                                                                                                                  |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 19                        | The article of footwear of claim 15, wherein the first knit strip and the second knit strip extend along the lateral side of the upper from an instep region of the upper to an area proximate to the sole structure. |
| 20                        | The article of footwear of claim 15, wherein the first knit strip and the second knit strip extend along the medial side of the upper from an instep region of the upper to an area proximate to the sole structure.  |

## I. INTRODUCTION

United States Patent No. 9,918,511 (EX1001 (“the ’511”)) relates to footwear made using a flat knit textile having flat knit edges. The footwear further comprises a plurality of knit strips, wherein a “property” of the first knit strip is different from a “property” of the second knit strip. Such “different properties” can include differences in textures (*e.g.*, claim 8 (“smooth” vs “rough” textures)); stitches (*e.g.*, claim 7 (“knit construction”)); degree of stretch (*e.g.*, claim 10); and biodegradability, moisture absorption, insulation, durability and/or hydrophobicity (*e.g.*, claim 13).

In litigation, Patentee’s infringement allegations confirmed that the knit strips recited in 16 of the ’511’s 20 claims recite no functional purpose and can be present solely for *aesthetic* purposes. For example, the presence and number of strips, the textures of the strips, the stitching of the strips, the locations of the strips, the (alternating) patterns of the strips, and even the type of yarn used to fabricate the strips ***need not have any functional or structural purpose whatsoever and may be present solely for aesthetic purposes***. Patentee’s infringement allegations confirm that “different properties” can simply be different-looking textures. *See* EX1011, 95 (red boxes (in original) identifying different-looking textures as having “different properties” (claim 1); “different textures” (claim 8), “different knit constructions” (claim 7), and even “different degrees of stretch” (claim 10)).



However, these claim limitations, alone and in combination, have been known for decades. EX1002 (Adanur Declaration), ¶¶47-50. Long before the priority date of the '511, knitting machines had been used to commercially manufacture flat-knitted textiles with curved edges. EX1002, ¶¶55-56, ¶¶67-69. (Hand knitting is an even older technology, dating back thousands of years.) EX1002, ¶47. Such machines are electronically controlled and can be easily programmed. EX1002, ¶63. Users of knitting machines can therefore manufacture textiles having a wide variety of characteristics, including textures, patterns, stretch, yarns, and other properties. *Id.*

Furthermore, knit strips are among the oldest and simplest of all machine-knitted patterns. EX1002, ¶70. Such knit strips may correspond to the use of *different knit constructions (i.e., stitches)* with the *same yarn* to make strips having

different textures, patterns, and other characteristics, such as elasticity, strength, and thickness. *Id.* Such knit strips may also correspond to the use of ***different yarns*** with ***the same knit construction*** to make strips having different elasticities, strengths, biodegradability, moisture absorption, insulation, durability, and hydrophobicity. *Id.*

During prosecution, the fact that knit strips are among the simplest and most ubiquitous aesthetic and functional design elements to appear on footwear and knitted textiles was ***not*** considered by the Examiner, who did not have the opportunity to consider expert testimony regarding what was common knowledge or a matter of obvious design choice in footwear and textiles.

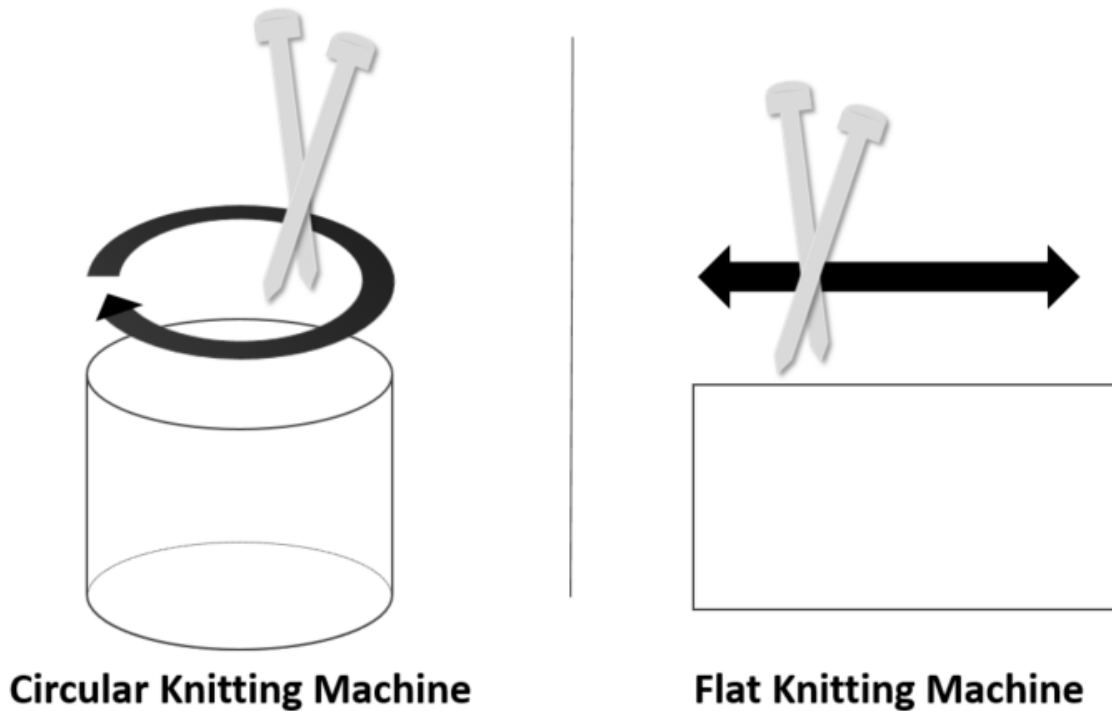
As set forth below, the Board should institute *inter partes* review of the '511.

## **II. TECHNOLOGICAL OVERVIEW**

### **A. Knitting Machines Were Well-Known In The Prior Art**

Knitting machines, such as the stocking frame (invented in 1589), have been used in manufacturing textiles for centuries. EX1002, ¶¶63-64; EX1050 (“Spencer”) at 9. By the early 2000s, commercially-available tricot, raschel, flat bar, straight bar, and circular knitting machines were in common use. *Id.*; *see also* EX1001, 7:21-50; EX1002, ¶¶47-76.

Two common machine-knitting techniques are circular knitting and flat knitting. EX1002, ¶¶51-53. Circular knitting machines knit textiles in a continuous circle or tube, while flat knitting machines knit textiles in sheets. *Id.*



Both techniques are described in the Background of the '511. EX1002, ¶¶68-69. *See, e.g.,* EX1001 at 7:22-8:36. Both techniques have long been used to produce a single workpiece to avoid having to stitch together multiple workpieces. *Id.* And both techniques can be used to manufacture footwear. *Id.*; EX1016 (Herbert) at 3:46-69 (disclosing use of either circular or flat knitting machines for making a slipper).

In some instances, flat knitting can be more efficient than circular knitting. EX1002, ¶¶69-70. EX1050 (Spencer) at 379; EX1021 ('484 Patent) at 4:51-55. Flat

knitting can also be used to produce flat knit edges, for example, when knitting to shape. EX1002, ¶¶69-70. Knitting to shape eliminates the need to cut the workpiece (whatever shape it takes) from surrounding textile structure. *Id.*; EX1050 (Spencer) at 45, 83. The use of such techniques is consistent with a long-time industry goal of the reducing wastage of yarn and knitted material wherever possible. EX1002, ¶¶69-70; *see also* EX1014 (Cusinato), [0007]-[0013]; EX1050 (Spencer) at 185.

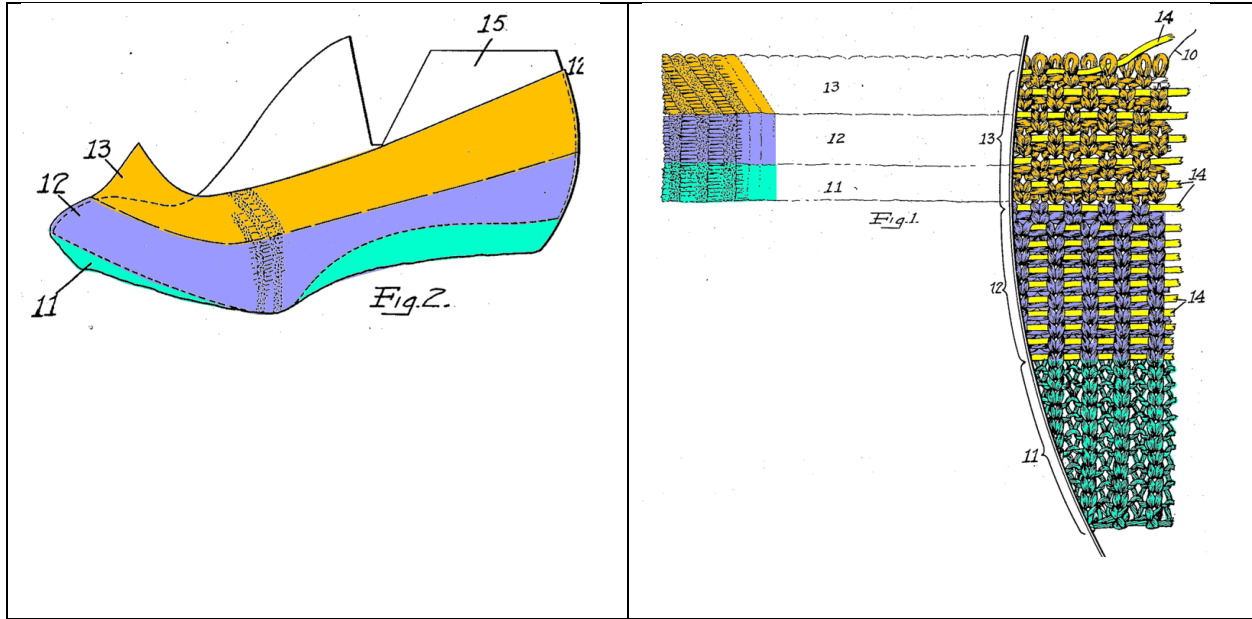
**B. Knitted Footwear And Textiles Having Strips With Different Properties Were Well-Known In The Prior Art**

Knitting can be used to make textiles with a plurality of strips adjacent to one another each having different textures, stitches, yarns, or other properties. EX1002, ¶70. Such designs are ubiquitous in footwear and textiles. EX1002, ¶71.

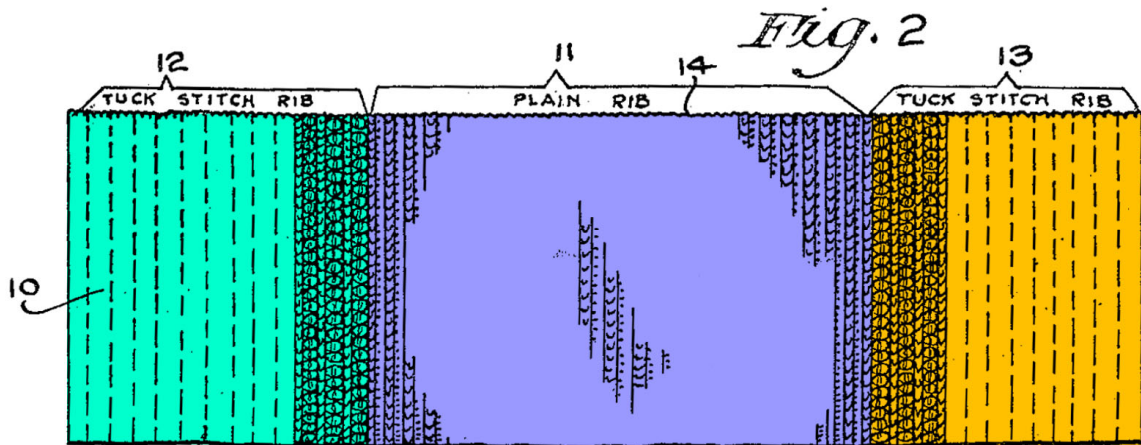
For example, US2,440,393 (“Clark,” EX1015) shows an “upper” for a shoe made of “knitted fabric” having three sections (11-13) in Figure 2.<sup>1</sup> These three sections run longitudinally down the upper, forming strips. And, as shown in Figure 1, these three sections have different properties, including different yarns (elastane 14 in sections 12 and 13 but not 11), textures, stitches, and elasticities. EX1002, ¶¶71-72.

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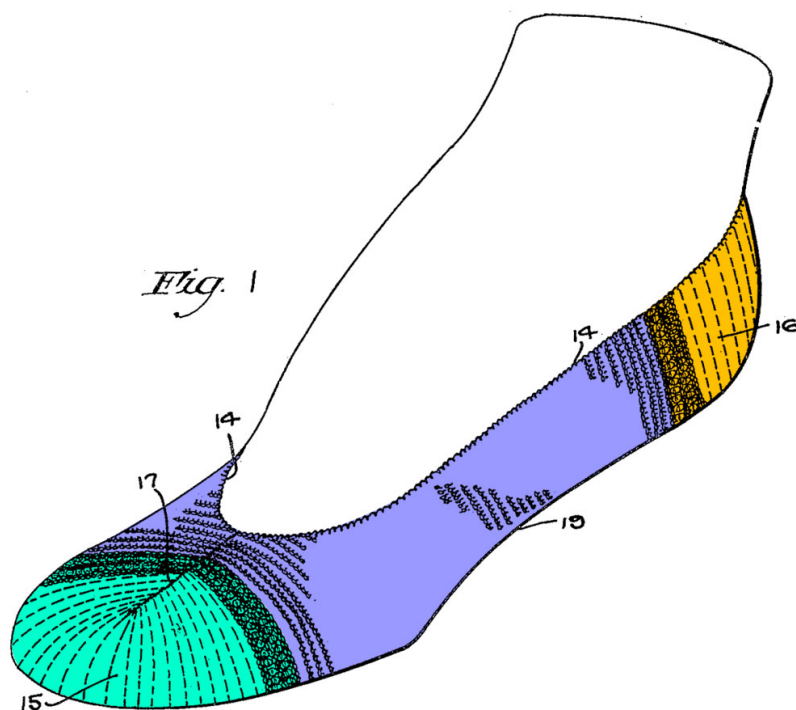
<sup>1</sup> Unless otherwise noted, all coloring and annotations are added to patents and published references.



Another patent, US2,400,692 (“Herbert,” EX1016) discloses a “seamless knitted fabric” with “tuck stitch rib” strips 12 and 13 (green and orange, respectively) and a “plain rib” strip 11 (purple), with different stitches, textures, and elasticities.



The workpiece is then assembled into the “slipper foot covering” shown in Figure 1 below, comprising a strip of “plain ribs” (purple) between two strips of “tuck stitch ribs” (green and orange). EX1002, ¶¶73-74.



Finally, it should be noted that wider ribs can constitute alternating strips of different textures and/or stitches; for example, ribbed patterns like the one in the sweater and sock below were well-known. EX1002, ¶75.



EX1019.



The construction of wide ribbed knits comprising strips of varying textures and stitches is described in Spencer and was well-known in the art. EX1050 (Spencer) at 103, 186, 193.

Thus, the use of knitting machines to make adjacent knitted strips having a variety of different textures or other properties was well-known in the prior art.

EX1002, ¶76. And knitting machines in the early 2000s were easily programmed to manufacture knits having such variations. *Id.*

### III. OVERVIEW OF THE CHALLENGED PATENT

#### A. Overview of the '511

The '511 is generally directed to an article of footwear with a knitted upper. The upper comprises what the patent claims as “a flat knit textile element” having at least one “curved flat knit edge.” EX1001 ('511), claims 1, 15. These “curved flat knit edges” are *not* discussed anywhere in the specification, but are purportedly shown in Fig. 8 below, and claimed in the limitation, “the flat knit edges are *not* surrounded by textile structure from which the textile element must be removed, at least one flat knit edge being a curved flat knit edge.” *Id.*<sup>2</sup>; EX1002, ¶¶77-86.

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<sup>2</sup> Emphasis added throughout unless otherwise indicated.

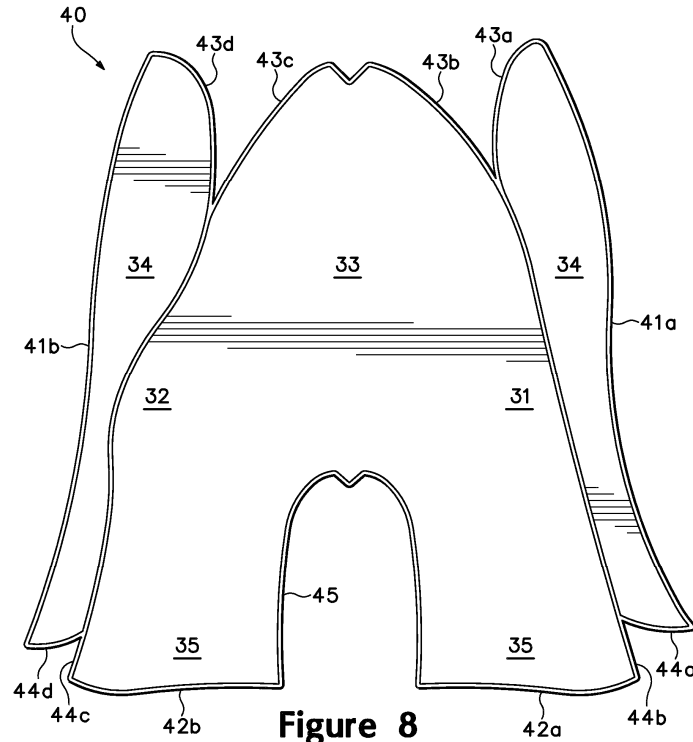


**Figure 8**

EX1001, Fig. 8.

The '511 also claims a “first knit strip having a first property and a second knit strip having a second property that is different from the first property.” EX1001, claims 1, 15. The first and second knit strips are not clearly defined or discussed anywhere in the specification, which instead explains that a “first [smooth] texture 46” [in grey]...has the configuration of various strips that extends [sic] laterally across areas corresponding with lateral region 31, medial region 32, and instep region 33,” *id.*, 9:61-64, as shown in Fig. 11:

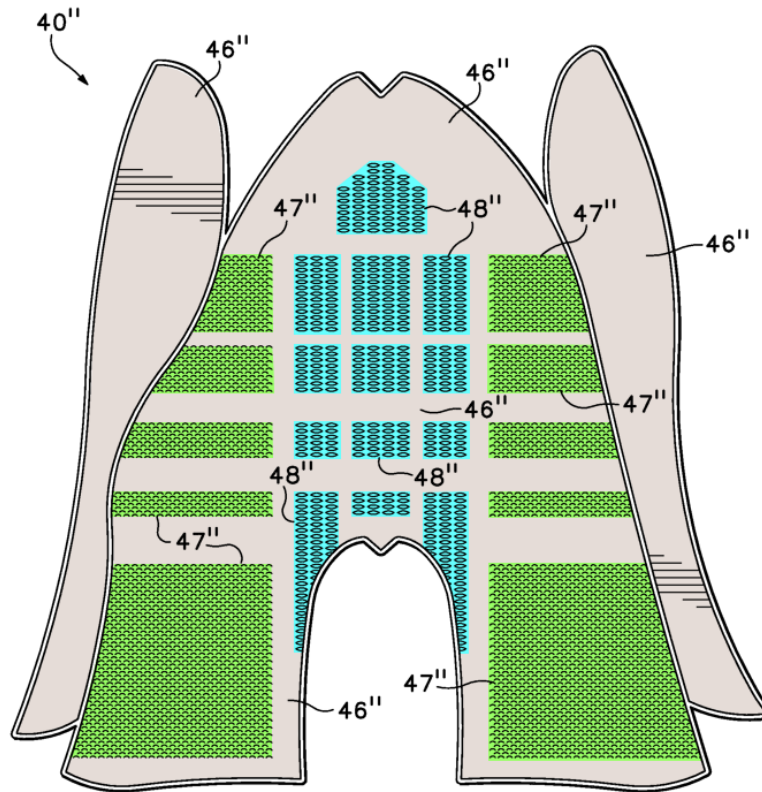


**Figure 11**

*Id.*, Fig. 11. The specification also explains that “[v]arious portions of textile element 40” also include a second texture 47” [(in green)]...[and] the area of textile element 40” corresponding with instep region 33 includes a third texture 48.” [(in blue)].” *Id.*, 9:64-10:1.

The ’511 also explains that these textures “are formed by... varying the type of stitch...at each location of textile element 40”. *Textures 46”-48” may exhibit aesthetic differences*, or the differences may be structural.” *Id.*, 10:1-5. “Various...knitting processes may be utilized to form textile element 40,” so that “various *stitches* may be incorporated into specific locations of textile element...to modify the physical properties *or aesthetics* of textile element....” *Id.*, 11:26-31.

The '511 acknowledges that “[a] variety of knitting processes may be utilized to form textile element 40” and “other types of knitting, such as flat knitting, may be utilized within the scope of the present invention to impart various textures, different properties, or different yarn types to the textile element.” *Id.*, 11:41-63. It also explains that “[t]he types of knitting that may be utilized to form different zones *with different properties* (e.g., *yarn* characteristics, *textures*, etc.) may vary significantly to include” widely used and well-recognized “various warp knitting and weft knitting processes...such as tricot, raschel, double needle-bar raschel, circular knitting, and flat knitting, for example.” *Id.*, 10:30-36.

Of critical importance to this Petition, *other than dependent claims 10-11 and 13-14, none of the claims recite that the strips serve a functional purpose.* The patent specification confirms this in reference to two “properties,” textures and stitches.

- “Textures...may exhibit aesthetic differences....”
- “[S]titches...may be utilized to vary the...aesthetics of footwear...”

*Id.*, 10:4-29. The other claims (besides 10-11 and 13-14) recite various design configurations and arrangements of the strips, the use of different yarns, and the presence of apertures.

**B. Relevant Prosecution History of the '511**

Initially, the Examiner rejected all pending claims. EX 1013, 82-95; EX1002, ¶¶87-89. Among the rejections, then-pending claims 35-40 were rejected as obvious under 35 U.S.C. § 103 in view of US1,841,518 (“Bellak”) and US1,910,251 (“Joha”). *Id.*, 96. An interview was then conducted on September 21, 2017.

In a December 12, 2017 response, the Applicant summarized the interview as follows:

During the interview, Applicant’s representative and Examiner Bays discussed the...Joha reference, and Examiner Bays agreed that the reference does not teach or suggest **curved** flat knit edges, which are disclosed in the pending Application.

*Id.*, 726.

In the same response, the Applicant amended the independent claims to add “at least one flat knit edge being a **curved** flat knit edge,” arguing that its amendments overcame the examiner’s obviousness rejection because “Joha does not teach or suggest at least one curved flat knit edge.” *Id.*, 728-29. On February 6, 2018, the Examiner allowed the claims as amended without further comment. *Id.*, 745.

Critically, Patentee does not claim to have invented flat knit edges, curved edges, textured strips, or the techniques for fabricating them. Instead, as Applicant's statement demonstrates, curved edges and flat knit edges are made using existing

(and undisclosed) techniques and textured strips are made simply by varying the stitches.

#### **IV. DISCRETIONARY FACTORS**

##### **A. § 314(a) Does Not Favor Denial**

This Petition raises a compelling case of unpatentability for all claims of the '511. 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*." EX1012 (Vidal Guidance Memorandum) at 4-5.

##### **B. § 325(d) Does Not Favor Denial**

Neither Cusinato nor Herbert, the primary references for Grounds 1 and 2, respectively, nor Spencer were before the Examiner. Moreover, while Clark and Glidden were cited, they were not discussed by the Applicant or the Examiner, and the Examiner did not have before her the testimony of Dr. Adanur to explain why a person of ordinary skill in the art ("POSITA") would understand that Clark, in combination with Cusinato, and that Glidden, in combination with Herbert and Cusinato, rendered obvious all of the claims. In addition, the Examiner did not have before her Patentee's litigation infringement contentions, which shed additional light on the '511 claims. Furthermore, the Examiner did not discuss the aesthetic nature of the vast majority of the claims, including the location and placement of the knit

strips, and why they represent obvious design choices. Finally, the Petition makes a strong showing that all claims are unpatentable, and therefore the Board should not discretionarily decline institution.

## **V. IDENTIFICATION OF CHALLENGE AND GROUNDS**

The asserted Grounds rely on the following references:

- European Patent Application EP1,338,690A1 (“Cusinato”) was filed on February 5, 2003 and published on August 27, 2003 (EX1014). Cusinato is prior art to the ’511 under at least pre-AIA 35 U.S.C. §§ 102(a), (b), and (e).
- US2,440,393 (“Clark”) was filed on August 18, 1944 and issued on April 27, 1948 (EX1015). Clark is prior art to the ’511 under at least pre-AIA 35 U.S.C. §§ 102(a), (b), and (e).
- *Knitting Technology, A Comprehensive Handbook And Practical Guide* (Third Edition) by David J. Spencer (“Spencer”) was published in 2001 (EX1050). Spencer is prior art to the ’511 under at least pre-AIA 35 U.S.C. §§ 102(a), (b), and (e).
- US2,400,692 (“Herbert”) was filed on March 24, 1943 and issued on May 21, 1946 (EX1016). Herbert is prior art to the ’511 under at least pre-AIA 35 U.S.C. §§ 102(a), (b), and (e).

- US2,147,197 (“Glidden”) was filed on November 25, 1936 and issued on February 14, 1939 (EX1017). Glidden is prior art to the ’511 under at least pre-AIA 35 U.S.C. §§ 102(a), (b), and (e).

The asserted Grounds are:

- Ground 1: Claims 1-20 are obvious over Cusinato in view of Clark and, if necessary, Spencer, under 35 U.S.C. § 103.
- Ground 2: Claims 1-20 are obvious over Herbert in view of Cusinato and Glidden and, if necessary, Spencer, under 35 U.S.C. § 103.

## **VI. LEVEL OF ORDINARY SKILL IN THE ART**

The ’511 relates to an article of footwear made using a flat knit textile having both flat knit edges and knit strips integrally knitted into the textile. EX1001, Abstract; claim 1. A POSITA in the field of the ’511 in March 2004 would have been someone with at least a few years of experience in knit materials and knitting methods and machines that can be used in making footwear, or a bachelor’s degree in textile-related sciences, engineering, or industrial product design, or equivalent academic or work experience, including in the footwear industry. *See* EX1002, ¶78. Such a POSITA would have at least a general understanding of general construction processes and materials used in the manufacturing process of fabric-based articles. *See id.* For individuals with a lower educational level, a person could still be of

ordinary skill in the art provided that person's working experience compensates for any such lower educational level, or vice versa.

This Petition does not turn on this definition of the level of ordinary skill. The claims would have been obvious from the perspective of any reasonable definition.

## VII. CLAIM CONSTRUCTION

Other than as set forth below, Petitioner submits that the issues presented in this Petition do not require additional claim terms to be construed.

### A. "article of footwear"

"[A]rticle of footwear" should be construed as "any foot covering in the form of shoes, boots, slippers, or hose (*e.g.*, socks) used for utility and/or dress wear. Not necessarily synonymous with shoes, which are simply one category of footwear." Petitioner's construction is taken nearly verbatim from *The Complete Footwear Dictionary*, with further clarification (from the same source) that "hose" includes socks, and is not just panty hose, for example. EX1022, 67, 88, 170; EX1008, 23; EX1002, ¶92.

This definition is consistent with the specification. *Id.*, ¶91. While some embodiments are described as having an upper and a sole structure, the '511 indicates a sole is optional. EX1001, Abstract ("The footwear *may* include an upper and a sole structure."). Other intrinsic evidence includes US2,675,631, cited during prosecution, which recites that "the invention is generally applicable to knitted

*footwear* of all types, *e.g. hose...and socks.*” EX1053 (“Doughty”), 4:55-58; EX1002, ¶92.

Even if Patentee’s narrower construction is adopted, *see* EX1007, 6-7 the Grounds below nevertheless meet all limitations. *Id.*

**B. “a flat knit textile element having: (1) 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”**

Petitioner proposes, as it has in litigation, construing this term as “a textile element that has only flat knit edges, where a flat knit edge is itself flat knit, *e.g.*, not formed by cutting from a flat knit textile element or by otherwise removing the textile element from a larger textile material.” Patentee proposed giving this term its “ordinary and customary meaning” with “no further construction necessary.” EX1007, 9-10. Regardless of whose proposed construction is adopted, the prior art asserted in the Petition meets all limitations, including under 35 U.S.C. § 103, as set forth in detail below. EX1002, ¶¶93-94.

**C. “strips”**

This term does *not* need to be construed as *neither* party raised a dispute regarding its meaning in litigation. However, so that the prior art can be properly assessed if Patentee later raises an argument regarding the meaning of “strips,” Petitioner provides images from Patentee’s infringement contentions below.

Patentee uses red boxes (in original) to identify different-looking textures. Each texture is purportedly a “different property,” (e.g., “a second property that is different from the first property”), and the corresponding “strip” would presumably be the entire area covered by a single texture. EX1002, ¶¶95-96. Notably, Patentee does *not* contend that the strips in the accused shoes must have a particular width, length, shape, orientation, location or other properties. *Id.* Instead, Patentee identifies, as infringing, textured areas having disparate widths, lengths, shapes, orientations, and locations. *Id.*







EX1011, 91, 95, 102-03. In this proceeding, “strips” should be accorded the same breadth as Patentee contends in the litigation. EX1002, ¶98.

**D. Other terms**

Petitioner submits that the Board need not specially construe any other claim terms.

**VIII. GROUND 1: CUSINATO IN VIEW OF CLARK AND, IF NECESSARY, SPENCER RENDERS OBVIOUS THE CHALLENGED CLAIMS**

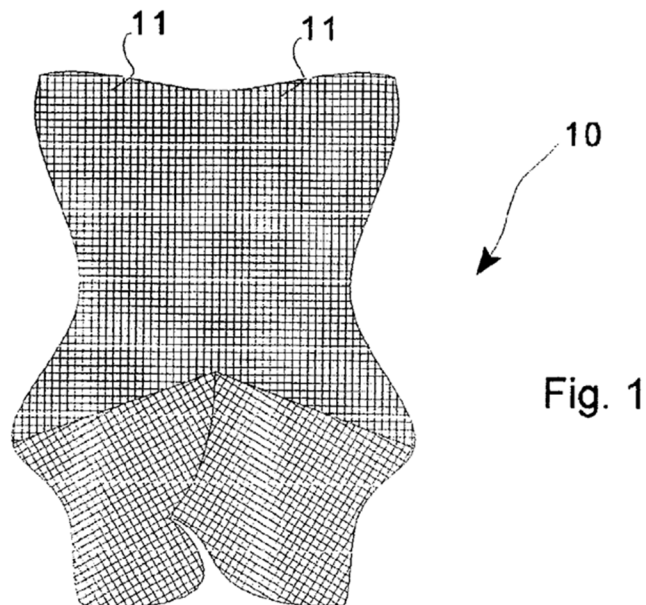
For the reasons set forth below, challenged claims 1-20 are rendered obvious under 35 U.S.C. § 103 by Cusinato in view of Clark and, if necessary, Spencer.

**A. Overview of Cusinato**

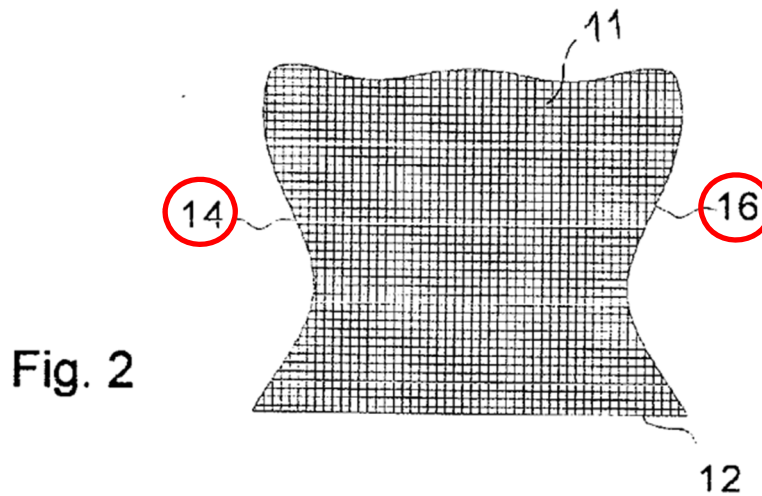
Cusinato is directed to “a process for making a knitted fabric and a product obtained with this process.” EX1014, [0001]. “The knitting manufacturing is made by using knitting machines or looms in which a support, called a needle bar, houses

several needles placed side by side and parallel to each other, in order to pass over the stitches of the new row with the stitches of the previous row.” *Id.*, [0005]; *see also* [0006]. Cusinato explains that this process makes it “possible to produce a one-piece fabric which has suitably *shaped side edges* (by increasing or decreasing the fabric).” *Id.*, [0015]. Cusinato then discloses that “*the stocking or footwear* is directly obtained by wrapping the fabric in a boot-like manner and carrying out a simple sewing in order to join the two side edges.” *Id.* “In such a way the fabric, so obtained, can be made into a stocking or a footwear which is form-fitting to the foot or the leg of a person.” *Id.*, [0018].

Figure 1 “illustrate[s] a fabric 10 in order to obtain a stocking or a footwear with the process of the present invention.” *Id.*, [0020]. Note the presence of *curved* edges.



Figures 2-5 “illustrate[] the various phases of the process in order to produce the fabric 10 [shown in Fig. 1], starting from the top of the stocking or the upper part of the footwear.” *Id.* This process, “wherein decreases and increases operations have been made,” forms a “boot-leg, which is defined by a left side edge 14 and a right side edge 16.” *Id.*, [0021].



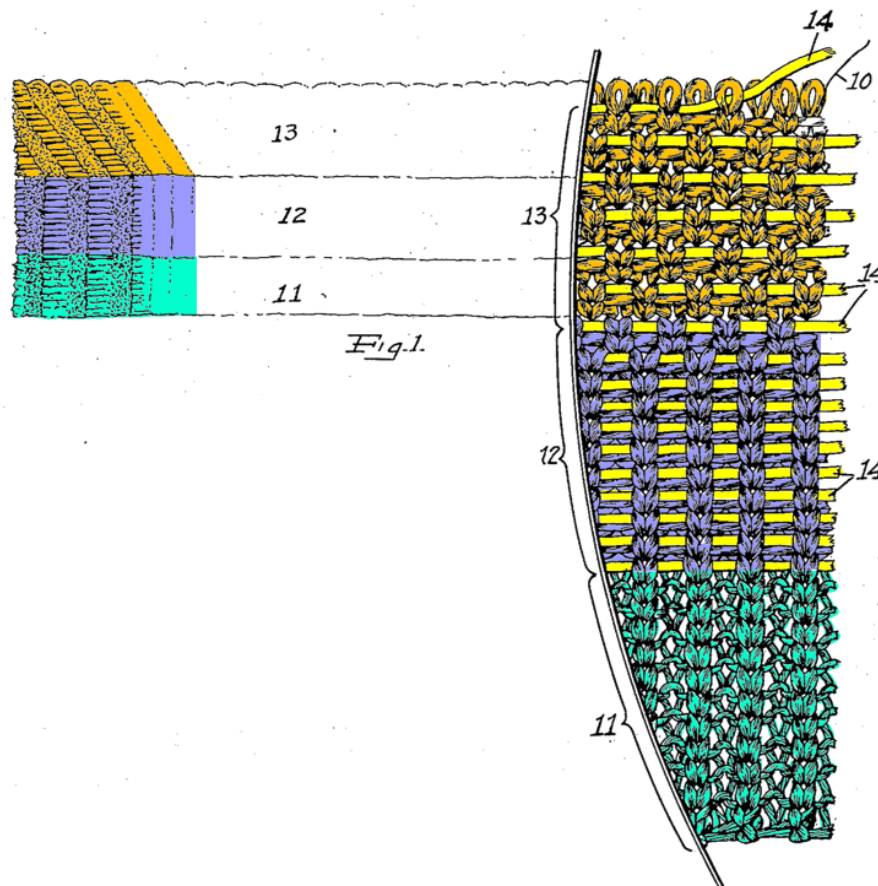
*Id.*, Fig. 2; *see also id.*, Figs. 3-5; [0029]-[0031].

## B. Overview of Clark

Clark issued in 1948 and “relates primarily to shoemaking” using a “knitted fabric.” EX1015, 1:1-19. Clark teaches creating an upper for the shoe “by properly distributing relatively coarse strands of certain thermoplastic material [“[v]inyl *yarn*” or “Vinyon”] in a knitted fabric and then shrinking these strands in the fabric upon the last...to secure a stiff resilient self-sustaining upper in which the shape of the last is accurately reproduced and permanently sustained.” *Id.*, 1:18-25; 3:32-35.

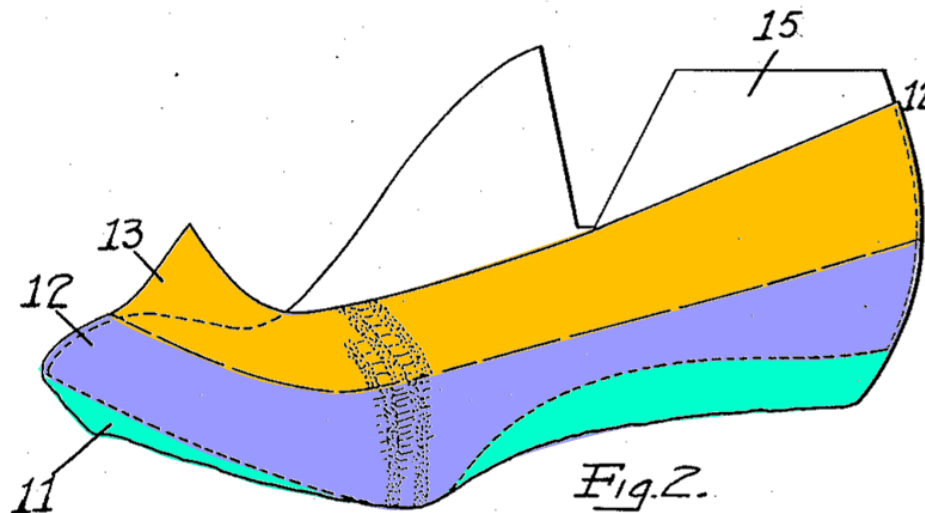
Clark discloses that “the body of the upper may be knitted of any yarn suitable for machine knitting,” and that the fabric may be knitted “in a flat bed knitting machine and formed into a continuous band by having its ends joined, or it may be knitted as a seamless band in a circular knitting machine.” *Id.*, 2:13-17. (Note the difference in terminology in Clark. While Clark discloses “strips” like the ones in the ’511 patent, the word “strip” in Clark is used to describe the workpiece rather than features of the workpiece.)

With reference to Figure 1, Clark discloses a “band” that is “knit with a rib stitch upon a flat bed machine from chenille yarn...” *Id.*, 3:1-3.



The band is formed of chenille or woolen yarn in three sections: 11 (green); 12 (purple), which further includes vinyon strands 14 (yellow) in every row; and 13 (orange), which further includes vinyon strands 14 (yellow) in every *alternate* row. *Id.*, 3:3-6; 3:14-17; 3:36-40. Clark explains that any “convenient” or “desired” knitting stitch may be used in forming sections 12 and 13. *Id.*, 3:27-28; 3:50-54.

After the knitted band shown in Figure 1 is formed, it is “worked over a last 15,” as shown in Figure 2, to form a shoe upper, which is then heat treated. *Id.*, 3:68, 3:6-11, 4:75-5:4; Fig. 3.



### C. Overview of Spencer

Spencer is entitled *Knitting Technology, A Comprehensive Handbook And Practical Guide* and was written by David J. Spencer. The Third Edition was published in 2001.

#### Knit Strips

Spencer discusses knitting strips using a variety of techniques and configurations.

- Strips having different colors, patterns, and textures. EX1050 (Spencer), 103:



Fig. 10.3 Examples of intarsia designs knitted on an electronic V-bed machine [Shima Seiki].

- Strips constituting horizontal stripes made using different yarns having different colors. *Id.*, 101:



**Fig. 10.1** An attractive use of horizontal striping [International Institute for Cotton].

- Ribs with alternating strips of texture and stitches. *Id.*, 185, 186, 187:

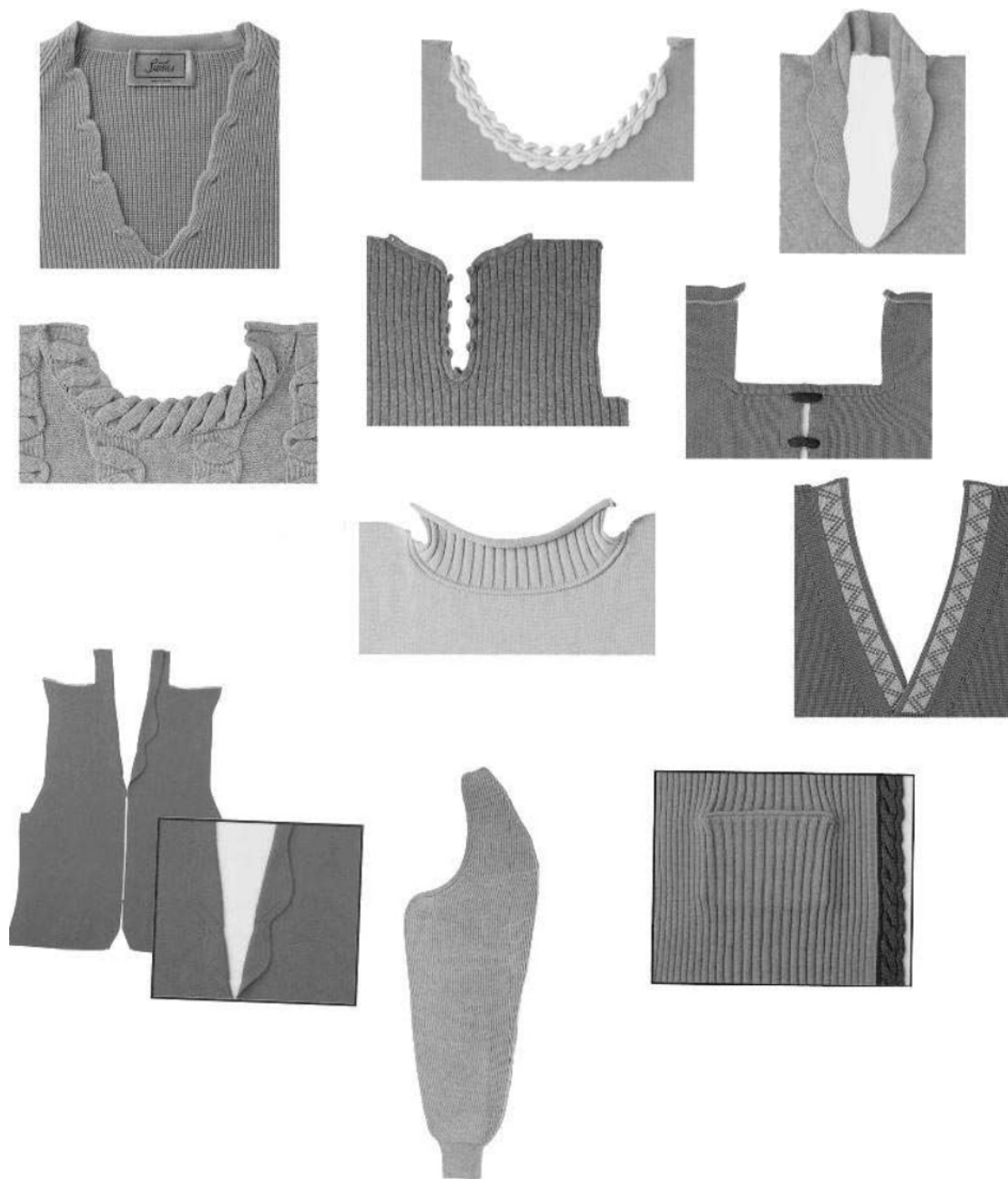
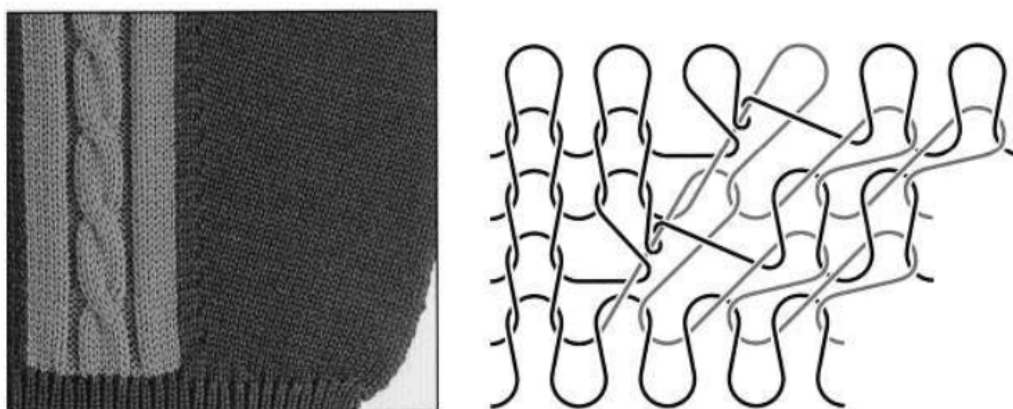


**Fig. 16.9** Integrally shaped rib garment pieces. The machine has an additional bed containing the transfer points [Shima Seiki].



Widening with split-stitch (latch-type needle)

- Knit material with strips having different textures, stitches (rib, cardigan, tubular), and elasticities. *Id.*, 191:

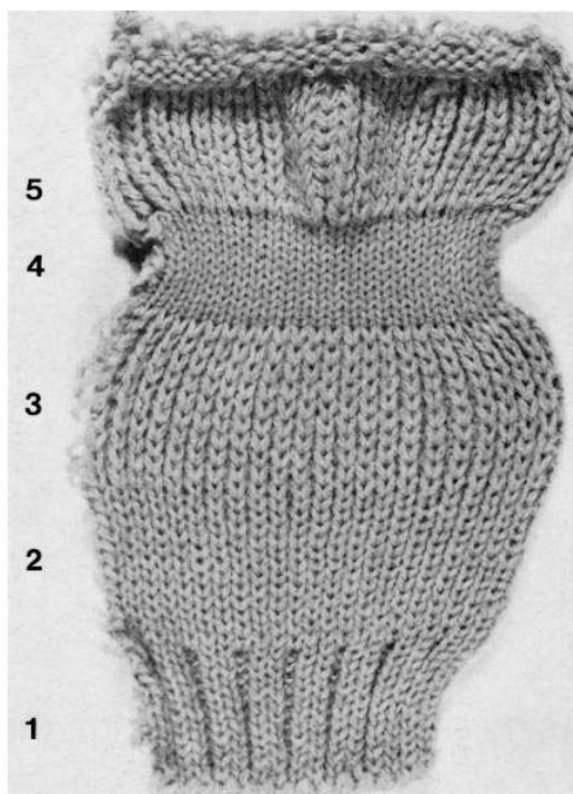


**Fig. 16.13** Stitch shaping (1 = 2 × 2 rib; 2 = 1 × 1 rib; 3 = half-cardigan; 4 = tubular courses; 5 = full cardigan).

- Spencer also discloses knit strip patterns that alternate between a first texture and a second different texture. *Id.*, 69 (“Broad ribs have a number of adjacent rib as well as plain wales, for example, 6/3 Derby Rib.”); EX1002, ¶119.
- Spencer also illustrates how strips with different textures and patterns adjacent to one another are commonplace (and obvious) aesthetic design elements. *Id.*, 235; EX1002, ¶120.

Automatic power flat knitting 235



**Fig. 19.6** Multi-gauge technique garment.

**Use of Different Yarns.** Spencer discloses the use of different yarns on the same knitted workpiece, including the “use of Lycra or other elastane yarns...at every course or at alternate courses....” In addition, Spencer teaches “precisely plac[ing] spliced areas of elastane yarns to give selective comfort support whilst saving expensive yarn.” EX1050 (Spencer), 260, 264; EX1002, ¶¶121-22.

**Flat Knit Edges And Knit To Shape.** Spencer discloses the use of flat knit machines to knit selvedged or finished “self-edges.” *Id.* at 45. The advantages include that “[t]he firm, fashioned selvedge edges can be...seamed together, without the need for cutting...involving loss of expensive fabric.” *Id.*, 185. As Spencer further explains, “weft knitting provides unique opportunities for width-wise shaping during knitting,” including by “varying the number of needles in action in the knitting width.” *Id.*, 184, 188; EX1002, ¶123.

**D. Combination of Cusinato with Clark and, If Necessary, with Spencer**

At the time of the invention, a POSITA would have been motivated to combine the teachings of Cusinato and Clark and/or Spencer, and would have had a reasonable expectation of success in doing so. EX1002, ¶137.

Both Cusinato and Clark relate to machine-made, flat-knitted footwear. EX1014 (Cusinato), [0005]; EX1015 (Clark), 3:1-3. Both Cusinato and Clark utilize a sewing operation after the flat knitting operation to join the edges of the textile into a footwear-shaped workpiece. EX1014, [0015]; EX1015, 3:55-65. Thus, using

Cusinato to make the upper of Clark would have yielded predictable results, would have constituted simple substitution or application of a more modern knitting technique for an older one, and would have been obvious to try with reasonable expectations of success. EX1002, ¶138.

A POSITA in possession of Cusinato would have been motivated to further improve the stiffness, durability, and resiliency of selected regions of its knitted fabric upper by incorporating Clark's use of varied knit stitches and yarns (*e.g.*, thermoplastic strands) in different sections of the upper. *Id.*, ¶139. It is well known that certain areas of footwear need to be stiffer, more durable, and more resilient than others (*e.g.* toe and heel vs. boot leg). *Id.* A POSITA attempting to create Cusinato's knitted boot would look to known approaches in the knitting field such as Clark's teachings of using different stitch types and inlaying yarn to impart desired properties to regions of a knitted fabric upper, such as to create a stiffer, more durable toe or heel. *Id.* A POSITA would have reasonably expected to succeed in combining Cusinato and Clark, particularly because Clark's teachings have been known in the art for decades, and a POSITA would recognize that its simple and well-known techniques could be employed to impart different properties to different areas of Cusinato's textile element. *Id.*

A POSITA in possession of Cusinato would have been motivated to further improve the appearance of or create variations in the appearance of the knitted

footwear by combining or substituting the Cusinato pattern with variations in stitching (and texture) as well as yarns, as disclosed in Clark. EX1002, ¶140. This is consistent with Clark’s discussion of an “urgent demand in women’s shoes for a great variety of ornamental and different color effects.” EX1015, 1:8-14. Clark discloses the use of different stitches (and visual textures) in Figure 1 and that “any convenient knitting stitch” or “any desired form of knitting stitch may be employed,” which a POSITA would understand would give rise to different textures. EX1015, 3:27-54; EX1002, ¶141. And Clark also discloses the possibility of using chenille yarn of different colors and weights. Thus, a POSITA familiar with knitting technology would understand that Clark also teaches the use of different textures, stitches, and different yarns for ornamental purposes—a commonplace motivation due to design incentives and market forces in the fashion industry, of which footwear and textiles are a part. *Id.* Thus, a POSITA attempting to create Cusinato’s knitted footwear would investigate aesthetic aspects of design elements from other footwear designs such as Clark. *Id.* Insofar as the changes are aesthetic, a POSITA would have reasonable expectations of success. *Id.*

Moreover, a POSITA in possession of Cusinato or Clark would have been motivated to further improve the manufacturing efficiency, functionality, and/or appearance of the knitted footwear, and would have consulted Spencer, a seminal “handbook” and “practical guide,” regarding how to do so. EX1002, ¶¶142-43.

Such a reference would teach how to substitute or use known methods to yield predictable results, how to apply known techniques to improve a known method or product, which techniques or structures would be obvious to try (with reasonable expectations of success – they’re in a reference book), and the use of other teachings, suggestions, and motivations to combine. *Id.* Indeed, much of the information provided in Spencer would have been known to a POSITA, and in addition to constituting a combinable prior art reference, Spencer would also constitute evidence of what would have been known to a POSITA and/or what was inherent in prior art knit textiles/structures and knitting machines. *Id.*

Finally, the consideration and possible use, on the same knitted textile or footwear, of (1) at least two different textures in different strips; (2) at least two different stitches in different strips; (3) at least two different yarns in different strips; (4) at least two different physical properties in different strips; (5) varying patterns of the strips; (6) differently shaped elements in the pattern; (7) different orientations of elements in patterns; and (8) different locations of elements in patterns, among other things, are a long-standing and integral part of fashion design, including knitted fashion design, and would have been obvious or obvious to try from the perspective of a POSITA familiar with either footwear or textiles, including because knitting machines available before the time of the invention were programmable to implement known knitting techniques that would produce such patterns and

variations (collectively, “the Obvious Design Choices”). EX1002, ¶144. Design changes that do not “result in a difference in function or give unexpected results” are “no more than obvious variations consistent with the principles known in th[e] art.” *In re Rice*, 341 F.2d 309, 314 (CCPA 1965)).

Indeed, having strips of (1) different textures, (2) different stitches, and (3) different yarns in knitted textile or footwear is among the simplest and most ubiquitous of a finite number of aesthetic design elements in footwear and in knit fabrics, and their use and success is predictable. EX1002, ¶145. Implementing (4) different physical properties using variations in textures, stitches, and yarns is also simple and ubiquitous in footwear and in knit fabrics, and their use and success is predictable. *Id.* Thus, at the time of the invention, a POSITA would have been motivated to combine the teachings of Cusinato with Clark, and Spencer, and would have had a reasonable expectation of success in doing so, insofar as aesthetic changes and the implementation of different physical properties in knits was well known. *Id.* And, at the time of the invention, a POSITA would have thought it obvious or obvious to try modifying Cusinato, Clark, Spencer, or any combination thereof to add elements (1), (2), (3), (4), (5), (6), (7), and/or (8) above. *Id.* Insofar as the changes are well-known aesthetic or functional changes, a POSITA would have expectations of success. *Id.*

## E. Claim 1

### 1. Element 1[pre]

To the extent the preamble is limiting, Cusinato and Clark each disclose an upper for an article of footwear. As explained above in Section VII.A, “article of *footwear*” should be construed as “any *foot covering* in the form of *shoes, boots, slippers, or hose (e.g., socks).*”

- Cusinato discloses “a fabric...[that] directly forms the stocking or *footwear*” having a “*boot*-like shape.” EX1014 (Cusinato), [0010], [0013].
- Clark “relates primarily to *shoemaking* and consists in a novel process of making of textile material a last-fitting *upper* ...” EX1015 (Clark), 1:1-7.

If Patentee were to argue (contrary to the intrinsic and extrinsic evidence) that “footwear” must include a sole, a “shoe bottom” or sole is disclosed in Clark, and a POSITA would consider it obvious to add a sole to Cusinato’s “*boot*-like” form. EX1002, ¶¶157-561

### 2. Element 1[a1]

Cusinato discloses this element, as a POSITA would understand the “flat knit edges” term under either Petitioner’s or Patentee’s proposed constructions. EX1002, ¶162.

First, Cusinato discloses “flat knit textile elements,” referring to “the different parts or shapes of the stocking or footwear” as “*flat* parts.” EX1014, [0009]. Moreover, a POSITA would understand that Cusinato teaches using flat knitting through its disclosure of using a knitting machine with a straight needle bar. EX1002, ¶¶163-64; EX1014, [0041]. A POSITA would understand that Cusinato’s claimed process is also consistent with the use of a flat knitting machine with a straight needle *bed*, used in weft knitting machines. EX1002, ¶¶163-65. Straight needle beds have long been associated with flat knitting, and circular knitting techniques cannot use straight needle beds. EX1050, 63, 86-87; EX1002, ¶¶163-66.

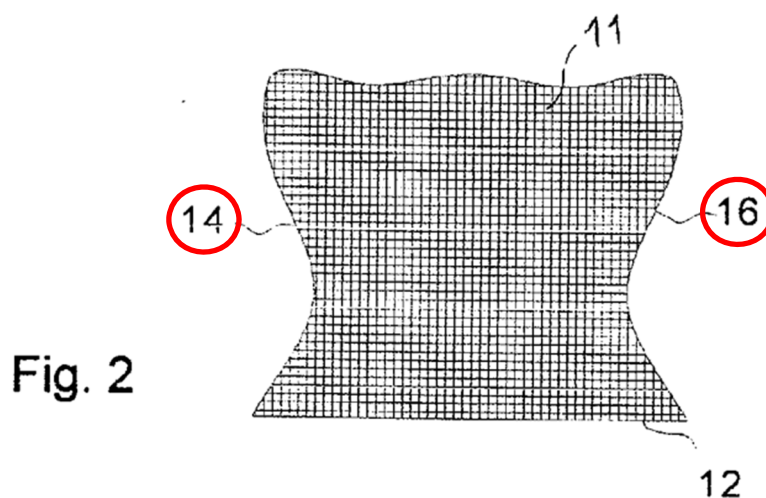
Cusinato also describes using “needles *placed side by side and parallel to each other*, in order to pass over the stitches of the new row with the stitches of the previous row.” EX1014, [0005]; *see also* [0014], [0021]-[0031]. A POSITA would recognize these descriptions as consistent with the use of a flat knitting machine. EX1002, ¶¶163-66.

Moreover, Cusinato explains that the invention includes “the use of any machine,” which would include flat knitting machines, and a POSITA would recognize that a flat knitting machine would be particularly suitable. EX1014, [0042]; *see also* EX1050, 87; EX1002, ¶¶163-66.

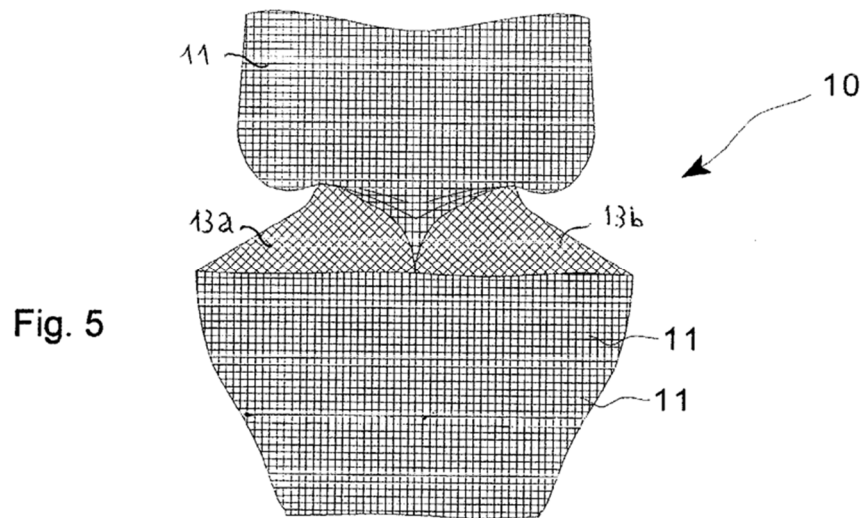
Second, Cusinato discloses *curved* flat knit edges. Cusinato teaches that well-known knitting machines at the time of the invention made it “possible to generate

a decrease or an increase of the fabric, namely it is possible to obtain *shaped* fabrics.” EX1014, [0006]. An “increase” is created by inserting needles at the ends of the knitting machine’s needle bar, and a “decrease” is created by removing needles from the ends of the needle bar. *Id.*, [0005]-[0007]. “The number of needles is, obviously, equal to the number of the stitches per row.” *Id.*, [0005]. Thus, a flat knit textile element may be knit to its final shape by adjusting the number of needles used in each row and, consequently, the number of stitches in each row. EX1002, ¶¶167-69; EX1050, 184 (explaining that “weft knitting provides unique opportunities for width-wise shaping during knitting,” including by “varying the number of needles in action in the knitting width”), 188. ¶¶167-69.

By making use of so-called “increase” and “decrease” operations, a *curved*-edge textile element such as that shown in Cusinato’s Figure 2 may be obtained, with “suitably shaped side edges [14 and 16]”:



EX1014, [0015]; Fig. 2; *see also* claims 2-3. Curved flat knit edges would be a natural and obvious result of increasing or decreasing the number of needles (and, therefore, stitches) used from row to row. EX1002, ¶¶170-72. The finished knit, with curved flat knit edges, is provided below:



Third, Cusinato discloses that the flat knit edges are “free of surrounding textile structure...from which the textile element must be removed.” There is no disclosure of the Cusinato “shaped fabrics” being further cut before sewing (nor would there be any need to do so). EX1002, ¶¶173-75. Indeed, Cusinato explicitly *distinguishes* its method from prior art methods in which “the different parts or shapes of the stocking or footwear...may be obtained starting from a rectangular fabric and *cutting* from it the component parts of the stocking or footwear.” EX1014, [0007]-[0008]; *see also* [0010]-[0016], [0021]-[0032].

A POSITA would therefore understand that Cusinato's consistent references to "shaped fabrics" and distinguishing prior art techniques utilizing cutting (*i.e.*, removing "different parts or shapes of the stocking or footwear" from surrounding material) confirm that its flat knit textile element comprises "flat knit edges free of surrounding textile structure...from which the textile element must be removed." EX1002, ¶¶173-75.

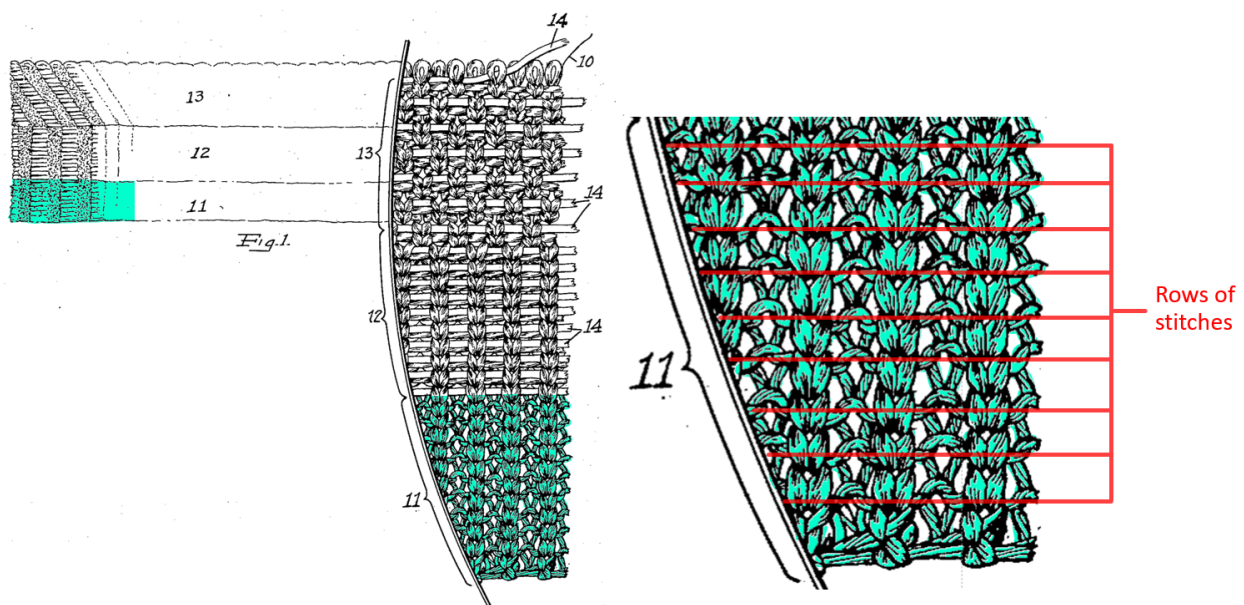
To the extent Cusinato does not disclose a flat knit textile element on its own, it would have been obvious to a POSITA to use flat knitting, as expressly taught in Clark and Spencer, and a POSITA would reasonably have expected to do so successfully. EX1002, ¶¶176-77. For example, Clark teaches that the fabric used in its claimed upper "may be knitted as a strip *in a flat bed knitting machine.*" EX1015, 2:13-14. As discussed above, Spencer teaches that flat knitting machines produce flat pieces of fabric with finished edges. *See* EX1050, 63, 86-87. EX1002, ¶¶176-77.

### 3. Element 1[a2]

As discussed in Section II.A, the specification provides next to no definition, discussion, or explanation of the "knit strips" of this claim element. The specification does explain that different types of knit stitches and yarns may be used to impart various broadly-defined "properties" to the claimed textile element, including differences in textures, stitches, yarns, and/or degree of stretch, among

other properties. Of critical importance to this Petition, *other than dependent claims 10-11 and 13-14, none of the claims require that the strips serve any functional purpose*. EX1002, ¶¶178-79. The patent specification confirms this in reference to two “properties,” textures and stitches, both of which exhibit aesthetic qualities. EX1001, 8:59-61, 9:3-22. A POSITA would understand that Clark and, if necessary, Spencer disclose a first knit strip having a first property and a second knit strip having a second property that is different from the first property. EX1002, ¶¶180-81. Clark, describes knitting three sections (11, 12, and 13) using various types and arrangements of knit *stitches* (a *first* type of “property”). EX1014, 3:27-29 (“any convenient knitting stitch”); 3:50-53 (“any desired form of knitting stitch”); 3:6-7.

A POSITA would further recognize that sections 11, 12, and 13 comprise three different knit strips, because each section comprises multiple rows (“courses”) of stitches, as shown with reference to section 11 below:

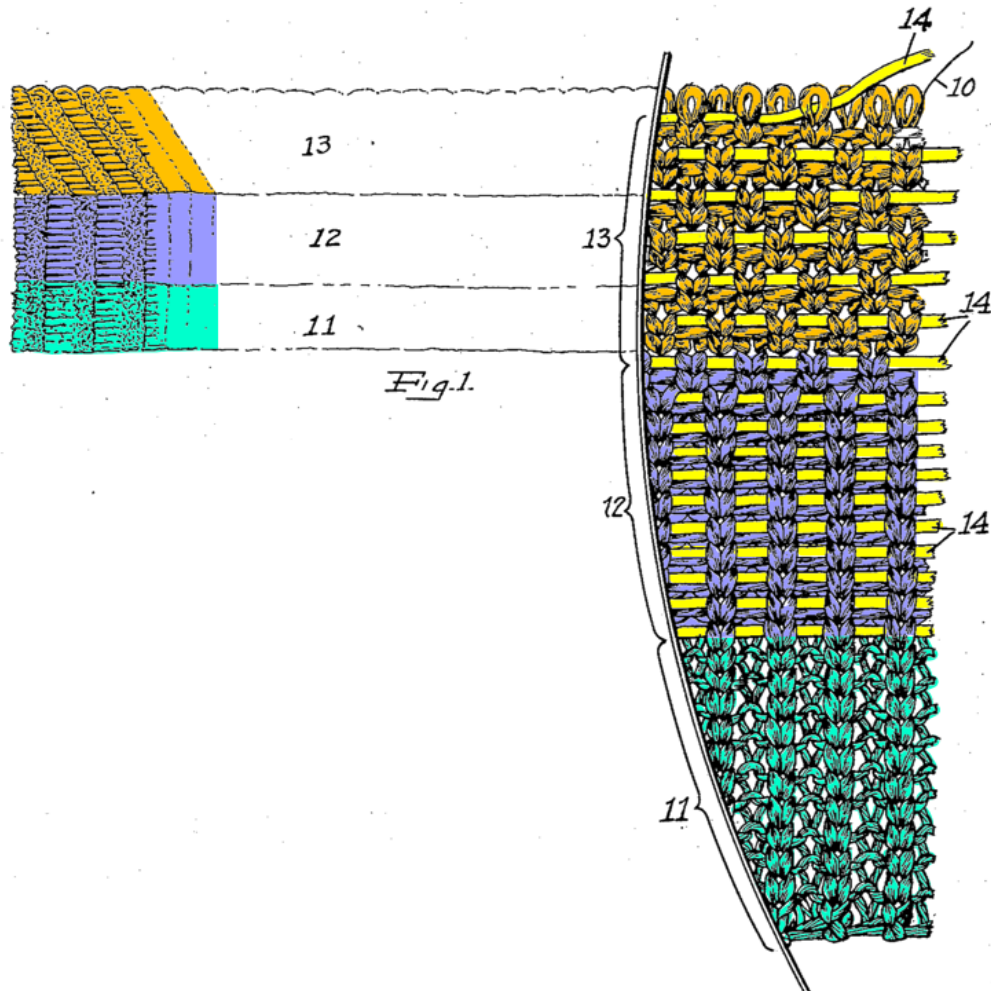


EX1015, Fig. 1; 3:6-10. EX1002, ¶¶180-81.

A POSITA would understand that these knit strips also produce different textures, *e.g.*, when different stitches are used, which are a ***second*** type of “property,” as in Figure 1 above. EX1002, ¶¶182.

Notably, Clark does not discuss this use of varying knit stitches in the same textile element as a novel feature of his invention, but by way of background. *See* EX1015, 3:1-54. Instead, Clark’s “novel process” is directed to the use of different yarns (a ***third*** type of “property”) in different strips, specifically laying in “vinyl yarn” strands to stiffen the upper. *Id.*, 1:18-23; 3:14-17. This technique is also a well-known practice in the knitting field and may be used to impart properties such as stability or elasticity. EX1002, ¶183; *see also* EX1050, 54-55.

In the “composite knitted strip” shown in Clark’s Figure 1 below, no vinyon strands 14 (yellow) are laid in section 11 (green). EX1015, 3:8-10, 3:55. One vinyon strand 14 is laid in ***each course*** of section 12 (purple), and in ***every other course*** of section 13 (orange). *Id.*, 3:13-42.



*Id.*, Fig. 1. EX1002, ¶¶184-85.

After heat-treatment, Clark’s sections 11, 12, and 13 form knit strips with different degrees of stretch, stiffness, and recovery (*fourth*, *fifth*, and *sixth* “properties”). See EX1001, 9:20-22 (“physical properties” of textile element 40 may include “strength, stretch, support, stiffness, recovery, fit, and form”). EX1002, ¶186.

Spencer also discloses that varying the knit stitch type within a single textile element to impart different properties to different areas of the element has been a

well-known technique for decades. EX1002, ¶187. Two examples reproduced below show the differences in stitching and texture as well as what a POSITA would understand would be elasticity:

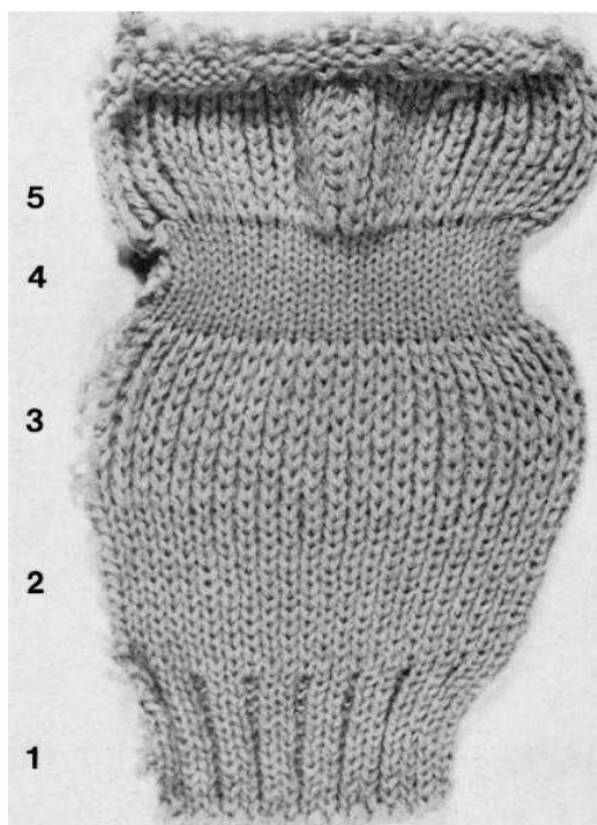


**Fig. 16.13** Stitch shaping (1 =  $2 \times 2$  rib; 2 =  $1 \times 1$  rib; 3 = half-cardigan; 4 = tubular courses; 5 = full cardigan).

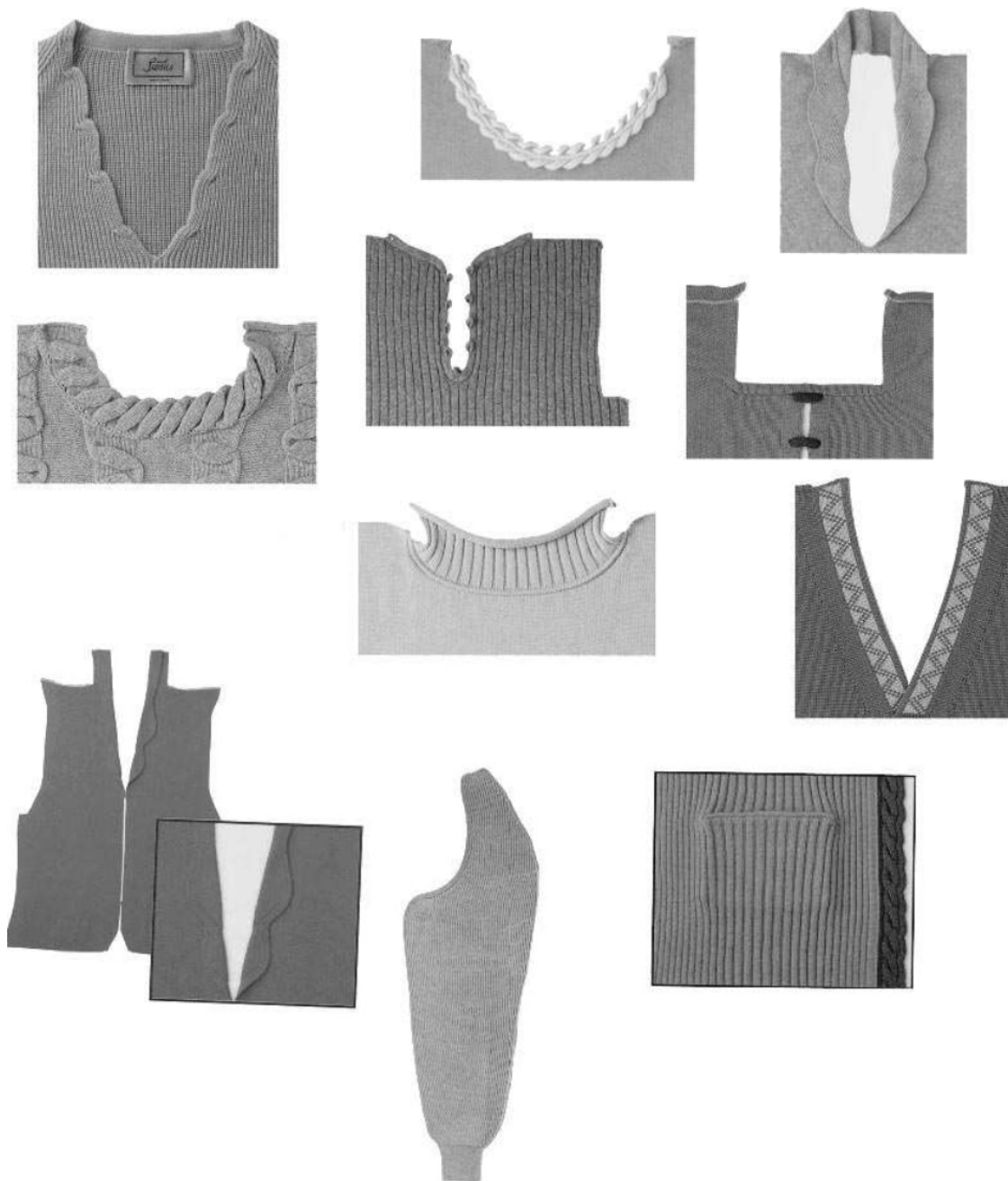
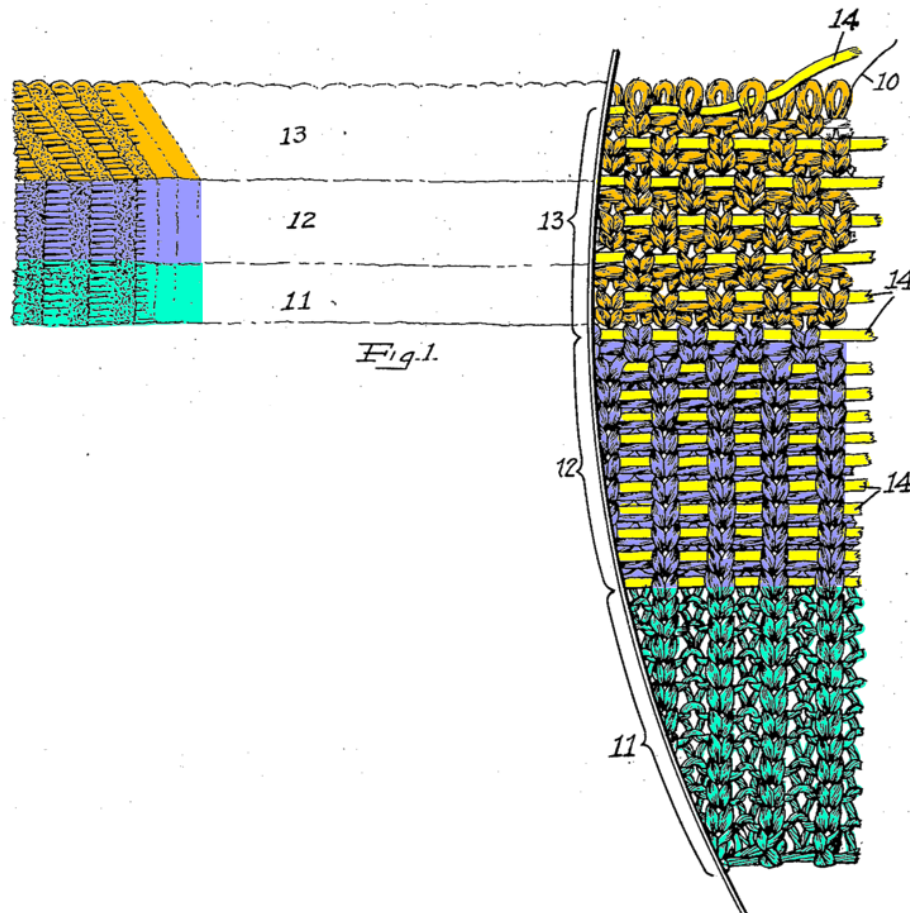


**Fig. 16.9** Integrally shaped rib garment pieces. The machine has an additional bed containing the transfer points [Shima Seiki].

EX1050, 186, 191; EX1002, ¶188.

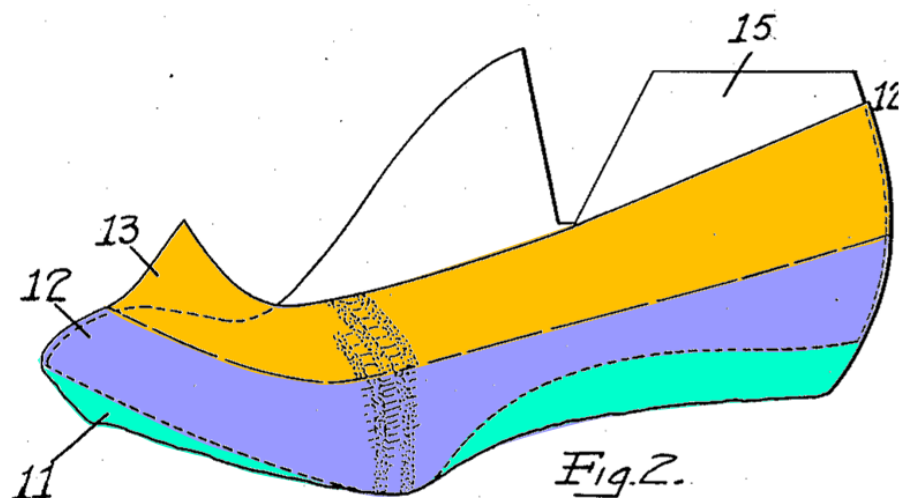
#### 4. Element 1[b]

Cusinato in view of Clark discloses a first knit strip and second knit strip positioned adjacent to each other along one or more of a lateral side and a medial side of the upper. EX1002, ¶190. As discussed above, Clark discloses multiple knit strips adjacent to one another (sections 11-13):



EX1015, Fig. 1.

When Clark's band of fabric is worked over a last, as shown below in Figure 2, at least sections 12 and 13 are positioned adjacent to each other along one or more of a lateral side and a medial side of the upper:

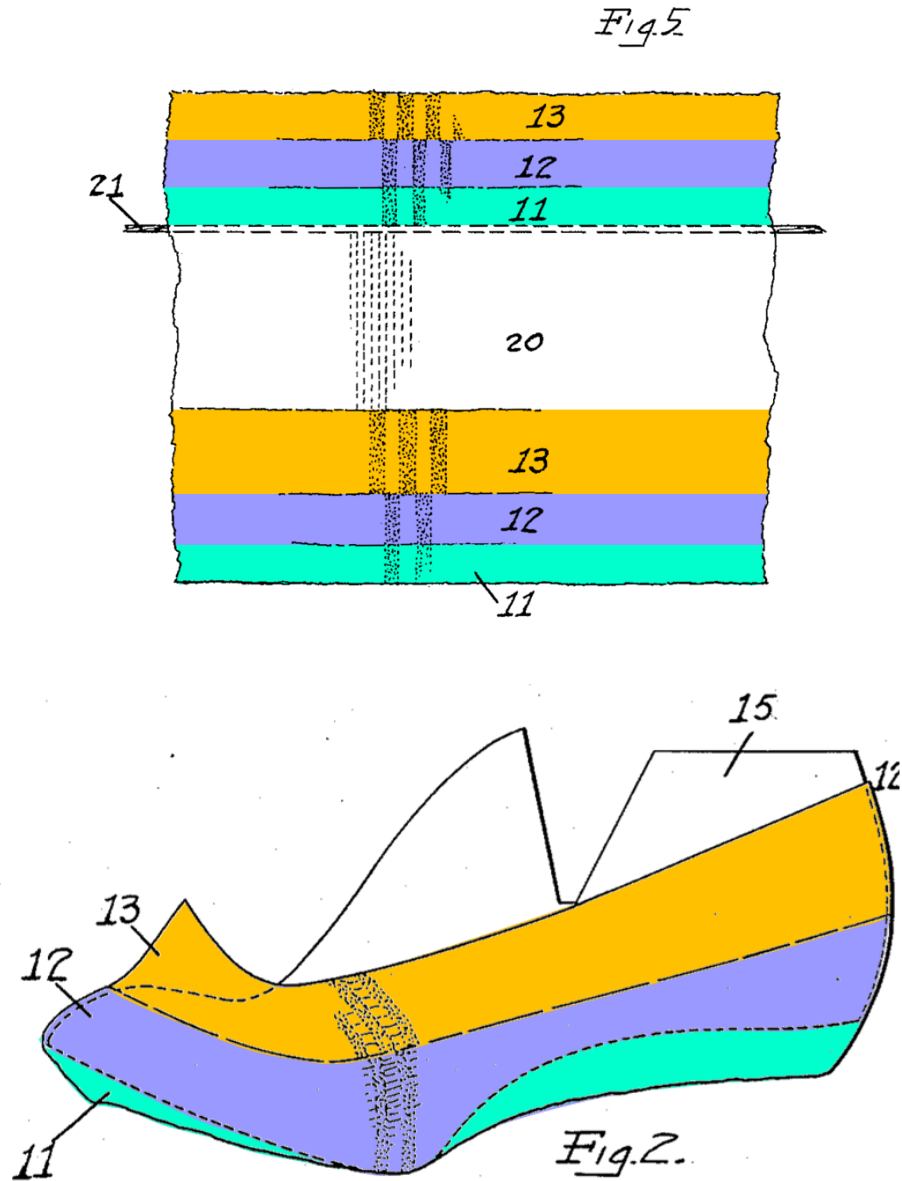


*Id.*, Fig. 2 (depicting a side view of the upper on a last); EX1002, ¶191-93.

#### F. Claim 2

As described above with reference to Elements 1[a2] and 1[b], a POSITA would recognize Clark's sections 11-13 meet this limitation.

The unassembled workpiece has two each of sections 11-13, one for each side of the upper.



Furthermore, the aesthetic design of claim 2 would have been an obvious design choice to a POSITA. EX1002, ¶¶194-97. The number, location, and arrangement of these knit strips may be solely for aesthetic purposes. It would have been obvious to a POSITA to use the textured strips of Clark for aesthetic purposes in Cusinato, but to arrange them in accordance with the limitations of this claim. *Id.*

Such a design choice would be obvious or obvious to try in the fashion industry, of which footwear and textiles are a part, and a POSITA would reasonably have expected to be successful. *See* the Obvious Design Choices, *supra* VIII.D. EX1002, ¶¶194-97.

**G. Claim 3**

For the same reasons discussed with respect to Elements 1[a2] and [b] and Claim 2, it would have been obvious to a POSITA in possession of Cusinato and Clark and, if necessary, Spencer to create the upper of claim 2, with the additional *aesthetic* limitations of Claim 3. EX1002, ¶198.

For example, Spencer also discloses alternating patterns:

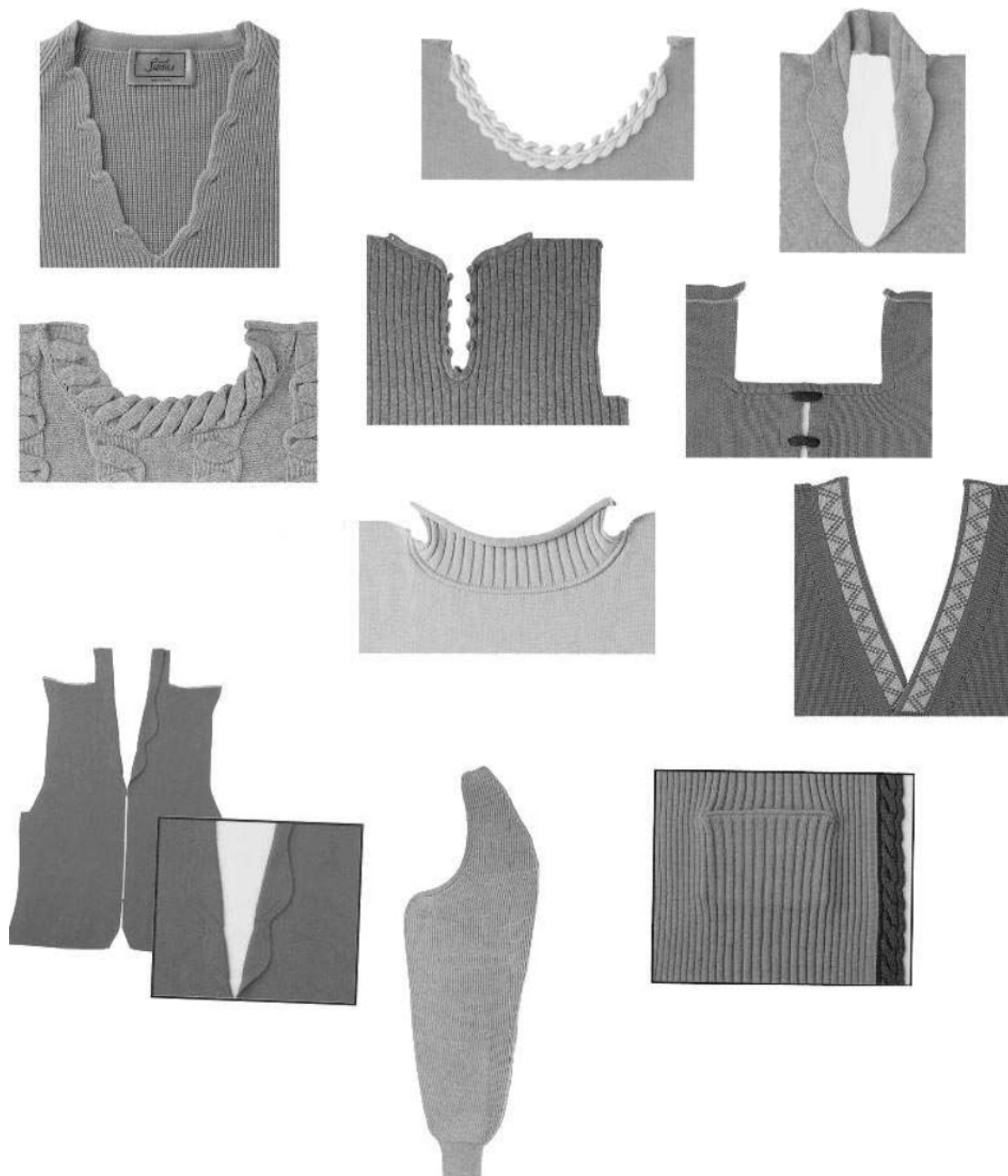


**Fig. 16.9** Integrally shaped rib garment pieces. The machine has an additional bed containing the transfer points [Shima Seiki].

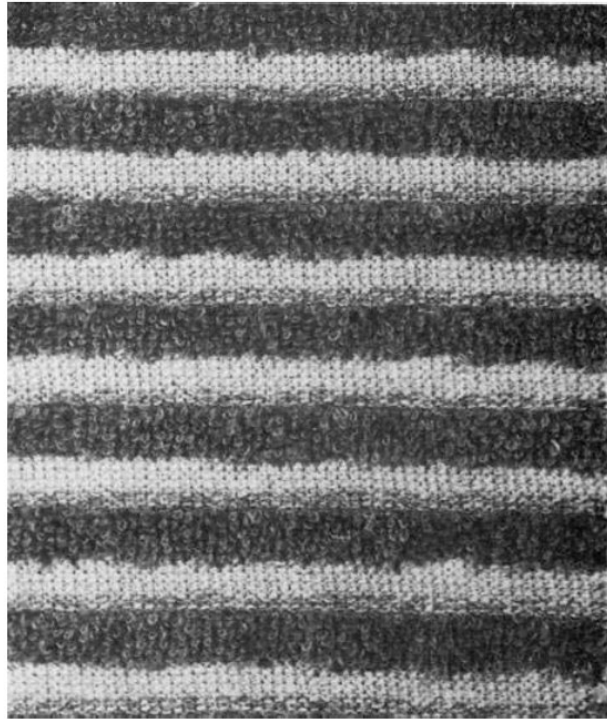


**Fig. 14.4** Horizontal ribs with an ottoman effect on two-tone towelling [Alwin Wild, Switzerland].

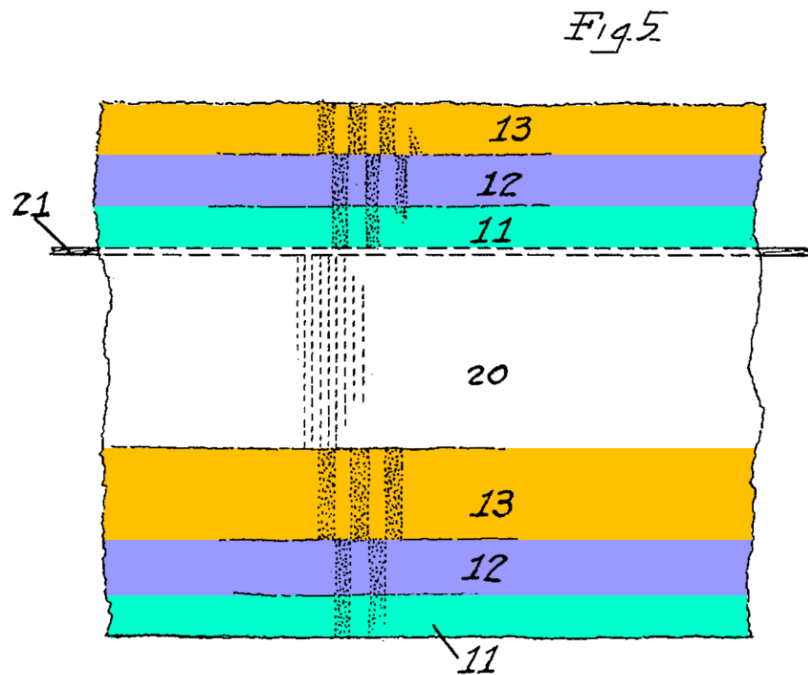
EX1050, 165, 186.

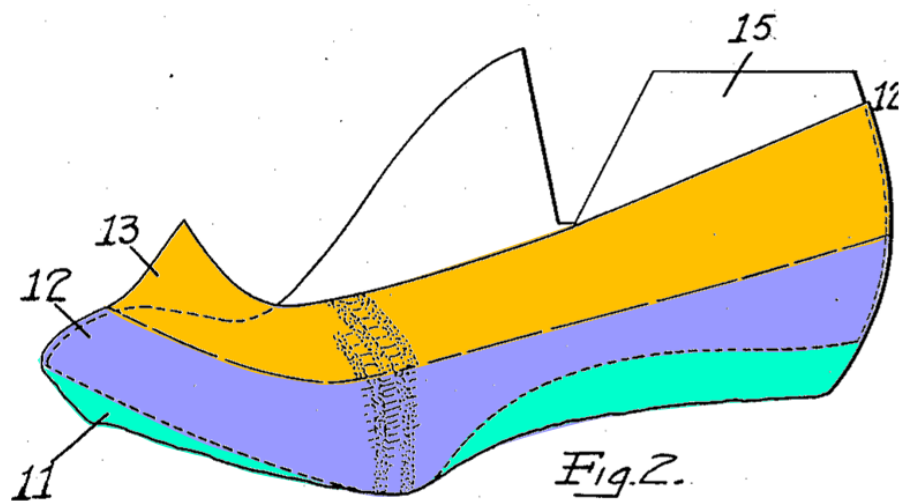
Furthermore, such an aesthetic design, involving the number, location, and arrangement of the knit strips, would have been an obvious design choice to a POSITA. EX1002, ¶200. It would have been obvious to a POSITA to use the textured strips of Clark for aesthetic purposes in Cusinato, arranged in accordance with the limitations of this claim. *Id.* Such a design choice would be obvious or obvious to try in the fashion industry, of which footwear and textiles are a part, and a POSITA would reasonably have expected to be successful. *See* the Obvious Design Choices, *supra* VIII.D. EX1002, ¶¶200-01.

#### H. Claim 4

For the same reasons discussed with respect to Claim 2, the limitations of Claim 4 would have been an obvious design choice to a POSITA considering Cusinato, Clark, and Spencer, as it merely requires creating the first and second knit strips a second time. EX1002, ¶202.

The unassembled workpiece has two each of sections 11-13, one for each side of the upper.





The use of multiple pairs of strips is also taught by Spencer.

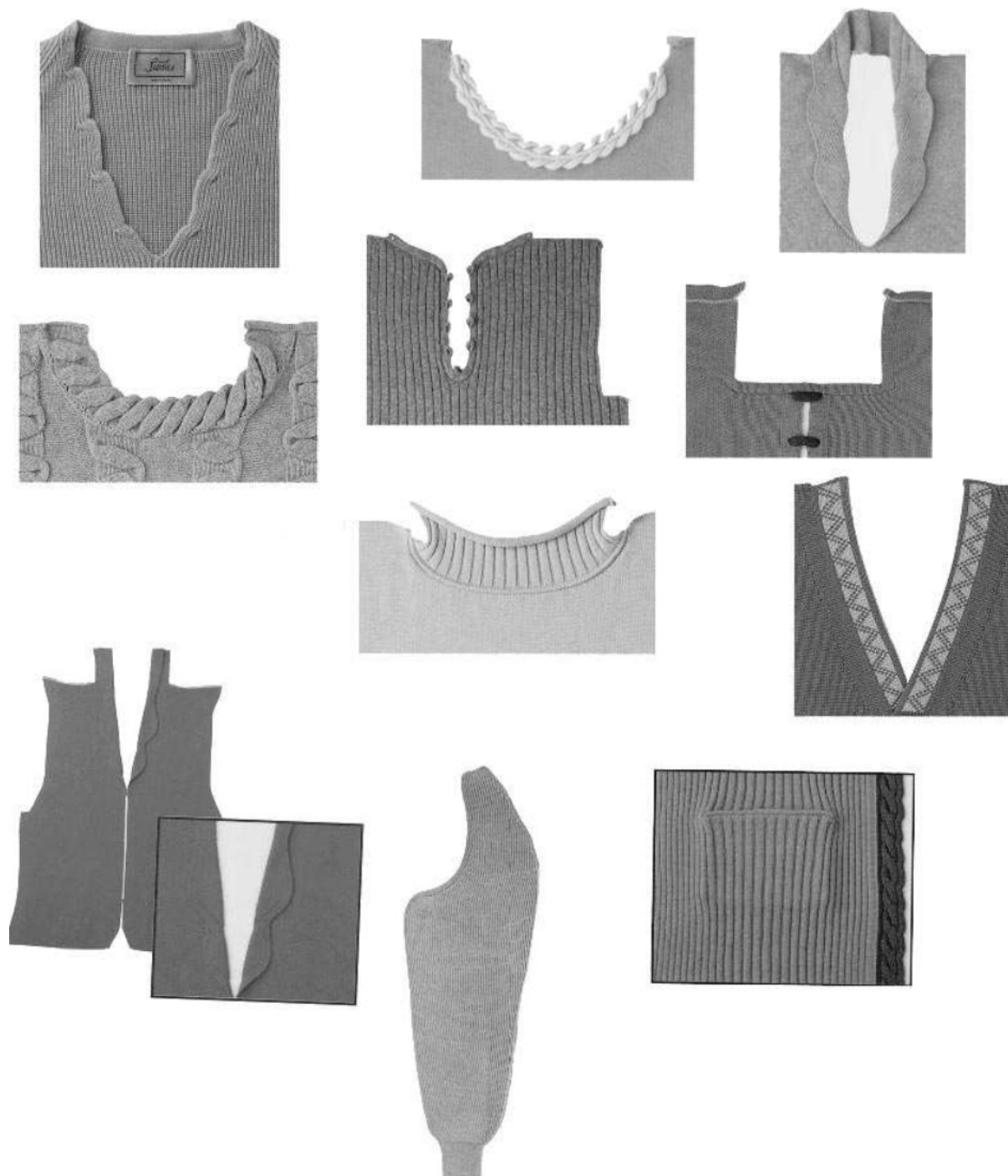


**Fig. 16.9** Integrally shaped rib garment pieces. The machine has an additional bed containing the transfer points [Shima Seiki].

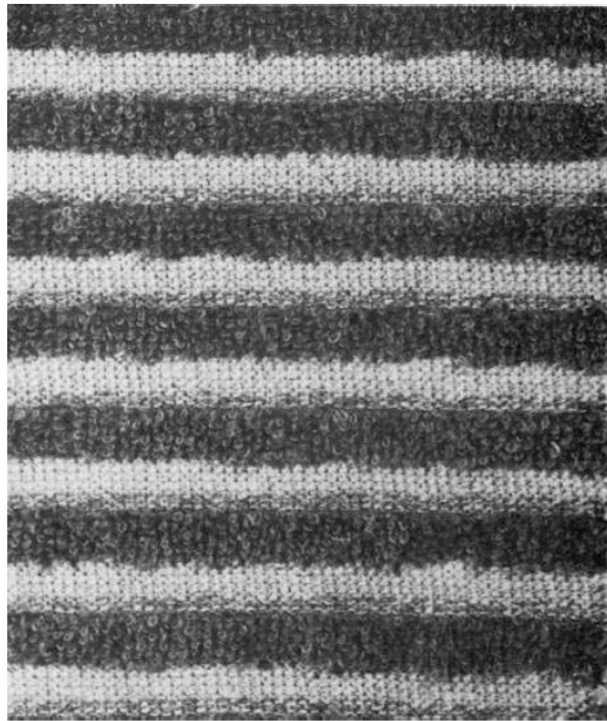


**Fig. 14.4** Horizontal ribs with an ottoman effect on two-tone towelling [Alwin Wild, Switzerland].

EX1050, 165, 186; EX1002, ¶¶203-04.

Moreover, such an aesthetic design, involving the number, location, and arrangement of the knit strips, would have been an obvious design choice to a POSITA for the same reasons set forth for claims 2 and 3 (plurality of strips and alternating strips). EX1002, ¶¶205-06. *See also* the Obvious Design Choices, *supra* VIII.D. EX1002, ¶¶205-06.

#### **I. Claim 5**

For the same reasons discussed with respect to Claims 3 and 4, it would have been obvious to a POSITA in possession of Cusinato, Clark, and Spencer to create

the upper of claim 1, with the additional *aesthetic* limitations of Claim 5 because the strips are on both sides. EX1002, ¶207.

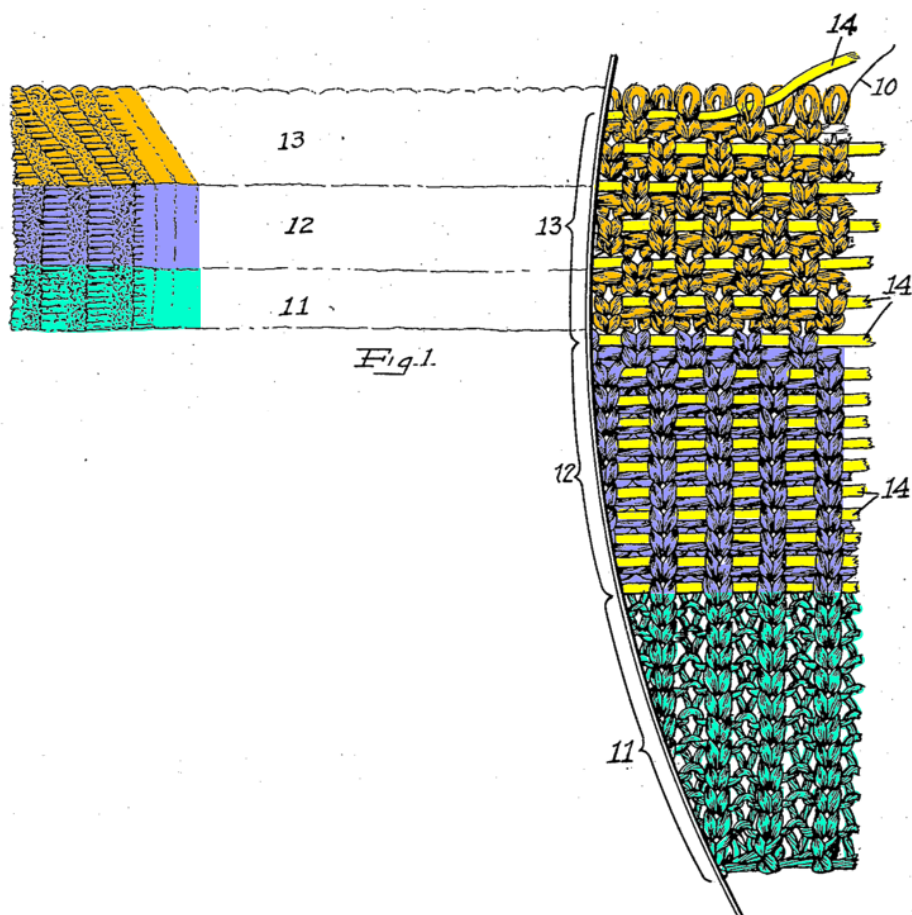
Moreover, such an aesthetic design, involving the number, location, and arrangement of the knit strips, would have been an obvious design choice to a POSITA. EX1002, ¶208. It would have been obvious to a POSITA to use the textured strips of Clark for aesthetic purposes in Cusinato, arranged in accordance with the limitations of this claim. *Id.* Such a design choice would be obvious or obvious to try in the fashion industry, of which footwear and textiles are a part, and a POSITA would reasonably have expected to be successful. *See* the Obvious Design Choices, *supra* VIII.D. EX1002, EX1002, ¶¶208-09.

#### **J. Claim 6**

The only difference between Claims 5 and 6 is the side of the upper to which each claim refers (“lateral” or “medial”). Therefore, Claim 6 would have been obvious to a POSITA for the same reasons discussed with respect to Claim 5 because the strips are on both sides. EX1002, ¶¶210-11.

#### **K. Claim 7**

As discussed above with respect to Element 1[a2] and shown below in the annotated version of Figure 1, Cusinato in view of Clark discloses a first and second knit strip (sections 12 and 13), each with different properties comprising a knit construction (*i.e.*, stitches and the “first” property of [1][a][2]).



EX1015, Fig. 1.

Spencer also teaches that different knit stitches form different knit constructions, as set forth above. Two examples reproduced below show the differences in stitching.

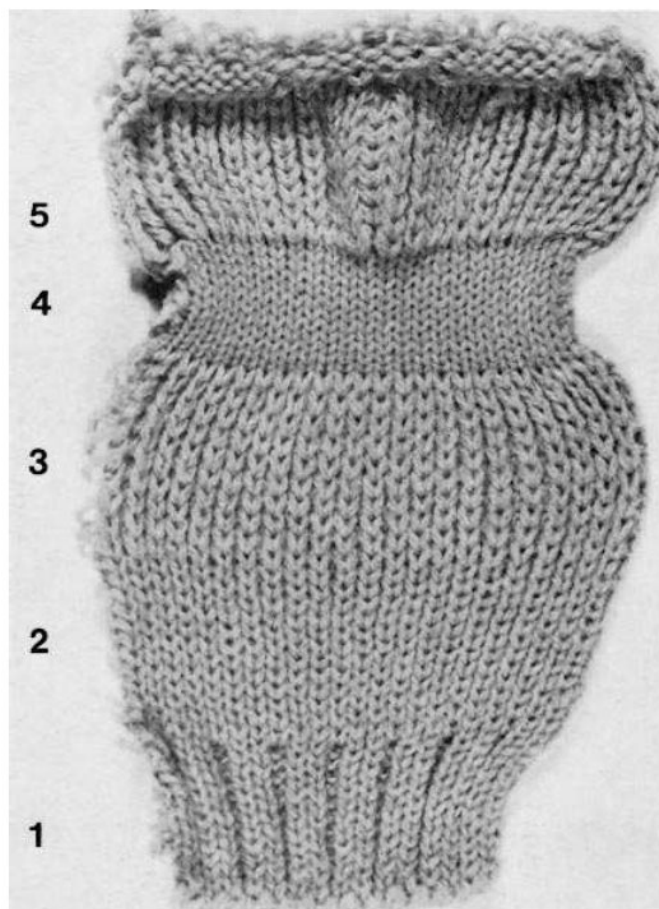


**Fig. 16.13** Stitch shaping (1 = 2 × 2 rib; 2 = 1 × 1 rib; 3 = half-cardigan; 4 = tubular courses; 5 = full cardigan).

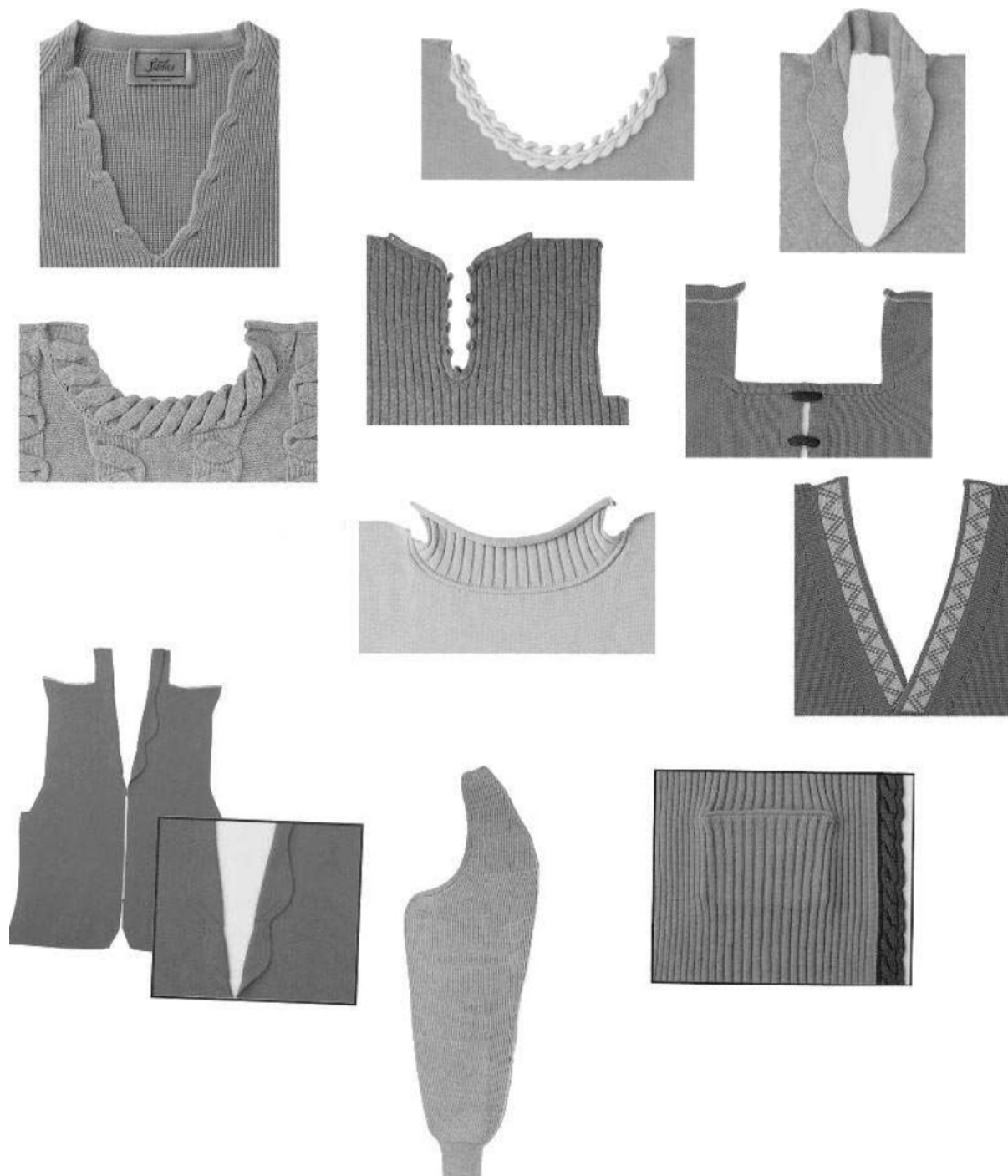


**Fig. 16.9** Integrally shaped rib garment pieces. The machine has an additional bed containing the transfer points [Shima Seiki].

EX1050, 165, 186; EX1002, ¶¶212-13.

Moreover, such an aesthetic design would have been an obvious design choice to a POSITA. EX1002, ¶214. It would have been obvious to a POSITA to use the textured strips of Clark for aesthetic purposes in Cusinato, varying the stitches to achieve different textures, and a POSITA would reasonably have expected to be successful. *See* the Obvious Design Choices, *supra* VIII.D. EX1002, ¶¶214-16.

#### L. Claim 8

Cusinato in view of Clark and/or Spencer renders obvious or discloses this claim. The specification does not describe any specific stitch type or yarn type that must be used to create smooth or rough textures. Patentee has accused shoes with the following textures as having both “a smooth texture” and “a rough texture,” suggesting that Patentee views these terms as just a matter of degree rather than a numerically precise definition:





EX1011, 88, 95; EX1002, ¶¶218-20.

As discussed above with reference to Claim 7, Clark describes and depicts using different knit stitches, or “knit constructions,” in its sections 11-13. Cusinato in view of Clark and/or Spencer renders Claim 8 obvious for the same reasons discussed with respect to Claim 7. EX1002, ¶¶217, 221. A POSITA would recognize that Clark’s sections can be made with different stitch types and will therefore have different properties, some smoother and some rougher, and that one stitch type would necessarily be smoother than the other. EX1002, ¶221; *see also* EX1001, 9:65-66.

Spencer also teaches that different knit stitches form different knit constructions, as set forth above. Two examples reproduced below show the differences in stitching (as well as smoother vs rougher textures).

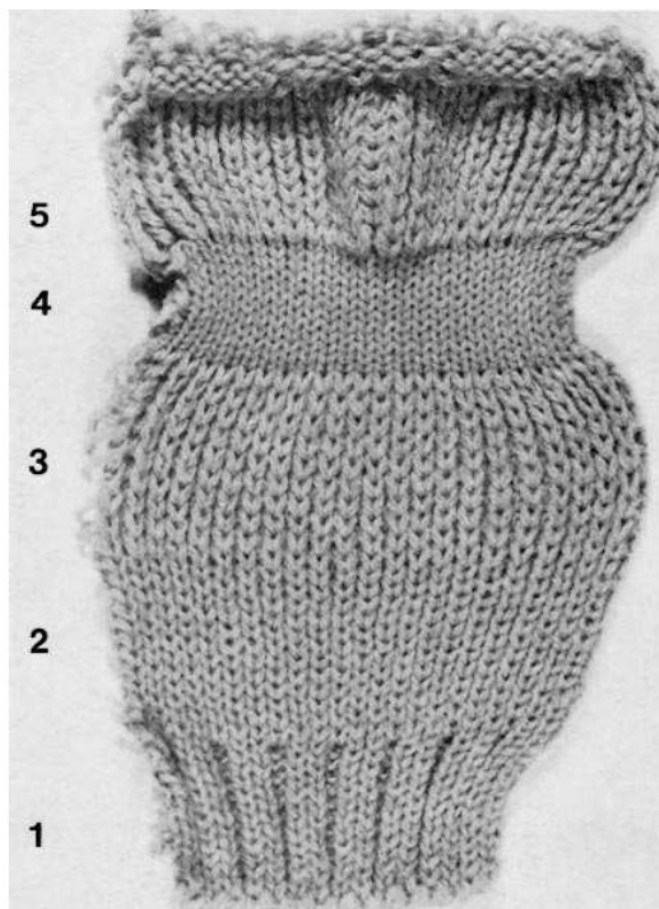


**Fig. 16.13** Stitch shaping (1 =  $2 \times 2$  rib; 2 =  $1 \times 1$  rib; 3 = half-cardigan; 4 = tubular courses; 5 = full cardigan).

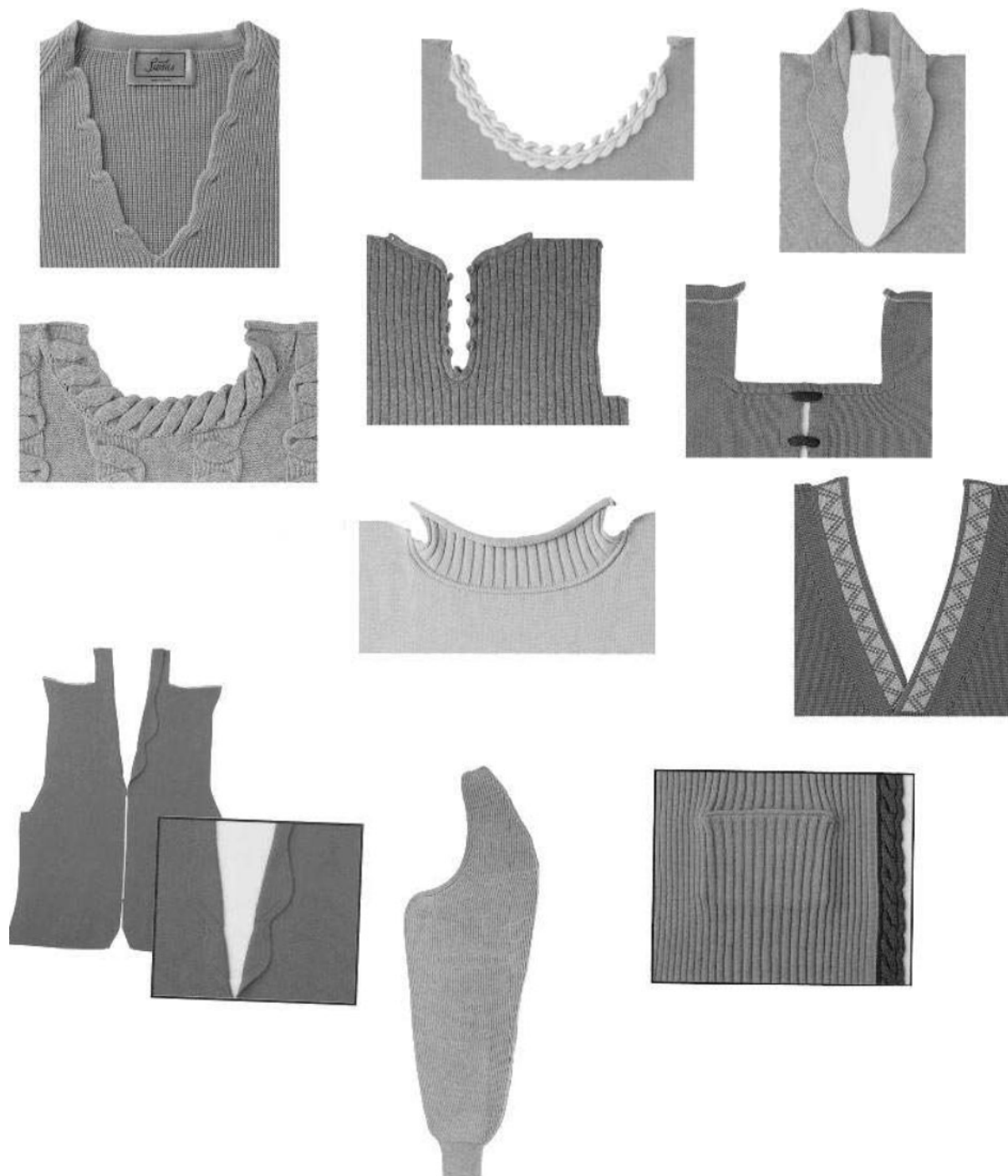


**Fig. 16.9** Integrally shaped rib garment pieces. The machine has an additional bed containing the transfer points [Shima Seiki].

EX1050 at 186, 191; EX1002, ¶222.

Moreover, such an aesthetic design would have been an obvious design choice to a POSITA. EX1002, ¶223. It would have been obvious to a POSITA to use the textured strips of Clark for aesthetic purposes in Cusinato, varying the stitches to achieve smoother and rougher textures, and a POSITA would reasonably have expected to be successful. *See* the Obvious Design Choices, *supra* VIII.D. EX1002, ¶¶223-24.

#### **M. Claim 9**

Further enhancing breathability and ventilation in the Cusinato and Clark combination would have been an obvious design choice to a POSITA because ventilation is important for footwear. EX1002, ¶¶225-28. And the use of apertures would have been obvious or obvious to try. *Id.* Furthermore, Spencer teaches how to knit open-work structures that have apertures. EX1050, 57-58.

Moreover, using apertures would have been an obvious design choice to a POSITA. EX1002, ¶¶228-29. In footwear, apertures may exist for aesthetic or ventilation purposes, the latter a well-known need solved with apertures in prior art shoes made of other materials, including leather or other fabrics. *Id.* Nike Air Jordan's, released in 1985, for example, along with countless other shoes, have apertures in the instep region.



EX1018.

**N. Claim 10**

Cusinato in view of Clark and, if necessary, Spencer discloses this claim.

Clark discloses the use of strips having “non-stretchable” Vinyon and strips without Vinyon to achieve different degrees of stretch, both before and after heating.

EX1015, 1:25-40.

Cusinato explains that the threads used in the construction of its textile element are preferably elastic threads like latex or lycra. EX1014, [0033]; *see also id.* at claims 12-13 (claiming use of “elastic” and “latex or lycra” threads). A POSITA would understand that such elastic threads or yarns are generally used when a greater degree of stretch is desired in certain areas of a textile element (such as an upper), and it would thus be obvious to use a yarn with a higher degree of elasticity

in such areas (*i.e.*, a first knit strip) and a yarn with a lower degree of elasticity in other areas where a lower degree of stretch is desired (*i.e.*, a second knit strip). EX1002, ¶¶231-32; EX1062, 564-75.

Moreover, as discussed with respect to Element 1[a2], Clark and Spencer teach that there are a variety of knit stitches that can be used within the same textile element, each of which has a different degree of elasticity. *See, e.g.*, EX1015, 3:6-53; EX1050, 68, 78. Rib stitches, for example, “are elastic [and] form fitting.” *Id.*, 68. EX1002, ¶¶233-34.

#### **O. Claim 11**

Claim 11 merely reverses which of the two knit strips in the upper of claim 1 has the higher degree of stretch—in Claim 10, it is the first knit strip, and in Claim 11, it is the second. Therefore, for the reasons set forth with respect to Claim 10, this claim have been obvious to a POSITA in view of Cusinato, Clark, and/or Spencer. EX1002, ¶¶235-36.

#### **P. Claim 12**

Cusinato in view of Clark and, if necessary, Spencer discloses this claim. Cusinato recognizes the well-known concept that multiple types of yarn, or threads, may be used to form a single textile element. *See, e.g.*, EX1014, [0033] (disclosing “elastic threads”), claims 12-13 (same), [0022] (disclosing use of multiple threads in the same piece of knitted fabric). EX1002, ¶¶237-38.

Spencer also teaches that “[t]he properties of more than one type of fibre may be incorporated into a fabric as the result of blending the fibres during spinning, *or by knitting two or more types of yarn.*” EX1050, 4. EX1002, ¶239.

Clark also teaches using multiple types of yarn in an upper for an article of footwear. EX1002, ¶240. Clark discloses the use of strips having “non-stretchable” Vinyon and strips without Vinyon, both before and after heating. EX1015, 1:25-40. Moreover, Clark explains that “the body of the upper may be knitted of *any yarn* suitable for machine knitting, for example, *chenille yarn* which is readily available in a great variety of colors and weights,” EX1015, 1:41-45, into which “relatively coarse or heavy strands of *vinyon yarn* are laid in place.” *Id.*, 1:46-49.

A POSITA would readily recognize that a first yarn type could be used to create a first property in a first knitted strip and a second yarn type could be used to create a second property in a second knitted strip in the combination of Cusinato, Clark, and/or Spencer. EX1002, ¶240.

**Q. Claim 13**

For the same reasons discussed with respect to Claim 12, it would have been obvious to a POSITA with access to Cusinato, Clark, and/or Spencer to create the upper of Claim 12 with the additional yarn type limitations of Claim 13. EX1002, ¶242.

As explained with respect to Claim 12, a POSITA would understand that different types of yarn may be used to knit a textile element and have different degrees of biodegradability, moisture absorption, insulation, durability, and hydrophobicity. EX1002, ¶244; EX1062, 555-648.

For example, Clark discloses the use of strips having Vinyon and strips without Vinyon to achieve different degrees of durability (strength and “tough[ness]”), both before and after heating. EX1015, 1:25-40.

Spencer teaches that natural fibers such as cotton and wool have different physical and mechanical properties than synthetic fibers like rayon. *See e.g.*, EX1050, 279 (“hydrophilic fibres such as wool and cotton”); 376 (“Yarns with good moisture transportation properties”); EX1002, ¶244.

Therefore, it would have been obvious to a POSITA in view of Cusinato and Clark to create an upper with a first knit strip made up of yarn with a higher degree of any of these qualities than a yarn used for the second knit strip, and a POSITA would reasonably have expected to be successful. EX1002, ¶245.

#### **R. Claim 14**

Claim 14 is substantially the same as Claim 13, and merely recites additional common properties of yarn. It is therefore obvious for the same reasons as Claim 13. EX1002, ¶¶247-49. Moreover, Clark expressly teaches using “vinyon yarn”

threads because of their tendency, after heat treatment, for “strength,” “stiff[ness],” “fit[]” (after heat treatment), and resilien[ce].” EX1015, 1:25-40; 4:24-31.

### S. Claim 15

Independent Claim 15 is substantially similar to Claim 1, with the addition of Element 15[c] (“a sole structure secured to the upper”), and is therefore obvious in light of the combined teachings of Cusinato, Clark, and if necessary, Spencer, for the reasons set forth above with respect to the corresponding limitations of Claim 1. EX1002, ¶250.

| Claim   | Corresponding Analysis             |
|---------|------------------------------------|
| 15[pre] | • Element 1[pre]; EX1002, ¶157-61. |
| 15[a1]  | • Element 1[a1]; EX1002, ¶¶162-77. |
| 15[a2]  | • Element 1[a2]; EX1002, ¶¶178-89. |
| 15[b]   | • Element 1[b]; EX1002, ¶¶190-93.  |

Cusinato, Clark, and/or Spencer either disclose or render obvious Element 15[c], which specifies that the article of footwear further comprises a sole structure secured to the upper. Cusinato’s preferred embodiment is a boot, EX1014, [0015], and Clark’s section 11 is intended “to be incorporated eventually in the *shoe bottom*,” *i.e.*, the sole. EX1015, 3:6-10. EX1002, ¶¶255-56. It also would have

been obvious to modify the footwear disclosed therein to attach a sole in order to provide additional cushioning and protection to the foot. EX1002, ¶257.

**T. Claim 16**

Claim 16 is substantially similar to Claims 7 and 12, and it would be obvious to a POSITA for the same reasons set forth above with respect to Claims 7 and 12. EX1002, ¶258.

**U. Claim 17**

Claim 17 is substantially similar to Claims 2, 4, 5, and 6, and it would be obvious to a POSITA for the same reasons set forth above with respect to those claims. EX1002, ¶259.

**V. Claim 18**

Claim 18 is substantially similar to Claim 3 (“the first and second knit strips alternate with one another...”), which as explained above is rendered obvious by Cusinato in view of Clark and, if necessary, Spencer, and it would be obvious to a POSITA to arrange first and second knit strips parallel to one another for the same reasons set forth above with respect to Claim 3. EX1002, ¶¶260-61.

**W. Claim 19**

Claim 19 is substantially the same as Claim 5, which as explained above is rendered obvious by Cusinato in view of Clark and, if necessary, Spencer, but recites “to an area proximate to *the sole structure*” rather than “to an area proximate to *a lower region of the upper*.” A POSITA would understand that this slight variation

in claim language does not render Claim 19 any more inventive than Claim 5. EX1002, ¶¶262-63.

**X. Claim 20**

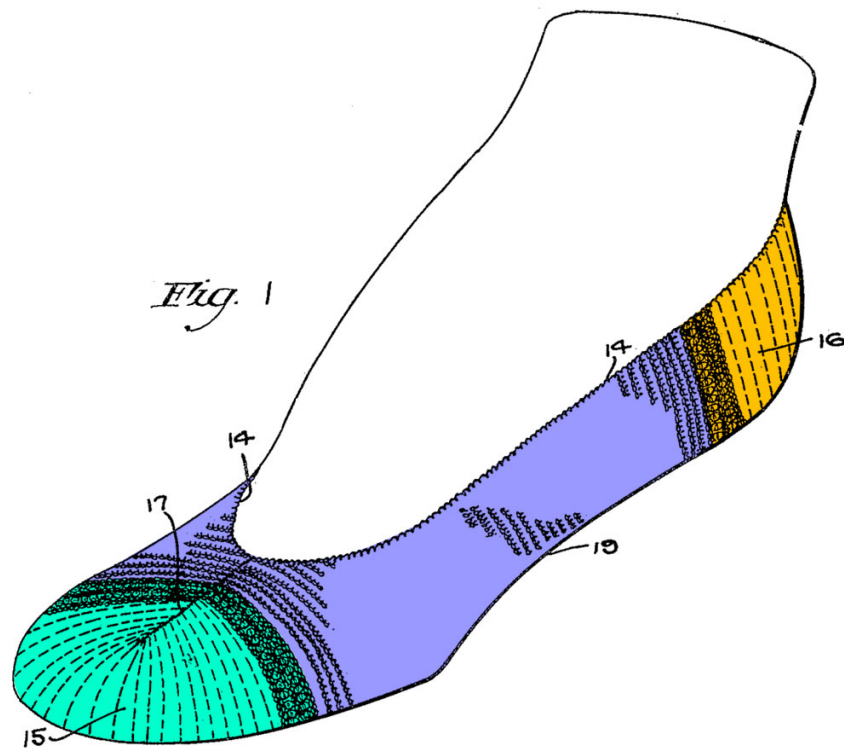
Claim 20 is substantially the same as Claim 6, and introduces the same slight variation in claim language as Claim 19. Claim 20 is therefore obvious for the same reasons set forth above with respect to Claims 5, 6, and 19. EX1002, ¶¶264-65.

**IX. GROUND 2: HERBERT IN VIEW OF CUSINATO AND GLIDDEN AND, IF NECESSARY, SPENCER RENDERS OBVIOUS THE CHALLENGED CLAIMS**

For the reasons set forth below, challenged claims 1-20 are rendered obvious by Herbert in view of Glidden and Cusinato and, if necessary, Spencer.

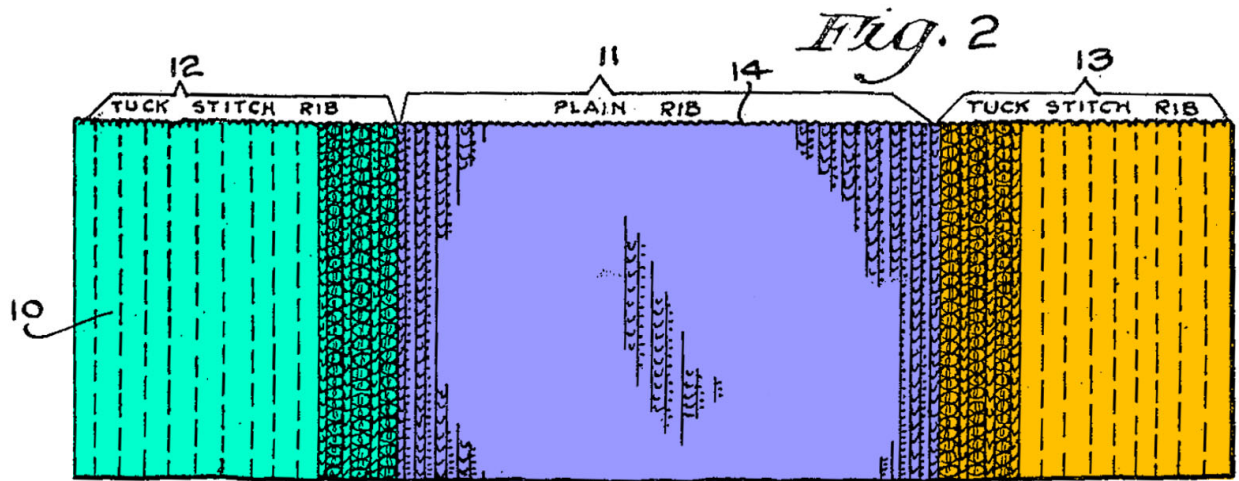
**A. Overview of Herbert**

Herbert, entitled “Foot Covering,” issued in 1946. The patent “relates to knitted *foot coverings* and more particularly to the *slipper* type.” EX1016 (Herbert), 1:4-5. Although the preferred embodiment is a circular knit fabric, Herbert discloses that “cut and sewn *flat rib knitted* fabric may be employed.” *Id.*, 1:48-55, 2:8-9.



Herbert discloses that “one edge” 14 of the circular knit workpiece “has a selvage, this edge forming the upper finished edge of the slipper foot covering.” *Id.*, 2:36-38. “The inherent selvage edge 14...provides a finished edge for the article of apparel without any further operations.” *Id.*, 4:14-17.

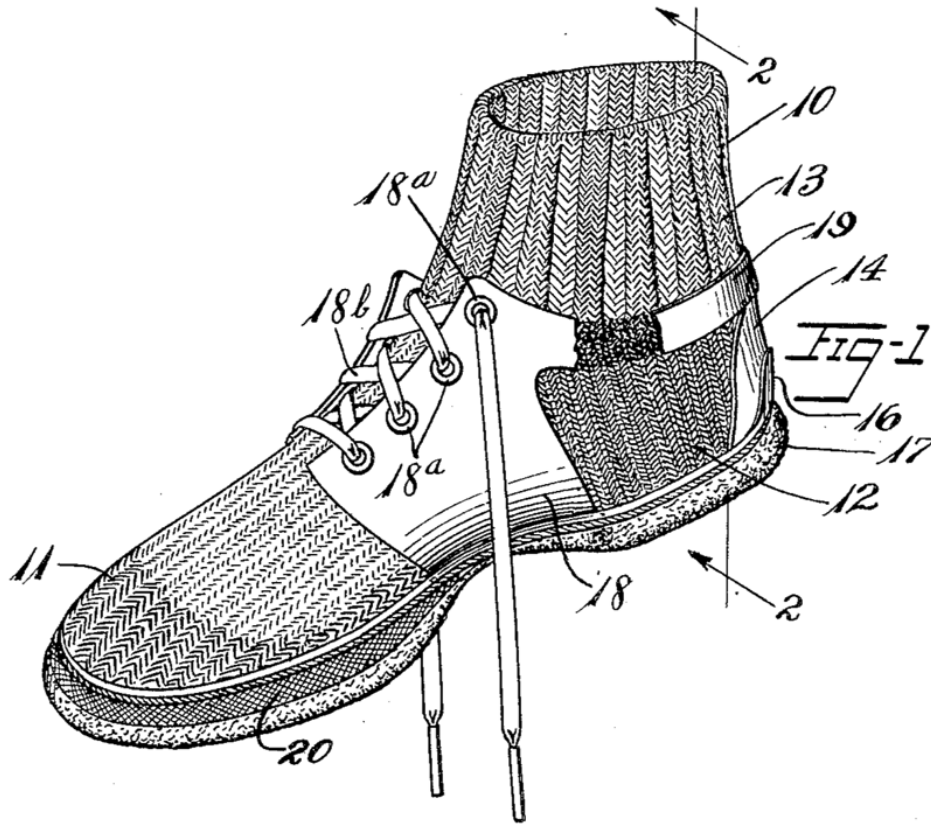
Herbert discloses that the “foot covering [is] rib knitted fabric.” *Id.*, 1:9. The stitching of multiple knit strips is shown in Figure 2, with area 11 comprising plain true ribs and areas 12 and 13 comprising tuck stitch ribs – though other stitches can be used such as “plain jersey fabric” to “reduce the elasticity.” *Id.*, 3:1-6. A POSITA would recognize that each of the plain ribs and tuck stitch ribs disclosed in Herbert constitute knit strips. EX1002, ¶¶124-32.



Herbert discloses that “[i]n the preferred embodiment[,] rib rather than plain fabric is used as the former has a greater stretch...than the latter, although the latter [plain fabric] may be used if desired.” *Id.*, 2:16-29.

## B. Overview of Glidden

Glidden, entitled “Article of Footwear,” issued in 1939. The patent “relates to articles of footwear and to methods of making the same, and is especially useful in the manufacture of shoes having textile uppers.” EX1017 (Glidden) at 1:1-4.



EX1017, Fig. 1.

As shown above, Glidden discloses fabricating different areas having different properties by “*changing the type of stitch or amount or thickness of the yarn in the knitting.*” *Id.*, 2:33-4. For example:

- The toe and heel “may be more densely fabricated to provide...heavier weight and less extensibility than in the other parts of the upper....” *Id.*, 2:36-39.
- The ankle and other areas “are preferably made so as to provide softness and elasticity, as by making them of ribbed construction.” *Id.*, 2:41-44.

Thus, the Glidden shoes have areas of varying textures, thicknesses, elasticities, and densities. EX1002, ¶¶133-36.

**C. Overview of Cusinato**

Cusinato is described above at Section VII.A.

**D. Overview of Spencer**

Spencer is described above at Section VII.C.

**E. Combination of Herbert, Glidden, and Cusinato, and, If Necessary, Spencer**

At the time of the claimed invention, a POSITA would have been motivated to combine the teachings of Herbert, Glidden, and Cusinato, and, if necessary, Spencer and would have had a reasonable expectation of success in doing so. EX1002, ¶146.

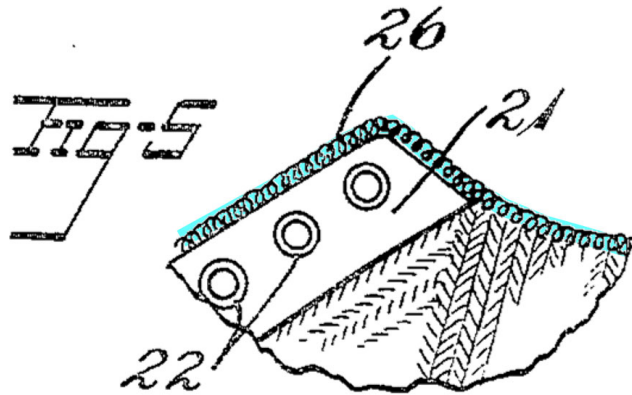
For example, Herbert and Cusinato relate to the design and manufacture of footwear using flat knitting. Herbert explicitly discloses that “cut and *sewn flat* rib *knitted* fabric may be employed without departing from the spirit of the invention.” EX1016 (Herbert), 2:8-10. Cusinato teaches a *flat knit* fabric workpiece that is then *sewn*. EX1014 (Cusinato), [0015]. A POSITA in possession of Herbert would have been motivated to combine it with Cusinato in furtherance of Herbert’s teaching that flat knitting could be used, as well as to take advantage of the benefits of Cusinato’s flat knitting, which eliminated waste and simplified manufacturing by eliminating cutting. EX1002, ¶147. This comports with the purpose of Herbert, which sought a “method of making the finished product...simpler and less expensive.” EX1016, 2:14-15. It is also consistent with the purpose of Glidden, which discloses footwear

“fabricated without substantial waste to the desired shape to accommodate the foot without uncomfortable wrin[k]les.” EX1017, 2:3-10; EX1002, ¶148.

Herbert also discloses the use and advantages of a “selvage” finished edge. A POSITA in possession of Herbert would have looked to Cusinato, which has all finished edges. EX1002, ¶149. A POSITA would understand that all finished edges would eliminate cutting, rendering the “method of making the finished product...simpler and less expensive.” *Id.* Thus, using Cusinato’s flat knit technology to make the ribbed slipper of Herbert would have yielded predictable results, would have constituted simple replacement of an older knitting technique with a more modern one, and would have been obvious to try with reasonable expectations of success. *Id.*

Herbert discusses the use of different stitches as well as ribbed and non-ribbed textures to achieve differing elasticities in different regions of a slipper. EX1002, ¶150. Glidden also discloses the use of different stitches as well as ribbed and non-ribbed textures to achieve differing physical properties, including elasticities, in different regions of a shoe. *Id.* A POSITA in possession of Herbert, looking to build a more rugged knit shoe rather than a knit slipper, would have been motivated to combine Herbert with Glidden to achieve other desired properties in such a shoe, including greater durability and would have had reasonable expectations of success. EX1002, ¶151. While Glidden appears to relate to circular knit technology, both flat

knit and circular knit technology have been used to make shoes. EX1002, ¶152. A POSITA would have recognized that one could substitute Cusinato's and/or Herbert's flat knit technology for Glidden's knit technology, and that such substitution would have yielded predictable results, would have constituted simple substitution or application of a more modern knitting technique for an older one, and would have been obvious to try with reasonable expectations of success. *Id.* Indeed, such a substitution would have simplified the additional step disclosed in Glidden of finishing the "raw textile edges" through the use of additional stitching, making the solution one that would be obvious to try with a reasonable expectation of success. *Id.*



EX1017, at Fig. 5 and 3:56-64. EX1002, ¶152.

Moreover, a POSITA in possession of Herbert, Glidden, or Cusinato would have consulted Spencer, a seminal "handbook" and "practical guide," regarding how to do so, as set forth above in Section VIII.D. EX1002, ¶¶153-54. Such a reference would teach how to substitute or use known methods to yield predictable results,

how to apply known techniques to improve a known method or product, which techniques or structures would be obvious to try (with reasonable expectations of success – they’re in a reference book), and the use of other teachings, suggestions, and motivations to combine. *Id.*

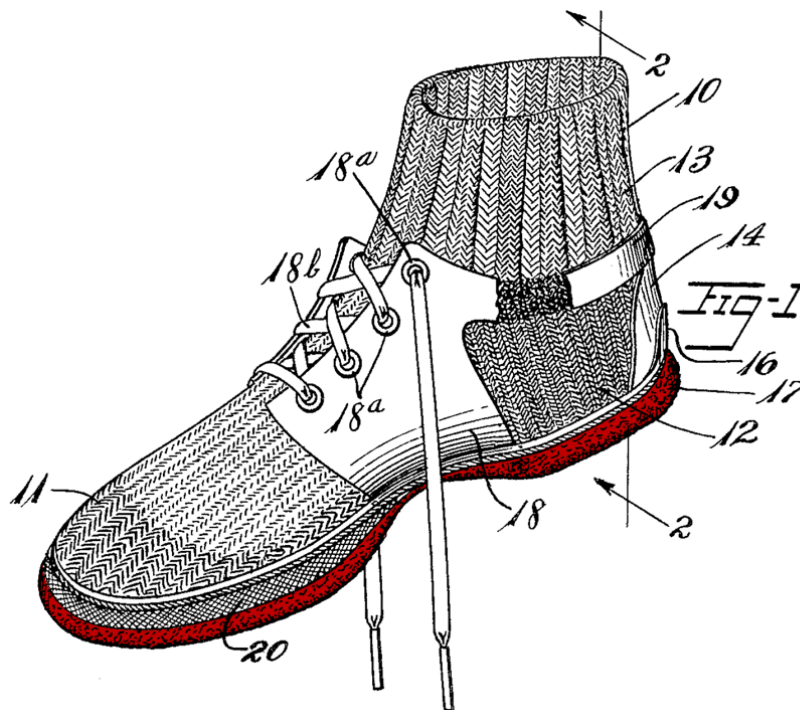
Finally, the Obvious Design Choices, set forth above in Section VIII.D, would all have been obvious or obvious to try from the perspective of a POSITA familiar with either footwear or textiles. EX1002, ¶¶155-56. *See In re Rice*, 341 F.2d at 314. At the time of the invention, a POSITA would have been motivated to combine the teachings of Herbert, Glidden, Cusinato, and Spencer, and would have had a reasonable expectation of success in doing so, insofar as aesthetic changes and the implementation of different physical properties in knits was well known. *Id.* And, at the time of the invention, a POSITA would have thought it obvious or obvious to try modifying Herbert, Glidden, Cusinato, and Spencer, or any combination thereof, to add elements of any or all of the Obvious Design Choices. *Id.* Insofar as the changes are well-known aesthetic or functional changes, a POSITA would have reasonable expectations of success. *Id.*

## F. Claim 1

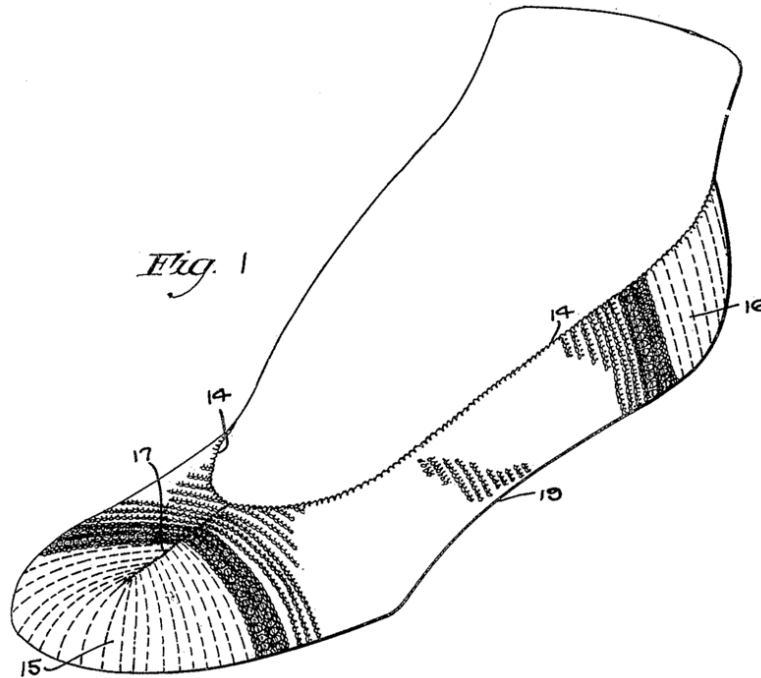
### 1. Element 1[pre]

If the preamble is limiting, Herbert, Glidden and Cusinato each disclose an upper for an article of footwear. EX1002, ¶266. Glidden relates to “articles of footwear...and is especially useful in the manufacture of shoes.” EX1017, 1:1-4;

Fig. 1. Note outsole 17:



Herbert discloses a “*slipper* foot covering,” including a “*sole*” (in case Patentee asserts that Herbert is simply a sock). EX1016, 1:48, 3:17.



And Cusinato discloses “a fabric...[that] directly forms the stocking or *footwear*,” specifically a “*boot*.” EX1014, [0010], [0013]. A POSITA would also consider it obvious to add a more rugged sole to the “*slipper*” in Herbert or the “*boot-like*” form in Cusinato. EX1002, ¶¶268-69.

## 2. Element 1[a1]

Herbert in view of Cusinato and Glidden and, if necessary, Spencer discloses Element 1[a1] under either party’s construction.

### Flat knit textile element with flat knit edges

Herbert teaches that “cut and sewn *flat* rib *knitted* fabric may be employed” to create the disclosed slipper type foot covering. EX1016, 2:8-9. Herbert also discloses flat knit edges. *Id.*, 4:14-17 (“The inherent selvage edge 14...provides a

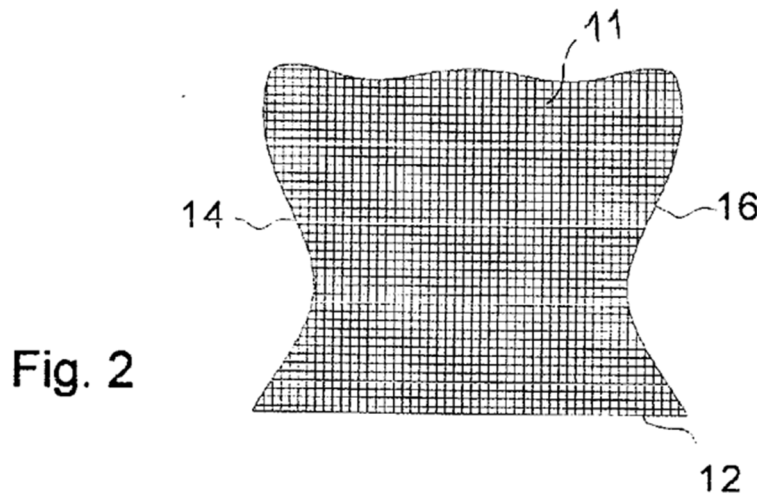
finished edge for the article of apparel without any further operations.”); EX1002, ¶272.

As set forth above, Cusinato discloses a flat knit fabric element comprising “flat knit edges.” *See* Section VIII.E.2, *supra*. EX1002, ¶273.

Finally, if Patentee argues that these references do not disclose flat knit edges, such technology is disclosed in Spencer. EX1050, 185 “[T]he advantages of flat knitting are...[t]he...*selvedge* edges can be...seamed together, without the need for cutting...” EX1002, ¶274.

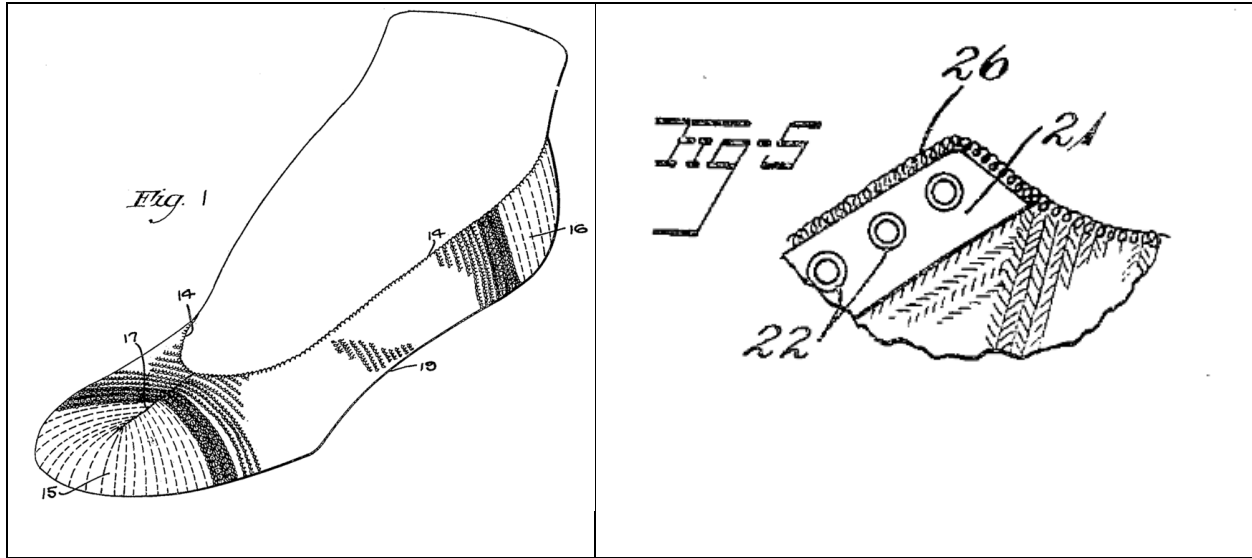
### **Curved flat knit edges**

As set forth above in Section VIII.E.2, Cusinato expressly discloses *curved* flat knit edges:



EX1014, [0005]-[0007], [0015], Figs. 2, 3. EX1002, ¶275.

A POSITA would understand that the use of such curved edged structures would be especially useful for footwear, including Herbert and Glidden, which have curved edges:



EX1016, Fig. 1; EX1017, Fig. 5; EX1002, ¶276.

Spencer also expressly discloses using flat knitting to create a textile element with at least one curved edge. *See supra* Section VIII.E.2; *see also* EX1050, 184, 188. EX1002, ¶277.

A POSITA in possession of Herbert, Glidden, Cusinato, and if necessary, Spencer, would thus have understood that a combination of their teachings would have disclosed the claimed “curved flat knit edge.” EX1002, ¶278.

**Free of surrounding textile structure**

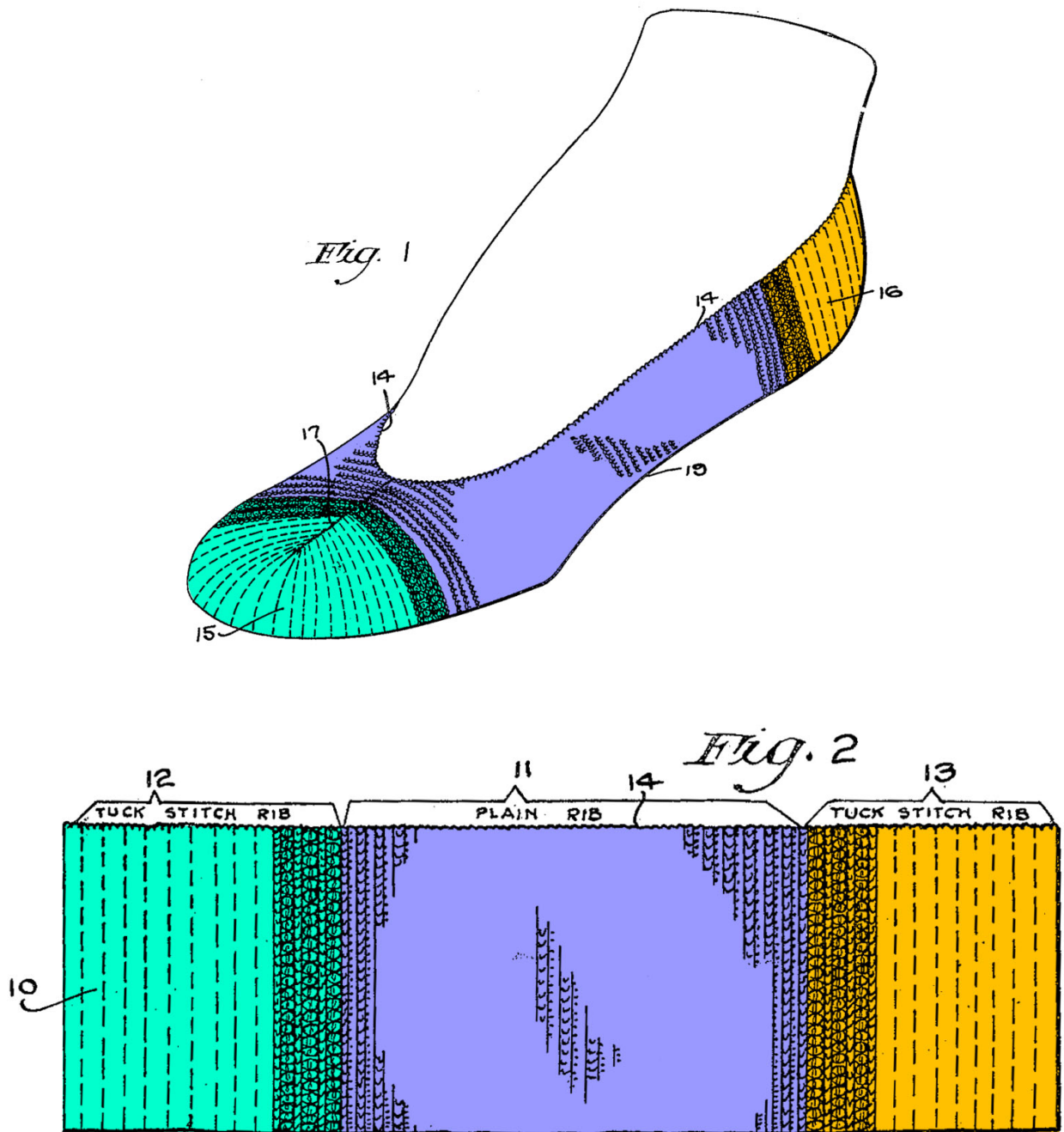
As set forth above in Section VIII.E.2, Cusinato discloses that its flat knit edges are “free of surrounding textile structure...from which the textile element must be removed.” EX1014, [0007]-[0008]; Fig. 2. EX1002, ¶279.

Likewise, Herbert teaches that selvedging “provides a finished edge for the article of apparel without any further operations” and Spencer teaches seaming selvedged edges “without the need for cutting.” EX1016, 4:14-17; EX1050, 185. EX1002, ¶¶280-81.

**3. Element 1[a2]**

As discussed above in Section VIII.E.3, other than dependent claims 10-11 and 13-14, none of the claims require that the strips serve any functional purpose. EX1002, ¶282. The patent specification confirms this in reference to two “properties,” textures and stitches, that exhibit “*aesthetic*” qualities. EX1001, 10:4-5, 16-19.

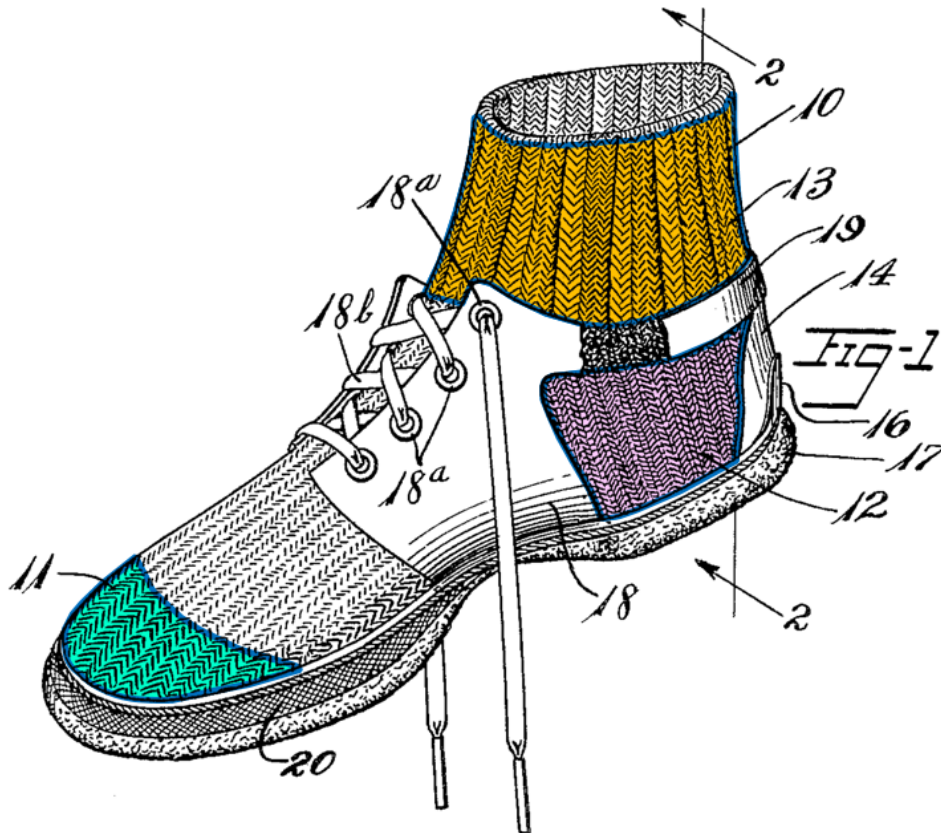
A POSITA would understand that Herbert and Glidden, and if necessary, Spencer, discloses knit strips with different properties. EX1002, ¶283. Figures 1 and 2 of Herbert depict these knit strips:



Herbert discloses that tuck stitch rib 12 and plain rib 11 are knit strips of different properties. EX1016, 2:50-54. EX1002, ¶¶284-85. Herbert further discloses that “[t]he areas 12 and 13 may contain other stitch variations than the tuck

stitches, such, for example, as transferred stitches or they may be made of plain jersey fabric.” EX1016, 3:1-4.

A POSITA would recognize that Glidden discloses multiple knit strips with different properties, for example, the toe portion 11, heel portion 12, and ankle portion 13, illustrated in Figure 1. EX1002, ¶286:

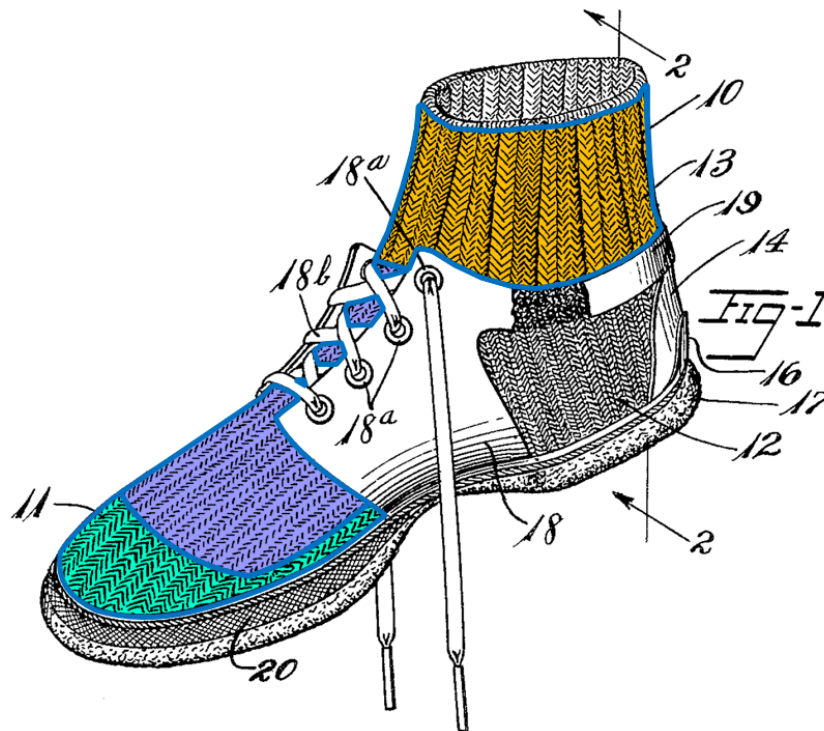


With reference to Figure 1, Glidden describes how:

In fabricating the unitary upper, as by knitting, areas thereof which are normally subjected to greater wear and in which a **lower degree of elasticity** is desired, such as the toe 11 [green] and the heel portion 12 [pink], may be **more densely fabricated** to provide therein **heavier weight and less extensibility** than in the other parts of the upper, as by changing the type of stitch or amount of **thickness of the yarn** in the knitting. Other areas, such as the ankle portion 13 [orange], are

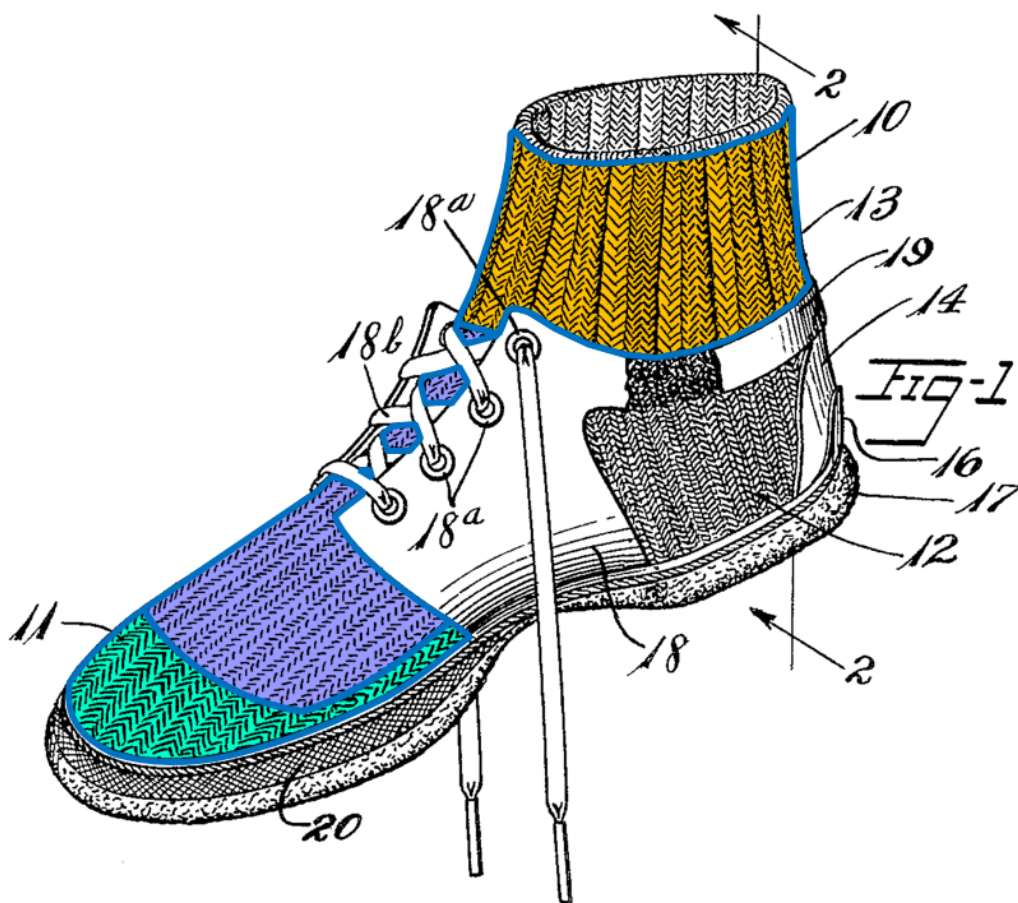
preferably made so as to provide *softness* and *elasticity*, as by making them of *ribbed construction*, as shown.

EX1017, 2:19-44. These different properties include elasticity, density, weight, extensibility, yarn thickness, softness, elasticity, and texture (ribs). EX1002, ¶¶286-87. A POSITA would recognize that yarns of different thickness would provide different physical and mechanical properties. EX1002, ¶288. And a POSITA would recognize that textures would provide different physical and mechanical properties. *Id.* For example, the “ankle portion...[is] preferably made so as to provide...elasticity.” EX1017, 2:33-44:



Accordingly, a POSITA would understand Glidden as having at least a first knit strip having a first property and a second knit strip having a second property that is different from the first property. *Id.*

A comparison of Glidden with a colored version of the accused shoe is provided below. Note the distribution of the textured strips in both:

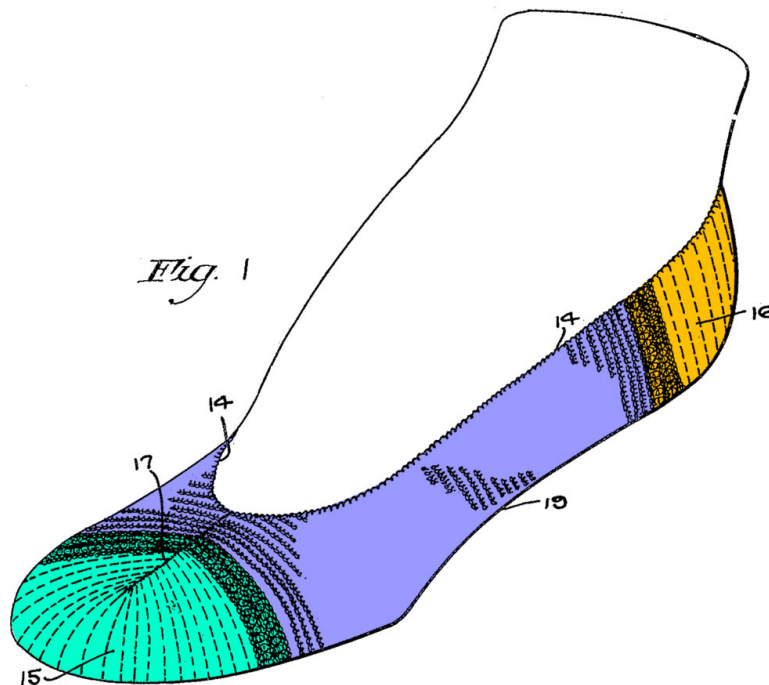


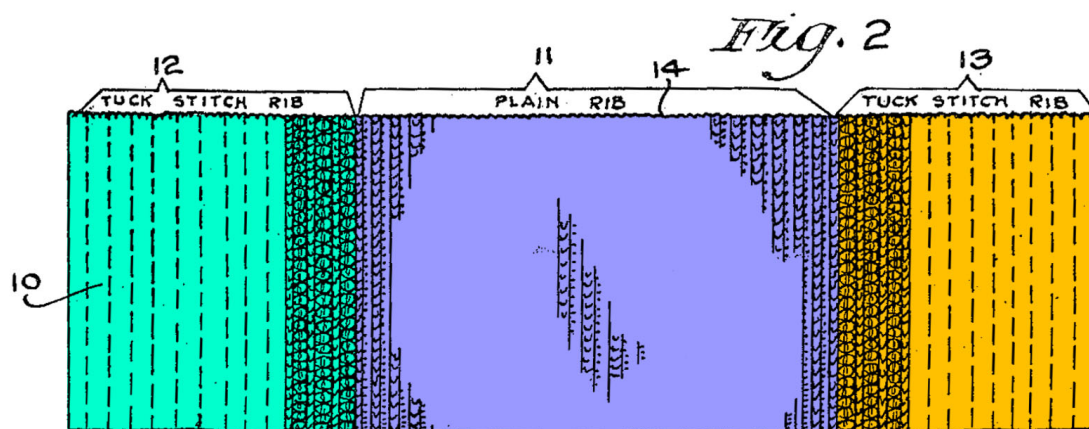
EX1011, 102 (flipped horizontally); EX1017, Fig. 1.

In addition, Herbert's and Glidden's disclosures may be combined with Cusinato and/or Spencer, which discloses knit strips with different properties, as discussed above in Section VIII.E.3. EX1002, ¶¶290-91.

#### 4. Element 1[b]

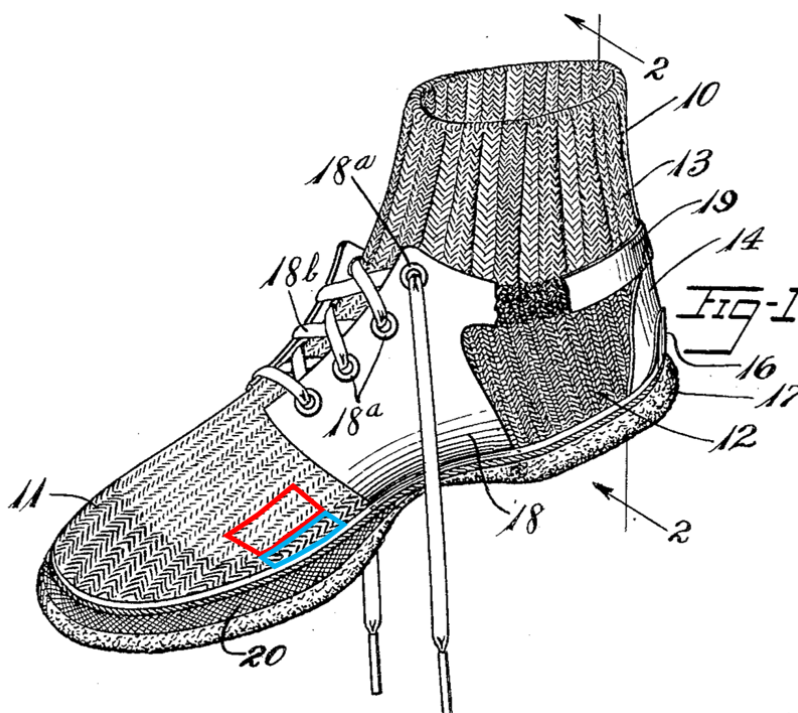
In Herbert, knit strips of different properties are positioned adjacent to each other along a lateral or medial side of the upper. Figures 1 and 2 of Herbert depict these knit strips as “tuck stitch rib” (12 and 13) and “plain rib” (11) fabric:

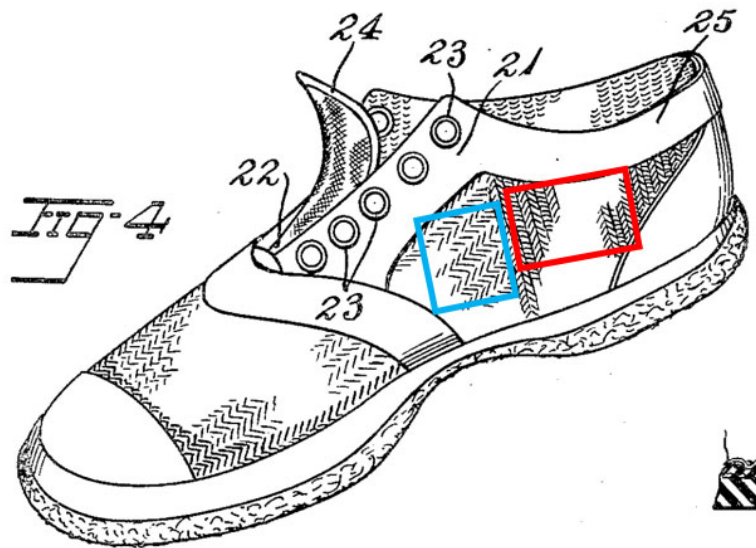




EX1002, ¶293.

In Figures 1 and 4, Glidden discloses multiple different fabric textures adjacent to one another on the medial side of the upper:





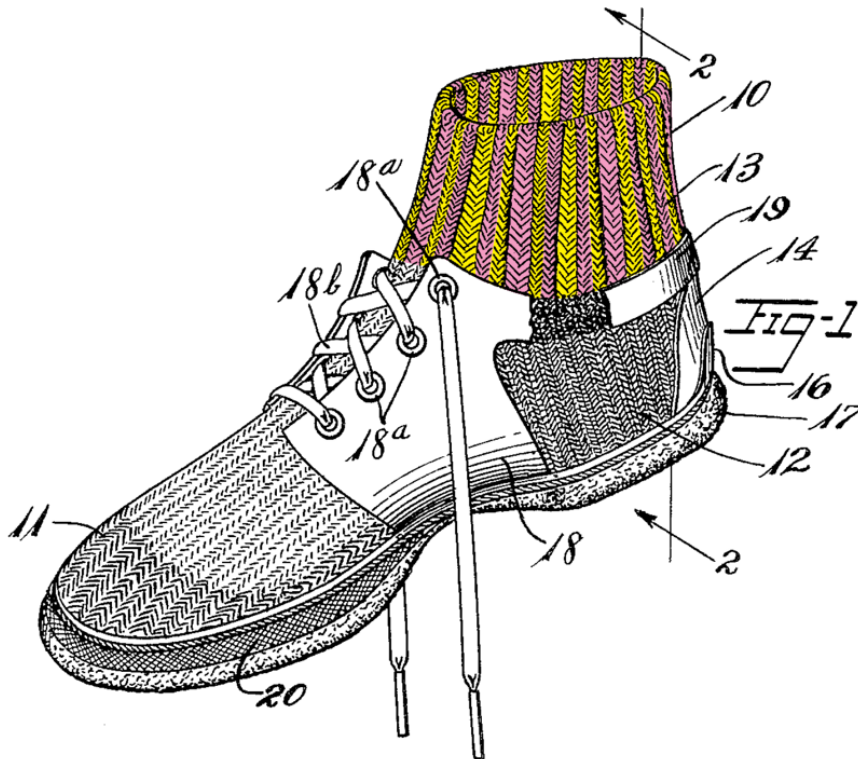
EX1017, Figs. 1, 4; *see also id.*, 2:19-44; EX1002, ¶294. A POSITA would understand this disclosure as a first knit strip and second knit strip positioned adjacent to each other along one or more of a lateral side and a medial side of the upper because the two strips depicted in Figure 1 contain different textures and are adjacent to each other. EX1002, ¶294.

It would have been obvious to a POSITA to use the textured strips of Glidden or Herbert for aesthetic purposes in Cusinato, arranged in accordance with the limitations of this claim element. EX1002, ¶295. Such a design choice would be obvious or obvious to try in the fashion industry, of which footwear and textiles are a part, and a POSITA would have a reasonable expectation of success. *See the Obvious Design Choices, supra* VIII.D. EX1002, ¶295-96.

### G. Claim 2

For the same reasons discussed with respect to Claim 1, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 1 with the additional *aesthetic* limitations of claim 2. EX1002, ¶297.

In Figure 1, Glidden discloses a plurality of both first and second knit strips:



EX1017, Fig. 1; *see also id.*, 2:19-44. Moreover, Spencer discloses patterns of repeating strips, for example, ribs. *See supra* at Section VIII.G; EX1050, 186:

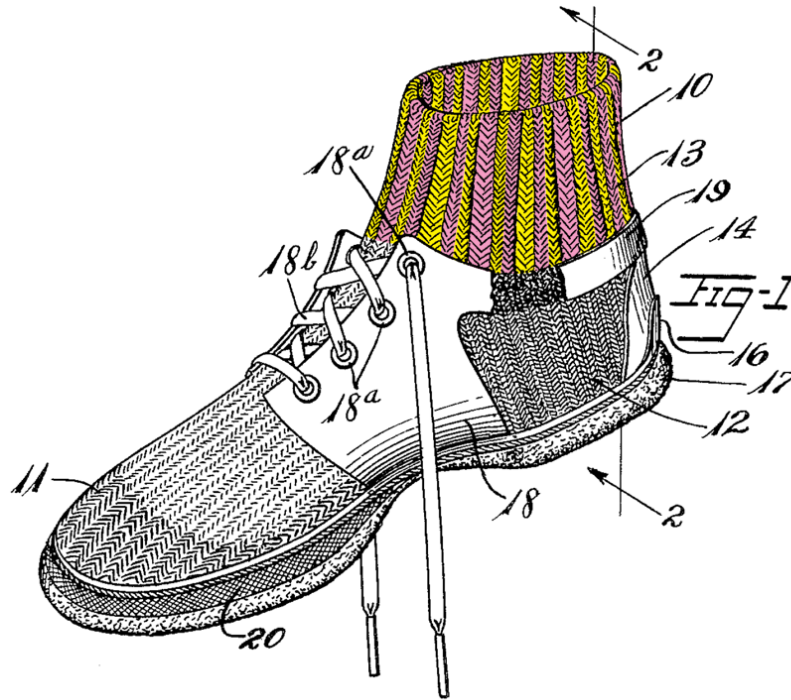


Finally, using a plurality of first and/or second knit strips would have been an obvious design choice to a POSITA, as it would simply require increasing the number of strips, and a POSITA would reasonably have expected to successfully do so. EX1002, ¶¶298-301; *supra* Obvious Design Choices, Section VIII.D.

#### **H. Claim 3**

For the same reasons discussed with respect to Claim 2, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 1 with the additional *aesthetic* limitations of claim 3. EX1002, ¶302.

Glidden discloses a plurality of first knit strips and second knit strips that alternate with one another along the lateral and medial sides:



EX1017, Fig. 1; *see also id.*, 2:19-44; EX1002, ¶303.

Moreover, Spencer discloses alternating patterns, for example, ribs. *See supra* at Section VIII.G; EX1050, 186:



EX1002, ¶304.

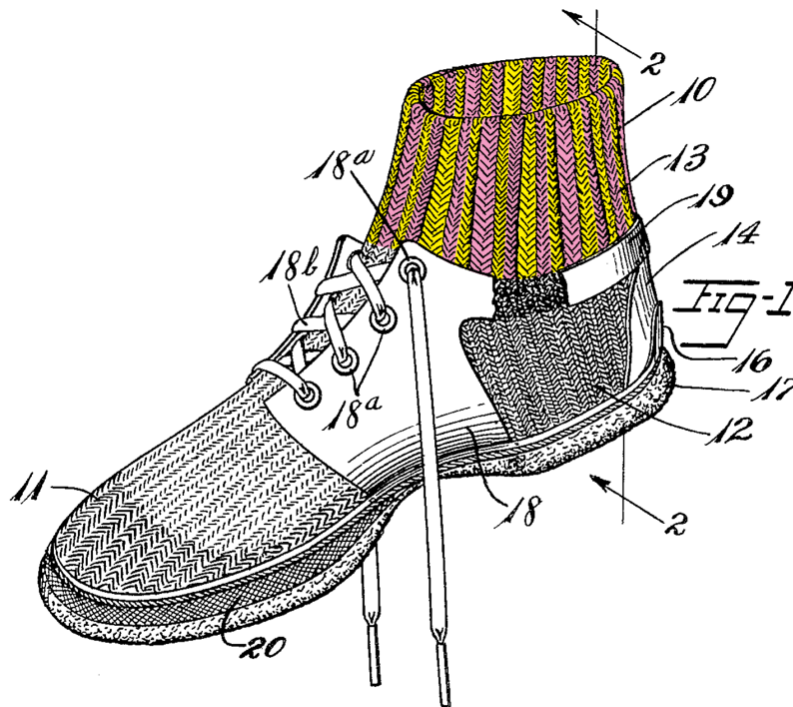
Finally, arranging first and second knit strips in an alternating pattern would have been an obvious design choice to a POSITA, as it would simply require

repeating the pattern used for each knit strip in an alternating fashion, and a POSITA would reasonably have expected to successfully do so. EX1002, ¶¶305-06; *see also* Obvious Design Choices, Section VIII.D, *supra*.

### I. Claim 4

For the same reasons discussed with respect to Claim 2, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 1 with the additional *aesthetic* limitations of claim 4. EX1002, ¶307.

Glidden discloses a plurality of both first and second knit strips:



EX1017, Fig. 1; *see also id.*, 2:19-44; EX1002, ¶308. .

Moreover, Spencer discloses a plurality of both first and second knit strips, for example, ribs. *See supra* at Section VIII.H; EX1050, 186:



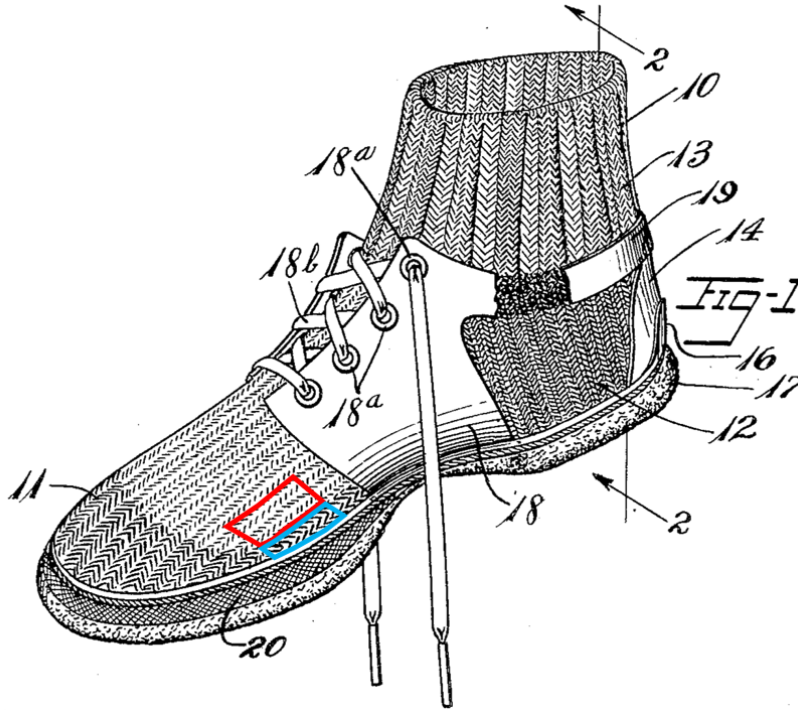
EX1002, ¶309.

Finally, using a plurality of first and a plurality of second knit strips would have been an obvious design choice to a POSITA, as it would simply require increasing the number of strips, and a POSITA would reasonably have expected to successfully do so. EX1002, ¶¶310-11; *see also* Obvious Design Choices, Section VIII.D, *supra*.

#### **J. Claim 5**

For the same reasons discussed with respect to Claim 1, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 1 with the additional *aesthetic* limitations of claim 5. EX1002, ¶312.

Glidden discloses strips that meet this limitation on the medial side, but disclosure of the lateral side is implicit by the generally symmetrical nature of the upper depicted in Glidden and would have been an obvious design choice for a POSITA:



EX1016, Fig. 1; *see also id.*, 2:19-44; EX1002, ¶¶313-14.

It would also have been obvious to a POSITA to use the textured strips of Glidden or Herbert for aesthetic purposes in Cusinato, arranged in accordance with the limitations of this claim element. EX1002, ¶¶315-16. Such a design choice would be obvious or obvious to try in the fashion industry, of which footwear and textiles are a part, and a POSITA would have a reasonable expectation of success. *See the Obvious Design Choices, supra* VIII.D. EX1002, ¶¶315-16.

#### K. Claim 6

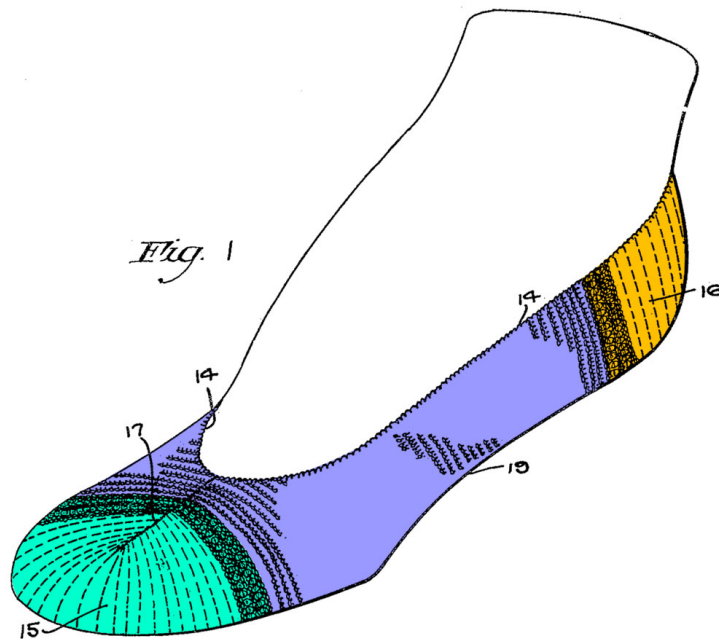
The only difference between Claims 5 and 6 is the side of the upper to which each claim refers (“medial”), which is disclosed in Glidden. Therefore, Claim 6

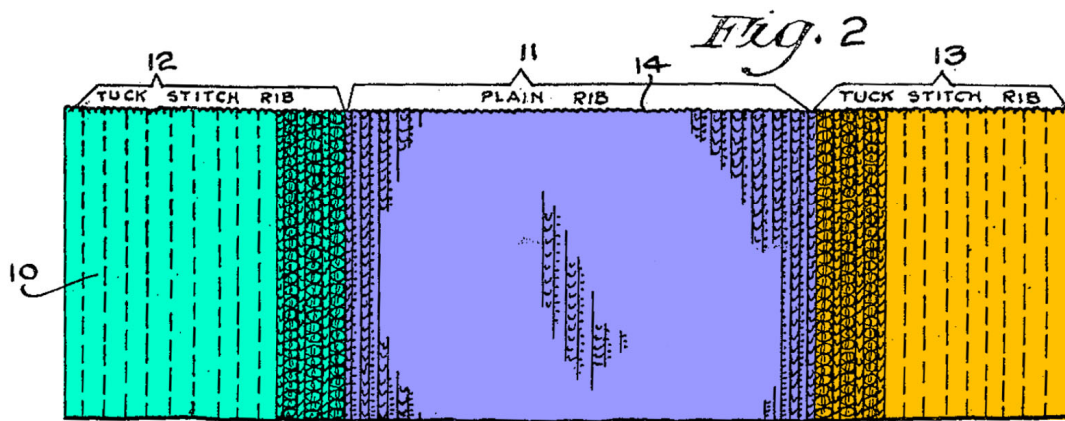
would have been obvious to a POSITA for the same reasons discussed with respect to Claim 5. EX1002, ¶317.

### L. Claim 7

For the same reasons discussed with respect to Claim 1, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 1 with the additional *aesthetic* limitations of claim 7. EX1002, ¶318.

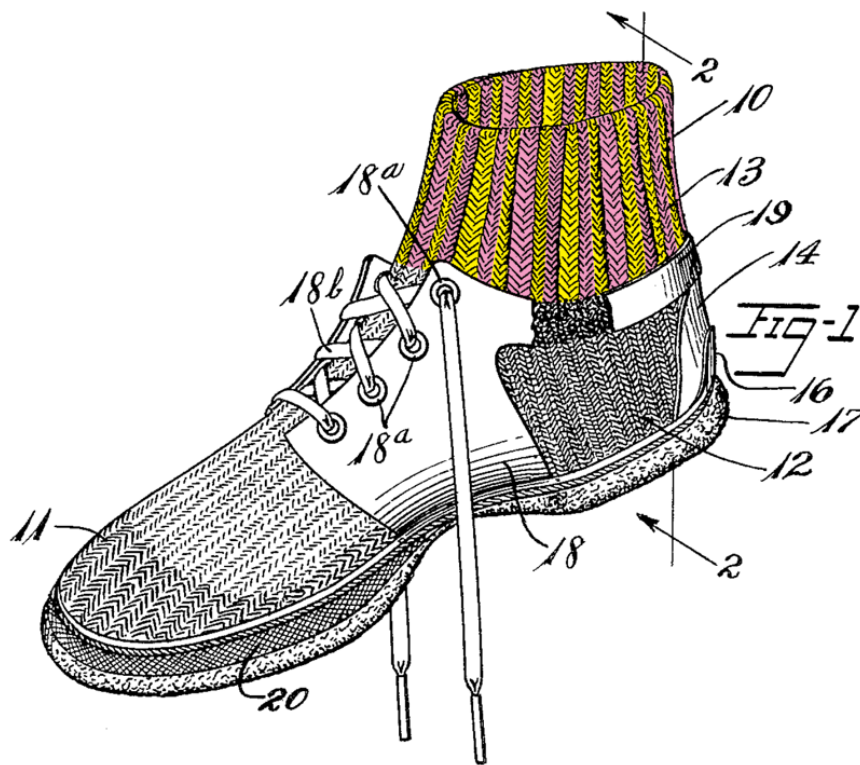
Herbert and Glidden each disclose a first strip with one knit construction/stitch and a second strip with a different knit construction/stitch. Herbert depicts these knit strips as “tuck stitch rib” and “plain rib”:





EX1016, Figs. 1-2; EX1002, ¶319.

Glidden discloses multiple different textures adjacent to one another on the upper formed “by changing the type of stitch,” which a POSITA would understand utilize different constructions. *See supra* Section IX.F.3.



EX1017, Fig. 1; EX1002, ¶319.

Spencer also teaches first and second knit strips with different knit constructions/stitches. *See supra* Section VIII.M; EX1050, 191; EX1002, ¶320:

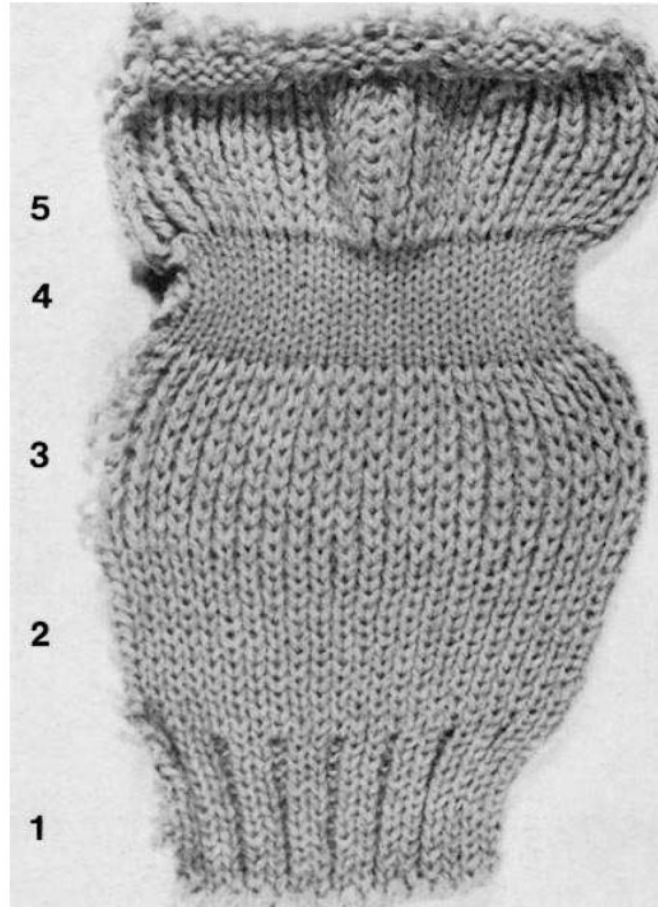


**Fig. 16.13** Stitch shaping (1 = 2 × 2 rib; 2 = 1 × 1 rib; 3 = half-cardigan; 4 = tubular courses; 5 = full cardigan).

Moreover, such an aesthetic design would have been an obvious design choice to a POSITA. EX1002, ¶321. It would have been obvious to a POSITA to use the textured strips of Glidden or Spencer for aesthetic purposes in Herbert, but to vary the stitches to achieve different textures, and a POSITA would reasonably have

expected to successfully do so. *See* the Obvious Design Choices, *supra* VIII.D. EX1002, ¶¶321-22.

### M. Claim 8

For the same reasons discussed with respect to Claim 1, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 1 with the additional *aesthetic* limitations of claim 8. EX1002, ¶323.

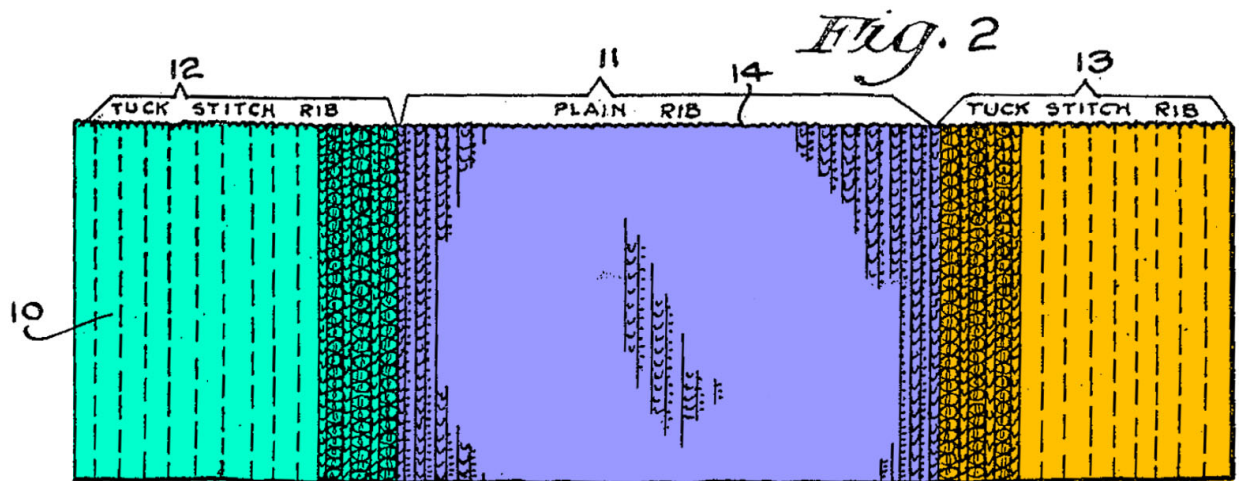
Section VIII.L *supra* discusses how patentee has accused shoes (exemplars below) with “smooth” and “rough” “textures,” establishing that Patentee views these terms as just a matter of degree rather than a numerically precise definition:



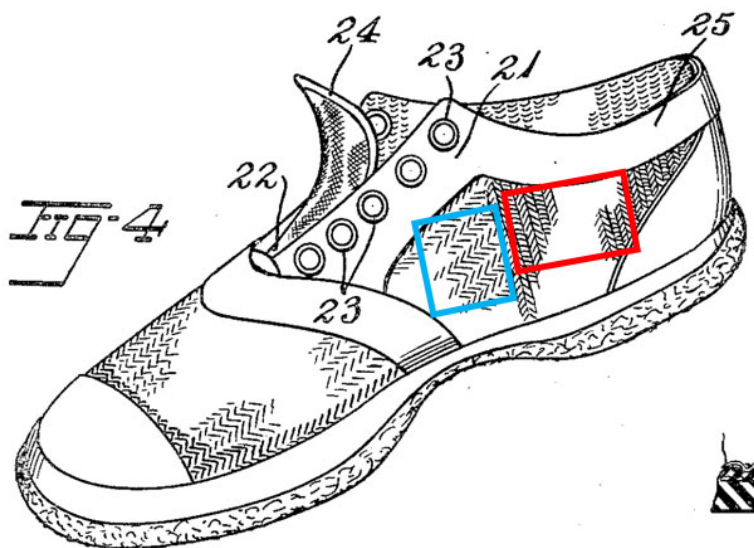
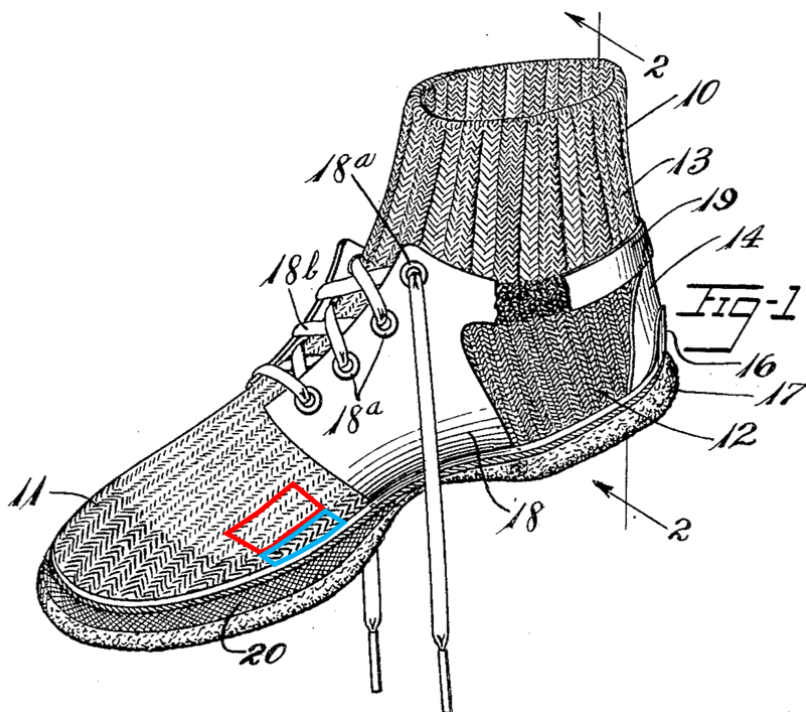


EX1011, 88, 95; EX1002, ¶324.

Herbert discloses multiple knit strips of varying textures positioned adjacent to each other. Herbert discloses that smooth “plain jersey fabric” can be substituted for rougher ribbed fabric at 12 and 13, leading a POSITA to understand that one texture is rougher than the other texture. EX1016, Fig. 2, 3:1-8; EX1002, ¶325.



As discussed with respect to Claim 7, Glidden discloses multiple different fabric textures adjacent to one another on the medial side of the upper:



EX1017, Figs. 1, 4; EX1002, ¶326.

A POSITA would also understand that the knit strips disclosed by Glidden are made with different stitch types and will therefore have different textures, some smoother and some rougher, and that one stitch type would necessarily be smoother than the other. EX1002, ¶327; *see also* EX1001 at 9:65-66. To the extent the claimed properties are not expressly disclosed in Herbert or Glidden, they would have been an obvious design choice for a POSITA, who would reasonably have expected to be successful. *See* the Obvious Design Choices, *supra* VIII.D. EX1002, ¶¶328-29.

#### N. Claim 9

Glidden discloses that “[t]he principal objects of the present invention are to provide...*breathability*.” EX1017, 1:25-27. Glidden also discloses using “knitted material providing...*ventilating porosity* by virtue of the knitted construction.” *Id.*, claim 2. EX1002, ¶¶330-31.

Although apertures are not disclosed in Glidden, further enhancing breathability and ventilation would have been an obvious design choice to a POSITA because ventilation is important for footwear. EX1002, ¶¶332-33. The use of apertures would have been obvious or obvious to try. *Id.* And Spencer discloses knitting open-work structures that have apertures. EX1050, 57-58. Moreover, as discussed in Section VIII.M above, such a design would have been an obvious

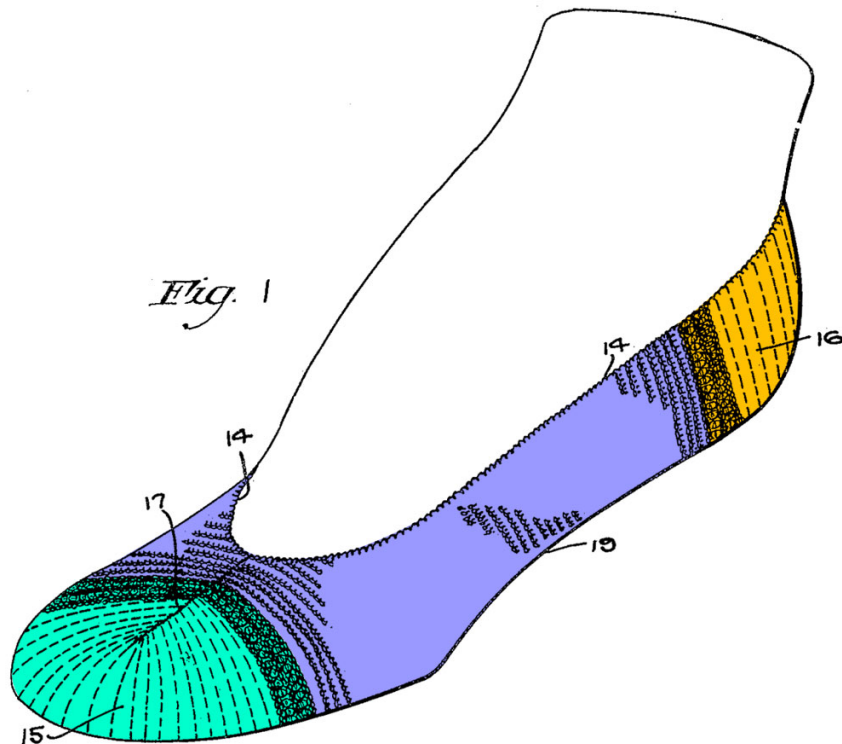
design choice to a POSITA, who would reasonably have expected to be successful.

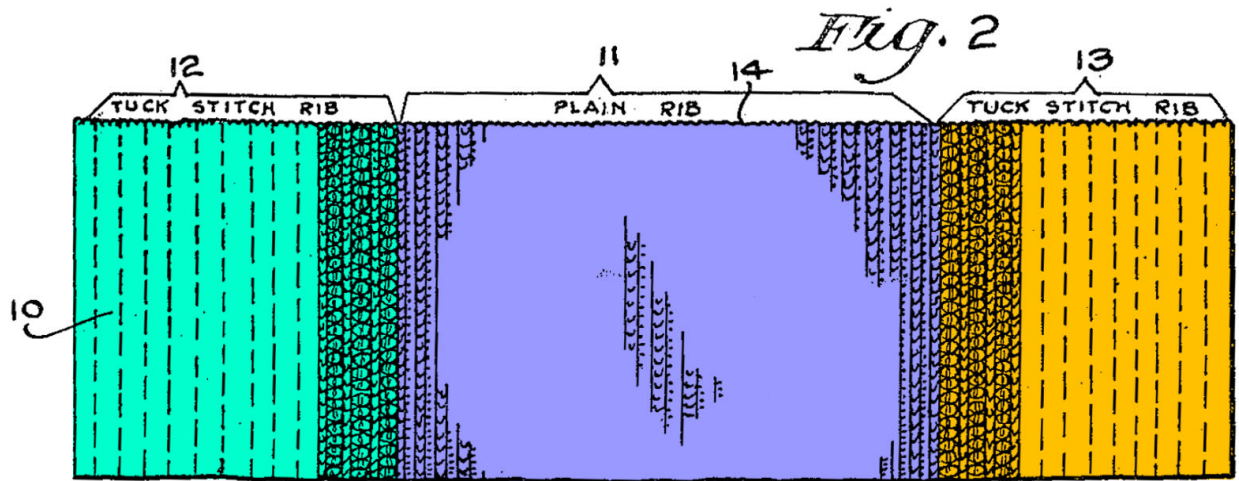
*Id.*

## O. Claim 10

For the same reasons discussed with respect to Claim 1, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 1 with the additional limitations of claim 10. EX1002, ¶334.

Herbert discloses a plurality of knit strips with different degrees of stretch on the same upper:

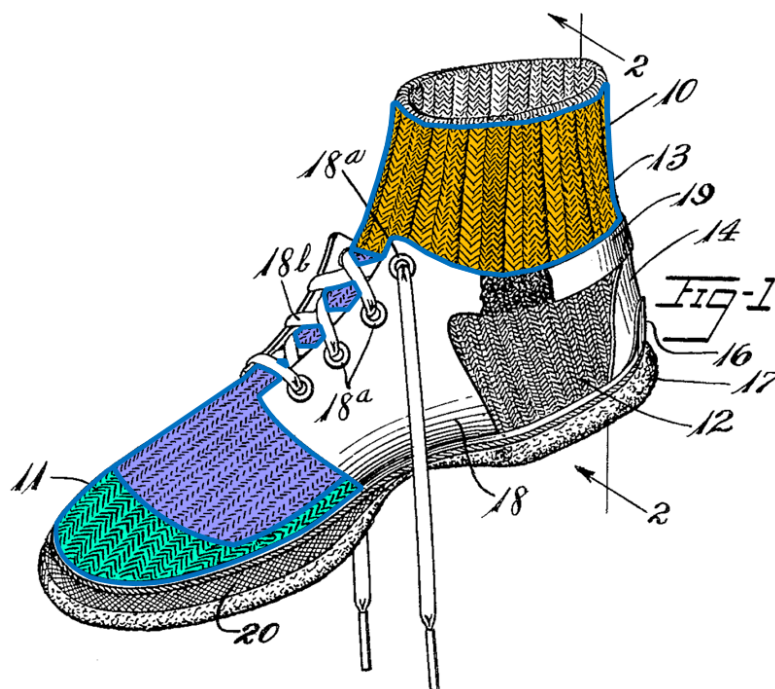




EX1016, Figs. 2-3; EX1002, ¶335.

Herbert discloses that the “true rib fabric [in purple area] may be used throughout the slipper foot, but if less stretch is desired in the heel and toe areas [green and gold]...then the stitch structure...may be varied...to reduce the elasticity of the same.” *Id.*, 2:19-29; 3:1-8; 4:4-14; EX1002, ¶336.

Glidden discloses a plurality of knit strips with different degrees of stretch on the same upper. EX1002, ¶337. For example, the “ankle portion...[is] preferably made so as to provide...elasticity” compared to other strips. EX1017, 2:33-44:



Spencer also discloses strips of varying elasticities.

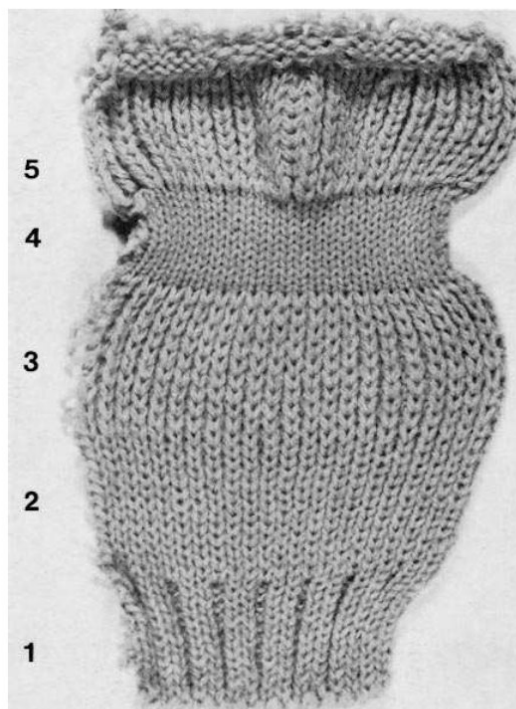


**Fig. 16.13** Stitch shaping (1 = 2 × 2 rib; 2 = 1 × 1 rib; 3 = half-cardigan; 4 = tubular courses; 5 = full cardigan).

EX1050, 191; EX1002, ¶338.

**P. Claim 11**

Claim 11 merely reverses which of the two knit strips in the upper of claim 1 has the higher degree of stretch. For the same reasons set forth with respect to Claim 10, this claim have been obvious to a POSITA. EX1002, ¶¶340-41.

**Q. Claim 12**

For the same reasons discussed with respect to Claim 1, it would have been obvious to a POSITA with access to Herbert, Glidden, Cusinato, and/or Spencer to create the upper of claim 1 with the additional limitations of claim 12. EX1002, ¶342.

Glidden discloses a plurality of strips each different yarns of different thickness. In particular, portions of the upper “may be more densely fabricated to provide therein heavier weight and less extensibility than in the other parts of the upper, as *by changing the...thickness of the yarn* in the knitting.” EX1017, 2:33-44; *see also* 2:23-32; EX1002, ¶¶343-44. Thickness is a property. *Id.*

Spencer discloses the use of different yarns on the same knitted workpiece, including the “use of Lycra or other elastane yarns...at every course or at alternate courses....” EX1050, 260. Spencer teaches “precisely plac[ing] spliced areas of elastane yarns to give selective comfort support whilst saving expensive yarn.” *Id.*, 264; EX1002, ¶345.

Therefore, a POSITA would readily recognize that a first yarn type could be used to create a first property in a first knitted strip and a second yarn type could be used to create a second property in a second knitted strip in the combination of Herbert, Glidden, Cusinato, and/or Spencer, including to achieve certain functional benefits. EX1002, ¶¶345-46. Such properties include the ones recited in claims 13 and 14. *Id.*

#### **R. Claim 13**

For the same reasons discussed with respect to Claim 12, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 12 with the additional limitations of claim 13. EX1002, ¶347.

Glidden teaches that using a thicker yarn in one region would provide “heavier weight...than in the other parts of the upper.” EX1017, 2:37-39. A POSITA would understand that, all things being equal, a heavier weight yarn and a strip made of such yarn would provide both greater “insulation” and “durability.” EX1002, ¶348-49.

A POSITA would also recognize the use of two different yarn types could be used to achieve the functional benefits of claim 13, and would reasonably have expected to succeed in doing so, for the reasons discussed above in claim 12 and here. *Id.*

**S. Claim 14**

For the same reasons discussed with respect to Claim 12, it would have been obvious to a POSITA with access to Herbert, Glidden, and Cusinato to create the upper of claim 12 with the additional limitations of claim 14. The thicker yarn disclosed in Glidden would have “higher strength” and a thicker “form.” EX1002, ¶351. Moreover, Glidden discloses that strips knitted of such yarn would have “less extensibility” (*e.g.*, greater stiffness) and heavier weight (*e.g.*, strength). EX1017, 2:33-39; EX1002, ¶¶352-53.

A POSITA would also recognize the use of two different yarn types could be used to achieve the functional benefits of claim 14, and would reasonably have expected to succeed in doing so, for the reasons discussed above in claim 12 and here. EX1002, ¶¶352-53.

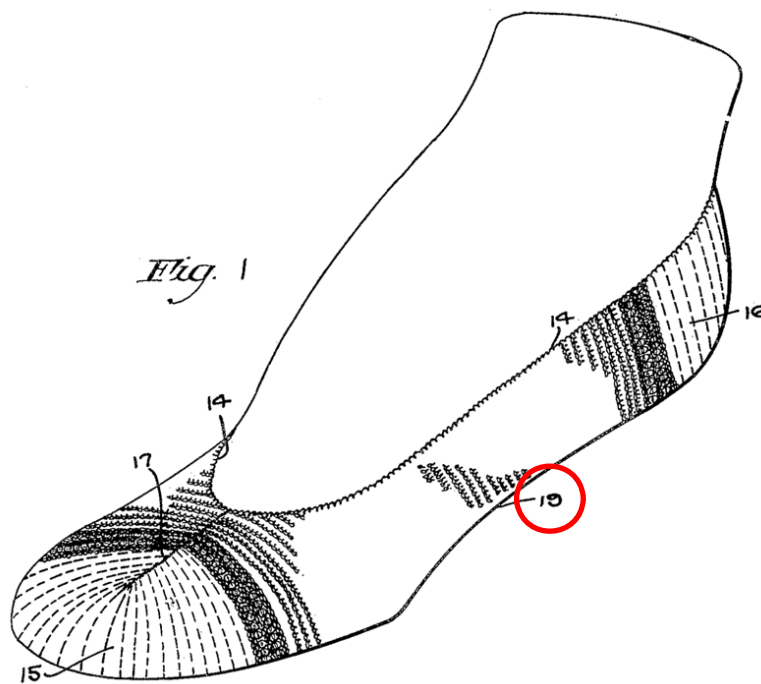
**T. Claim 15**

Independent Claim 15 is substantially similar to Claim 1, with the addition of Element 15[c] (“a sole structure secured to the upper”), and is therefore obvious in light of the combined teachings of Herbert, Glidden, Cusinato, and if necessary, Spencer, for the reasons set forth with respect to the corresponding limitations of Claim 1. EX1002, ¶354.

| <b>Claim</b> | <b>Corresponding Analysis</b>         |
|--------------|---------------------------------------|
| 15[pre]      | • Element 1[pre]; EX1002, ¶¶157-61. . |
| 15[a1]       | • Element 1[a1]; EX1002, ¶¶162-77.    |

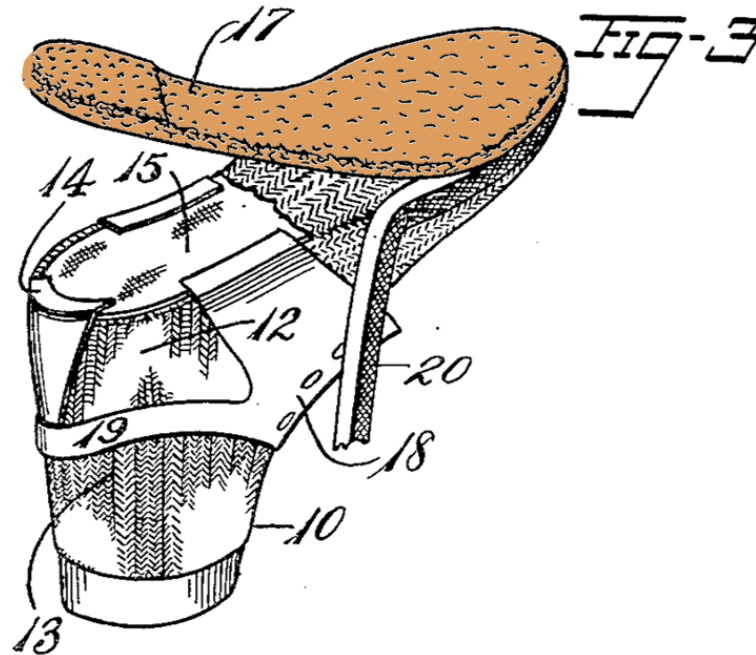
|        |                                    |
|--------|------------------------------------|
| 15[a2] | • Element 1[a2]; EX1002, ¶¶178-89. |
| 15[b]  | • Element 1[b]; EX1002, ¶¶190-93.  |

Herbert discloses “[a] bottom or *sole* portion 19 of the slipper foot covering,” which would meet claim limitation 15[c], “a sole structure secured to the upper.” EX1002, ¶¶359-60; EX1016, 3:17-18; Fig. 1:



To the extent Patentee argues that a discrete structure must be secured to the Herbert slipper, adding a discrete sole structure to a slipper would constitute an obvious modification. EX1002, ¶361. Motivations to add the sole would include protecting the bottom of the foot, as soles have done for thousands of years. *Id.*

Figure 3 of Glidden, reproduced below, also discloses a sole secured to the upper:



EX1017, Fig. 3; *see also id.*, cls. 1-5 (“a sole on said upper”); EX1002, ¶¶362-63.

A POSITA in possession of Herbert seeking to construct a knit shoe more rugged than a slipper would have been motivated to combine its disclosures with those of Glidden. *Id.*

#### U. Claim 16

Claim 16 is substantially similar to Claims 7 and 12, and it would be obvious to a POSITA for the same reasons set forth above with respect to Claims 7 and 12. EX1002, ¶364.

#### V. Claim 17

Claim 17 is substantially similar to Claims 2, 4, 5, and 6, and it would be obvious to a POSITA for the same reasons set forth above with respect to those claims. EX1002, ¶365.

**W. Claim 18**

Claim 18 is substantially similar to Claim 3, which as explained above is rendered obvious by Herbert in view of Glidden, Cusinato, and, if necessary, Spencer, and it would have been obvious to a POSITA to arrange first and second knit strips parallel to one another for the same reasons set forth above with respect to Claim 3. EX1002, ¶¶366-67.

**X. Claim 19**

Claim 19 is substantially the same as Claim 5, which as explained above is rendered obvious by Herbert in view of Glidden, Cusinato, and, if necessary, Spencer, but recites “...to an area proximate to *the sole structure*” rather than “...to an area proximate to *a lower region of the upper.*” A POSITA would understand that this slight variation in claim language does not render Claim 19 any more inventive than Claim 5. EX1002, ¶¶368-70.

**Y. Claim 20**

Claim 20 is substantially the same as Claim 6, and introduces the same slight variation in claim language as Claim 19. Claim 20 is therefore obvious for the same reasons set forth above with respect to Claims 5, 6, and 19. EX1002, ¶¶371-72.

## **X. STATUTORY REQUIREMENTS**

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

Real party-in-interest is Skechers U.S.A., Inc.

### **B. Notice of Related Matters (37 C.F.R. § 42.8(b)(2))**

The '511 is involved in the following litigations:

- *Nike, Inc. v. Skechers U.S.A., Inc.*, Case No. 2:23-cv-09346-AB-PVC (C.D. Cal.)
- *Nike, Inc. v. New Balance Athletics, Inc.*, Case No. 1:23-cv-12666 (D. Mass.)

To Petitioner's counsel's knowledge, there are no other judicial or administrative matters regarding the '511 that would affect or be affected by a decision in this proceeding.

### **C. Designation of Lead And Back-Up Counsel (37 C.F.R. § 42.8(b)(3))**

Lead Counsel: Samuel K. Lu (Reg. No. 40,707)

Backup Counsel: Keith Orso (Reg. No. 52,084)

Backup Counsel: Jonathan M. Lindsay (Reg. No. 45,810)

Backup Counsel: Michael Rosen (*pro hac vice* to be requested)

Backup Counsel: Jie Gao (Reg. No. 73,835)

Backup Counsel: Connor He-Schaefer (*pro hac vice* to be requested)

Contact information for Lead and Backup Counsel is as follows:

Irell & Manella LLP  
1800 Avenue of the Stars, Suite 900  
Los Angeles, CA 90067-4276

Telephone: (310) 277-1010  
Fax: (310) 203-7199

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

Please address all correspondence to lead counsel at the address above.

Petitioner consents to email service at: SkechersNikeIPRs@irell.com

**E. Fees**

The Office is authorized to charge Deposit Account No. 09-0946 for any fees required.

**F. Grounds for Standing**

Petitioner certifies that the '511 is eligible for IPR and that Petitioner is not barred or estopped from requesting an IPR of the '511.

**XI. CONCLUSION**

For the reasons above, the claims of the '511 are unpatentable.

Dated: November 6, 2024

Respectfully submitted,

By: /Samuel K. Lu/  
Samuel K. Lu (Reg. No. 40,707)

**IRELL & MANELLA LLP**  
1800 Avenue of the Stars, Suite 900  
Los Angeles, CA 90067-4276  
Telephone: (310) 277-1010  
Fax: (310) 203-7199

**CERTIFICATE OF WORD COUNT**

I hereby certify, pursuant to 37 C.F.R. section 42.24, that the foregoing Petition contains 13,625 words, excluding the words in the table of contents, table of authorities, exhibit list, this certificate of word count, and certificate of service. The word count is based on the word count of the Microsoft Word program used to prepare the Petition.

/Jonathan M. Lindsay/  
Jonathan M. Lindsay

**CERTIFICATE OF SERVICE**

I hereby certify, pursuant to 37 C.F.R. sections 42.6 and 42.105, that a complete copy of the Petition for *Inter Partes* Review of U.S. Patent No. 9,986,781 and Exhibits are being served via Priority Mail Express on November 6, 2024, the same day as the filing of the above-identified documents in the United States Patent and Trademark Office/Patent Trial and Appeal Board, upon the patent prosecution counsel of record for the Patent Owner:

78342 - SHOOK, HARDY & BACON LLP/NIKE, INC.  
2555 Grand Boulevard  
Kansas City, MO 64108

Courtesy copies were also sent via ShareSite to Patent Owner's counsel of record in the related district court litigation at the following addresses:

Christopher J. Renk  
ARNOLD & PORTER KAYE SCHOLER LLP  
70 West Madison Street, Suite 4200  
Chicago, Illinois 60602-4231  
[chris.renk@arnoldporter.com](mailto:chris.renk@arnoldporter.com)

/Susan M. Langworthy/  
Susan M. Langworthy