

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SKECHERS USA, INC.,
Petitioner,

v.

ADIDAS AG,
Patent Owner.

Case IPR2017-00127
Patent 9,339,079 B2

Before JOSIAH C. COCKS, PATRICK R. SCANLON, and
MICHAEL L. WOODS, *Administrative Patent Judges*.

COCKS, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Summary

Skechers USA, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) to institute an *inter partes* review of claims 1–30 of U.S. Patent No. 9,339,079 B2 (Ex. 1001, “the ’079 patent”). We instituted trial to determine whether claims 1–30 are unpatentable under 35 U.S.C. § 103 based on Luthi ’202¹ either alone or in combination with Luthi ’800² and Chan.³ See Paper 6, 12 (“Institution Decision” or “Inst. Dec.”). After institution of trial, adidas AG (“Patent Owner”), filed a Patent Owner Response. Papers 10, 11 (“PO Resp.”).⁴ Petitioner replied. Papers 17, 18 (“Pet. Reply”).⁵ Patent Owner filed a Sur-reply. Papers 21, 22 (“PO Sur-reply”).⁶ Oral argument was

¹ U.S. Patent No. 6,769,202 B1 issued August 3, 2004 (Exhibit 1005) (“Luthi ’202”).

² U.S. Patent No. 5,461,800 issued October 31, 1995 (Exhibit 1006) (“Luthi ’800”).

³ U.S. Patent No. 7,383,647 B2 issued June 10, 2008 (Exhibit 1007) (“Chan”).

⁴ Paper 10 is a confidential, unredacted version of the Patent Owner Response subject to Patent Owner’s Motion to Seal (Paper 9). Paper 11 is a public, redacted version.

⁵ Paper 17 is a confidential, unredacted version of Petitioner’s Reply subject to Petitioner’s Motion to Seal (Paper 19). Paper 18 is a public, redacted version.

⁶ Paper 21 is a confidential, unredacted version of the Sur-reply. Paper 22 is a public, redacted version. We observe that it is not apparent from the record at hand that Patent Owner’s Sur-reply was authorized. We also observe that the unredacted version of the Sur-reply is not the subject of any motion to seal.

conducted on January 8, 2018. A transcript of that argument is entered in the record. *See* Paper 27 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of claims 1–30 of the ’079 patent. For the reasons discussed below, we hold that Petitioner has not demonstrated by a preponderance of the evidence that claims 1–30 of the ’079 patent are unpatentable under 35 U.S.C. § 103(a).

B. Related Matters

The parties identify Case No. 3:16-cv-01400-AC pending in the District Court for the District of Oregon concerning the ’079 patent. Pet. 1; Paper 4, 2. Related U.S. Patent No. 9,345,285 B2 is the subject of a separate petition for *inter partes* review as a part of IPR2017-00125.

C. The ’079 patent

The ’079 patent is titled “Shoe and Sole.” Ex. 1001, (54). The ’079 patent describes the invention as including specific “leaf spring elements” intended to provide cushioning properties that minimize disadvantages associated with the use of foamed materials, which are typically used in shoe construction. *Id.* at 2:15–39. Figure 1 of the ’079 patent is reproduced below.

FIG 1

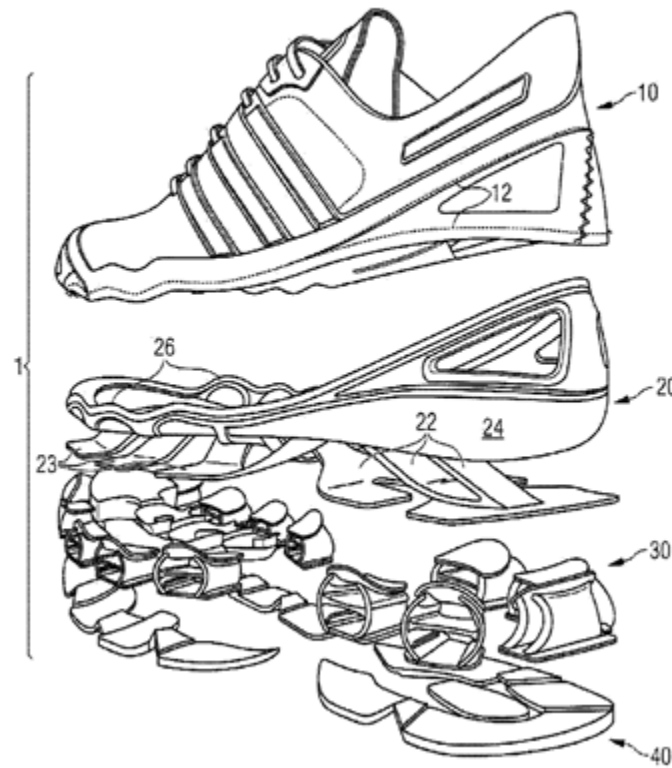
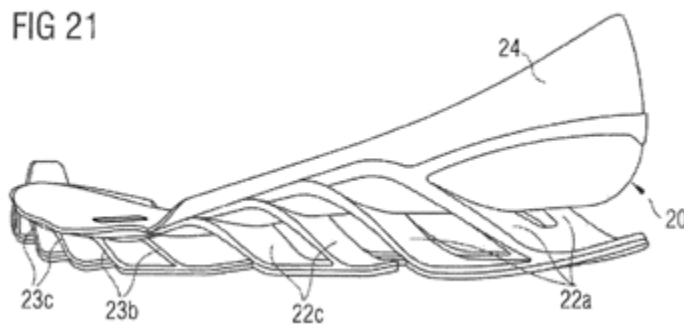


Figure 1 above depicts an exploded view of a shoe according to an embodiment of the invention. *Id.* at 4:33–34. In particular, shoe 1 includes shoe upper 10, sole plate 20, a group of first cushioning elements 30, and outsole layer 40. *Id.* at 5:29–32. Sole plate 20 includes leaf spring elements 22 and 23, as well as heel cup 24. *Id.* at 5:42–47. Each of leaf spring elements 22 and 23 includes ends that are connected to the sole plate and ends that are not connected to the sole plate (each of the latter ends being characterized as a “free end”). *See id.* at 3:48–57. The ’079 patent describes that the free ends of the leaf springs may also be interconnected. *Id.* at 3:50–52. In Figure 1, the free ends of the two rearmost leaf spring elements 22 closest to heel cup 24 are shown interconnected. *Id.* at 8:28–32. Figure 21 is reproduced below and shows another embodiment of a shoe according to

the '079 patent.



In the embodiment of Figure 21, shown above, certain leaf spring elements, such as those designated 22c and 22a are side-by-side so as to be arranged on each of a “lateral side” of the shoe, and also on a “medial side.” *Id.* at 12:6–60. In that embodiment, the interconnection of leaf spring elements, such as each of 22c and 22a, is between the lateral and medial sides of the shoe.

D. Claims

Of the challenged claims, claims 1, 8, 12, and 20 are independent. Claims 2–7 depend from claim 1, claims 9–11 depend from claim 8, claims 13–19 ultimately depend from claim 12, and claims 21–30 depend from claim 20. Claim 1 is reproduced below:

1. A sole for an article of footwear, the sole comprising:
a sole plate comprising a plurality of leaf springs disposed in a rearfoot area of the sole plate and a plurality of leaf springs disposed in a forefoot area of the sole plate,
wherein each of the plurality of leaf spring elements has a connection end connected to the sole plate and an end not directly connected to the sole plate, and where all ends not directly connected to the sole plate point in substantially the same direction,
wherein two or more leaf springs disposed adjacent to each

other on the sole plate in a transverse direction between a lateral side of the sole plate and a medial side of the sole plate are integrally joined to form a single end not directly connected to the sole plate, and wherein the single end not directly connected to the sole plate extends from the lateral side of the sole plate to the medial side of the sole plate.

Id. at 15:29–45.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, a claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard). Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

In the Institution Decision, we determined that all claim terms of the '079 patent should be afforded their ordinary and customary meaning. Inst. Dec. 6. We made explicit that meaning for the terms “leaf spring[s]” and “free end[s].” *Id.* In particular, at that time, we adopted the meaning of those terms argued by Petitioner. For “leaf spring[s],” that meaning was “a flexible member that deflects and provides a restoring force with an orthogonal and a parallel component in response to a load applied to the sole.” *Id.* For “free end[s],” that meaning was “the end of a leaf spring that deflects in response to a load applied to the sole, whether or not the end is

connected to other leaf springs.” *Id.* at 7. We concluded that Petitioner had explained adequately how those meanings were consistent with the Specification of the ’079 patent. *Id.* at 6–7.

1. “*leaf spring[s]*”

Patent Owner now disputes Petitioner’s proposed meaning of “leaf spring[s].” In that respect, Patent Owner contends that the proposed meaning “ignores the express disclosure of the specification.” PO Resp. 11. Instead, Patent Owner proposes that “leaf spring[s]” means “a flexible member that deflects and provides a restoring force with a component orthogonal to the sole plate (e.g., for cushioning) and a component parallel to the sole plate in the rearward direction (e.g., for acceleration).” *Id.* at 13. Thus, the difference in meaning advocated by Patent Owner is that the component parallel to the sole plate is “in the rearward direction.”

We observe that Patent Owner relies on content of the ’079 patent at column 11, lines 31–34 to support the meaning of “leaf spring[s]” and “leaf spring element[s]” that it advances. That portion of the ’079 patent describes embodiments of the invention appearing in Figures 19 to 25. Referencing particular leaf spring elements 22 and 23 of those embodiments, the ’079 patent states that “[t]ypically the restoring force exerts a force that has a component orthogonal to the sole plate (e.g., for cushioning) and a component parallel to the sole in the rearward direction (e.g., for acceleration).” Ex. 1001, 11:31–34. While that language mirrors the meaning of “leaf spring[s]” and “leaf spring element[s]” proposed by Patent Owner, we discern that the noted clause also begins with the term “[t]ypically.” That leaf spring elements may “typically” include a component parallel to the sole in the rearward direction does not lend itself

to the conclusion that a “leaf spring” necessarily includes such a component. Rather, it conveys the opposite. In that respect, the plain understanding of the pertinent content of the ’079 patent is that, while, perhaps, not typical, the ’079 patent contemplates other component arrangements, logically including those in which the parallel component is not in the rearward direction.

Indeed, our above-noted understanding is also consistent with other embodiments described in the ’079 patent. For instance, embodiments depicted in Figures 13–16 show elements 23 extending in a forward direction with respect to the sole. The elements 23 of those figures are described as “leaf spring elements.” *Id.* at 10:24–59. Moreover, the ’079 patent makes explicit that those leaf spring elements “are either forwardly or rearwardly directed.” *Id.* at 10:58–59. Patent Owner’s position that the claimed “leaf springs” or “leaf spring elements” require a parallel component extending in the rearward direction is inconsistent with these particular figures and the accompanying description in the ’079 patent. To that end, Patent Owner does not explain adequately why the meaning of the term “leaf spring” encompasses only a parallel component in the rearward direction, yet the ’079 patent clearly provides that leaf springs may also have components that extend in the forward direction.

Accordingly, for the foregoing reasons, we again conclude that “leaf spring[s]” means “a flexible member that deflects and provides a restoring force with an orthogonal and a parallel component in response to a load applied to the sole.”

2. “*free end[s]*”

Patent Owner also challenges Petitioner’s proposed meaning of “free end[s].” Patent Owner contends that Petitioner’s meaning is incorrect on the theory that it encompasses “an unlimited number of interconnections” and is “not supported by the claim language or the specification and contradicts expert testimony that clearly demonstrates how a [person of ordinary skill in the art] would understand the term.” PO Resp. 13–14 (citing Ex. 2001 ¶¶ 21–25). Patent Owner also contends that the ’079 patent contemplates embodiments in which not all the leaf springs are interconnected. *Id.* at 14–15. According to Patent Owner, “free end[s],” means “the end of a leaf spring that deflects in response to a load applied to the whole, which may be connected to some but not all other leaf springs.”

The difference between Petitioner’s proposed meaning and Patent Owner’s proposed meaning for “free end[s]” lies in the last clause of each proposal. In particular, in Petitioner’s meaning that clause is “whether or not the end is connected to other leaf springs,” whereas in Patent Owner’s meaning the clause reads “which may be connected to some but not all other leaf springs.” At the outset, it is clear that Petitioner’s proposed meaning is the broader of the two. In that respect, Petitioner’s meaning encompasses the full range of end connections, i.e., a free end of a leaf spring may be connected to no other spring or it may be connected to all other leaf springs. We observe that the ’079 patent, itself, does not disclaim the connection of a free end of a leaf spring with all other leaf springs. Although, as Patent Owner notes, the ’079 patent contemplates embodiments in which the free ends of leaf springs are not interconnected, Patent Owner does not explain why that somehow prohibits a “free end” of a leaf spring in other

circumstances being connected to all other leaf springs of a particular shoe configuration.

The testimony Dr. Richard Hinrichs (Ex. 2001 ¶¶ 21–25) cited by Patent Owner is not availing. For instance, Dr. Hinrichs provides little, if any, explanation supporting his position that “while connecting some leaf springs is good, once you connect all of them you lose the benefit,” and “[i]f all leaf springs were connected, the structure would lock up and it would not adapt to the needs of the runner’s foot.” Ex. 2001 ¶ 24.

Furthermore, even if true, and there is some detriment to connection of the end of a leaf spring to all other leaf springs, neither Patent Owner nor Dr. Hinrichs articulate adequately why such circumstance dictates the meaning of “free end” as necessarily precluding complete connection of the leaf springs.

Accordingly, having considered the respective positions of the parties, we conclude that the more appropriate meaning of “free end[s]” is Petitioner’s meaning of “the end of a leaf spring that deflects in response to a load applied to the sole, whether or not the end is connected to other leaf springs.” We discern that it is unnecessary to construe expressly any other claim term of the ’079 patent. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

B. Alleged Obviousness

1. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject

matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966). We analyze this asserted ground based on obviousness with the principles identified above in mind.

2. Level of Skill in the Art

The parties express disagreement as to the relevant level of ordinary skill in the art. Petitioner contends that “a person of ordinary skill in the art would have had at least a bachelor’s degree or equivalent training in mechanical engineering, and would have gained substantial experience in the structural design of flexible elements and plastic polymers.” Pet. 5–6 (citing Ex. 1002 ¶¶ 19–22; 39–43).⁷ Patent Owner faults Petitioner’s assessment of the level of ordinary skill in the art on the premise that such person would necessarily have experience in “biomechanical systems.” PO Resp. 5–6. Patent Owner points to the declaration of its declarant, Dr. Hinrichs, who testifies that a person of ordinary skill in the art “would have at least a bachelor’s degree in mechanical engineering, biomedical engineering, physics, or biomechanics, and two years of practical experience

⁷ Exhibit 1002 is the Declaration of Petitioner’s declarant, Mr. Scott O. Ganaja.

with biomechanical systems.” *Id.* at 6 (quoting Ex. 2001 ¶¶ 14–15).

The basis of disagreement boils down to an evaluation of a skilled artisan’s experience. In that respect, Petitioner urges that the artisan generally has “substantial experience in the structural design of flexible elements and plastic polymers,” whereas Patent Owner characterizes the experience as directed to “biomechanical systems.” The ’079 patent is clearly directed to matters of shoe construction, and takes note, for instance, of the desirability of “cushioning and biomechanically supporting the foot.” Ex. 1001, 1:27–29. It is also apparent that an overarching focus of the ’079 patent is concern with “balance” and “support” of a “foot against misorientations such as pronation and supination (i.e. a tilting movement of the forefoot part to the medial and the lateral side, respectively).” *Id.* at 2:34–39. Such concerns, in our view, go beyond general experience in the design of flexible elements and plastic polymers. In that regard, we credit the testimony of Patent Owner’s declarant, Dr. Hinrichs, that a person of ordinary skill in the art would have experience with biomechanical systems, such as shoes. *See* Ex. 2001 ¶¶ 14–15.

We have considered the respective opinions of the parties when it comes to the level of ordinary skill in the art. In reaching our decision as to the merits of this proceeding, for the reasons discussed above, we are persuaded by Patent Owner’s evidence as to the ordinary skill of an artisan.

3. Overview of *Luthi* ’202

Luthi ’202 is titled “Shoe and Sole Unit Therefor.” Ex. 1005, (54). *Luthi* ’202’s Figure 1 is reproduced below.

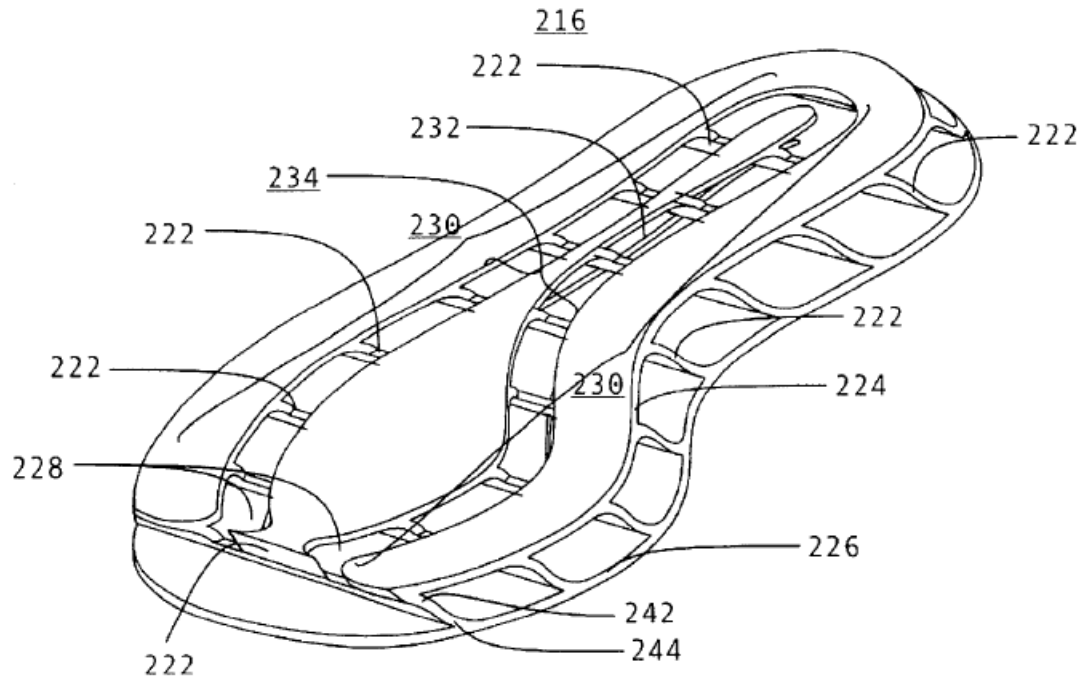


Fig. 17.

Figure 17 above shows a “medial side perspective view” of another embodiment of Luthi ’202’s invention, which, in particular, illustrates a directional element of a shoe. *Id.* at 3:3–5. In that embodiment, strut elements 222 are characterized as having a “spring-like design,” and may also provide a cushioning effect. *Id.* at 8:43–55.

4. Overview of Luthi ’800

Luthi ’800 is titled “Midsole for Shoe.” Ex. 1006, (54). Luthi ’800’s Figure 4 is reproduced below.

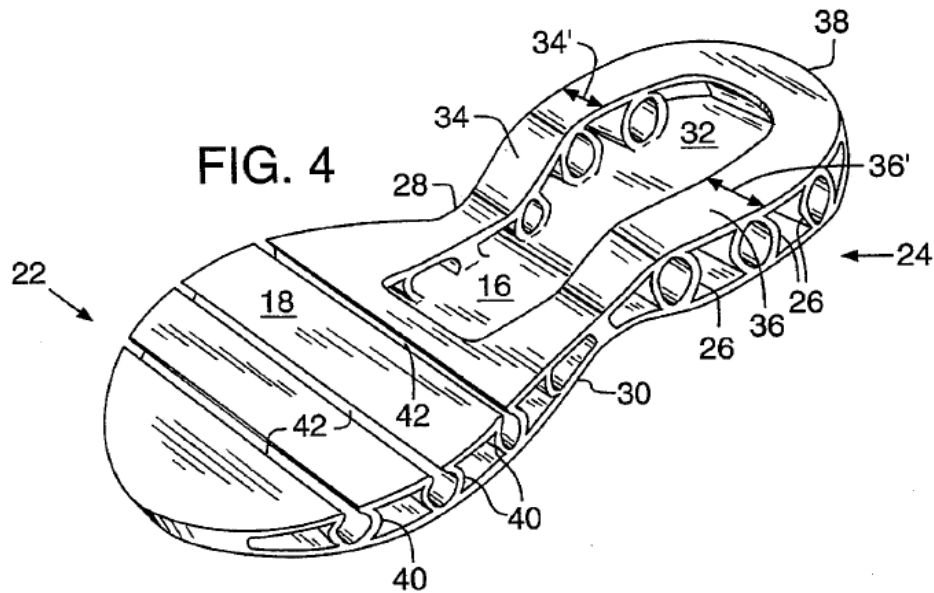


Figure 4 above depicts a perspective bottom view of a midsole according to an embodiment of the invention. Ex. 1006, 3:14–15. The midsole includes forefoot section 22 with “forefront tubes 40,” and heel section 24 with “heel tubes 26.” *Id.* at 3:46–4:4. Tubes 26 and 40 are described as having a “circular configuration” and “characteristics of springs.” *Id.* at 4:65–5:10.

5. Overview of Chan

Chan is titled “Mechanical Cushioning System for Footwear.” Ex. 1007, (54). Chan’s Figure 1 is reproduced below.

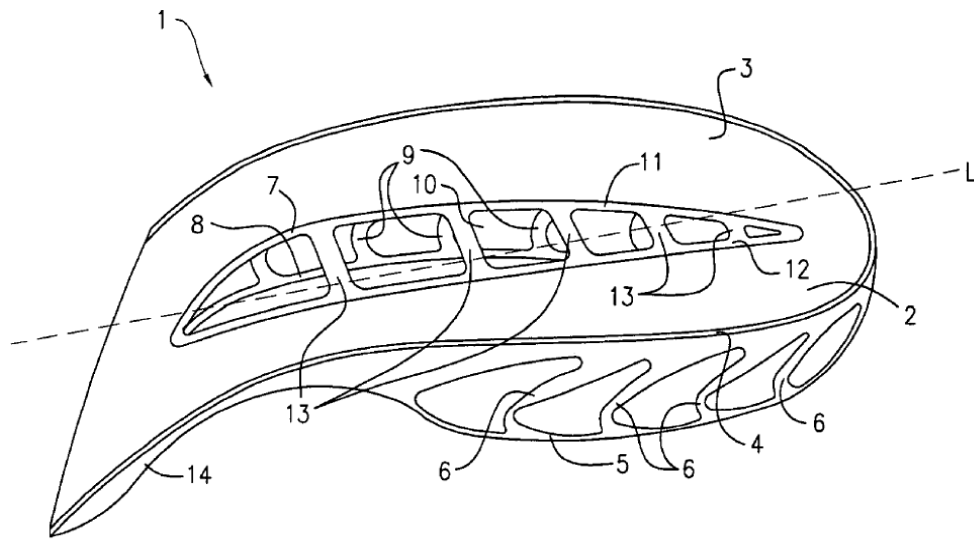


FIG. 1

Figure 1 above depicts a “perspective view of a midsole element” according to Chan’s invention. *Id.* at 5:8–9. Midsole 1 includes medial element 2 and lateral element 3. *Id.* at 5:62–64. Medial element 2 includes a plurality of “medial strut members 6.” *Id.* at 5:63–65. Lateral element 3 includes a plurality of “lateral strut members 9.” *Id.* at 6:1–5.

6. Discussion—Obviousness

The parties disagree with respect to several claim elements of claims 1–30. We consider the claims in the following groupings: (1) claims 1–7; (2) claims 8–11; (3) claims 12–19; and (4) claims 20–30.

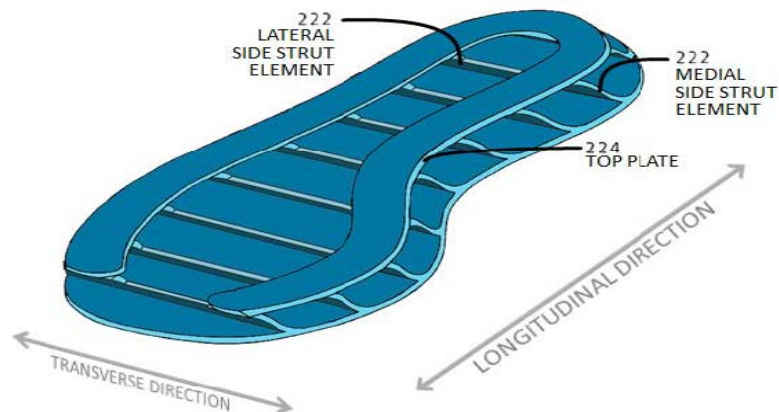
a. Claims 1–7

Independent claim 1 is directed to a sole for an article of footwear and requires two or more leaf springs that are “integrally joined to form a single end not directly connected to the sole plate.” *Id.* at 15:38–35. We focus on that requirement.

Petitioner points to Luthi ’202’s strut members 22 as forming the required leaf springs of claim 1, respectively. Pet. 19. We conclude that

strut members 22 are viewed reasonably as leaf springs based on the construction of those terms that we adopt in this Decision. In accounting for the above-quoted feature of claim 1, however, Petitioner analogizes Luthi '202's strut members 22 to strut members 222, which appear in Luthi '202's Figure 17. Petitioner does so because Petitioner's obviousness position relies heavily on dissection and modification of Figure 17.

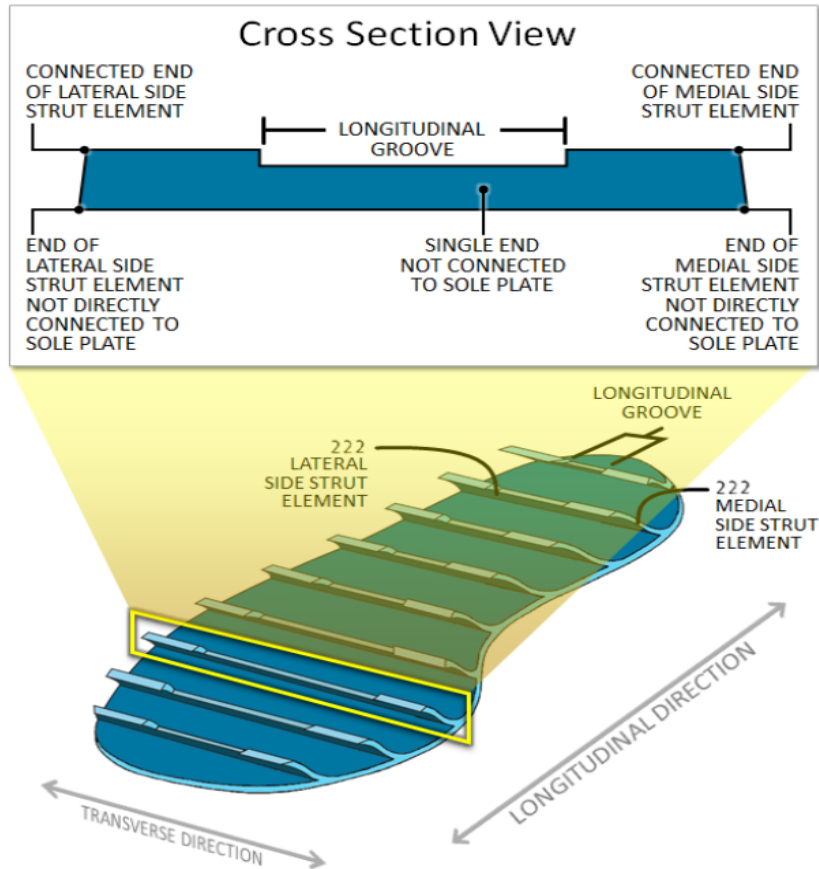
Reproduced below are multiple versions of Luthi '202's Figure 17 as annotated by Petitioner, on which Petitioner relies in making out its obviousness case. In particular, Petitioner first proposes the following annotated version:



Luthi '202, Figure 17 (annotated)

According to Petitioner, the above-reproduced Figure 17 “depicts how a person of ordinary skill in the art would understand that the directional element would look with the center island material removed to form a single longitudinal groove.” Pet. 26 (citing Ex. 1002 ¶¶ 85–86).

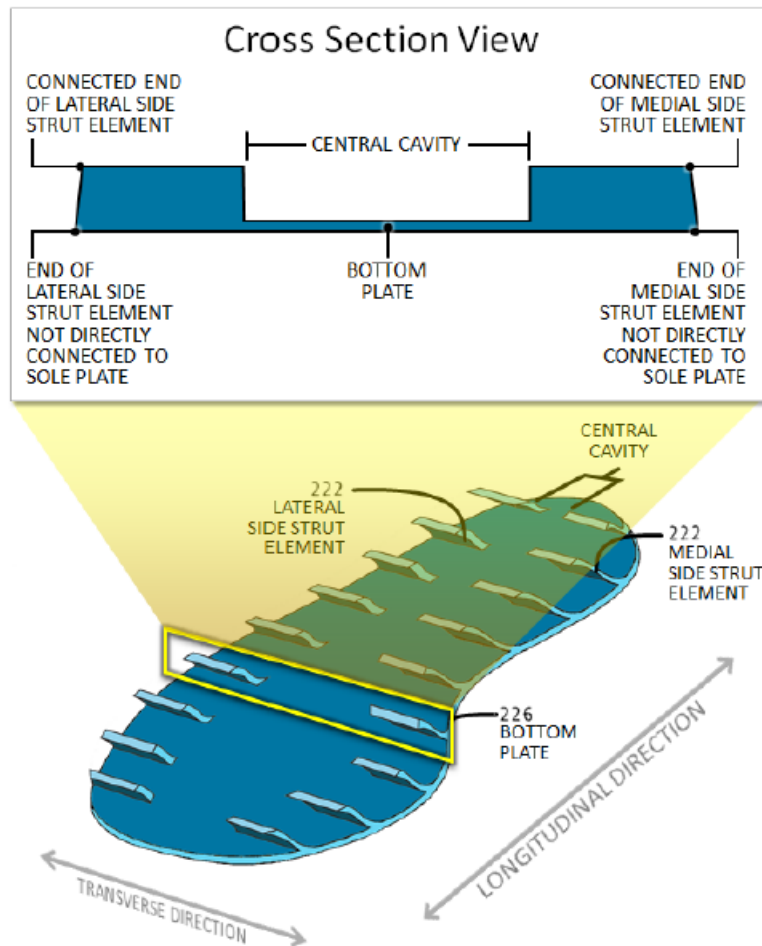
Petitioner further proposes the following version of Figure 17:



Luthi '202, Figure 17 (annotated)

Petitioner asserts that the above-reproduced Figure 17 “depicts the way a person of ordinary skill in the art would envision the directional element of Figure 17 with the top plate bisected and removed for clarity and an enlarged cross section showing a pair of adjacent strut elements that are joined to form a single end.” *Id.* at 27. Petitioner also asserts that “persons of ordinary skill in the art would appreciate that all components of the directional element shown in Figure 17, including the strut elements and the transverse portion that joins their ends, could be integrally formed as a single piece.” *Id.* at 28. The support for Petitioner’s assertions is said to lie in Mr. Ganaja’s testimony (Ex. 1002) at paragraphs 40, 87–88. *Id.*

Further still, Petitioner offers the following annotated version of Figure 17, as an alternative approach with the intent to reach leaf springs that must be “integrally joined to form a single end not directly connected to the sole plate”:



Luthi '202, Figure 17 (annotated)

In Petitioner's view, the annotated illustration above reflects the incorporation of a “central cavity” into Luthi '202's Figure 17 based on the teachings of Luthi '800 or Chan. Pet. 34. Petitioner offers that view on the theory that:

[I]f a greater degree of separation is required between strut elements on the lateral and medial sides of the sole plate, it would be obvious to increase the depth of the longitudinal groove or to incorporate a central cavity based on the combined teachings of Luthi '202, Luthi '800, and Chan.

Id. at 30 (citing Ex. 1002 ¶¶ 91–97). In supporting its proposed combination, Petitioner postulates that it amounts “to a combination of familiar elements according to known methods that would yield predictable results,” and “well within the knowledge and skill of persons of ordinary skill in the art . . .” *Id.* at 35.

In summary, Petitioner contends that the above-reproduced annotated versions of Luthi '202's Figure 17 allegedly demonstrate that a skilled artisan would have recognized that either a “longitudinal groove” or a “central cavity” may be present between the “medial” and “lateral” sides of a strut element in Luthi '202's Figure 17. As such, Petitioner takes the approach that such configuration gives rise to two “leaf springs” that “come together integrally to form a single end not directly connected to the sole plate.” *See* Pet. 23–36.

Patent Owner, on the other hand, contends that the modifications proposed in conjunction with the annotated versions of Figure 17 on which Petitioner relies find no support in Luthi '202, itself, or the teachings of Luthi '800 and Chan and would “lead to a non-functional design.” PO Resp. 26. That view is also shared by Patent Owner's declarants, Dr. Hinrichs and Dr. Simon Luthi.⁸ For instance, Dr. Hinrichs testifies that the “‘annotated’ versions of Figure 17 take considerable creative license and go well beyond

⁸ Dr. Luthi is a named inventor of Luthi '202.

the actual disclosure of Figure 17,” and that “there is no support in Luthi ’202 for Petitioner’s interpretation of the ‘strut elements’ shown in many annotated version of Figure 17.” Ex. 2001 ¶ 41. He also testifies the following:

Furthermore, one of skill in the art would not be motivated to modify Figure 17 to include the notches or gaps that Petitioner attempts to include in the strut elements because these proposed modifications would reduce medial-lateral stability of the directional element. A person with experience in biomechanics would not modify shoes in a way that increases instability medial-lateral instability, as this increases the risk of injury to the wearer.

Id. ¶ 42.

Dr. Luthi, too, testifies that the modifications that Petitioner proposes to Figure 17 of Luthi ’202 are not supported by the record, echoing Dr. Hinrichs’s testimony that the modifications would create “medial-lateral instability”. Ex. 2005 ¶¶ 11–13.

We are mindful that the record reflects that each of Dr. Hinrichs and Dr. Luthi have considerable experience in the design, creation, and analysis of footwear. Ex. 2001 ¶¶ 3–4; Ex. 2005 ¶ 2. We also are cognizant that Patent Owner contends that Petitioner’s declarant, Mr. Ganaja, “has no experience with shoe soles or mechanical cushioning systems for shoes.” PO Resp. 8–9. In support of those contentions, Patent Owner points to the testimony of Mr. Ganaja in litigation corresponding to this proceeding, in which Mr. Ganaja testifies that he has not had occasion to work with athletic shoes. *Id.* In reviewing Mr. Ganaja’s declaration we observe that he testifies that (1) he has participated “in the design and engineering of various biomechanical systems, including medical and dental devices, bicycle

components, exercise equipment, and consume products,” and (2) that he “also engineered a spur system that is integrated into equestrian riding boots in a manner that eliminates traditional straps and provides enhanced control for riders.” Ex. 1002 ¶ 7. Notably absent, however, from Mr. Ganaja’s stated experience is any exposure to, or consideration of, the design or construction of athletic footwear, which is central to this proceeding.

As noted above, the core of Petitioner’s obviousness position requires substantial dissection and modification of Luthi ’202’s Figure 17. That dissection is premised on Mr. Ganaja’s assessment of what a person of ordinary skill in the art would take from the record at hand. Yet, in our view, neither Mr. Ganaja nor Petitioner explains adequately how the teachings of the prior art would have led one down the path that they advocate. For instance, it is decidedly unclear from the record that any “longitudinal groove” as advanced in Petitioner’s annotated illustrations of Luthi ’202’s Figure 17 reproduced herein exists in the configuration proposed by Petitioner. Although Petitioner and Mr. Ganaja postulate that it does exist, Luthi ’202’s teachings are less than determinative in that respect. We credit the testimony of Dr. Hinrichs and Dr. Luthi, that no such groove or “gap” exists as proposed by Petitioner. PO Resp. 21–25 (citing Ex. 2001 ¶¶ 32–35, 42–43; Ex. 2005 ¶¶ 6, 8–13).

Moreover, even if such groove does exist, neither Petitioner nor Mr. Ganaja adequately explains why the presence of such groove would create at least two leaf springs or leaf spring elements that are “integrally joined to form a single end not directly connected to the sole plate,” as required by all the claims involved in this proceeding. We agree with, and credit, the testimony of Dr. Hinrichs that “Luthi ’202 consistently discloses that the

strut elements run the entire width of the shoe.” Ex. 2001 ¶ 32 (citing Ex. 1005, 3:47–50 (“the strut elements 22 extend substantially from the medial edge of the lateral edge of lower plate 26 . . .”). In extending the entire width of the shoe, strut elements 22 (and 222) are more appropriately viewed as a single element (e.g., a spring element) rather than multiple spring elements that come together integrally.

Petitioner and Mr. Ganaja also inadequately explain why combination of Luthi ’202’s teachings with those of either Luthi ’800 or Chan would result in the above-noted “central cavity” as a part of the directional element of Luthi ’202’s Figure 17. Although Luthi ’800 and Chan may show spaces or cavities in components of their shoes, there appear substantial differences in the designs of those shoes, and in particular the cushioning aspects, as compared with Luthi ’202’s Figure 17. We credit Dr. Hinrichs’s and Dr. Luthi’s testimony that the presence of such a cavity as shown in Luthi ’800 and Chan would prove detrimental to the medial-lateral stability of Luthi ’202’s shoe, and specifically the directional element of such a shoe that is depicted in Luthi ’202’s Figure 17. *See* Ex. 2001 ¶ 42; Ex. 2005 ¶¶ 11–13. To that end, we also find inadequate Petitioner’s general position that combining the teachings of Luthi ’202, Luthi ’800, and Chan would result simply in a “combination of familiar elements according to known methods that would yield predictable results,” and “well within the knowledge and skill of persons of ordinary skill in the art . . .” Pet. 35. We are not persuaded that any such combination would yield the “predictable results” advanced by Petitioner, or that “well within the knowledge and skill” of an artisan cited by Petitioner constitutes rational underpinning to support an obviousness conclusion. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)

(An assertion of unpatentability based on “obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”)

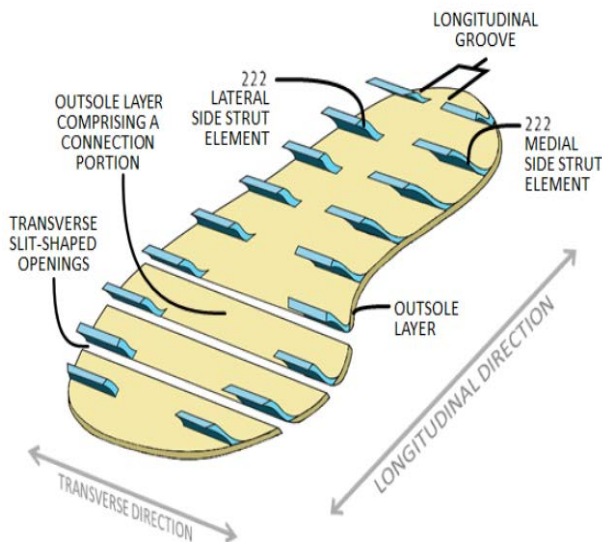
In weighing the evidence before us, we find more persuasive the position of Patent Owner, and the underlying testimony of Dr. Hinrichs and Dr. Luthi in support of that position. To that end, and for the reasons discussed above, we credit the testimony of Dr. Hinrichs and Dr. Luthi, over that of Mr. Ganaja, that the dissection and modification of Luthi ’202’s Figure 17 is not what a skilled artisan would have derived from the teachings of the prior art, but instead is rooted in hindsight.⁹ Such hindsight bias has no permissible role in an obviousness analysis. *See Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (“we cannot allow hindsight bias to be the thread that stitches together prior art patches into something that is the claimed invention.”) Accordingly, we are not

⁹ Patent Owner also has introduced into the record a “Corrected Declaration of Paul Gaudio” originating in a District Court proceeding in Oregon. *See* Ex. 2004. In its Reply, Petitioner contends that “[Patent Owner] refused to make him available for deposition.” Pet. Reply 9. During oral argument, Petitioner reiterated that it had attempted to depose Mr. Gaudio but that Patent Owner had refused to make Mr. Gaudio available for deposition. Tr. 14–15. Patent Owner does not indicate that Petitioner’s statements are incorrect concerning Mr. Gaudio. That Petitioner was unable to depose Mr. Gaudio in accordance with 37 C.F.R. § 42.53 in connection with this proceeding calls into considerable question the evidentiary value to be afforded Mr. Gaudio’s District Court Declaration. In crediting Dr. Hinrichs’s and Dr. Luthi’s testimony, we have not considered Mr. Gaudio’s Declaration (Ex. 2004).

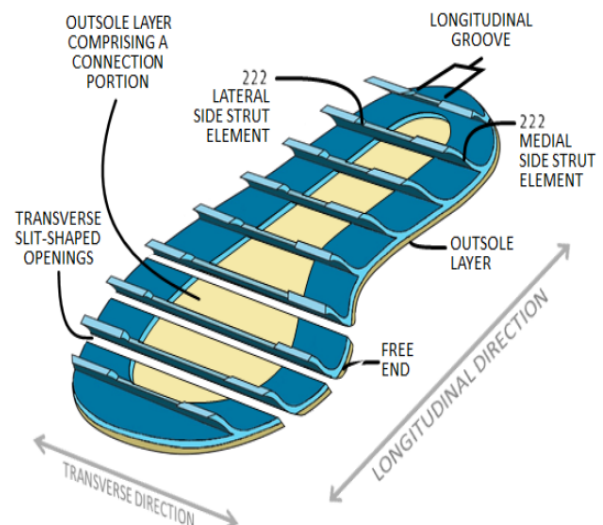
satisfied that Petitioner has accounted appropriately for the requirement in claim 1 (and, thus, also dependent claims 2–7) that requires two or more leaf springs that “come together integrally to form a single end not directly connected to the sole plate.”

b. Claims 8–11

Claim 8, like claim 1, is drawn to a sole for an article of footwear. Claim 8 includes the following feature: “an outsole layer comprising a plurality of separate connection portions, each connection portion interconnecting the free ends of two or more leaf springs.” In accounting for that feature, Petitioner relies on different annotated versions of Luthi ’202’s Figure 17. Those versions are reproduced below:



Luthi ’202, Figure 17 (annotated)



Luthi ’202, Figure 17 (annotated)

The figures above depict two annotated, modified, and colorized versions of Luthi ’202’s Figure 17. Pet. 51–52. According to Petitioner, a person of ordinary skill in the art would have derived those figures by applying teachings of “transverse slit shaped openings” from Luthi ’800 to

Luthi '202's Figure 17 to result in the “plurality of separate connection portions” required by claim 8. *Id.* at 51–53 (citing Ex. 1002 ¶¶ 64–69, 127–28). Petitioner's reasoning in that respect is that “the incorporation of transverse slit-shaped openings based on the combined teaching[s] of Luthi '202 and Luthi '800 would have been well within the knowledge of persons of ordinary skill in the art” *Id.* at 53.

Patent Owner does not agree with Petitioner's assertions of obviousness. Specifically, Patent Owner challenges Petitioner's position as to the presence of the required “plurality of separate connection portions” from the teachings of Luthi '202's Figure 17 and Luthi '800. PO Resp. 57–59; *see id.* at 52–53 (challenging generally the presence of any “connection portion” arising from the teachings of the prior art). In that respect, as it did in connection with claim 1, Patent Owner contends that Luthi '202 provides that “the strut members of each disclosed embodiment run substantially the entire medial-lateral width of the shoe” and are “continuous.” *Id.* at 53. Patent Owner also argues that one of ordinary skill in the art would not modify Luthi '202's struts to include a gap within any given strut because doing so would reduce the stability of the directional element. *Id.* (citing Ex. 2001 ¶¶ 42–43, 51–52; Ex. 2005 ¶¶ 8, 10–13); *see also id.* at 58 (“as Dr. Hinrichs explains, such a gap would render the shoe disclosed by Luthi'202 inoperable for its intended purpose (translational movement) and reduce stability”) (citing Ex. 2001 ¶ 82; Ex. 2005 ¶¶ 6, 14–15)).

We have considered the evidence that Petitioner offers in support of its obviousness challenge to claim 8. Petitioner, for instance, relies on the testimony of its declarant, Mr. Ganaja at paragraphs 64–69 and 127–28 of this declaration (Ex. 1002). Mr. Ganaja relies on general teachings of Luthi

'202, Luthi '800, and Chan suggesting that materials properties in shoes such as flexibility, stability, and cushioning may be varied in shoe design. Ex. 1002 ¶¶ 64–69 and 127–28 (citing, e.g., Ex. 1005, 7:22–40 (“[t]he various elements of the sole unit 12 may be constructed from materials and techniques known in the footwear art.”)) Absent from Mr. Ganaja’s testimony, however, is adequate explanation as to why the above-reproduced annotated versions of Luthi '202’s Figure 17 concerning the positioning of “transverse slit-shaped openings” and “separate connection portions” are what emerge from those teachings to one of ordinary skill in the art. In particular, we find wanting plausible explanation as to why any one of Luthi '202’s struts in Figure 17 would have been altered to create components viewed as at least two leaf springs, or why any transverse slits would have been positioned in the manner proposed in Luthi '202’s Figure 17 to produce multiple separate connection portions. In that regard, we find more credible the testimony of Patent Owner’s declarants, Dr. Hinrichs and Dr. Luthi, that the prior art simply does not suggest the configuration of a directional element that Petitioner advocates in the annotated version of Luthi '202’s Figure 17 reproduced above. *See* Ex. 2001 ¶¶ 42–43, 51–52, 82; Ex. 2005 ¶¶ 6, 8, 10–13.

We also find lacking from Petitioner’s arguments and Mr. Ganaja’s testimony adequate reasoning for modifying Luthi '202’s Figure 17 based on the prior art. To that end, Petitioner’s and Mr. Ganaja’s view that the proposed modifications would be “well within the knowledge and skill” of a person of ordinary skill in the art, and simply yielding “predictable results” as sufficient reasoning to support an obviousness position. *See, e.g.,* Pet. 52–53; Ex. 1002 ¶¶ 69, 127. As we discussed in conjunction with claim 1

above, such “reasoning” does not amount to the requisite articulated rationale with rational underpinning to support an obviousness conclusion. *See In re Kahn*, 441 F.3d at 988.

Accordingly, having carefully considered the record at hand, we are not persuaded that Petitioner has accounted for all the features of claim 8 (and, thus, also dependent claims 9–11). Specifically, for the reasons discussed above, Petitioner has not shown why the required “outsole layer comprising a plurality of separate connection portion, each connection portion interconnecting the free ends of two or more leaf springs” emerges from the teachings of the prior art.

c. Claims 12–19

Independent claim 12, like claims 1 and 8, is directed to a sole for an article of footwear. Claim 12 requires the following feature: “wherein at least two free ends in a leaf spring group are interconnected by a connection portion extending in a transverse direction from a lateral side of the sole plate to a medial side of the sole plate.” In accounting for that feature, Petitioner relies on the same flawed analysis of the annotated version of Luthi ’202’s Figure 17 discussed above concerning each of claims 1 and 8. *See* Pet. 57 (“person of ordinary skill in the art would understand that Luthi ’202 discloses or renders Element C^[10] of claim 12 obvious, either alone or in combination with Luthi’800 and/or Chan for the same reasons discussed in Parts IX.B.5 and IX.A.5 above.”)¹¹

¹⁰ “Element C” constitutes the pertinent quoted feature of claim 12.

¹¹ Part “IX.B.5” addresses claim 8, and Part “IX.A.5” addresses claim 1.

For the same reasons discussed above, we are not persuaded on the record before us that the modifications depicted by Petitioner's annotations of Luthi '202's Figure 17 would have been understood by a skilled artisan from the teachings of the prior art. We, thus, are not satisfied that Petitioner has accounted adequately for the feature required by claim 12 (and also dependent claims 13–19) of “wherein at least two free ends in a leaf spring group are interconnected by a connection portion extending in a transverse direction from a lateral side of the sole plate to a medial side of the sole plate.”

d. Claims 20–30

Independent Claim 20 is drawn to an article of footwear. Claim 20 includes the requirement of “wherein the connection portion extends in a transverse direction from a lateral side of the sole plate to a medial side of the sole plate.” As with claim 12, in accounting for that requirement, Petitioner relies on the same misguided analysis of annotated version of Luthi '202's Figure 17 discussed above concerning each of claims 1 and 8. See Pet. 64 (“person of ordinary skill in the art would understand that Luthi '202 discloses or renders Element F^[12] of claim 12 obvious, either alone or in combination with Luthi'800 and/or Chan for the same reasons discussed in Parts IX.B.5 and IX.A.5 above.”)

For the same reasons discussed above, we are not persuaded on the record before us that Petitioner's annotations of Luthi '202's Figure 17 would have been understood by a skilled artisan from the teachings of the prior art. We, thus, are not satisfied that Petitioner has accounted adequately

¹² “Element F” constitutes the pertinent quoted feature of claim 20.

for the feature required by claim 20 (and also dependent claims 21–30) of “wherein the connection portion extends in a transverse direction from a lateral side of the sole plate to a medial side of the sole plate.”

7. *Secondary Considerations*

Patent Owner contends that it has submitted evidence of the non-obviousness of claims 1–30. PO Resp. 59–70. That evidence pertains to a commercial shoe product called “Springblade.” Patent Owner contends that record evidence demonstrates “that (1) Petitioner copied the Springblade, which embodies the patented feature, (2) the Springblade achieved significant commercial success as a result of the patent feature, and (3) the patented feature of the Springblade received industry praise.” *Id.* at 60. We have considered the evidence of non-obviousness offered by Patent Owner. Because, for the reasons discussed above, we are not persuaded that Petitioner has shown that claims 1–30 are unpatentable over the prior art, we need not further address Patent Owner’s secondary considerations evidence.

C. *Motions to Seal*

Both parties have filed Motions to Seal. See Paper 9 (“PO Mot. to Seal”); Paper 19 (“Pet. Mot. to Seal”). Each of those Motions indicates that they are unopposed. Both parties associate the Motions to Seal with a mutually agreed to protective order appearing as “Addendum A” of Paper 9. *Id.*

There is a strong public policy in favor of making information filed in an *inter partes* review open to the public, especially because the proceeding determines the patentability of claims in an issued patent and, therefore, affects the rights of the public. Under 35 U.S.C. § 316(a)(1) and 37 C.F.R. § 42.14, the default rule is that all papers filed in an *inter partes* review are

open and available for access by the public; a party, however, may file a concurrent motion to seal and the information at issue is sealed pending the outcome of the motion. It is, however, only “confidential information” that is protected from disclosure. 35 U.S.C. § 316(a)(7); *see* Trial Practice Guide, 77 Fed. Reg. at 48,760. The standard for granting a motion to seal is “for good cause.” 37 C.F.R. § 42.54(a). The party moving to seal bears the burden of proof in showing entitlement to the requested relief, and must explain why the information sought to be sealed constitutes confidential information. 37 C.F.R. § 42.20(c).

Here, Patent Owner moves to seal Exhibits 2008–10, 2016, and 2018–20. PO Mot. to Seal 4. Patent Owner also moves to seal portions of the Patent Owner Response that address or rely on those Exhibits. *Id.* Patent Owner contends that the content that it seeks to be sealed “contains confidential business information of either Petitioner or Patent Owner” and that “[i]f this information were disclosed publicly, that information likely would cause competitive business harm.” *Id.* at 5.

Petitioner moves to seal Exhibits 1033, 1037, 1040, 1048, 1049, 1058, 1059, 1072, and 1073. Pet. Mot. to Seal 2. Petitioner also moves to seal portions of its Petitioner’s Reply that address or rely on those Exhibits. Petitioner contends that the documents and material it seeks to seal are either subject to a protective order entered in the related district court litigation, or contain “confidential and competitively-sensitive information” or Patent Owner. *Id.* at 1.

We have reviewed the content of the record that the parties wish to have sealed. We agree that the pertinent content includes confidential material. We note that in the Scheduling Order, we advised the parties the

following:

We advise the parties that redactions to documents filed in this proceeding should be limited strictly to isolated passages consisting entirely of confidential information, and that the thrust of the underlying argument or evidence must be clearly discernible from the redacted versions. We also advise the parties that information subject to a protective order will become public if identified in a final written decision in this proceeding, and that a motion to expunge the information will not necessarily prevail over the public interest in maintaining a complete and understandable file history. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. at 48,761.

Paper 7, 3.

Here, Petitioner has provided redacted versions of the content that it seeks to have sealed, including the exhibits and Petitioner's Reply. We conclude that the redacted portions of the exhibits and Reply still permit the public to understand the thrust of Petitioner's arguments and evidence. Accordingly, we conclude that there is good cause to grant Petitioner's Motion to Seal (Paper 19), and we do so.

Although Patent Owner filed a redacted version of its Patent Owner Response, Patent Owner did not file a redacted, public version of any of the exhibits that it seeks to have sealed. That approach does not follow the above-noted guidance we provided. Nevertheless, because none of the content of the exhibits that Patent Owner seeks to have sealed factored into our Final Written Decision, in this case, we do not view Patent Owner's approach as detrimental to its Motion. We conclude that there is good cause to grant Patent Owner's Motion to Seal (Paper 9).

We make an additional observation that Patent Owner filed a non-public Patent Owner's Sur-reply (Paper 21) as "Parties and Board only" and

also a redacted, public version (Paper 22). Patent Owner's non-public version of the Sur-reply, however, is not the subject of any motion to seal. If Patent Owner wishes to maintain that version of the Sur-reply as "Parties and Board only" it must file a corresponding motion to seal.

III. CONCLUSION

For the foregoing reasons, we are not persuaded on the record at hand that Petitioner has shown by a preponderance of the evidence that claims 1–30 of the '079 patent are unpatentable over the prior art.

IV. ORDER

It is

ORDERED that Petitioner has not shown by a preponderance of the evidence that claims 1–30 of the '079 patent are unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Seal (Paper 9) is *granted*;

FURTHER ORDERED that Petitioner's Motion to Seal (Paper 19) is *granted*;

FURTHER ORDERED that the protective order, agreed to by the parties, is entered; and

FURTHER ORDERED that this is a Final Written Decision under 35 U.S.C. § 318(a), and that parties to the proceeding seeking judicial review of the decision under 35 U.S.C. § 319 must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2017-00127
Patent 9,339,079 B2

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