

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SKECHERS U.S.A., INC.,
“Petitioner”

v.

FAST IP, LLC,
“Patent Owner”

U.S. Patent No. 12,458,101

Title:
FOOTWEAR

**DECLARATION OF ANGUS WARDLAW IN SUPPORT OF PETITION
FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 12,458,101**

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I, Angus Wardlaw, declare as follows:

I. INTRODUCTION AND ENGAGEMENT

1. I have decades of experience in footwear, as described in Section II below. I have been asked by Skechers to analyze and provide explanations regarding certain matters relating to those subjects. I was retained in connection with this matter in January 2026.

2. My opinions are based on my years of education, research, and experience with footwear, as well as my investigation and study of relevant materials. In forming my opinions, I have considered and may rely upon the documents and information identified below, as well as all documents and information identified in Skechers' Petition for *Inter Partes* Review of U.S. Patent No. 12,458,101, including EX1001 to EX1019. Numbered exhibits cited below refer to exhibits to the Petition.

II. BACKGROUND AND QUALIFICATIONS

3. I am a footwear design and development engineer and the founder of Nimlin Sports Ltd., a footwear consultancy firm based in Hong Kong. My current *curriculum vitae* is attached as Appendix A to this declaration.

4. I have been involved in footwear design, development, and innovation for more than twenty years, with a focus on the ergonomic and functional engineering elements of footwear design, such as the physical parameters by which

components of footwear should be constructed to achieve their desired functions. My career has included research and development and leadership positions at global footwear companies, including at adidas and ANTA.

5. I obtained my Bachelor of Engineering in 2002 from the Department of Mechanical Engineering at the University of Edinburgh, Scotland. My research focused on solid mechanics and materials sciences. After completing my B.Eng., I started my career on the adidas Innovation Team in 2003, focusing on developing new footwear technologies. In 2011, I was promoted to Senior Development Engineer within the adidas Innovation Team, focusing on product innovation and development within the running and lifestyle footwear categories. By 2014, I was Director of Future Running, leading a team focused on driving innovation in footwear design.

6. One of the projects I worked on at adidas was the development of Boost technology, which generally relates to the use of expanded thermoplastic polyurethane in midsoles, to provide enhanced energy return, durability, and flexibility to performance footwear. Boost was highly successful, resulting in a number of additional product lines. In particular, I directed the innovation of adidas' Ultra Boost, which was focused on addressing strain and tension on the foot. I was featured in a production by HYPEBEAST concerning the design, technical

development, and features of the adidas Ultra Boost, which is available at <https://youtu.be/hw1tE-JIMW4?si=kSWAvTgoMwY31PWE>.

7. In 2017, I left adidas to become the Head of Innovation for Footwear and Apparel at ANTA, a position I held until January 2021. ANTA is one of the largest sportswear companies globally, by revenue. During my time at ANTA, I managed a large team of designers and engineers, and helped establish laboratories for sports science, mechanical engineering, and 3D printing. My responsibilities at ANTA included driving innovation in footwear design, sports engineering, polymer engineering, and 3D mold manufacturing processes.

8. From 2022 on, I have worked as a freelance footwear and innovation consultant under my consultancy firm, Nimlin Sports Ltd, advising a number of major brands on design and engineering matters. Additionally, between 2023-2024, I was Vice President of Footwear Operations at FILA, a major footwear brand.

9. I am also a named inventor on multiple patents relating to footwear technologies, including materials, manufacturing methods, and specific footwear constructions. For example, I am a named co-inventor of U.S. Patent No. 11,350,700, titled “Shoe with adaptive heel element,” which relates to improvements in heel construction for footwear. Similarly, I am a named co-inventor of U.S. Patent No. 10,759,096, titled “Expanded polymer pellets,” which relates to the manufacturing of shoe cushioning components.

10. Additional details regarding my education and employment are set forth in my curriculum vitae, which is attached hereto as Appendix A.

11. I am being compensated for my time spent on this matter at a rate of \$300 per hour, plus expenses. My compensation is not contingent on the outcome of this matter or the opinions I offer. All opinions in this declaration are my own.

III. LEVEL OF SKILL IN THE ART

12. I have been asked to provide my opinions regarding the qualifications and level of a person having ordinary skill ("POSITA") at the times of November 2009.

13. I am not an attorney. In expressing my opinions, I am relying on certain basic legal principles that have been explained to me.

14. I understand that a "POSITA" is a hypothetical person having ordinary skill in the field to which an invention pertains. I understand that a POSITA is not a layperson, but is also not of extraordinary skill. Instead, a POSITA is an individual with the same level of skill as a typical practitioner of the art at issue.

15. Applying those principles, I believe that a POSITA in the field of the '101 patent in November 2009 would have had a bachelor's degree in engineering and at least a few years of experience in designing and manufacturing shoes, or equivalent academic and work experience. Such a person would have at least a

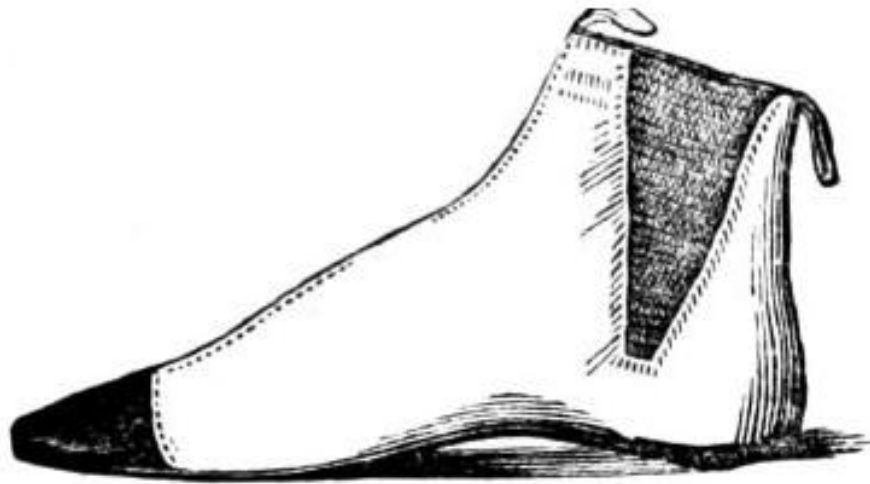
general understanding of general construction processes and materials used to manufacture footwear.

16. My opinions regarding the level of ordinary skill in the field are based on, among other things, my years of experience in footwear design, my understanding of the key qualifications relevant to a person tasked constructing articles of footwear like those described in the '101 Patent, and my familiarity with the backgrounds of colleagues and coworkers, both past and present.

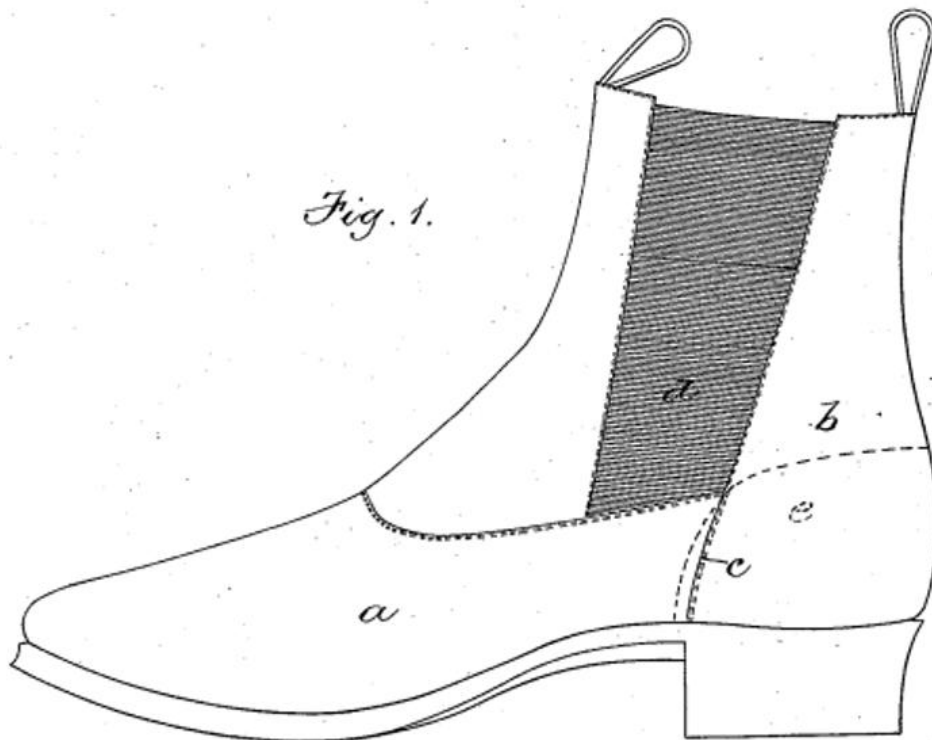
17. Although my qualifications and experience exceed those of the hypothetical POSITA defined above, my analysis and opinions are based on the perspective of a POSITA as described above, as of the relevant time frame.

IV. BRIEF DESCRIPTION OF THE TECHNOLOGY

18. Rapid-entry footwear had already been developed by the mid-nineteenth century. In 1847, J. Sparks Hall published his designs for an “elastic boot,” commonly known today as the “Chelsea boot,” which features flexible material that allows the boot to be put “on and [taken] off in an instant.” EX1014 at 127.

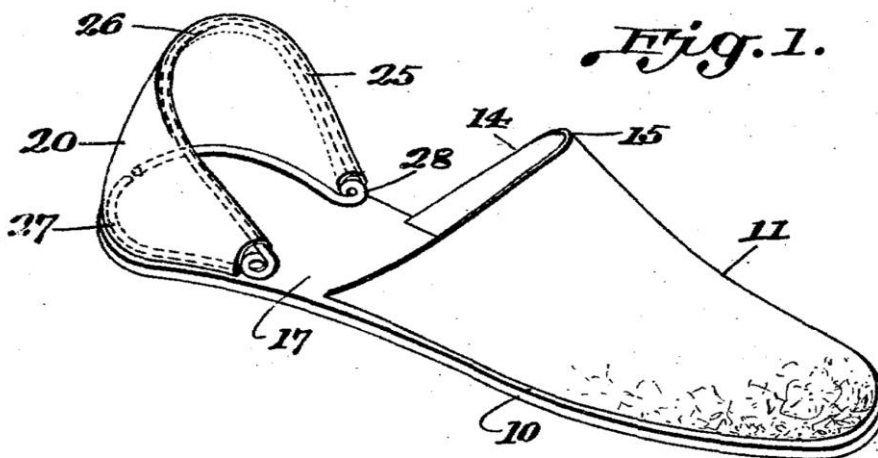


Id. Use of flexible upper material quickly became standard in footwear construction, and were described in U.S. Patent No. 287,312 (“Congress-Gaiter”), which issued in 1883.



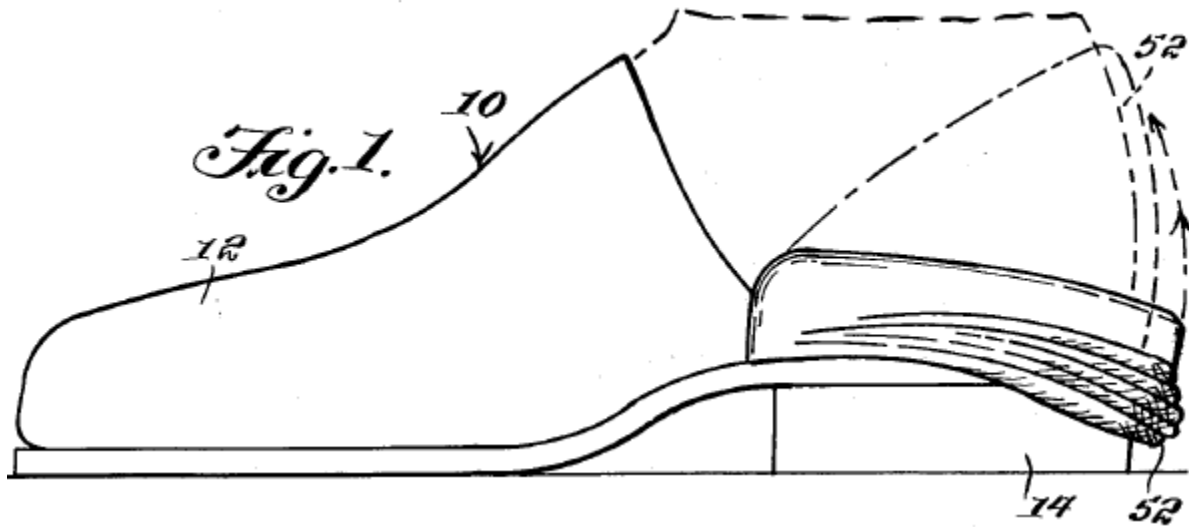
EX1015, Fig. 1; *id.*, 1:12–31 (discussing “*d* the elastic gorings”).

19. Similarly, footwear incorporating pivoting or hinged heel structures to facilitate rapid entry have also been well-known for decades. For example, U.S. Pat. No. 1,686,175, issued in 1928, described a “yieldable counter restorer” that “permit[s] the user to insert his foot” into footwear “with a minimum of trouble and yet with assurance of the retention on the foot of the article.” EX1016 1:6-11. This was achieved through the use of a “spring 25” connected to the “counter 20” such that “so that the counter is held erect collapsibly and yieldably, so as to permit ready insertion of the foot and instant erection of the counter after the counter is freed from downward pressure.” *Id.*, 1:52-77.



Id., Fig. 1. Similarly, U.S. Pat. No. 2,736,110, issued in 1956, disclosed, among other things, “arms carried by a shoe heel to move in arcuate paths above the heel adjacent opposite sides thereof about a common axis adjacent the front of the heel” in order

to “facilitate the donning or doffing of a pair of shoes without requiring the use of the hands.” EX1017, 1:27-36.



Id., Fig. 1. Thus, the core elements described and claimed in the '101 Patent—flexible upper material and a pivoting heel structure—have been well-known in the art for decades.

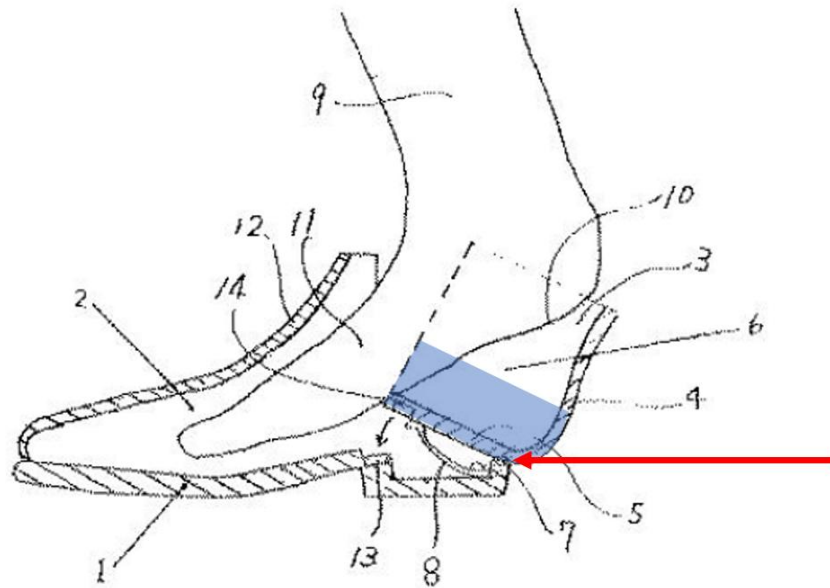
V. THE '101 PATENT

A. Heel structure including lower portion coupled to sole and integrally formed midportion

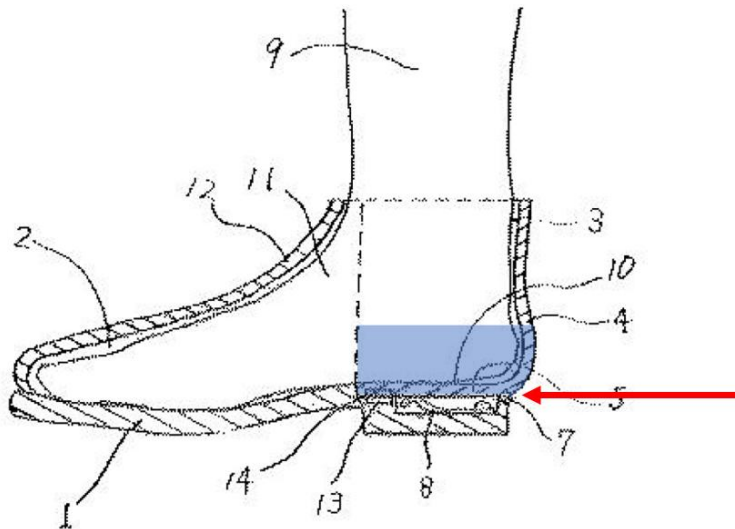
20. Kawase discloses “a lower portion coupled to a sole of the rapid-entry shoe and extending completely around the rear portion.” For example, Kawase’s heel portion “makes contact with four sides of the rear portion of the foot (both lateral sides, the rear side, and the sole side),” and “is pivotally supported along an axis extending left and right at the rear end of the sole of the footwear, allowing

rotation relative to the front securing portion of the footwear that secures the front portion of the foot to the sole.” EX1005 (“Kawase”) ¶ 6; see also *id.* claim 1 (“[F]ootwear comprising . . . side portions making contact with both sides of the rear portion of the foot, and a rear portion making contact with the rear side of the foot.”). Kawase further explains that “the movable heel portion 6 consisting of side portions 3, a rear portion 4, and a sole portion 5, is integrally separated from the shoe at the rear end of the sole 1 of the shoe and pivotally supported along an axis 7 extending in the lateral direction at the rear end of the sole 1 of the shoe.” *Id.* ¶ 10. Kawase teaches that the movable heel portion is connected to the sole at least by the “axis 7,” which “may take the form of a hinge or may be integrally formed from plastic or connected by leather.” *Id.* For example, in Figures 1-3, the lower portion of the heel portion, highlighted by Petitioner below in blue, extends completely around the rear portion, and is coupled to the sole at the axis of rotation 7 as denoted by red arrows added by Petitioner:

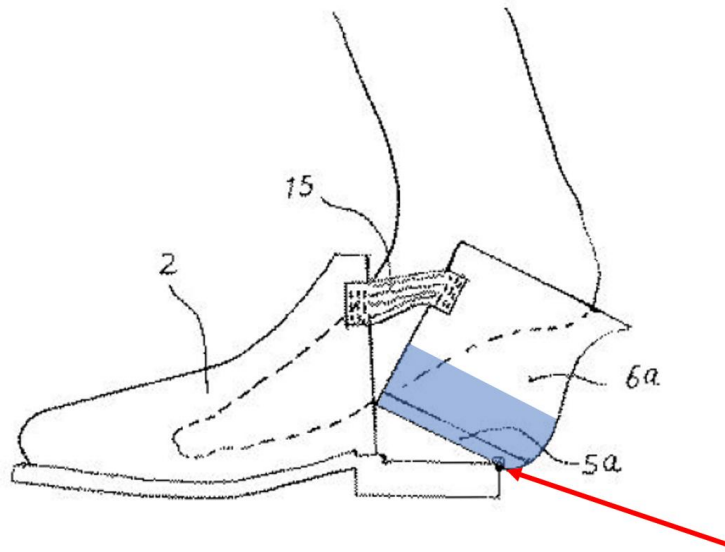
[FIG. 1]



[FIG. 2]



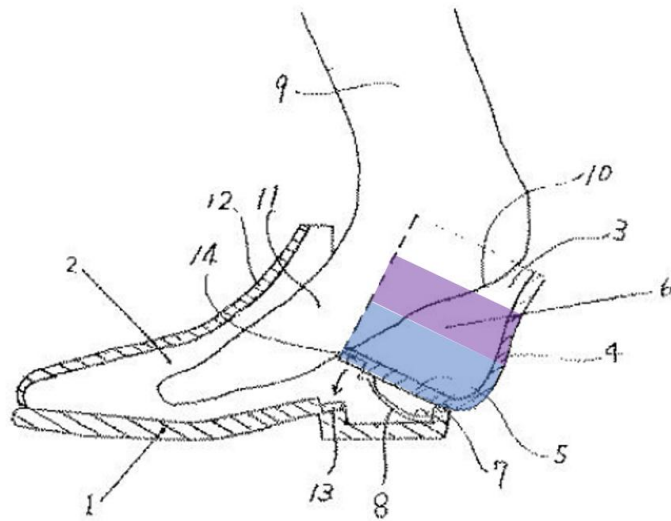
[FIG. 3]



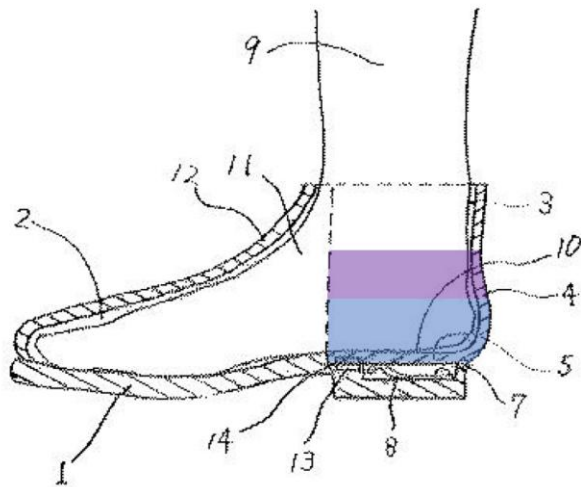
Id. Figs. 1-3 (highlighting and red arrows added).

21. Kawase discloses element 7[d]. As explained above, Kawase’s heel portion has “side portions making contact with both sides of the rear portion of the foot, and a rear portion making contact with the rear side of the foot.” Kawase claim 1. As shown in Figures 1-3, the midportion portion, highlighted by Petitioner in purple below, extends completely around the rear portion and extends from the lower portion as a continuous piece defining abutting and non-overlapping regions:

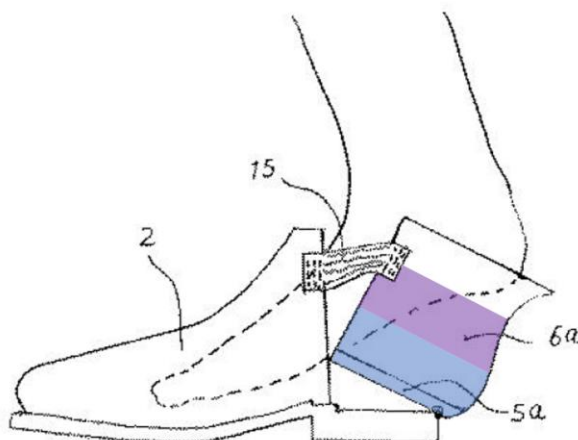
[FIG. 1]



[FIG. 2]



[FIG. 3]

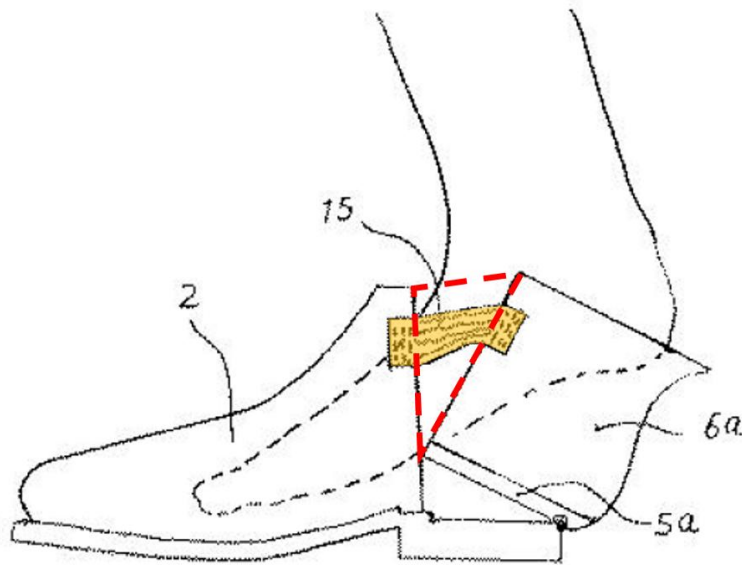


Id. Figs. 1-3 (highlighting added).

B. Positioning of the flexible material

22. Kawase discloses claim 8. Kawase explains that “the front securing portion 2 and the movable heel portion 6a of the shoe” are “pull[ed] together and connect[ed]” by the “[r]ubber cords 15.” *Id.* ¶ 11. Figure 3, annotated by Petitioner below, shows the slit created by the separation of the front securing portion 2 and the movable heel portion 6a, annotated with red lines, and the rubber cords 15 provided in that slit, highlighted in orange:

[FIG. 3]



Id. Fig. 3 (emphasis added).

C. Combining the References

1. Kawase & Murray

23. A POSITA would have reason to incorporate Murray's (EX1007) foam inserts within Kawase's movable heel portion, and would have had a reasonable expectation of success in doing so. Here, the interrelated teachings of Kawase and Murray provide a teaching, suggestion, or motivation to combine them.

24. For example, Kawase and Murray each address similar technology and are directed to similar design incentives and market pressures—namely, facilitating easy donning and doffing by use of their technology. Kawase expressly states that “[a]n object of the present invention is to provide footwear that can be put on while standing without bending, squatting, or using hands or a shoehorn, and which, once put on, secures the foot, eliminating concerns about slipping sideways or coming off while walking.” Kawase ¶ 5. Similarly, Murray explains that its “construction permits the wearer to put his feet into the boots without strenuous effort.” Murray at 1:38-40. Moreover, each reference discloses heel structures particularly suited to this purpose: Kawase's “heel portion” that “pivots open at the rear end of the sole portion,” Kawase ¶ 14, and Murray's insert positioned “below the wearer's interior ankle bone” that “extend[s] around the heel,” Murray at 2:23-25. Murray further teaches that its cushioning inserts are technology-independent, in that they can be incorporated multiple different types of shoes, such as the shoe of Kawase. *See*

Murray, 1:15-20 (“‘[B]oots’ are used throughout to designate all types of footwear such as firemen and sportsman boots, high and low shoes, loafers, slippers, and of all types of materials whether rubber, plastic, leather or cloth.”). Accordingly, a POSITA seeking to address the problem of footwear that is easy to don or doff without the use of traditional methods such as laces or shoehorns would have been motivated to consider the teachings of both Kawase and Murray.

25. Separately, Murray explains that one problem with footwear that have “no laces and no zipper fastenings” is that they are “oversize” so that they “may be put on and taken off without too much effort.” Murray, 1:7-10. Murray notes that such shoes “make[] walking difficult and running almost impossible because the foot is not held firmly” in the footwear “and has considerable movement” in the footwear “when the wearer is in motion.” *Id.*, 1:11-14. Murray teaches that its foam inserts “correct[] these disadvantages” because they “do not permit the foot to move about within” the footwear and “cause[] the foot to cling to the sole.” *Id.*, 24-30. Similarly, Kawase teaches that by implementing its movable heel portion, “the footwear is secured to the foot, eliminating concerns about sideways slippage or coming off while walking.” Kawase ¶ 14, *see also id.* ¶ 5 (“An object of the present invention is to provide footwear . . . which, once put on, secures the foot, eliminating concerns about slipping sideways or coming off while walking.”). Thus, Kawase and Murray both directly teach solutions to the problems of stability and retention of the foot in

footwear. A POSITA would have been motivated to consider their teachings and would have understood that their features are complementary and would enhance securement of the foot in a shoe.

26. Additionally, the proposed combination of Kawase and Murray would also have been obvious to a POSITA because it is a combination of prior art elements according to known methods to yield predictable results. For example, Murray's foam insert could easily have been added to Kawase's movable heel portion in the same configuration taught by Murray—i.e., attached “below the wearer's interior ankle bone D of tibia E and extending around the heel to the outside of the foot A,” forming a “semicircle” around the heel of the shoe, Murray, 2:23-27—in order to yield the predictable result of better securing and stabilizing the foot within Kawase's movable heel portion. As noted above, a POSITA would have understood that incorporating Murray's insert into Kawase's movable heel portion would simply enhance Kawase's teaching that “[o]nce put on, the footwear is secured to the foot, eliminating concerns about sideways slippage or coming off while walking.” Kawase ¶ 14.

27. Finally, it was well within the skill of a POSITA to modify the shoe of Kawase to use the cushioning component of Murray. Murray explains that its inserts can be incorporated into footwear using conventional methods, such as stitching, adhesives, or by making the foam itself sticky. Murray, 2:17-18, 2:47-53.

Moreover, the materials and techniques for making and using the components of Kawase and Murray were standard well before the claimed priority date, and combining those components into a shoe would have been a predictable application of routine skill. For example, a POSITA would be able to easily make slight modifications to size, shape, and orientation of Murray's foam insert based on the particularities of Kawase's shoe, including its upper and movable heel portion, to effectively accommodate those components without experimentation or unconventional modifications.

2. Kawase & Baek

28. A POSITA would have reason to incorporate Baek's (EX1010) stretchable portions within Kawase's slit region, and would have had a reasonable expectation of success in doing so. Here, the interrelated teachings of Kawase and Baek provide a teaching, suggestion, or motivation to combine them.

29. For example, Kawase and Baek each address similar technology and are directed to similar design incentives and market pressures—namely, facilitating easy donning and doffing by use of their technology. Kawase expressly states that “[a]n object of the present invention is to provide footwear that can be put on while standing without bending, squatting, or using hands or a shoehorn, and which, once put on, secures the foot, eliminating concerns about slipping sideways or coming off while walking.” Kawase ¶ 5. Similarly, Baek states that its “invention relates to

footwear easy to put on. . . . without the inconvenience of having to loosen and retie shoelaces each time the footwear is taken off and put on.” Baek at pg. 2, ¶ 12. Baek also states that, “the main object of the present invention is to provide footwear that enables convenience and quick putting on without requiring a person to bend at the waist to loosen shoelaces or adjust other fasteners.” *Id.* at pg. 2, ¶ 18. Baek further explains that its inventive structures are technology-independent: “the structure of the present invention is not limited to use in men’s dress shoes as shown in FIGS. 1 to 3, but when applied to women’s shoes, athletic shoes, and sandals . . . various types of footwear can be put on more conveniently and quickly.” *Id.*, pg. 3. Accordingly, a POSITA seeking to address the problem of footwear that is easy to don or doff without the use of traditional methods such as laces or shoehorns would have been motivated to consider the teachings of both Kawase and Baek.

30. Separately, Baek explains that one problem with footwear with “laces . . . often tied loosely during normal use” to facilitate easy donning and doffing is that “easily slipping off occur.” Baek at p. 2, ¶ 13. Similarly, Kawase teaches that by implementing its movable heel portion, “the footwear is secured to the foot, eliminating concerns about sideways slippage or coming off while walking.” Kawase ¶ 14, see also *id.* ¶ 5 (“An object of the present invention is to provide footwear . . . which, once put on, secures the foot, eliminating concerns about slipping sideways or coming off while walking.”). Thus, Kawase and Baek both

directly teach solutions to the problems of stability and retention of the foot in footwear. A POSITA would have been motivated to consider their teachings and would have understood that their features are complementary and would enhance securement of the foot in a shoe.

31. Additionally, the proposed combination of Kawase and Baek would also have been obvious to a POSITA because it is a combination of prior art elements according to known methods to yield predictable results. For example, Baek's stretchable portions could easily have been added to Kawase's slit region in the same configuration taught by Baek—i.e., “provided at both sides of the center of the outer skin (4) of the footwear (1)” EX1009 at pg. 3, ¶ 3—in order to yield the predictable result of “perform[ing] a stretching action” to facilitate donning of the shoe. *Id.* As noted above, minor adjustments in the position of components that otherwise do not impact the operation or functionality of those components in the context of the invention, as taught by Baek for its stretchable portions as compared to Kawase's rubber cords, do not confer non-obviousness over the prior art.

32. Finally, it was well within the skill of a POSITA to modify the shoe of Kawase to use the stretchable portions of Baek. The materials and techniques for making and using the components of Kawase and Baek were standard well before the claimed priority date, and combining those components into a shoe would have been a predictable application of routine skill. For example, a POSITA would be

able to easily make slight modifications to size, shape, and orientation of Baek's stretchable portions based on the particularities of Kawase's shoe, including its upper and movable heel portion, to effectively accommodate those components without experimentation or unconventional modifications.

3. Kawase & Kim

33. A POSITA would have reason to incorporate Kim's (EX1012) stretchable portions within Kawase's slit region, and would have had a reasonable expectation of success in doing so. Here, the interrelated teachings of Kawase and Kim provide a teaching, suggestion, or motivation to combine them.

34. For example, Kawase and Kim each address similar technology and are directed to similar design incentives and market pressures—namely, facilitating easy donning and doffing by use of their technology. Kawase expressly states that “[a]n object of the present invention is to provide footwear that can be put on while standing without bending, squatting, or using hands or a shoehorn, and which, once put on, secures the foot, eliminating concerns about slipping sideways or coming off while walking.” Kawase ¶ 5. Similarly, Kim addresses the problem “[t]o provide a shoe that can be easily put on and taken off by people who cannot bend down.” EX1012 at Abstract. Kim further explains that its inventive structures are technology-independent: “In addition to leather shoes, it can be applied to various types of shoes such as boots, sneakers, synthetic leather shoes, cloth shoes, and

sandals with heels.” *Id.* at ¶ 38. Kawase and Kim also both directly teach solutions to the problems of donning and doffing of footwear without bending down or using a shoehorn. A POSITA would therefore have been motivated to consider their teachings and would have understood that their features are complementary and would enhance securement of the foot in a shoe. Accordingly, a POSITA seeking to address the problem of footwear that is easy to don or doff without the use of traditional methods such as laces or shoehorns would have been motivated to consider the teachings of both Kawase and Kim.

35. Additionally, the proposed combination of Kawase and Kim would also have been obvious to a POSITA because it is a combination of prior art elements according to known methods to yield predictable results. For example, Kim’s stretchable portions could easily have been added to Kawase’s slit region in the same configuration taught by Kim—i.e., “at the boundary between the instep portion 3 and the heel portion 4 and in the vicinity thereof,” EX1012 at Abstract—in order to yield the predictable result whereby “the opening of the shoe expands.” *Id.* at ¶ 8. As noted above, minor adjustments in the position of components that otherwise do not impact the operation or functionality of those components in the context of the invention, as taught by Kim for its stretchable portions as compared to Kawase’s rubber cords, do not confer non-obviousness over the prior art.

36. Finally, it was well within the skill of a POSITA to modify the shoe of Kawase to use the stretchable portions of Kim. The materials and techniques for making and using the components of Kawase and Kim were standard well before the claimed priority date, and combining those components into a shoe would have been a predictable application of routine skill. For example, a POSITA would be able to easily make slight modifications to size, shape, and orientation of Kim's stretchable portions based on the particularities of Kawase's shoe, including its upper and movable heel portion, to effectively accommodate those components without experimentation or unconventional modifications.

I, Angus Wardlaw, do hereby declare and state that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code. I further declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: August 6, 2026

A handwritten signature in black ink, appearing to read "Angus Wardlaw", written over a horizontal line.

Angus Wardlaw

APPENDIX A

Angus Nimlin Wardlaw

Edinburgh, UK

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anguswardlaw@me.com

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Professional Summary

Global sportswear executive with 20+ years of leadership experience in innovation, product development, and operational transformation across footwear and apparel. Achieved industry-leading results, including the launch of Adidas Ultraboost (\$2B+ in revenue), and developed ANTA's innovation centre, integrating sustainability into every phase of the product lifecycle. With 8+ years leading teams in China and Asia, excels in navigating complex markets, building global R&D networks, and delivering solutions that drive performance and growth for international brands.

Key Achievements

- Spearheaded the creation of the Adidas Ultraboost, achieving over 30 million pairs sold and generating revenue exceeding \$2B USD.
 - Built ANTA Group's first cross-functional innovation centre, integrating advanced R&D capabilities for both footwear and apparel.
 - Acted as lead industry expert for the development of a novel 3D design software now used in the footwear industry for live customisation during sales meetings with major global retailers.
 - Reconstructed FILA's footwear development and testing program, laying the foundation for premium performance and lifestyle product launches.
-

Career Experience

Nimlin Sports Limited, Hong Kong / Scotland FOUNDER & PRINCIPAL CONSULTANT

December 2024 – Present

- Independent consulting practice supporting global sportswear and outdoor brands with strategy, product creation, sourcing, testing, and operations.
- Delivered strategic R&D, calendar, and manufacturing systems support for brands including Lululemon
- Supported Asia-based sourcing transitions, digital tooling strategy, and innovation pipeline planning for multiple clients.

Smoothlink Manufacturing, Hong Kong SAR FOOTWEAR DIRECTOR

Apr 2025 – Present

- Design, Development & Manufacturing support for performance sportswear and fashion brands.
- Covering all major sports from Road Running, Trail, Mountain, Fishing, Golf, Football, Court, Outdoor and Lifestyle.

Fila USA, NYC, USA

VICE PRESIDENT – Footwear Operations

October 2023 – November 2024

- Revitalised Fila's footwear operations by rebuilding product creation and testing processes, enabling consistent delivery of premium-quality performance and lifestyle footwear.
- Optimised the product calendar and streamlined SKUs from 2,000 to 450, achieving efficiency and profitability.
- Established a Vietnam-based supply chain network, reducing dependency on China and cutting production lead times.
- Developed a flagship running shoe and integrated advanced technology, outperforming industry leaders in consumer tests.

Revobit, Berlin, Germany

VICE PRESIDENT – Global Business Development

January 2021 – October 2023

- Led the SME team in R&D, commercialisation, sourcing, and business strategy, driving the development of a digital platform for footwear and apparel innovation.
- Successfully expanded EU operations, enhancing client adoption of 3D design tools for live sales customisation with major retailers.

ANTA Sports Limited, Xiamen, China

HEAD OF INNOVATION – Footwear and Apparel

January 2018 – January 2021

- Built ANTA's first cross-category innovation roadmap, driving advancements in performance, sustainability, smart products, and speed-to-market.
- Established a world-class innovation centre, including state-of-the-art labs for sports science, mechanical engineering, and 3D printing.
- Recruited and managed a 35-member team of global experts across disciplines, delivering multiple consumer-driven innovations.

Adidas AG, Herzogenaurach, Germany

DIRECTOR – FUTURE Innovation Team

October 2014 – June 2017

- Directed the innovation process for the Ultraboost franchise, generating \$2B+ in sales and defining the premium running category.
- Led the cross-functional development of groundbreaking products, including Pureboost X and Futurecraft AM4.

SENIOR DEVELOPMENT ENGINEER II – FUTURE Innovation Team

May 2011 – September 2014

- Oversaw product innovation and manufacturing advancements, contributing to the launch of Boost technology with over 100 million pairs sold.
- Developed Energy Boost, a flagship product generating \$72M in its first year, representing an 80% increase over prior models.

CATEGORY LEADER – Golf Footwear (Guangzhou, China)

2009 – 2011

DEVELOPMENT MANAGER – Running Footwear (China & Germany)

2007 – 2009 (Guangzhou, China)

2004 – 2007 (Herzogenaurach, Germany)

MECHANICAL ENGINEER – adidas Innovation Team (Herzogenaurach, Germany)

2003 – 2004

Patents

Co-inventor on **20+ patents** covering footwear materials, footwear technology, and advanced manufacturing.

Full details available at <https://patents.google.com/?inventor=angus+wardlaw>

Education and Certifications

B.Eng. Mechanical Engineering with Management Techniques

2:1

The University of Edinburgh, Edinburgh, Scotland

Technical Skills

- **Product Development:** Agile methodologies, R&D management, 3D software integration.
- **Strategic Operations:** Supply chain optimisation, cross-category innovation leadership.
- **Languages:** Basic Mandarin (Pinyin), Moderate German.
- **Software:** Advanced CAD (Rhino Surface Modeler), 3D digital creation platforms.

Sporting Achievements

Represented Scotland in international running competitions, including the World Mountain Running Championships, demonstrating a lifelong commitment to performance and sport.

