

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

Case IPR2026-00343
U.S. Patent No. 11,871,811

**DECLARATION OF ROBERT ERB,
IN SUPPORT OF PATENT OWNER'S PRELIMINARY RESPONSE**

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Fast IP EX2028
Skechers U.S.A. v. Fast IP
IPR2026-00343

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	MY BACKGROUND AND QUALIFICATIONS	2
III.	LIST OF DOCUMENTS CONSIDERED	5
IV.	LEGAL UNDERSTANDING	7
	A. My Understanding of Claim Construction	7
	B. My Understanding of Anticipation	7
	C. My Understanding of Obviousness	8
	D. My Understanding of a Person Having Ordinary Skill in the Art	10
V.	PERSON OF ORDINARY SKILL IN THE ART	11
VI.	OVERVIEW OF THE STATE OF THE ART	12
VII.	OVERVIEW OF THE '811 PATENT	16
VIII.	OVERVIEW OF THE APPLIED REFERENCES	19
	A. Kim (EX1005)	19
	B. Hoying (EX1007)	22
	C. Koo (EX1008)	23
IX.	DETAILED DISCUSSION OF OPINIONS	26
	A. The Petition fails to show that Kim discloses all of the limitations recited in the challenged claims.	27
	1. The claimed stabilizer extending from the sole portion (claims 1 and 10)	27
	2. The claimed flexion-and-pivoting limitation (claim 10).	29
	3. The relative-angles limitation (claim 10)	31
	B. The Petition fails to establish that a POSITA would have been motivated to combine the asserted references or would have had a reasonable expectation of success in doing so, in either of its obviousness grounds.	33
X.	CONCLUSION	38

I, Robert Erb, hereby declare as follows.

I. INTRODUCTION

1. I have been retained as an expert witness on behalf of Patent Owner Fast IP, LLC (“Patent Owner”) for the above-captioned *inter partes* review (“IPR”). I am being compensated for my time in connection with this IPR at my normal hourly rate. My compensation is not contingent on either my expert opinion or the outcome of this litigation. I have no other interest in this proceeding.

2. I understand that this Declaration accompanies Patent Owner’s Preliminary Response filed in this IPR involving U.S. Patent No. 11,871,811 (“the ’811 patent”) (EX1001), entitled “Rapid-Entry Footwear Having a Stabilizer and an Elastic Element.” The ’811 patent was filed on September 21, 2023, as a continuation of U.S. Application No. 17/965,516, filed on October 13, 2022, which is a continuation of U.S. Application No. 16/942,335, filed on July 29, 2020, and which claims priority to U.S. Provisional Application No. 62/879,883, filed on July 29, 2019. My opinions regarding the knowledge in the art at the time of the ’811 patent are based on the July 29, 2019 priority date.

3. In preparing this Declaration, I have reviewed the ’811 patent and each of the documents cited herein, in light of general knowledge in the art before the ’811 patent’s priority date. In formulating my opinions, I have relied upon my experience, education, and knowledge in the relevant art. In formulating my

opinions, I have also considered the viewpoint of a person of ordinary skill in the art (“POSITA”) (as discussed further below in Section V) at the time of the ’811 patent’s priority date.

II. MY BACKGROUND AND QUALIFICATIONS

4. I received a Bachelor’s degree in Philosophy from the University at Buffalo in 1982 and a Juris Doctor from New York Law School in 1991.

5. From 2023 to the present, I have been the Chief Executive Officer of Triple 8 Distribution, LLC, a manufacturer and distributor of athletic and action-sport protective equipment. In this role, I oversee the company’s product strategy, operations, manufacturing, distribution, marketing, and brand-development activities. Triple 8 is a global leader in protective gear for action sports, including skateboarding, biking, roller skating, and roller derby, and its products serve consumers ranging from beginners to professional athletes. My work requires substantial familiarity with the way athletic products are designed, developed, tested, positioned, manufactured, and commercialized for real-world use by active consumers.

6. Prior to joining Triple 8, I served at adidas America beginning in 1994, initially as General Counsel and a member of the company’s Senior Management Team. I also served as Head of Sports Marketing, during which time I was a member of the Executive Management Team responsible for growing the

adidas America subsidiary substantially in size. My responsibilities required me to develop a detailed understanding of the development, positioning, commercialization, and competitive differentiation of athletic footwear products. Through my work with adidas's footwear business, I regularly interacted with personnel involved in footwear design, product development, brand management, and commercialization and became familiar with the considerations that drive athletic footwear design and development.

7. Additionally, I served in senior leadership roles with TaylorMade Golf Company and adidas Golf, including as Senior Executive of Global Marketing and later President. During that time, I was accountable for product development initiatives, research and development activities, operations, licensing, marketing, and sales. Because adidas Golf products are designed specifically for athletic performance, comfort, fit, stability, durability, and user experience, my responsibilities required me to work closely with personnel involved in the design, development, testing, and commercialization of performance footwear products.

8. I also served in senior executive leadership positions at FILA International (Sport Brands International, LLC) from 2004 to 2007, including as Chief Executive Officer, Chief Marketing Officer, and Managing Director, North America. In those roles, I was involved in product strategy, brand positioning, market expansion, and commercialization efforts relating to FILA footwear

products. This experience further deepened my understanding of how footwear companies evaluate design alternatives, consumer preferences, manufacturing constraints, product performance requirements, and market demands when developing athletic footwear.

9. From 2007 through 2023, I served in various executive leadership roles at Kranos Corporation (d/b/a Schutt Sports), including President, Chief Executive Officer, and General Counsel, and, from 2018 to 2021, Chairman and Chief Executive Officer. I also served as Chief Executive Officer and Director of Certor Sports, LLC in 2021. In these roles, I oversaw operations, manufacturing, research and development, product strategy, and commercialization activities for athletic equipment and consumer sporting-goods products. These responsibilities included supervising multidisciplinary product-development teams responsible for designing products that balance performance, comfort, safety, manufacturability, durability, and consumer usability.

10. I am also a named inventor on several U.S. patents, including U.S. Patent No. 7,073,277, entitled “Shoe Having an Inner Sole Incorporating Microspheres.” The patent relates to shoe components, including shoe sole and insole technologies, and addresses issues such as cushioning, conformability, durability, resilience, and user comfort. My work as an inventor on this project

provided direct experience with the conceptual design and implementation of shoes generally, and athletic footwear specifically.

11. Through these experiences, including leadership roles at adidas, adidas Golf, and FILA, and my own work as an inventor in the same field as the '811 patent, I have developed substantial familiarity with how footwear designers identify design objectives, evaluate design tradeoffs, develop prototypes, and balance competing considerations such as comfort, fit, support, stability, manufacturability, durability, and aesthetics. I am therefore familiar with the perspective and thought process of persons working in the field of athletic footwear design and development.

12. I understand that a copy of my complete curriculum vitae has been submitted as Exhibit 2029, which includes a list of my publications, and other details regarding my expertise and qualifications.

III. LIST OF DOCUMENTS CONSIDERED

13. I have considered the following documents listed below in addition to any other documents cited in this Declaration. To the best of my knowledge, these documents are true and accurate copies of what they purport to be. An expert in the field would reasonably rely on them to formulate opinions such as those set forth in this Declaration.

Paper No.	Description
1	Petition for <i>Inter Partes</i> Review of U.S. Patent No. 11,871,811

Exhibit No.	Description
1001	U.S. Patent No. 11,871,811 (“the ’811 Patent”)
1005	English Translation of Japan Utility Model Registration No. 3,153,220 (“Kim”)
1007	U.S. Patent No. 11,166,517 (“Hoying”)
1008	U.S. Patent No. 9,756,903 (“Koo”)
2023	Carmichael, E. (2019, February 21). TWH explains: What is a heel counter and Why you need to know. Retrieved July 22, 2026, from https://the-well-heeled.com/twh-explains-what-is-a-heel-counter-and-why-you-need-to-know/
2024	Heel Counter. Retrieved July 22, 2026, from https://shoemaking.wiki/Heel_Counter
2025	Counter Stiffener Attaching in Footwear Upper Manufacturing – Stitching Process Series. Retrieved July 22, 2026, from https://thefootwearedge.com/counter-stiffener-attaching-028/
2026	“The Ultimate Guide to Skechers Hands-Free Slip-ins®,” <i>SKECHERS</i> , accessed at https://www.skechers.com/stories/comfort-technology/what-is-skechers-hands-free-slip-ins.html (last accessed July 15, 2026)
2027	“Hands-Free Slip-ins® vs. Traditional Slip-Ons: What’s the Difference?,” <i>SKECHERS</i> , accessed at https://www.skechers.com/stories/comfort-technology/skechers-hands-free-slip-ins-vs-slip-ons.html (last accessed July 15, 2026)
2030	Ryder, S. “Step by Step. Design and Development,” CoDesign Collaborative, accessed at https://codesigncollaborative.org/step-by-step-shoe-design/ (last accessed July 30, 2026)

IV. LEGAL UNDERSTANDING

A. My Understanding of Claim Construction

14. I understand that during an *inter partes* review proceeding, claims are to be construed in light of the specification as would be read by a person of ordinary skill in the relevant art at the time of the invention. I understand that claim terms are given their plain and ordinary meaning as would be understood by a POSITA in the context of the patent's specification and prosecution history. A claim term, however, will not receive its ordinary meaning if the patentee acted as his or her own lexicographer and clearly set forth a definition of the claim term in the specification. In this case, the claim term will receive the definition set forth in the patent.

B. My Understanding of Anticipation

15. I understand that a single piece of prior art anticipates a claim if that prior art discloses each and every claim element as arranged in the claim. I further understand that, where a claim element is not explicitly disclosed in a prior art reference, the reference may only anticipate a claim if the missing claim element is necessarily present in the apparatus or is a natural result of the method disclosed, i.e., the missing claim element is "inherent." I understand that inherency may not be established by probabilities or possibilities and that the mere fact that a certain thing may result from a given set of circumstances is not sufficient.

C. My Understanding of Obviousness

16. I understand that a patent claim is invalid if the claimed invention would have been obvious to a person of ordinary skill in the art at the time of the application's priority date. I understand that this means that even if all the limitations of the claim cannot be found in a single prior-art reference that would anticipate the claim, the claim can still be invalid.

17. To obtain a patent, a claimed invention must have been, as of its priority date, nonobvious in view of the prior art in the field. I understand that a patent claim is obvious when the differences between the subject matter sought to be patented 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.

18. I understand that to prove that prior art or a combination of prior art renders a patent claim obvious, it is necessary to: (1) identify the particular references that, singly or in combination, render the patent claim obvious; (2) specifically identify which elements of the patent claim appear in each of the asserted references; and (3) explain how the prior art references could have been combined in order to create the inventions claimed in the patent claim.

19. I also understand that when considering the obviousness of a patent claim, one should consider whether a teaching, suggestion, or motivation to

combine the references exists so as to avoid impermissibly applying hindsight when considering the prior art. I understand this test should not be rigidly applied, but that the test can be important to avoiding such hindsight.

20. I understand that certain objective indicia can be important evidence as to whether a patent is obvious or nonobvious. Such indicia include: (1) commercial success of products covered by the patent claims; (2) a long-felt need for the invention; (3) failed attempts by others to make the invention; (4) copying of the invention by others in the field; (5) unexpected results achieved by the invention as compared to the closest prior art; (6) praise of the invention by the infringer or others in the field; (7) the taking of licenses under the patent by others; (8) expressions of surprise by experts and those skilled in the art at the making of the invention; and (9) the patentee proceeded contrary to the accepted wisdom of the prior art.

21. I also understand that “obviousness” is a legal conclusion based on the underlying factual issues of the scope and content of the prior art, the differences between the claimed invention and the prior art, the level of ordinary skill in the pertinent art, and any objective indicia of non-obviousness. For that reason, I am not rendering a legal opinion on the ultimate legal question of obviousness. Rather, my testimony addresses the underlying facts and factual analysis that would support a legal conclusion of obviousness or non-obviousness, and when I use the

term obvious, I am referring to the perspective of one of ordinary skill at the time of invention of the '811 patent.

D. My Understanding of a Person Having Ordinary Skill in the Art

22. I understand that a POSITA is presumed to be aware of all pertinent art, thinks along conventional wisdom in the art, and is a person of ordinary creativity.

23. I understand that the following should be considered when deciding the level of ordinary skill in the art that someone would have had at the time the claimed invention was made:

- the levels of education and experience of persons working in the field;
- the types of problems encountered in the field; and
- the sophistication of the technology.

24. My opinion below explains how a POSITA would have understood the technology described in the documents I have identified herein around the time of the '811 patent.

25. Regardless of whether I use “I” or “POSITA” during my technical analysis below, all of my statements and opinions are always to be understood to be based on how a POSITA would have understood or read a document at the time of the '811 patent.

V. PERSON OF ORDINARY SKILL IN THE ART

26. For purposes of this Declaration, I do not dispute Petitioner's articulation of a POSITA as having 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*. See Pet., 8 (emphasis added). I also agree that a POSITA would have at least a general understanding of construction processes and materials used to manufacture footwear. Pet., 8. I have applied that definition for purposes of this Declaration.

27. I also satisfy this definition myself. While I do not have a bachelor's degree in engineering, I have equivalent academic and work experience. Specifically, I have extensive practical experience (far more than merely "a few years") in the field of designing and manufacturing shoes. Pet., 8. That experience has given me an in-depth understanding of construction processes and materials used to manufacture footwear, and I am a named inventor on patents in this field. My experience in a supervisory role for multiple footwear design projects has also given me insight into how other contributors to the footwear design process, including engineers, materials scientists, and artists, collaborate and engage to find problems and solutions in the field. I have also applied this insight in forming my opinions in this Declaration on how a POSITA would understand and interpret the challenged claims and the prior art.

28. It is my opinion that the precise definition of a POSITA would not materially affect the limited analysis required for deciding institution and presented in this Declaration. If called to give further opinions in this proceeding should review be instituted, I reserve the right to reconsider Petitioner's definition of a POSITA and arrive at my own conclusion.

VI. OVERVIEW OF THE STATE OF THE ART

29. I understand that the '811 patent arises from longstanding challenges in footwear design, particularly the challenge of creating a shoe that permits hands-free entry while still providing the fit, structure, support, and retention expected of conventional footwear. The '811 patent discloses a rapid-entry shoe with a stabilizer configured to resist collapse of the rear portion of the shoe while still permitting a user to step into the shoe without using his or her hands. EX1001, Abstract. As described in the '811 patent, the disclosed footwear is intended to provide the convenience of hands-free entry while maintaining the performance and functionality of a conventional shoe.

30. Footwear development is often a collaborative process involving designers, developers, materials specialists, engineers, and manufacturing personnel. Decisions regarding fit, support, cushioning, sole geometry, upper construction, durability, manufacturability, retail objectives, and consumer expectations are typically evaluated together rather than independently. Changes to

one portion of a shoe frequently affect the operation and performance of surrounding structures and often require corresponding adjustments elsewhere in the design. As a result, footwear products are generally designed as coordinated systems intended to achieve specific performance and consumer-use objectives. *See, e.g.*, EX2030.

31. The design and development of footwear must account for foot anatomy, regional anthropomorphic data, and material restrictions. In other words, footwear developed in 2019 was designed as a fully integrated system. *See, e.g.*, EX2030. The process begins with research and analysis. Then, in the ideation phase, designers create drawings exploring silhouettes, upper panel overlays, and tooling textures. Next, refined digital drawings using CAD software or vector tools showing multiple angles (lateral, medial, top, bottom, and heel views). The technical specification of the is then engineered, using what is called a “last.” A last is a foot-shaped plastic or wooden model that dictates the fit, volume, toe shape, and heel-to-toe drop of the shoe. Then the outsole tooling was determined.

32. First prototypes are sometimes built with whatever scraps or temporary materials are on hand. This is followed by further refinements and prototypes using production-intent materials. These were assigned to real humans for rigorous biomechanical and wear-testing to optimize comfort and durability.

33. The standard workflow for shoe design had been documented across historical textbooks, peer-reviewed journals, and industry design institutions, such as: Karl T. Ulrich & Steven D. Eppinger, *Product Design and Development*, 5th ed. 2012); A. Luximon ed., *Handbook of Footwear Design and Manufacture* (2013); Wade Motawi, *How Shoes Are Made* (2014)..

34. *Footwear Design* by Aki Choklat (2012) is widely considered the foundational trade manual for the modern shoe industry. Choklat dedicates an entire section to the research and design development processes, outlining how a designer transitions from a macro-trend concept into an active design brief. It breaks down the ideation phase into visual storyboarding, material sourcing maps, and collection planning before technical drawing begins. Nowhere in this institutional knowledge would a person of skill in the art be motivated to mix and match components of existing shoes, especially different kinds of shoes that serve different purposes.

35. Rather, footwear designers generally approach shoe development as the design of an integrated product in which the heel structure, sole, upper, elastic components, cushioning elements, and support features are intended to function together as part of a cohesive system. Changes to one portion of a shoe often affect the operation, comfort, fit, support, stability, durability, and manufacturability of other portions of the shoe. The '811 patent addresses these design challenges

through a specific claimed combination of structural features, including a stabilizer and a plurality of elastic elements configured to cooperate with one another to facilitate hands-free entry while resisting collapse of the rear portion of the shoe during use. EX1001, Abstract; claim 1.

36. For example, stabilizing structures are generally evaluated based on how they interact with surrounding portions of the shoe, including the sole, upper, cushioning structures, and heel-support architecture. A stabilizer may incorporate, cooperate with, or support a heel structure, but a stabilizer and a heel counter are not necessarily the same footwear component. In conventional footwear terminology, a heel counter is a relatively stiff component associated with the heel portion of the upper and used to maintain the upper's shape and support or contain the wearer's heel. A stabilizer is a structure whose principal identified function is to increase heel or rearfoot stability, frequently by reinforcing, supporting, anchoring, or working in conjunction with the heel counter, upper, midsole, or heel structure. Although a counter itself can contribute to stability, and a stabilizer can incorporate or be integrated into a counter, the terms do not necessarily identify the same footwear component.

37. Before the priority date of the '811 patent, footwear designers faced significant challenges in developing shoes that could be easily put on without

bending over, tying laces, or using one's hands while still maintaining comfort, stability, support, and secure foot retention. Slip-on shoes had existed for many years, but such shoes frequently suffered from functional shortcomings, including inadequate heel retention, insufficient support during athletic activities, discomfort during use, or difficulty entering the shoe without manually manipulating portions of the upper or heel structure. As a result, designers were required to balance competing design objectives, including ease of entry, fit, stability, durability, user comfort, and manufacturability.

VII. OVERVIEW OF THE '811 PATENT

38. **Overview of the System.** The '811 patent, titled "Rapid-Entry Footwear Having a Stabilizer and an Elastic Element," describes a rapid-entry shoe configured to allow a user to step into the shoe without using hands while maintaining support, retention, and functionality during use. EX1001, Abstract, 1:25-34, 1:52-67. The claimed shoe includes, among other features, a "stabilizer defining a unitary structure extending from the sole portion toward a rear portion of the foot opening," and "a plurality of elastic elements" configured in such a way to cooperate with the stabilizer and the other claimed structures to facilitate hands-free entry while resisting collapse of the rear portion of the shoe. EX1001, claims 1, 10.

39. **Stabilizer Architecture.** One feature of the '811 patent is its use of a stabilizer positioned at the rear portion of the shoe. Independent claims 1 and 10 each recite “a stabilizer defining a unitary structure extending from the sole portion toward a rear portion of the foot opening.” EX1001, 11:46-48, 12:25-27. In my opinion, the stabilizer is not merely a rigid component positioned at the heel of the shoe, such as a conventional heel counter. Rather, the claims describe a unitary stabilizing structure that extends from the sole portion and cooperates with surrounding portions of the shoe to support the rear portion of the footwear while maintaining rapid-entry functionality. As described in the '811 patent, the claimed stabilizer and the sole are in contact in order for the stabilizer to function properly as a stabilizer. EX1001, 6:36-40, 9:25-28.

40. **Elastic Elements.** The '811 patent further recites “a plurality of elastic elements.” EX1001, claims 1, 10. Claim 1 recites a plurality of elastic elements “positioned forward of the rear portion of the upper” that are “operable to enlarge the foot opening when expanded and operable to reduce the foot opening when contracted.” EX1001, 11:49-53. Claim 10 recites a plurality of elastic elements “configured to facilitate at least one of flexion and pivoting of the forward portion of the upper relative to the sole portion,” and further recites a first elastic element and a second elastic element defining longitudinal axes that form different angles relative to a vertical axis. EX1001, 12:28-39. In my opinion, the

elastic elements are not disclosed simply for cushioning or comfort purposes.

Instead, they participate in the rapid-entry functionality of the shoe and operate in a particular way in conjunction with the other claimed structures.

41. **Cooperation of the Claimed Structures.** In my opinion, the stabilizer, plurality of elastic elements, upper, and sole portion are not disclosed as isolated features. Rather, the '811 patent specification and claims describe a footwear configuration in which these components cooperate to achieve multiple objectives simultaneously, including hands-free entry, resistance to collapse, support, comfort, and retention. Each element of the claimed shoe has a specific shape and configuration, and each element interacts with the other elements as part of a carefully engineered whole. *See generally* EX1001. The operation of each structure depends in part on its relationship with surrounding structures. This is consistent with my experience that footwear designs are generally developed and evaluated as integrated products rather than as collections of unrelated components.

42. The interaction between these components relies on a balance of rigidity and flexibility to facilitate hands-free entry and stable wear. A POSITA would understand that the stabilizer acts as a unitary structure extending from the sole toward a rear portion of the foot opening. It provides the “skeleton” necessary to maintain the shoe’s shape while allowing specific zones to flex during entry.

The upper serves as the primary enclosure, while elastic elements provide the tension required for the rapid-entry function. The '811 patent describes particular configurations for the plurality of elastic elements that dictate how the opening expands and retracts.

VIII. OVERVIEW OF THE APPLIED REFERENCES

43. I understand that Petitioner relies on three prior-art references in its proposed grounds for the challenged claims of the '811 patent: Kim (EX1005), Hoying (EX1007), and Koo (EX1008). I provide brief overviews of these references below.

A. Kim (EX1005)

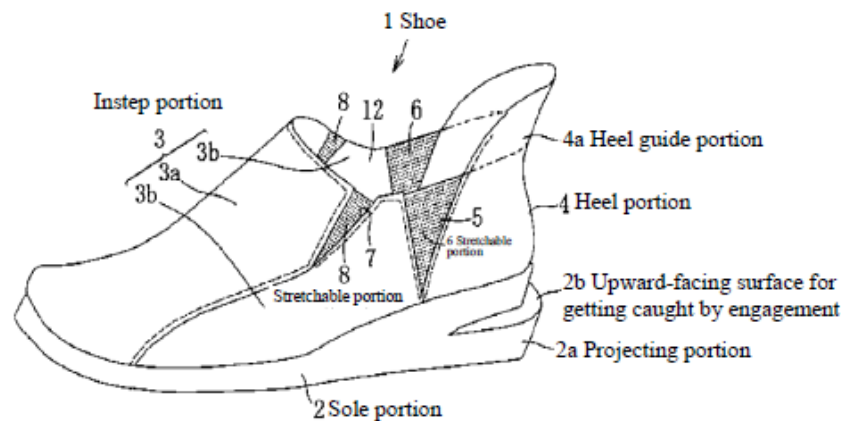
44. I understand that Petitioner relies on Japanese Utility Model Registration No. 3153220 to Seiji Kim, titled "Shoe," as its principal prior-art reference. EX1005 ("Kim").

45. Kim describes a shoe intended to be put on and taken off by a person who cannot readily bend down, including an elderly person, a person with a physical disability, or a pregnant person. EX1005, Abstract, ¶¶1, 5-6. Kim explains that conventional shoes generally required either a shoehorn or the user's finger to assist in inserting the heel, and that previously proposed shoehorn structures still required the user to hold the shoehorn by hand. EX1005, ¶¶2-5. Kim seeks to address that problem by incorporating a heel guide portion projecting from the

upper end of the heel portion and a separate projecting portion on the sole portion that assists removal of the shoe. EX1005, ¶¶6-8.

46. Kim's first embodiment, shown in Figure 1 (below), includes a sole portion 2, an instep portion 3, a heel portion 4, and a heel guide portion 4a that "integrally project[s] from the upper end of the heel portion 4." EX1005, ¶22.

[FIG. 1]



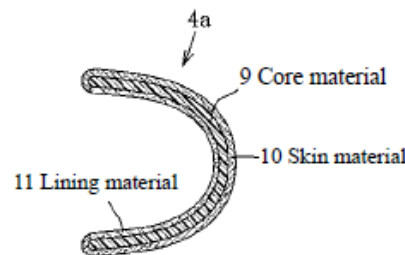
EX1005, FIG. 1

47. Kim's heel guide portion 4a projects from the upper end of heel portion 4 and curves backward as it extends upward. EX1005, ¶¶22, 26. During insertion, the user first places the toes into the shoe and then pushes the heel into heel portion 4 while sliding the heel along heel guide portion 4a. EX1005, ¶¶8, 13, 29. Kim states that the height and rearward slope of the heel guide facilitate this insertion process. EX1005, ¶¶13, 16, 29, 31. Stretchable portions 6, 8 stretch,

thereby facilitating expansion of the shoe opening 12, when the user dons or doffs the shoe. EX1005, ¶¶25, 29, 30.

48. Kim also describes a layered construction for heel portion 4 and heel guide portion 4a. In the embodiment illustrated by Figure 2 (below), those portions include a hard core material 9, a soft skin material 10 covering the outside of the core material, and a soft lining material 11 covering the inside of the core material. EX1005, ¶¶10, 17, 27.

[FIG. 2]



EX1005, FIG. 2.

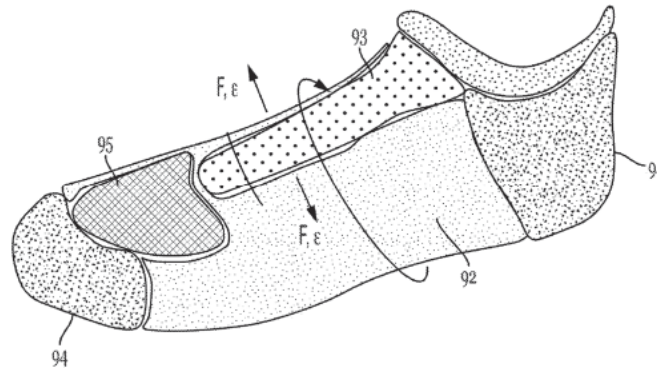
49. Kim states that core material 9 may be a synthetic resin material, including a hot-melt material, a counter material, “or the like.” EX1005, ¶27. According to Kim, this construction provides “sufficient strength” so that “the heel portion 4 and the heel guide portion 4a can be prevented from losing their shape.” EX1005, ¶¶27, 31.

B. Hoying (EX1007)

50. I understand that Petitioner also relies on U.S. Patent No. 11,166,517, titled “Method for Manufacturing a Shoe Upper.” EX1007 (“Hoying”). I understand that Petitioner relies on Hoying only in Ground 2, in combination with Kim, and only against dependent claims 8 and 9, which recite that the claimed elastic element specifically includes either a 2-way stretch (claim 8) or a 4-way stretch (claim 9).

51. Hoying is directed to a method for manufacturing a shoe upper, aimed at reducing the cost of producing uppers in many sizes. Its method provides a stretchable portion, “stretch[es]” it “for adapting a size of the shoe upper,” and then permanently attaches a rigid element “so that the stretched stretchable portion is locked.” EX1007, Abstract.

52. To form the stretchable portion, Hoying describes generic options, including a stretch fabric “e.g. 2-way or 4-way stretch” of a material such as elastane, and states that its method “may be used for the manufacture of shoe uppers in general.” EX1007, 7:23-29, 7:46-52. Figure 10A (below) shows a knit running-shoe upper with functional zones, including an elastic zone 93 for “ease of step in.” EX1007, 38:17-19, 41:52-54.



EX1007, FIG. 10A.

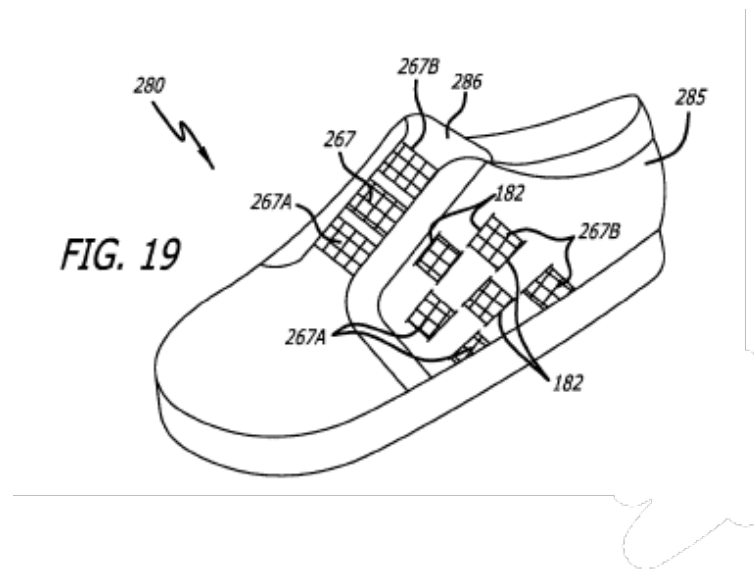
C. Koo (EX1008)

53. I understand that Petitioner also relies on U.S. Patent No. 9,756,903, titled “Shoe Having Elastic Tongue-Securing Straps.” EX1008 (“Koo”). I understand that Petitioner relies on Koo, in combination with Kim, only in Ground 3, against dependent claims 2, 5, 6, and 11.

54. Koo is directed to shoes having elastic tongue-securing straps. Koo provides “shoes in which a plurality of elastic straps secure the shoe’s tongue to other portions of the shoe’s structure, thereby facilitating ease-of-use.” EX1008, 1:26-31. The elastic straps “pull or hold a shoe’s tongue in a down (or at least lower) position,” with enough tension to hold the shoe on the foot, so that a wearer can “slide his or her foot into the shoe without tying the shoelaces.” EX1008, 6:1-13. Across its many embodiments, Koo implements this tongue-securing function using elastic straps, an elastic web (e.g., 267), or elastic laces (e.g., 147, 337) extending from the sides of the tongue and attaching to the upper and/or sole.

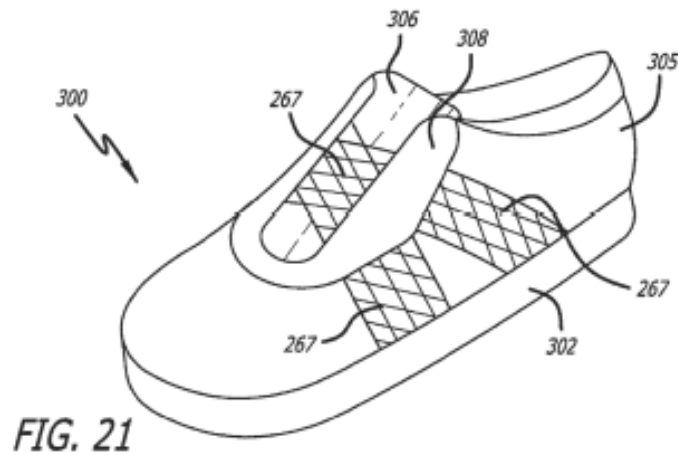
EX1008, 3:5-11:16. I understand Petitioner relies on the embodiments discussed with respect to Figures 19, 21 and 22 of Koo.

55. In the embodiment of Figure 19 (below), shoe 280 includes three sections of elastic web 267 that cross over the top of the tongues 286 and are woven inside and outside of the sidewalls of upper 285 through slits or openings 182. EX1008, 9:64-10:10



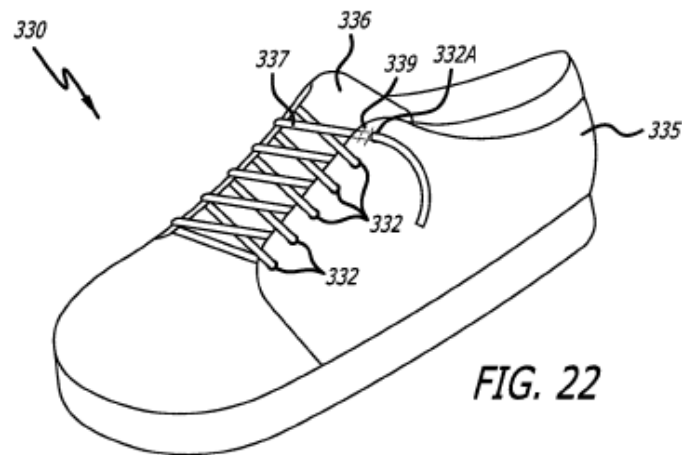
EX1008, FIG. 19.

56. In the embodiment of Figure 21 (below), shoe 300 has an elastic web 267 in the shape of an “X,” with its crossing portion over the tongue 306 and its extending portions passing beneath a U-shaped strip 308 that borders the forefoot opening and then attaching to the upper 305 or the sole 302. EX1008, 10:19-45.



EX1008, FIG. 21 .

57. In the embodiment of Figure 22 (below), shoe 330 includes a row of eyelets 332 on each side of the forefoot opening under which the tongue 336 extends (in accordance with conventional lace-up shoes), and lace 337 that is woven between eyelets in the manner of a convention shoelace. EX1008, 10:46-53. Lace 337, however, is elastic and is preferably stitched at position 339 on the interior of the sidewall of upper 335. EX1008, 10:53-67.



EX1008, FIG. 22 .

58. In my opinion, each Koo embodiment is a complete, integrated design in which the elastic straps, web, or laces are configured to cooperate with the tongue and the surrounding structure of that particular shoe. EX1008, 9:64-11:17. In my further opinion, Koo's tongue-securing elements are designed to function within Koo's own shoe structures and are not interchangeable parts to be transplanted into Kim's design while preserving their function.

IX. DETAILED DISCUSSION OF OPINIONS

59. For purposes of this Declaration, I have been asked to opine on certain positions taken by Petitioner in the Petition for *inter partes* review of the '811 patent. That I omit certain claims, claim elements, or presented grounds from my analysis should not be viewed as agreement that any claims or claim elements are obvious.

60. Upon considering the materials listed above and discussed herein, based on my extensive experience and education in footwear design and engineering, and in view of the arguments presented in the Petition, I have formed the following opinions.

A. The Petition fails to show that Kim discloses all of the limitations recited in the challenged claims.

1. The claimed stabilizer extending from the sole portion (claims 1 and 10).

61. Independent claims 1 and 10 each recite “a stabilizer defining a unitary structure extending from the sole portion toward a rear portion of the foot opening.” EX1001, 11:46-48, 12:25-27. The Petition relies on Kim’s “4 Heel portion,” including “4a Heel guide portion,” as disclosing the claimed stabilizer. Pet., 19-21. It is my opinion that no aspect of Kim’s heel portion 4 or heel guide portion 4a, including the hard core material 9, discloses this limitation.

62. In my opinion, Kim’s core material 9 (within heel portion 4) acts as a conventional heel counter. Heel counters were well known in the art. *See, e.g.*, EX2023 (“The heel counter is one of the most important features in a shoe...”). Based on my experience, a POSITA would have understood that a heel counter is a stiffening structure commonly inserted at the heel between a shoe’s upper and its lining. Traditionally, for example, a heel counter may be pasted or sewn into place between the shoe’s upper and any lining. *See, e.g.*, EX2024; EX2025 (“The

attaching process [for a counter] involves cutting, heating, positioning, and fixing the stiffener between upper and lining layers.”). A POSITA would further have understood that heel counters can take different forms and most often do not extend to, or make contact with, the sole. EX2023; EX2024; EX2025.

63. The ’811 patent describes the claimed stabilizer as extending from, and being in contact with, the sole so that it can perform its stabilizing function. EX1001, 6:36-40, 9:25-28. In my opinion, Kim does not disclose that its hard core material 9 extends from, or is connected to or in contact with, the sole portion 2. Rather, Kim indicates only that hard core material 9 is sandwiched between a skin material 10 and a lining 11. EX1005, ¶27. As contrast, although Kim expressly states that the heel guide portion 4a “integrally project[s] from the upper end of the heel portion 4,” EX1005, ¶22, Kim contains no corresponding statement that the hard core material 9 extends from, or contacts, the sole portion 2.

64. Further, in my opinion, the presence of Kim’s forward *and* rearward stretchable portions 6 and 8 at least suggests to a POSITA that Kim’s heel portion 4 is configured to move rearward upon foot insertion. *See* EX1005, ¶29 (describing that the opening of the shoe expands when the foot slides along the heel guide portion). A POSITA would have understood that such rearward motion would not be possible if core material 9 were “extending from” the sole portion, as claimed.

65. It is further my opinion that Kim's Figure 2 does not supply this missing disclosure. Kim describes Figure 2 as "a cross sectional view of a heel guide portion" and does not identify where along the heel guide portion that cross-section is taken. EX1005, ¶20. Because Figure 2 is labeled "4a," which is the heel guide portion at the upper end of the heel portion 4, in my opinion Figure 2 does not appear to be taken at the bottom of the heel adjacent to the sole, and it does not show that the hard core material 9 extends from the sole portion.

66. Kim also describes the hard core material 9 as, among other things, "a counter material or the like." EX1005, ¶27. As I discuss above, counter materials most often *do not* extend from the sole. In my opinion, it is therefore at least as likely if not more so, based on Kim's disclosure, that only Kim's soft lining material 11 and/or soft skin material 10 are connected to the sole portion and that the hard core material 9 begins at some point above the sole.

67. I understand that anticipation requires that the claimed arrangement be clearly and explicitly disclosed, or necessarily present, in the reference, and it is my opinion that a stabilizer extending from the sole portion is neither clearly disclosed nor necessarily present in Kim.

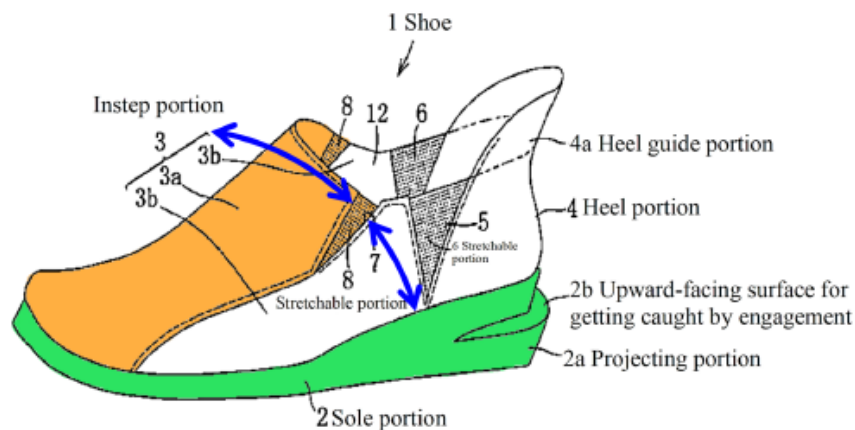
2. The claimed flexion-and-pivoting limitation (claim 10).

68. Independent claim 10 further recites "a plurality of elastic elements positioned along at least a portion of the upper, the elastic element configured to

facilitate at least one of flexion and pivoting of the forward portion of the upper relative to the sole portion.” EX1001, 12:28-31. It is my opinion that Kim does not disclose this limitation.

69. The Petition relies on Kim’s stretchable portions 6 and 8 and adds blue arrows to an annotated version of Kim’s Figure 1 (see below) to assert that those portions facilitate flexion and/or pivoting of the forward portion of the upper relative to the sole portion. Pet., 40-42.

[FIG. 1]



EX1005, FIG. 1 (as annotated at Pet., 42).

70. Based on my review, however, Kim discloses only that the stretchable portions 6 and 8 “stretch[]” so that the “shoe opening 12 expands.” EX1005, ¶¶25, 29. Kim is silent as to how, or in what direction, the shoe opening expands when a wearer dons the shoe. In my opinion, expansion of a shoe opening does not necessarily require, and is not the same as, flexion or pivoting of the forward portion of the upper relative to the sole portion. In fact, because the hard core

material 9 of the heel portion 4 does not extend from the sole portion (see above in Section IX.A.1, regarding the claimed “stabilizer”), it is my opinion that stretchable portion 6 allows Kim’s heel portion 4/heel guide portion 4a to move rearward. *See* EX1005, ¶29 (describing that the opening of the shoe expands *when the foot slides along the heel guide portion*).

71. Petitioner relies on the blue arrows added to Figure 1. These blue arrows are Petitioner’s own annotations, and, based on my review, they are not supported by any disclosure in Kim. Pet., 42.

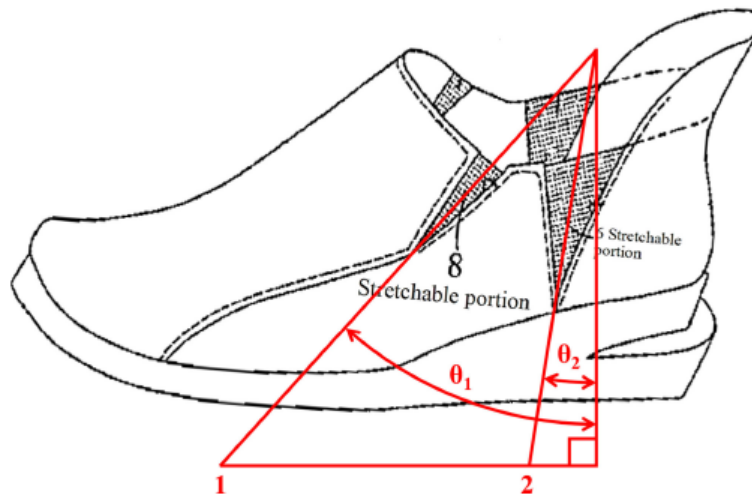
72. I understand that anticipation requires that the claimed arrangement be clearly and explicitly disclosed, or necessarily present, in the reference, and it is my opinion that an “elastic element configured to facilitate at least one of flexion and pivoting of the forward portion of the upper relative to the sole portion” is neither clearly disclosed nor necessarily present in Kim.

3. The relative-angles limitation (claim 10).

73. Independent claim 10 further recites that “the plurality of elastic elements includes a first elastic element defining a first longitudinal axis and a second elastic element defining a second longitudinal axis, wherein the first longitudinal axis defines a first angle relative to a vertical axis and the second longitudinal axis defines a second angle relative to the vertical axis, wherein the

first angle and the second angle are different.” EX1001, 12:32-39. It is my opinion that Kim does not disclose this limitation.

74. To support its position, the Petition treats one of Kim’s stretchable portions 8 as the “first elastic element” and one of Kim’s stretchable portions 6 as the “second elastic element,” draws diagonal lines through those portions on an annotated version of Kim’s Figure 1 (see below), adds a vertical reference line, and asserts that the resulting angles are different. Pet., 45-46.



EX1005, FIG. 1 (as annotated at Pet., 45).

75. Based on my review, every part of that angular comparison comes from Petitioner’s annotations, not from any disclosure in Kim. Kim describes the stretchable portions 6 and 8 only as filling “substantially triangular” notches at particular locations of the upper, and states that the stretchable portions 8 are “formed smaller than” the stretchable portions 6. EX1005, Abstract, ¶25. Kim does

not disclose any longitudinal axis, any vertical axis, or any angular relationship between the stretchable portions.

76. I understand that anticipation requires that the claimed arrangement be clearly and explicitly disclosed, or necessarily present, in the reference, and it is my opinion that the relative-angles limitation is neither clearly disclosed nor necessarily present in Kim.

B. The Petition fails to establish that a POSITA would have been motivated to combine the asserted references or would have had a reasonable expectation of success in doing so, in either of its obviousness grounds.

77. It is my opinion that each of the prior-art references relied upon in the Petition (Kim, Hoying, and Koo) discloses a complete and self-contained solution to a specific problem, not a collection of interchangeable parts, and that the components disclosed in each reference are intended to function together as part of an integrated whole. EX1005, ¶¶7-8, 29-32; EX1007, 38:10-31; EX1008, 9:64-10:18, 10:46-11:17.

78. Based on my review and experience, footwear features such as the claimed stabilizer, and a plurality of elastic elements derive their function from the surrounding structures and the combination of structures of the shoe in which they appear, and their shapes, relative positions, and points of contact matter. In my opinion, a POSITA would not simply take the elastic web or laces of one shoe and combine them with, or use them to replace, the stretchable portions of a different

shoe, because those elements are designed to cooperate with every other part of the shoe in which they appear, with each surface, contour, and point of attachment playing a specific role in the overall functionality of the whole. The Petition does not address this anywhere in its motivation-to-combine showing. Pet., 62-66, 79-87.

79. It is my opinion that the Petition's combination theories for Grounds 2 and 3 both assert that components from different shoes are interchangeable without addressing how the substituted or combined structures would actually cooperate once removed from their original designs. *See* Pet., 62-66, 79-87. In each instance, the Petition identifies that a component (a 2-way or 4-way stretch material in Hoying, or an elastic web or laces in Koo) exists in a second reference and asserts, without more, that it could be incorporated into, or substituted into, Kim. In my opinion, the fact that a component could potentially be relocated from one shoe to another is not the same as a POSITA being motivated to make that specific change and reasonably expecting it to succeed.

80. Based on my review of the prior art cited in the Petition, each reference is presented as a complete solution to its own problem, not a set of components meant to be freely rearranged.

81. A POSITA would not have developed a functionally unique shoe (like the rapid-entry shoe claimed in the '811 patent) by selecting isolated structures

from unrelated footwear designs and recombining them. Instead, designers generally begin with a targeted performance objective and develop a coordinated footwear system in which cushioning structures, support features, elastic components, upper construction, and sole geometry are intended to function together. *See, e.g.*, EX2030.

82. In my opinion, the claimed configuration reflects a particular balance between resilient and rigid structures, support and flexibility, and ease of entry and secure retention, and the asserted references strike that balance differently, using different shapes, arrangements, and structural relationships. EX1005, ¶¶29-32; EX1008, 9:64-10:18, 10:46-11:17. Substituting or adding elements from Hoying or Koo into Kim without accounting for their differing shapes, functions, and structural roles would, in my opinion, alter how Kim's shoe admits and retains the foot, and would require additional redesign of the surrounding structure to maintain functionality—redesign that the Petition does not identify anywhere in the prior art.

83. It is my opinion that, to the extent the prior-art teachings can be combined at all, the resulting combination would not yield the same result as the claims without further modification, which signifies the Petition is relying on impermissible hindsight. Based on my experience, footwear designers do not begin with existing pieces of prior designs and then look for ways to combine them.

Instead, they begin with a problem to solve and design a complete solution looking forward, rather than working backward from an existing design. It is further my opinion that the Petition does not provide a non-hindsight reason why a POSITA would disturb the existing designs in the prior art, let alone why an artisan would modify them in the precise way required to arrive at the claim of the '811 patent.

84. It is further my opinion that although the prior art may separately disclose 2-way and 4-way stretch materials, elastic webs, elastic laces, and elastic straps, it does not disclose or suggest how or why a POSITA would have been motivated to implement them in Kim, or would have known to implement those elements into Kim such that the components are arranged and configured to work together as recited in the challenged claims. In fact, a POSITA would not have substituted Kim's stretchable material with just *any* known stretchable material. Rather, the tighter the stretchable material, the further Kim's shoe moves from its intended purpose—namely, “allowing the user to easily put on the shoe 1 *without bending down.*” EX1005, ¶29 (emphasis added).

85. In the claimed design, the plurality of elastic elements are not merely present. They are arranged and configured in a specific manner that governs how the shoe admits, retains, and supports the foot.

86. The Petition does not identify a prior-art teaching that would have led a POSITA to select those elements from among the different shoes, position them

as claimed, and expect the resulting arrangement to preserve the functionality of the original designs. In fact, it is my opinion that both Hoying and Koo disclose configurations completely different from that of Kim, which uses the elastic elements 6, 8 at the side portion for expansion of the foot opening. Hoying has a configuration with elastic elements at the forward portion, and Koo has a configuration with a split forward portion with a tongue that is tied by laces or elastic straps. *See* EX1007, FIG. 10A; EX1008, FIGs. 19, 22. In my opinion, the claimed invention is therefore not the predictable result of combining known parts as Petitioner asserts, but rather reflects a specific arrangement and shaping of those parts that is not suggested by the prior art.

87. I also note that Petitioner's own public description of the products that I understand are accused of practicing the '811 patent in the co-pending litigation is consistent with my opinion that these structures must cooperate as an integrated system rather than function as freely interchangeable pieces. For example, Petitioner describes its accused Hands-Free Slip-ins® technology as using "a specially molded heel panel and an exclusive Heel Pillow™ to allow you to step into your shoes without bending down," and describes this same system as "a revolutionary approach to footwear design." EX2026; *see also* EX2027. In my opinion, this description is consistent with the fact that the technology at issue

depends on cooperation among structures, which the Petition's combination theories do not account for in either obviousness ground.

X. CONCLUSION

In signing this Declaration, I recognize that the Declaration will be filed as evidence in an *inter partes* review before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required, I will appear for cross-examination within the United States during the time allotted.

I hereby declare 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.

Executed on this 30th day of July, 2026, in Manhasset, New York.

A handwritten signature in cursive script, appearing to read "Robert Erb", is written over a horizontal line.

Robert Erb