

Petitioner's Demonstratives

UNDER ARMOUR, INC., *Petitioner*, v. ATHALONZ, LLC, *Patent Owner*

IPR2024-00636, 637, 638

***U.S. Patent Nos. 10,674,786; 11,013,291;
and 11,064,760***

June 17, 2025 Oral Hearing



UNDER ARMOUR

VENABLE LLP

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Petitioner Exhibit 1038

**IPR2024-00636, 637, 638 – U.S. Patent
Nos. 10,674,786 (“the ’786 Patent”);
11,013,291 (“the ’291 Patent”) and
11,064,760 (“the ’760 Patent”) - The
“Slope” Patents**

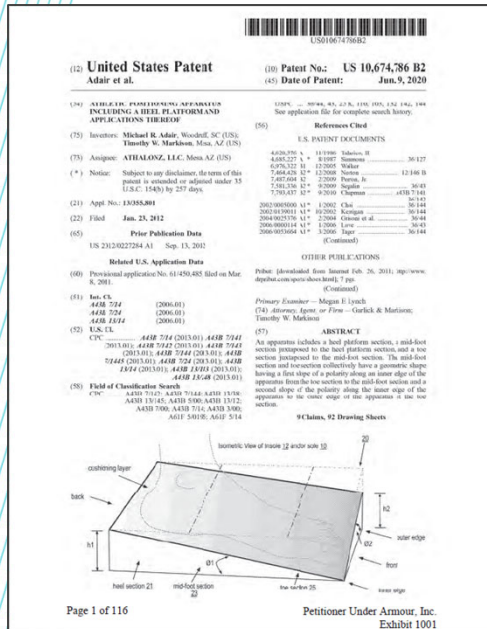
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'786 Patent: Slopes

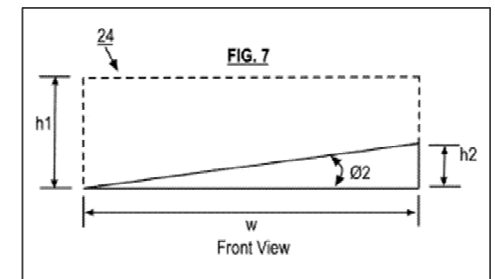
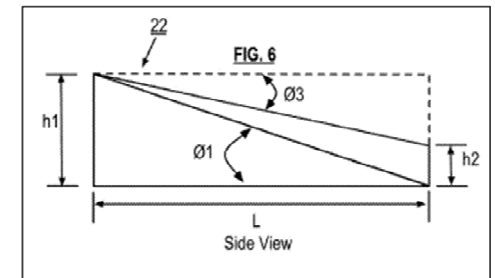
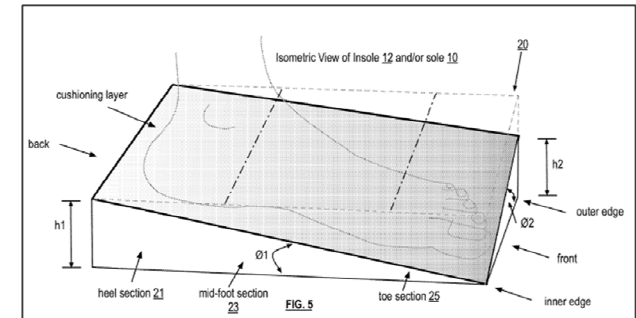
- Claim 1. An apparatus comprising:
 - a heel platform section of uniform height from outer edge to inner edge that establishes a reference slope
 - a mid-foot section and a toe section, where the combination of the mid-foot section and the toe section forms an angled support platform that has a first slope along the inner edge of the apparatus from the toe section to the heel section (θ_1), a second slope from the inner edge to the outer edge of the toe section (θ_2), and a third slope along the outer edge of the apparatus from the toe section to the heel section (θ_3), wherein
 - the first, second, and third slopes are each greater than the reference slope, and the toe section is lower than the heel section.



IPR2024-00636, EX1001

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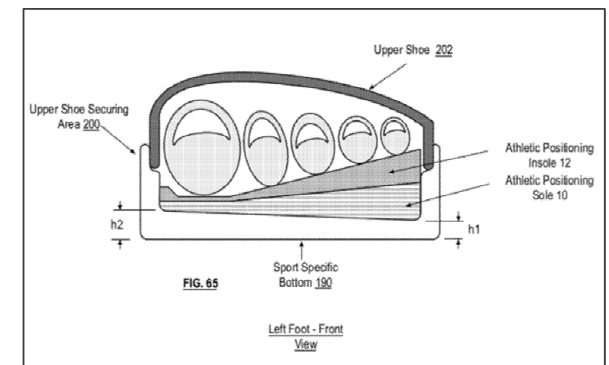
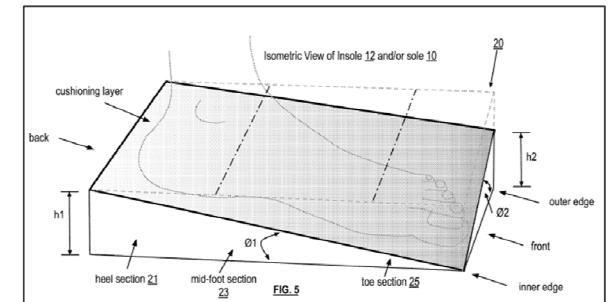
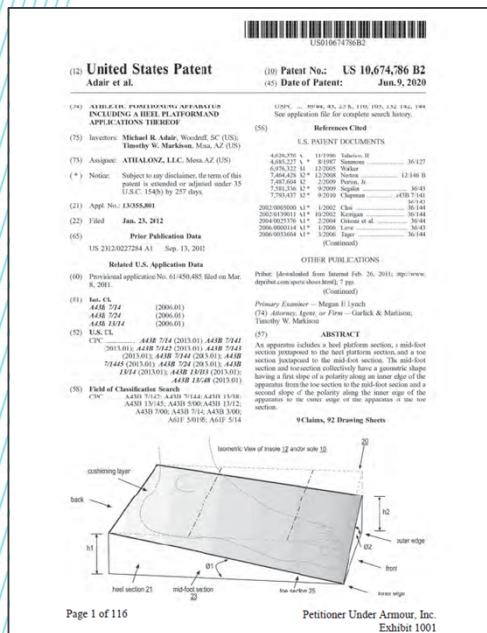
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IPR2024-00636, EX1001, Figs. 5-7

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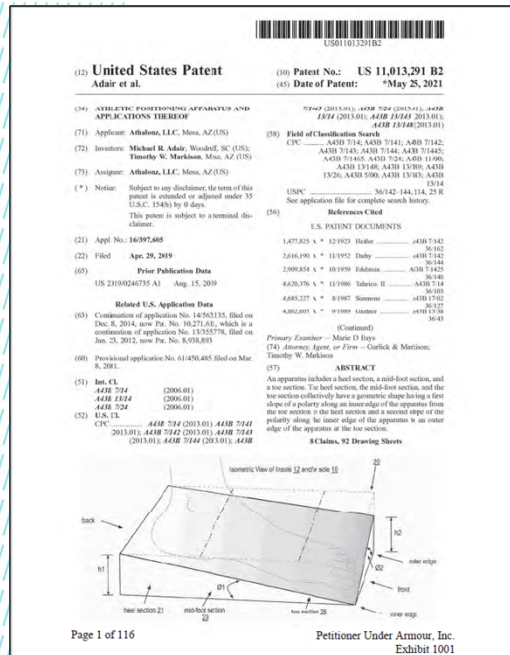
- Claim 5. A shoe comprises:
 - an upper shoe section
 - a sole that includes:
 - a specific bottom
 - a heel platform section of uniform height from outer edge to inner edge that establishes a reference slope
 - a mid-foot section and a toe section, where the combination of the mid-foot section and the toe section forms an angled support platform that has a first slope along the inner edge of the apparatus from the toe section to the heel section (θ_1), a second slope from the inner edge to the outer edge of the toe section (θ_2), and a third slope along the outer edge of the apparatus from the toe section to the heel section (θ_3), wherein
 - the first, second, and third slopes are each greater than the reference slope



IPR2024-00636, EX1001, Figs. 5, 65

'291 Patent: Heights

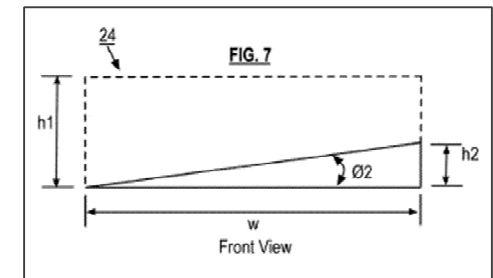
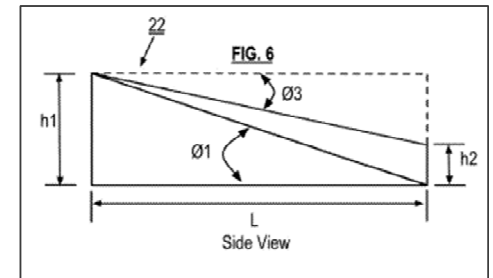
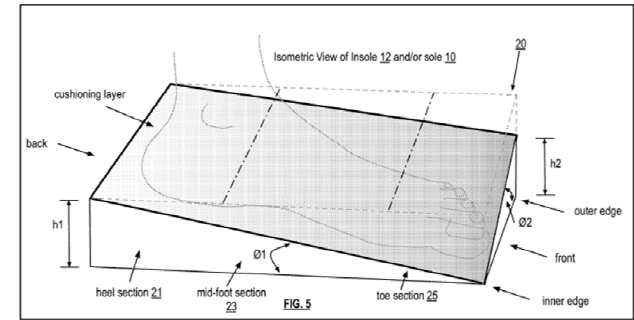
- Claim 1. a shoes comprising:
 - An upper section
 - A midsole, an insole and an outsole, wherein the combination forms an athletic positioning shape having:
 - A first height at an inside edge and an outside edge of the heel section
 - A second height at the outside edge of a toe section
 - A third height at the inside edge of the toe section
 - Wherein the first height is greater than the second height and the second height is greater than the third height, causing slopes to form



IPR2024-00637, EX1001

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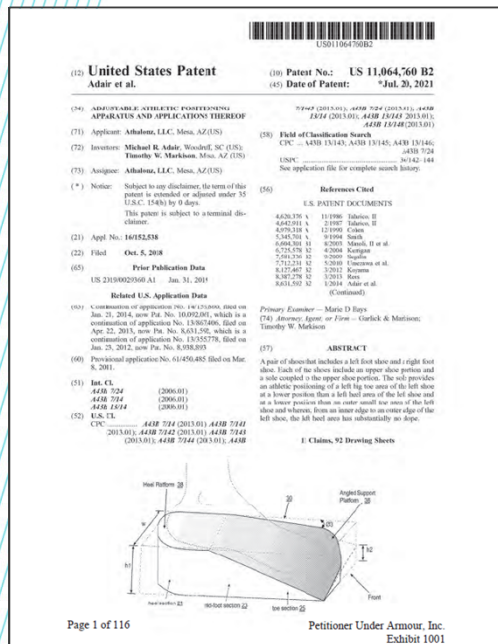
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IPR2024-00637, EX1001, Figs. 5-7

'760 Patent: Positions

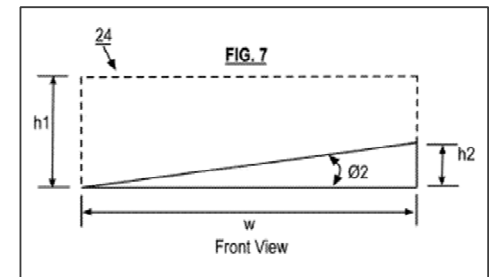
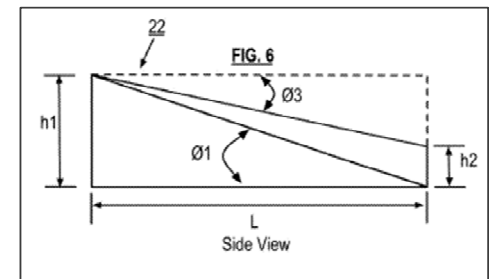
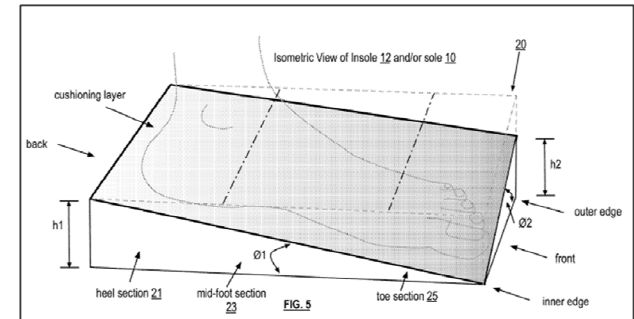
- Claim 1. a pair of shoes wherein each shoe includes:
 - an upper shoe portion
 - a sole, wherein a foot platform of the sole provides an athletic positioning of a big toe area at a lower position than a heel area and a lower position than an outer small toe area
 - from an inner edge to an outer edge, the heel area has substantially no slope
 - from the inner edge to the outer edge at a cross section of the ball of [foot], the bottom of the sole is substantially linear



IPR2024-00638, EX1001

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IPR2024-00638, EX1001, Figs. 5-7

'786 Patent: Instituted Grounds of Unpatentability

Ground	Claim(s)	Basis for Unpatentability
1	1-8	Obvious Over Kim
2	1-3, 5-6, 8	Obvious Over Dufour
3	1-3, 5-6, 8	Obvious Over Rubin
4	2, 4, 7	Obvious Over Dufour in View of Kim
5	2, 4, 7	Obvious Over Rubin in View of Kim

IPR2024-00636, ID, Paper 8

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'291 Patent: Instituted Grounds of Unpatentability

Ground	Claim(s)	Basis for Unpatentability
1	1-5	Obvious Over Kim
2	1-5	Obvious Over Dufour in View of Kim
3	1-5	Obvious Over Rubin in View of Kim

IPR2024-00637, ID, Paper 8

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

'760 Patent: Instituted Grounds of Unpatentability

Ground	Claim(s)	Basis for Unpatentability
1	1-3, 6-8, 11	Obvious Over Kim
2	1-3, 6-8, 11	Obvious Over Dufour
3	1-3, 6-8, 11	Obvious Over Rubin
4	4, 5, 9, 10	Obvious Over Kim in View of De Obaldia
5	4, 5, 9, 10	Obvious Over Dufour in View of De Obaldia
6	4, 5, 9, 10	Obvious Over Rubin in View of De Obaldia

IPR2024-00638, ID, Paper 8

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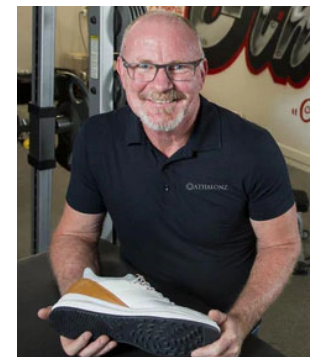
Definition of POSITA and the Parties' Experts

Level of Ordinary Skill adopted by the Board

- “A person of ordinary skill in the art would have (1) at least a B.S. or equivalent degree related to industrial or product design and at least two years’ experience designing or developing athletic shoes; or (2) at least five years designing or developing athletic shoes.” (IPR2024-00636, ID, Paper 8, 7)

As of the Priority Date - March 8, 2011:

- **Petitioner's Expert - Mr. Delgatty**
 - Education: ***B.S. Industrial Design*** – Art Center College of Design
 - Experience: ***15 years as an athletic footwear designer:***
 - 1996-1999: E-West Designs - athletic footwear design and development
 - 1999-2001: DVS – skate shoe design and development
 - 2001-2008: Vans - Senior Director of Product Design
 - 2008-2011: Instructor of Industrial Design, including athletic footwear design
- **Patent Owner’s Expert – Mr. Markison**
 - Education: B.S.E.E. – Illinois Institute of Technology / J.D. Loyola School of Law
 - Experience: 1 year “working extensively on designing and developing athletic shoes” – (EX2008, ¶43) (Mr. Markison admitting “***he was not yet a POSITA***”)



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Mr. Markison is Biased

- Mr. Markison is: 1) Athalonz's Founder and CEO; 2) Athalonz's largest shareholder; 3) a named inventor and 4) the prosecuting attorney.
- Mr. Markison will receive 30% of any compensation related to the underlying litigation if Athalonz's shareholders are paid.
- Mr. Markison acknowledged having both personal and professional interests in the challenged patents being found valid.



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IPR2024-00636, Reply, 2 (citing Ex. 1023 at 11, 12, 15, 16 18)

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Mr. Markison is Biased

- Mr. Markison’s undeniably biased opinions should be given little, if any, weight.
 - *EC Data Sys., Inc. v. J2 Global, Inc.*, 2014 WL 7171966, at *4 (P.T.A.B. Dec. 15, 2014) (considering “the interest of the expert in the outcome of the case” when assessing the probative value of an expert’s opinion)
 - *eBay Inc. et al. v. Global Equity Management (SA) Pty. Ltd.*, No. IPR2016-01829, Paper 63, 15 (P.T.A.B. Apr. 19, 2018) (giving less weight to expert who was the inventor and a Director of Patent Owner)
 - *VSR Indus. Inc. v. Cole Kepro Intern’l, LLC*, IPR2015-00182, Paper 33 at 43 (P.T.A.B. May. 25, 2016) (testimony from the CEO of Patent Owner “is due less weight than a more objective source”)
 - *Ex Parte Magna*, 2014 WL 2360424, at *3 (the probative value of Petitioner’s expert opinion outweighed that of Patent Owner’s due to the expert’s employment by Patent Owner)
- Mr. Markison’s inability to provide an objective opinion is further demonstrated by his testimony and Athalonz documents that directly contradict his declaration.

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Kim – ‘786 Ground 1

‘786 Patent: Claim 1	Kim
1. An apparatus comprises:	Undisputed
a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus;	Undisputed
a mid-foot section juxtaposed to the heel platform section; and	Undisputed
a toe section juxtaposed to the mid-foot section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the apparatus from a front edge of the apparatus to the heel platform section, a second slope along the front edge of the apparatus from the inner edge to the outer edge of the apparatus, and a third slope along the outer edge of the apparatus from the front edge of the apparatus to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope, wherein the toe section is lower than the heel platform section as a result of the first, second, and third slopes.	

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Kim – ‘786 Ground 1

‘786 Patent: Claim 5	Kim
5. A shoe comprises:	Undisputed
an upper shoe section; and	Undisputed
a sole coupled to the upper shoe section, wherein the sole includes:	Undisputed
a specific bottom; and	Undisputed
an athletic positioning sole section having:	
a heel platform section that has a uniform height from an outer edge to an inner edge of the athletic positioning sole section at a rear edge of the athletic positioning sole section, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the sole;	Undisputed
a mid-foot section; and	Undisputed
a toe section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the athletic positioning sole section from a front edge of the athletic positioning sole section to the heel platform section, a second slope along the front edge of the athletic positioning sole section from the inner edge to the outer edge of the athletic positioning sole section, and a third slope along the outer edge of the athletic positioning sole section from the front edge of the athletic positioning sole section to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope.	

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Kim – ‘291 Ground 1

‘291 Patent: Claim 1	Kim
1. A shoe comprises:	Undisputed
an upper section;	Undisputed
a midsole coupled to the upper section;	Undisputed
an insole positioned proximal to the midsole and within the upper section; and	Undisputed
a bottom outsole coupled to the midsole, wherein a combination of the midsole, the insole, and the bottom outsole form an athletic positioning shape , wherein the athletic positioning shape has:	
a first height at an inside edge and at an outside edge of the shoe along a heel section of the shoe,	Undisputed
a second height on the outside edge of the shoe at a toe section of the shoe,	Undisputed
a third height on the inside edge of the shoe at the toe section of the shoe, and	Undisputed
the first height being greater than the second height and the second height being greater than the third height , wherein a first slope is formed by the first height and the second height, wherein a second slope is formed by the first height and the third height, and wherein a third slope is formed by the second height and the third height.	

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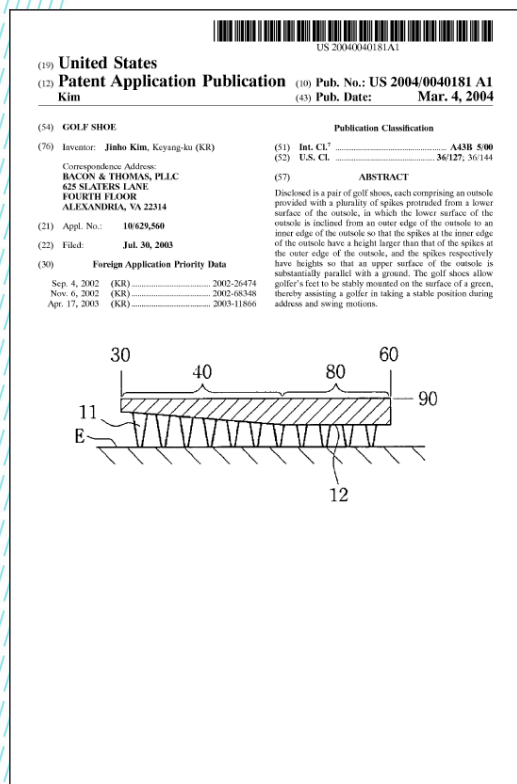
Kim – ‘760 Ground 1

‘760 Patent: Claim 1	Kim
1. A pair of shoes comprises:	Undisputed
a left foot shoe including:	Undisputed
a left upper shoe portion; and	Undisputed
a left sole coupled to the left upper shoe portion, wherein a foot platform of the left sole provides an athletic positioning of a left big toe area of the left shoe at a lower position than a left heel area of the left shoe and at a lower position than an outer small toe area of the left shoe, wherein, from an inner edge to an outer edge of the left shoe, the left heel area has substantially no slope, and wherein, from the inner edge to the outer edge of the left shoe at a cross section at a ball of [foot], a bottom of the left sole is substantially linear; and	
a right foot shoe including:	
a right upper shoe portion; and	Undisputed
a right sole coupled to the right upper shoe portion, wherein a foot platform of the right sole provides an athletic positioning of a right big toe area of the right shoe at a lower position than a right heel area of the right shoe and at a lower position than an outer small toe area of the right shoe and wherein, from an inner edge to an outer edge of the right shoe, the right heel area has substantially no slope, and wherein, from the inner edge to the outer edge of the right shoe at a cross section at a ball of ball, a bottom of the right sole is substantially linear.	

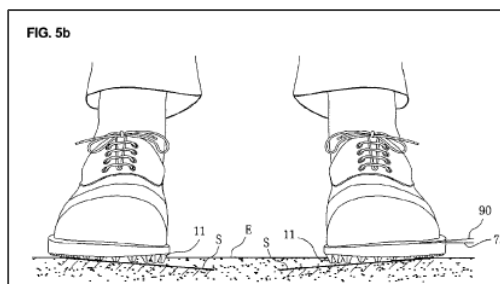
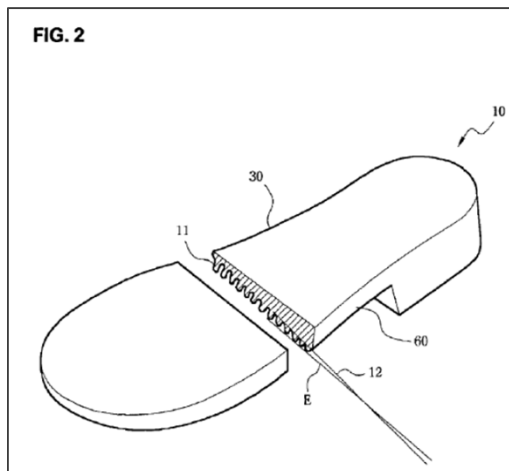
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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Prior Art Reference Kim



Ex. 1005



Ex. 1005, Figs. 2, 5B

[0012] Therefore, the present invention has been made in view of the above problems, and it is an object of the present invention to provide a pair of golf shoes, which assist a golfer in concentrating his/her proper weight balance on the inner edges of soles of feet during the address and swing motions, thus allowing the golfer to perform the swing motion while maintaining his/her stable position.

[0027] As shown in FIGS. 1 and 2, the golf shoe 100 in accordance with one embodiment of the present invention comprises an upper leather portion 20 and an outsole 10. The outsole 10 includes a lower surface 12 inclined from its outer edge 60 to its inner edge 30 so that the outer edge 60 has a thickness larger than that of the inner edge 30. Except for the outsole 10 including the inclined lower surface 12, the golf shoe 100 of the present invention is substantially the same as conventional golf shoes.

[0046] Although the preferred embodiments of the present invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims. For example, the inclined plane may be formed only at the front portion of the outsole, or only at parts of the front and/or rear portions of the outsole.

Ex. 1005, ¶¶12, 27, 46

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IPR2024-00636, Pet., 8-9, 20, 25

Kim – Toe Lower than Heel

The Board

In addition, Kim also discloses a heel area taller than a toe area, as is typical in shoes. Figure 2 of Kim depicts this configuration:

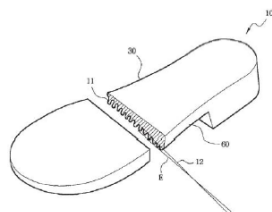


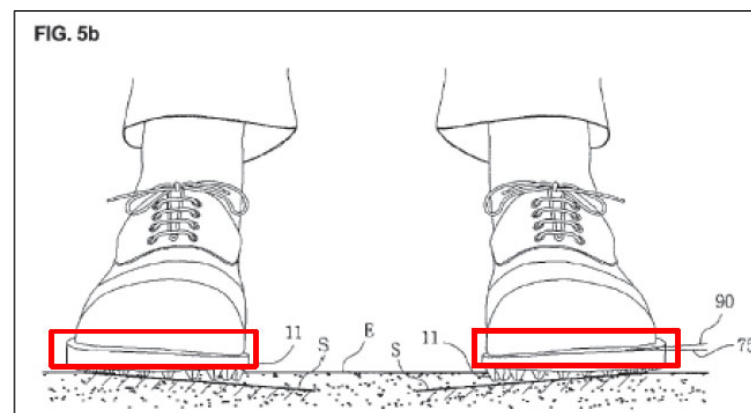
Figure 2 of Kim is a perspective view of an outsole of a golf shoe. Ex. 1005 ¶ 19. The figure depicts a heel taller than a toe section. As Kim makes clear, “[e]xcept for the outsole 10 including the inclined lower surface 12, the golf shoe 100 of the present invention is substantially the same as conventional golf shoes.” *Id.* ¶ 27.

IPR2024-00638, ID Paper 8, 10

Petitioner's Expert

10. Kim consistently discloses a big toe area at a lower position than the heel area. This is shown in Figure 2, as well as in Figure 5b, below, which shows the top of a surface area on the part of the sole that sticks out beyond the upper, suggesting the shoes are tilted forward.

EX1022, ¶10



IPR2024-00636 Reply, 13

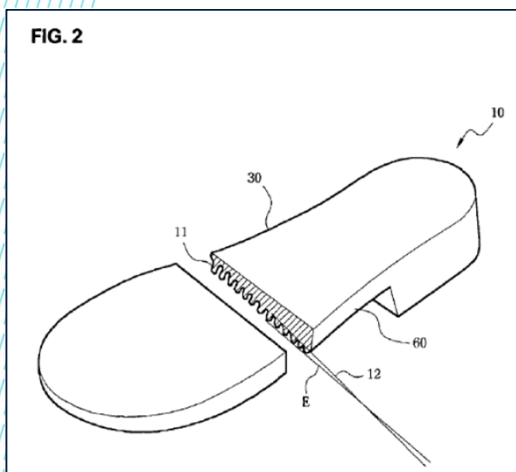
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IPR2024-00636, Reply, 11-13

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Kim – Toe Lower than Heel



- Patent Owner's suggestion that Figure 2 is either inaccurately drawn or an illogical design because there would be a gap between the bottom of the forefoot and the ground, or "only a small portion of the heel would be in contact with the ground" is unsupported. (POR, 40-41)
- This conclusion incorrectly assumes that the sole is rigid and would not flex.

[0040] The above-described outsole 10 of the golf shoe 100 is made of synthetic rubber, or synthetic resin such as ABS (Acrylonitrile-butadiene styrene), polycarbonate, etc.

EX1005, [0040]

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IPR2024-00636, Reply, 13

Patent Owner's
Expert & Inventor

Q. Would you agree that if the Outsole 10 is made of synthetic rubber, the outsole would flex when worn by a golfer?

A. There's a wide range of rubber. So there would be some rubbers, no, there wouldn't be any noticeable flexion.

Q So it says, of synthetic rubbers. You mentioned there's different types of rubber, correct?

A Yeah.

Q And are some more flexible than others?

A Yes.

Q Are some types of synthetic rubber flexible?

A Are some types of synthetic rubber flexible? Yes.

EX1023 100:3-17

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Kim – Slopes/Heights/Positions Exclude Cleats

The Claims Require that the Cleats be Excluded

5. A shoe comprises:
an upper shoe section; and
a sole coupled to the upper shoe section, wherein the sole includes:

a specific bottom; and

an athletic positioning sole section having:

a heel platform section that has a uniform height from an outer edge to an inner edge of the athletic positioning sole section at a rear edge of the athletic positioning sole section, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the sole;

a mid-foot section; and

a toe section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the athletic positioning sole section from a front edge of the athletic positioning sole section to the heel platform section, a second slope along the front edge of the athletic positioning sole section from the inner edge to the outer edge of the athletic positioning sole section, and a third slope along the outer edge of the athletic positioning sole section from the front edge of the athletic positioning sole section to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope.

} “specific bottom” = cleats / spikes

“athletic positioning sole section” includes the “angled support platform” that has the “first,” “second” and “third” slopes

8. The shoe of claim 5, wherein the specific bottom comprises one of:

a cleat pattern bottom;

a baseball spike bottom;

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Kim – Slopes/Heights/Positions Exclude Cleats

The Specification Describes the “Sole” and “Cleats” as Separate Components

a pair of baseball spikes. As is shown, the baseball spikes include a sole, a padded insole, an upper shoe portion, and cleats (or spikes). The positioning of the cleats facilitates

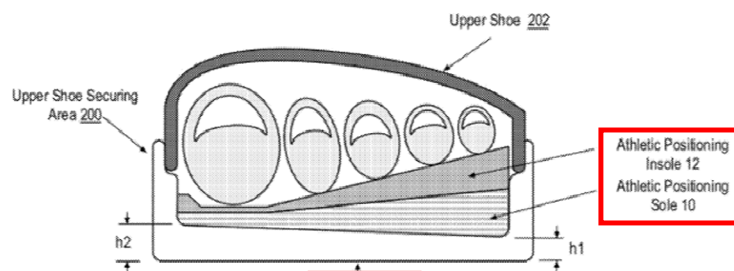
‘768 Patent, EX1001, 1:51-53

shoes, etc. For each of these sport specific shoes, the athletic positioning insole 12 and/or sole 10 are coupled to a specific bottom and a corresponding upper shoe section to promote a better athletic position for an athlete. The specific bottom

‘768 Patent, EX1001, 9:37-40

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FIGS. 63-64 illustrate a cross-sectional front view diagram and a cross-sectional side view diagram of another embodiment of an athletic positioning sole 10 and/or insole 12 with compensating sport specific bottom 190. The ath-

‘768 Patent, EX1001, 20:47-50

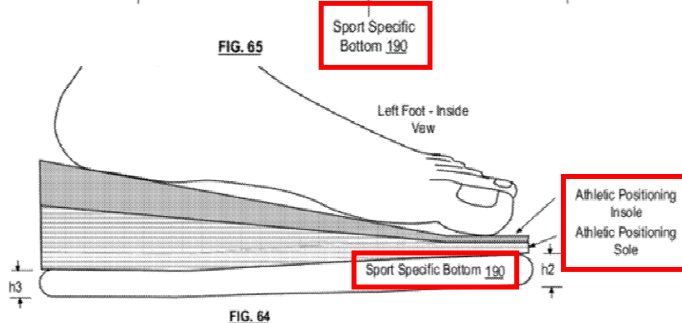


FIG. 66 illustrates a cross-sectional heel view diagram of another embodiment of an athletic positioning sole 10 and/or insole 12 and a sport specific bottom 190. The athletic

‘768 Patent, EX1001, 21:35-37

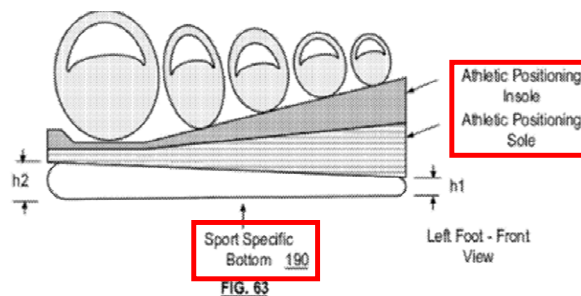


FIG. 111 illustrates a cross-sectional heel view diagram of another embodiment of a varying positioning athletic positioning sole/insole assembly, which includes a sole 10, an insole 12, and a sport specific bottom 190. The sole 10 may

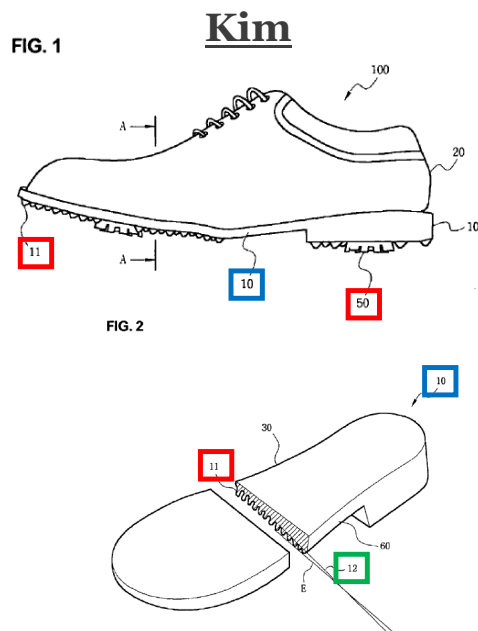
‘768 Patent, EX1001, 33:4-7

IPR2024-00636, Reply, 6

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Kim – Slopes/Heights/Positions Exclude Cleats

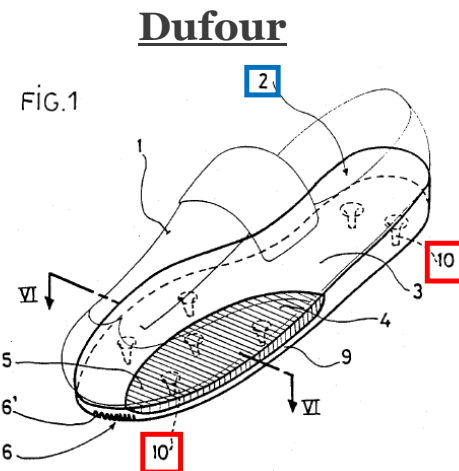
The Prior Art Describes the “Sole” and “Cleats” as Separate Components



[0030] A plurality of spikes 11 are protruded from the lower surface 12 of the outsole 10 so that the golf shoe 100 is firmly gripped on the ground. The spikes 11 are integrally formed with the outsole 10. As shown in FIGS. 1 and 2, a plurality of cleat-shaped spikes 50 are also protruded from the lower surface 12 of the outsole 10. The cleat-shaped spikes 50 may be integrally formed with the outsole 10, or detachably attached to the outsole 10 using bolts, etc.

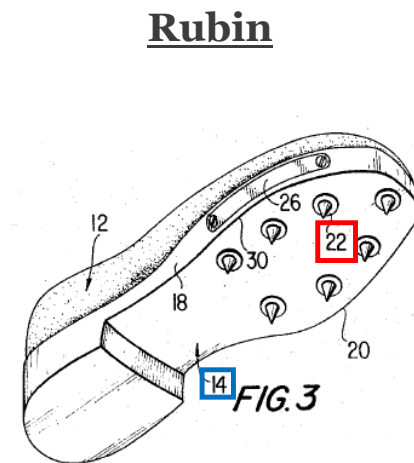
VELINADLE LLP EX1005, ¶30

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE



element 5. Spikes 10 are then advantageously fastened to the sole 2 on the side of the walking surface 11 to ensure solid traction with the ground; the density of the distribution of the spikes 10 preferably differs depending on whether they are placed in the passive or active zones, respectively 3 and 4, of the sole. Thus, the active zone 4 has a greater density of spikes 10 than the passive zone 3.

EX1006, 4:9-11



Projecting downwardly from the bottom of sole 14 are a plurality of cleats 22. Cleats 22 serve to anchor the foot of the golfer in position once he has assumed his stance on a golf playing surface. Cleats 22 extend

EX1007, 3:24-27

IPR2024-00636, Reply, 6-7

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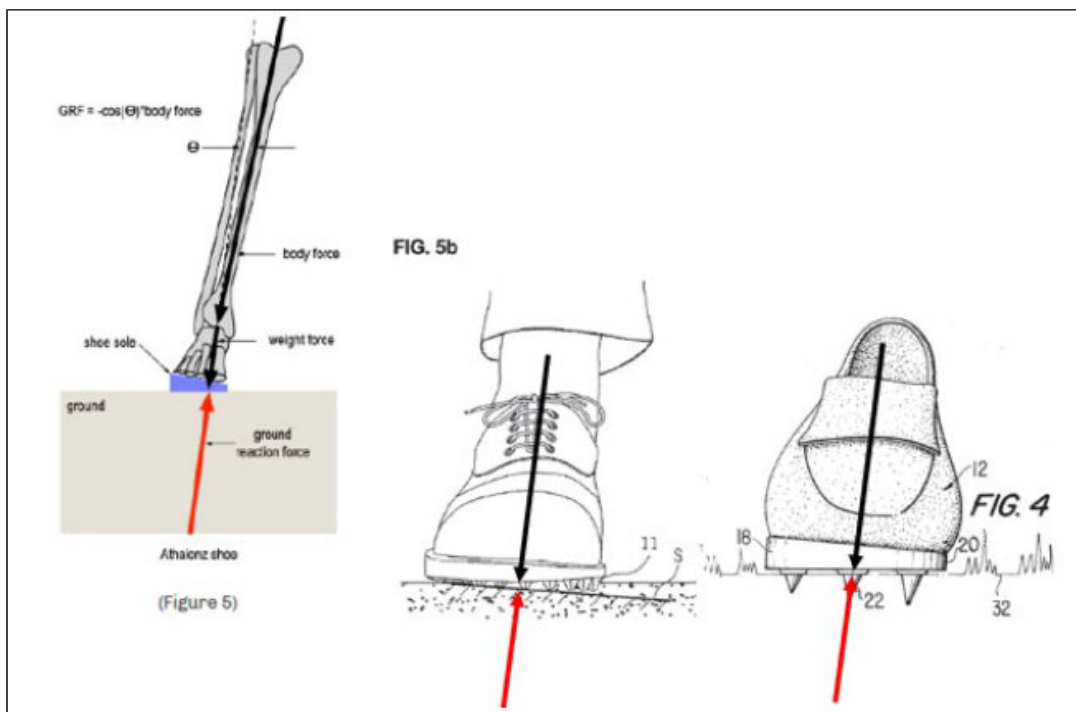
Kim – Slopes/Heights/Positions Exclude Cleats

Petitioner's Expert

16. A POSITA would thus understand that, because the cleat height is irrelevant to forming the claimed angled support platform or athletic positioning sole section, the cleat height would not be included as the reference point for measuring the claimed slopes that define the athletic positioning shape.

EX1022, ¶16

- Mr. Markison admitted when comparing the placement of the forefoot relative to the ground when using Athalonz's technology shown in Fig. 5 with the shoes in Rubin and Kim when used on soft ground, similar beneficial ground reaction forces are created "by angling" the foot's interaction with the ground. EX1023, 133:13-141:13.



IPR2024-00636 Reply, 8

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IPR2024-00636, Reply, 7-9

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Kim – Slopes/Heights/Positions Exclude Cleats

Athalonz Did Not Include the Cleats When Alleging Infringement

HOVR Drive 2



HOVR Drive 2



HOVR Drive 2



EX1025, 208, 265, 273

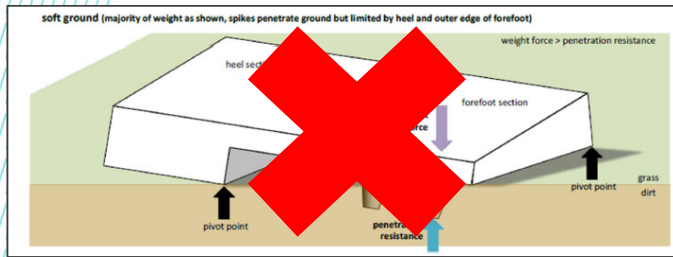
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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

IPR2024-00636, Reply, 9

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Kim – The Shoe Will Not Pivot



- Athalonz argues that the shoe will pivot when on soft ground which would result in the shoe not having the claimed slopes.
- Athalonz cites no disclosure in Kim in support.
- Mr. Markison recognized that to pivot in this manner, Kim's sole must be rigid, but Kim discloses a rubber sole that would flex.
- Mr. Markison admitted that he "hadn't considered" whether the pivot points would exist for a flexible rubber sole.

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[0040] The above-described outsole **10** of the golf shoe **100** is made of synthetic rubber, or synthetic resin such as ABS (Acrylonitrile-butadiene styrene), polycarbonate, etc.

EX1005, ¶40

Q. To pivot in the way that you're suggesting, the sole of the shoe must be rigid, correct?

A. It would be fairly rigid, yes.

Q. So if the material of the sole was flexible enough, that pivot wouldn't occur, correct?

A. That's a hypothetical I haven't Considered

EX1023, 104:17-105:2

Petitioner's Expert

27. A POSITA would understand that Kim's shoe would not create the pivot points that Mr. Markison identifies, as Kim discloses that the "outsole 10 of the golf shoe 10 is made of synthetic rubber." EX1005, [0040]. A POSITA would understand that the design choice to use synthetic rubber for the outsole would allow Kim's sole to flex, rather than pivot, when the cleats depress into soft ground. Not only is this a well-understood function of shoe design, but it is consistent with Kim's disclosure that the shoe will allow the golfer to maintain a stable position during and after the swing motion (EX1005, [0037]), which would not be the case if the golfer's heel were lifted off the ground at varying degrees from the inner to outer edge.

28. In light of Kim's disclosures, a POSITA would understand Kim's shoe to be designed such that the downward weight force on the heel section would keep the heel in place flat on the ground while the cleats in the forefoot section depress into the ground. In that scenario, the heel section would maintain a reference slope substantially parallel to the bottom of the sole, and thus first, second, and third slopes each greater than the reference slope.

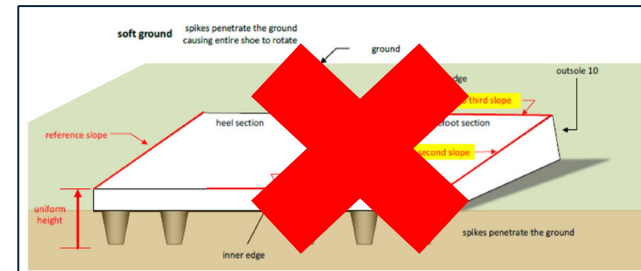
EX1022, ¶¶27-28

Kim – “Conventional” Flat Heel

- Athalonz’s suggestion that Kim’s “primary embodiment” lacks a heel that is substantially uniform in height or has substantially no slope from the inside edge to the outside edge is unsupported.

[0046] Although the preferred embodiments of the present invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims. For example, the inclined plane may be formed only at the front portion of the outsole, or only at parts of the front and/or rear portions of the outsole.

[0027] As shown in FIGS. 1 and 2, the golf shoe 100 in accordance with one embodiment of the present invention comprises an upper leather portion 20 and an outsole 10. The outsole 10 includes a lower surface 12 inclined from its outer edge 60 to its inner edge 30 so that the outer edge 60 has a thickness larger than that of the inner edge 30. Except for the outsole 10 including the inclined lower surface 12, the golf shoe 100 of the present invention is substantially the same as conventional golf shoes.



The Board

Patent Owner’s argument for independent claim 5 recognizes the disclosure in Kim’s Figure 5b, but argues that the entire foot of the golfer would be inclined, including the heel. Prelim Resp. 37–41. It is not clear to us, on this record, what Patent Owner is basing its argument on. We find no disclosure in Kim suggesting that the heel is inclined. To the contrary, the record suggests a person of ordinary skill in the art would presume a flat heel absent disclosure to the contrary. Specifically, Petitioner’s declaration states that “having a heel platform of uniform height throughout is standard shoe design” (Ex. 1002 ¶ 47) and, as Kim makes clear, “[e]xcept for the outsole 10 including the inclined lower surface 12, the golf shoe 100 of the present invention is substantially the same as conventional golf shoes” (Ex. 1005 ¶ 27). Thus, we are not persuaded, on this record, that the heel in Kim is inclined in the same manner as the sole.

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Ex. 1005, ¶¶ 27, 46

IPR2024-00636, ID, Paper 8, 11-12

“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope

- Claim Requirements:

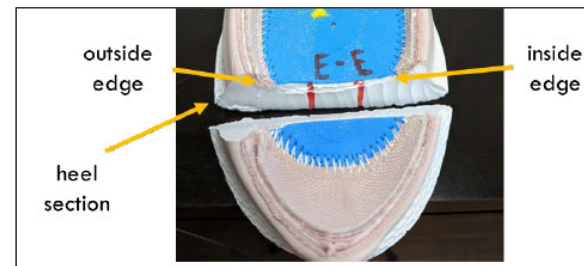
- “a first height at an inside edge and at an outside edge ... along a heel section” and “the heel section has the first height throughout” – ‘291 Patent, claims 1 and 2

- “from the inner edge ... to the outer edge ... and for a length of the surface” – ‘760 Patent, claim 3

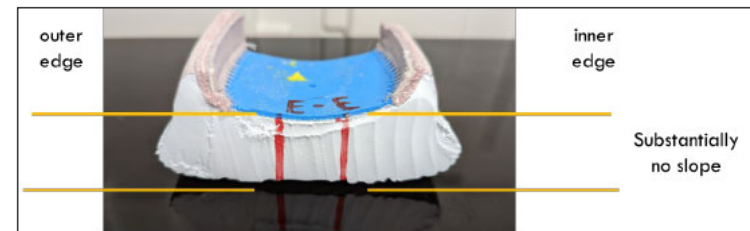
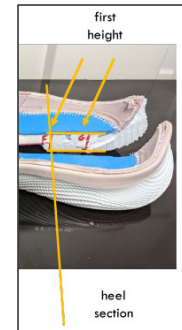
- “from an outer edge to an inner edge ... at the rear edge of the apparatus” and “from a front edge of the heel platform to the rear edge of the apparatus” – ‘786 Claims 1 and 3

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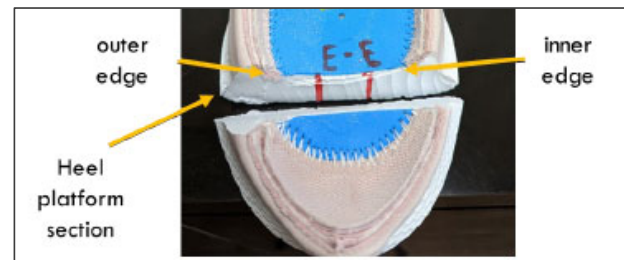
DEMONSTRATIVE EXHIBIT – NOT EVIDENCE



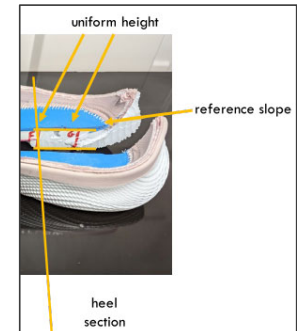
EX1025, pp. 54, 63



EX1025, p. 143



EX1025, pp. 189, 235



“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope

Petitioner’s Expert

E. “Conventional” Shoes

47. A POSITA would understand that shoes in general, including athletic shoes and golf shoes, have several traits and features that are “conventional” or “standard.” These conventional design traits include a heel section having a consistent height throughout, at least based on Patent Owner’s apparent interpretation of this limitation, discussed in Section VI, above. Having a heel section of consistent height throughout is standard shoe design, both before and after the priority date of the ‘291 patent. In fact, over the course of my career, the vast majority, if not all, of the shoes I designed or oversaw the design of had this feature.

IPR2024-00637, EX1002, pp. 17-18

II. “CONVENTIONAL” SHOES

3. Mr. Markison suggested that I failed to establish that a heel platform with a uniform height is a conventional feature of a shoe. EX2008, ¶168. I disagree that the evidence I provided in my initial declaration is insufficient. However, further evidence is provided below showing that the shoes I designed for Vans that were sold in the United States between 2002 and 2005 have a heel platform that has a consistent height throughout, at least based on Patent Owner’s apparent interpretation of this limitation.

IPR2024-00637, EX1022, p.2

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IPR2024-00636, Reply, 3

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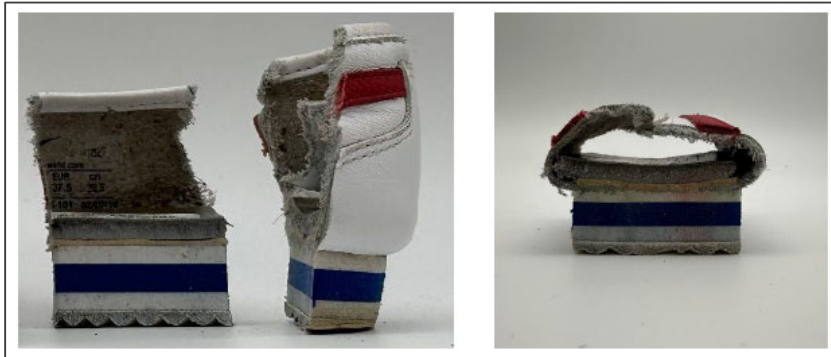
“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope



EX1022, p. 4



EX1022, p. 9



EX1022, p. 8



EX1022, p. 10

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

IPR2024-00636, Reply, 3

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“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope

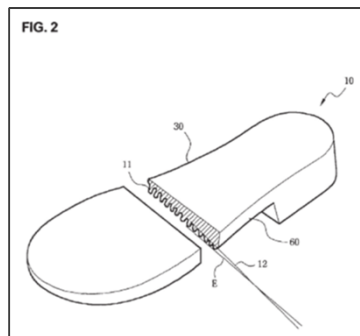
Patent Owner’s Expert & Inventor

Q. Do you agree the heel portion would be flat from the inside of the shoe to the outside of the shoe if there was no incline plane?

A ... So you asked if -- if, hypothetically, there's a conventional heel put on the teaching of Kim, would that be flat from ... inside edge to outside edge, at least in one spot cross-section of the heel. And if they put a conventional heel like they have on a dress shoe, then yes, there would be a portion where it would be flat from the inside edge to the outside edge.

Kim

EX1023, 99:1-16



VENABLE EX1005, Fig. 2
LLP

So in Figure 3 of Rubin, does it look like that heel section is angled at all?

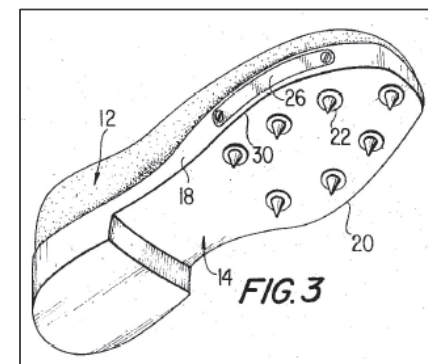
A No, taking Figure 3 in a vacuum, absent of what the patent teaches, it doesn't -- it appears to be a conventional dress shoe block heel.

Q “Conventional” meaning having a consistent height from the inside to the outside of the heel section; is that right?

A Yes.

Rubin

EX1023, 139:7-15



EX1007, Fig. 3

“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope

Patent Owner’s Expert & Inventor

So I'll have you turn to Column 20 of the '291 patent, starting at Line 48. ... it describes: This embodiment may include an athletic-positioning sole and a conventional insole or a conventional sole and an athletic-positioning insole. Do you see that?

A Let me re-read again. Yes.

So you're distinguishing between an athletic-positioning sole and a conventional sole in that paragraph, correct?

A Yes.

Q **What is a conventional sole?**

A Well, in the context of this particular paragraph, **it's not having -- not contributing to the athletic-positioning shape.**

Q **So what would that mean as far as the shape of the sole?**

A So if we went to Figure 63, which is the paragraph I was talking about. So just Figure 63. So if, for example, **the insole or a conventional insole, it would have in Figure 63 roughly the same thickness under the big toe all the way across to the little toe.**

Q **And same thing for an athletic-positioning sole, that same idea?**

A Yes.

Q And this is described in Column 35. So starting about Line 7, do you see that paragraph?

A Yes. ...

Q So if I understand this right, these figures are showing what's called an athletic-positioning spike pattern; is that right?

A Yes.

...

Q And **here it describes that this athletic-positioning spike pattern may be used with a sole having a conventional sole design. Do you see that?**

A **That's one of the options, yes.**

Q **And this same meaning, conventional sole design would be a flat sole from the inside to the outside; is that your understanding?**

A Yeah ...

EX1023, 88:10-89:10

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EX1023, 86:17-87:19

“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope

Patent Owner’s
Expert & Inventor

Q. Exhibit 2014 of your declaration. ... Claim charts for the ‘786, ‘291 and ‘760 Athalonz products. ... So you understand that this was included as an exhibit to your declarations, correct?

A. I do now, yes. ...

Q. I believe what's -- what's being shown in these charts is that **the Athalonz EnVe golf shoe is a product that practices these three patents; is that a proper understanding of what's shown here?**

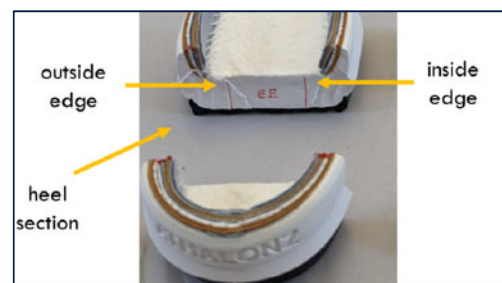
A. **I think that's a fair statement.**

EX1023, 173:4-22

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Athalonz EnVe



EX1036, pp. 9, 15



EX1022, p. 12

IPR2024-00636, Reply, 4

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“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope

Athalonz EnVe

Features:

THE FIRMEST STANCE

- Optimal Athletic Positioning (OAP) Technology
- Grip & Glide Tread Pattern
- Re-Enforced Lateral Wall

ALL-DAY COMFORT

- Flex Zone
- Open Sock Liner
- Spikeless Tread Pattern



Athalonz OAP technology shifts the way the body interacts with the ground to provide horizontal and vertical reactive forces to keep the foot firmly positioned in the shoe and hence firmly connected to the ground. In general, the OAP technology includes a conventional heel section and an athletic positioning forefoot section that has a conventional heel section to toe section slope on the lateral side and a slightly greater slope from heel section to toe section on the medial side; creating about a four-degree lateral to medial forefoot downward angle. The horizontal reactive forces produced by the OAP Technology are further enhanced by the **Re-Enforced Lateral Wall**.



Markison explains the construction of the EnVe:

“The heel is conventional but as you go forward in the shoe, it transitions you to the inside of your foot,” he says. “It mimics the natural movement of walking — you land on your heel, roll to your toe and push. When you’re in that athletic stance, your knee is inward just a little bit.”

EX1028, pp. 3, 5

EX1027

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IPR2024-00636, Reply, 4

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“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope

Q. Athalonz contends that the shoes charted below are representative of other Athalonz products as set forth in Athalonz’s infringement contentions. Do you know what other Athalonz products are -- according to you, practice these patents, the sole slope patents?

A. Every product we’ve made practiced these patents.

Q. So I happen to notice, are those the new Mangrove shoes you’re wearing right now?

A. Yes.

Q. Do you believe those also fall within the claim limitations and practice the sloped sole?

A. Yes. And thank you for noticing.

Athalonz Mangrove



3:18 golfer so as you can see the platform
3:20 here in the heel sections it's flat so
3:23 just like a normal heel in any kind of
3:25 golf shoe it's flat but as you work your
3:27 way forward from the heel to the toe we
3:30 have this slope that gradually tapers
3:33 this way so it puts the energy of your
3:37 contact with the ground here on the ball
3:39 of the foot and big toe area and it does
3:41 so on both the left side and the right

EX1029

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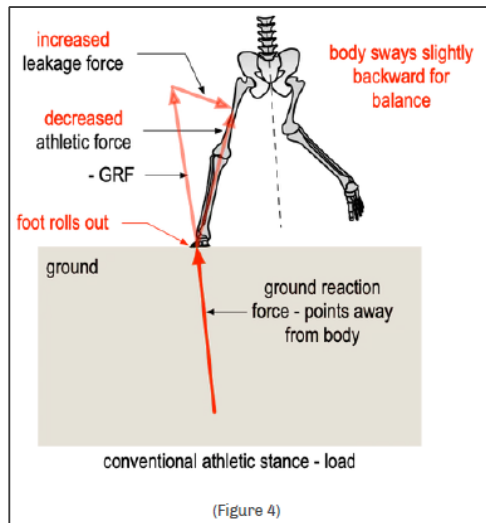
EX1023, 175:3-19

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

IPR2024-00636, Reply, 4-5

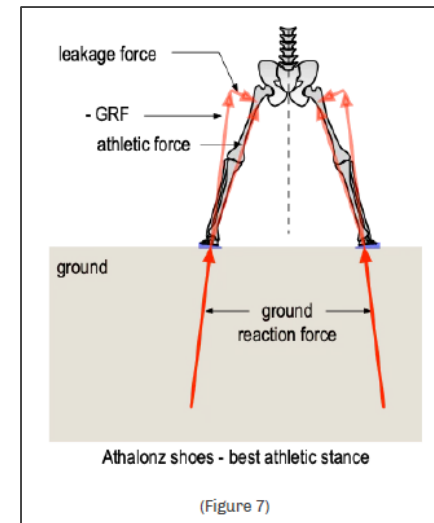
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“Conventional” Shoe Design – Heel Platform/Section/Area Having Substantially Uniform Height or Substantially No Slope



Accordingly, when we load in a conventional athletic stance in name brand shoes, we increase our leakage force, reduce our athletic force, and thus reduce our power to hit or throw a ball.

EX1030, p. 4



So, for the same amount of body force as with a **conventional pair of shoes with a flat sole**, the Athalonz shoes increase the ground reaction force, which increases the athletic force and reduces the leakage force.

EX1030, p. 6

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

IPR2024-00636, Reply, 5

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Dufour – ‘786 Ground 2

‘786 Patent: Claim 1	Dufour
1. An apparatus comprises:	Undisputed
a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus;	Undisputed
a mid-foot section juxtaposed to the heel platform section; and	Undisputed
a toe section juxtaposed to the mid-foot section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the apparatus from a front edge of the apparatus to the heel platform section, a second slope along the front edge of the apparatus from the inner edge to the outer edge of the apparatus, and a third slope along the outer edge of the apparatus from the front edge of the apparatus to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope, wherein the toe section is lower than the heel platform section as a result of the first, second, and third slopes.	

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Dufour – ‘786 Ground 2

‘786 Patent: Claim 5	Dufour
5. A shoe comprises:	Undisputed
an upper shoe section; and	Undisputed
a sole coupled to the upper shoe section, wherein the sole includes:	Undisputed
a specific bottom; and	Undisputed
an athletic positioning sole section having:	
a heel platform section that has a uniform height from an outer edge to an inner edge of the athletic positioning sole section at a rear edge of the athletic positioning sole section, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the sole;	Undisputed
a mid-foot section; and	Undisputed
a toe section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the athletic positioning sole section from a front edge of the athletic positioning sole section to the heel platform section, a second slope along the front edge of the athletic positioning sole section from the inner edge to the outer edge of the athletic positioning sole section, and a third slope along the outer edge of the athletic positioning sole section from the front edge of the athletic positioning sole section to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope.	

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Dufour – ‘291 Ground 2

‘291 Patent: Claim 1	Dufour
1. A shoe comprises:	Undisputed
an upper section;	Undisputed
a midsole coupled to the upper section;	Undisputed
an insole positioned proximal to the midsole and within the upper section; and	Undisputed
a bottom outsole coupled to the midsole, wherein a combination of the midsole, the insole, and the bottom outsole form an athletic positioning shape , wherein the athletic positioning shape has:	
a first height at an inside edge and at an outside edge of the shoe along a heel section of the shoe,	Undisputed
a second height on the outside edge of the shoe at a toe section of the shoe,	Undisputed
a third height on the inside edge of the shoe at the toe section of the shoe, and	Undisputed
the first height being greater than the second height and the second height being greater than the third height , wherein a first slope is formed by the first height and the second height, wherein a second slope is formed by the first height and the third height, and wherein a third slope is formed by the second height and the third height.	

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Dufour – ‘760 Ground 2

‘760 Patent: Claim 1	Dufour
1. A pair of shoes comprises:	
a left foot shoe including:	Undisputed
a left upper shoe portion; and	Undisputed
a left sole coupled to the left upper shoe portion, wherein a foot platform of the left sole provides an athletic positioning of a left big toe area of the left shoe at a lower position than a left heel area of the left shoe and at a lower position than an outer small toe area of the left shoe, wherein, from an inner edge to an outer edge of the left shoe, the left heel area has substantially no slope, and wherein, from the inner edge to the outer edge of the left shoe at a cross section at a ball of [foot], a bottom of the left sole is substantially linear; and	
a right foot shoe including:	
a right upper shoe portion; and	Undisputed
a right sole coupled to the right upper shoe portion, wherein a foot platform of the right sole provides an athletic positioning of a right big toe area of the right shoe at a lower position than a right heel area of the right shoe and at a lower position than an outer small toe area of the right shoe and wherein, from an inner edge to an outer edge of the right shoe, the right heel area has substantially no slope, and wherein, from the inner edge to the outer edge of the right shoe at a cross section at a ball of ball, a bottom of the right sole is substantially linear.	

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Prior Art Reference Dufour

United States Patent

Dufour

(19)

Patent Number: 4,754,561

Date of Patent: Jul. 5, 1988

[54] GOLF SHOE

[75] Inventor: Pierre Dufour, Annecy, France

[73] Assignee: Salomon S.A., Annecy Cedex, France

[21] Appl. No.: 48,206

[22] Filed: May 11, 1987

[30] Foreign Application Priority Data
May 9, 1986 (FR) France 86 07102

[51] Int. Cl.⁴: A43B 5/00; A43C 15/02

[52] U.S. Cl.: 36/127; 36/31; 36/59 C

[58] Field of Search: 36/28, 30 R, 30 A, 31, 36/59 R, 59 B, 59 C, 103, 113, 114, 124, 127, 134

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Primary Examiner—Donald Watkins
Attorney, Agent, or Firm—Pollock, Vande Sande & Priddy

[57] ABSTRACT

Golf shoe (1), the sole (2) of which has two separate areas (3) and (4), one of which (4) is provided with a shock absorbing element (5) and a deformable structure (6) to allow the golfer's foot to roll on the outer edge of the sole.

21 Claims, 4 Drawing Sheets

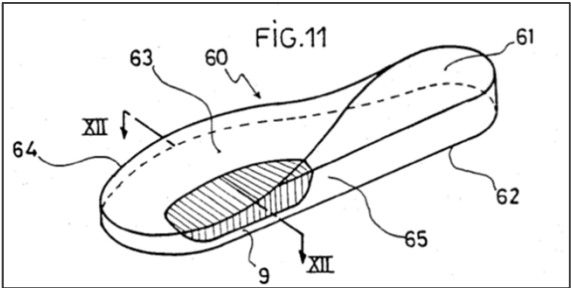
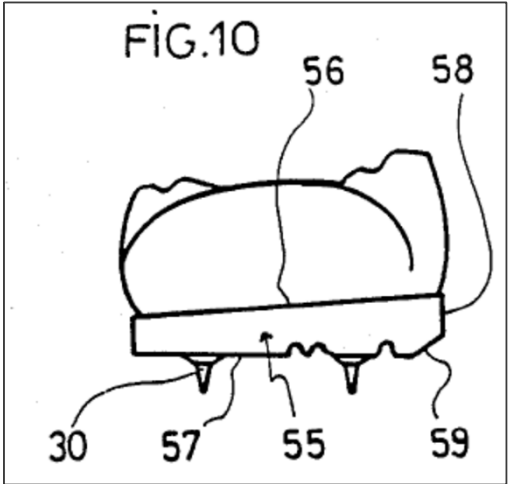
EX1006

Still according to the invention (FIG. 9), the sole 45 has a transverse section in which the inside support surface 46 is inclined with respect to the walking surface 47. Considering that this involves the sole 45 of a left shoe, the incline of the surface 46 rises from the right inner edge 48 of said sole to the outer edge 49 thereof. The structure of this sole 45 shows a passive

EX1006, 4:51-57

Provision is also made (FIGS. 11 and 12) for the sole 60 to furnish a transverse seating for the foot, having variations in the plantar support surface. As such, the plantar support zone 61 at the level of the heel remains substantially parallel to the walking surface 62, while the support surface 63 in the front area of the foot is inclined upwards from the inner edge 64 towards the outer edge 65.

EX1006, 5:7-14



EX1006, Figs. 10, 11

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Dufour – Toe Lower than Heel

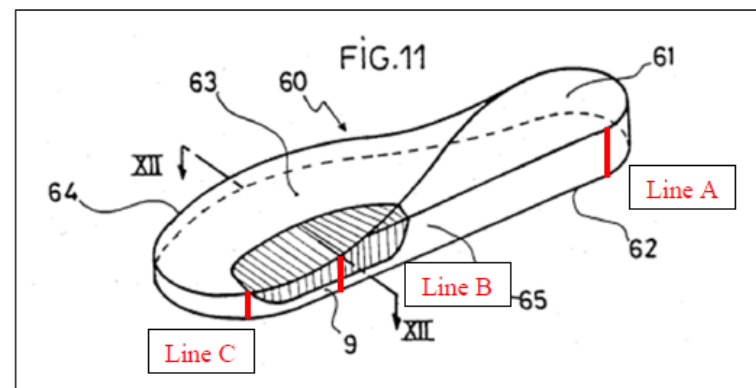
The Board

Patent Owner also argues that Dufour discloses the heel to be at the same height as the toe area. Prelim. Resp. 42–43. Patent Owner does not persuasively explain its position. In contrast, Petitioner’s showings with respect to Figure 11 of Dufour appear to satisfy the first and third slope limitations requiring the heel to be taller than the toe area. *See* Pet. 34–35. In particular, the heel area visually appears to be taller than the toe area in Figures 11 and 12. This visual inspection is supported by Petitioner’s declarant, who states that it is generally expected that a heel area is taller than a toe area in a shoe. Ex. 1002 ¶ 63. Thus, we are not persuaded that the toe area in Dufour is the same height as the heel area.

IPR2024-00636 ID, Paper 8, 13

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE



IPR2024-00636 Reply, 18

Patent Owner’s Expert & Inventor

Q. I'd like you to draw a line closer to the front of the toe section on Figure 11. How about I do it for you. I'll label that C.

Is it your position that C is the same height as A?

A. So in a vacuum, Figure 11, without context of what the patent is teaching, the way you drew Figure -- **Line C, it's smaller than Line A,** but that's not what Figure 12 shows.

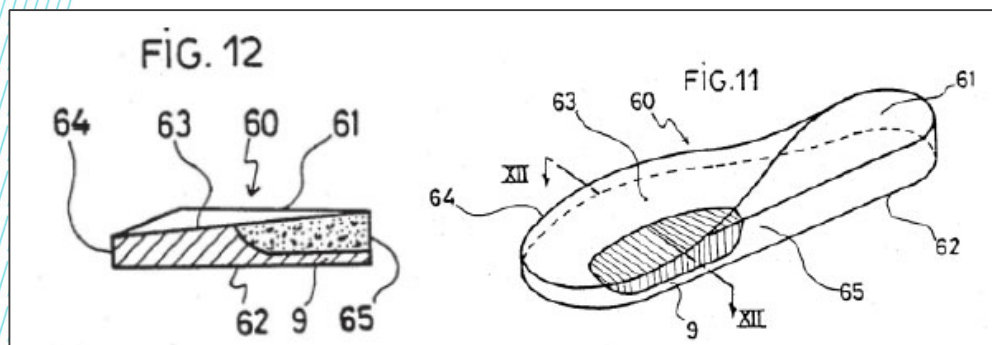
IPR2024-00636, Reply, 17-18

EX1023, 119:3-11

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Dufour – Toe Lower than Heel

Petitioner's Expert



EX1006, Figs. 11, 12

29. There is an inconsistency between the depictions of the shoe of the sole depicted in Figures 11 and 12 of Kim. Figure 12 purports to show the heel section 61, as if it were a perspective view looking down the length of the shoe, as shown below.

30. However, based on the shape of the sole shown in Figure 11, a POSITA would understand that in Figure 12, the outer edge (65) should show a decrease in height from the heel (61) to the toe, in a similar but less pronounced fashion as the decrease in height shown at the inner edge (64) from the heel (61) to the toe. Line XII-XII of Figure 11, where the cross section of Figure 12 was taken, is depicted as being past the intersection point of the flat heel section (61) and angled forefoot section (63) at the outer edge (65), at which point the outer edge (65) begins to decrease in height.

31. Thus, Mr. Markison's suggestion that Dufour's Figure 12 discloses that "the height of the outer edge 65 of the plantar support zone 61 and of support surface 63 is the same" (EX2008, ¶234) is wrong.

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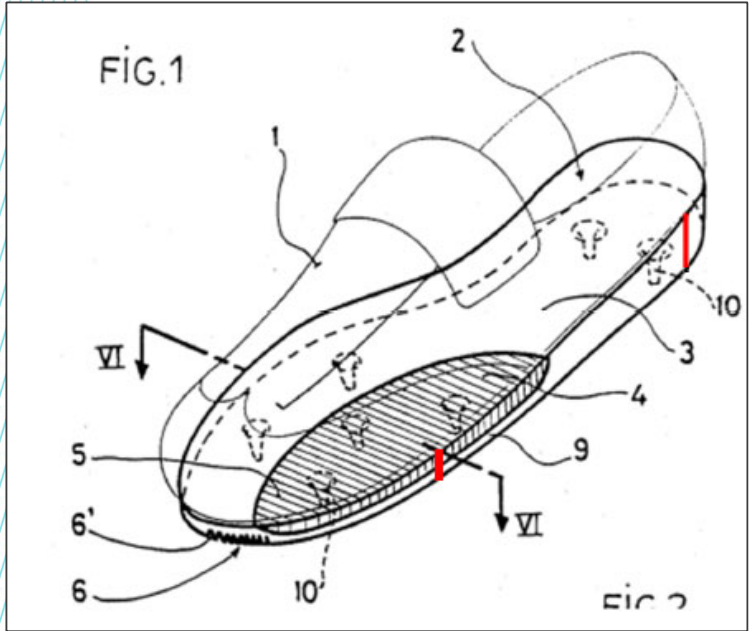
DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

IPR2024-00636, Reply, 17-18

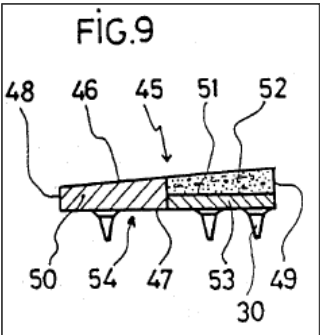
EX1022, ¶¶29-31

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Dufour – Toe Lower than Heel



IPR2024-00636 Reply, 20



FIGS. 6 to 9 are cross section views along line VI—VI in FIG. 1 and show details of several structures and assemblies of a golf shoe sole, still according to the invention;

EX1006, 3:20-21

EX1006, Fig. 9

The Britannica Dictionary

cross-section

cross section

noun

plural cross sections

1 : a view or drawing that shows what the inside of something looks like after a cut has been made across it

The Britannica Dictionary

perspective

perspective

/pəˈspektɪv/

noun

plural perspectives

4 [noncount] : a way of showing depth or distance in a painting or drawing by making the objects that are far away smaller and making the objects that are closer to the viewer larger

EX1032, EX1033

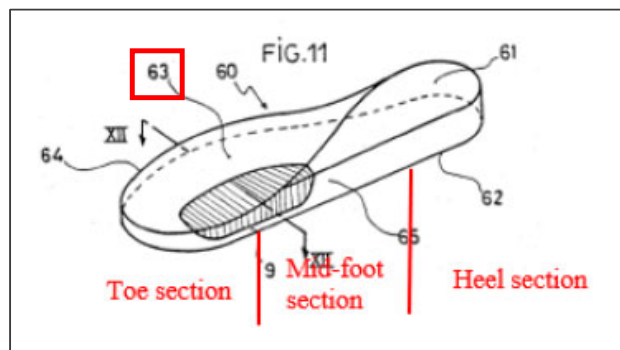
IPR2024-00636, Reply, 19-20

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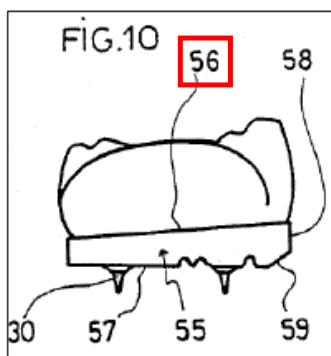
DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Dufour – Angled Support Platform / Mid-foot Section

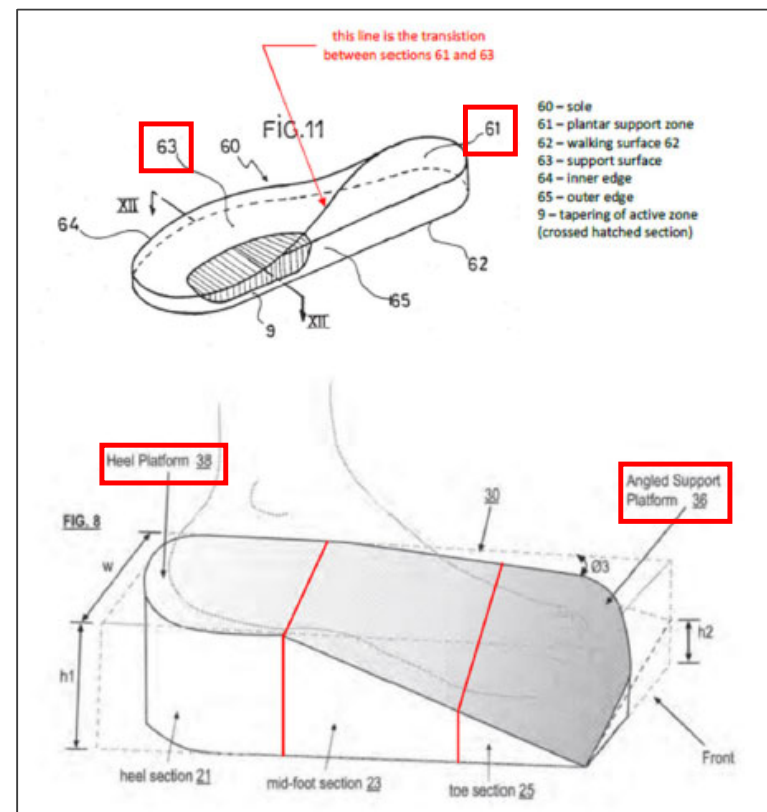
- Petitioner identified Dufour's mid-foot section and toe section which comprise the angled support platform.
- The corresponding first, second, and third slopes are shown with respect to the support surface (56) in Figure 10, and support surface (63) in Figure 11.



IPR2024-00636, Pet. 32



EX1006, Fig. 10



IPR2024-00638 Reply, 21

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IPR2024-00636, Reply, 21

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Dufour – A Pair of Shoes

The Board

As explained above, a left shoe, thus a shoe especially for right-handed players, is preferably described; of course, the characteristics presented below can be applied to a right shoe, which thus will be for left-handed golfers (about 10%), without departing from the framework of the invention.

EX1006, 3:43-48

Patent Owner also argues that Dufour does not disclose a pair of shoes having both a left and right shoe. Prelim. Resp. 44–46. As Petitioner points out, however, Dufour teaches both a left and a right shoe. *See, e.g.*, Pet. 29, 33; Ex. 1006, 3:43–44 (“a left shoe . . . is preferably described; of course, the characteristics presented below can be applied to a right shoe”). Thus, we are not persuaded that Petitioner has failed to show both a left and right shoe.¹

¹ We note here that the claims are not directed to a method of playing golf while wearing a certain left shoe and a certain right shoe, nor are they directed to a combination of a human being wearing a left shoe and a right shoe (or a box containing a left shoe and a right shoe). Instead, the claim is directed to a pair of shoes (i.e., a left shoe and a right shoe), which would seem to be satisfied merely by a manufacturer making a left and a right shoe. Patent Owner is free to propose a claim construction in its Response.

IPR2024-00636 ID, Paper 8, 11-12

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IPR2024-00638, Reply, 19

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Rubin – ‘786 Ground 3

‘786 Patent: Claim 1	Rubin
1. An apparatus comprises:	Undisputed
a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus;	Undisputed
a mid-foot section juxtaposed to the heel platform section; and	Undisputed
a toe section juxtaposed to the mid-foot section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the apparatus from a front edge of the apparatus to the heel platform section, a second slope along the front edge of the apparatus from the inner edge to the outer edge of the apparatus, and a third slope along the outer edge of the apparatus from the front edge of the apparatus to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope, wherein the toe section is lower than the heel platform section as a result of the first, second, and third slopes.	

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Rubin – ‘786 Ground 3

‘786 Patent: Claim 5	Rubin
5. A shoe comprises:	Undisputed
an upper shoe section; and	Undisputed
a sole coupled to the upper shoe section, wherein the sole includes:	Undisputed
a specific bottom; and	Undisputed
an athletic positioning sole section having:	
a heel platform section that has a uniform height from an outer edge to an inner edge of the athletic positioning sole section at a rear edge of the athletic positioning sole section, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the sole;	Undisputed
a mid-foot section; and	Undisputed
a toe section, wherein the mid-foot section and the toe section form an angled support platform that has a first slope along the inner edge of the athletic positioning sole section from a front edge of the athletic positioning sole section to the heel platform section, a second slope along the front edge of the athletic positioning sole section from the inner edge to the outer edge of the athletic positioning sole section, and a third slope along the outer edge of the athletic positioning sole section from the front edge of the athletic positioning sole section to the heel platform section, the first slope, second slope, and the third slope each greater than the reference slope.	

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Rubin – ‘291 Ground 3

‘291 Patent: Claim 1	Rubin
1. A shoe comprises:	Undisputed
an upper section;	Undisputed
a midsole coupled to the upper section;	Undisputed
an insole positioned proximal to the midsole and within the upper section; and	Undisputed
a bottom outsole coupled to the midsole, wherein a combination of the midsole, the insole, and the bottom outsole form an athletic positioning shape , wherein the athletic positioning shape has:	
a first height at an inside edge and at an outside edge of the shoe along a heel section of the shoe,	Undisputed
a second height on the outside edge of the shoe at a toe section of the shoe,	Undisputed
a third height on the inside edge of the shoe at the toe section of the shoe, and	Undisputed
the first height being greater than the second height and the second height being greater than the third height , wherein a first slope is formed by the first height and the second height, wherein a second slope is formed by the first height and the third height, and wherein a third slope is formed by the second height and the third height.	

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

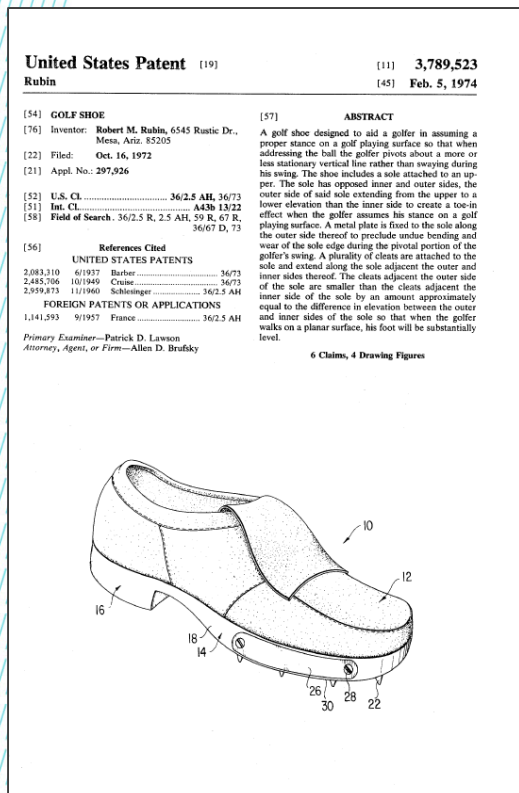
Rubin – ‘760 Ground 3

‘760 Patent: Claim 1	Dufour
1. A pair of shoes comprises:	
a left foot shoe including:	Undisputed
a left upper shoe portion; and	Undisputed
a left sole coupled to the left upper shoe portion, wherein a foot platform of the left sole provides an athletic positioning of a left big toe area of the left shoe at a lower position than a left heel area of the left shoe and at a lower position than an outer small toe area of the left shoe, wherein, from an inner edge to an outer edge of the left shoe, the left heel area has substantially no slope, and wherein, from the inner edge to the outer edge of the left shoe at a cross section at a ball of [foot], a bottom of the left sole is substantially linear; and	
a right foot shoe including:	
a right upper shoe portion; and	Undisputed
a right sole coupled to the right upper shoe portion, wherein a foot platform of the right sole provides an athletic positioning of a right big toe area of the right shoe at a lower position than a right heel area of the right shoe and at a lower position than an outer small toe area of the right shoe and wherein, from an inner edge to an outer edge of the right shoe, the right heel area has substantially no slope, and wherein, from the inner edge to the outer edge of the right shoe at a cross section at a ball of ball, a bottom of the right sole is substantially linear.	

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Prior Art Reference Rubin



EX1007

VENABLE LLP

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

1. Field of the Invention
This invention relates to a golf shoe, and more particularly, a golf shoe designed to aid the golfer in assuming a proper stance on a golf playing surface so that during his swing the golfer will pivot in a proper manner to enhance the change of straight flight of the golf ball when struck.

EX1007, 1:5-11

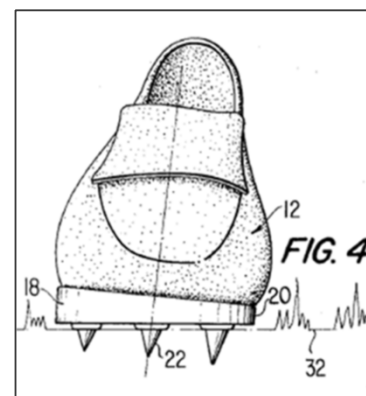
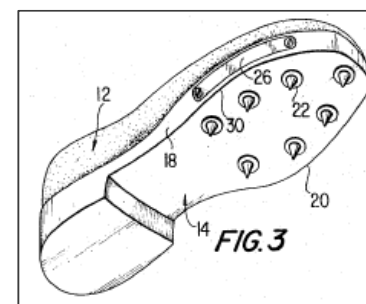
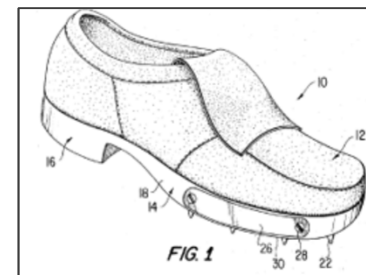
The outer side 18 of sole 14 extends downwardly from the shoe upper 12 to a lower elevation than the inner side 20 of sole 14. The sole portion 14 of shoe 10 will therefore have the appearance of having a built-up sole along outer side 18 so that the planar bottom of sole 14 will converge towards inner side 20 of sole 14. Experimentation with different sized soles has

EX1007, 3:9-15

Shoe 10 includes a conventional upper 12 and a sole 14 which can be molded integrally with upper 12 from such material as poly vinyl chloride. Sole 14 should be sufficiently flexible to enable the wearer latitude to flex the shoe when walking but yet rigid enough to preclude undue roll of the shoe when used by the golfer once he has assumed a proper stance over a golf ball. A conventional heel 16 is also molded integrally with sole 14.

EX1007, 2:55-68

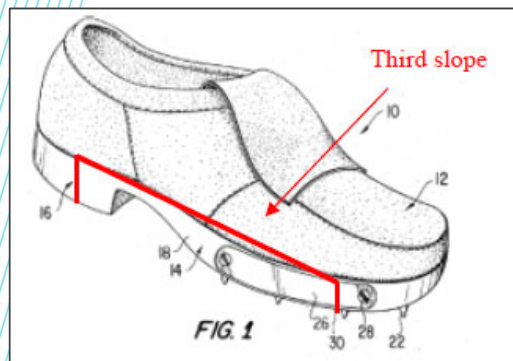
IPR2024-00636, Pet., 11; Reply 23



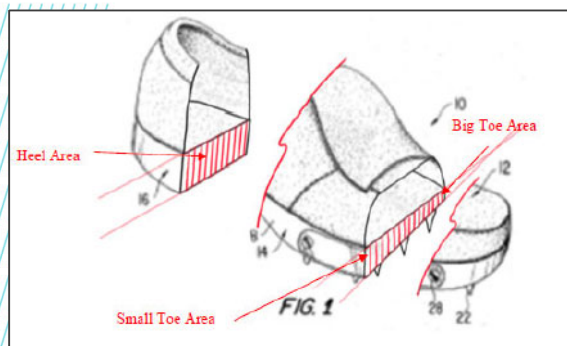
EX1007, Figs. 1, 3, 4

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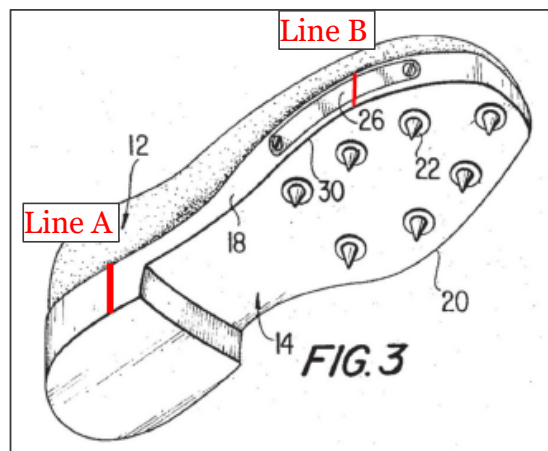
Rubin – Toe Lower than Heel



IPR2024-00636, Pet., 46



IPR2024-00637, Pet., 42



IPR2024-00636, Reply, 27

Patent Owner's Expert & Inventor

Q. Let's take a look at Figure 3. ... I'm going to draw a line and mark that A. Do you believe that A accurately depicts the height of the heel section in Ruben?

A. It corresponds to what you drew on Figure 1, yes.

Q. And that's the heel section, correct?

A. Yes.

Q. I'll draw a line B. Do you agree that B shows the height of the toe section in Ruben?

A. I mean, you drew a Line B in the toe section ...

Q. So looking at Figure 3, is line A longer than Line B; yes or no?

A. Well, the way you drew it, yes, but it's not an accurate representation.

IPR2024-00636, Reply, 26 /EX1023, 132:7-133:9

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Rubin – Bottom Surface Parallel to Reference Slope

- Athalonz suggestion that “the bottom surface” of the sole “has to have a flat plane” to meet the claims of the ‘768 patent is wrong.
- The claimed uniform height that establishes the reference slope is measured “from the outer edge to the inner edge” of the heel platform, and must only be parallel to the bottom surface of the apparatus/sole at the heel section, not the forefoot section.
- This is confirmed by Athalonz’s infringement contentions wherein the reference slope of accused products is measured only with respect to heel.

1. An apparatus comprises:
a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus;

‘768 Patent, Claims 1, 5

5. A shoe comprises:
an upper shoe section; and
a sole coupled to the upper shoe section, wherein the sole includes:
a specific bottom; and
an athletic positioning sole section having:
a heel platform section that has a uniform height from an outer edge to an inner edge of the athletic positioning sole section at a rear edge of the athletic positioning sole section, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the sole;

For example, the Curry 4 FloTrio has a reference slope from the outer edge to the inner edge that is substantially parallel to a bottom surface of the apparatus.



EX1025, 203

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

IPR2024-00636, Reply, 25-26

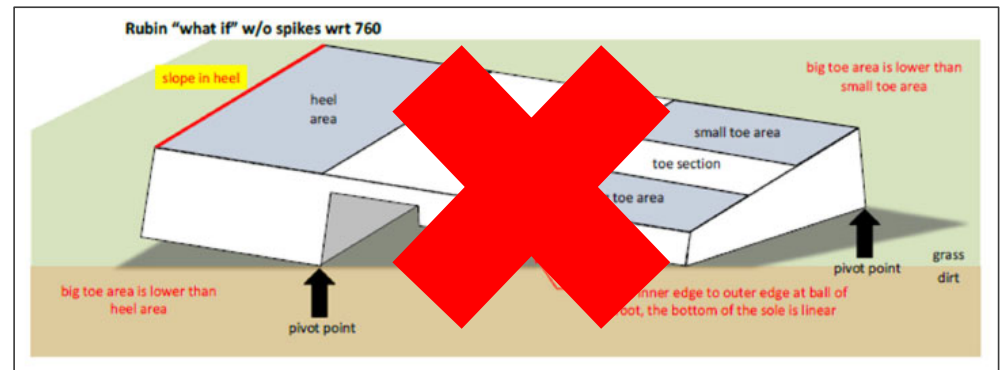
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Rubin – Bottom Surface Parallel to Reference Slope

- Even if the claims had such a requirement, they are met by Rubin.
- Like Kim, Rubin expressly discloses a flexible sole.
- Rubin's flexible sole would allow the toe section of the sole to extend downwards and onto the ground while the heel section also remains flat on the ground. EX1022, ¶¶43-46.
- Rubin's flexible sole also contradicts Mr. Markison's assertion that the heel section would lift off the ground due to pivot points. See slide 25, discussing Kim.

such material as poly vinyl chloride. Sole 14 should be sufficiently flexible to enable the wearer latitude to flex the shoe when walking but yet rigid enough to preclude undue roll of the shoe when used by the golfer once he has assumed a proper stance over a golf ball. A conventional heel 16 is also molded integrally with sole 14.

EX1007, 2:59-67

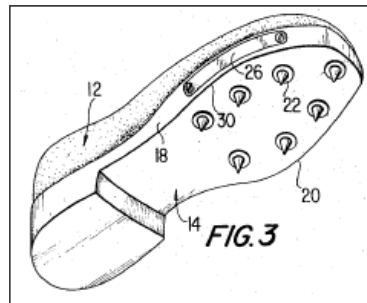


IPR2024-00638, Reply 27

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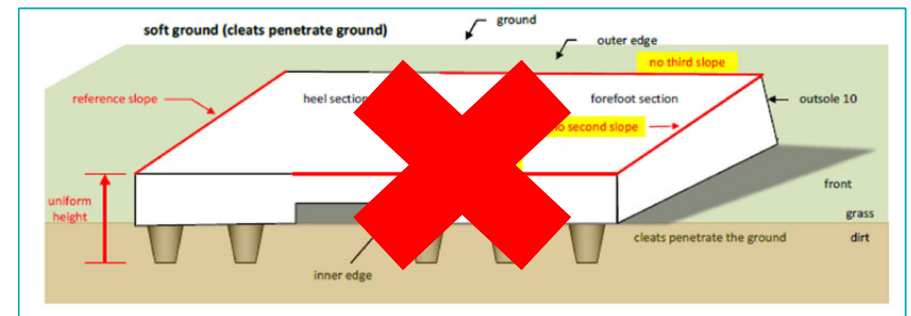
Rubin – “Conventional” Flat Heel

- Athalonz’s suggestion that some of Rubin’s embodiments lack a heel that is substantially flat or has substantially no slope from the inside edge to the outside edge is unsupported.
- Like Kim (see slides 26-35) Rubin’s disclosure of a “conventional heel,” along with the flat heel shown in Figure 3 confirm the opposite.



Shoe 10 includes a conventional upper 12 and a sole 14 which can be molded integrally with upper 12 from such material as poly vinyl chloride. Sole 14 should be sufficiently flexible to enable the wearer latitude to flex the shoe when walking but yet rigid enough to preclude undue roll of the shoe when used by the golfer once he has assumed a proper stance over a golf ball. A conventional heel 16 is also molded integrally with sole 14.

EX1007, 2:55-68, Fig. 3



IPR2024-00636, Reply 22

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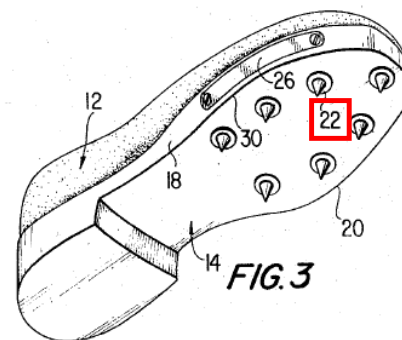
DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

IPR2024-00636, Reply 22-23

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Rubin – Slopes/Heights/Positions Exclude Cleats

- Rubin’s cleats 22 “projecting” from the “bottom of the sole 14” should not be included when measuring the claimed slopes, heights and positions for the same reasons discussed with respect to Kim. (See slides 20-24).



Projecting downwardly from the bottom of sole 14 are a plurality of cleats 22. Cleats 22 serve to anchor the foot of the golfer in position once he has assumed his stance on a golf playing surface. Cleats 22 extend

EX1007 3:24-27

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IPR2024-00636, Reply, 5-8

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Rubin – Pair of Shoes

- Athalonz has presented no evidence that alters the Board’s conclusion about what the claims require with respect to a “pair” of shoes. IPR2024-00636 ID, Paper 8, 11-12.
- Mr. Delgatty explained why it would have been obvious to provide both left and right shoes with the claimed features.

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DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Petitioner's Expert

94. To the extent Rubin does not expressly disclose a “pair” of shoes having the disclosed features, it would have been obvious to provide both left and right shoes with the disclosed features based on Rubin’s teachings and the knowledge of a POSITA. For example, Rubin explains that providing a built-up sole at the outer edge so that the bottom of the sole converges toward the inner side of the shoe, which provides “toe-in effect,” results in an improved golf stance. *Id.*, 2:3-11, 3:9-15, Abstract. It would have been obvious to apply these features to both shoes to provide the associated benefits for both feet, for example to provide the golfer’s weight to be placed on the inside of both feet. This would improve the golfer’s stance and weight distribution even further. As Kim explains, providing both shoes with the claimed features:

IPR2024-00638, EX1002, ¶94

Dufour + Kim and Rubin + Kim

- A POSITA would successfully combine Dufour and Rubin's teachings with those in Kim.
 - The references are in the same field and disclose similar improvements, including a sloped sole configured to provide enhanced positioning or support;
 - both a midsole and an insole were common shoe components that provide several benefits, such as providing additional cushioning, comfort and/or stability;
 - Dufour's and Rubin's sole could easily be modified to include the midsole and insole disclosed in Kim while maintaining the athletic positioning shape; and
 - a POSITA would have been able to make any necessary modifications to the shoe or shoe components. (EX1002, ¶¶71-78, 90-98; EX1022, ¶¶35, 47).
- Athalonz's argument is premised on a fundamental misunderstanding of obviousness law.
 - "It is not necessary that the inventions of the references be physically combinable to render obvious the invention under review." *In re Sneed*, 710 F.2d 1544, 1550 (Fed. Cir. 1983)
 - "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference" *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). "Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *Id.*
- Athalonz's overly narrow view of the law considers only physical placement of Kim's embodiments on top of Dufour's and Rubin's embodiments without considering alternative disclosures in the references or the modifications that a POSITA would have made.

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Secondary Considerations

- *Long-Felt, Unmet Need* – Athalonz failed to show a persistent need recognized by a POSITA, why the cited prior art in the grounds above did not meet such a need, nor evidence of how the alleged invention did.
- *Skepticism by Others* – Athalonz relies entirely on unsupported personal beliefs of Mr. Markison for why its product was met with limited success and failed to provide evidence that the limited success was due to a disbelief in the technical merits as opposed to other economic or commercial factors
- *Industry Praise* - the article on which Athalonz relies purporting to praise Athalonz's shoes was written as a result of Athalonz's marketing department's solicitation for reviews.
- *Unexpected Results* - Bernhard Langer got worse, not better, after switching to Athalonz's shoes, and the remainder of Athalonz's support is hearsay
- *Copying* - Athalonz failed to include any technical analysis of Petitioner's products, or any evidence that Petitioner's shoes practice the asserted patents or have a similar design as Athalonz's products.

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IPR2024-00636, Reply, 28-30

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