



ATHALONZ

Patent Owner's Presentation

IPR2024-00636, IPR2024-00637, IPR2024-00638

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

Under Armour, Inc. v. Athalonz LLC

June 17, 2025

“Slope Patents” – IPR Proceedings

- **IPR2024-00636:** U.S. Patent No. 10,674,786 (786)
- **IPR2024-00637:** U.S. Patent No. 11,013,291 (291)
- **IPR2024-00638:** U.S. Patent No. 11,064,760 (760)



Slope Patents – Primary Prior Art References

- **Kim (EX1005):** U.S. Patent Pub. No. 2004/0040181
- **Dufour (EX1006):** U.S. Patent No. 4,754,561
- **Rubin (EX1007):** U.S. Patent No. 3,789,523

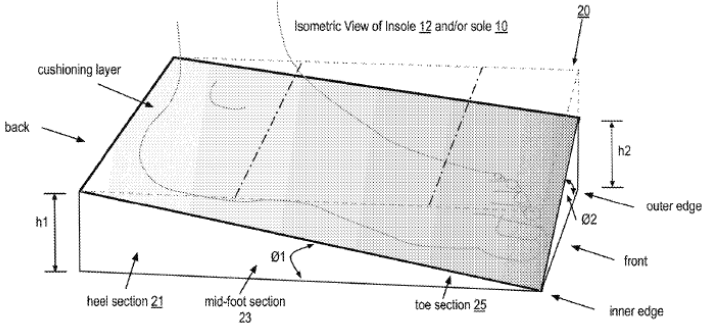


OVERVIEW OF THE PATENTS



'786 Patent

(12) United States Patent Adair et al.	(10) Patent No.: US 10,674,786 B2 (45) Date of Patent: Jun. 9, 2020
(54) ATHLETIC POSITIONING APPARATUS INCLUDING A HEEL PLATFORM AND APPLICATIONS THEREOF	USPC 36/44, 43, 25 R, 110, 103, 132, 142, 144 See application file for complete search history.
(75) Inventors: Michael R. Adair , Woodruff, SC (US); Timothy W. Markison , Mesa, AZ (US)	(56) References Cited U.S. PATENT DOCUMENTS
(73) Assignee: ATHALONZ, LLC , Mesa, AZ (US)	4,620,376 A 11/1986 Talarico, II 36/127 4,685,227 A * 8/1987 Simmons 36/127 6,976,322 B1 12/2005 Walker 12/146 B 7,464,428 B2 * 12/2008 Norton 36/43 7,487,604 B2 2/2009 Perron, Jr. 36/142 7,581,336 B2 * 9/2009 Segatin 36/144 7,793,437 B2 * 9/2010 Chapman A43B 7/141
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 257 days.	2002/0005609 A1 * 1/2002 Choi 36/144 2002/0139011 A1 * 10/2002 Kerrigan 36/144 2004/0025376 A1 * 2/2004 Grisoni et al. 36/44 2006/0000114 A1 * 1/2006 Love 36/43 2006/0053664 A1 * 3/2006 Tager 36/144
(21) Appl. No.: 13/355,801	(Continued)
(22) Filed: Jan. 23, 2012	OTHER PUBLICATIONS
(65) Prior Publication Data US 2012/0227284 A1 Sep. 13, 2012	Pribut: [downloaded from Internet Feb. 26, 2011; http://www.dprbut.com/sports/shoes.html]; 7 pgs. (Continued)
Related U.S. Application Data	Primary Examiner — Megan E Lynch
(60) Provisional application No. 61/450,485, filed on Mar. 8, 2011.	(74) Attorney, Agent, or Firm — Garlick & Markison; Timothy W. Markison
(51) Int. Cl. A43B 7/14 (2006.01) A43B 7/24 (2006.01) A43B 13/14 (2006.01)	(57) ABSTRACT An apparatus includes a heel platform section, a mid-foot section juxtaposed to the heel platform section, and a toe section juxtaposed to the mid-foot section. The mid-foot section and toe section collectively have a geometric shape having a first slope of a polarity along an inner edge of the apparatus from the toe section to the mid-foot section and a second slope of the polarity along the inner edge of the apparatus to the outer edge of the apparatus at the toe section.
(52) U.S. Cl. CPC A43B 7/14 (2013.01); A43B 7/141 (2013.01); A43B 7/142 (2013.01); A43B 7/143 (2013.01); A43B 7/144 (2013.01); A43B 7/145 (2013.01); A43B 7/24 (2013.01); A43B 13/14 (2013.01); A43B 13/143 (2013.01); A43B 13/148 (2013.01)	9 Claims, 92 Drawing Sheets
(58) Field of Classification Search CPC A43B 7/142; A43B 7/144; A43B 13/38; A43B 13/145; A43B 5/00; A43B 13/12; A43B 7/00; A43B 7/14; A43B 3/00; A61F 5/0195; A61F 5/14	



IPR2024-00636

Title: Athletic Positioning Apparatus Including a Heel Platform and Applications Thereof

Assignee: Athalonz, LLC

Priority Date: March 8, 2011

Petitioned Claims: 1-8



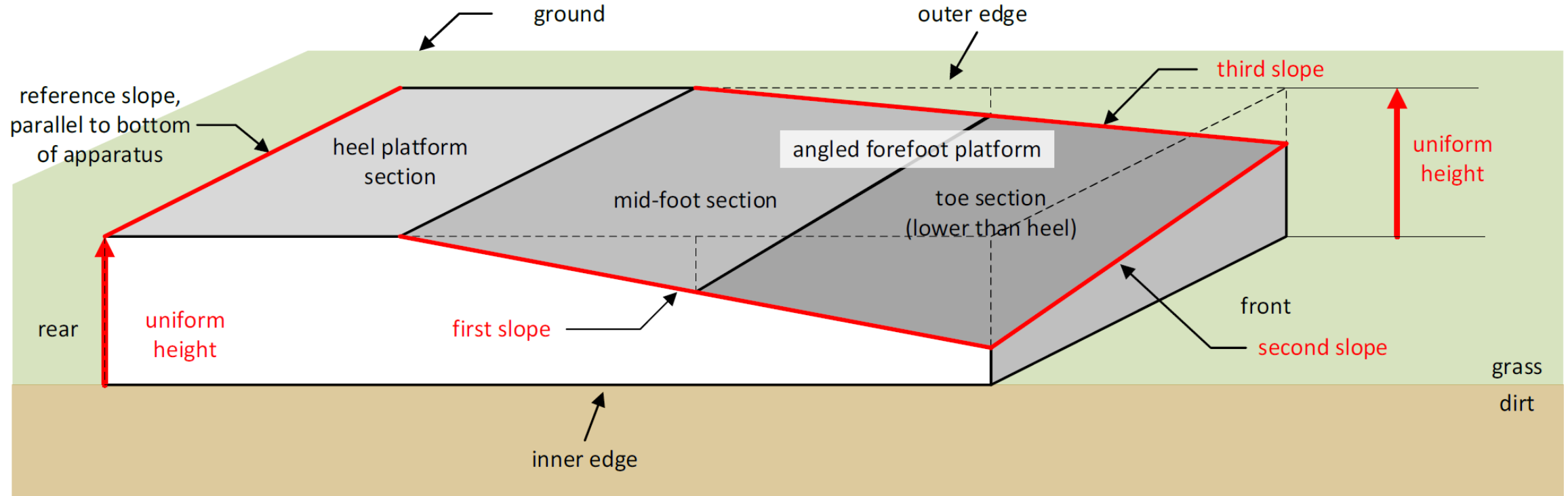
'786 Patent: Claim 1

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;
- a mid-foot section juxtaposed to the heel platform section; and
- 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.



'786 Patent: Claim 1



'786 Patent: Claim 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:

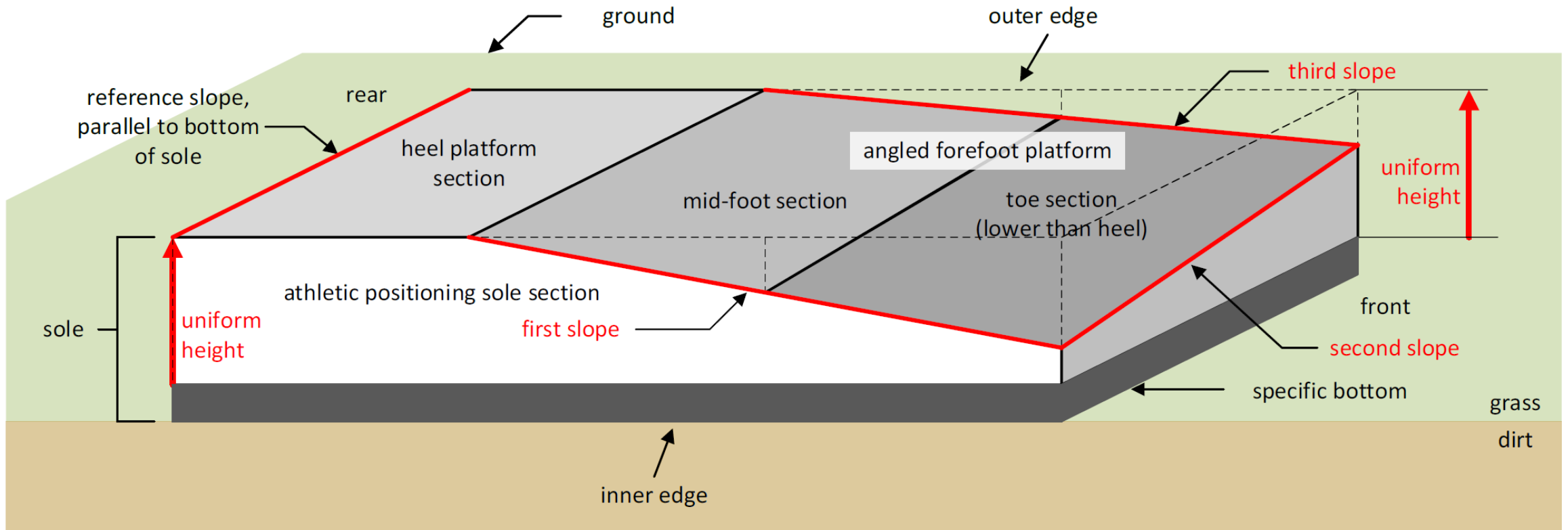
a heel platform section that has a uniform height from an outer edge to an inner edge of the athletic positioning sole section at a rear edge of the athletic positioning sole section, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially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

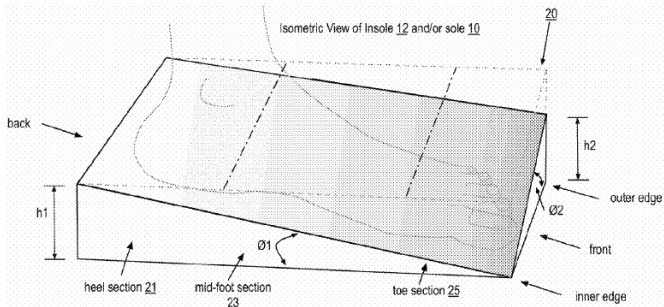


'786 Patent: Claim 5



'291 Patent

(12) United States Patent Adair et al.		(10) Patent No.: US 11,013,291 B2 (45) Date of Patent: *May 25, 2021
(54) ATHLETIC POSITIONING APPARATUS AND APPLICATIONS THEREOF		7/1445 (2013.01); A43B 7/24 (2013.01); A43B 13/14 (2013.01); A43B 13/143 (2013.01); A43B 13/148 (2013.01)
(71) Applicant: Athalonz, LLC , Mesa, AZ (US)		(58) Field of Classification Search
(72) Inventors: Michael R. Adair , Woodruff, SC (US); Timothy W. Markison , Mesa, AZ (US)		CPC A43B 7/14; A43B 7/141; A43B 7/142; A43B 7/143; A43B 7/144; A43B 7/1445; A43B 7/1465; A43B 7/24; A43B 11/00; A43B 13/148; A43B 13/189; A43B 13/26; A43B 5/00; A43B 13/143; A43B 13/14
(73) Assignee: Athalonz, LLC , Mesa, AZ (US)		USPC 36/142-144, 114, 25 R See application file for complete search history.
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days. This patent is subject to a terminal disclaimer.		(56) References Cited
(21) Appl. No.: 16/397,605		U.S. PATENT DOCUMENTS
(22) Filed: Apr. 29, 2019		1,477,825 A * 12/1923 Heiter A43B 7/142 36/162
(65) Prior Publication Data US 2019/0246735 A1 Aug. 15, 2019		2,616,190 A * 11/1952 Darby A43B 7/142 36/144
Related U.S. Application Data		2,909,854 A * 10/1959 Edelstein A43B 7/1425 36/140
(63) Continuation of application No. 14/563,135, filed on Dec. 8, 2014, now Pat. No. 10,271,611, which is a continuation of application No. 13/555,778, filed on Jan. 23, 2012, now Pat. No. 8,938,893.		4,620,376 A * 11/1986 Talarico, II A43B 7/14 36/103
(60) Provisional application No. 61/450,485, filed on Mar. 8, 2011.		4,685,227 A * 8/1987 Simmons A43B 17/02 36/127
(51) Int. Cl. A43B 7/14 (2006.01) A43B 13/14 (2006.01) A43B 7/24 (2006.01)		4,862,605 A * 9/1989 Gardner A43B 13/38 36/43
(52) U.S. Cl. CPC A43B 7/14 (2013.01); A43B 7/141 (2013.01); A43B 7/142 (2013.01); A43B 7/143 (2013.01); A43B 7/144 (2013.01); A43B		(Continued) <i>Primary Examiner</i> — Marie D Bays (74) <i>Attorney, Agent, or Firm</i> — Gartick & Markison; Timothy W. Markison
		(57) ABSTRACT An apparatus includes a heel section, a mid-foot section, and a toe section. The heel section, the mid-foot section, and the toe section collectively have a geometric shape having a first slope of a polarity along an inner edge of the apparatus from the toe section to the heel section and a second slope of the polarity along the inner edge of the apparatus to an outer edge of the apparatus at the toe section.
		8 Claims, 92 Drawing Sheets



IPR2024-00637

Title: Athletic Positioning Apparatus and Applications Thereof

Assignee: Athalonz, LLC

Priority Date: March 8, 2011

Petitioned Claims: 1-5



'291 Patent: Claim 1

A shoe comprises:

an upper section;

a midsole coupled to the upper section;

an insole positioned proximal to the midsole and within the upper section; and

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,

a second height on the outside edge of the shoe at a toe section of the shoe,

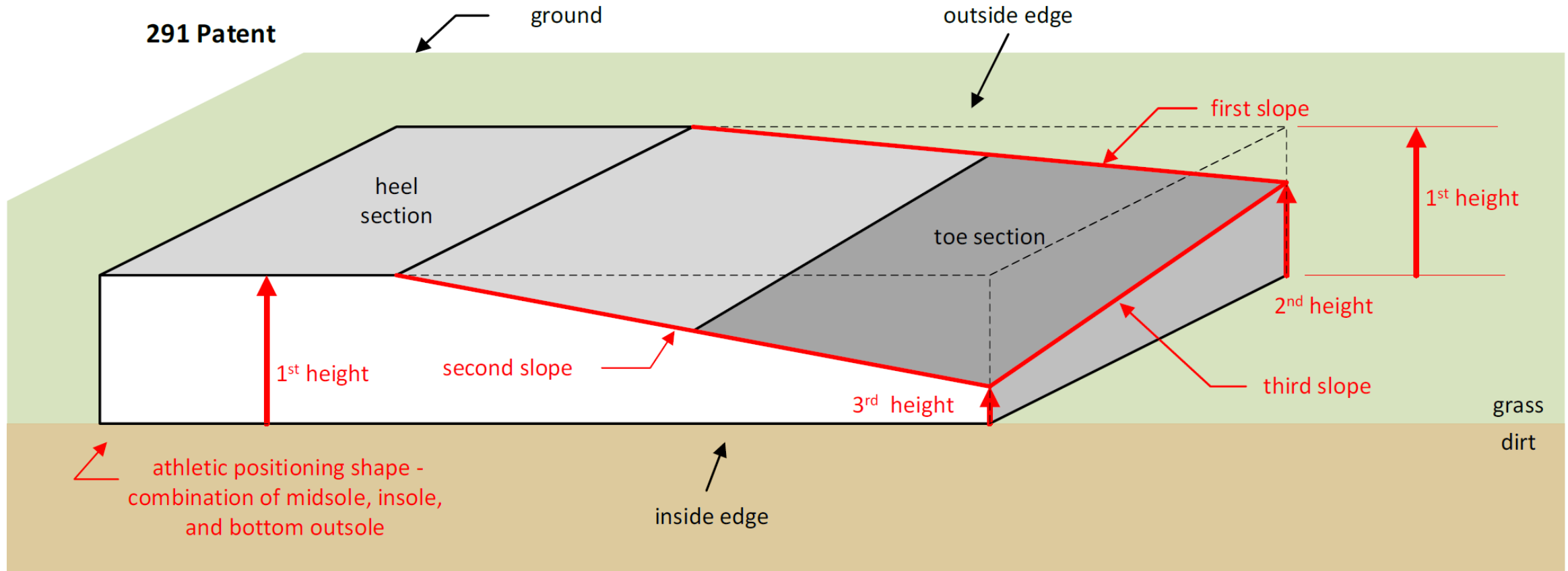
a third height on the inside edge of the shoe at the toe section of the shoe, and

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.

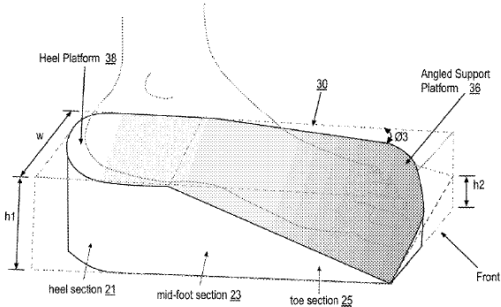


'291 Patent: Claim 1



'760 Patent

(12) United States Patent Adair et al.	(10) Patent No.: US 11,064,760 B2 (45) Date of Patent: *Jul. 20, 2021
(54) ADJUSTABLE ATHLETIC POSITIONING APPARATUS AND APPLICATIONS THEREOF	7/1445 (2013.01); A43B 7/24 (2013.01); A43B 13/14 (2013.01); A43B 13/143 (2013.01); A43B 13/148 (2013.01)
(71) Applicant: Athalonz, LLC , Mesa, AZ (US)	(58) Field of Classification Search CPC ... A43B 13/143; A43B 13/145; A43B 13/146; A43B 7/24 USPC 36/142-144 See application file for complete search history.
(72) Inventors: Michael R. Adair , Woodruff, SC (US); Timothy W. Markison , Mesa, AZ (US)	(56) References Cited U.S. PATENT DOCUMENTS 4,620,376 A 11/1986 Talarico, II 4,642,911 A 2/1987 Talarico, II 4,979,318 A 12/1990 Cohen 5,345,701 A 9/1994 Smith 6,604,301 B1 8/2003 Manoli, II et al. 6,725,578 B2 4/2004 Kerrigan 7,581,336 B2 9/2009 Segalin 7,712,231 B2 5/2010 Umezawa et al. 8,127,467 B2 3/2012 Koyama 8,387,278 B2 3/2013 Rees 8,631,592 B2 1/2014 Adair et al. (Continued)
(73) Assignee: Athalonz, LLC , Mesa, AZ (US)	
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days. This patent is subject to a terminal disclaimer.	
(21) Appl. No.: 16/152,538	
(22) Filed: Oct. 5, 2018	
(65) Prior Publication Data US 2019/0029360 A1 Jan. 31, 2019	
Related U.S. Application Data	
(63) Continuation of application No. 14/159,860, filed on Jan. 21, 2014, now Pat. No. 10,092,061, which is a continuation of application No. 13/867,406, filed on Apr. 22, 2013, now Pat. No. 8,631,592, which is a continuation of application No. 13/355,778, filed on Jan. 23, 2012, now Pat. No. 8,938,893.	Primary Examiner — Marie D Bays (74) Attorney, Agent, or Firm — Garlick & Markison; Timothy W. Markison
(60) Provisional application No. 61/450,485, filed on Mar. 8, 2011.	(57) ABSTRACT A pair of shoes that includes a left foot shoe and a right foot shoe. Each of the shoes include an upper shoe portion and a sole coupled to the upper shoe portion. The 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 and wherein, from an inner edge to an outer edge of the left shoe, the left heel area has substantially no slope.
(51) Int. Cl. A43B 7/24 (2006.01) A43B 7/14 (2006.01) A43B 13/14 (2006.01)	
(52) U.S. Cl. CPC A43B 7/14 (2013.01); A43B 7/141 (2013.01); A43B 7/142 (2013.01); A43B 7/143 (2013.01); A43B 7/144 (2013.01); A43B	11 Claims, 92 Drawing Sheets



IPR2024-00638

Title: Adjustable Athletic Positioning Apparatus and Applications Thereof

Assignee: Athalonz, LLC

Priority Date: March 8, 2011

Petitioned Claims: 1-11

IPR2024-00638: EX1001



'760 Patent: Claim 1

A pair of shoes comprises:

a left foot shoe including:

a left upper shoe portion; and

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 ball, a bottom of the left sole is substantially linear; and

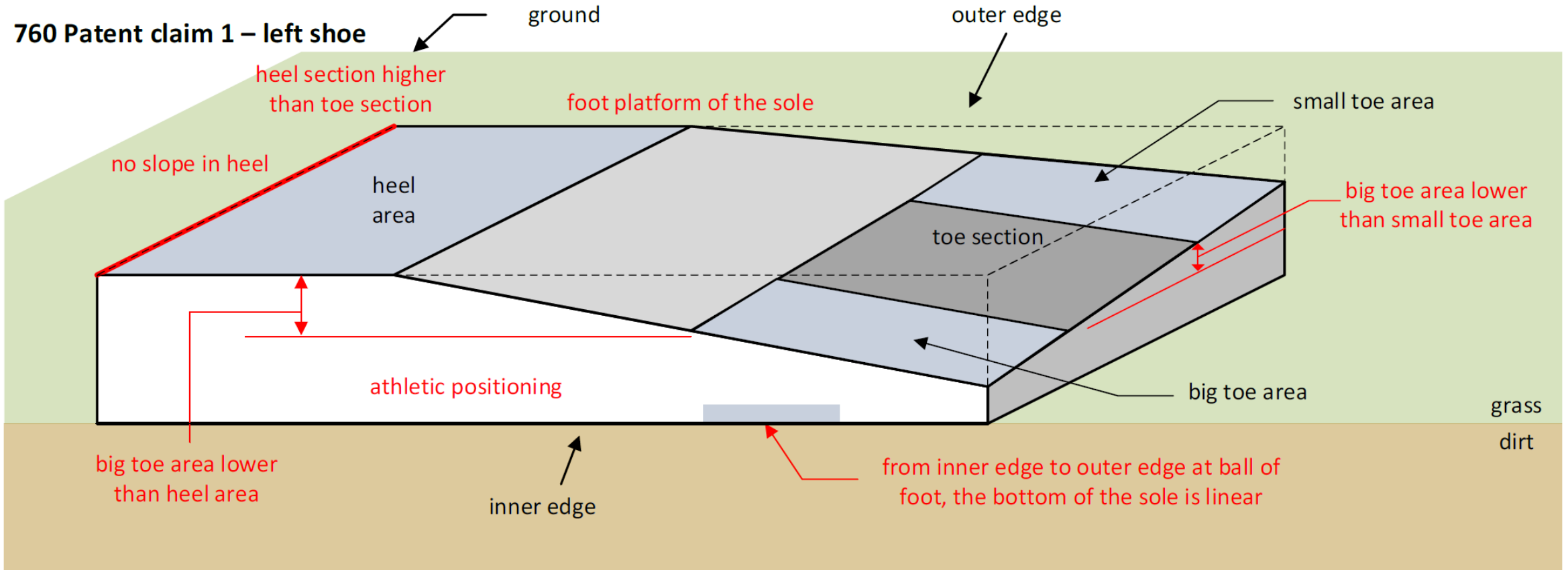
a right foot shoe including:

a right upper shoe portion; and

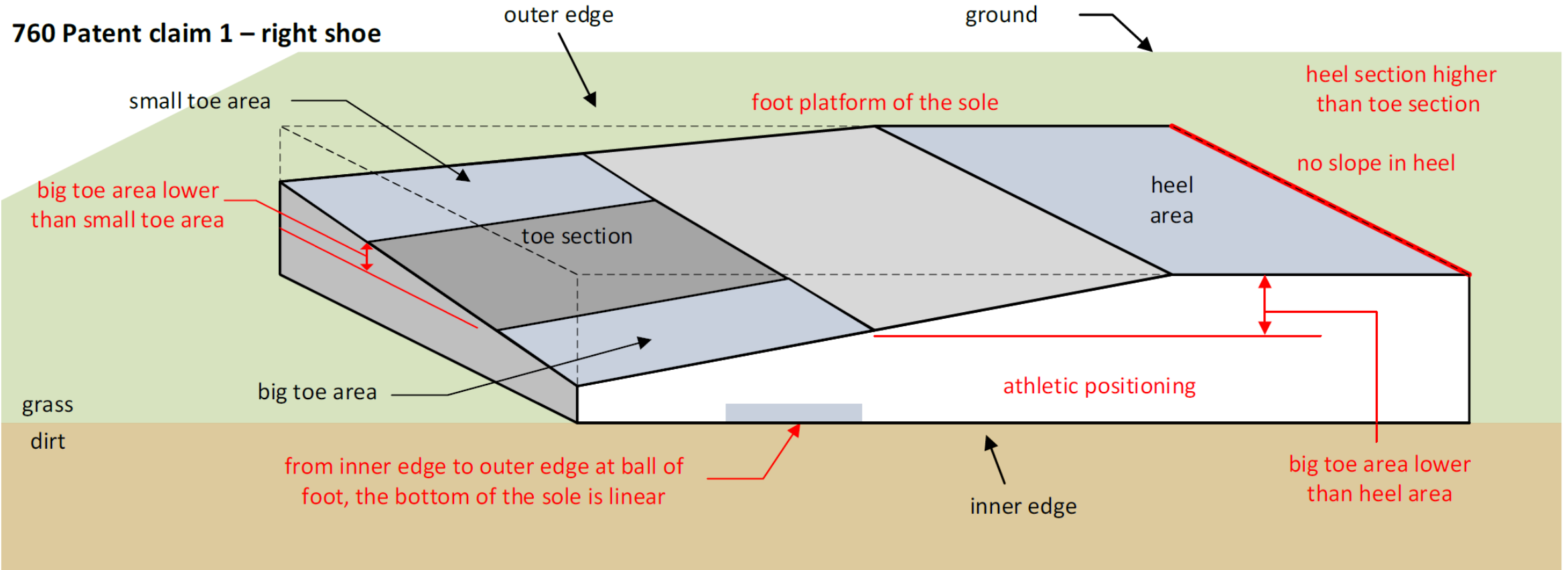
a right sole coupled to the right upper shoe portion, wherein a foot platform of the right sole provides an athletic positioning of a right big toe area of the right shoe at a lower position than a right heel area of the right shoe and at a lower position than an outer small toe area of the right shoe 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.



'760 Patent: Claim 1



'760 Patent: Claim 1



OVERVIEW OF KIM



Kim: Overview

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2004/0040181 A1**
Kim (43) **Pub. Date: Mar. 4, 2004**

(54) **GOLF SHOE**

Publication Classification

(76) Inventor: **Jinho Kim**, Keyang-ku (KR)

(51) **Int. Cl.⁷** **A43B 5/00**

(52) **U.S. Cl.** **36/127; 36/144**

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(57) ABSTRACT

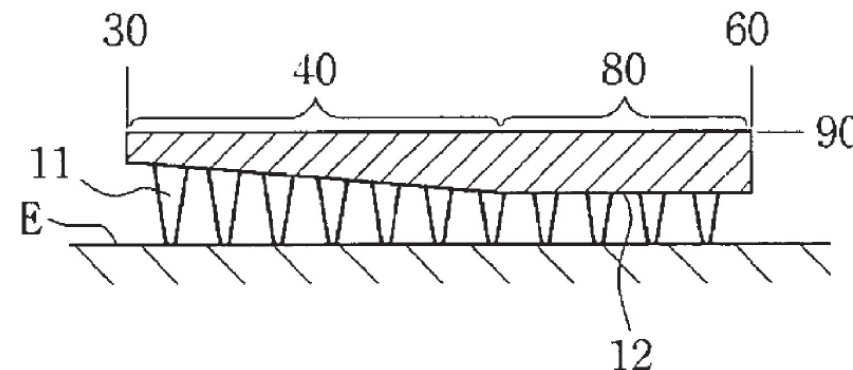
Disclosed is a pair of golf shoes, each comprising an outsole provided with a plurality of spikes protruded from a lower surface of the outsole, in which the lower surface of the outsole is inclined from an outer edge of the outsole to an inner edge of the outsole so that the spikes at the inner edge of the outsole have a height larger than that of the spikes at the outer edge of the outsole, and the spikes respectively have heights so that an upper surface of the outsole is substantially parallel with a ground. The golf shoes allow golfer's feet to be stably mounted on the surface of a green, thereby assisting a golfer in taking a stable position during address and swing motions.

(21) Appl. No.: **10/629,560**

(22) Filed: **Jul. 30, 2003**

(30) Foreign Application Priority Data

Sep. 4, 2002 (KR) 2002-26474
Nov. 6, 2002 (KR) 2002-68348
Apr. 17, 2003 (KR) 2003-11866



IPR2024-00636: EX1005

IPR2024-00637: EX1005

IPR2024-00638: EX1005

Kim: Overview

(57)

ABSTRACT

Disclosed is a pair of golf shoes, each comprising an outsole provided with a plurality of spikes protruded from a lower surface of the outsole, in which the lower surface of the outsole is inclined from an outer edge of the outsole to an inner edge of the outsole so that the spikes at the inner edge of the outsole have a height larger than that of the spikes at the outer edge of the outsole, and the spikes respectively have heights so that an upper surface of the outsole is substantially parallel with a ground. The golf shoes allow golfer's feet to be stably mounted on the surface of a green, thereby assisting a golfer in taking a stable position during address and swing motions.

IPR2024-00636: EX1005, Abstract; Paper 12, 9-10

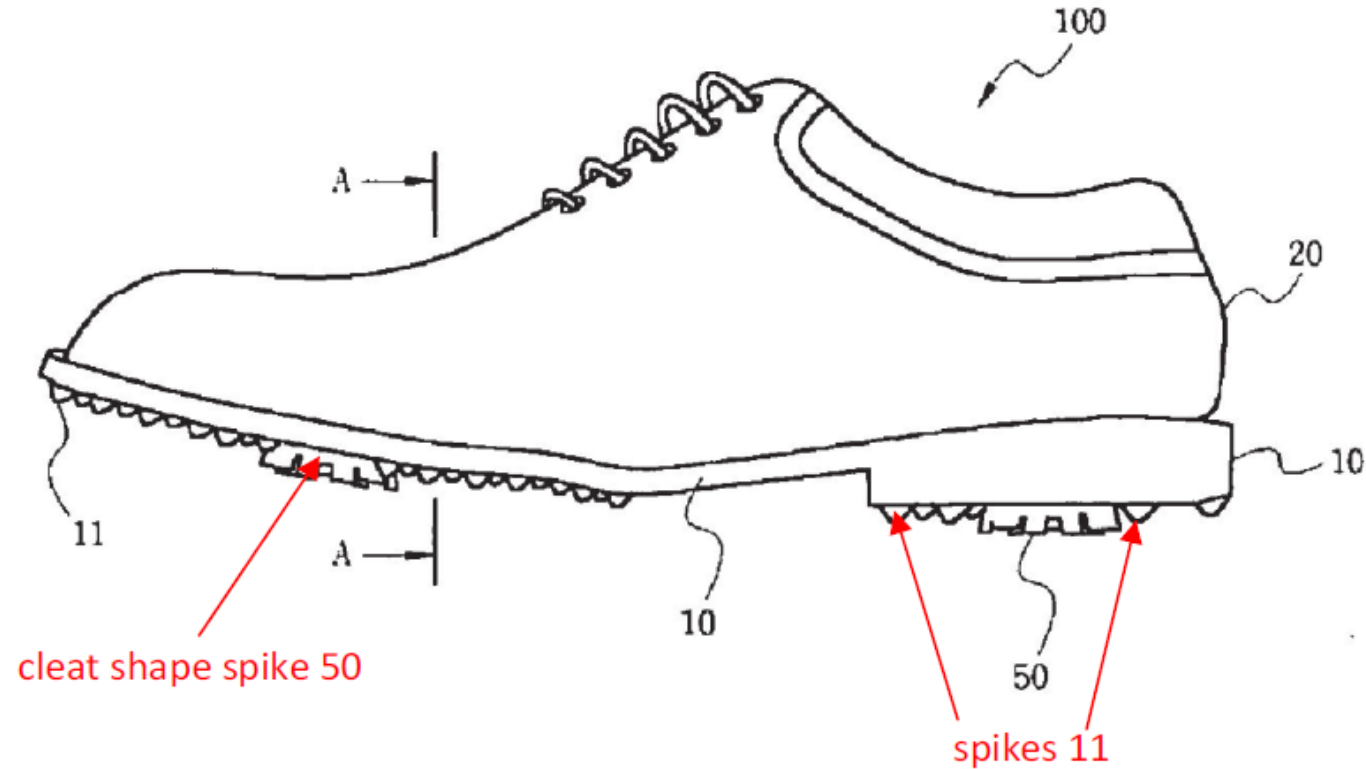
IPR2024-00637: EX1005, Abstract; Paper 12, 9-10

IPR2024-00638: EX1005, Abstract; Paper 12, 9-10



Kim: Overview

FIG. 1



IPR2024-00636: EX1005, Fig. 1; Paper 12, 9-10

IPR2024-00637: EX1005, Fig. 1; Paper 12, 8-9

IPR2024-00638: EX1005, Fig. 1; Paper 12, 9-10

Kim: Overview

[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.

[0031] Hereinafter, the term “spikes” disclosed in the description and the accompanying claims include the spikes **11** integrally formed with the outsole **10**, and the cleat-shaped spikes **50** integrally formed with the outsole **10** or detachably attached to the outsole **10**.

IPR2024-00636: EX1005 [0030]-[0031]; Paper 12, 9-10

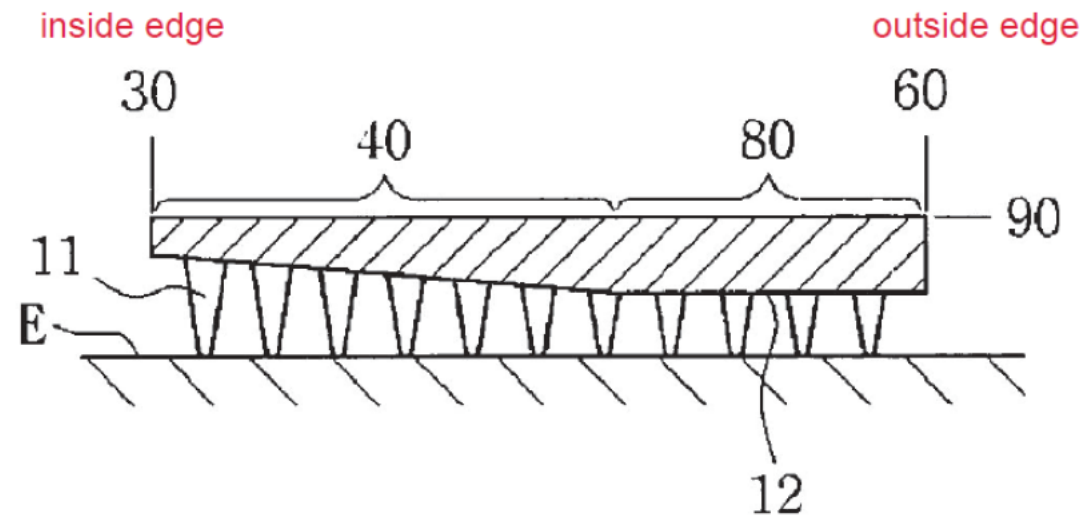
IPR2024-00637: EX1005 [0030]-[0031]; Paper 12, 9-10

IPR2024-00638: EX1005 [0030]-[0031]; Paper 12, 9-10



Kim: Overview

FIG. 3b

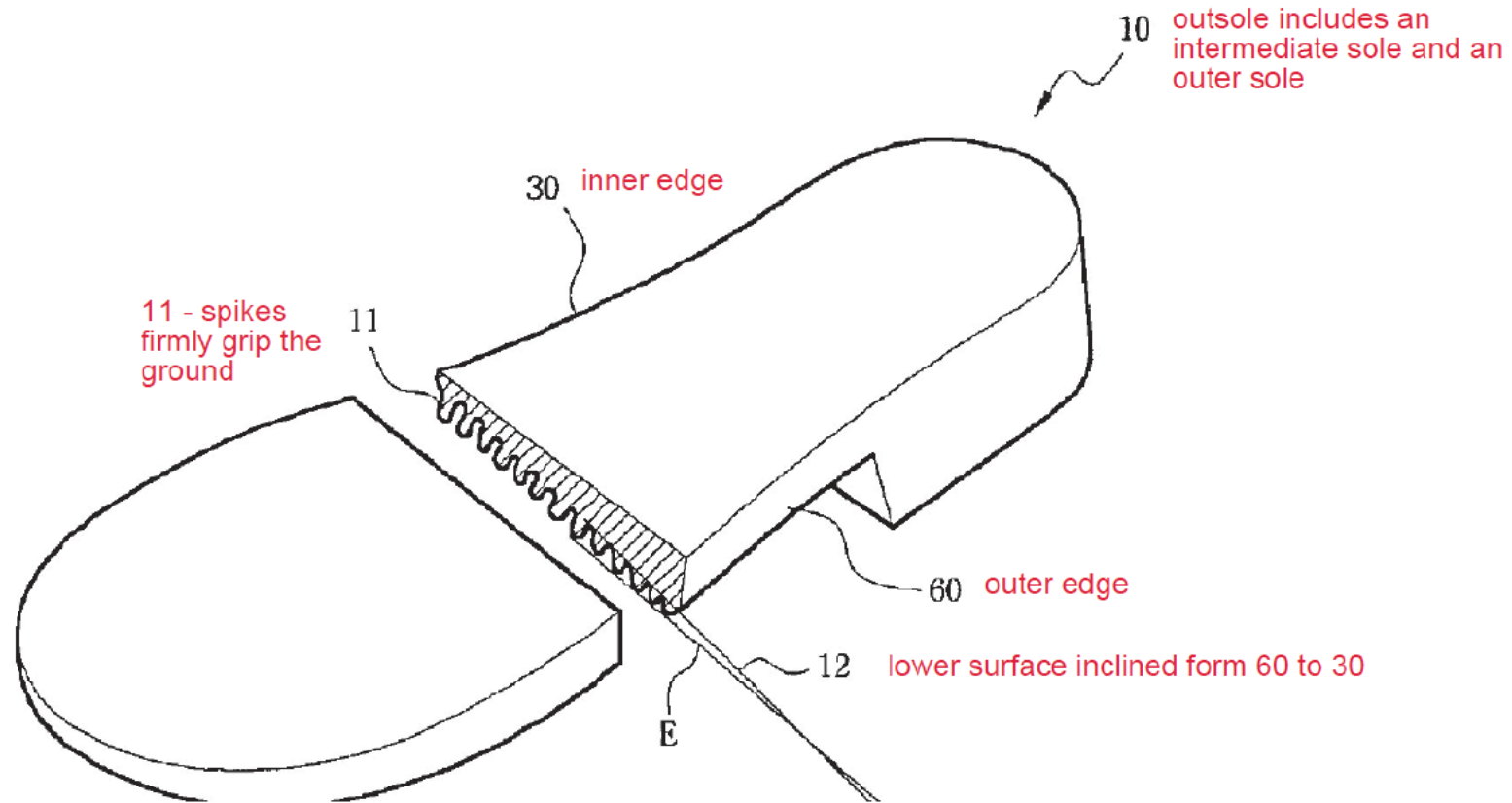


IPR2024-00636: EX1005, Fig. 3b; Paper 12, 10-11; EX2008 ¶199

IPR2024-00637: EX1005, Fig. 3b; Paper 12, 10-11; EX2008 ¶199

IPR2024-00638: EX1005, Fig. 3b; Paper 12, 10-11; EX2008 ¶199

Kim: Overview



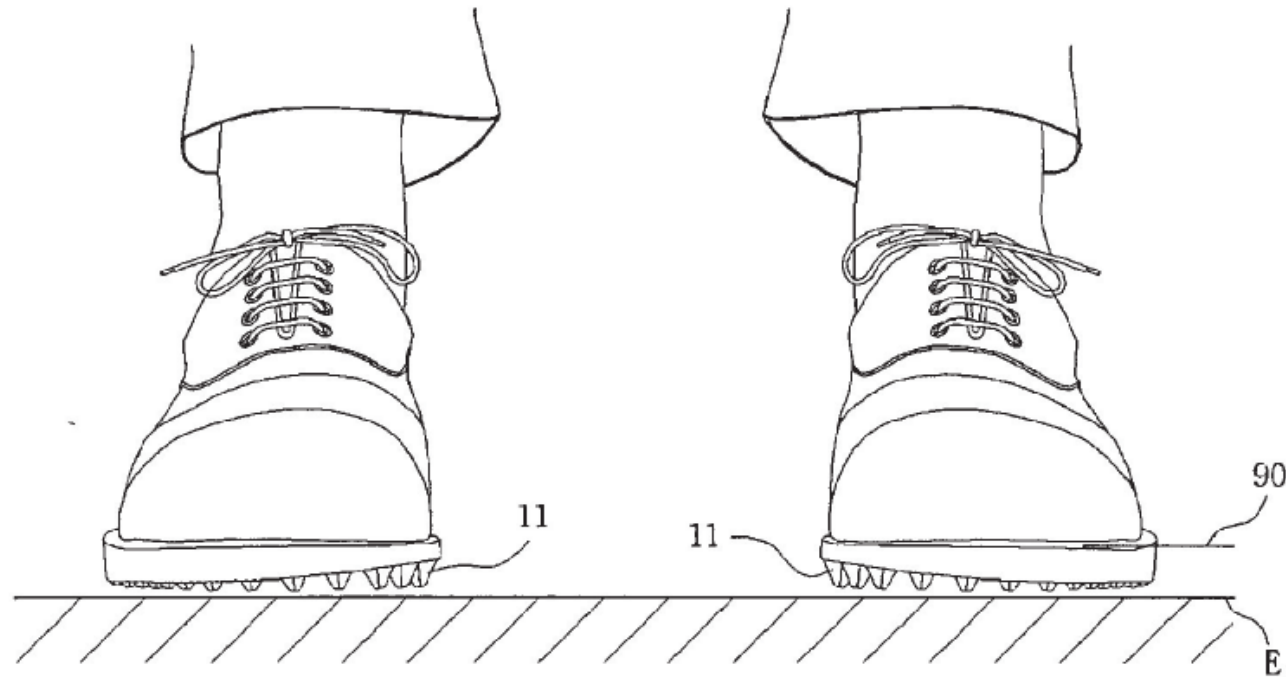
IPR2024-00636: EX1005, Fig. 2; Paper 12, 10-11; EX2008 ¶199

IPR2024-00637: EX1005, Fig. 2; Paper 12, 10-11; EX2008 ¶199

IPR2024-00638: EX1005, Fig. 2; Paper 12, 10-11; EX2008 ¶199

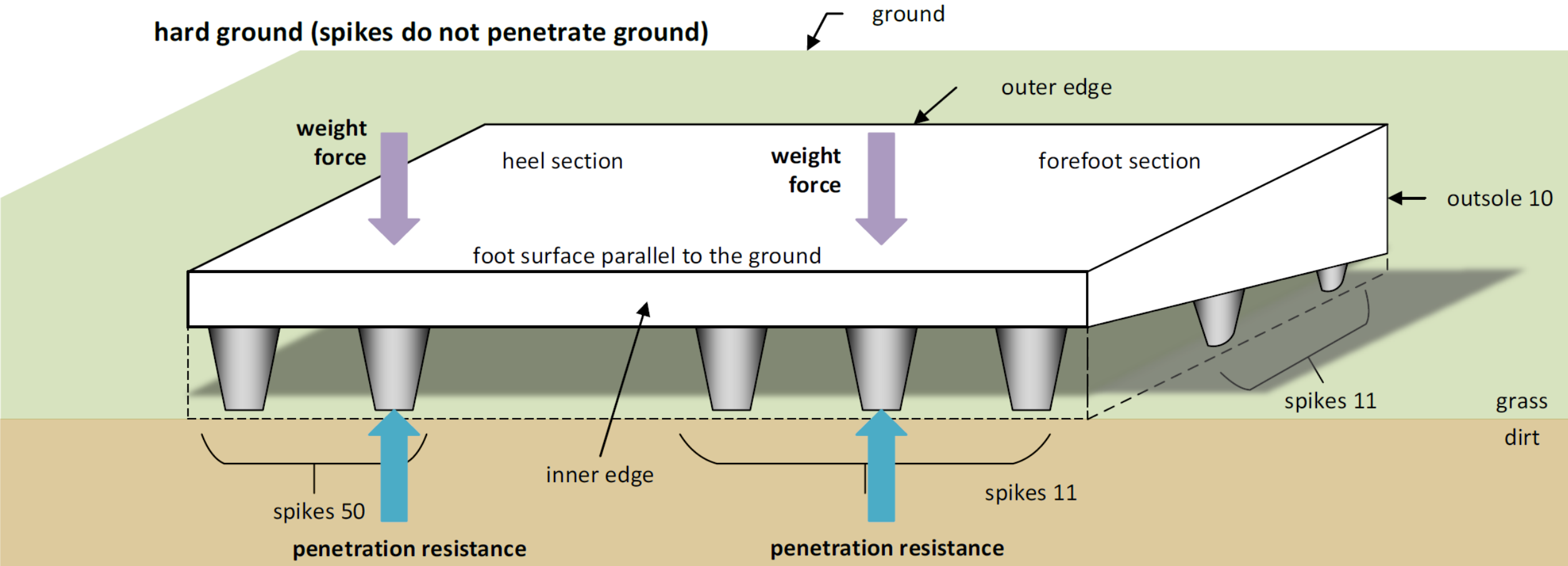
Kim: Hard Surface

FIG. 5a



IPR2024-00636: EX1005, Fig. 5a; Paper 12, 13; EX2008 ¶¶99-111
IPR2024-00637: EX1005, Fig. 5a; Paper 12, 13; EX2008 ¶¶99-111
IPR2024-00638: EX1005, Fig. 5a; Paper 12, 13; EX2008 ¶¶99-111

Kim: Hard Surface



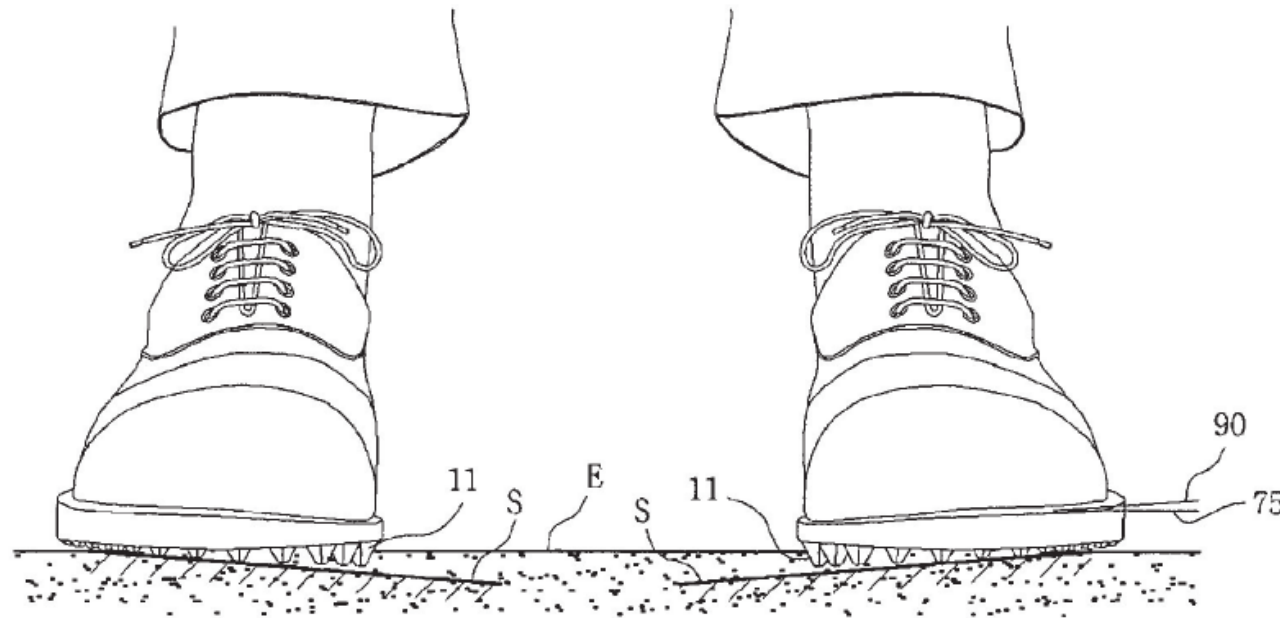
IPR2024-00636: EX1005, Fig. 5a; Paper 12, 12-13; EX2008 ¶110
IPR2024-00637: EX1005, Fig. 5a; Paper 12, 12-13; EX2008 ¶110
IPR2024-00638: EX1005, Fig. 5a; Paper 12, 12-13; EX2008 ¶110

Kim: Foot Parallel to the Ground

- Abstract: “the spikes respectively have heights so that an upper surface of the outsole is substantially parallel with a ground”
- [0014]: “a plurality of spikes protrude[] from a lower surface of the outsole, wherein: bottoms of the spikes (an upper surface of the outsole) are substantially parallel with the ground”
- [0015]: “the bottoms of the spikes are substantially parallel with the ground, thereby allowing a golfer in the golf shoes to concentrating his/her weight during the address and swing phases on the inner edges of soles of feet and assisting the golfer in performing a stable swing motion”
- [0033]: “the bottoms of the spikes . . . are substantially parallel with the ground E”
- [0045]: “the bottoms of spikes protruding from the outsoles of the golf shoes are parallel with the ground”

Kim: Soft Surface

FIG. 5b

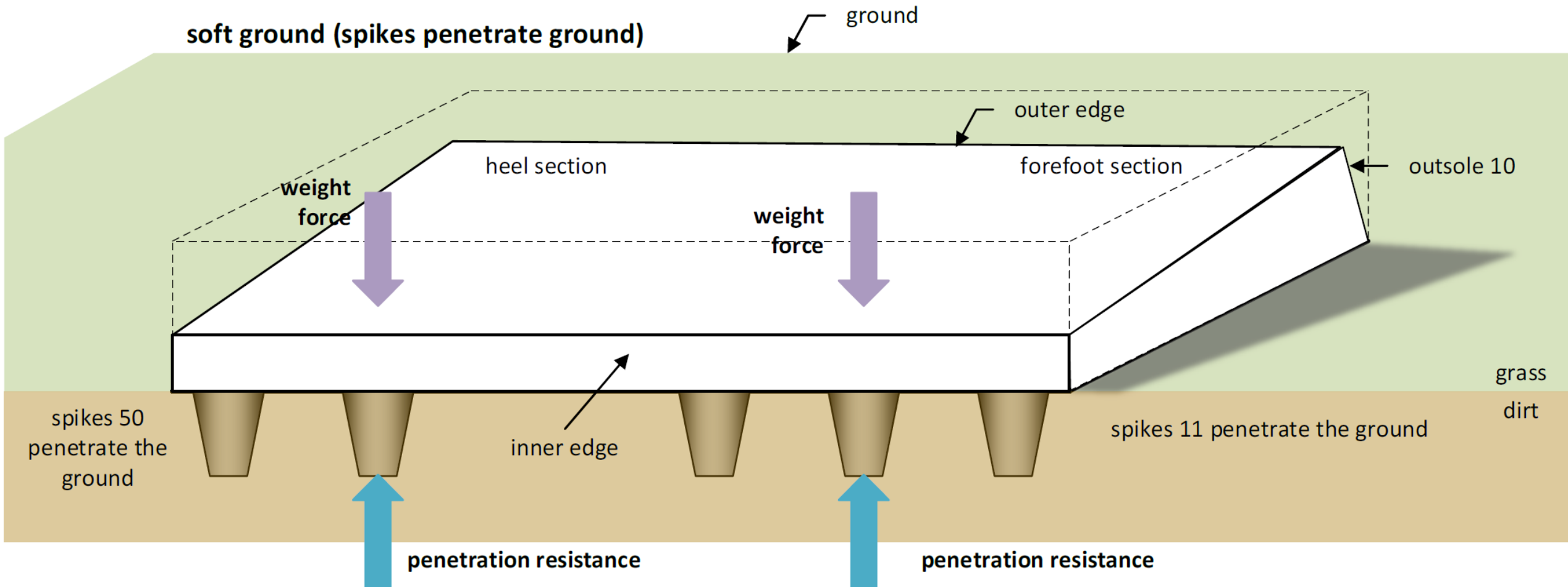


IPR2024-00636: EX1005, Fig. 5b; Paper 12, 14-16; EX2008 ¶¶112-116

IPR2024-00637: EX1005, Fig. 5b; Paper 12, 14-16; EX2008 ¶¶112-116

IPR2024-00638: EX1005, Fig. 5b; Paper 12, 14-16; EX2008 ¶¶112-116

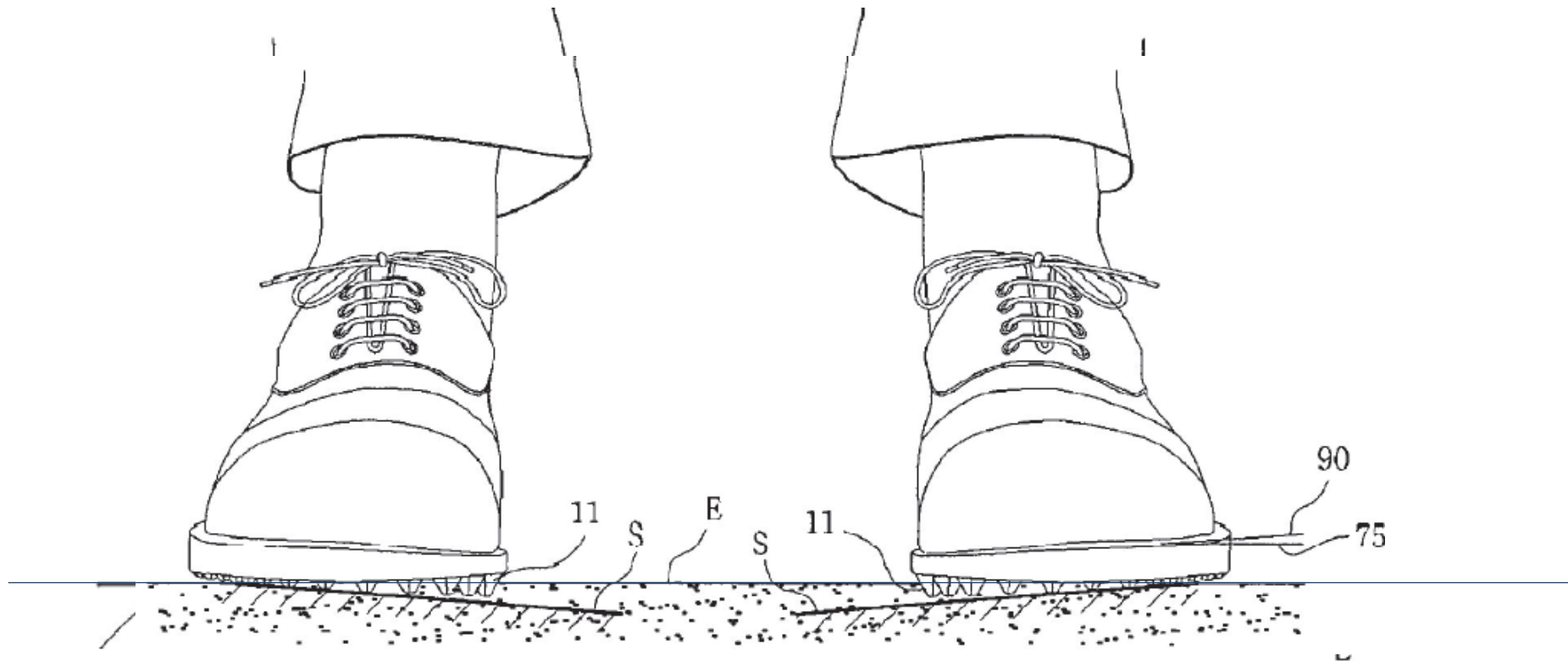
Kim: Soft Surface



IPR2024-00636: EX1005, Fig. 5b; Paper 12, 15-16; EX2008 ¶112
IPR2024-00637: EX1005, Fig. 5b; Paper 12, 14-15; EX2008 ¶112
IPR2024-00638: EX1005, Fig. 5b; Paper 12, 14-15; EX2008 ¶112



Kim: Entire Foot Tilts

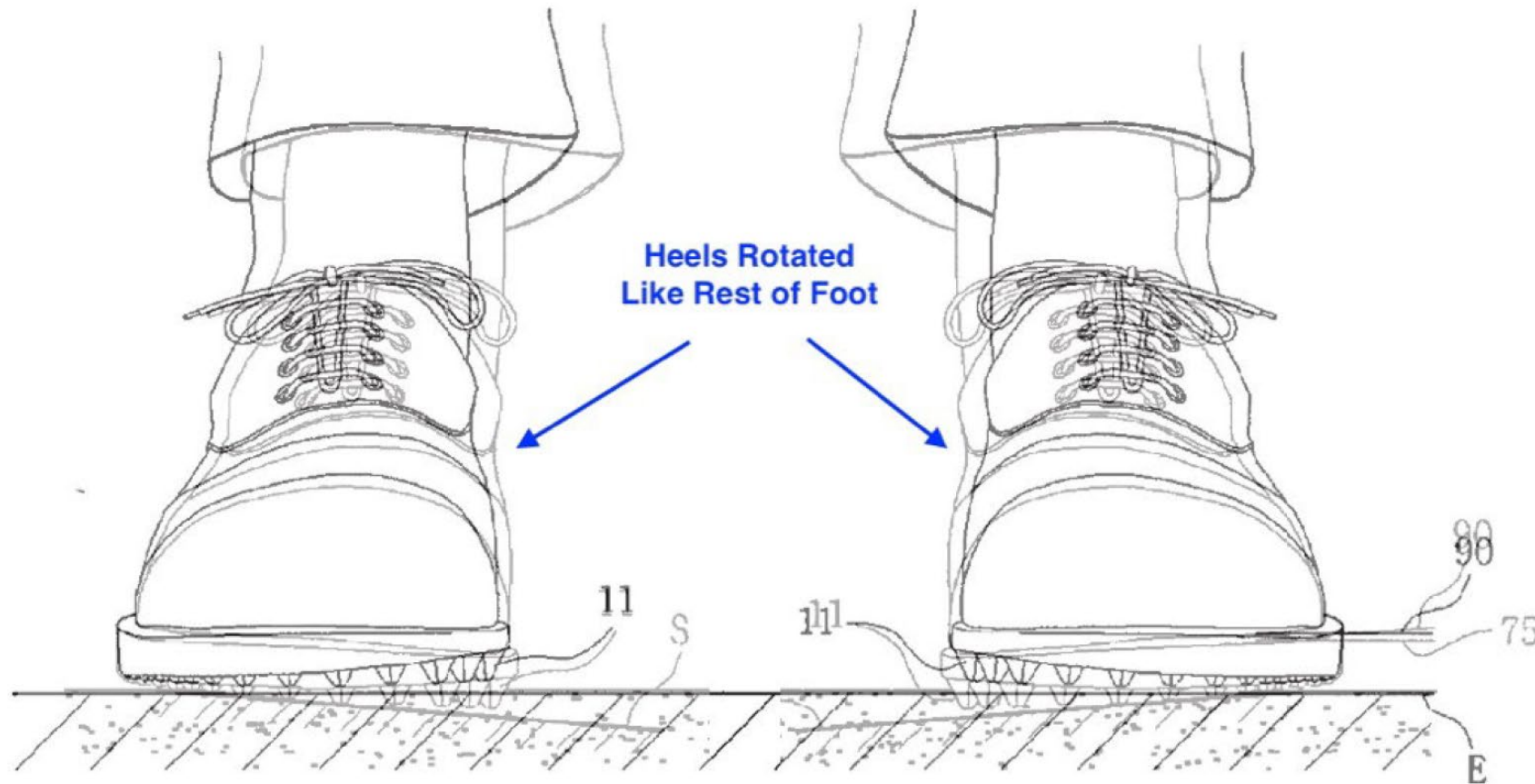


IPR2024-00636: EX1005, Fig. 5b; Paper 12, 16; EX2008 ¶¶113-115
IPR2024-00637: EX1005, Fig. 5b; Paper 12, 15; EX2008 ¶¶113-115
IPR2024-00638: EX1005, Fig. 5b; Paper 12, 15; EX2008 ¶¶113-115



Kim: Entire Foot Tilts

FIG. 5a
FIG. 5b



IPR2024-00636: EX1005, Fig. 5b; Paper 12, 16; EX2008 ¶¶113-115

IPR2024-00637: EX1005, Fig. 5b; Paper 12, 15; EX2008 ¶¶113-115

IPR2024-00638: EX1005, Fig. 5b; Paper 12, 15; EX2008 ¶¶113-115



Kim: “What If” Embodiment

[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.

IPR2024-00636: EX1005 [0046]; EX2008 ¶¶116-120

IPR2024-00637: EX1005 [0046]; EX2008 ¶¶116-120

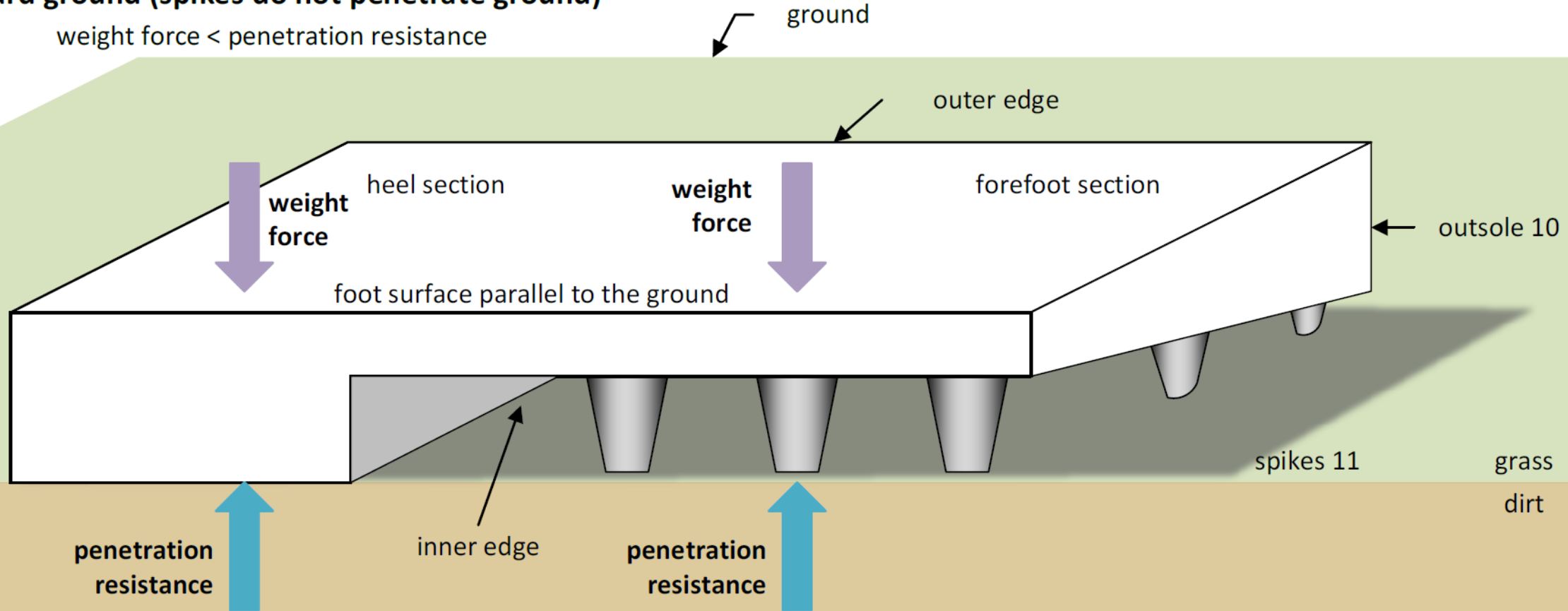
IPR2024-00638: EX1005 [0046]; EX2008 ¶¶116-120



Kim: “What If” Embodiment

hard ground (spikes do not penetrate ground)

weight force < penetration resistance



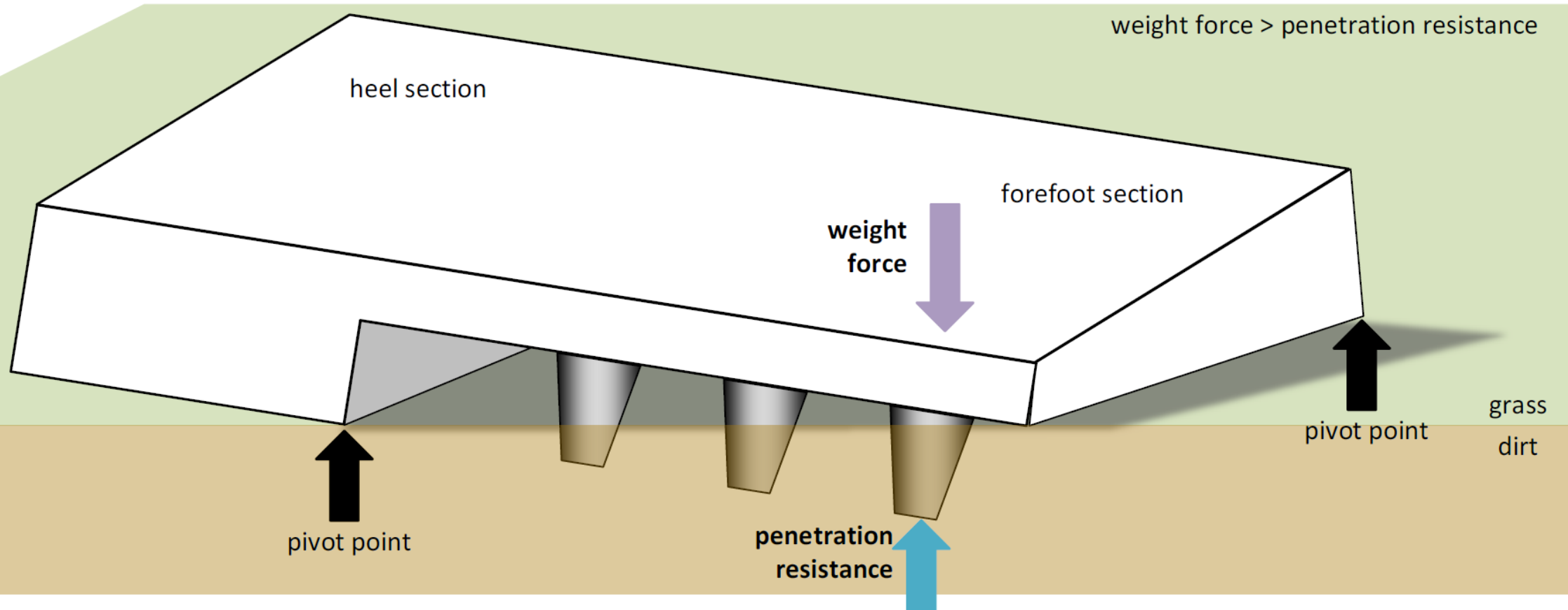
IPR2024-00636: EX2008 ¶117

IPR2024-00637: EX2008 ¶117

IPR2024-00638: EX2008 ¶117

Kim: “What If” Embodiment

soft ground (majority of weight as shown, spikes penetrate ground but limited by heel and outer edge of forefoot)



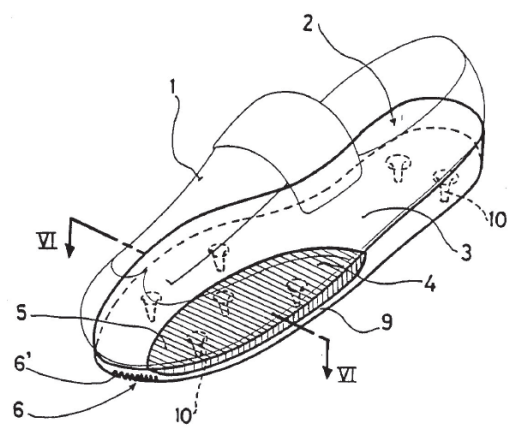
IPR2024-00636: EX2008 ¶120

IPR2024-00637: EX2008 ¶120

IPR2024-00638: EX2008 ¶120

Dufour: Overview

United States Patent [19]		[11] Patent Number:	4,754,561
Dufour		[45] Date of Patent:	Jul. 5, 1988
[54] GOLF SHOE		[56] References Cited	
[75] Inventor: Pierre Dufour, Annecy, France		U.S. PATENT DOCUMENTS	
[73] Assignee: Salomon S.A., Annecy Cedex, France		2,616,190 11/1952 Darby 36/25 R X	
[21] Appl. No.: 48,206		2,847,769 8/1958 Schlesinger 36/127	
[22] Filed: May 11, 1987		2,855,704 10/1958 Schlesinger 36/25 R X	
[30] Foreign Application Priority Data		3,593,436 7/1971 Vietas 36/59 C X	
May 9, 1986 [FR] France 86 07102		4,506,462 3/1985 Cavagnagh 36/31 X	
[51] Int. Cl.⁴ A43B 5/00; A43C 15/02		4,547,979 10/1985 Harada et al. 36/31 X	
[52] U.S. Cl. 36/127; 36/31; 36/59 C		4,642,911 2/1987 Talarico 36/30 R	
[58] Field of Search 36/28, 30 R, 30 A, 31, 36/59 R, 59 B, 59 C, 103, 113, 114, 124, 127, 134		4,685,227 8/1987 Simmons 36/127	
		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	

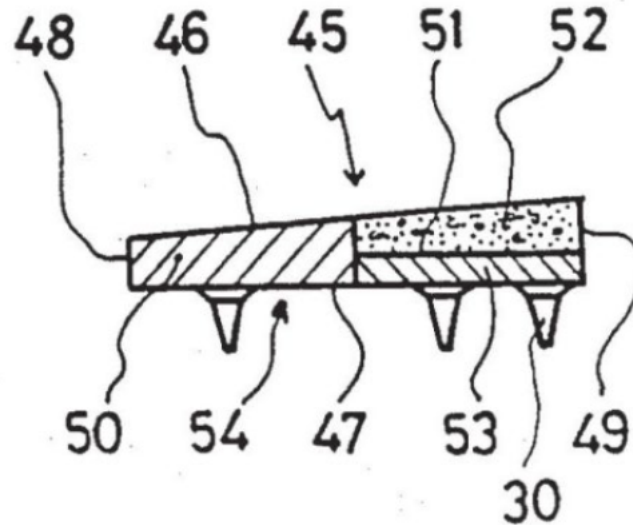


IPR2024-00636: EX1006
IPR2024-00637: EX1006
IPR2024-00638: EX1006



Dufour: Fig. 8-10 Embodiment

FIG. 9

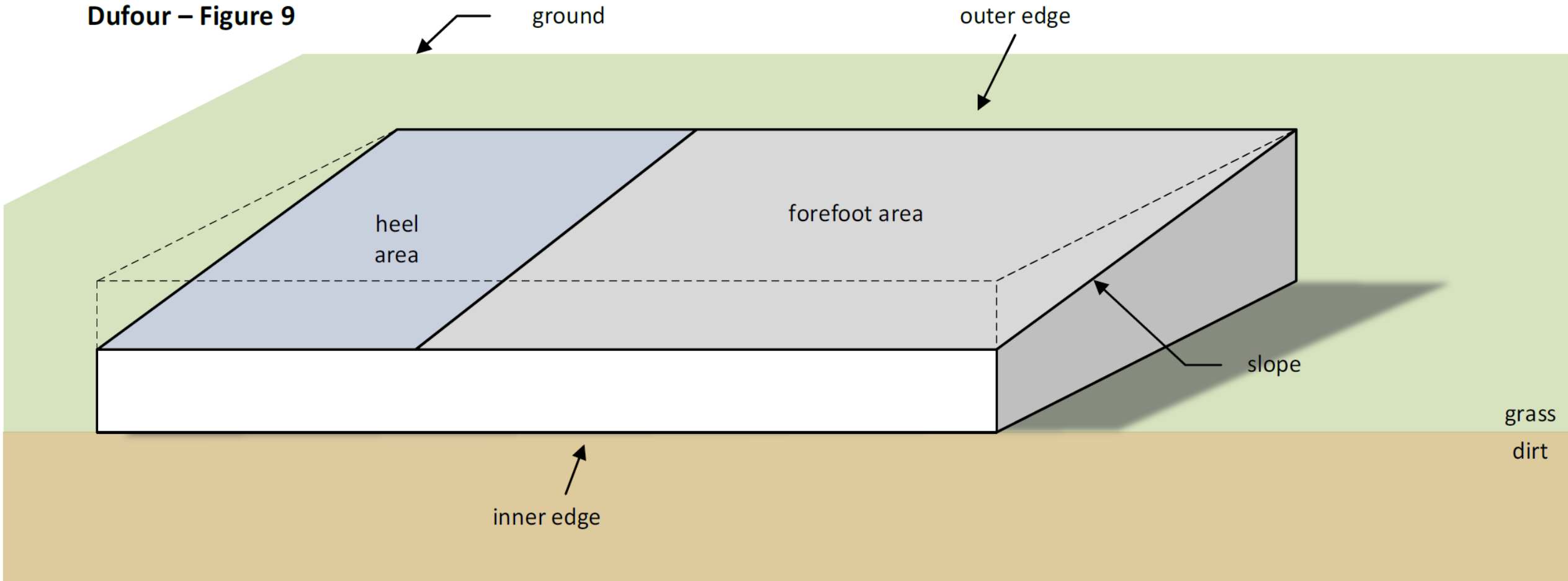


- 30 – spikes
- 45 – sole
- 46 – inside support surface
- 47 – walking surface
- 48 – inner edge
- 49 – outer edge
- 50 – passive zone
- 51 – active zone
- 52 – shock absorbing element
- 53 – walking sole portion
- 54 – walking surface

IPR2024-00636: EX1006, Fig. 9; Paper 12, 17-18; EX2008 ¶127
IPR2024-00637: EX1006, Fig. 9; Paper 12, 16-18; EX2008 ¶127
IPR2024-00638: EX1006, Fig. 9; Paper 12, 16-18; EX2008 ¶127

Dufour: Fig. 8-10 Embodiment

Dufour – Figure 9

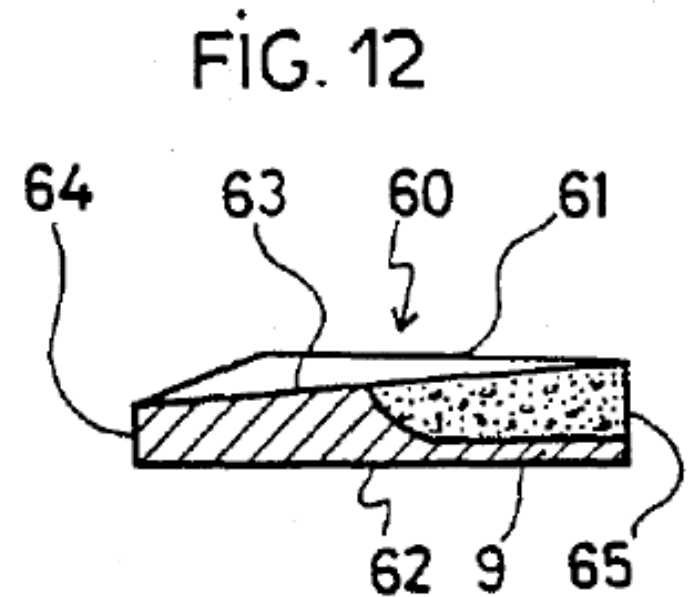
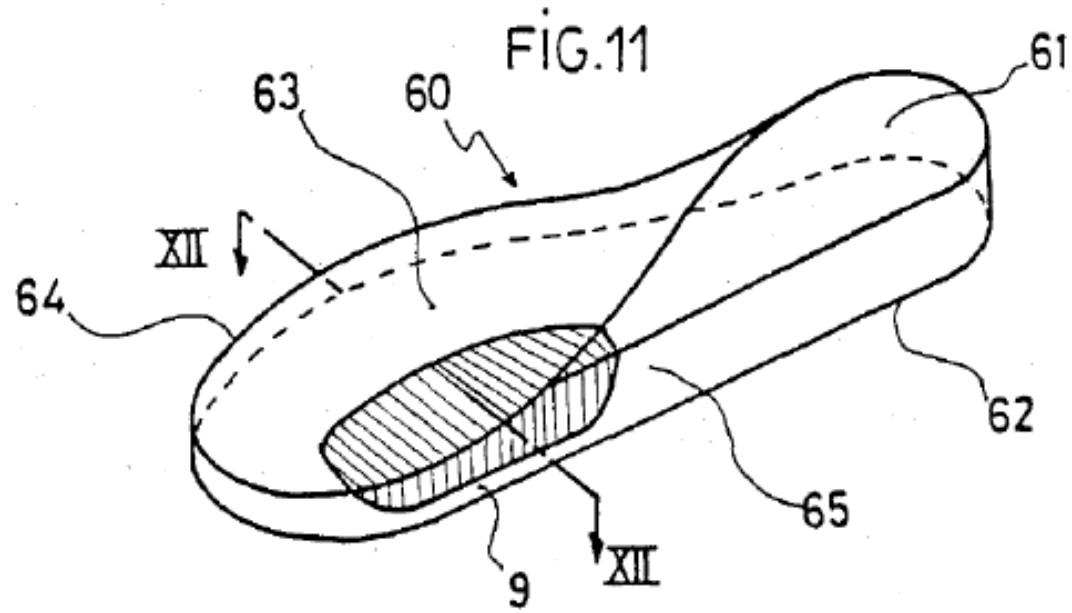


IPR2024-00636: EX1006, Fig. 9; Paper 12, 17-18; EX2008 ¶128

IPR2024-00637: EX1006, Fig. 9; Paper 12, 16-18; EX2008 ¶128

IPR2024-00638: EX1006, Fig. 9; Paper 12, 16-18; EX2008 ¶128

Dufour: Fig. 11-12 Embodiment



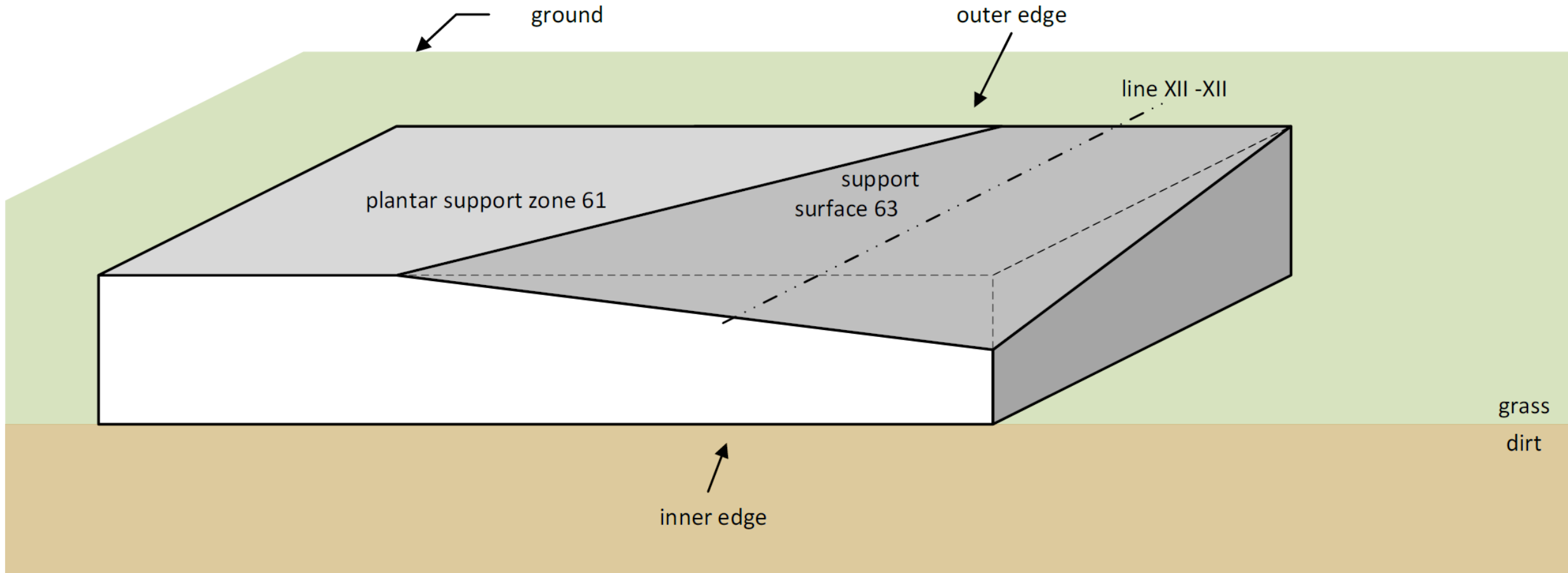
IPR2024-00636: EX1006, Fig. 11-12; Paper 12, 18-19; EX2008 ¶129

IPR2024-00637: EX1006, Fig. 11-12; Paper 12, 17-18; EX2008 ¶129

IPR2024-00638: EX1006, Fig. 11-12; Paper 12, 17-18; EX2008 ¶129

Dufour: Fig. 11-12 Embodiment

Dufour – Figures 11 and 12



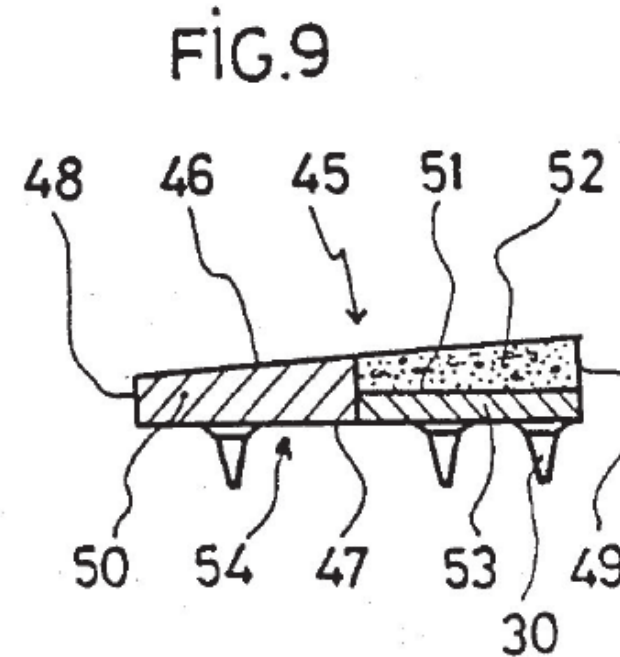
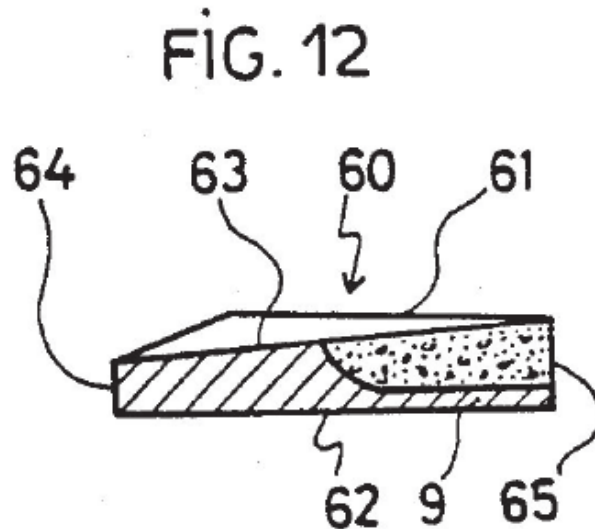
IPR2024-00636: EX1006, Fig. 11-12; Paper 12, 18-19; EX2008 ¶134

IPR2024-00637: EX1006, Fig. 11-12; Paper 12, 17-18; EX2008 ¶134

IPR2024-00638: EX1006, Fig. 11-12; Paper 12, 17-18; EX2008 ¶134



Dufour: Figures 11 and 12 Have Same Height at Heel and Outer Toe



IPR2024-00636: EX1006, Figs. 9, 12; Paper 12, 18-19; Paper 23, 16-19
IPR2024-00637: EX1006, Figs. 9, 12; Paper 12, 17-18; Paper 23, 16-20
IPR2024-00638: EX1006, Figs. 9, 12; Paper 12, 17-18; Paper 23, 16-21

Dufour: Figures 11 and 12 Have Same Height at Heel and Outer Toe

EX1002 (-636)

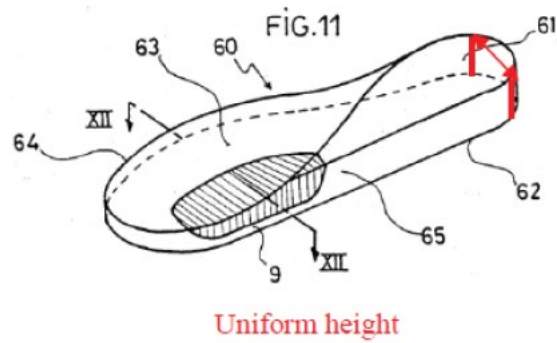
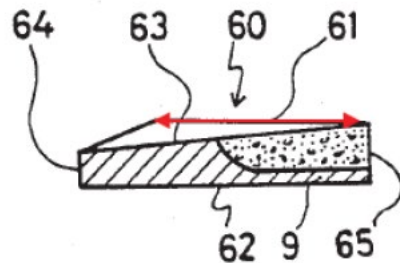
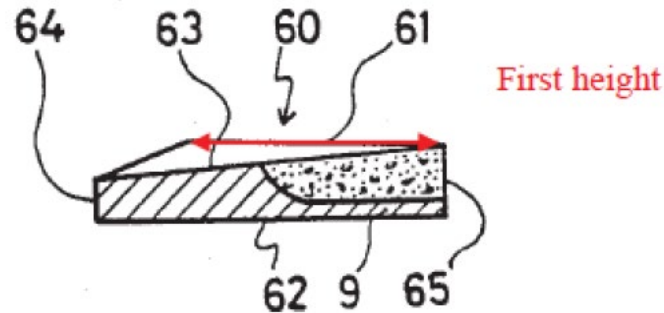


FIG. 12



EX1002 (-637)



EX1002 (-638)

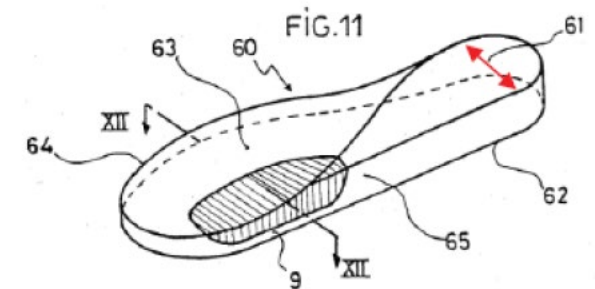
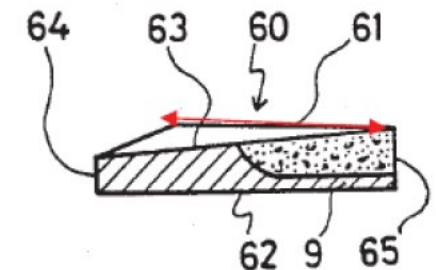


FIG. 12



- 17 Q. Figure 11 and 12 are the same embodiment.
- 18 Correct?
- 19 A. They're the same embodiment. Yes.
- 20 Q. And you drew the first height in Figure 12
- 21 along the back edge of the figure. Right?
- 22 A. That's what I've drawn in my declaration.

IPR2024-00636: Paper 23, 16-19; EX1002, 50; EX2010, 105:17-22
IPR2024-00637: Paper 23, 16-20; EX1002, 54; EX2010, 105:17-22
IPR2024-00638: Paper 23, 16-21; EX1002, 61; EX2010, 105:17-22

Rubin: Overview

United States Patent [19] [11] **3,789,523**
Rubin [45] **Feb. 5, 1974**

[54] **GOLF SHOE**

[76] Inventor: **Robert M. Rubin**, 6545 Rustic Dr.,
Mesa, Ariz. 85205

[22] Filed: **Oct. 16, 1972**

[21] Appl. No.: **297,926**

[52] **U.S. Cl.** **36/2.5 AH, 36/73**

[51] **Int. Cl.** **A43b 13/22**

[58] **Field of Search** . 36/2.5 R, 2.5 AH, 59 R, 67 R,
36/67 D, 73

[56] **References Cited**

UNITED STATES PATENTS

2,083,310 6/1937 Barber 36/73
2,485,706 10/1949 Cruise 36/73
2,959,873 11/1960 Schlesinger 36/2.5 AH

FOREIGN PATENTS OR APPLICATIONS

1,141,393 9/1957 France 36/2.5 AH

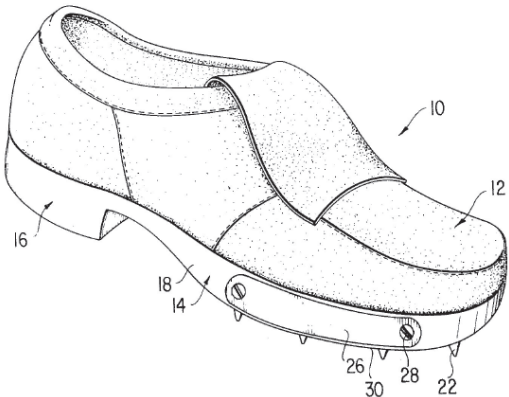
Primary Examiner—Patrick D. Lawson
Attorney, Agent, or Firm—Allen D. Brufsky

[57]

ABSTRACT

A golf shoe designed to aid a golfer in assuming a proper stance on a golf playing surface so that when addressing the ball the golfer pivots about a more or less stationary vertical line rather than swaying during his swing. The shoe includes a sole attached to an upper. The sole has opposed inner and outer sides, the outer side of said sole extending from the upper to a lower elevation than the inner side to create a toe-in effect when the golfer assumes his stance on a golf playing surface. A metal plate is fixed to the sole along the outer side thereof to preclude undue bending and wear of the sole edge during the pivotal portion of the golfer's swing. A plurality of cleats are attached to the sole and extend along the sole adjacent the outer and inner sides thereof. The cleats adjacent the outer side of the sole are smaller than the cleats adjacent the inner side of the sole by an amount approximately equal to the difference in elevation between the outer and inner sides of the sole so that when the golfer walks on a planar surface, his foot will be substantially level.

6 Claims, 4 Drawing Figures



IPR2024-00636: EX1007
IPR2024-00637: EX1007
IPR2024-00638: EX1007



Rubin: Overview

[57]

ABSTRACT

A golf shoe designed to aid a golfer in assuming a proper stance on a golf playing surface so that when addressing the ball the golfer pivots about a more or less stationary vertical line rather than swaying during his swing. The shoe includes a sole attached to an upper. The sole has opposed inner and outer sides, the outer side of said sole extending from the upper to a lower elevation than the inner side to create a toe-in effect when the golfer assumes his stance on a golf playing surface. A metal plate is fixed to the sole along the outer side thereof to preclude undue bending and wear of the sole edge during the pivotal portion of the golfer's swing. A plurality of cleats are attached to the sole and extend along the sole adjacent the outer and inner sides thereof. The cleats adjacent the outer side of the sole are smaller than the cleats adjacent the inner side of the sole by an amount approximately equal to the difference in elevation between the outer and inner sides of the sole so that when the golfer walks on a planar surface, his foot will be substantially level.

IPR2024-00636: EX1007, Abstract

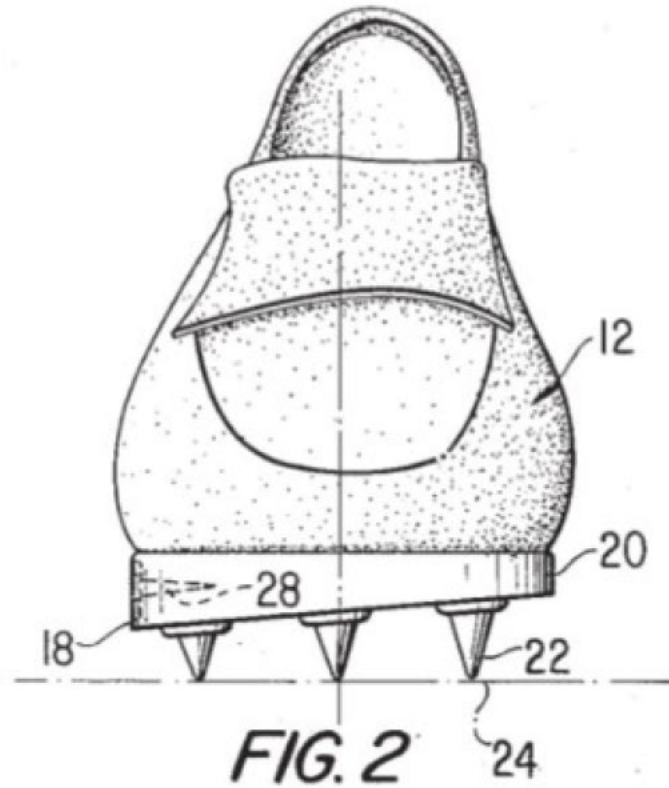
IPR2024-00637: EX1007, Abstract

IPR2024-00638: EX1007, Abstract

Rubin: Entire Foot Stays Parallel to the Ground

- “The cleats adjacent the outer side of the sole are smaller than the cleats adjacent the inner side of the sole by an amount approximately equal to the difference in elevation between the outer and inner sides of the sole so that when the golfer walks on a planar surface, his foot will be substantially level.” EX1007, Abstract.
- “However, the cleats adjacent the outer side of the sole are smaller than the cleats adjacent the inner side of the sole by an amount approximately equal to the difference in elevation between the outer and inner sides of the sole so that when the golfer walks his foot will be substantially level.” EX1007, 2:16-25.
- “In between shots, and when walking on other planar surfaces, shoe 10 on the foot of the golfer will remain substantially level as illustrated in FIG. 2. This is due to the difference in sizes of the cleats 22 and will preclude undue strain on the golfer's foot.” EX1007, 4:4-8.

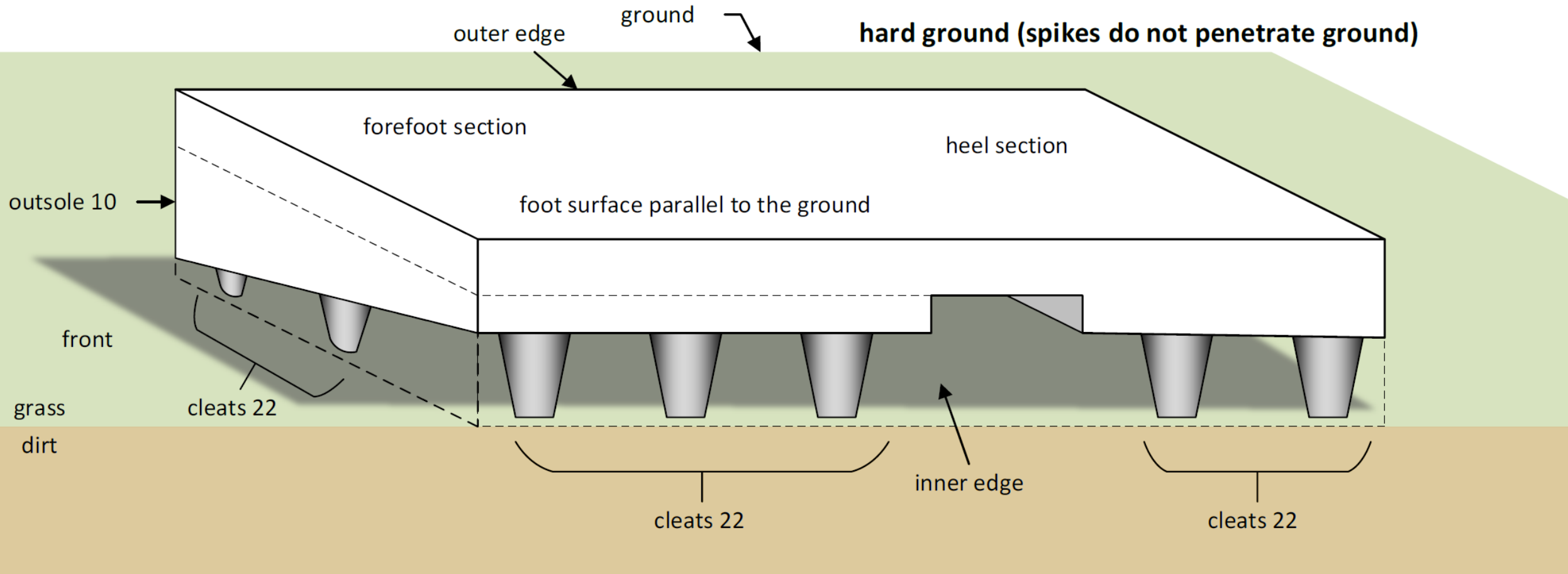
Rubin: Hard Surface



IPR2024-00636: EX1007, Fig. 2; Paper 12, 19-21; EX2008 ¶¶138-155
IPR2024-00637: EX1007, Fig. 2; Paper 12, 18-21; EX2008 ¶¶138-155
IPR2024-00638: EX1007, Fig. 2; Paper 12, 18-20; EX2008 ¶¶138-155



Rubin: Hard Surface

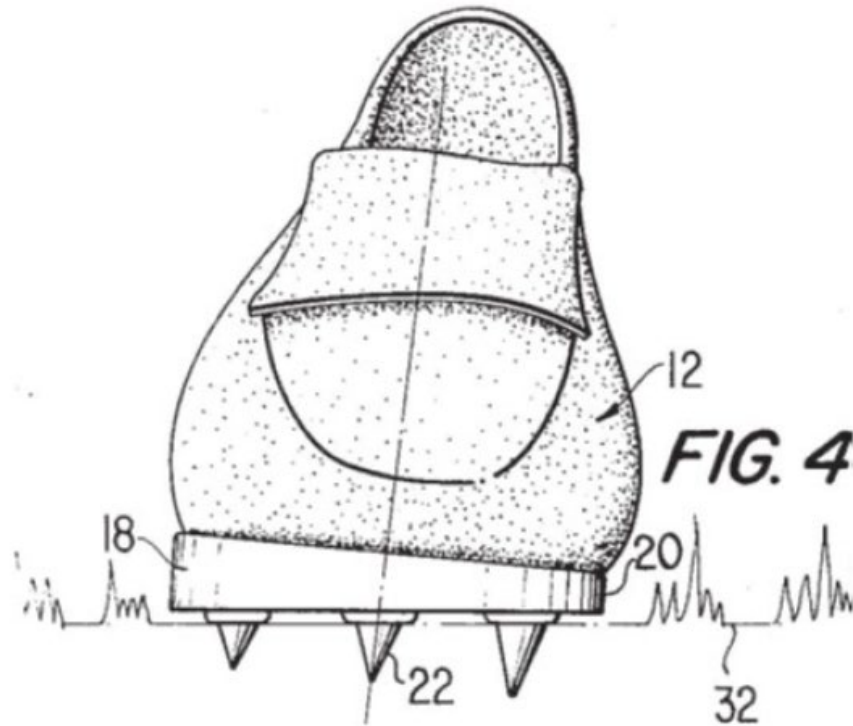


IPR2024-00636: Paper 12, 22; EX2008 ¶148

IPR2024-00637: Paper 12, 22; EX2008 ¶148

IPR2024-00638: Paper 12, 21; EX2008 ¶148

Rubin: Soft Surface

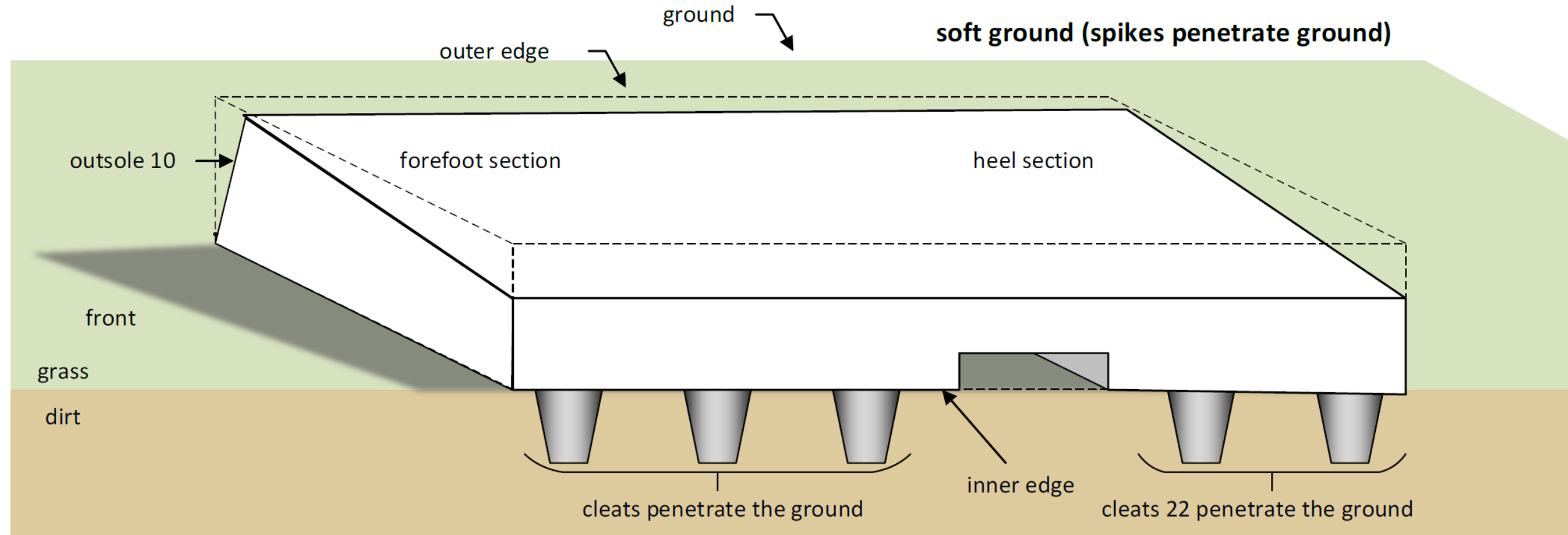


IPR2024-00636: EX1007, Fig. 4; Paper 12, 21-22; EX2008 ¶¶138-155

IPR2024-00637: EX1007, Fig. 4; Paper 12, 21; EX2008 ¶¶138-155

IPR2024-00638: EX1007, Fig. 4; Paper 12, 20-21; EX2008 ¶¶138-155

Rubin: Soft Surface

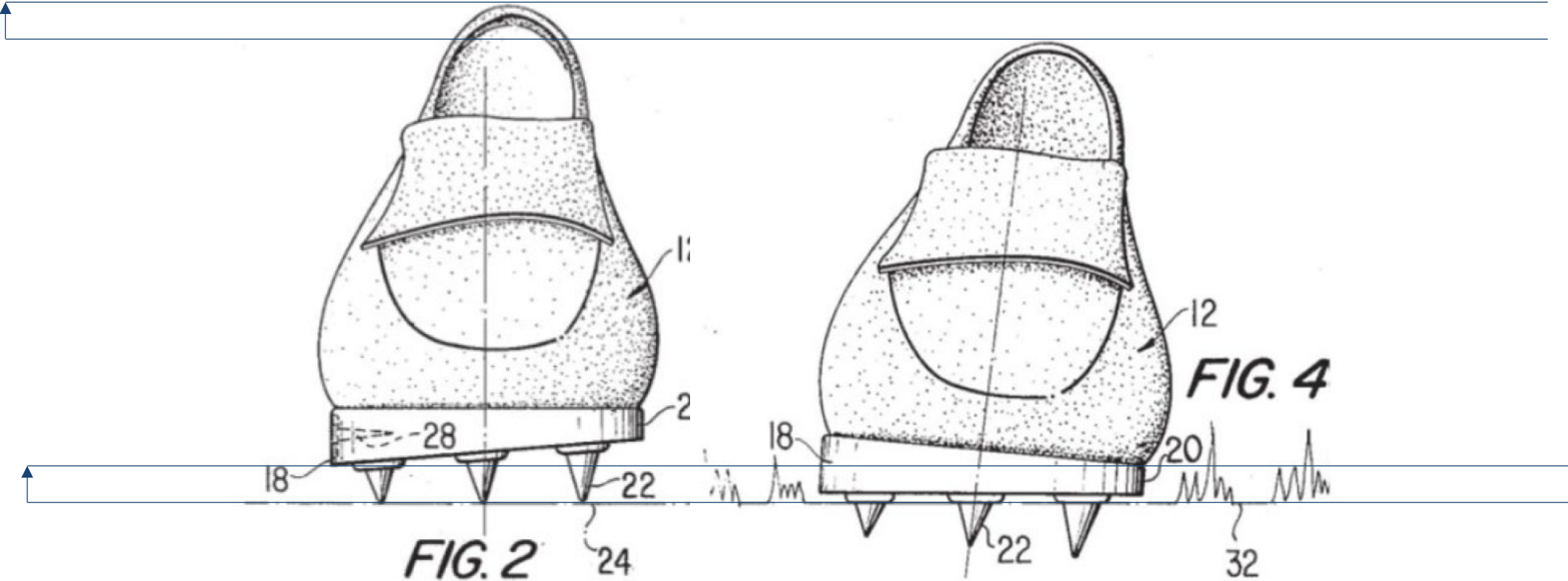


IPR2024-00636: Paper 12, 23; EX2008 ¶149

IPR2024-00637: Paper 12, 22; EX2008 ¶149

IPR2024-00638: Paper 12, 22; EX2008 ¶149

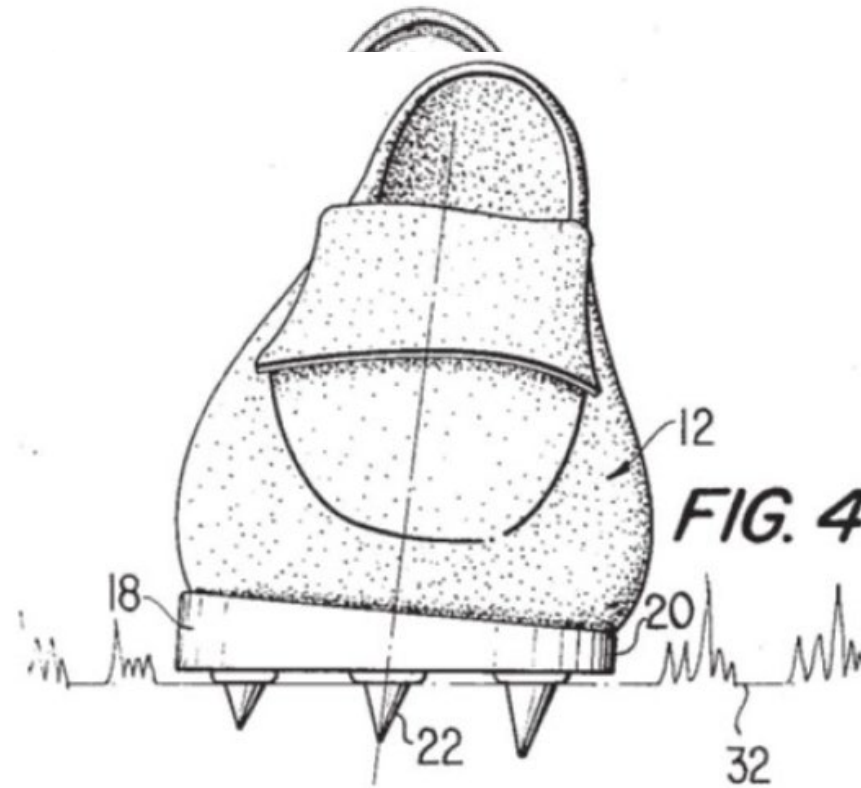
Rubin: Entire Foot Tilts



IPR2024-00636: EX1006, Fig. 2, 4; Paper 12, 19-23; EX2008 ¶¶148-149
IPR2024-00637: EX1006, Fig. 2, 4; Paper 12, 18-22; EX2008 ¶¶148-149
IPR2024-00638: EX1006, Fig. 2, 4; Paper 12, 18-22; EX2008 ¶¶148-149



Rubin: Entire Foot Tilts



IPR2024-00636: EX1006, Fig. 2, 4; Paper 12, 19-23; EX2008 ¶¶148-149

IPR2024-00637: EX1006, Fig. 2, 4; Paper 12, 18-22; EX2008 ¶¶148-149

IPR2024-00638: EX1006, Fig. 2, 4; Paper 12, 18-22; EX2008 ¶¶148-149



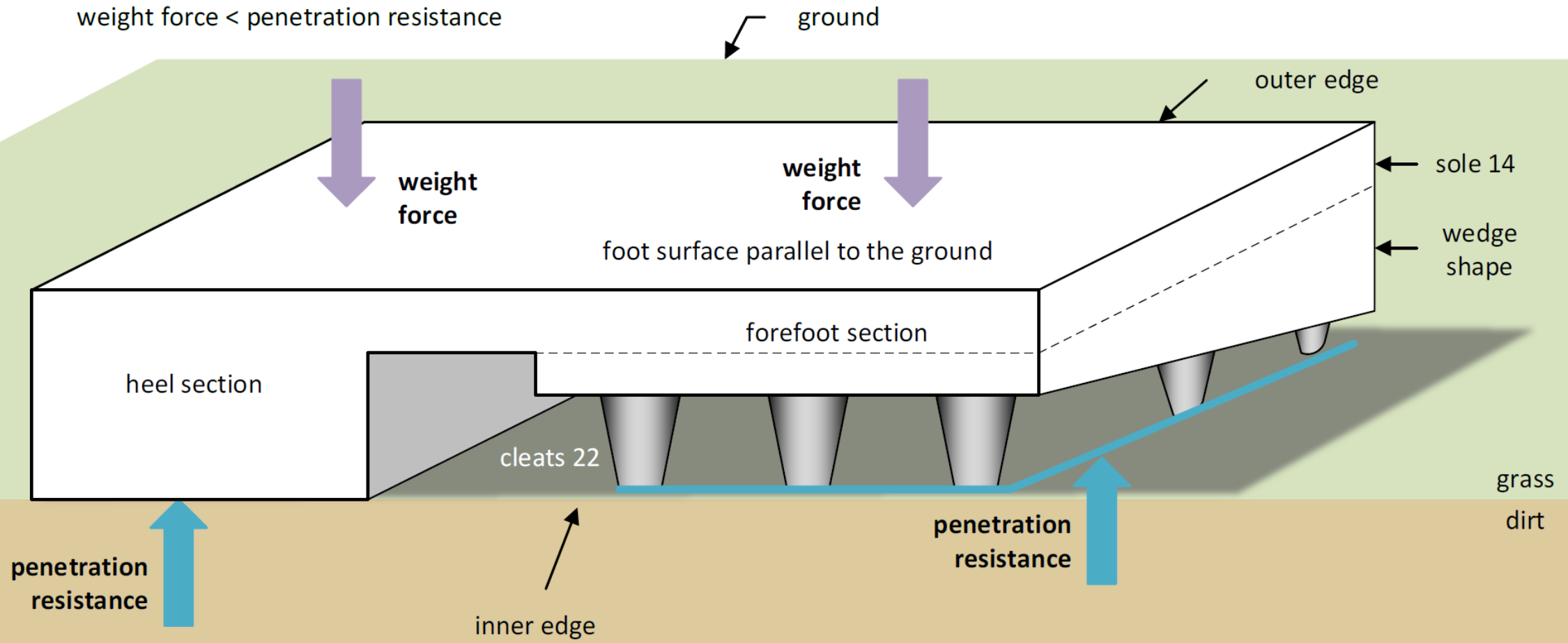
IPR2024-00638: EX1006, Fig. 2, 4; Paper 12, 18-22; EX2008 ¶¶148-149



Rubin: “What If” Embodiment

walking (spikes do not penetrate ground)

weight force < penetration resistance

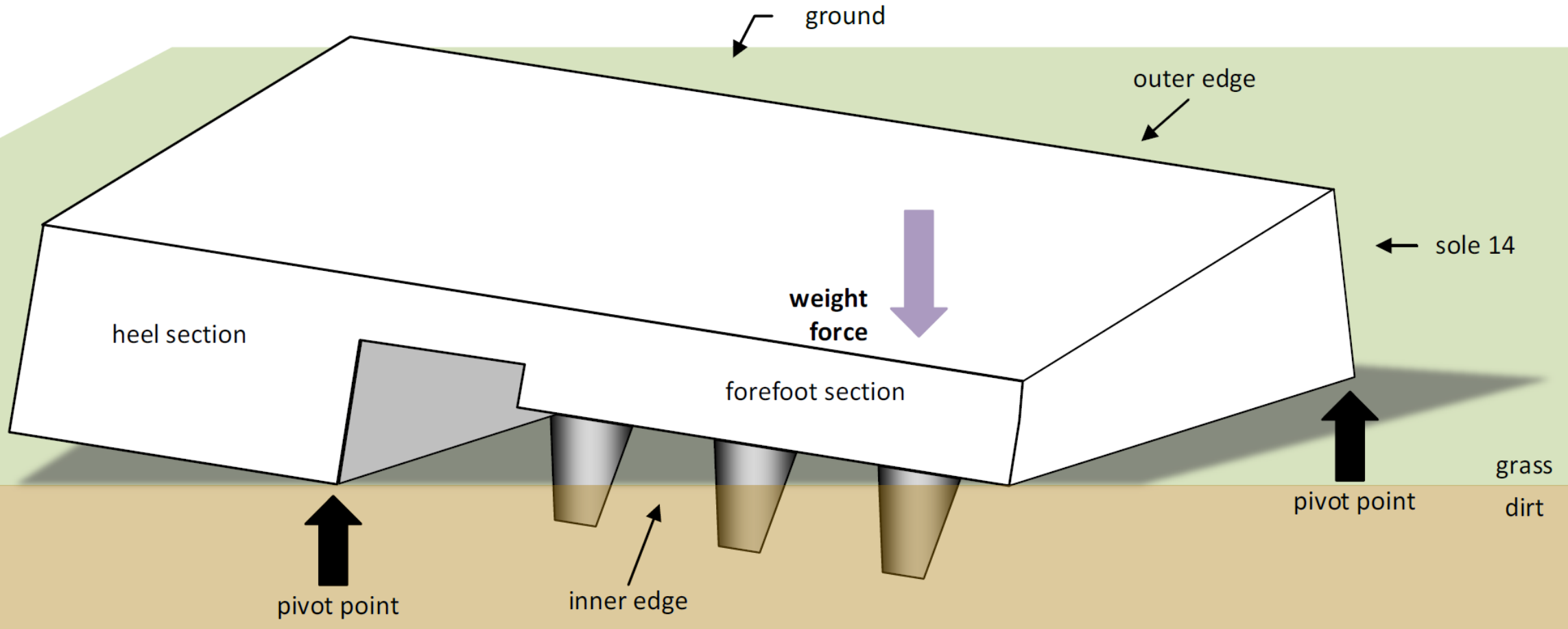


IPR2024-00636: EX2008 ¶152

IPR2024-00637: EX2008 ¶152

IPR2024-00638: EX2008 ¶152

Rubin: “What If” Embodiment



IPR2024-00636: EX2008 ¶154

IPR2024-00637: EX2008 ¶154

IPR2024-00638: EX2008 ¶154

CLAIM CONSTRUCTION

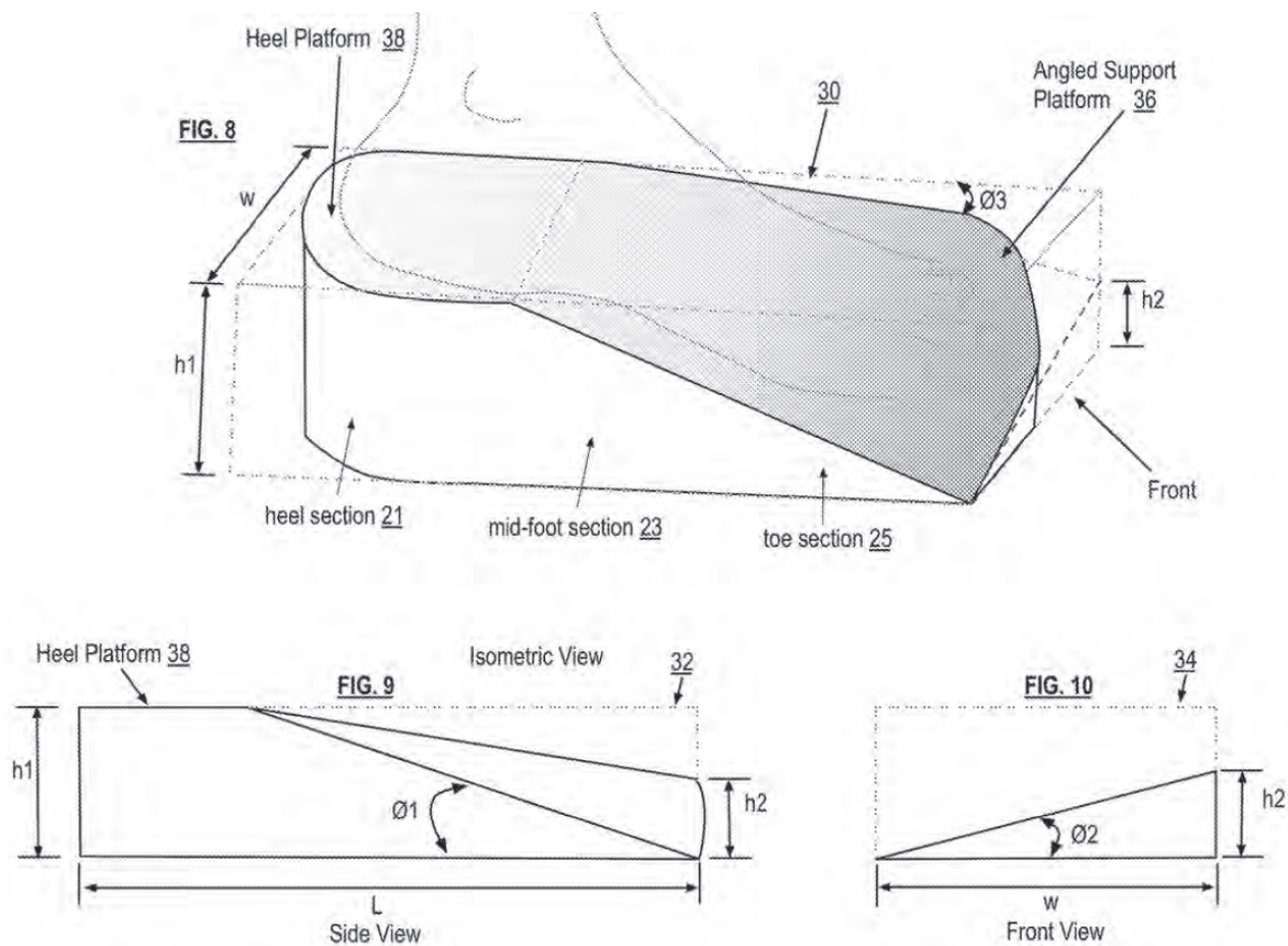
“Athletic Positioning”

Petitioner’s Position	Patent Owner’s Position
no construction	a heel section higher than the toe section and the outside edge of the toe section higher than the inside edge of the toe section

IPR2024-00636: Paper 12, 27-31; Paper 15, 1, 27; Paper 23, 24
IPR2024-00637: Paper 12, 25-29; Paper 15, 1; Paper 23, 24-25
IPR2024-00638: Paper 12, 26-30; Paper 15, 1; Paper 23, 7-8



Patent Owner's Construction of "Athletic Positioning" Is Consistent with the Claims, Specification, and Figures



IPR2024-00636: Paper 12, 27-31; EX2008 ¶¶144-146

IPR2024-00637: Paper 12, 25-29; EX2008 ¶¶144-146

IPR2024-00638: Paper 12, 26-30; EX2008 ¶¶144-146

Petitioner's Non-Construction Reads Out Limitations

1 Q. Athletic positioning is in the claims of
2 the '291 patent. Right?

3 A. It is one of the claims. Yes.

4 Q. Okay. And so does the term limit the
5 claims in your view?

6 MR. BUGG: Objection, vague, calls for
7 speculation. You can answer.

8 A. Does the term limit the claims? Is that
9 the question?

10 Q. Yes.

11 A. I would say that the term is something
12 that is different than the slope claims because it
13 is a separate claim.

14 So it would have to mean something -- you
15 wouldn't be able to have a claim that states
16 "having a slope" and then also a claim that states
17 "having athletic positioning."

IPR2024-00636: EX2010, 53:1-17; Paper 23, 24
IPR2024-00637: EX2010, 53:1-17; Paper 23, 24-25
IPR2024-00638: EX2010, 53:1-17; Paper 23, 7-8



Measuring Claimed Heights and Slopes

Petitioner's Position	Patent Owner's Position
The slopes and heights in the challenged claims should all be measured relative to the ground (or in some instances, the bottom of the sole), not the bottom of the shoes, and should exclude cleats from the measurements.	The slopes and heights in the challenged claims should all be measured relative to the bottom of the shoe, not the ground.

IPR2024-00636: Paper 12, 31-35; Paper 15, 5-10; Paper 23, 7-12
IPR2024-00637: Paper 12, 30-34; Paper 15, 6-10; Paper 23, 8-13
IPR2024-00638: Paper 12, 31-36; Paper 15, 11-16; Paper 23, 12-16



The Claimed Slopes Should be Measured Relative to the Bottom of the Shoe

IPR2024-00636 ('786 Patent)

A shoe comprises: ...

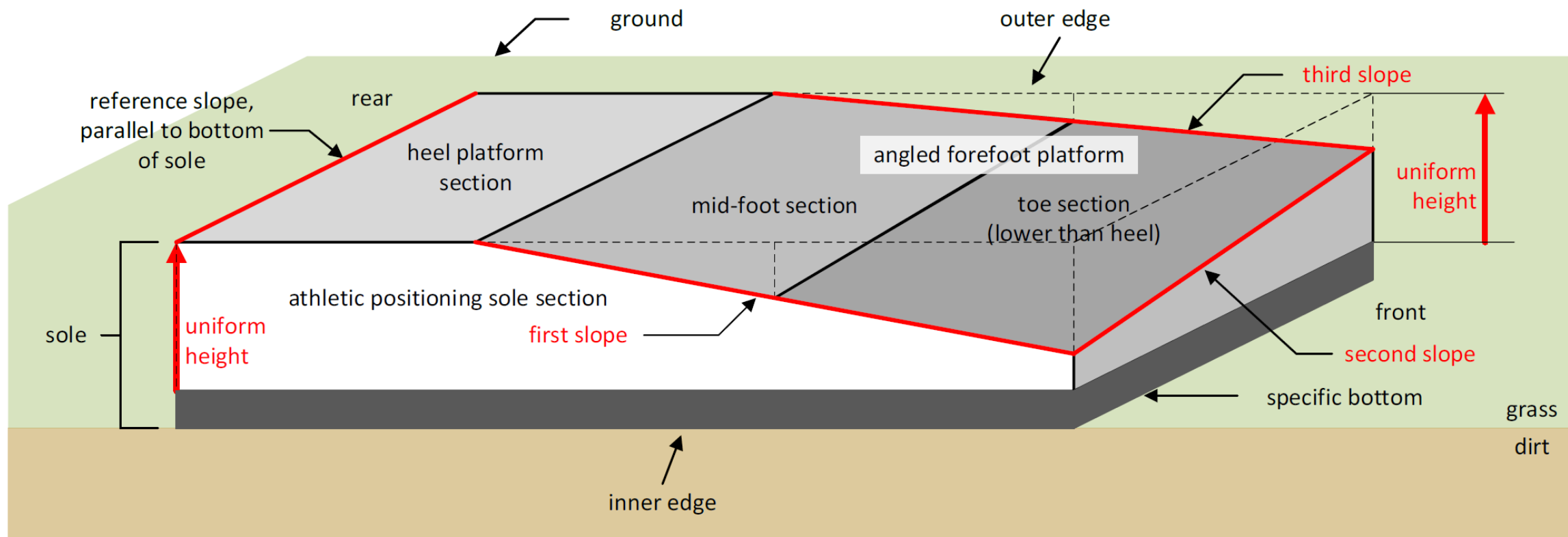
wherein the uniform height establishes a ***reference slope*** from the outer edge to the inner edge, the ***reference slope substantially parallel to a bottom surface of the apparatus;***

...

the first slope, second slope, and the third slope ***each greater than the reference slope ...***

The Claimed Slopes Should be Measured Relative to the Bottom of the Shoe

IPR2024-00636 ('786 Patent)



IPR2024-00636: Paper 12, 31-35; Paper 15, 5-10; Paper 23, 7-12

The Claimed Heights Should be Measured Relative to the Bottom of the Shoe

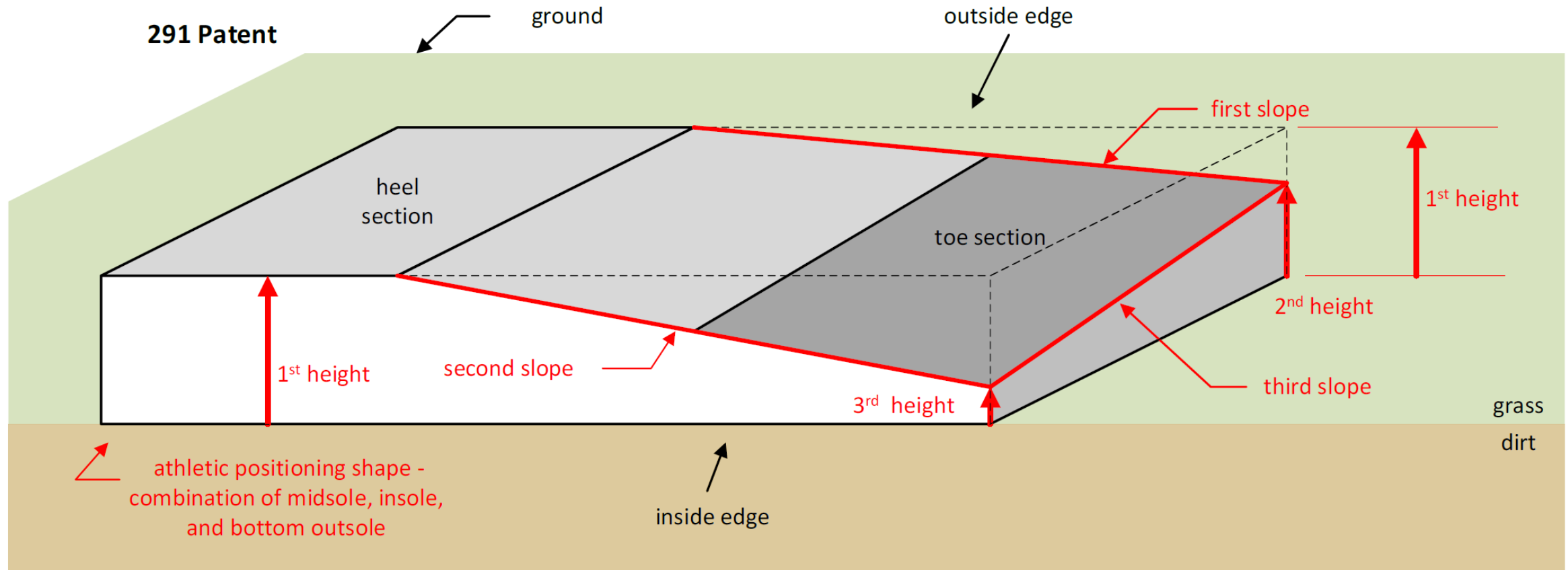
IPR2024-00637 ('291 Patent)

A shoe comprises:

...

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, *a second height* on the outside edge of the shoe at a toe section of the shoe, *a third height* on the inside edge of the shoe at the toe section of the shoe, and *the first height being greater than the second height and the second height being greater than the third height ...*

The Claimed Heights Should be Measured Relative to the Bottom of the Shoe IPR2024-00637 ('291 Patent)



The Claimed Positions Should be Measured Relative to the Bottom of the Shoe

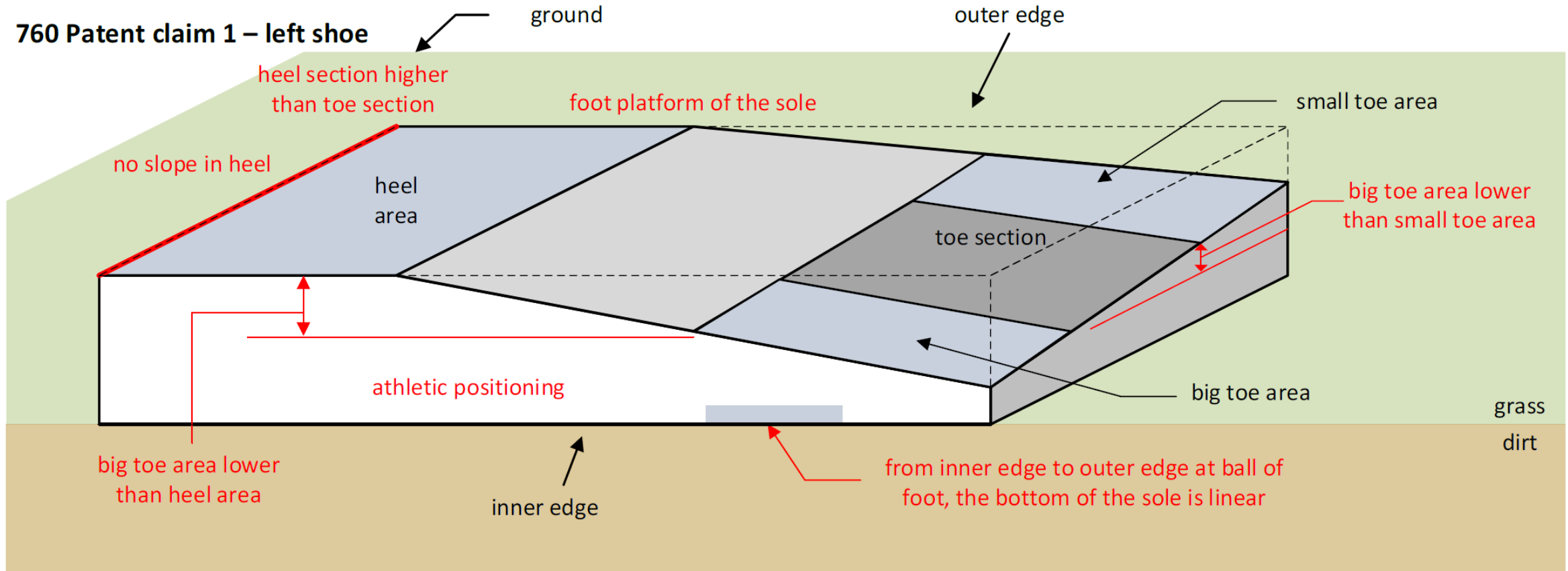
IPR2024-00638 ('760 Patent)

... *a left foot shoe* including: ...

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...

The Claimed Positions Should be Measured Relative to the Bottom of the Shoe

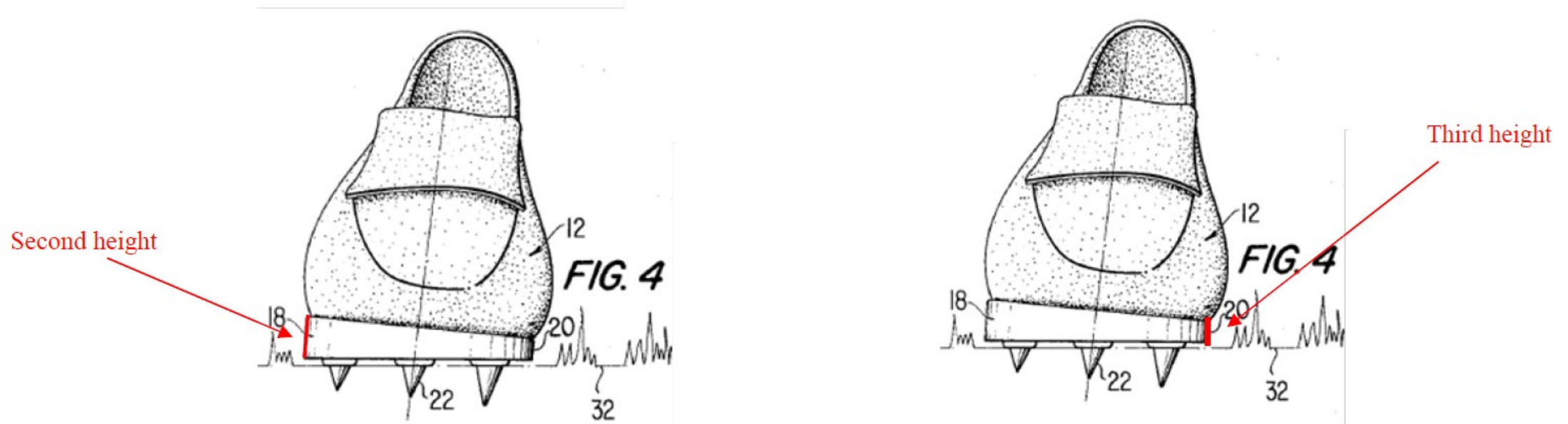
IPR2024-00638 ('760 Patent)



IPR2024-00638: Paper 12, 31-36; Paper 15, 11-16; Paper 23, 12-16



Petitioner's Construction Ignores Critical Heights and Creates Non-Existent Slopes



- 1 Q. You're excluding the height of the cleats
- 2 in these measurements too. Correct?
- 3 A. I am. Yes.

IPR2024-00636: EX2010, 112:1-3; Paper 1, 46
IPR2024-00637: EX2010, 112:1-3; Paper 1, 46
IPR2024-00638: EX2010, 112:1-3; Paper 1, 42

“CONVENTIONAL SHOES”

Petitioner's "Conventional Shoe" Arguments Change Nothing

19 Can you tell what the interior dimensions
20 of the shoe are from this picture of the shoe on
21 the outside?

1 A. You can't specify, see specifically what
2 the dimensions are from this view.

IPR2024-00636: EX2010, 38:19-39:21; Paper 23, 6-7
IPR2024-00637: EX2010, 38:19-39:21; Paper 23, 6-7
IPR2024-00638: EX2010, 38:19-39:21; Paper 23, 6-7



Mr. Delgatty's New Reply Cutaways are Improper

Petition Declaration (EX1002)



Reply Declaration (EX1022)



IPR2024-00636: Paper 23, 6-7

IPR2024-00637: Paper 23, 6-7

IPR2024-00638: Paper 23, 6-7

KIM GROUNDS

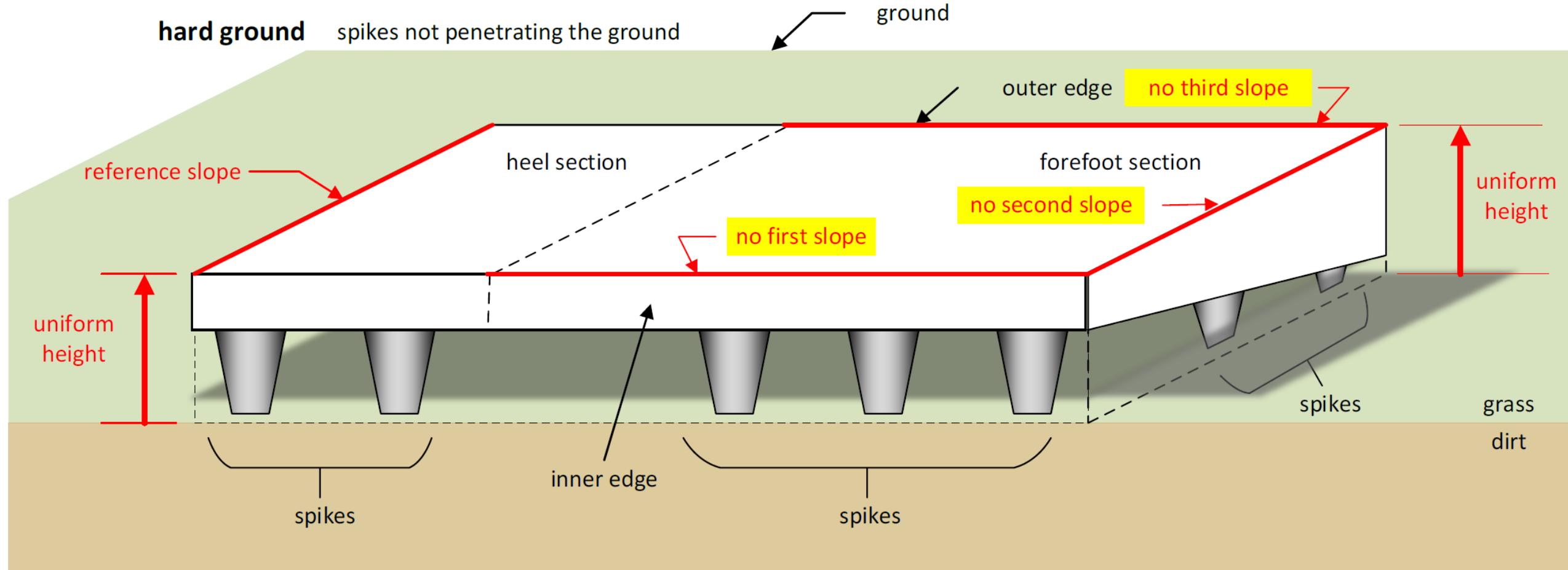


KIM GROUND

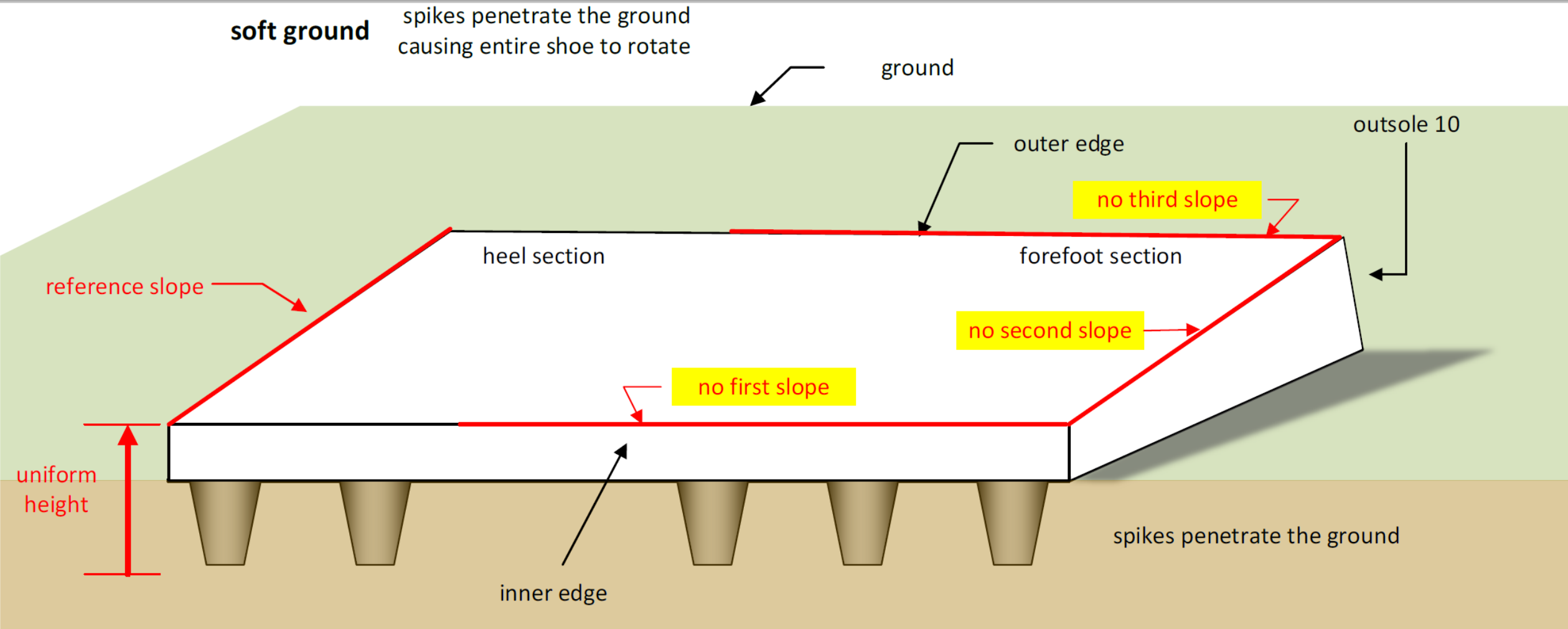
IPR2024-00636 ('786 Patent)



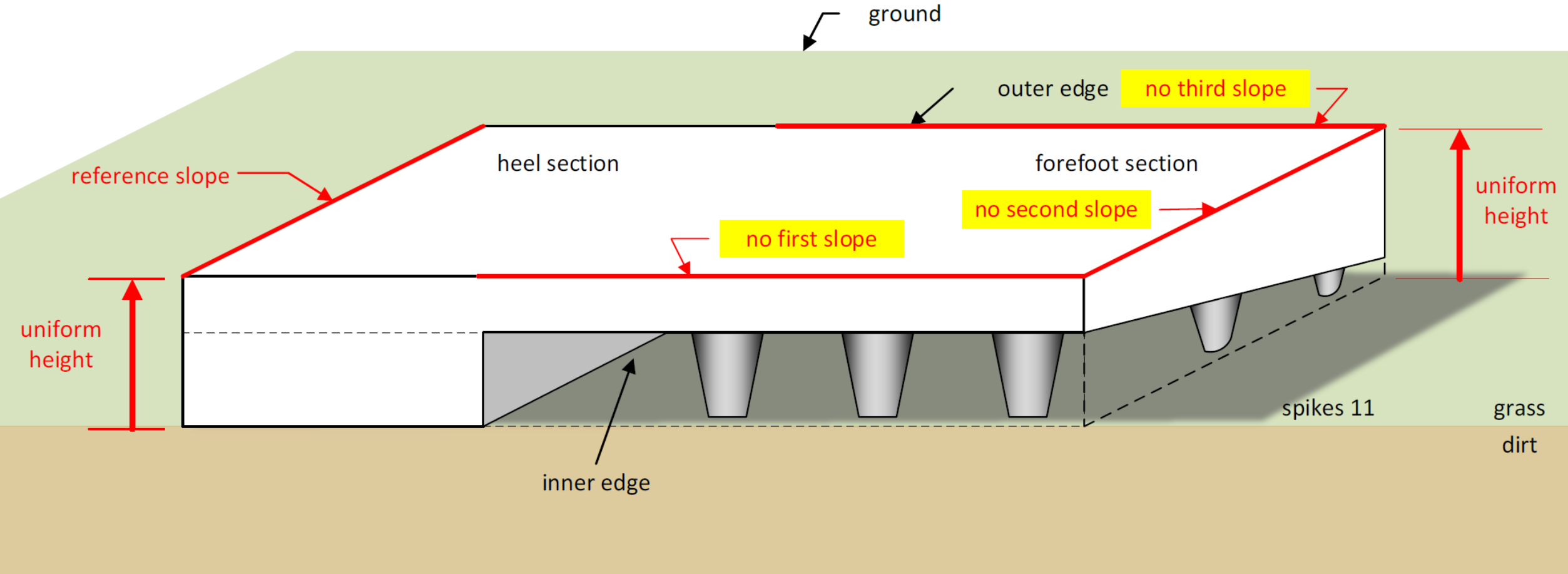
IPR2024-00636 ('786 Patent): No First, Second, or Third Slope – Primary Embodiment



IPR2024-00636 ('786 Patent): No First, Second, or Third Slope – Primary Embodiment

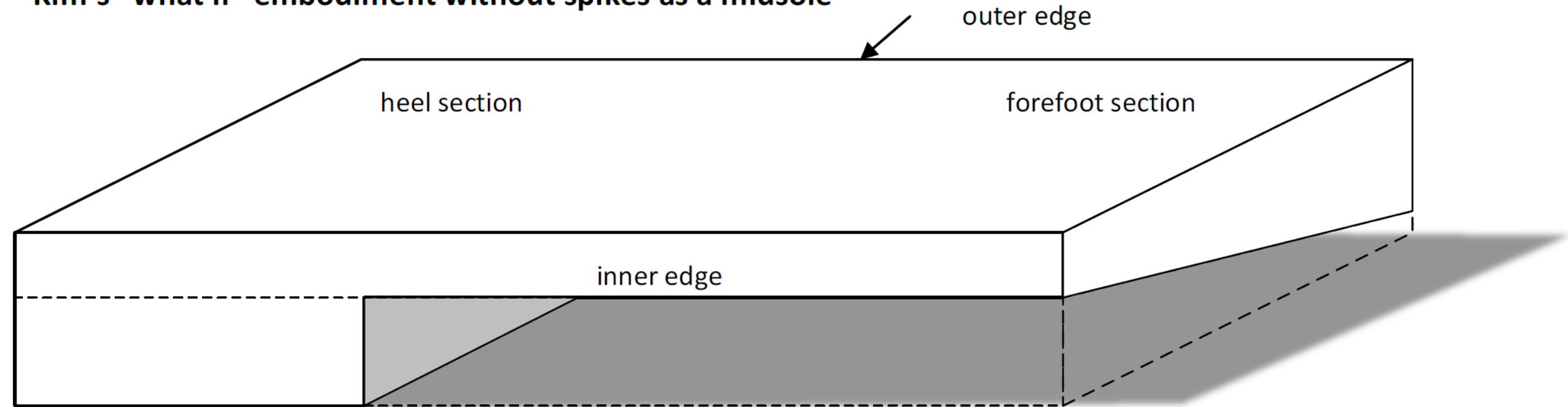


IPR2024-00636 ('786 Patent): No First, Second, or Third Slope – “What If” Embodiments



IPR2024-00636 ('786 Patent): No First, Second, or Third Slope – “What If” Embodiments

Kim’s “what if” embodiment without spikes as a midsole

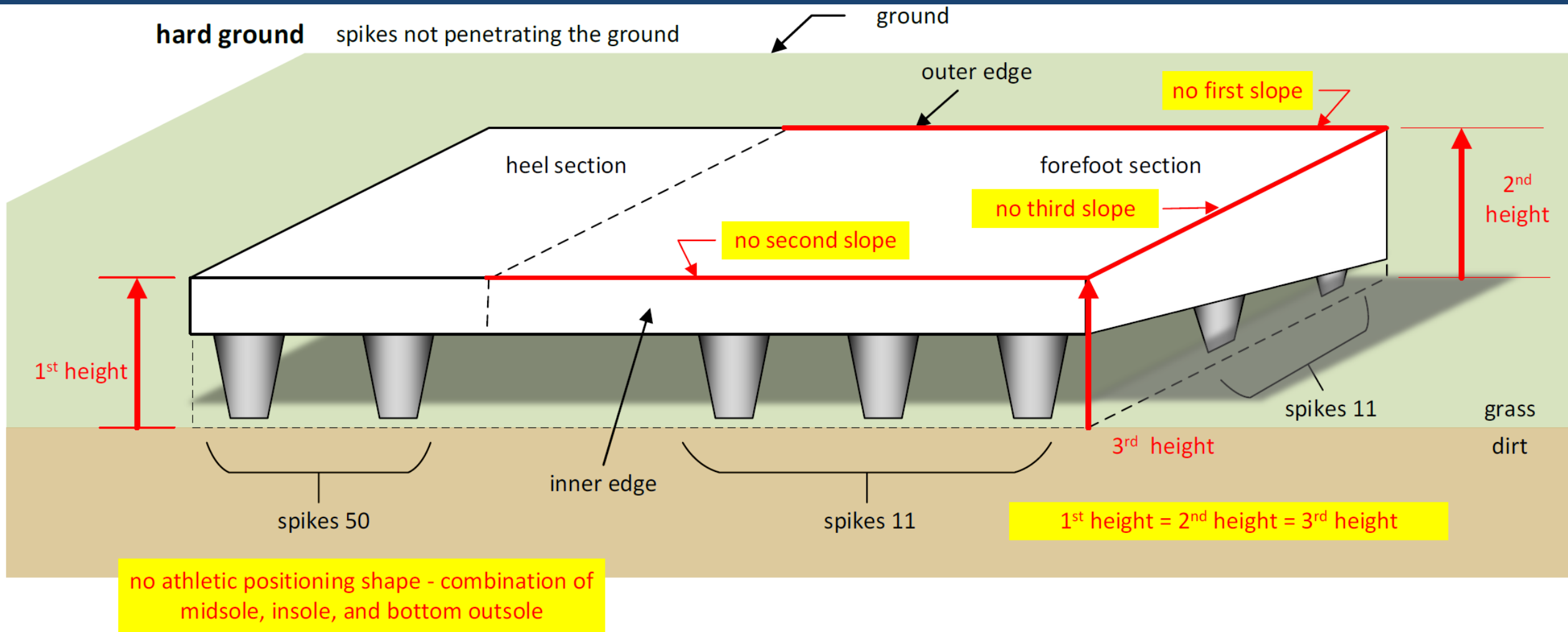


KIM GROUND

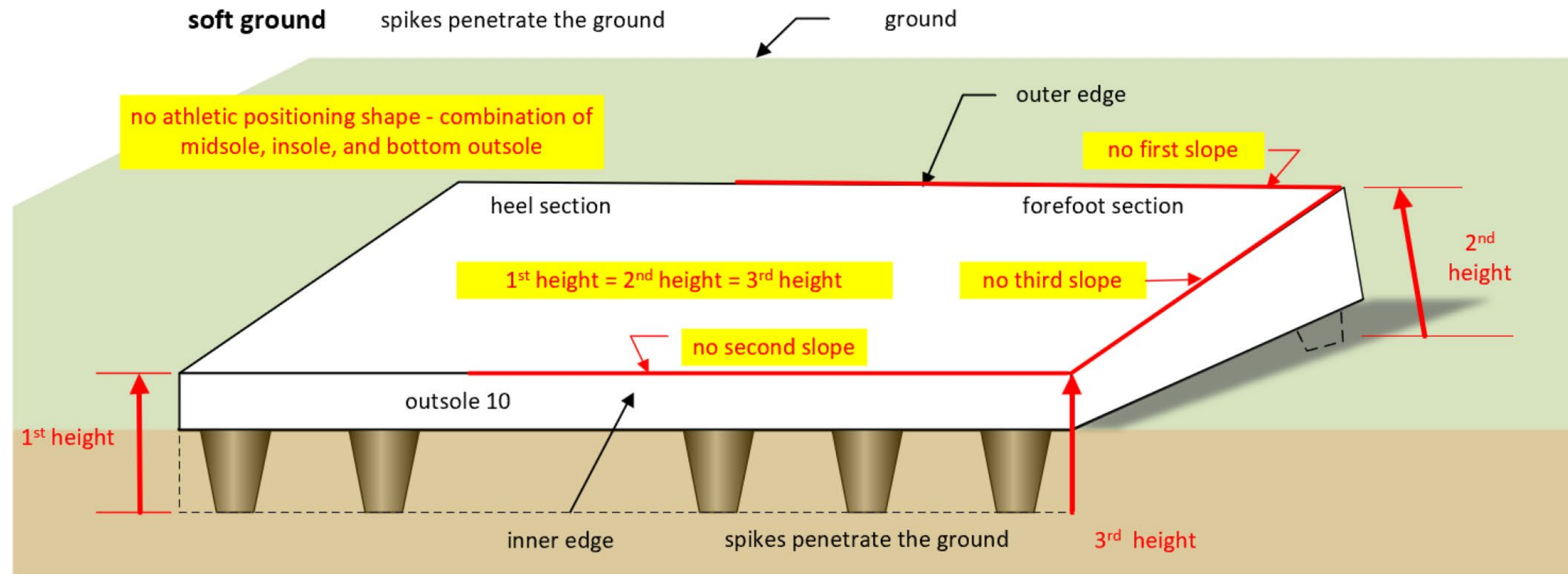
IPR2024-00637 ('291 Patent)



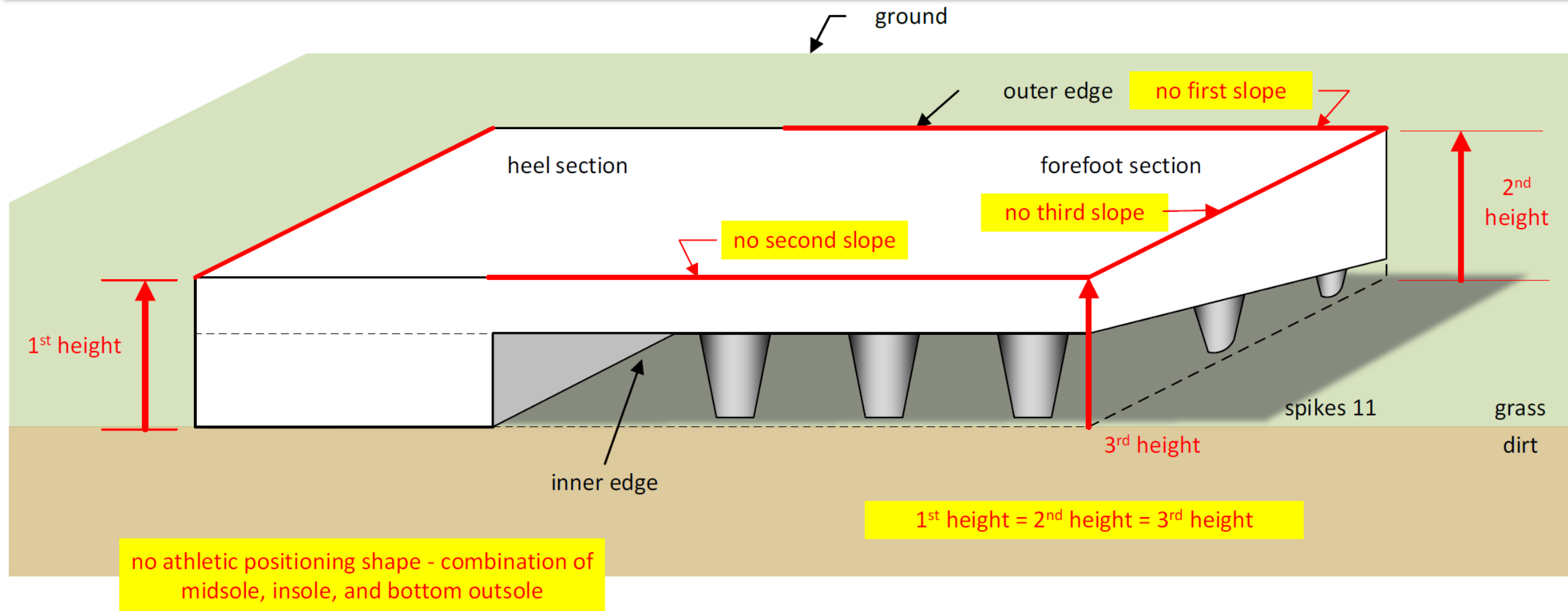
IPR2024-00637 ('291 Patent): No 1st Height > 2nd Height > 3rd Height or Slopes – Primary Embodiment



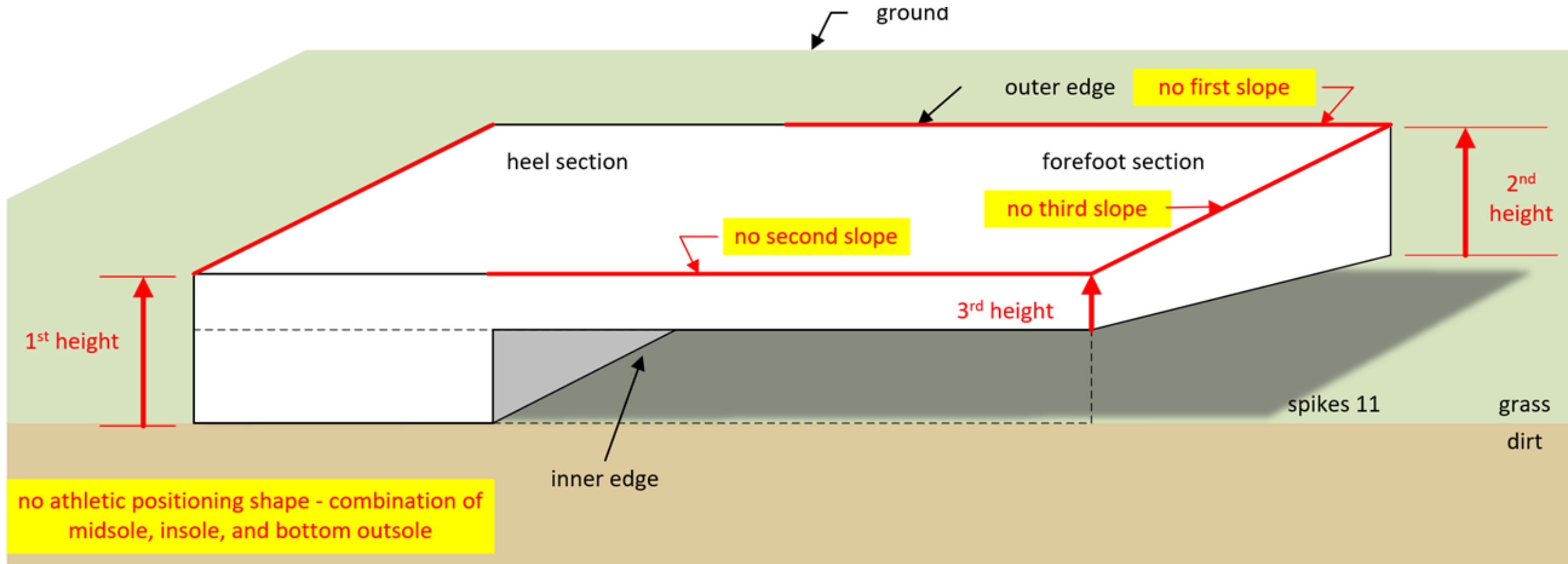
IPR2024-00637 ('291 Patent): No 1st Height > 2nd Height > 3rd Height or Slopes – Primary Embodiment



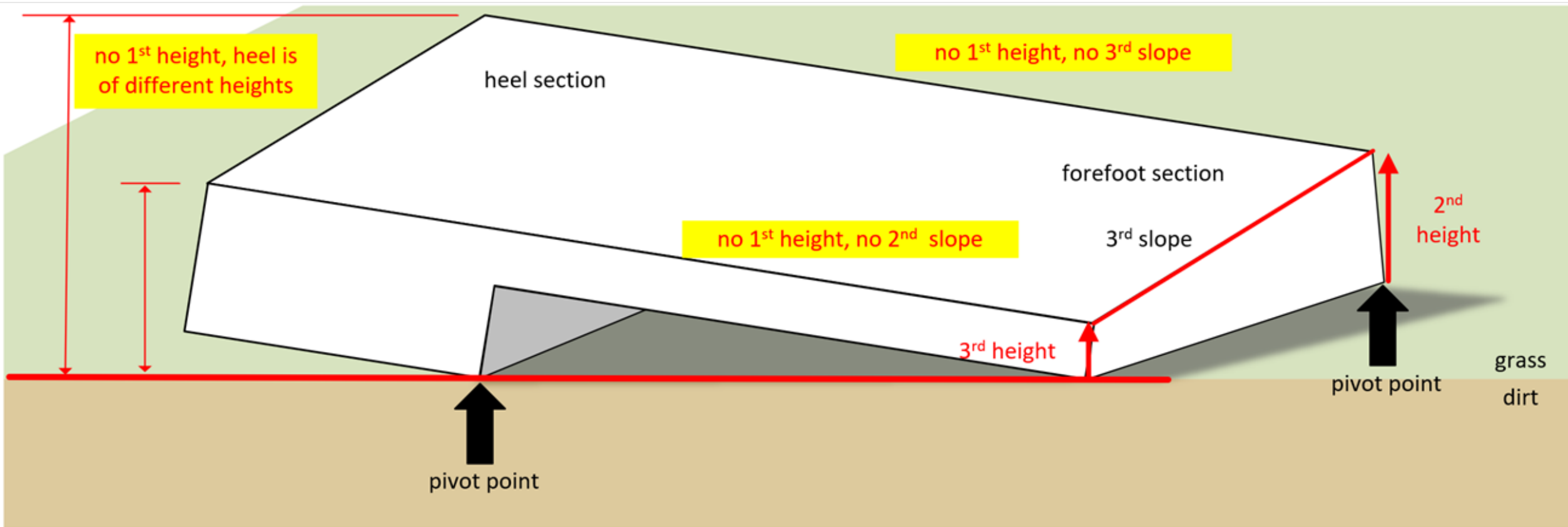
IPR2024-00637 ('291 Patent): No 1st Height > 2nd Height > 3rd Height or Slopes – “What If” Embodiments



IPR2024-00637 ('291 Patent): No 1st Height > 2nd Height > 3rd Height or Slopes – “What If” Embodiments



IPR2024-00637 ('291 Patent): No 1st Height > 2nd Height > 3rd Height or Slopes – “What If” Embodiments



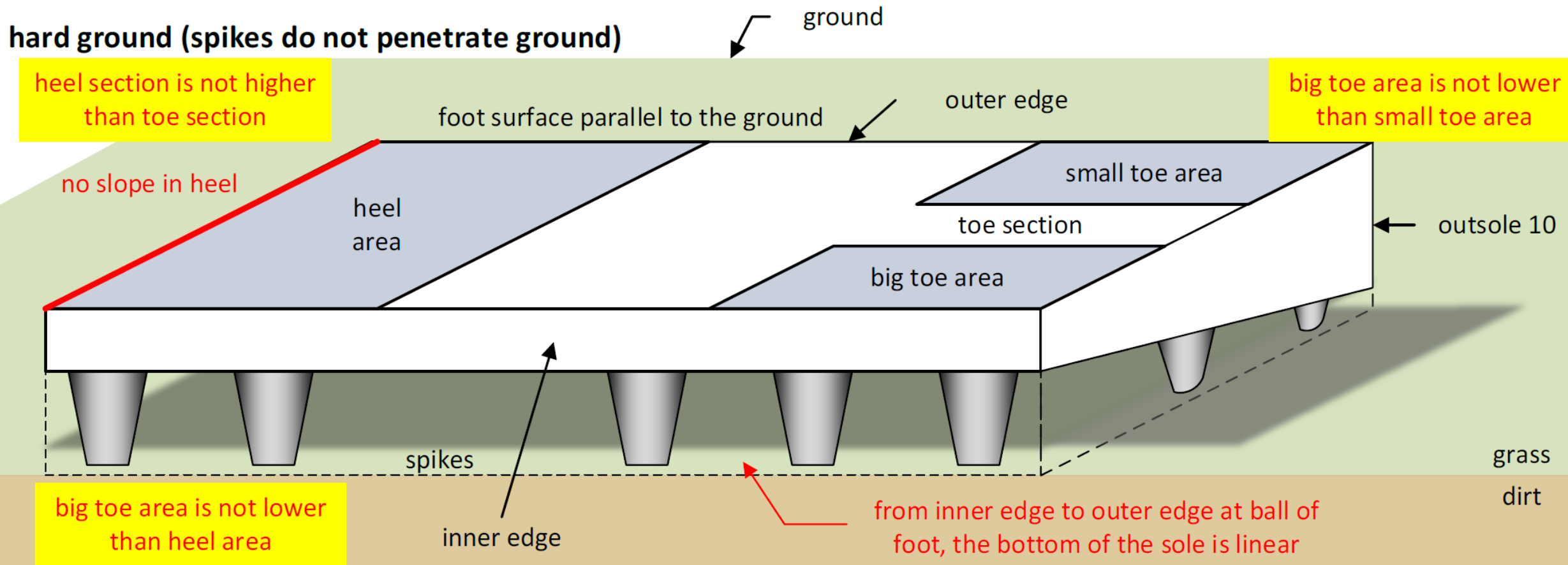
IPR2024-00637: Paper 12, 37-47; EX2008 ¶213

KIM GROUND

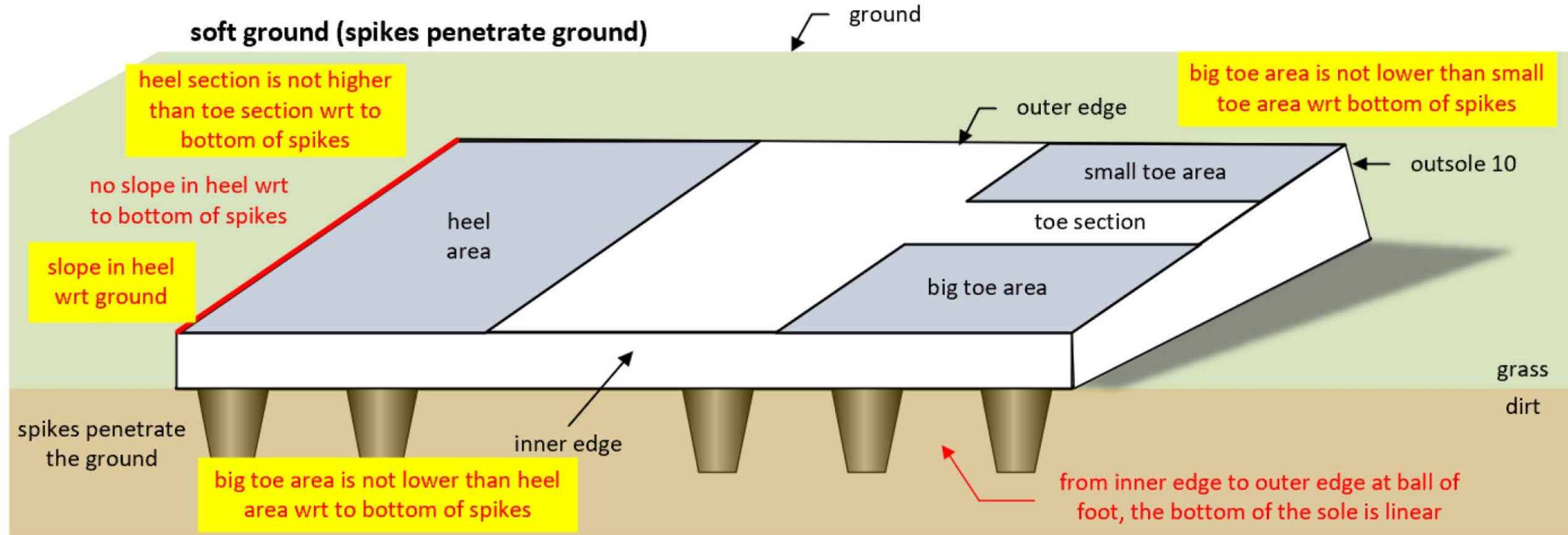
IPR2024-00638 ('760 Patent)



IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – Primary Embodiment



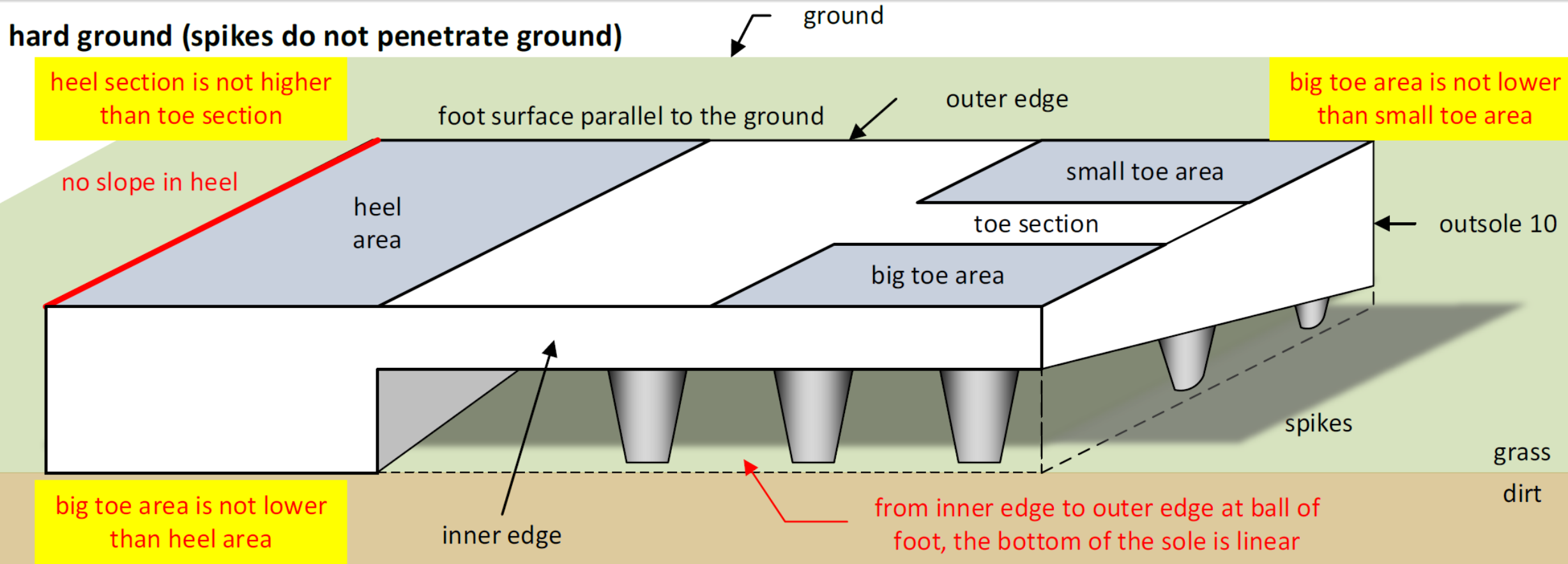
IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – Primary Embodiment



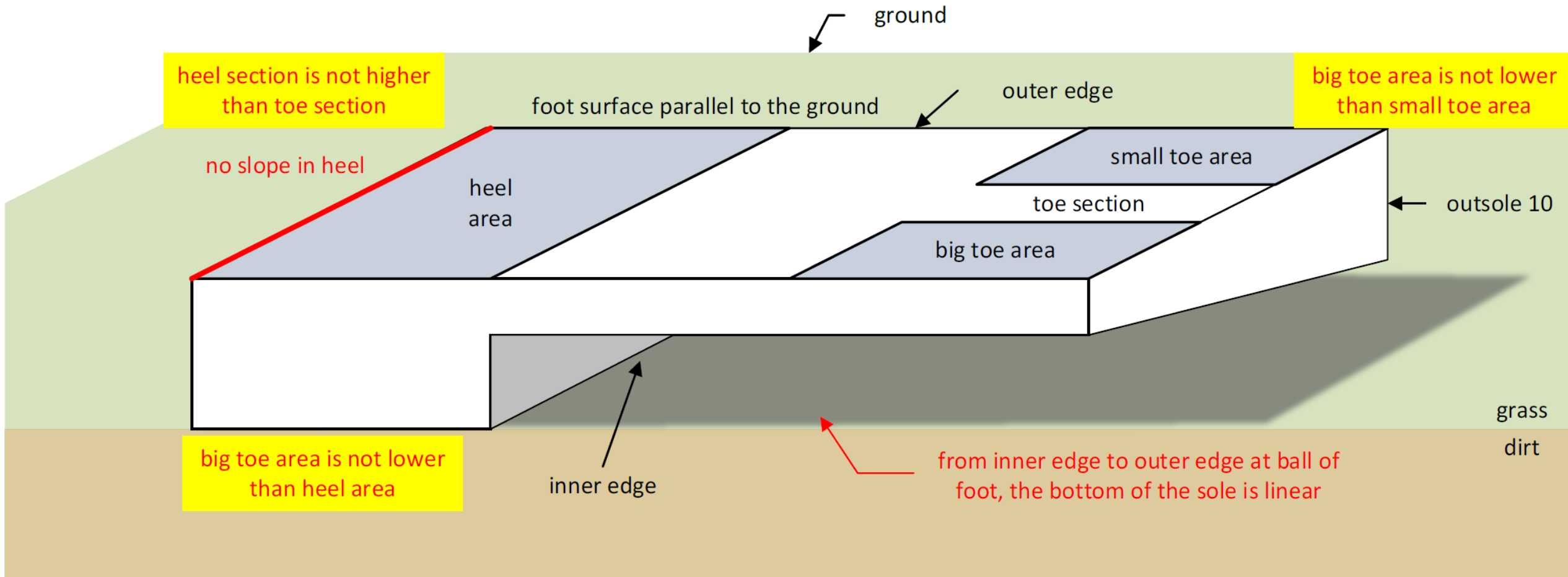
IPR2024-00638: Paper 12, 35-36; EX2008 ¶187



IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – “What If” Embodiments

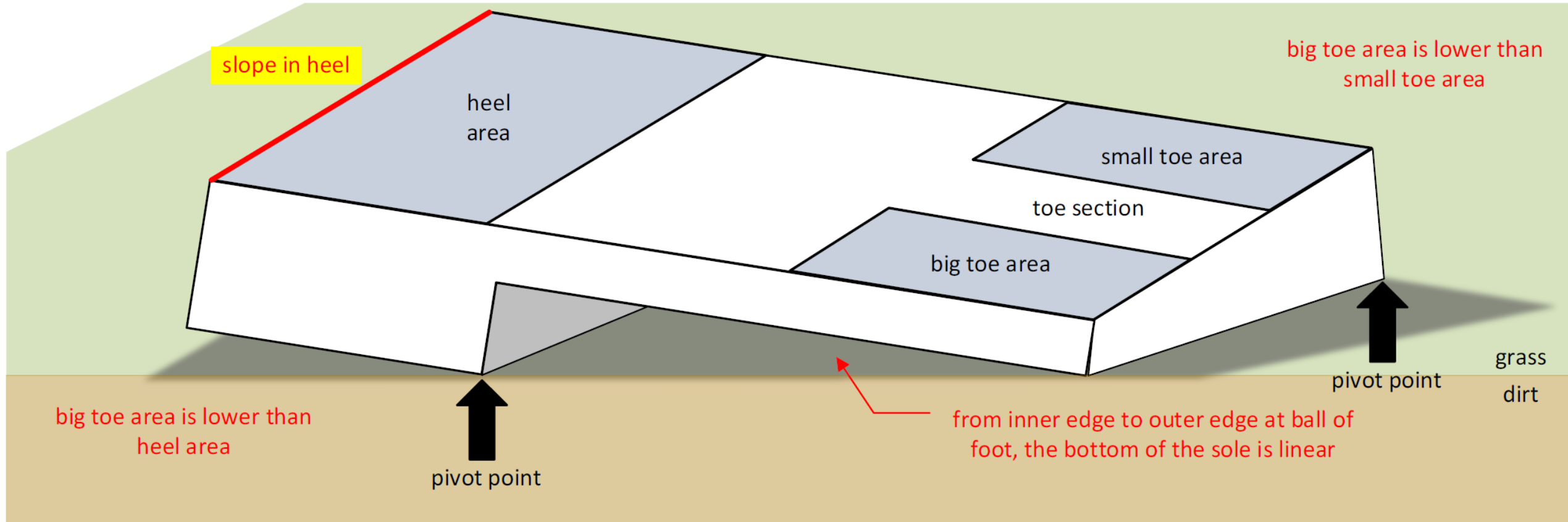


IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – “What If” Embodiments



IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – “What If” Embodiments

Kim “what if” w/o spikes wrt 760



IPR2024-00638: Paper 12, 38; EX2008 ¶197



760 Patent claim 1 – left shoe

The diagram illustrates a cross-section of a shoe sole with the following labeled components and features:

- Regions:**
 - heel area:** The rear portion of the sole.
 - foot platform of the sole:** The central, relatively flat portion.
 - toe section:** The front portion of the sole.
 - small toe area:** A sub-region within the toe section.
 - big toe area:** A sub-region within the toe section, located towards the inner edge.
- Edges and Orientation:**
 - outer edge:** The top surface of the sole.
 - inner edge:** The bottom surface of the sole.
- Height and Positioning:**
 - heel section higher than toe section:** Indicated by a red double-headed arrow showing the vertical difference between the heel and toe areas.
 - athletic positioning:** A red line with arrows indicating the horizontal distance from the heel to the toe section.
 - big toe area lower than heel area:** A red double-headed arrow showing the vertical difference between the heel area and the big toe area.
 - big toe area lower than small toe area:** A red double-headed arrow showing the vertical difference between the small toe area and the big toe area.
- Linear Feature:**
 - from inner edge to outer edge at ball of foot, the bottom of the sole is linear:** A red arrow points to a small rectangular feature on the inner edge of the sole, indicating a linear transition in the sole's profile at the ball of the foot.
- Ground Surface:**
 - ground:** The surface the shoe is on, shown as a light green area.
 - grass dirt:** The surface below the ground, shown as a brown area.

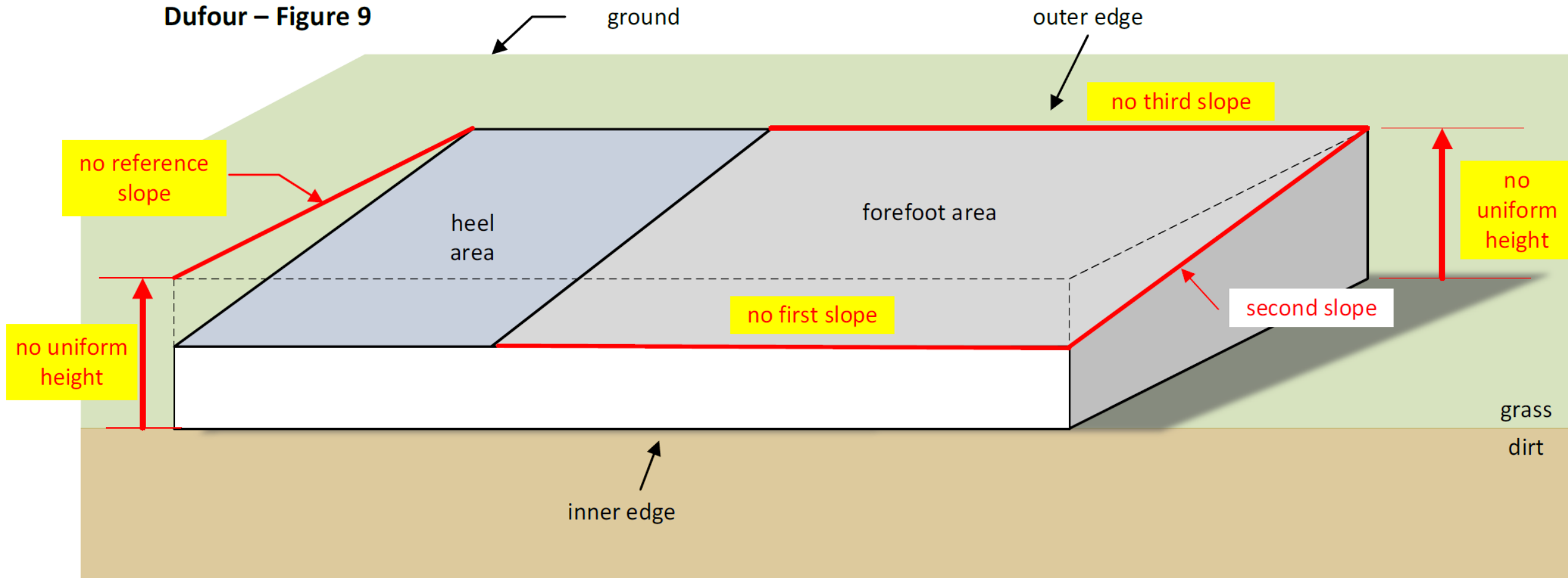
DUFOUR GROUNDS

DUFOUR GROUND

IPR2024-00636 ('786 Patent)



IPR2024-00636 ('786 Patent): No Reference, First, or Third Slope in Fig. 9 Embodiment

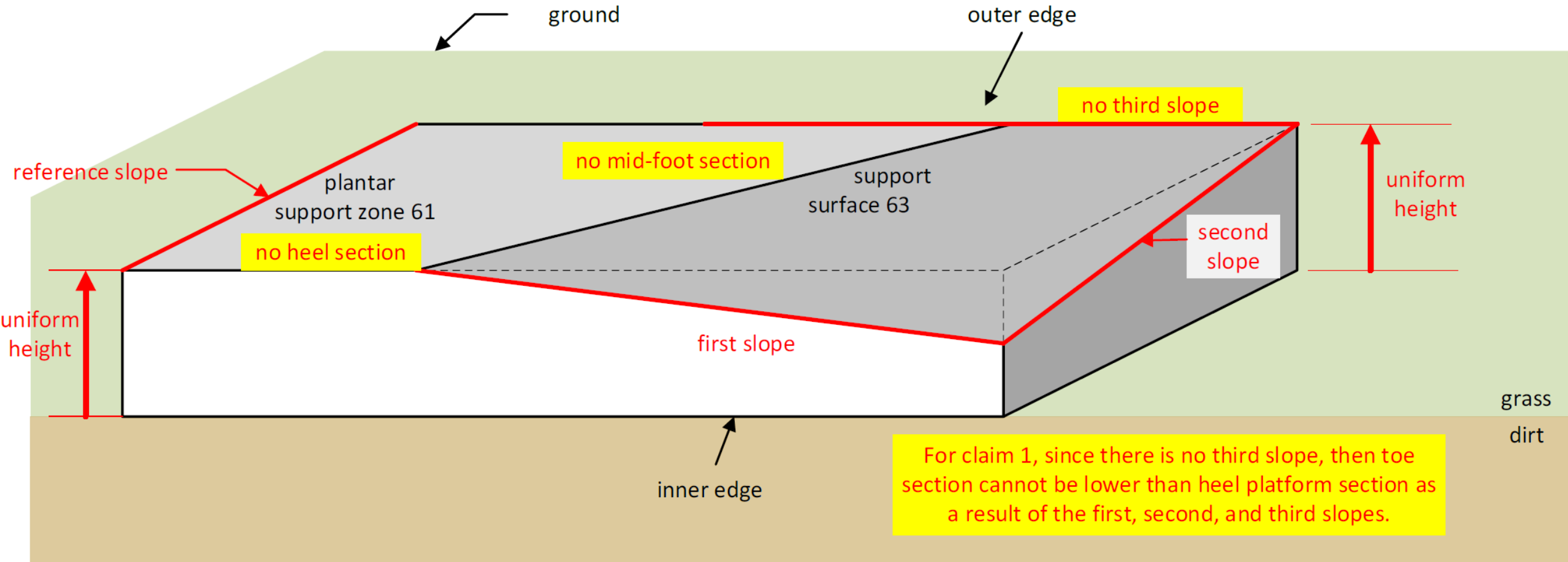


IPR2024-00636: Paper 12, 44-46; EX2008 ¶227

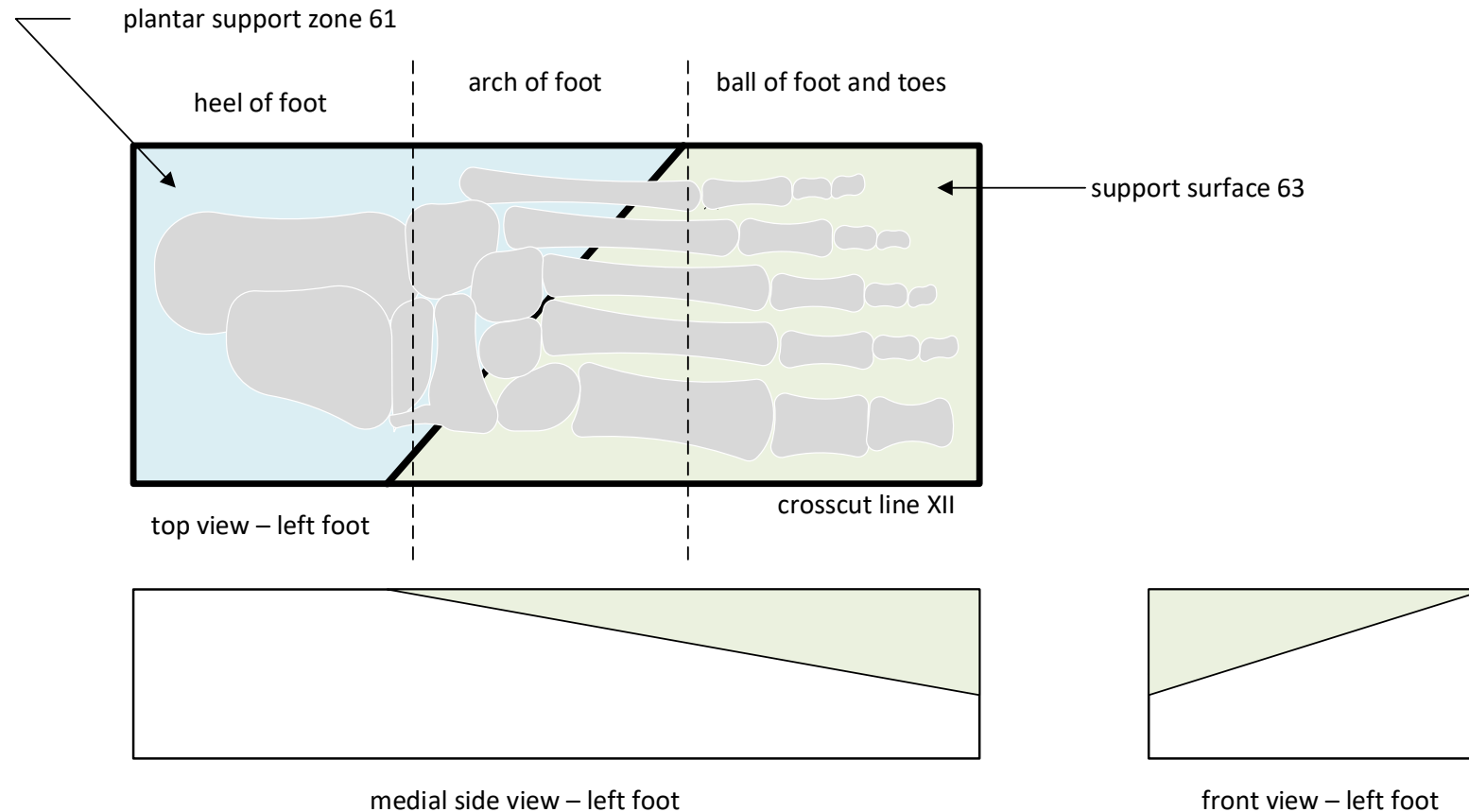


IPR2024-00636 ('786 Patent): No Third Slope in Fig. 12 Embodiment

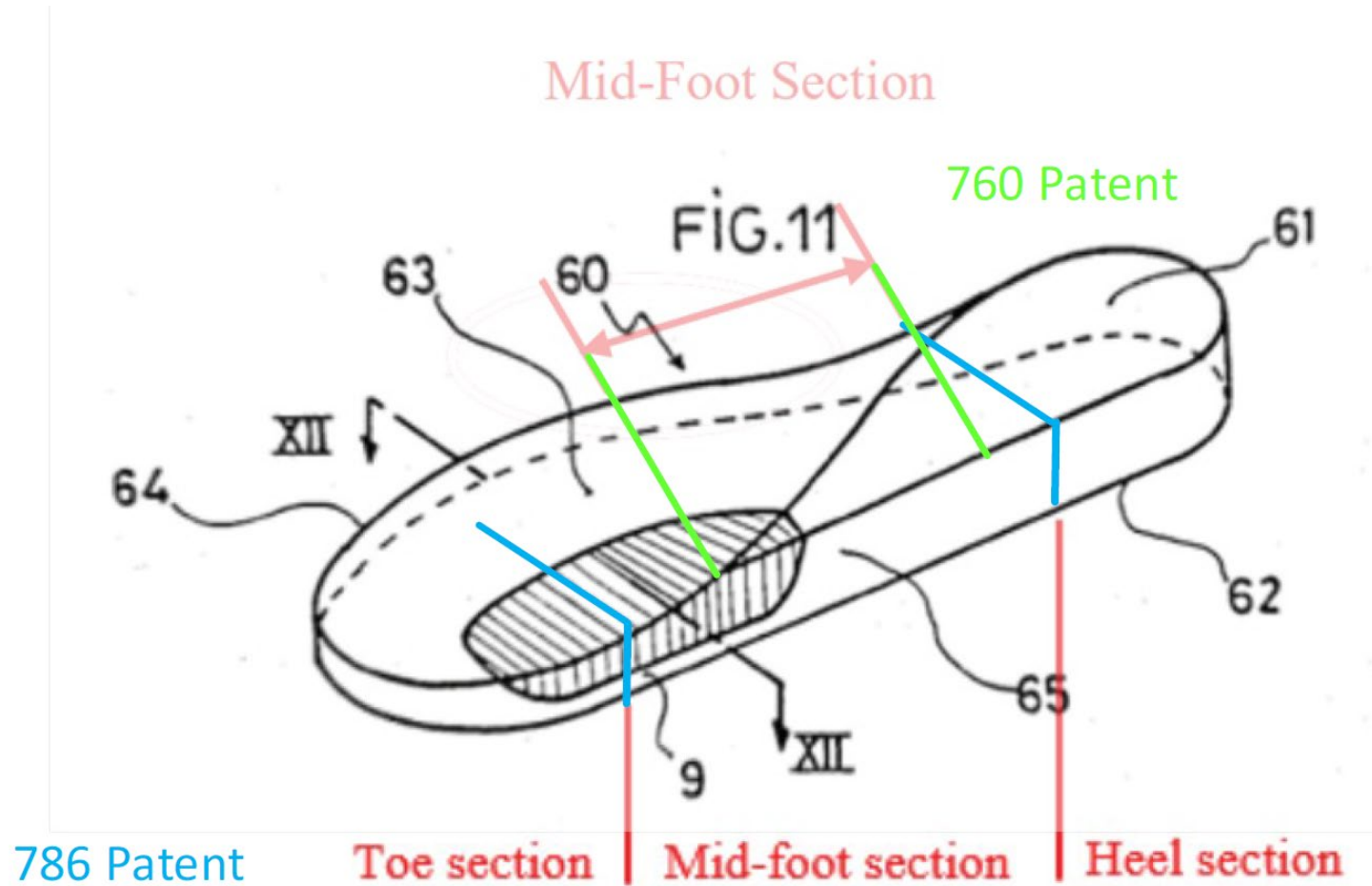
Dufour – Figures 11 and 12



IPR2024-00636 ('786 Patent): No Mid-Foot and Toe Sections Forming Angled Support Platform



IPR2024-00636 ('786 Patent): No Mid-Foot and Toe Sections Forming Angled Support Platform



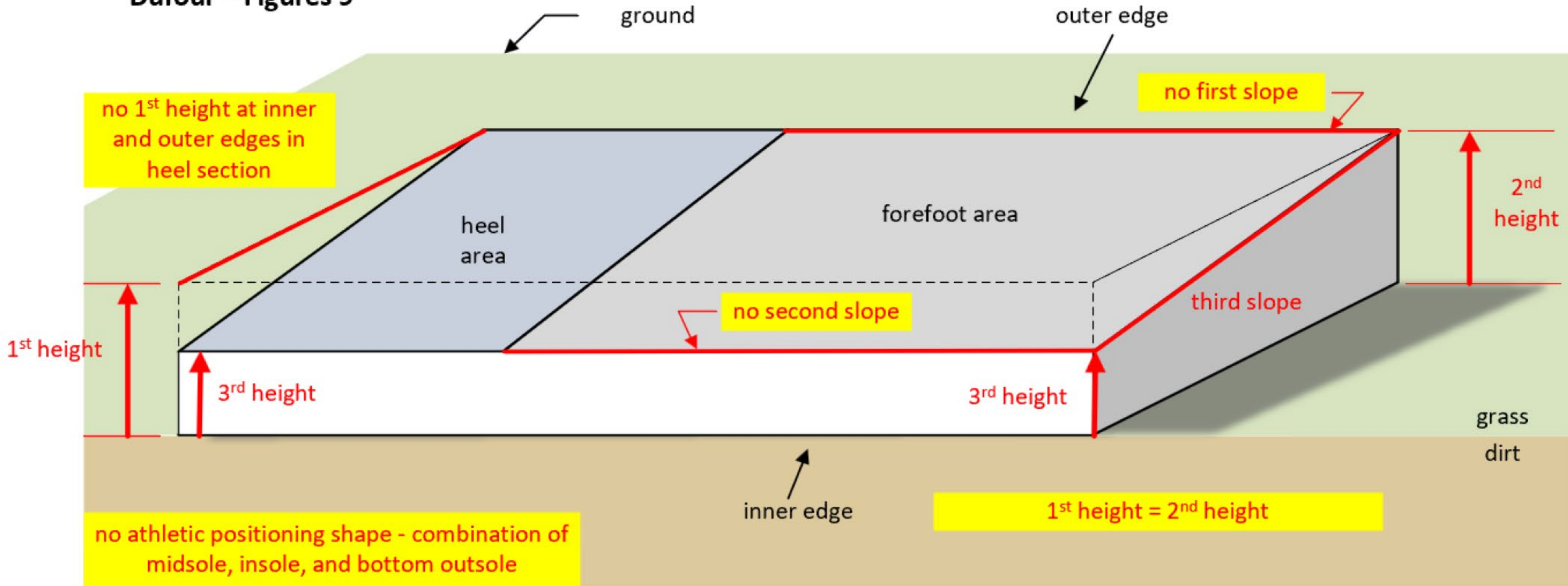
DUFOUR GROUND

IPR2024-00637 ('291 Patent)

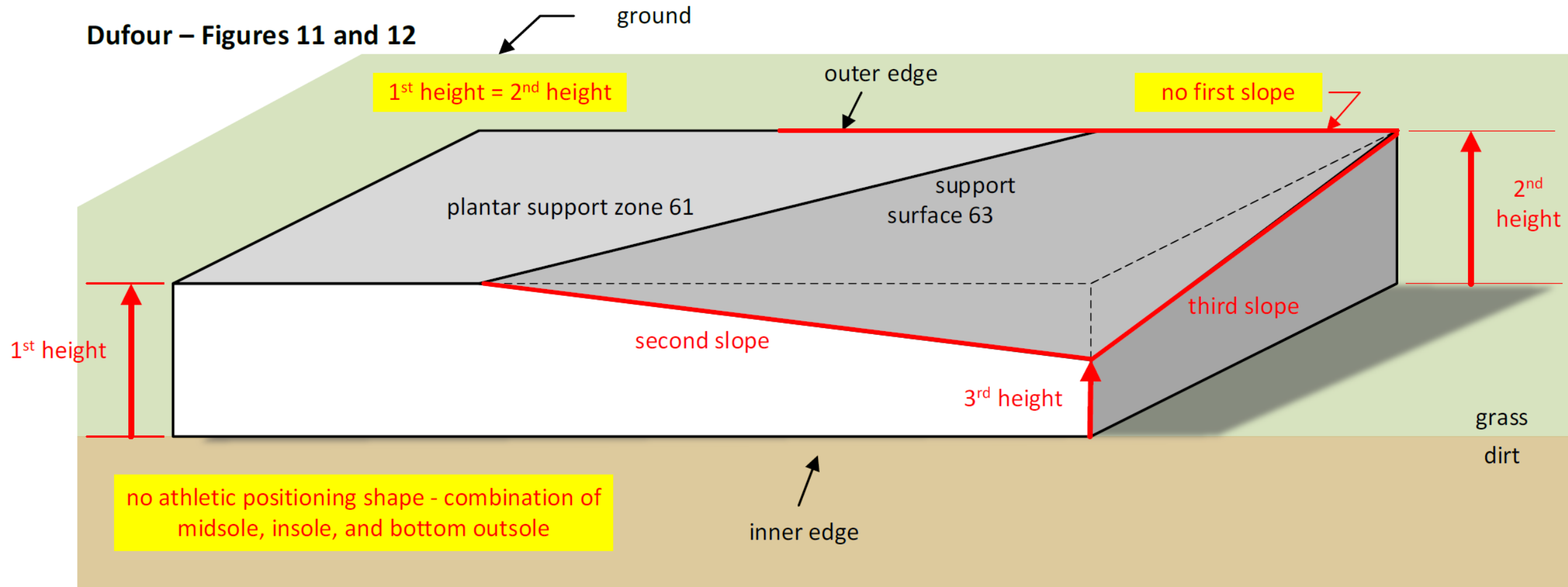


IPR2024-00637 ('291 Patent): No 1st Height, 1st Height > 2nd Height, or 1st/2nd Slope in Fig. 9 Embodiment

Dufour – Figures 9

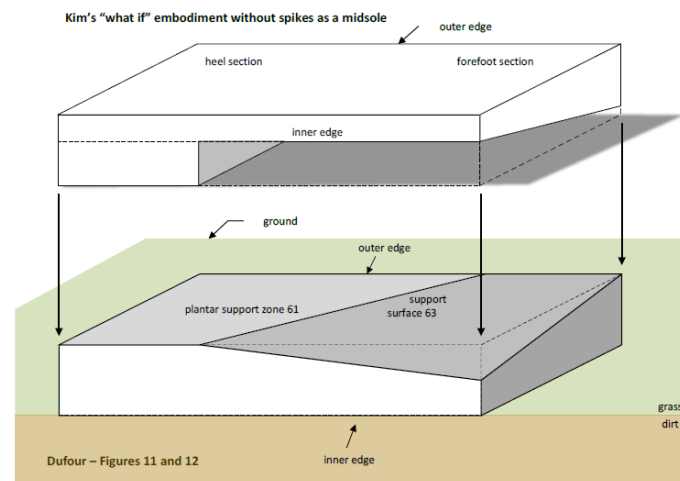
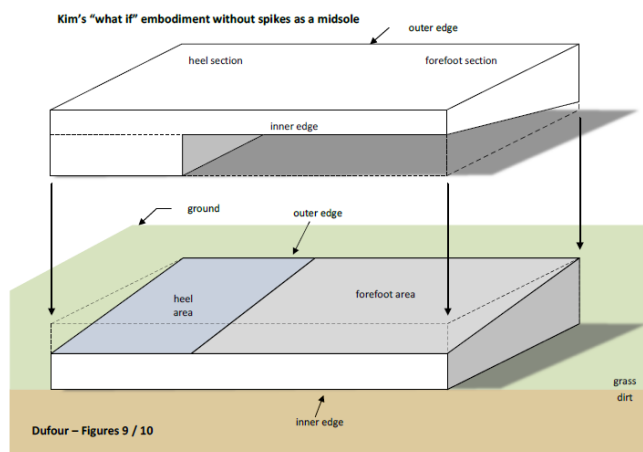
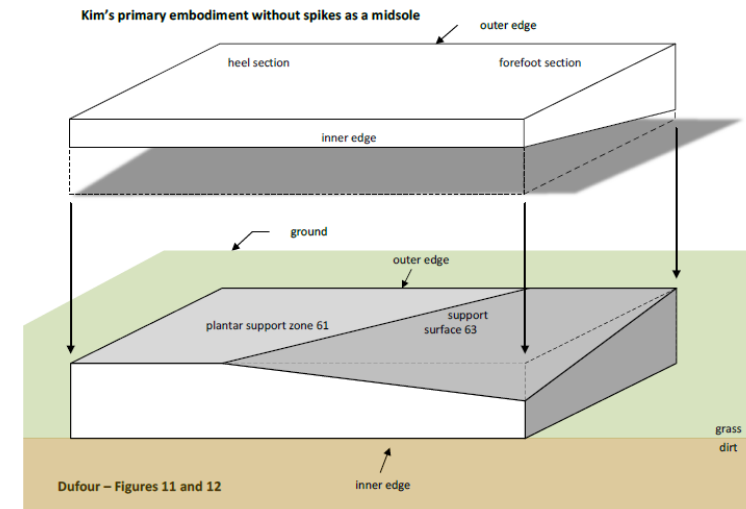
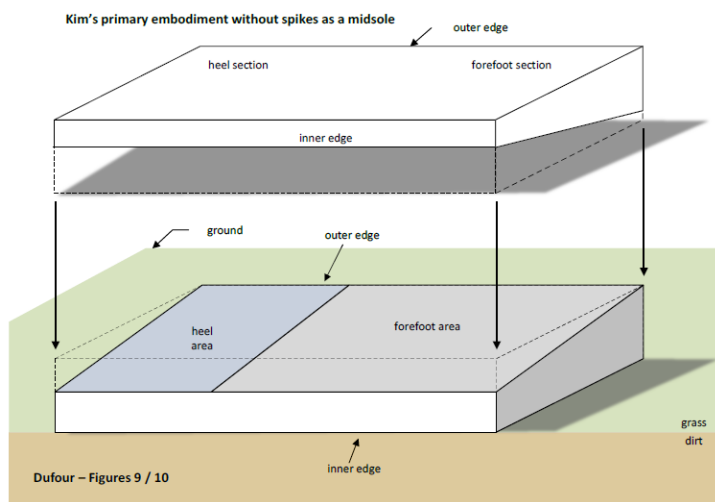


IPR2024-00637 ('291 Patent): No 1st Height > 2nd Height or 1st Slope in Fig. 12 Embodiment



IPR2024-00637: Paper 12, 51-54; EX2008 ¶239

IPR2024-00637 ('291 Patent): Petitioner Failed to Prove Motivation to Combine Dufour and Kim



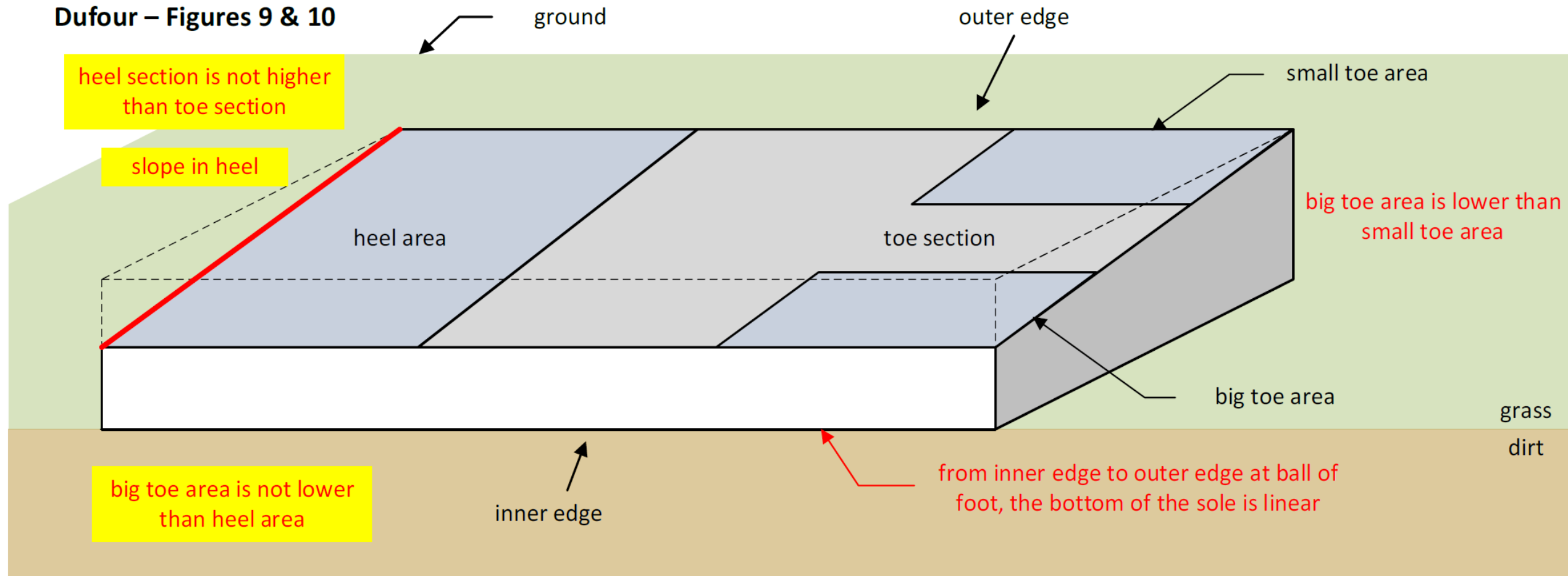
DUFOUR GROUND

IPR2024-00638 ('760 Patent)



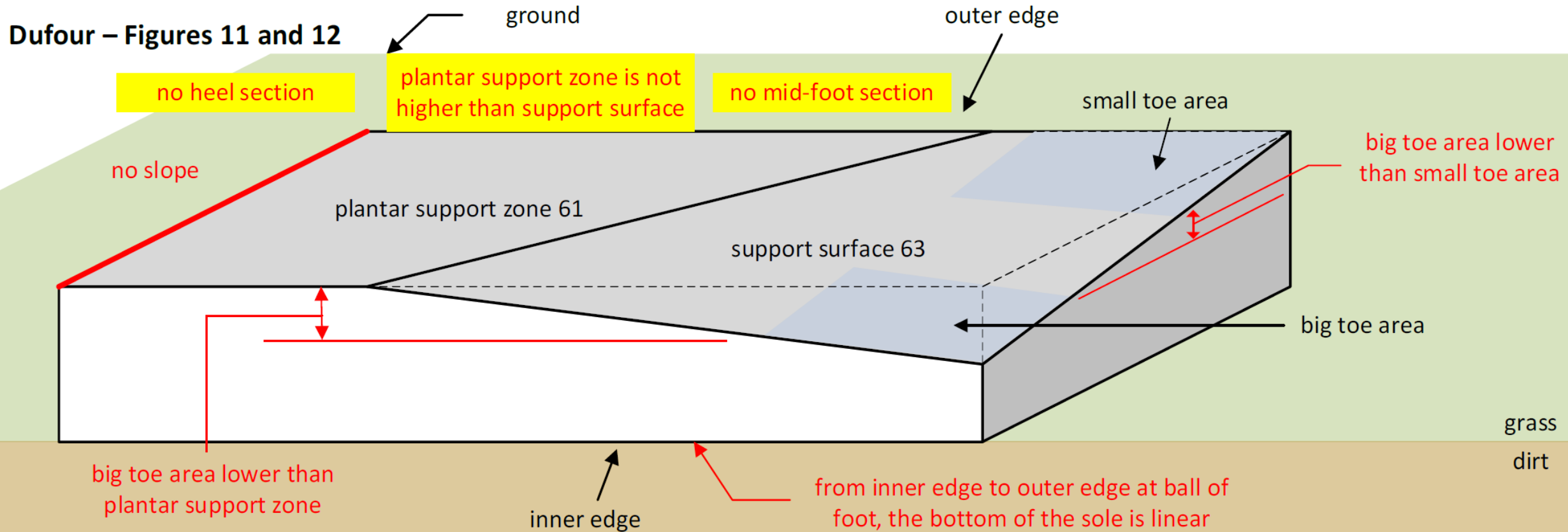
IPR2024-00638 ('760 Patent): No “Athletic Positioning” – Fig. 9 Embodiment

Dufour – Figures 9 & 10



IPR2024-00638: Paper 12, 41-43; EX2008 ¶213

**IPR2024-00638 ('760 Patent):
No “Athletic Positioning” – Fig. 12 Embodiment**



IPR2024-00638 ('760 Patent):
No “Pair of Shoes”

Claim 1: “A *pair of shoes* comprises: a *left foot shoe* . . . and a *right foot shoe*”:

United States Patent	[19]	[11] Patent Number:	4,754,561
Dufour		[45] Date of Patent:	Jul. 5, 1988

[54] **GOLF SHOE**

[56] References Cited

GOLF SHOE

FIELD OF THE INVENTION

This invention pertains to golf shoes, and especially a shoe sole able to facilitate the rolling of the foot (the left foot for a left-handed person; the right for a right-handed person) during the golfer’s swing movement; the term “swing” indicates the kinematics of the golfer’s compound movements in order to hit the ball.

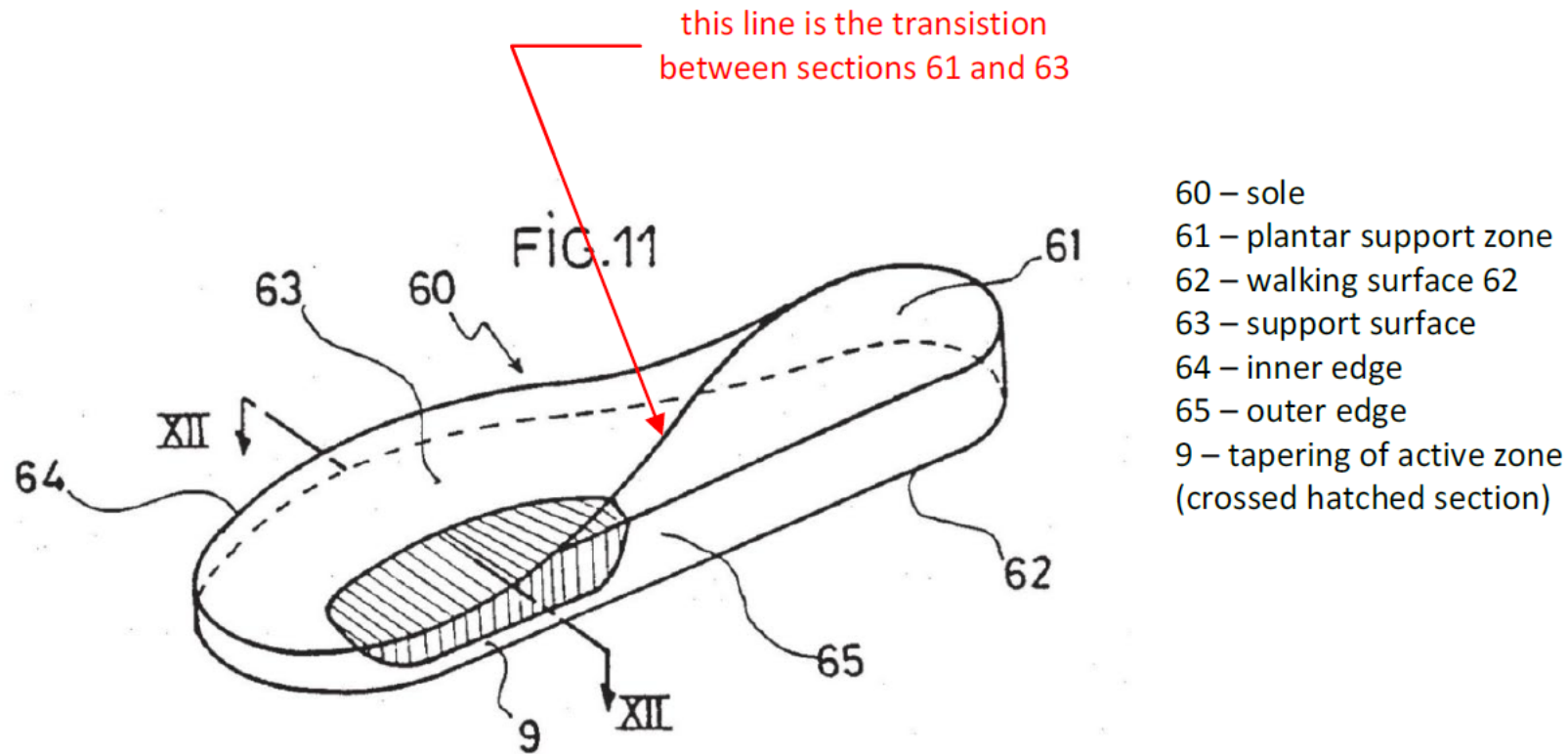
SUMMARY OF THE INVENTION

50

This invention proposes a golf shoe which provides excellent comfort for the foot, especially during the swing, and allows a rolling of the foot on the outer edge of the sole which has no adverse effects on the sound contact with the ground during the movement. Generally, a left shoe, thus a shoe for right-handed golfers, which represent 90% of the players, will be discussed.

55

IPR2024-00638 ('760 Patent): No Mid-Foot Section to Transition from Heel to Toe Section



RUBIN GROUNDS

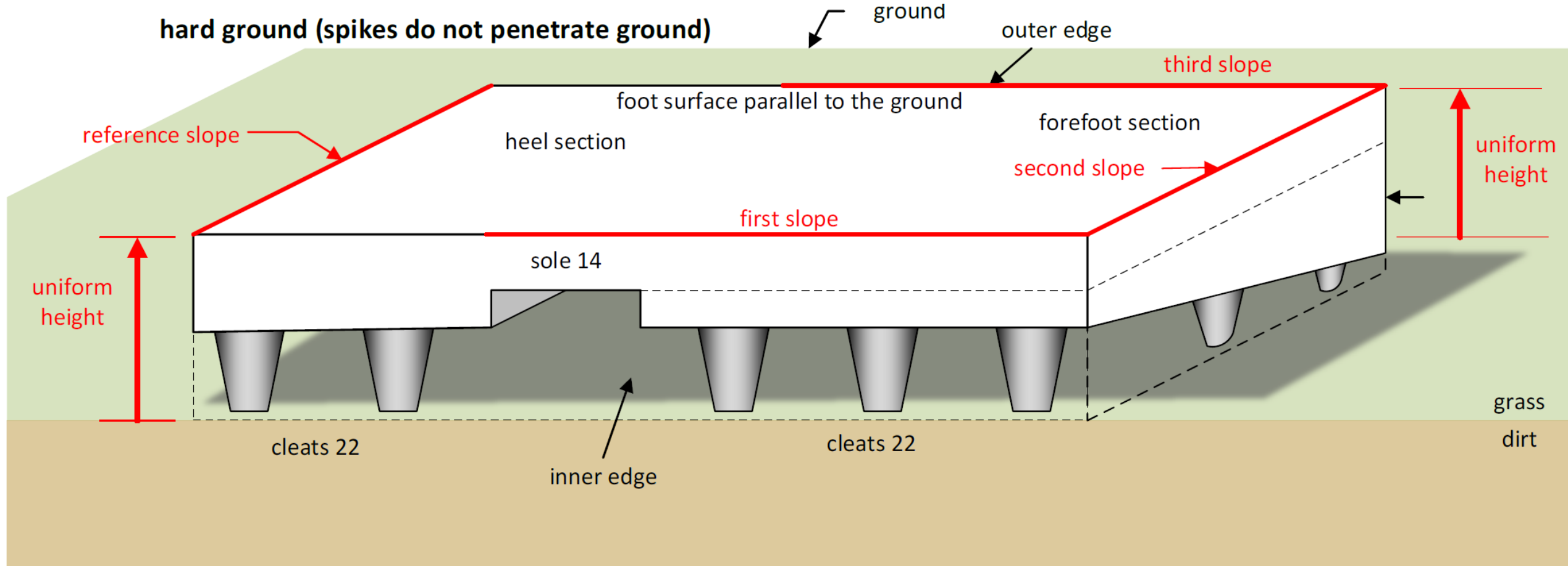


RUBIN GROUND

IPR2024-00636 ('786 Patent)



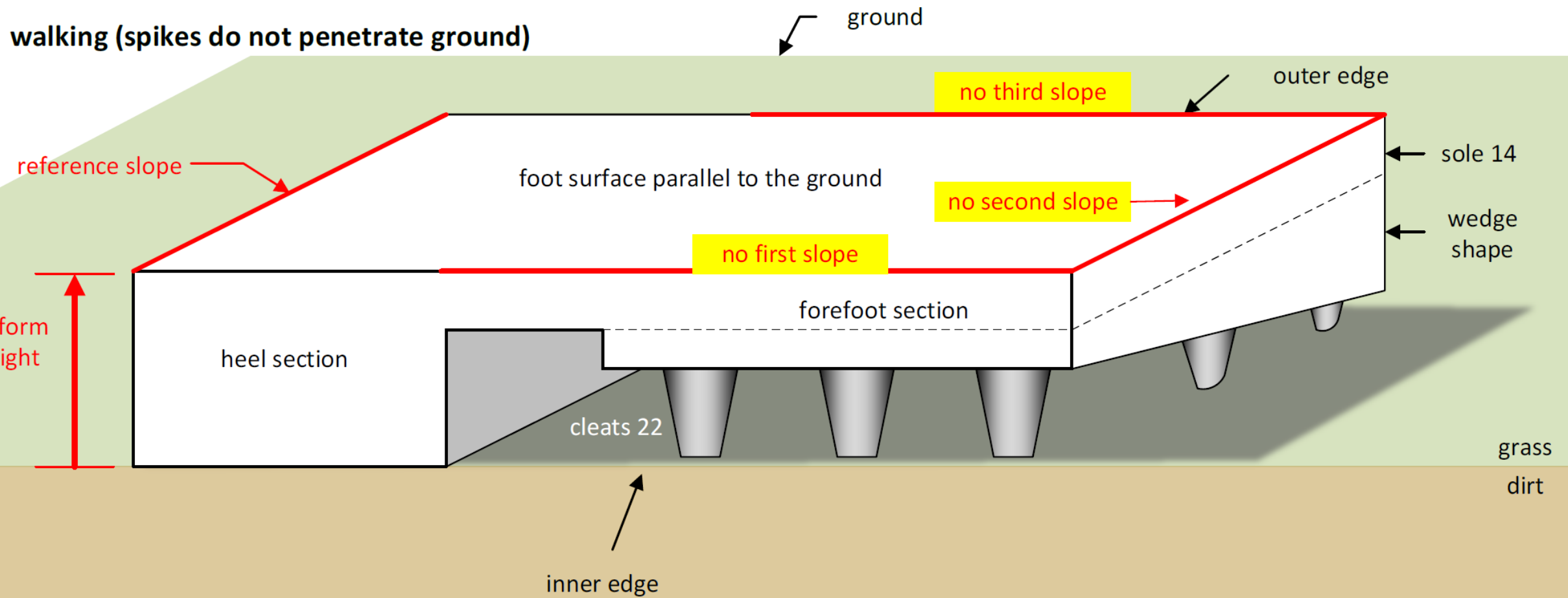
IPR2024-00636 ('786 Patent): No First, Second, or Third Slope – Primary Embodiment



IPR2024-00636: Paper 12, 60-62; EX2008 ¶286

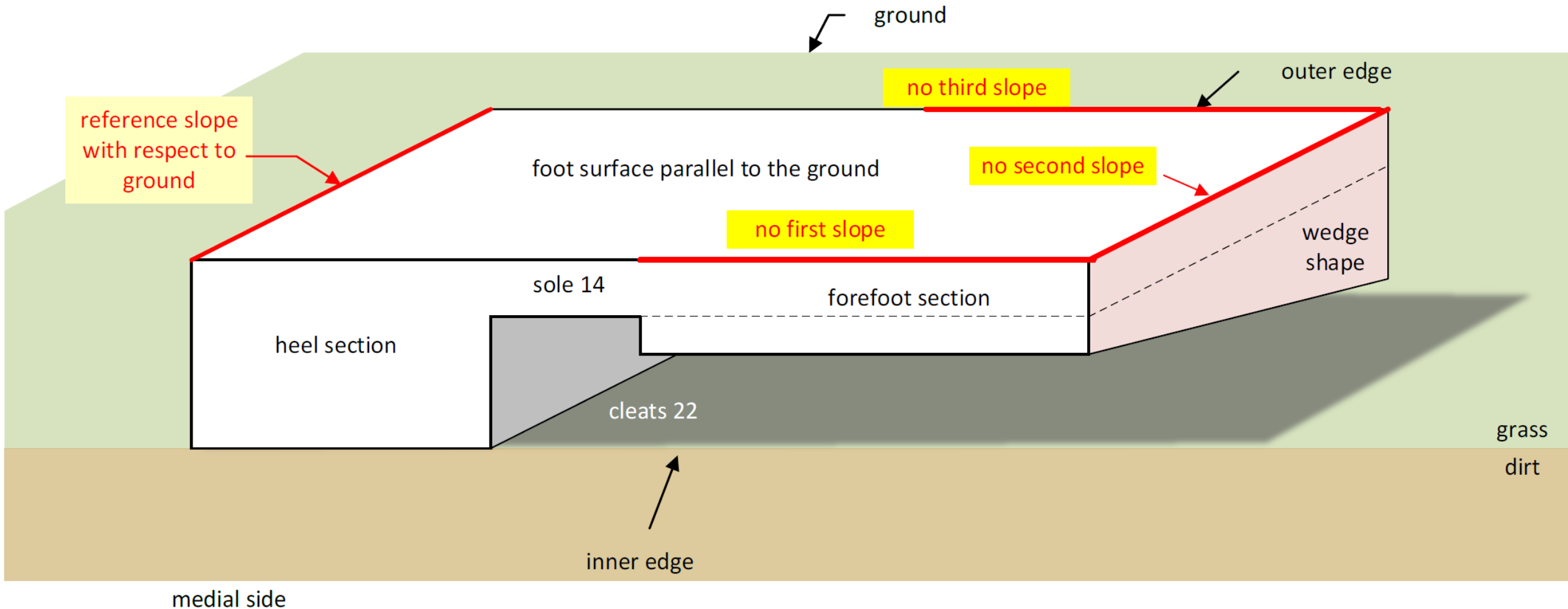


IPR2024-00636 ('786 Patent): No First, Second, or Third Slope – “What If” Embodiments



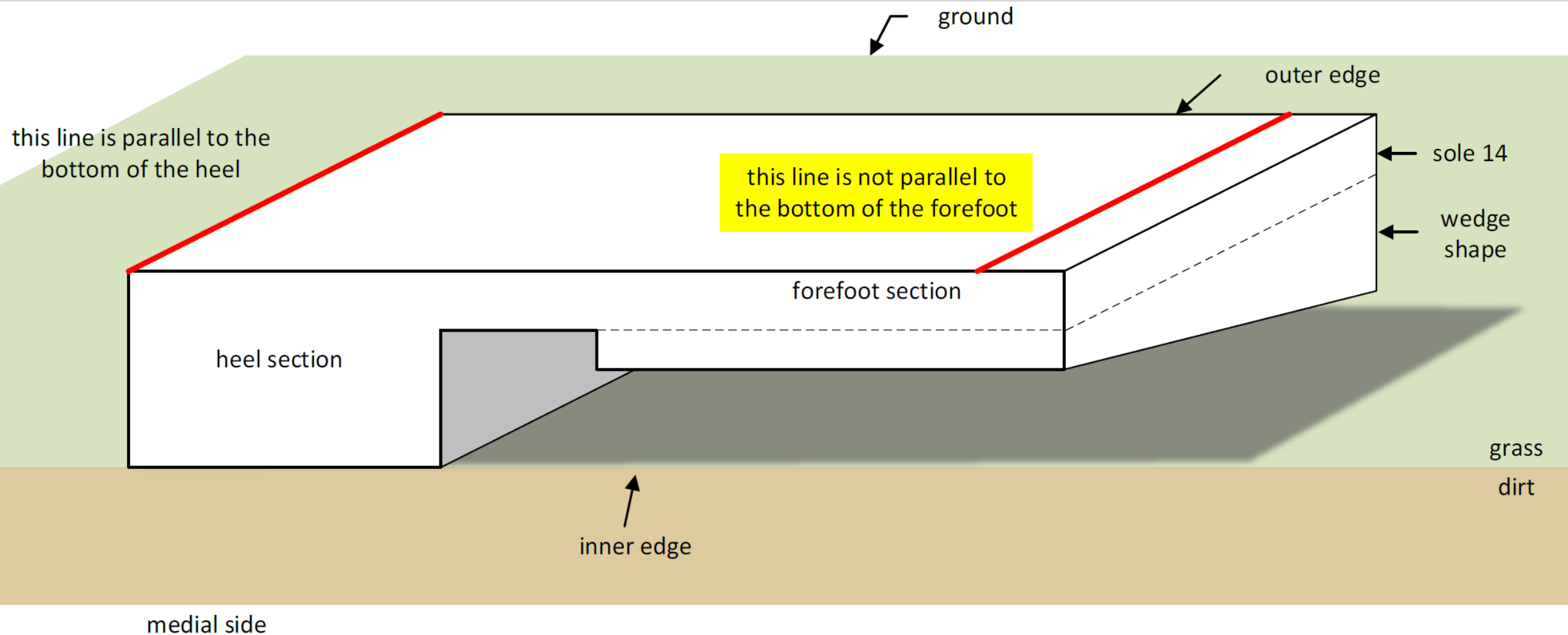
IPR2024-00636: Paper 12, 62-65; EX2008 ¶293

IPR2024-00636 ('786 Patent): No First, Second, or Third Slope – “What If” Embodiments



IPR2024-00636: Paper 12, 62-65; EX2008 ¶311

IPR2024-00636 ('786 Patent): No Reference Slope Parallel to the Bottom Surface



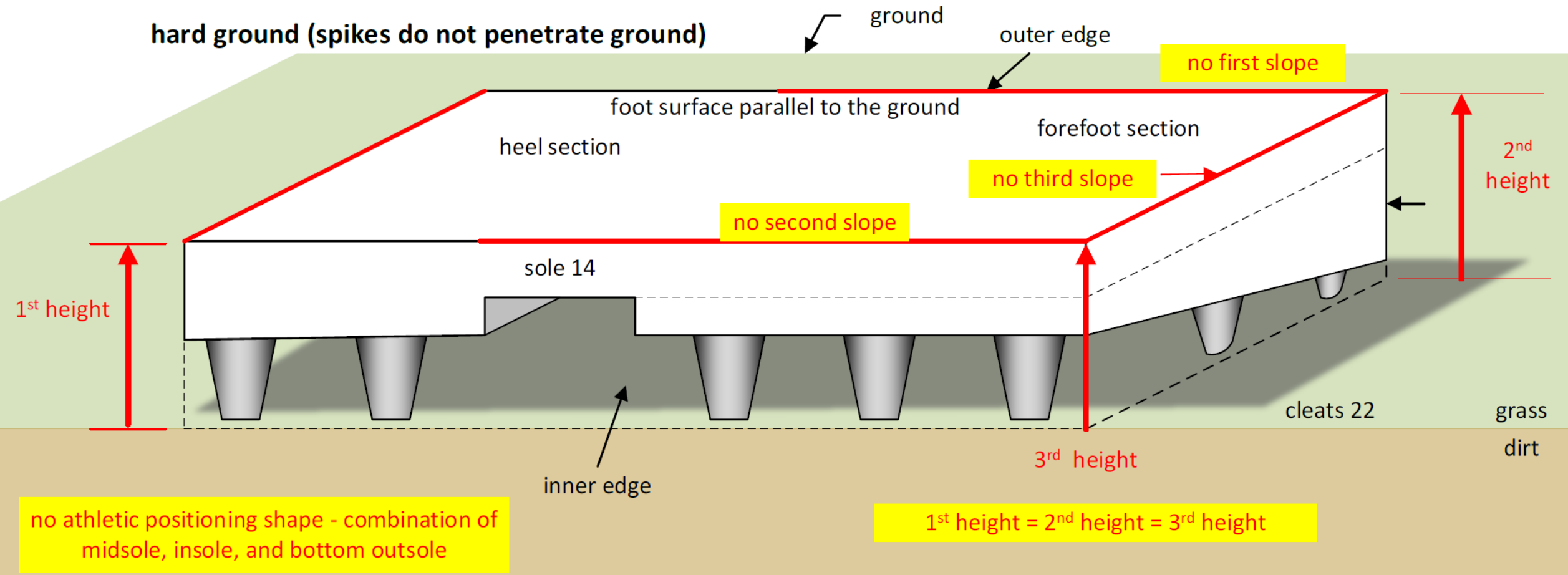
IPR2024-00636: Paper 12, 64; EX2008 ¶305

RUBIN GROUND

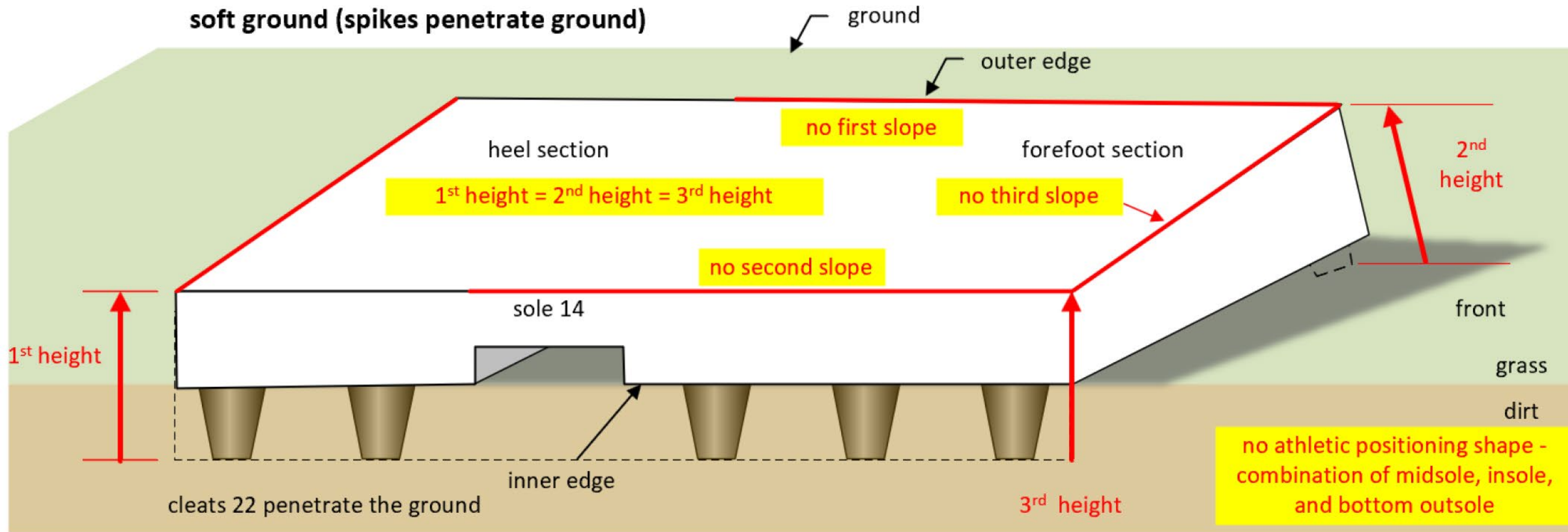
IPR2024-00637 ('291 Patent)



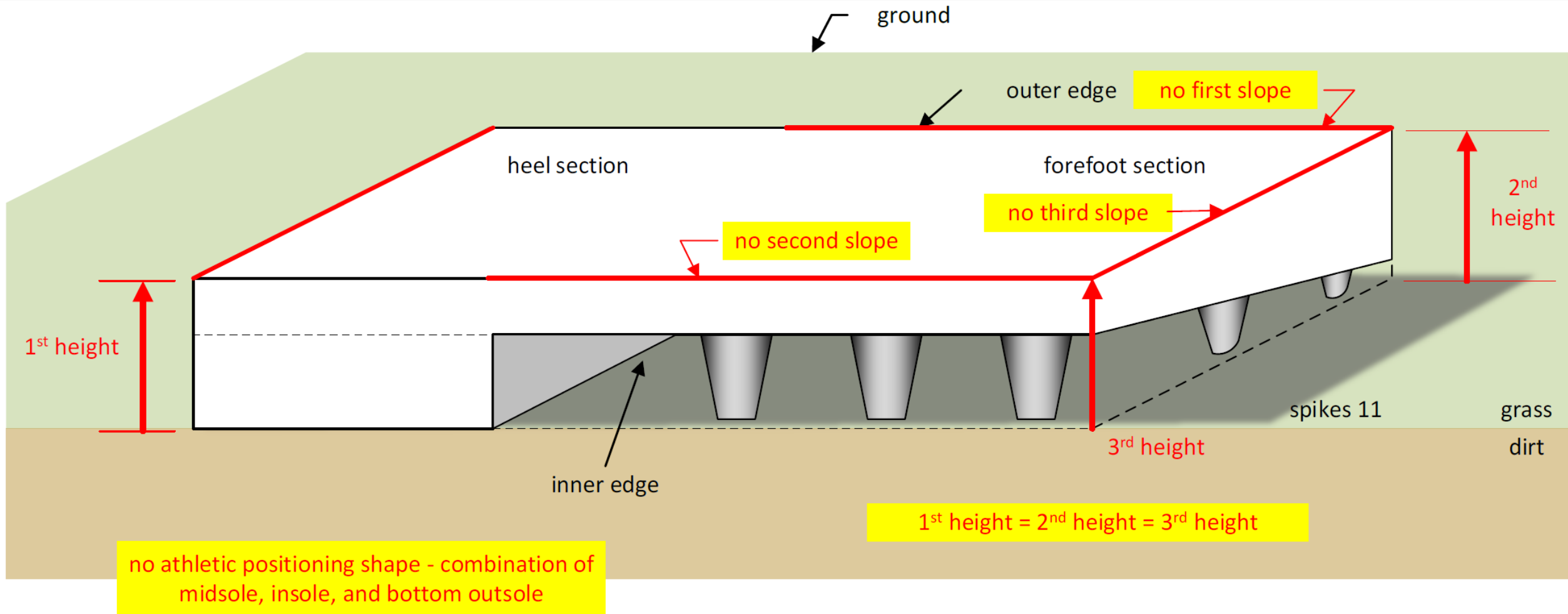
IPR2024-00637 ('291 Patent): No 2nd Height > 3rd Height – Primary Embodiment



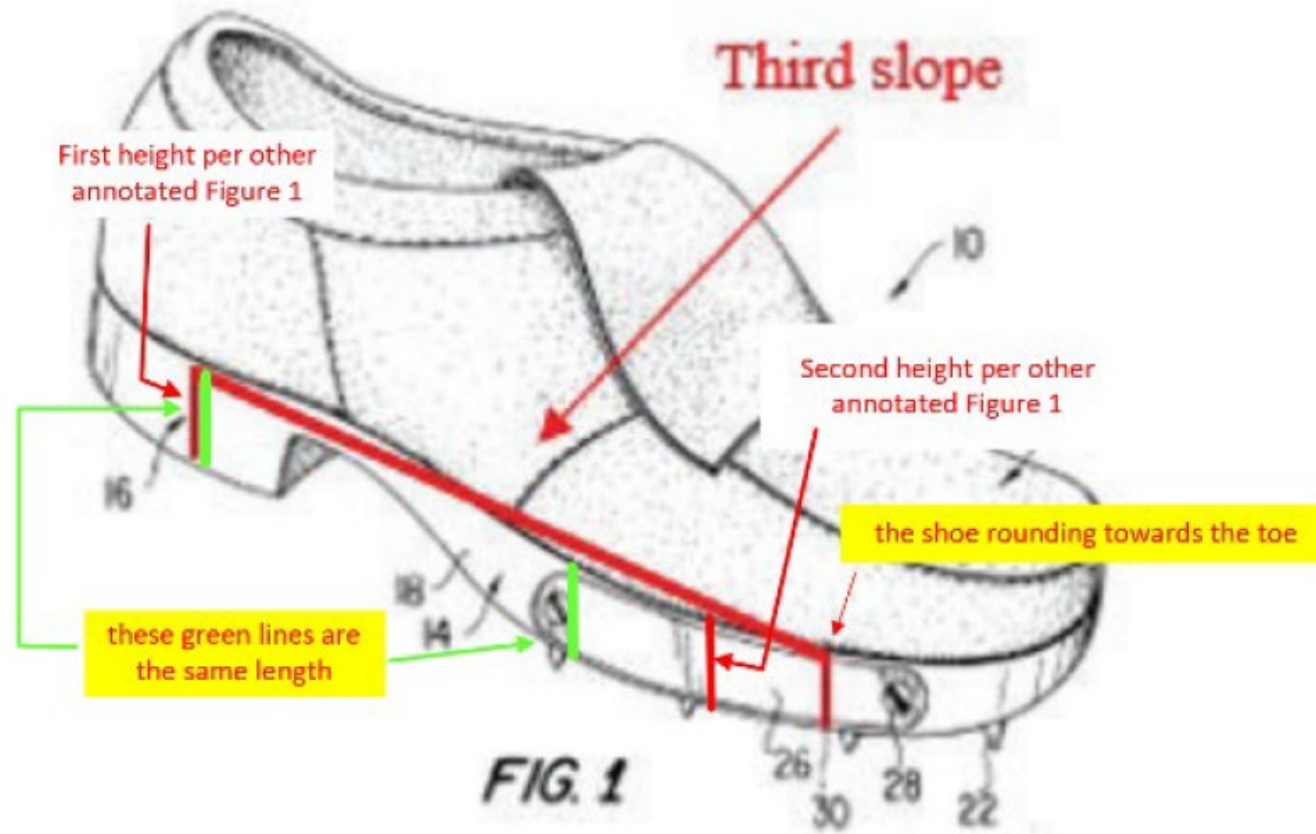
IPR2024-00637 ('291 Patent): No 2nd Height > 3rd Height – Primary Embodiment



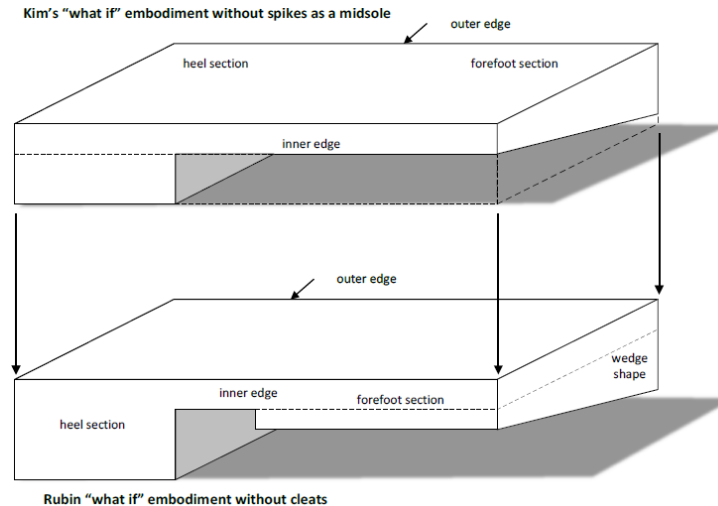
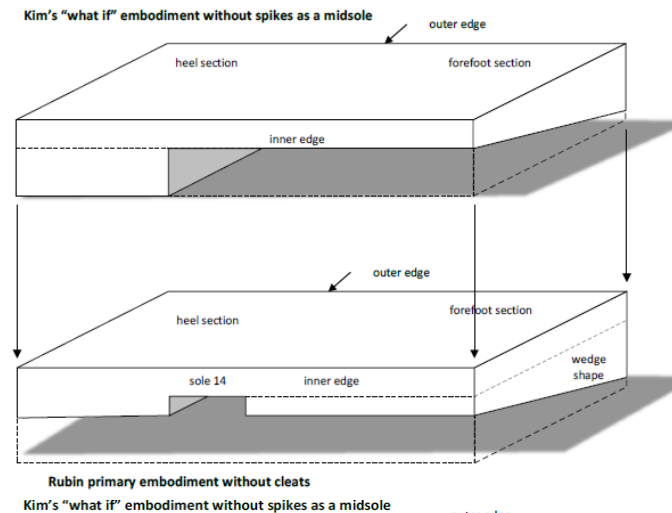
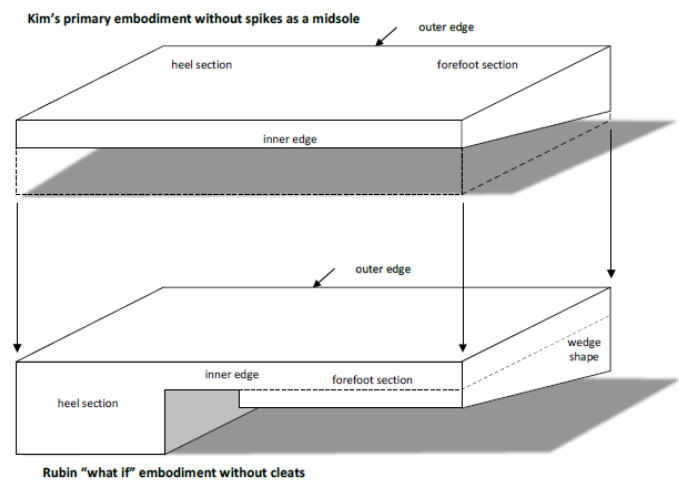
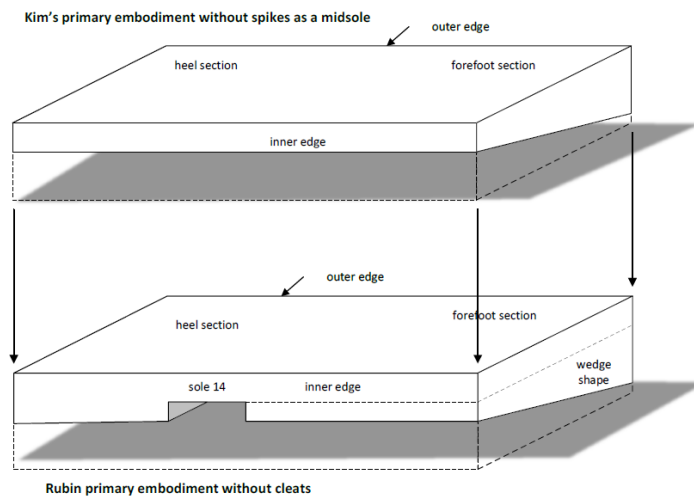
IPR2024-00637 ('291 Patent): No 2nd Height > 3rd Height – “What If” Embodiment



IPR2024-00637 ('291 Patent): No 1st Height > 2nd Height



IPR2024-00637 ('291 Patent): Petitioner Failed to Prove Motivation to Combine Rubin and Kim

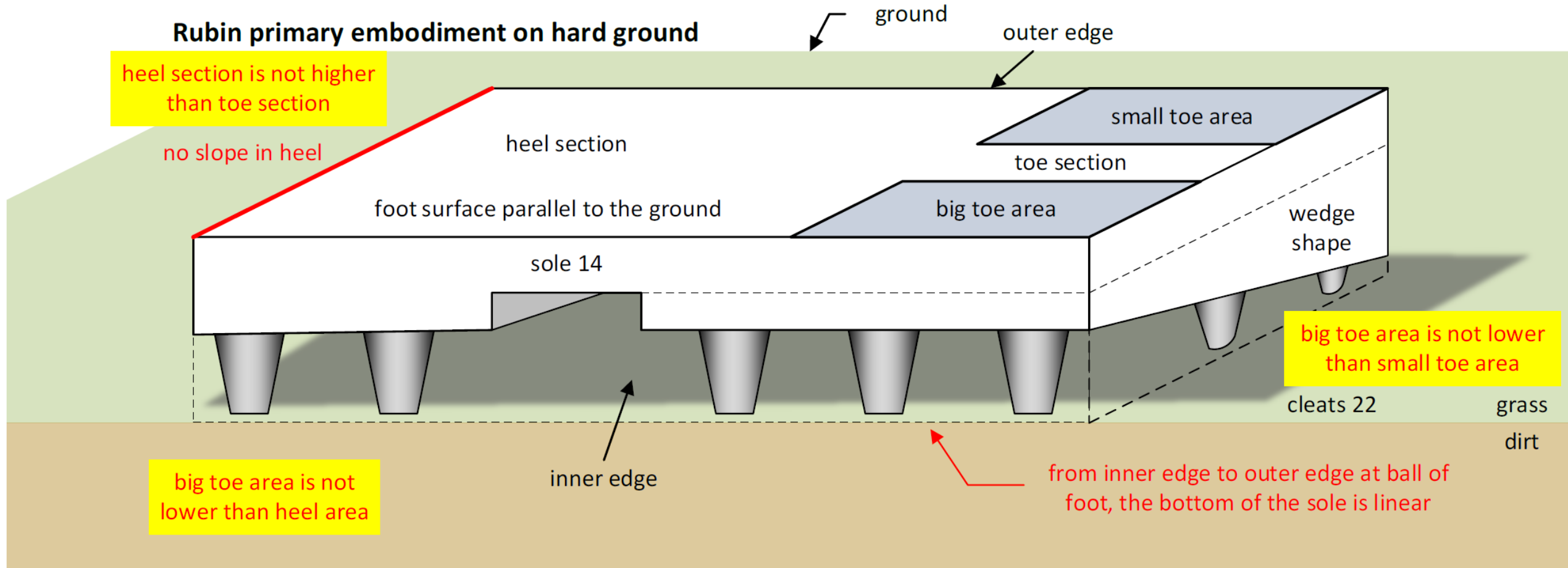


RUBIN GROUND

IPR2024-00638 ('760 Patent)

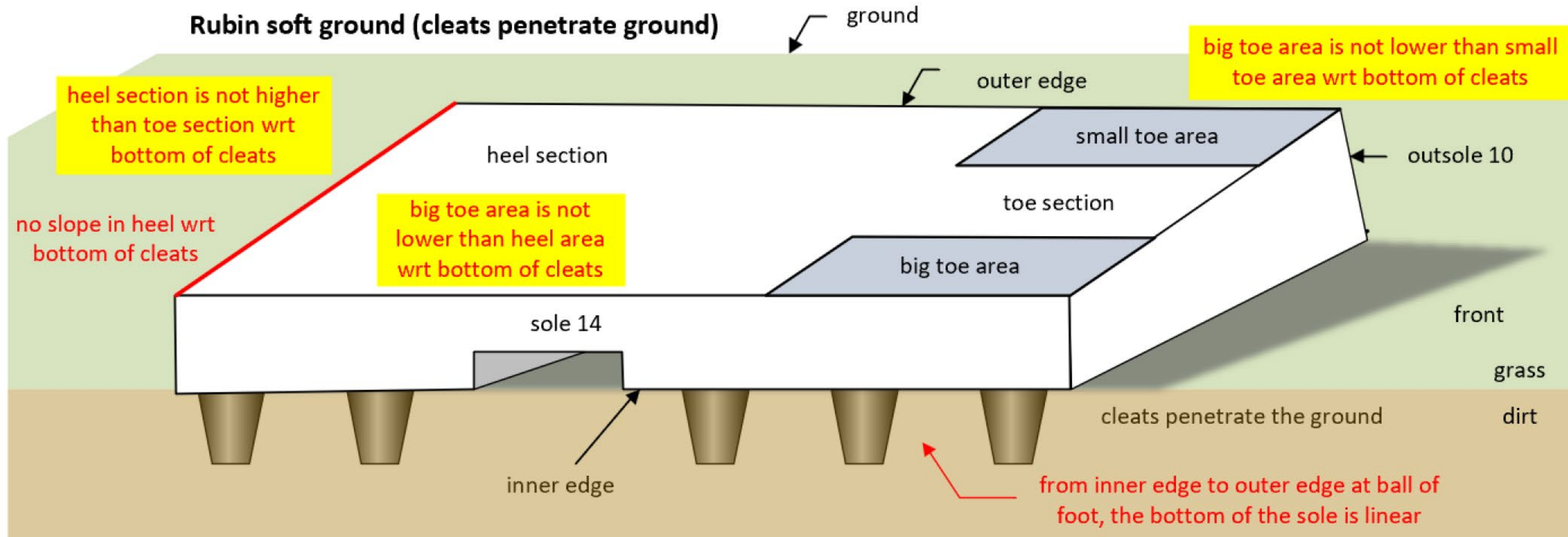


IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – Primary Embodiment

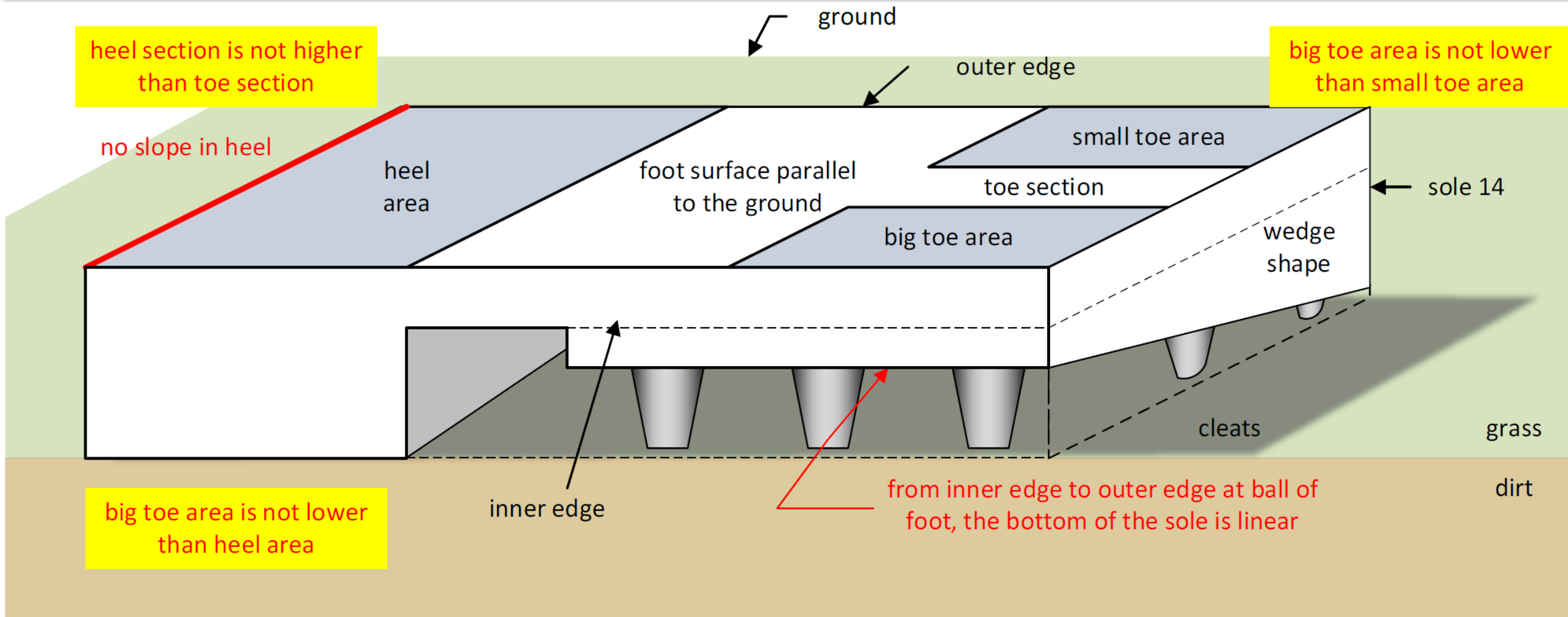


IPR2024-00638: Paper 12, 53-58; EX2008 ¶258

IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – Primary Embodiment

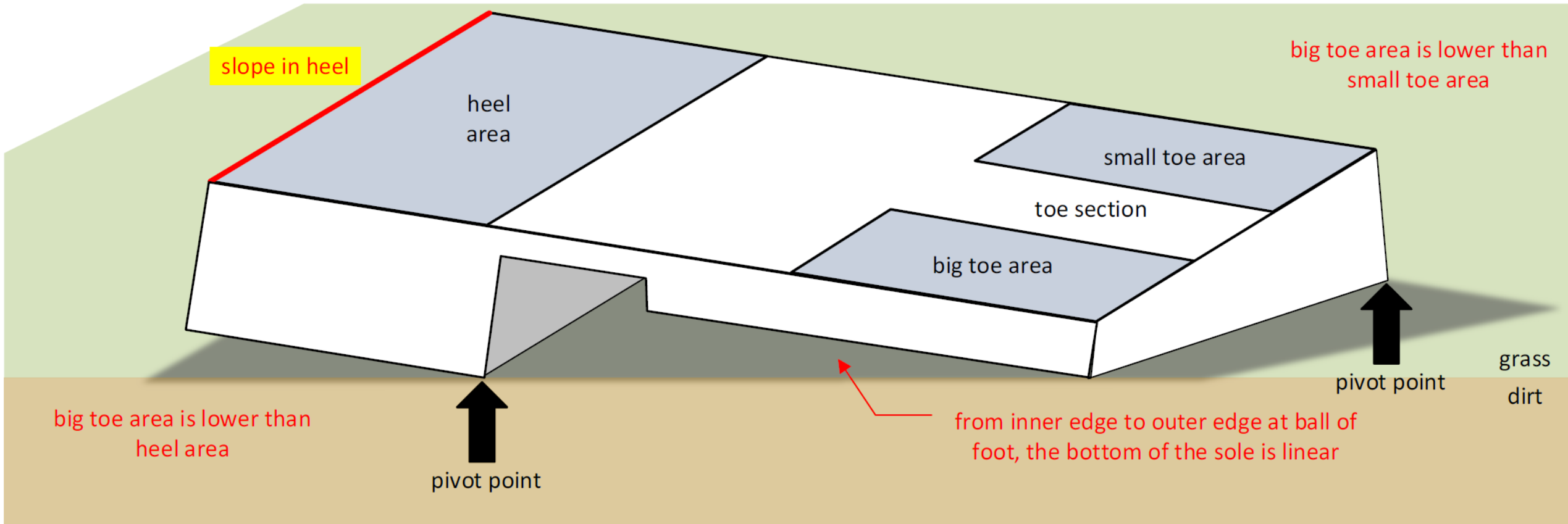


IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – “What If” Embodiments



IPR2024-00638 ('760 Patent): No Big Toe Area Lower than Heel Area – “What If” Embodiments

Rubin “what if” w/o spikes wrt 760



IPR2024-00638: Paper 12, 59-60; EX2008 ¶274

IPR2024-00638 ('760 Patent):
No “Pair of Shoes”

Claim 1: “A *pair of shoes* comprises: a *left foot shoe* . . . and a *right foot shoe*”:

United States Patent	[19]	[11]	3,789,523
Rubin		[45]	Feb. 5, 1974

[54] GOLF SHOE

[57]

ABSTRACT

FIGS. 2 and 4 illustrate the manner of use of the shoe 10. Specifically, in FIG. 4, the golfer will imbed cleats 22 in a golf playing surface 32 when addressing a golf ball. The rearwardmost foot of the golfer will be tilted inwardly because of the wedge-shaped sole 14 of shoe 10. This will tend to provide a more satisfactory weight distribution when hitting the ball. Furthermore, it has

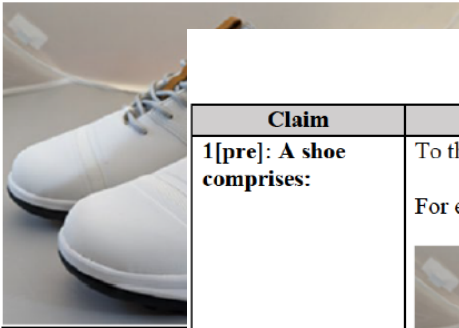


SECONDARY CONSIDERATIONS



Nexus

CLAIM CHART FOR U.S. PATENT NO. 11,064,760

Claim	Exemplary Evidence of Practice
1[pre]: A pair of shoes comprises:	To the extent the preamble is limiting, each of the Athalonz Products is a pair of shoes. For example, the Athalonz EnVe Golf Shoes (“EnVe”) are a pair of shoes.  To the extent Under Armour disputes literal practice for this element, the Athalonz Products practice this element under the doctrine of equivalents. That is, the Athalonz Products perform substantially the same function, in substantially the same way, to achieve substantially the same result.
1[a]: a left foot shoe including;	The Athalonz Product is a left foot shoe functionally equivalent to a left foot shoe as shown in the picture below. For example, the EnVe is a left foot shoe.

CLAIM CHART FOR U.S. PATENT NO. 10,674,786

Claim	Exemplary Evidence of Practice
1[pre]: An apparatus comprises:	To the extent the preamble is limiting, each of the Athalonz Products is an apparatus. For example, the Athalonz EnVe Golf Shoe (“EnVe”) is a shoe with an insole, which is an apparatus. 

CLAIM CHART FOR U.S. PATENT NO. 11,013,291

Claim	Exemplary Evidence of Practice
1[pre]: A shoe comprises:	To the extent the preamble is limiting, each of the Athalonz Products is a shoe. For example, the Athalonz EnVe Golf Shoe (“EnVe”) is a shoe.  To the extent Under Armour disputes literal practice for this element, the Athalonz Products practice this element under the doctrine of equivalents. That is, the Athalonz Products perform substantially the same function, in substantially the same way, to achieve substantially the same result.
1[a]: an upper section;	The Athalonz Products have an upper section. For example, the EnVe has an upper section, as shown below.

For example, the Athalonz Products practice this element under the doctrine of equivalents. That is, the Athalonz Products perform substantially the same function, in substantially the same way, to achieve substantially the same result.

For example, the EnVe has a heel platform section as shown below. The EnVe has a uniform height from an outer edge to an inner edge of the heel platform section.

For example, the EnVe has a heel platform section as shown below. The EnVe has a uniform height from an outer edge to an inner edge of the heel platform section.

IPR2024-00636: Paper 23, 25; EX2014; EX2008 ¶1322

IPR2024-00637: Paper 23, 25; EX2014; EX2008 ¶1341

IPR2024-00638: Paper 23, 26; EX2014; EX2008 ¶1285



Industry Praise and Unexpected Results

EX1028

SI

From the ground up

Athalonz, a new player in the golf shoe game, positions itself as a comfortable power source that is making believers of World Long Drive tour members.

[Mike Purkey](#) | Nov 21, 2019



After the drive, McDowell was amazed at the way the shoes connected him to the ground and said, "This is what I try to teach."

McDowell recommended the shoes to fellow long driver Ryan Steenberg, who has won two WLD events in the EnVe shoes. Pretty soon, other long drivers tried the shoes and now Athalonz is a popular choice among top WLD tour members, including top-ranked Kyle Berkshire. About 50 percent of all the WLD players wear EnVe shoes, Markison said.

IPR2024-00636: Paper 12, 73-75; Paper 23, 26-27; EX1028

IPR2024-00637: Paper 12, 84-85; Paper 23, 26-27; EX1028

IPR2024-00638: Paper 12, 73-74; Paper 23, 27-28; EX1028

Industry Praise and Unexpected Results

EX2013



Athalonz Golf Shoes: The Golf Shoe for Distance?



Can a pair of golf shoes help you add more distance and hit more fairways?

I know, it sounds too good to be true. But when you're done reading this I think you will believe in **Athalonz golf shoes**.

These shoes are used by long drive competitors, Bernhard Langer, and other professional golfers.

EX2008

329. At first, the other players did not believe him but, one by one, the other players starting wearing Athalonz golf shoes. By mid-way through the 2019 WLD season, about half of all WLD athletes were wearing Athalonz golf shoes. In addition, a majority of the top ten men and women were wearing Athalonz golf shoes, including the men's and women's 2019 WLD champions.

IPR2024-00636: Paper 12, 73-75; Paper 23, 26-27; EX2013; EX2008 ¶¶326-332

IPR2024-00637: Paper 12, 84-85; Paper 23, 26-27; EX2013; EX2008 ¶¶345-351

IPR2024-00638: Paper 12, 73-74; Paper 23, 27-28; EX2013; EX2008 ¶¶289-295



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Athletic Positioning Shoe TM

Presentation to Under Armour
August 22, 2013

AdMark Athletic Ventures Confidential Information

1

IPR2024-00636: EX2012, 1; Paper 12, 75-78; EX2008 ¶¶333-340; Paper 23, 27-28

IPR2024-00637: EX2012, 1; Paper 12, 85-88; EX2008 ¶¶352-358; Paper 23, 27-28

IPR2024-00638: EX2012, 1; Paper 12, 74-77; EX2008 ¶¶352-358; Paper 23, 28-29



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Creating A Solution

- We created a sole and/or an insole that provides:
 - a linear heel section that is higher than the toe section (i.e., downward slope from heel to toe); and
 - The inner edge of the ball of the foot and/or big toe portion of the toe section is lower than the outer edge of the toe section (i.e., inward slope from outside edge of front foot area to inside edge of front foot area);
- **Our Athletic Positioning Concept gives the athlete the optimal foot positioning for an optimal Athletic Start;**

AdMark Athletic Ventures Confidential Information

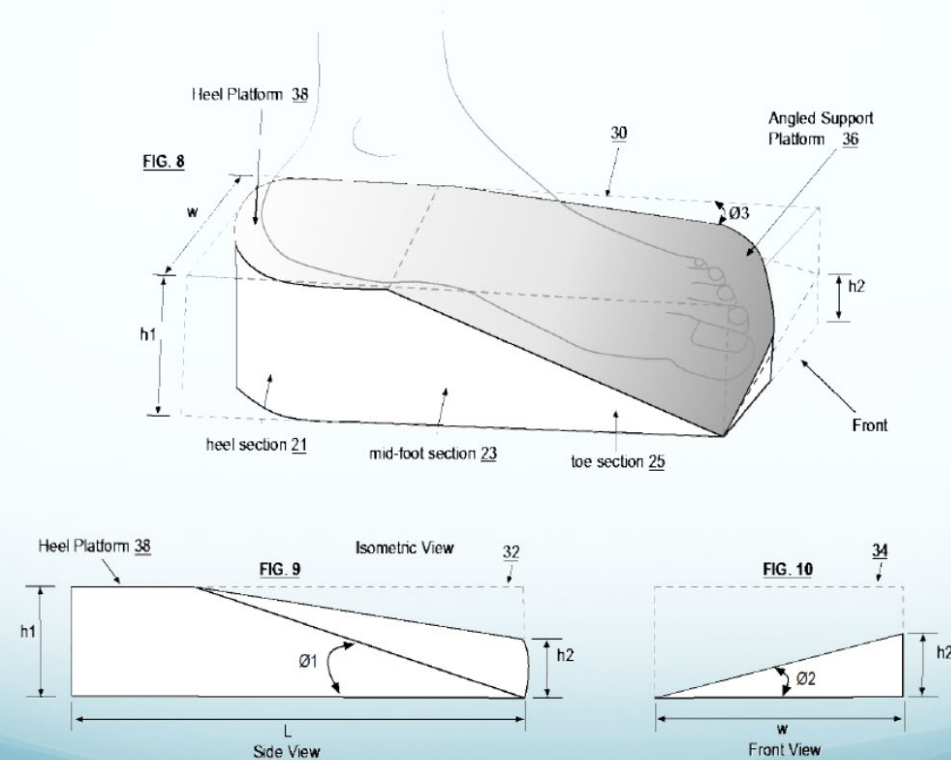
13

IPR2024-00636: EX2012, 13; Paper 12, 75-78; EX2008 ¶¶333-340; Paper 23, 27-28
IPR2024-00637: EX2012, 13; Paper 12, 85-88; EX2008 ¶¶352-358; Paper 23, 27-28
IPR2024-00638: EX2012, 13; Paper 12, 74-77; EX2008 ¶¶352-358; Paper 23, 28-29



Copying

Athletic Positioning with Heel Platform



AdMark Athletic Ventures Confidential Information

54

IPR2024-00636: EX2012, 54; Paper 12, 75-78; EX2008 ¶¶333-340; Paper 23, 27-28

IPR2024-00637: EX2012, 54; Paper 12, 85-88; EX2008 ¶¶352-358; Paper 23, 27-28

IPR2024-00638: EX2012, 54; Paper 12, 74-77; EX2008 ¶¶352-358; Paper 23, 28-29

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337. At the meeting, I discussed with Under Armour various options for acquiring or licensing Athalonz's technology. EX2012 at 47-49.

338. After the meeting, in 2014, I sent Under Armour a physical prototype of the Athalonz shoes, which they told me they would be testing internally.

339. Under Armour never purchased or licensed the Athalonz patents or technology. Instead, Under Armour began releasing its own shoes that implemented the athletic positioning technology claimed in the '786 patent. These shoes were all released after I presented the slides above to Under Armour in 2013.

IPR2024-00636: EX2012, 1; Paper 12, 75-78; EX2008 ¶¶333-340; Paper 23, 27-28

IPR2024-00637: EX2012, 1; Paper 12, 85-88; EX2008 ¶¶352-358; Paper 23, 27-28

IPR2024-00638: EX2012, 1; Paper 12, 74-77; EX2008 ¶¶352-358; Paper 23, 28-29



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**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ATHALONZ, LLC,

Plaintiff,

v.

UNDER ARMOUR, INC.,

Defendant.

§
§
§
§
§
§
§
§
§

Case No. 2:23-cv-0193-JRG

DEMAND FOR JURY TRIAL

PLAINTIFF ATHALONZ, LLC'S FIRST AMENDED COMPLAINT

**B. Under Armour Has Known About Athalonz's Patented Technology And Its
Infringement Of The Asserted Patents**

33. Under Armour, including senior employees and executives, has known about Athalonz's patented technology since at least 2013. For example, on information and belief, Kevin

C. Under Armour's Infringement of Athalonz's Intellectual Property

35. Upon information and belief, Under Armour has infringed and continues to infringe one or more claims of the Asserted Patents by, at minimum, making, using, offering for sale, and selling infringing products in the United States and in this District.

36. The accused products include, without limitation, athletic shoes provided by Under Armour, such as the HOVR Forge RC Spikeless Golf Shoe, Unisex Curry HOVR Splash Basketball Shoe, Unisex Curry 4 FloTro Basketball Shoe, Harper 7 Low Elite TPU Baseball Cleat, and the HOVR Drive 2 Spiked Golf Shoe (collectively, the "Accused Products"). Each of these shoes practice at least one claim of each Asserted Patent.

IPR2024-00636: Paper 23, 27-28; EX1031

IPR2024-00637: Paper 23, 27-28; EX1031

IPR2024-00638: Paper 23, 28-29; EX1031



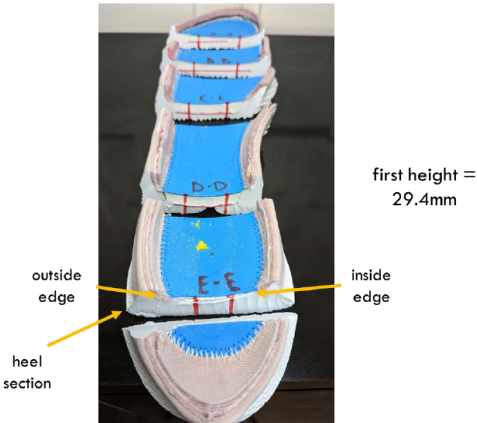
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Under Armour Infringing Shoes (EX1025)

1[f]: a first height at an inside edge and at an outside edge of the shoe along a heel section of the shoe,

The Accused Products have a first height at an inside edge and at an outside edge of the shoe along a heel section of the shoe.

For example, the Curry 4 FloTro has a first height of 29.4mm at an inside edge and at an outside edge of the shoe along a heel section of the shoe, as shown below.



The other Accused Products also have a first height at an inside edge and at an outside edge of the shoe along a heel section of the shoe. Athalonz incorporates by reference the documents cited above for each of the Accused Products.

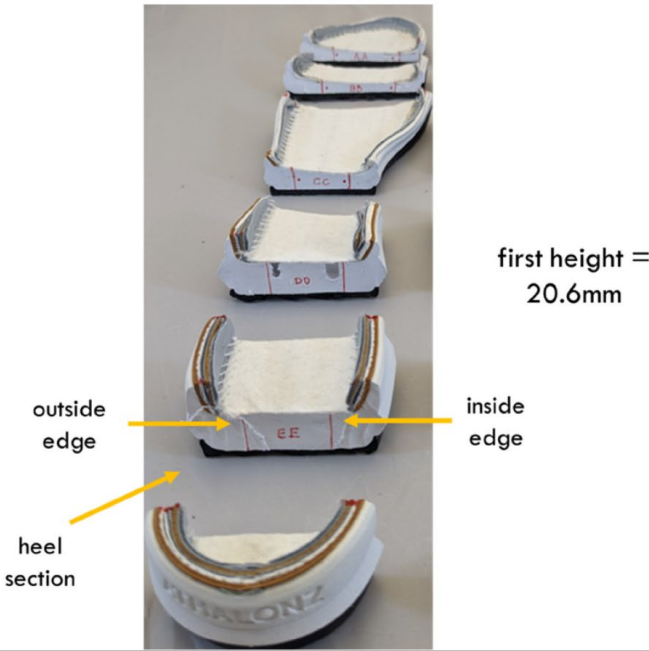
Accused Product	First Height (EE)
Charged Curry	20.1
Curry 10	24.5
Curry 11	29.9

Athalonz Patent-Practicing Shoes (EX1036)

Claim
and at an outside edge of the shoe along a heel section of the shoe,

Exemplary Evidence of Practice

For example, the EnVe has a first height of 20.6mm at an inside edge and at an outside edge of the shoe along a heel section of the shoe, as shown below.



IPR2024-00636: Paper 23, 27-28; EX1025, 54; EX1036, 9
IPR2024-00637: Paper 23, 27-28; EX1025, 54; EX1036, 9
IPR2024-00638: Paper 23, 28-29; EX1025, 54; EX1036, 9



Copying

Evidence of access and substantial similarity is evidence of copying. Medtronic's argument is tantamount to requiring that copying can be proven only by direct evidence “such as photos of patented features or disassembly of products,” *Liqwd*, 941 F.3d at 1137, rather than circumstantial evidence such as access and similarity. Our case law has never drawn any such distinction, nor would such a distinction be consistent with basic principles of evidence and inference. Circumstantial evidence is just that—evidence. It establishes that a given fact is more likely to be true than one would otherwise believe in the absence of the evidence. Nor is circumstantial evidence second-class to direct evidence: “Circumstantial evidence is not only sufficient, but may also be more certain, satisfying and persuasive than direct evidence.” *Michalic v. Cleveland Tankers, Inc.*, 364 U.S. 325, 330(1960) (citation omitted).

Medtronic, Inc. v. Teleflex Innovations S.a.r.l., 70 F.4th 1331, 1340 (Fed. Cir. 2023) (emphasis added)

IPR2024-00636: Paper 23, 27-28

IPR2024-00637: Paper 23, 27-28

IPR2024-00638: Paper 23, 28-29



EXPERT QUALIFICATIONS

Person of Ordinary Skill in the Art

- 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

- At least five years' experience designing or developing athletic shoes

IPR2024-00636: Paper 1, 15; EX2008 ¶140

IPR2024-00637: Paper 1, 11; EX2008 ¶140

IPR2024-00638: Paper 1, 15; EX2008 ¶140



Mr. Markison is a Qualified Expert

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Timothy W. Markison

Founding Partner of Garlick & Markison
Founder & CEO of Athalonz, LLC
Co-Founder & CEO of MPP, Inc.

FIELDS OF SPECIALIZATION

Legal

- **Patent application preparation and prosecution:** Covering a wide range of technologies as listed below
- **Patent value generation:** Support clients in building a valuable patent portfolio and support clients in licensing, selling, and/or enforcing patents of their portfolios

Technology

- **Physics of footwear:** How forces traversing through footwear affect human movement
- **Physics of body impact:** How impact forces can be diffused to reduce risk of injury
- **Monitoring athletic movement in concert with physics of footwear:** Monitoring forces through footwear directly corresponds to athletic movement
- **Wireless communications:** new hardware, software, and/or protocols for Bluetooth, wi-fi, cellular, broadcast, point-to-point, and RFID (Radio Frequency Identification)
- **Database system:** supporting new hardware design and new software architecture
- **Capacitive touch sensing:** for touch screen applications, bio-medical sensing applications, and bio-medical stimulation
- **Wired communication:** using low analog voltage signaling
- **Erasure encoding dispersed storage:** for safely and securely storing Big Data
- **Quantum computing:** new quantum mechanics approach to qubits and supporting circuitry thereof
- **Artificial Intelligence based system for code enhancement**
- **Intra & Inter wireless communications for ICs** to substantially reduce power consumption of ICs due to digital data conveyances
- **Battery technologies** regarding charging, discharging, and modeling of batteries

Business

- Consulting regarding the business value of patents
- **Strategic patent portfolio development:** regarding the number of inventions to patent protect, when, where, and how to protect inventions, the business objectives of patent portfolio, and the business justification for developing patent portfolio
- **Inventing independently,** on behalf of G&M clients, on behalf of Athalonz, on behalf of MPP, or on behalf of MPP clients

DEGREES

- B.S.E.E. Electrical Engineering & Computer Design from Illinois Institute of Technology, 1984
- Juris Doctorate from Loyola University Chicago School of Law, 1993

PROFESSIONAL MEMBERSHIPS

- Member of USPTO patent bar since 1989
- Member of the Illinois State bar since 1993
- Licensed to practice in the Federal District Courts of Illinois since 1993
- Member of IEEE

PROFESSIONAL POSITIONS

Current Positions

2000 – Present Founding Partner of Garlick & Markison (G&M)

Responsibilities include:

- Managing the preparation and prosecution of patent applications by other attorneys agents of G&M on behalf of its clients
- Managing quality program to maintain a firm-wide issuance rate of over ninety percent and a maintaining an office action to allowance ratio of two or less
- Personally preparing and prosecuting thousands of patent applications for G&M clients
- Creating patent strategies that resulted in billions of dollar in value for clients (spun out patent strategy in 2023, when MPP was launched)
- Supporting clients in licensing, selling, and/or enforcing patents of their portfolios
- Inventing with, and/or on behalf of, clients to expand their respective patent portfolio

2011 – Present Founder & CEO of Athalonz, LLC

Responsibilities include:

- Overseeing business operations
- Leading research & development of footwear that leverages the principles of physics to improve human movement and athletic performance
- Leading the design of physics footwear
- Managing patent protection of physics footwear innovations

UNDER ARMOUR, INC. v. ATHALONZ, LLC
IPR2024-00636
ATHALONZ EXHIBIT 2009
Page 1 of 47

Timothy W. Markison

UNDER ARMOUR, INC. v. ATHALONZ, LLC
IPR2024-00636
ATHALONZ EXHIBIT 2009
Page 2 of 47

IPR2024-00636: EX2009; Paper 23, 3-6; Paper 12, 23-24

IPR2024-00637: EX2009; Paper 23, 3-6; Paper 12, 23-24

IPR2024-00638: EX2009; Paper 23, 2-5; Paper 12, 23-24

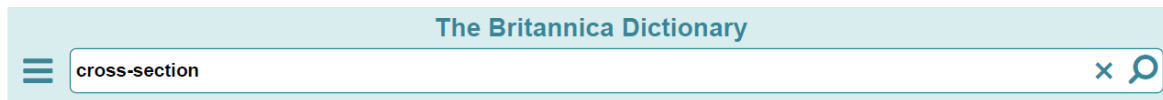


MOTIONS TO EXCLUDE

Exhibits 1032 and 1033

3/18/25, 4:19 PM

Cross section Definition & Meaning | Britannica Dictionary



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

[count]

[\[+\] Example sentences](#)

[noncount]

[\[+\] Example sentences](#)

2 [count] : a small group that includes examples of the different types of people or things in a larger group

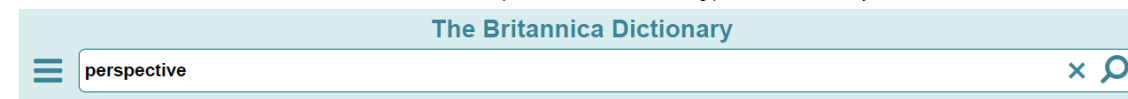
[\[+\] Example sentences](#)

— cross-sectional /ˈkrɒsˈsekʃənəl/ *adjective*

[\[+\] Example sentences](#)

4/7/25, 1:29 PM

Perspective Definition & Meaning | Britannica Dictionary



perspective

/pəˈspektɪv/

noun

plural perspectives

1 : a way of thinking about and understanding something (such as a particular issue or life in general)

[count]

[\[+\] Example sentences](#)

— often + *on*

[\[+\] Example sentences](#)

[noncount]

[\[+\] Example sentences](#)

2 [noncount]

a : a condition in which a person knows which things are important and does not worry or think about unimportant things

[\[+\] Example sentences](#)

— often used after *in* or *into*

[\[+\] Example sentences](#)

b : the ability to understand which things are truly important and which things are not

[\[+\] Example sentences](#)

3 [count] : the angle or direction that a person uses to look at an object

[\[+\] Example sentences](#)

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

[\[+\] Example sentences](#)



Exhibit 1034

PGA tour official stats	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2024
total driving	1998	1998	1998	1998	1998	1998	1998
driving distance	267.8	272.6	259.4	262.3	251.5	266.3	268.4
longest drives	341	287	303	284	271	273	333
driving accuracy	76.72	76.79	70.24	84.52	96.443	89.29	84.35
GIR	68.06	63.89	69.44	59.26	61.11	58.33	75.44
Scrambling	65.22	42.31	66.67	47.73	35.71	53.33	61.9
Putting Average	1.908	1.739	1.76	1.703	1.955	1.905	1.756
Scoring avg (actual)	71.75	74	69.33	72.67	76	74.5	69.74
Birdie avg	2.25	3.5	3.5	3.33	1	1	4.17

	Pre-Athlonz Shoe Avg. (Cols. B-D)	Post-Athlonz Shoe Avg. (Cols. E-H)	
total driving	1998	1998	Total Driving is computed by totaling a player's rank in both driving distance and driving accuracy
driving distance	266.60	262.125	The average number of yards per measured drive
longest drives	310.33	290.25	For all drives measured with a laser, this is the longest drive for the entire year
driving accuracy	74.58	88.65	The percentage of time a tee shot comes to rest in the fairway (regardless of club)
GIR	67.13	63.54	The percent of time a player was able to hit the green in regulation (greens hit in regulation/holes played)
Scrambling	58.07	49.67	The percent of time a player misses the green in regulation, but still makes par or better
Putting Average	1.80	1.83	The average number of putts per green in regulation
Scoring avg (actual)	71.69	73.23	The average number of strokes per completed round
Birdie avg	3.08	2.38	The average number of birdies made per round played

