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(54) **Composite shoe**

Umwandelbarer Schuh

Chaussure composite

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WO-A-2004/103105 DE-U1- 20 016 364
US-A1- 2006 101 671

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Description

BACKGROUND OF THE INVENTION

1. Technical Field

[0001] The present invention relates to shoes and, more particularly, to a composite shoe composed of two shoe bodies coupled together so as to have different applications.

2. Description of Related Art

[0002] "To choose proper shoes for specific work, sports, and occasions" may well be a concept preached by shoe companies to promote shoes, but it has also been deeply rooted in consumers' minds so that people tend to prepare different shoes for different events. During a business trip, for example, a formal pair of shoes are required for meeting clients or attending formal gatherings, but casual footwear is also needed for private or leisure time. As a result, luggage for a single business trip becomes heavier because of the different pairs of shoes. Besides, it is common practice in many families to take off shoes before entering the residence and walk barefoot or in slippers indoors. While this is helpful in maintaining household cleanliness, it is inconvenient for visitors because, when it is required to walk inside the house barefoot or only with socks on, the visitors may be concerned about their foot odor being offensive to others. On the other hand, if visitors are asked to wear indoor slippers, the slippers will inevitably be worn and shared by many different people so as to cause hygiene problems.

BRIEF SUMMARY OF THE INVENTION

[0003] In view of the aforesaid problems associated with conventional shoes, the present invention provides a composite shoe that serves as a formal shoe as well as a casual shoe, thereby solving the problem of carrying several pairs of shoes on a business trip.

A composite shoe from the prior art is disclosed for instance in WO 2004/103105. The composite shoe is also interchangeable between an indoor mode and an outdoor mode so as to eliminate the inconvenience of changing between indoor and outdoor shoes and the aforementioned hygiene problems.

[0004] The composite shoe according to the present invention includes a first shoe body and a second shoe body detachably coupled together as disclosed in claim 1.

[0005] The composite shoe with the first and the second shoe bodies coupled together serves as a common outdoor shoe. When moving indoors from an outdoor environment, a wearer of the composite shoe only has to disengage the coupling elements of the first and the second shoe bodies to remove the second shoe body, which

is already worn by the wearer, directly from inside the first shoe body so that the second shoe body turns into an indoor slipper. For the first and the second shoe bodies to serve respectively as outdoor and indoor shoes, the first shoe body should be more rigid and more impact-resistant than the second shoe body while the second shoe body is softer and more elastic than the first shoe body.

[0006] The composite shoe according to the present invention has several modes of use. For example, when riding a long-distance bus or a plane, a wearer may take off the first shoe body (i.e., the outer shoe) and wear only the second shoe body (i.e., the inner shoe) to alleviate foot discomfort and prevent poor blood circulation. In addition, the first shoe body, which is an open-heeled shoe, can be used independently as a casual shoe, a slipper, or a sandal for outdoor applications. Hence, the composite shoe according to the present invention changes its modes of use easily for indoor and outdoor applications, thus not only reducing the number of shoes to be carried on a business trip, but also eliminating the hygiene problems associated with walking barefoot or changing into indoor slippers. Furthermore, the soft second shoe body can be removed completely from inside the first shoe body for thorough cleaning, thereby solving the long-standing hygiene and odor problems caused by difficulty in cleaning the inside of a conventional shoe.

[0007] In the composite shoe according to the present invention, the coupling elements of the first and the second shoe bodies are mutually engageable and disengageable fasteners or hook-and-loop fasteners.

[0008] In the composite shoe according to the present invention, the outer bottom surface of the sole of the second shoe body is preferably an anti-slip surface, and the second shoe body preferably has an elastic tongue that moderately covers the back of a wearer's foot to facilitate walking.

[0009] In the composite shoe according to the present invention, the open-heeled portion of the first shoe body preferably includes a stop flange extending upward from the surface of the insole of the first shoe body for stopping the second shoe body.

[0010] At least one embodiment is provided hereinafter to illustrate the preferred implementation mode and features of the present invention.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0011]

FIG. 1 is an assembled perspective view of a composite shoe according to a first embodiment of the present invention;

FIG. 2 is an exploded perspective view of the composite shoe according to the first embodiment of the present invention;

FIG. 3 is an assembled sectional front view of the

composite shoe according to the first embodiment of the present invention, showing application of the composite shoe in an assembled state;

FIG. 4 is an assembled partial view of the composite shoe according to the first embodiment of the present invention, showing how a first shoe body and a second shoe body are coupled together by coupling elements;

FIG. 5 is a bottom view of the second shoe body of the composite shoe according to the first embodiment of the present invention;

FIG. 6 illustrates sole application of the second shoe body of the composite shoe according to the first embodiment of the present invention;

FIG. 7 illustrates sole application of the first shoe body of the composite shoe according to the first embodiment of the present invention;

FIG. 8 is an assembled perspective view of a composite shoe according to a second embodiment of the present invention;

FIG. 9 is an assembled partial view of the composite shoe according to the second embodiment of the present invention, showing how a first shoe body and a second shoe body are coupled together by coupling elements; and

FIG. 10 is a schematic partial view of the coupling element provided at the first shoe body of the composite shoe according to the second embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0012] Referring to FIGS. 1 and 2, a composite shoe 1 according to a first preferred embodiment of the present invention includes a first shoe body 10 and a second shoe body 20. The first shoe body 10 is a close-toed and open-heeled shoe, meaning that the first shoe body 10 lacks a quarter for covering a wearer's heel, as is the case with a slipper, or the first shoe body 10 has a quarter whose height is insufficient to cover the wearer's heel. In this preferred embodiment, the first shoe body 10 has an open-heeled portion 11 that includes a stop flange 13 extending upward from a surface 12 of an insole of the first shoe body 10. While the stop flange 13 can be regarded as a quarter of the first shoe body 10 or as the open-heeled portion 11 itself, the stop flange 13 is not high enough to cover a human heel. Additionally, the stop flange 13 of the first shoe body 10 has an outer surface provided with at least one coupling element 14. The coupling element 14 can be any element or device capable of achieving the intended function and commonly used by a person of ordinary skill in the art, such as a fastener or a hook-and-loop fastener. In this preferred embodiment, the coupling element 14 is a fastener.

[0013] The second shoe body 20 is a close-toed and close-heeled shoe, and a close-heeled portion 21 of the second shoe body 20 has an outer surface provided with at least one coupling element 22. In this preferred em-

bodiment, the coupling element 22 is a fastener provided at a distal end of a flap 23 extending outward from the close-heeled portion 21 of the second shoe body 20. The at least one coupling element 22 can be coupled with the at least one coupling element 14 at the open-heeled portion 11 of the first shoe body 10 so that the second shoe body 20 is received in and detachably coupled with the first shoe body 10. When the second shoe body 20 is received in and coupled with the first shoe body 10, as shown in FIGS. 1, 3, and 4, an outer bottom surface 24 of a sole of the second shoe body 20 is disposed on the surface 12 of the insole of the first shoe body 10, and a close-toed portion 25 of the second shoe body 20 is inserted in a close-toed portion 15 of the first shoe body 10 while the close-heeled portion 21 of the second shoe body 20 is disposed at the open-heeled portion 11 of the first shoe body 10. In this preferred embodiment, the stop flange 13 at the open-heeled portion 11 of the first shoe body 10 moderately prevents the close-heeled portion 21 of the second shoe body 20 from moving out of the open-heeled portion 11 of the first shoe body 10. Therefore, when the coupling elements 14 and 22 of the first and the second shoe bodies 10 and 20 are fastened together, as shown in FIG. 4, the first and the second shoe bodies 10 and 20 are securely coupled to each other for daily use. In this preferred embodiment, the first shoe body 10 is provided with a pair of the coupling elements 14 while the second shoe body 20 is provided with a pair of the coupling elements 22, as shown in FIG. 5.

[0014] The composite shoe 1 according to the first preferred embodiment of the present invention provides the following modes of use. When the first and the second shoe bodies 10 and 20 are coupled together, the composite shoe 1 serves as a general outdoor shoe, as shown in FIG. 3. Upon entering an indoor space or upon request to use an indoor slipper instead, the composite shoe 1 can change from the outdoor shoe mode to an indoor slipper mode by disengaging the fastened together coupling elements 14 and 22, and then directly removing the second shoe body 20, which is worn on a wearer's foot 30, from inside the first shoe body 10 so that the second shoe body 20 is worn alone, as shown in FIG. 6. When it is desired to go outdoors again, the second shoe body 20 worn on the wearer's foot 30 is inserted into the first shoe body 10, and the coupling elements 14 and 22 are fastened together, thereby bringing the composite shoe 1 back into the outdoor shoe mode. In order to enhance the function of the second shoe body 20 as a slipper, the outer bottom surface 24 of the sole of the second shoe body 20 is configured as an anti-slip surface. As shown in FIGS. 5 and 6, the anti-slip surface of the second shoe body 20 in this preferred embodiment has a plurality of studs 26. Moreover, the second shoe body 20 in this preferred embodiment has an elastic tongue 27, as shown in FIG. 6, for moderately covering the wearer's heel to facilitate walking. It is understood that the first shoe body 10 can be used alone, as shown in FIG. 7, and serves as a casual outdoor shoe, slipper, or sandal.

[0015] FIGS. 8 through 10 illustrate a composite shoe 2 according to a second preferred embodiment of the present invention. The composite shoe 2 includes a first shoe body 40 and a second shoe body 50 which are identical to their equivalents in the first embodiment in structure as well as in the way of coupling except for the configuration of the coupling elements. In the composite shoe 2 according to the second embodiment, an open-heeled portion of the first shoe body 40 is provided with an upwardly extending strip-like or flap-like coupling element 41. The coupling element 41 has an opening 43 and a slit 42 connected to a bottom of the opening 43. Meanwhile, the second shoe body 50 is provided with a coupling element 51 corresponding in position to the coupling element 41 of the first shoe body 40 and formed as a fastener protruding outward from a close-heeled portion of the second shoe body 50. The coupling element 51 can pass through the opening 43 of the coupling element 41 of the first shoe body 40 so as to engage with the coupling element 41 and thereby couple the first and the second shoe bodies 40 and 50 securely together. In order to serve this function, the coupling element 41 of the first shoe body 40 is preferably flexible, as made of leather or a stretchable fabric, to facilitate insertion of the coupling element 51 of the second shoe body 50 through the opening 43 of the first shoe body 40. Hence, the opening 43 may be slightly smaller than a head end of the coupling element 51 in diameter so that, with the assistance of the slit 42 below the opening 43, the two coupling elements 41 and 51 are effectively fastened together, thus allowing the composite shoe 2 to remain securely assembled in a walking state.

[0016] It has been demonstrated by way of example that the first and the second shoe bodies of the composite shoe according to the present invention are coupled to each other by the flap 23 extending outward from the second shoe body 20 and provided with the coupling element 22 in the first preferred embodiment or by the strip-like or flap-like coupling element 41 extending outward from the first shoe body 40 in the second preferred embodiment. The first and the second shoe bodies can nevertheless be coupled together by ways other than illustrated in the above two embodiments. For example, the strip-like or flap-like coupling element can be provided at the first shoe body or the second shoe body as appropriate.

[0017] The embodiments provided herein are intended to demonstrate the preferred implementation modes, but not to limit the scope, of the present invention. A person of ordinary skill in the art can make changes or modifications to the embodiments without departing from the technical concept of the present invention after reviewing the contents disclosed herein. The scope of the present invention is defined only by the appended claims.

LIST OF REFERENCE NUMBERS

[0018]

1	composite shoe
10	first shoe body
20	second shoe body
11	open-heeled portion
5 13	stop flange
12	surface
14	coupling element
21	close-heeled portion
22	coupling element
10 23	flap
24	outer bottom surface
25	close-toed portion
15 15	close-toed portion
30	foot
15 26	studs
27	tongue
2	composite shoe
40	first shoe body
50	second shoe body
20 41	coupling element
43	opening
42	slit
51	coupling element

Claims

1. A composite shoe, comprising:

a first shoe body (10) formed as a close-toed and open-heeled shoe, wherein an open-heeled portion (11) of the first shoe body (10) is provided with at least a coupling element (14); and
a second shoe body (20) formed as a close-toed and close-heeled shoe to be received in and detachably coupled with the first shoe body (10) so that an outer bottom surface (24) of a sole of the second shoe body (20) is disposed on a surface of an insole of the first shoe body (10), a close-toed portion (25) of the second shoe body (20) is inserted in a close-toed portion (15) of the first shoe body (10), and a close-heeled portion (21) of the second shoe body (20) is disposed at the open-heeled portion (11) of the first shoe body (10), wherein the close-heeled portion (21) of the second shoe body (20) is provided with at least a coupling element (22) to be coupled with the at least a coupling element (14) provided at the open-heeled portion (11) of the first shoe body (10),

characterized in that

the at least a coupling element (14) of the first shoe body (10) is provided at the outer surface of a stop flange (13) extending upward from the surface of the insole of the first shoe body (10) and the at least a coupling element (22) of the second shoe body (20) is provided at a distal end of a flap (23) extending outward from an

outer surface of the close-heeled portion (21) of the second shoe body (20) to be coupled with the at least a coupling element (14) of the first shoe body (10).

2. The composite shoe of Claim 1, wherein the at least a coupling element (14) of the first shoe body (10) and the at least a coupling element (22) of the second shoe body (20) are one of mutually engageable and disengageable fasteners and hook-and-loop fasteners.
3. The composite shoe of Claim 1, wherein the outer bottom surface (24) of the sole of the second shoe body (20) is an anti-slip surface.
4. The composite shoe of Claim 3, wherein the anti-slip surface of the sole of the second shoe body (20) has a plurality of studs (26).
5. The composite shoe of Claim 1, wherein the second shoe body (20) has an elastic tongue (27).

Patentansprüche

1. Ein Verbundschuh, aufweisend:

einen ersten Schuhkörper (10), der als ein an den Zehen geschlossener und an der Ferse offener Schuh ausgebildet ist, wobei ein offener Fersen-Abschnitt (11) des ersten Schuhkörpers (10) mit mindestens einem Verbindungselement (14) versehen ist, und
einen zweiten Schuhkörper (20), der als ein an den Zehen geschlossener und an der Ferse geschlossener Schuh ausgebildet ist, um in dem ersten Schuhkörper (10) aufgenommen und lösbar mit diesem verbunden zu sein, so dass eine äußere Bodenoberfläche (24) einer Sohle des zweiten Schuhkörpers (20) an einer Oberfläche einer Einlegesohle des ersten Schuhkörpers (10) angeordnet ist, ein geschlossener Zehen-Abschnitt (25) des zweiten Schuhkörpers (20) in einen geschlossenen Zehen-Abschnitt (15) des ersten Schuhkörpers (10) eingesetzt ist und ein geschlossener Fersen-Abschnitt (21) des zweiten Schuhkörpers (20) an dem offenen Fersen-Abschnitt (11) des ersten Schuhkörpers (10) angeordnet ist, wobei der geschlossene Fersen-Abschnitt (21) des zweiten Schuhkörpers (20) mit mindestens einem Verbindungselement (22) versehen ist, um mit dem mindestens einen Verbindungselement (14) verbunden zu sein, das an dem offenen Fersen-Abschnitt (11) des ersten Schuhkörpers (10) vorgesehen ist,

dadurch gekennzeichnet, dass

das mindestens eine Verbindungselement (14) des ersten Schuhkörpers (10) an der äußeren Oberfläche eines Anschlagflansches (13) vorgesehen ist, der sich von der Oberfläche der Einlegesohle des ersten Schuhkörpers (10) aus nach oben erstreckt, und das mindestens eine Verbindungselement (22) des zweiten Schuhkörpers (20) an einem distalen Ende einer Lasche (23) vorgesehen ist, die sich von einer äußeren Oberfläche des geschlossenen Zehen-Abschnitts (21) des zweiten Schuhkörpers (20) aus nach außen erstreckt, um mit dem mindestens einen Verbindungselement (14) des ersten Schuhkörpers (10) verbunden zu sein.

2. Der Verbundschuh gemäß Anspruch 1, wobei das mindestens eine Verbindungselement (14) des ersten Schuhkörpers (10) und das mindestens eine Verbindungselement (22) des zweiten Schuhkörpers (20) eines von miteinander verbindbaren und voneinander lösbaren Verschlüssen und Klettverschlüssen sind.
3. Der Verbundschuh gemäß Anspruch 1, wobei die äußere Bodenoberfläche (24) der Sohle des zweiten Schuhkörpers (20) eine Antirutschoberfläche ist.
4. Der Verbundschuh gemäß Anspruch 3, wobei die Antirutschoberfläche der Sohle des zweiten Schuhkörpers (20) eine Mehrzahl von Stollen (26) aufweist.
5. Der Verbundschuh gemäß Anspruch 1, wobei der zweite Schuhkörper (20) eine elastische Zunge (27) hat.

Revendications

1. Une chaussure composite, comprenant:

un premier corps de chaussure (10) formé en tant que chaussure fermée aux orteils et ouverte au talon, une partie à talon ouvert (11) du premier corps de chaussure (10) étant pourvue d'au moins un élément d'accouplement (14), et un deuxième corps de chaussure (20) formé en tant que chaussure fermée aux orteils et fermée au talon pour être reçu dans et lié de façon amovible au premier corps de chaussure (10), de sorte qu'une surface de fond extérieure (24) d'une semelle du deuxième corps de chaussure (20) est disposée sur une surface d'une semelle intérieure du premier corps de chaussure (10), une partie fermée aux orteils (25) du deuxième corps de chaussure (20) est insérée dans une partie fermée aux orteils (15) du premier corps de chaussure (10), et une partie à talon fermé (21) du deuxième corps de chaussure (20) est

disposée à la partie à talon ouvert (11) du premier corps de chaussure (10), la partie à talon fermé (21) du deuxième corps de chaussure (20) étant pourvue d'au moins un élément d'accouplement (22) pour être liée à l'au moins un élément d'accouplement (14) prévu à la partie à talon ouvert (11) du premier corps de chaussure (10),

caractérisée en ce que

l'au moins un élément d'accouplement (14) du premier corps de chaussure (10) est prévu à la surface extérieure d'une bride de butée (13) s'étendant vers le haut à partir de la surface de la semelle intérieure du premier corps de chaussure (10) et l'au moins un élément d'accouplement (22) du deuxième corps de chaussure (20) est prévu à une extrémité distale d'une languette (23) s'étendant vers l'extérieur à partir d'une surface extérieure de la partie à talon fermé (21) du deuxième corps de chaussure (20) afin d'être lié à l'au moins un élément d'accouplement (14) du premier corps de chaussure (10).

2. La chaussure composite selon la revendication 1, dans laquelle l'au moins un élément d'accouplement (14) du premier corps de chaussure (10) et l'au moins un élément d'accouplement (22) du deuxième corps de chaussure (20) sont un parmi des éléments de fixation pouvant se mettre en prise et se détacher mutuellement et des éléments de fermeture à crochets et boucles.
3. La chaussure composite selon la revendication 1, dans laquelle la surface de fond extérieure (24) de la semelle du deuxième corps de chaussure (20) est une surface antidérapante.
4. La chaussure composite selon la revendication 3, dans laquelle la surface antidérapante de la semelle du second corps de chaussure (20) a une pluralité de crampons (26).
5. La chaussure composite selon la revendication 1, dans laquelle le deuxième corps de chaussure (20) a une languette (27) élastique.

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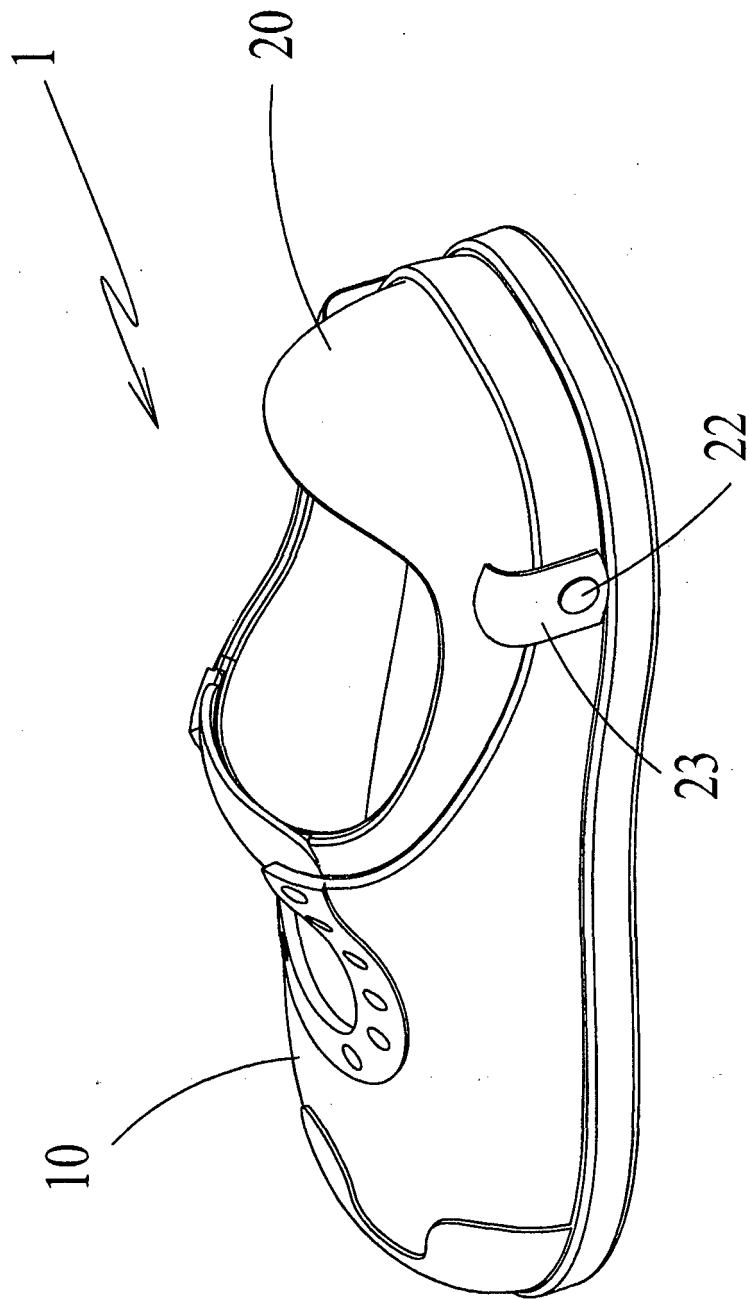
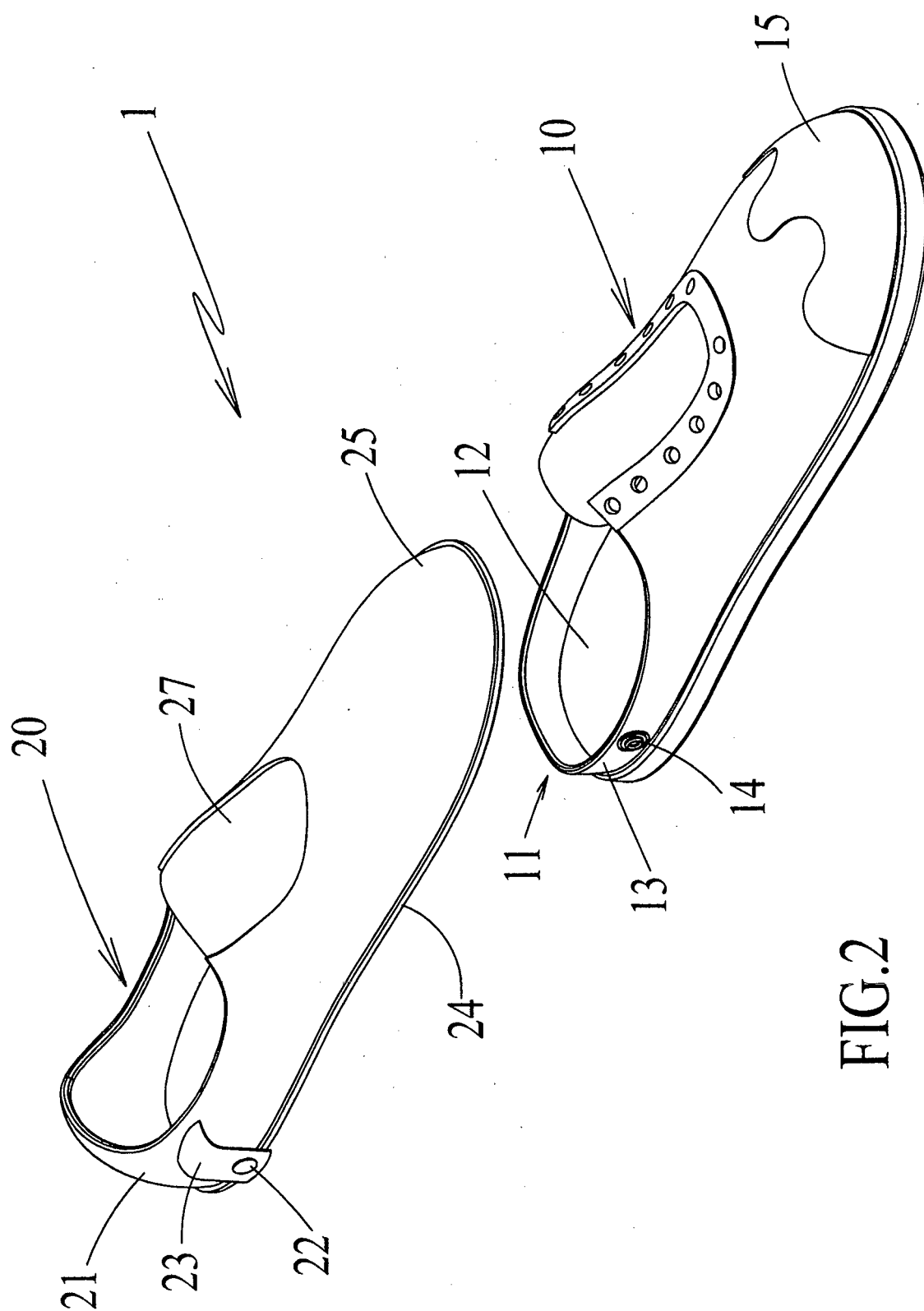


FIG.1



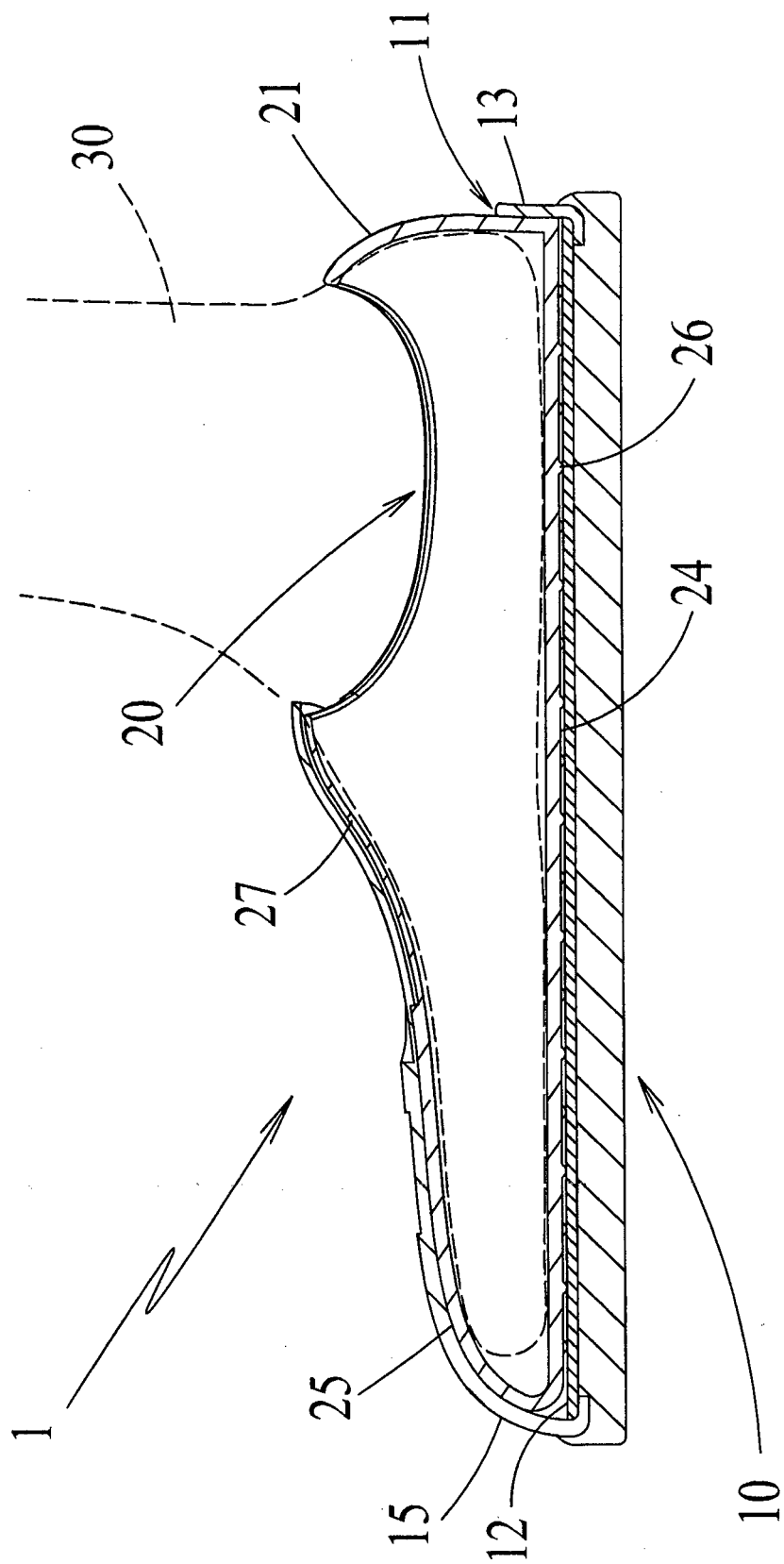


FIG.3

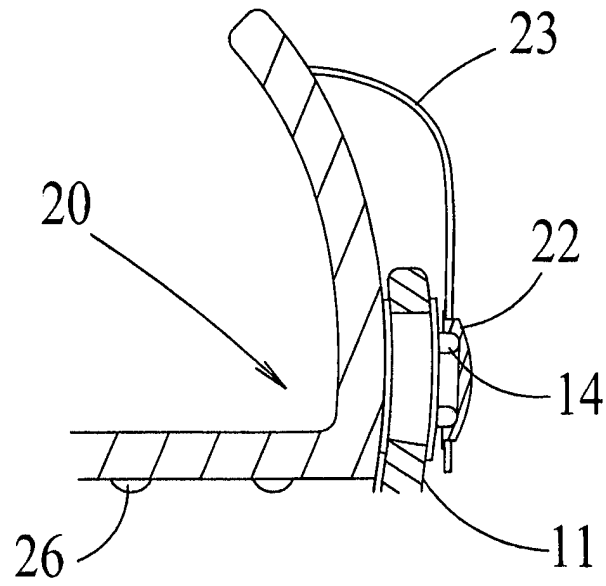


FIG.4

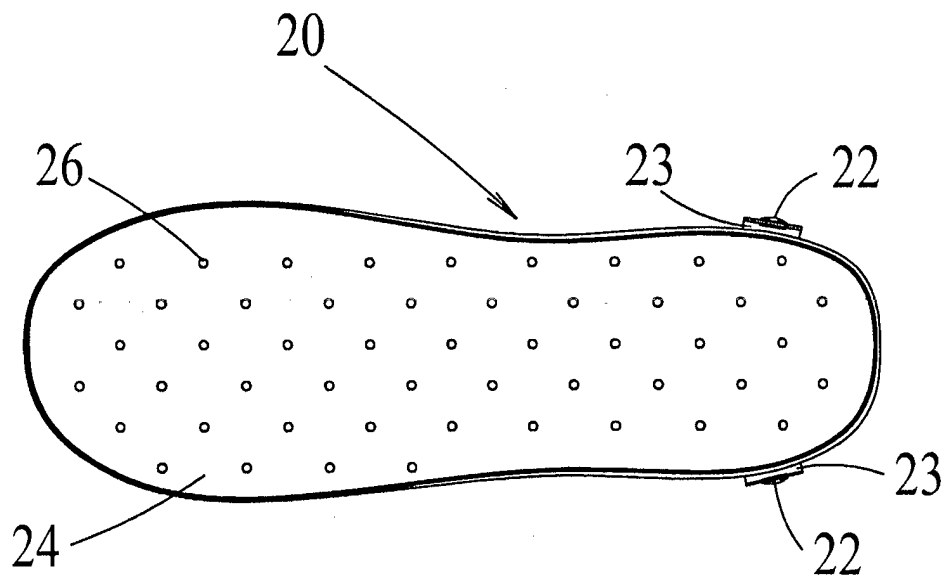


FIG.5

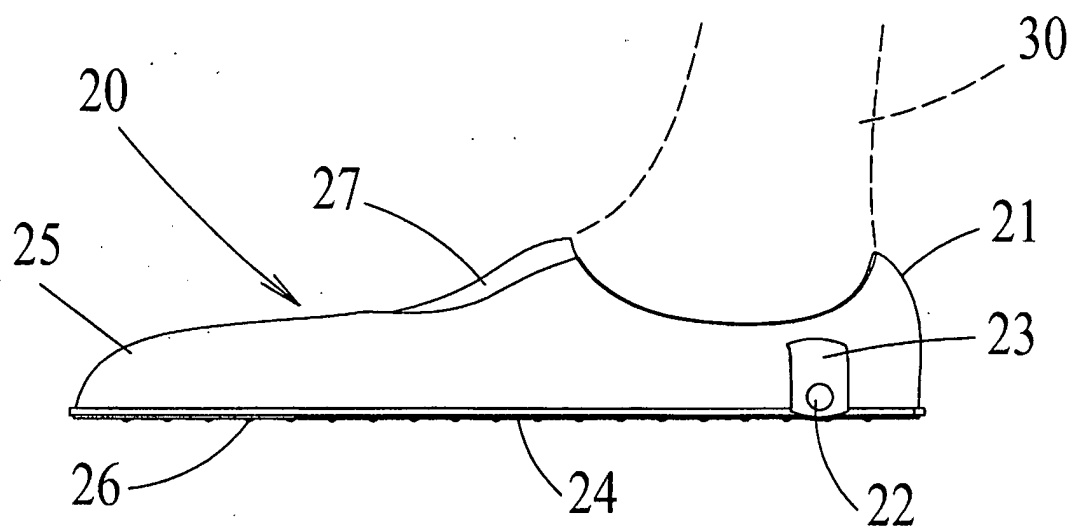


FIG. 6

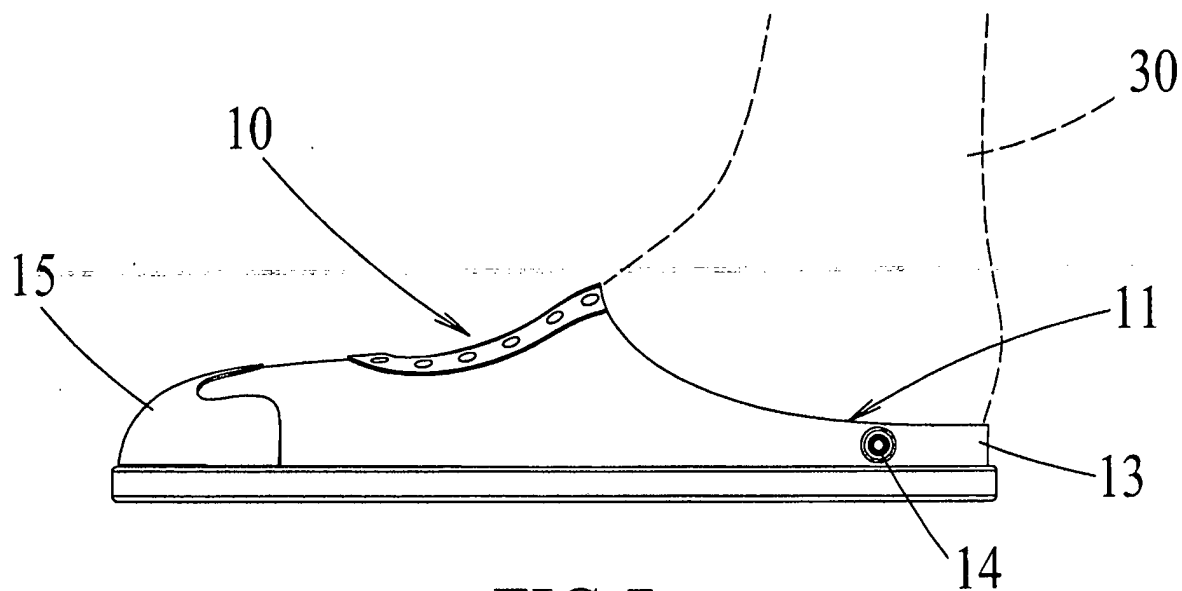


FIG. 7

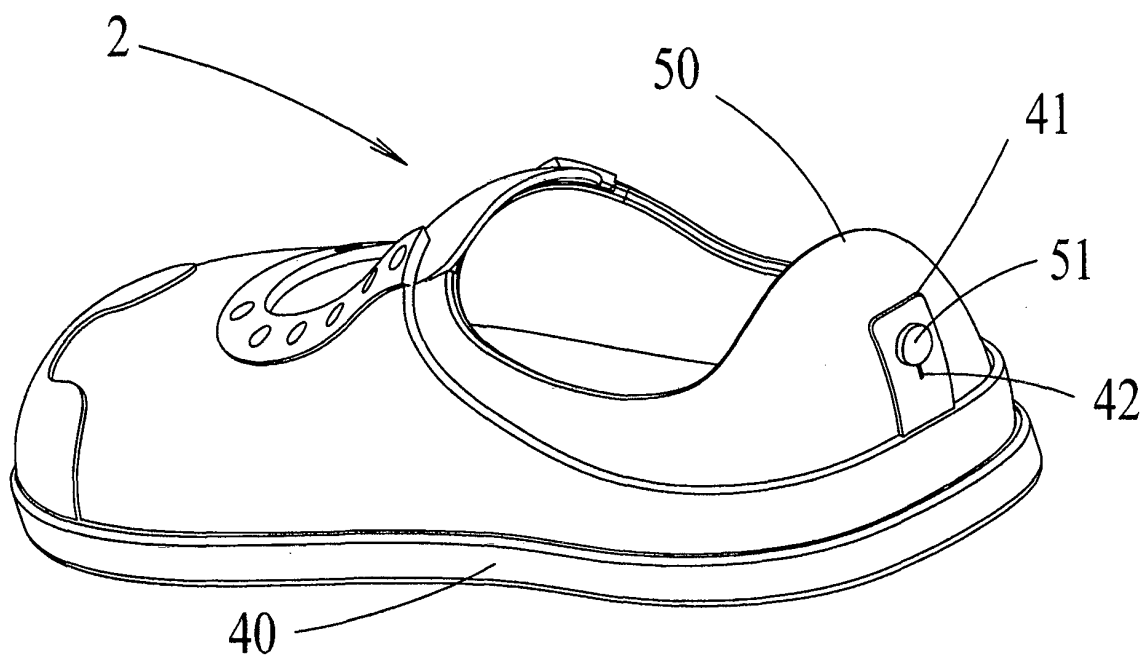


FIG. 8

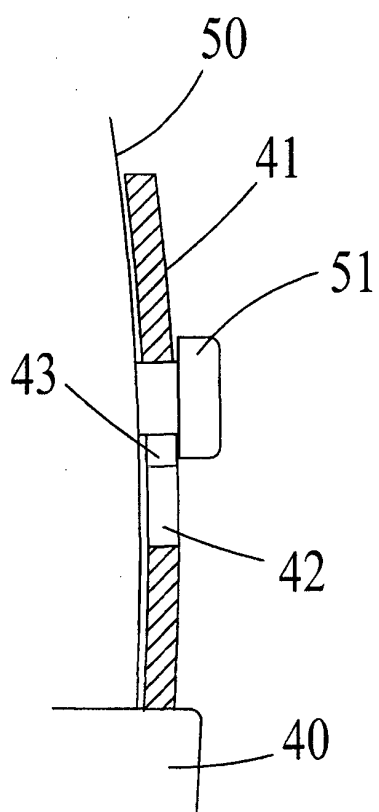


FIG. 9

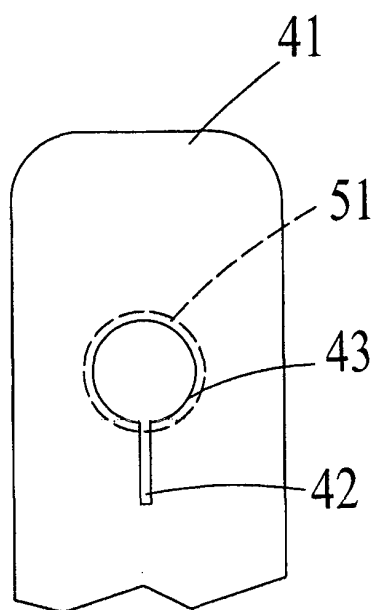


FIG. 10

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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