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#### (54) Inner sole for a shoe

(57) Insole for a shoe, which can be arranged above a sole and is provided with a first side (2) and a second side (3) which are substantially parallel to each other and directed in opposite directions. According to the invention, the insole (1) is functionally reversible. For this purpose the first side (2) and the second side (3) are both alternately capable of making contact with the sole of the shoe and defining a support surface for the sole of a foot. Advantageously the first side (2) may have a flattened form while the second side (3) may have an anatomical form with special ribs, swellings or projections according to the specific comfort effect which is to be obtained.

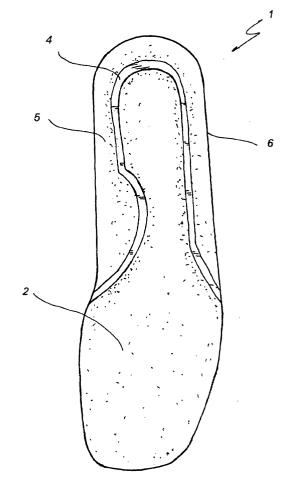


Fig. 1

#### Description

#### Field of application

**[0001]** The present invention relates to an insole which can be used in any type of shoe in order to improve the comfort and/or the grip of the user's foot.

#### State of the art

**[0002]** Nowadays, according to the known art there are numerous types of insoles on the market which differ from each other in their particular anatomical form, in the materials used or in the manufacturing process with which they are obtained.

**[0003]** As is known, insoles are traditionally inserted inside the upper of the shoes above the sole and can be of the extractable or non-extractable type.

**[0004]** More in particular, insoles which have a particular anatomical form suitable for aiding the natural blood circulation of the foot and/or producing a massage effect on the sole of the foot are known. Insoles which are capable of aiding the ventilation of the foot, thereby avoiding problems deriving from excessive sweating, are also known.

**[0005]** In general, nowadays insoles are designed in such a way as to interact actively with the natural physiology of the foot, increasing the comfort thereof.

**[0006]** For this purpose, special ribs, swellings or projections designed according to the specific comfort effect which is to be obtained may be mounted on the upper side of the insoles. Obviously, insoles which are substantially flat and devoid of a particular specific form, in order to satisfy the requirements of users who might for example be troubled by the ribs of the insole, are also available.

**[0007]** Recently, shoe manufacturers supply the shoes themselves with one or more insoles having different forms, generally inside the packaged product, in order to allow the customer to insert inside the shoe the insole which best suits his/her particular comfort requirements.

**[0008]** Obviously, such a circumstance represents an added cost for shoe manufacturers, negatively affecting the efficiency of the entire manufacturing process.

**[0009]** On the other hand, if the shoe is otherwise provided with a single insole it will be up to the user of the shoe to look for another insole which allows him/her to wear the shoe with the desired comfort.

#### Disclosure of the invention

**[0010]** The main object of the present invention is therefore that of eliminating the problems of the abovementioned known art by providing an insole for a shoe, which allows the different comfort requirements of users to be better satisfied,

[0011] Another object of the present invention is that

of designing an insole which is simple to manufacture and functionally completely reliable.

**[0012]** These and other objects are all achieved by the insole for a shoe forming the subject of the present invention, which is intended to be arranged above a sole, with a first side and a second side which are substantially parallel to each other and directed in opposite directions. According to the invention, the insole is characterized in that is functionally reversible, said first side and said second side are both configured to make contact with the sole of the shoe and to define a support surface for the sole of the foot

**[0013]** Owing to this insole it is possible in particular to satisfy both the requirements of those who prefer an anatomical insole inside the shoe and those who prefer an insole which is substantially devoid of ribs or reliefs.

#### Brief description of the drawings

**[0014]** The technical characteristics of the invention, according to the abovementioned objects, may be clearly understood from the contents of the claims provided hereinafter and the advantages of said invention will emerge more clearly in the detailed description which follows and is provided with reference to the accompanying drawings, which show a purely illustrative and non-limiting embodiment thereof, in which:

FIG. 1 shows a plan view of a first side of the insole for a shoe forming the subject of the present invention:

FIG. 2 shows a view in plan of a second side of the insole for a shoe forming the subject of the present invention.

## Detailed description of a preferred example of embodiment

**[0015]** With reference to the attached drawings, the insole for a shoe forming the subject of the present invention has been denoted in its entirety respectively by 1

**[0016]** This insole can be arranged in a manner known per se above the sole of any model of shoe and may be made from any material, Preferably, however, said insole will consist of a material which is included in the group composed of polyurethane, polyethylene, EVA, felt or PVC.

**[0017]** The insole in question may also be obtained by means of any traditional manufacturing process and therefore, for example, may be obtained by thermoforming injection-casting, high-frequency welding or other process.

**[0018]** Advantageously, said insole may be covered entirely or partly with a lining of leather, fabric or other material.

**[0019]** Traditionally, the insole in question is provided with a first side 2 and a second side 3, which are sub-

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stantially parallel to each other and directed in opposite directions.

**[0020]** According to the invention, the insole 1 in question is functionally reversible and, for this purpose, the first side 2 and the second side 3 are both alternately capable both of making contact with the sole of the shoe and defining a support surface for the sole of the foot.

**[0021]** In other words, the insole 1 can be inserted in the shoe, in a first case, with the first side 2 resting on the sole and with the second side 3 arranged to support the sole of the foot and, in a second case, with the second side 3 resting on the sole and with the first side 2 arranged to support the sole of the foot.

**[0022]** Obviously, said reversibility implies that the insole of the right shoe, once turned over, becomes the insole of the left shoe and vice versa.

[0023] Advantageously, the first and the second sides 2 and 3 of the insole 1 have different anatomical forms which are able to satisfy various comfort requirements. [0024] In particular, it could for example be envisaged that one of the sides is substantially flat (first side 2 of the example in Fig. 1), in order to comply with the requirements of users who do not like to have ribs, swellings or projections under the sole of the foot, and that the other side is provided with any anatomical form or with projections and/or ribs suitable, for example, for improving the natural blood circulation of the foot (second side 3 in the example of Fig. 2).

[0025] According to a further technical feature of the present invention, the insole 1 comprises a groove 4 of reduced thickness in such a way as to define a flexible edge 5 capable of lifting so as to project peripherally from the first side 2 or the second side 3 depending on which side of the insole 1 is arranged resting on the sole. [0026] According to the example of embodiment shown in the accompanying drawings the flexible edge 5 is formed in the rear and/or central part of the insole 1. [0027] The groove 4 is parallel to the external profile 6 of the insole 1 in such a way as to allow the flexible edge 5 to follow the lateral profile of the upper of the shoe by lifting, thereby creating a sort of continuity between upper and insole 1.

**[0028]** The invention thus conceived therefore achieves the predefined objects.

**[0029]** Obviously, in its practical embodiment this invention may also assume forms and configurations different from that shown above without thereby departing from the present scope of protection.

**[0030]** Moreover, all the details may be replaced by technically equivalent elements, and the dimensions, the forms and the materials used may also be of any type according to requirements.

Claims 55

1. Insole for a shoe adapted for use over a sole, comprising a first side (2) and a second side (3) which

are substantially parallel to each other and directed in opposite directions, **characterized in that** said insole (1) is functionally reversible, said first side (2) and said second side (3) are both configured to make contact with the sole of the shoe and to define a support surface for the sole of the foot.

- 2. Insole for a shoe according to Claim 1, **characterized in that** it comprises at least one groove (4) of reduced thickness able to define a flexible edge (5) capable of lifting peripherally so as to project from both the abovementioned first and second sides (2, 3).
- 15 3. Insole for a shoe according to Claim 2, characterized in that said flexible edge (5) is made in the rear and/or central part of the insole (1).
  - 4. Insole for a shoe according to Claim 2, **characterized in that** said groove (4) is at least partially parallel to the external profile of said insole (1).
  - 5. Insole for a shoe according to Claim 2, **characterized in that** said flexible edge (5) is able to follow the lateral profile (6) of the upper of said shoe.
  - **6.** Insole for a shoe according to Claim 1, **characterized in that** at least one of said first and second sides (2, 3) is substantially flat.
  - 7. Insole for a shoe according to Claim 1, **characterized in that** at least one of said first and second sides (2, 3) is provided with an anatomical form.
  - 8. Insole for a shoe according to Claim 1, characterized in that it is covered with a lining.
  - Insole for a shoe according to Claim 1, characterized in that it is formed by a material which is included in the group composed of polyurethane, polyethylene, EVA, felt and PVC.

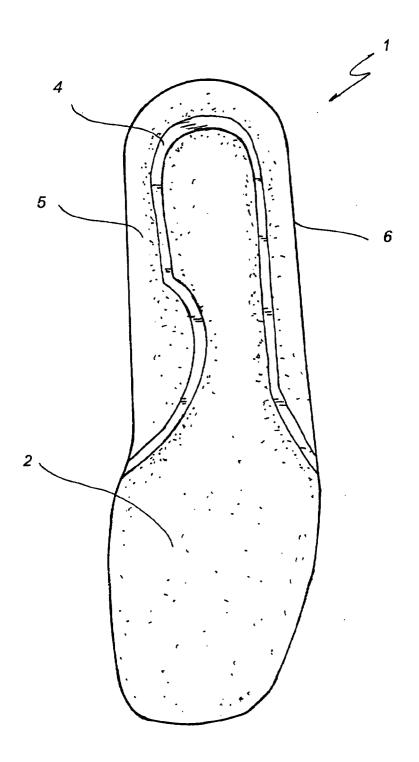


Fig. 1

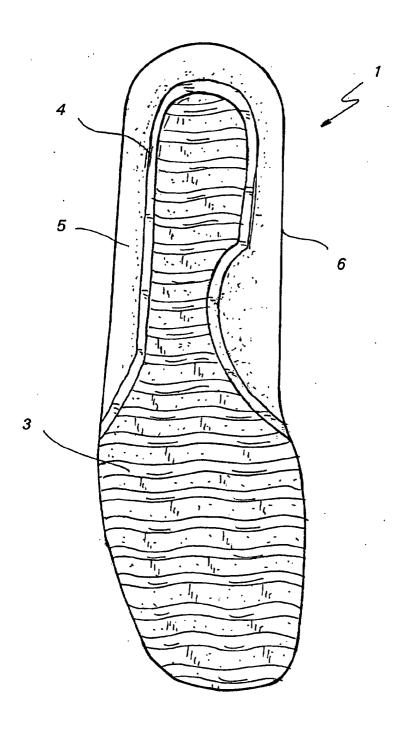


Fig. 2