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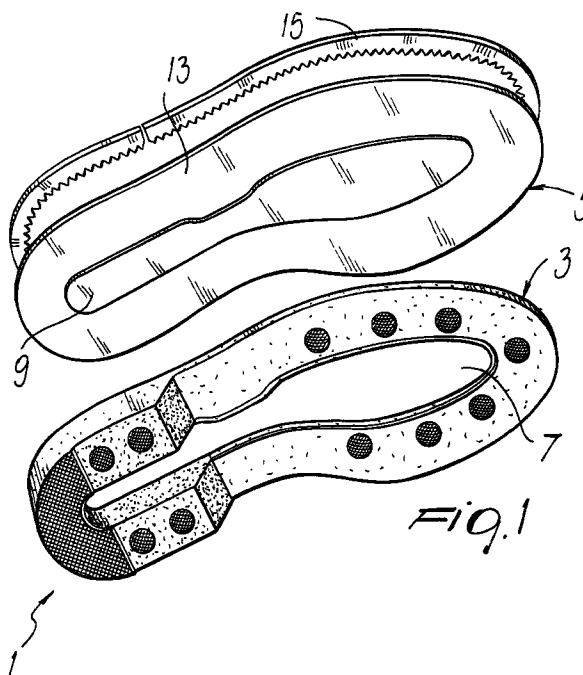
(71) Applicant:
**Lorenzo Banfi Diffusion S.p.A.
21013 Gallarate (VA) (IT)**

(72) Inventor: **Banfi, Renzo**
20015 Parabiago, Milano (IT)

(74) Representative:
Forattini, Amelia
c/o Internazionale Brevetti
Ingg. ZINI, MARANESI & C. S.r.l.
Piazza Castello 1
20121 Milano (IT)

(54) **Sole for shoes**

(57) A sole unit for shoes includes a tread (3) rigidly associated with a mid-sole (5) which is made of a vapor-permeable material, while the tread is made of an anti-skid material, such as rubber. The tread has a centrally located opening (7) and is associated with the mid-sole so as to leave at least one region (9) of the mid-sole portion exposed.



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Description

[0001] The present invention relates to a sole unit for shoes.

[0002] It is a well known problem that of providing shoe soles capable of ensuring good transpiration, which is essential for the health and comfort of the foot.

[0003] The material that is most suited to this purpose is undoubtedly natural leather, which however has some drawbacks; in particular, leather does not offer good grip, especially on slipper or wet surfaces.

[0004] In addition of course to conventional rubber soles, many shoes have recently been proposed which have synthetic soles which should allow some transpiration. However, in practice the transpiration allowed by these synthetic soles is generally not sufficient.

[0005] Another problem of synthetic soles is that they are generally ill-suited for aesthetically more refined shoes.

[0006] The aim of the present invention is to provide a sole unit which is capable of ensuring both perfect transpiration and simultaneously a perfect grip on slippery surfaces.

[0007] An object of the invention is to provide a sole unit which is aesthetically pleasant and can be used in any kind of shoe.

[0008] A further object of the invention is to provide a sole unit which can be manufactured by using exclusively natural materials.

[0009] This aim, these objects and others which will become apparent hereinafter are achieved by a sole unit for shoes, characterized in that it comprises a tread portion which is rigidly associated with a mid-sole portion, the mid-sole portion being made of a vapor-permeable material, the tread portion being made of an anti-skid material, the tread portion having at least one opening and being fixed to the mid-sole portion so as to leave at least one region of the mid-sole portion exposed.

[0010] Further characteristics and advantages will become apparent from the description of a preferred but not exclusive embodiment of the invention, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

FIG. 1 is an exploded perspective view of the sole unit according to the invention;

FIG. 2 is a perspective view of the assembled sole;

FIG. 3 is a bottom view of the rubber sole portion;

FIG. 4 is a top view of the rubber sole portion;

FIG. 5 is a side view of the rubber sole portion;

FIG. 6 is a cutout top view of the assembled sole;

FIG. 7 is a side view of the assembled sole;

FIG. 8 is a partial bottom perspective view of the sole.

FIG. 9 is a perspective top view of the shoe sole according to a further aspect of the invention;

FIG. 10 is a cross-section view according to the line X-X of FIG. 9.

[0011] With reference to the above figures, the sole according to the invention, generally designated by the reference numeral 1, is suitable to be applied to an upper (not shown) to provide a shoe (not shown) in a per se conventional manner.

[0012] The sole 1 includes a tread portion 3 which is rigidly coupled to a mid-sole portion 5.

[0013] The mid-sole portion 5 is made of a vapor-permeable material, advantageously constituted by natural leather, while the tread portion 3 is made of an anti-skid material, advantageously constituted by rubber and, more preferably, by natural rubber, or caoutchouc.

[0014] The tread portion has at least one opening 7 and is fixed to the mid-sole portion 5 so as to leave exposed a region 9 of the mid-sole portion. The opening 7 is preferably centrally located. The tread portion 3 is preferably associated with the mid-sole portion by gluing, preferably by using water-based glues, and preferably by means of additional perimetric stitches 11.

[0015] The mid-sole portion 5 preferably has a lowered region 13 of reduced thickness which surrounds the exposed region 9 and is suitable to accommodate the tread portion.

[0016] In this manner it is possible to optimize the different height between the resting surface of the tread portion and the resting surface of the central region 9 while maintaining a suitable thickness of the tread portion.

[0017] The sole according to the invention can be completed with conventional items, such as a welt 15, and can be assembled in a shoe in a fully conventional manner.

[0018] In practice it has been found that the invention achieves the intended aim and objects, providing a sole which ensures perfect transpiration and at the same time ensures an ideal grip even on slippery surfaces.

[0019] The great advantage of the sole according to the invention is that, differently from commercially available known shoes, it allows to achieve these advantages by using exclusively natural materials, such as leather and natural rubber, and environment-friendly glues.

[0020] The sole according to the invention is susceptible of numerous modifications and variations, all of which are within the scope of the inventive concept; all the details may be replaced with technically equivalent elements.

[0021] For example, FIGs. 9 and 10 illustrate a sole unit 101, according to a further aspect of the invention, comprising a tread portion 103 which is rigidly coupled to a mid-sole portion 105.

[0022] The mid-sole portion 105 is made of a vapor-permeable material, advantageously constituted by natural leather, while the tread portion 103 is made of an anti-skid material, advantageously constituted by rubber and, more preferably, by natural rubber, or caoutchouc.

[0023] The tread portion has at least one opening 107 and is fixed to the mid-sole portion 105 so as to leave exposed a region 109 of the mid-sole portion. The opening 107 is preferably centrally located. The tread portion 103 is preferably fixed to the mid-sole portion by gluing, preferably by using water-based glues, and preferably by means of a stitched seam.

[0024] According to this second aspect of the invention the tread portion 103 is monolithically provided with a welt 115.

[0025] This one piece construction of the welt and tread assembly is particularly useful for winter shoes, as it provides a greater protection from the wet.

[0026] The materials used, as well as the dimensions, may be any according to the requirements and the state of the art.

claims, characterized in that said mid-sole portion (5,105) and said tread portion (3,103) are rigidly associated by gluing with water-based glues and by stitches (11).

7. Sole according to one or more of the preceding claims, characterized in that said tread portion (103) is monolithically provided with a welt (115).

Claims

1. Sole unit for shoes, characterized in that it comprises a tread portion (3,103) which is rigidly associated with a mid-sole portion (5,105), said mid-sole portion being made of a vapor-permeable material, said tread portion being made of an anti-skid material, said tread portion having at least one opening (7,107) and being associated with said mid-sole portion so as to leave at least one region (9,109) of said mid-sole portion exposed.
2. Sole according to claim 1, characterized in that said tread portion (3,103) is made of natural rubber.
3. Sole according to claim 1, characterized in that said mid-sole portion (5,105) is made of leather.
4. Sole according to one or more of the preceding claims, characterized in that said opening lies substantially longitudinally in a median position on said tread portion (3,103).
5. Sole according to one or more of the preceding claims, characterized in that said mid-sole portion (5,105) has a lowered region (13) of reduced thickness which surrounds the exposed region (9,109) and is suitable to accommodate the tread portion (3,103).
6. Sole according to one or more of the preceding

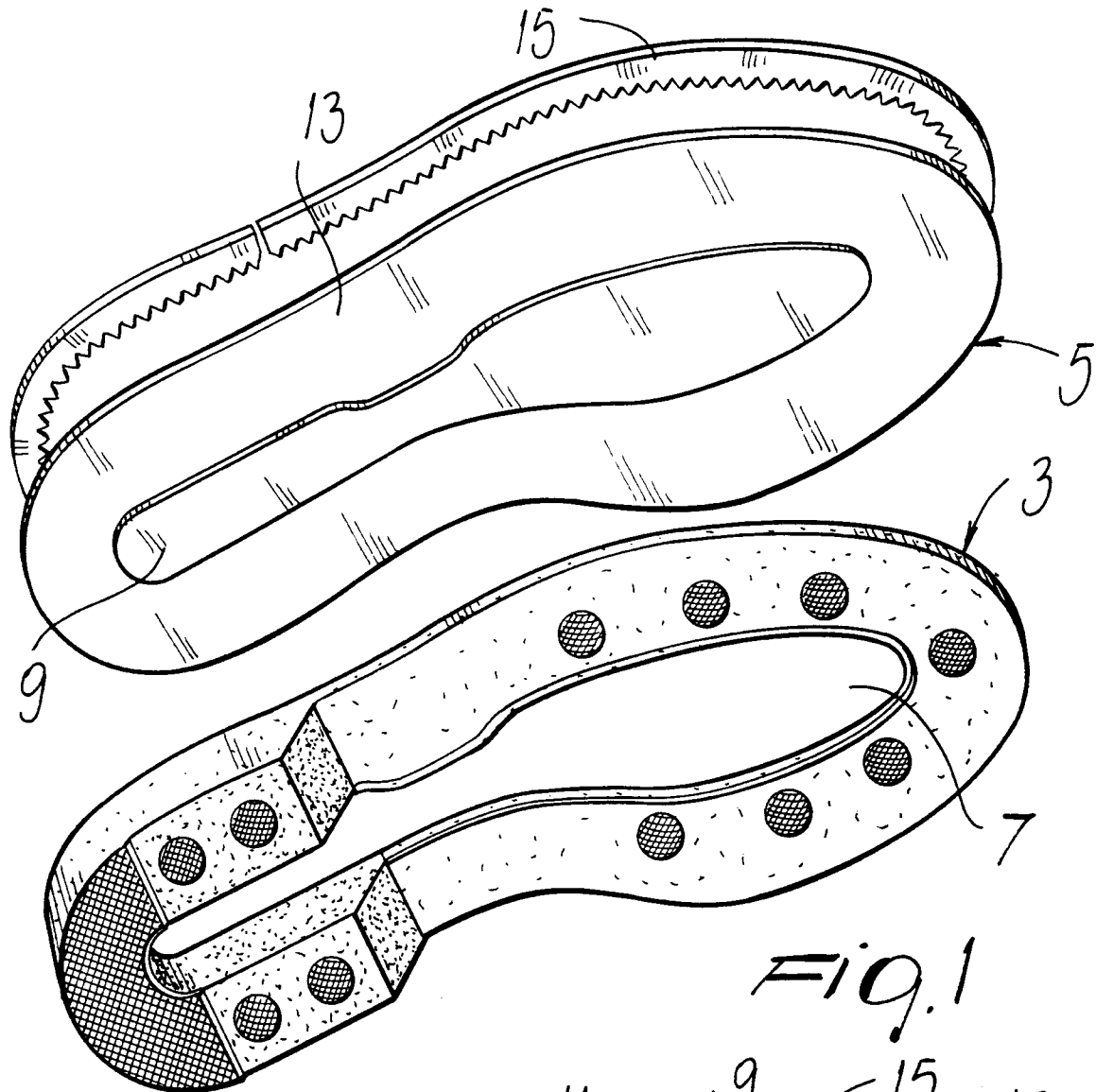


Fig. 1

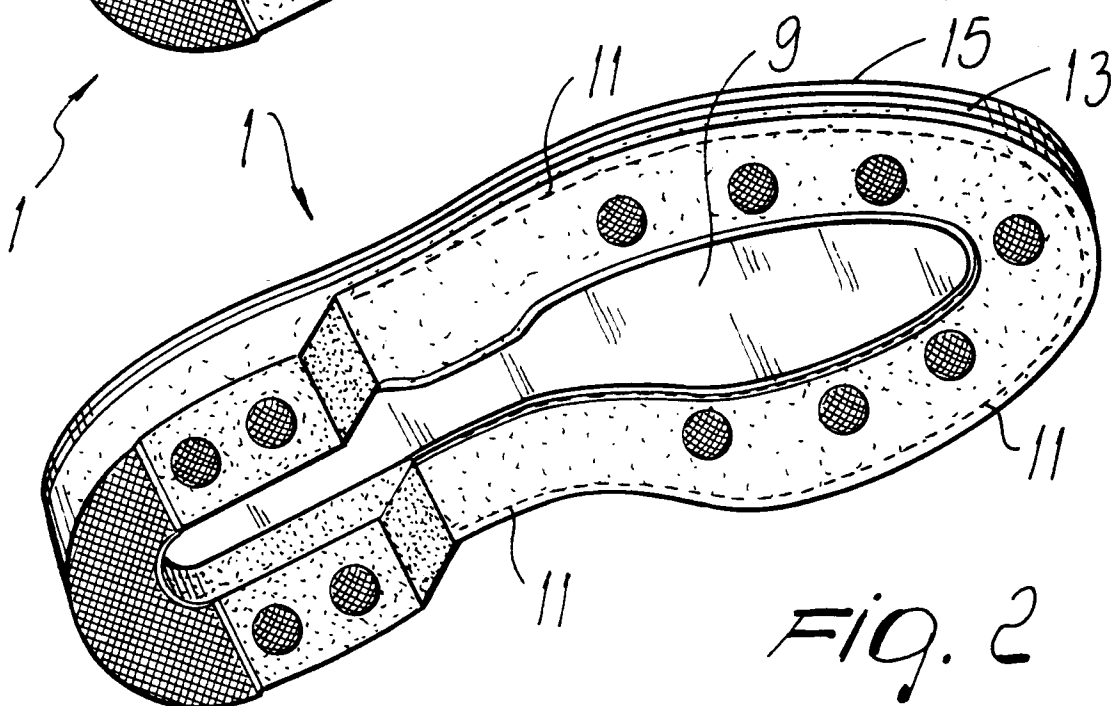


Fig. 2

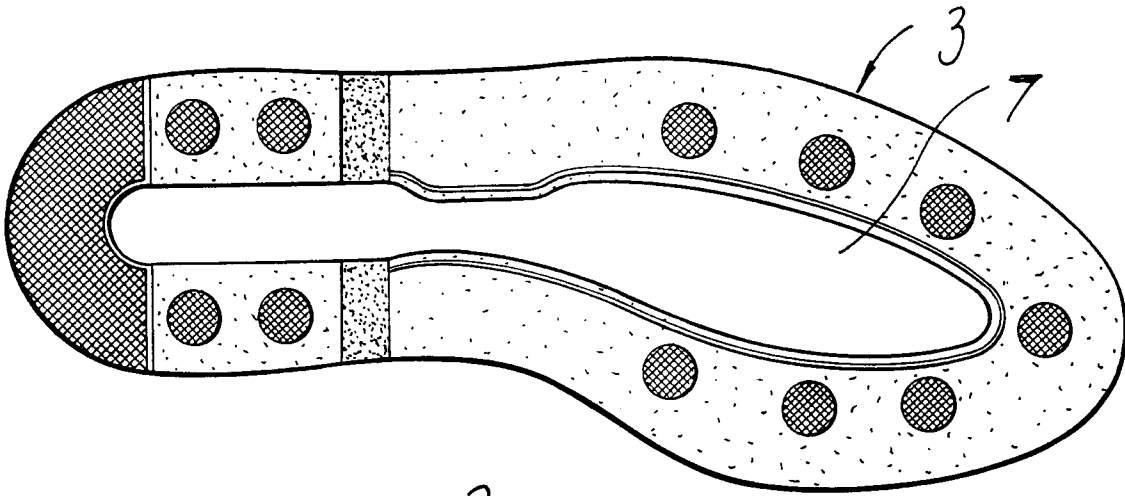


Fig. 3

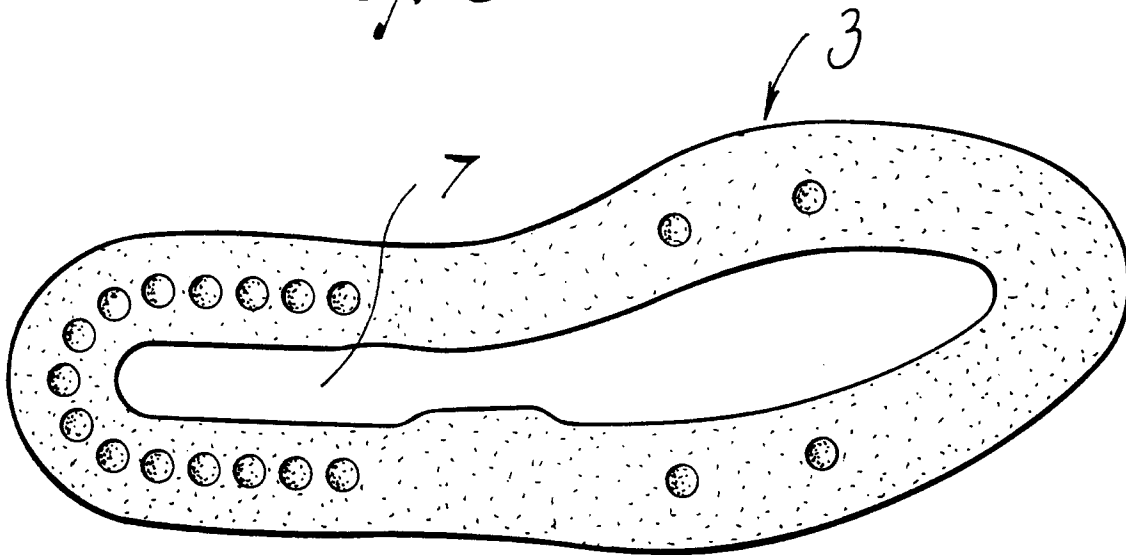


Fig. 4



Fig. 5

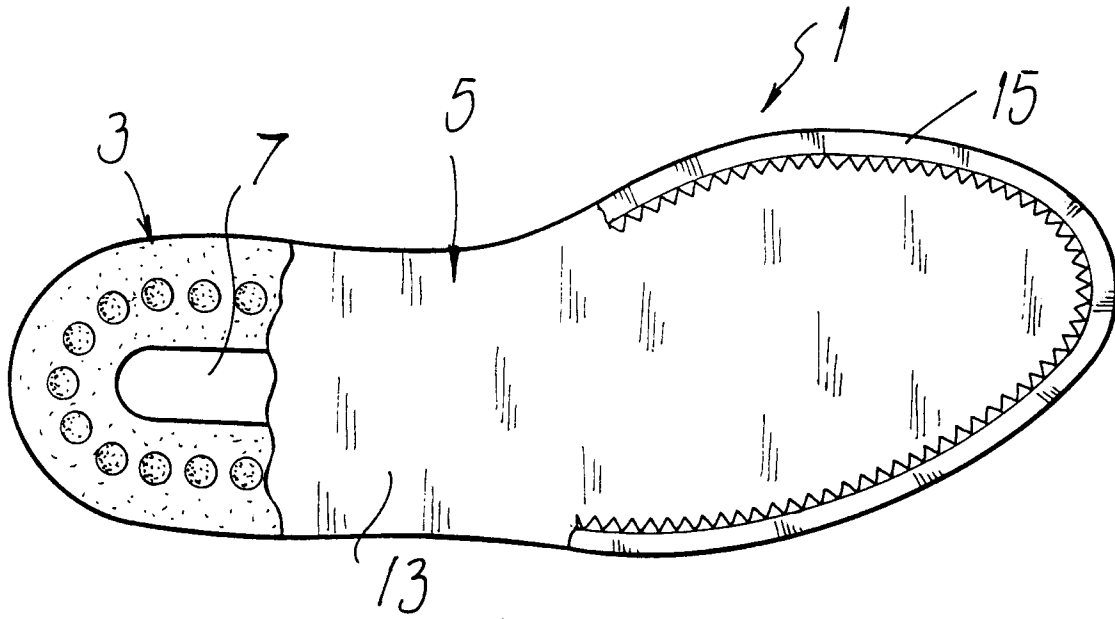


Fig. 6

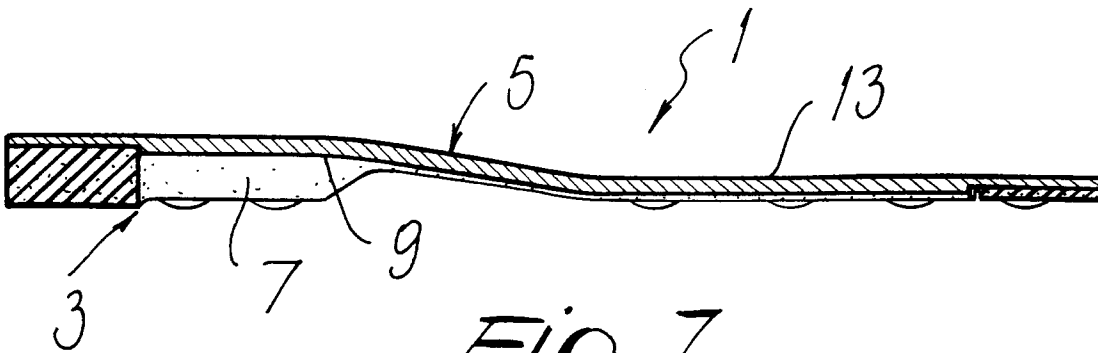


Fig. 7

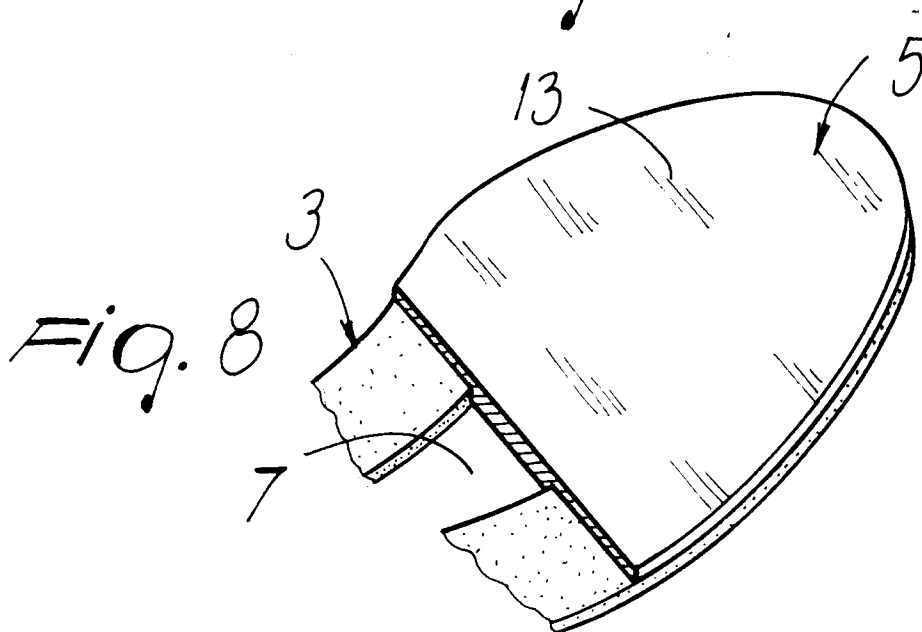


Fig. 8

