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(54) WATER DRAINABLE SOLE FOR FOOTWEAR

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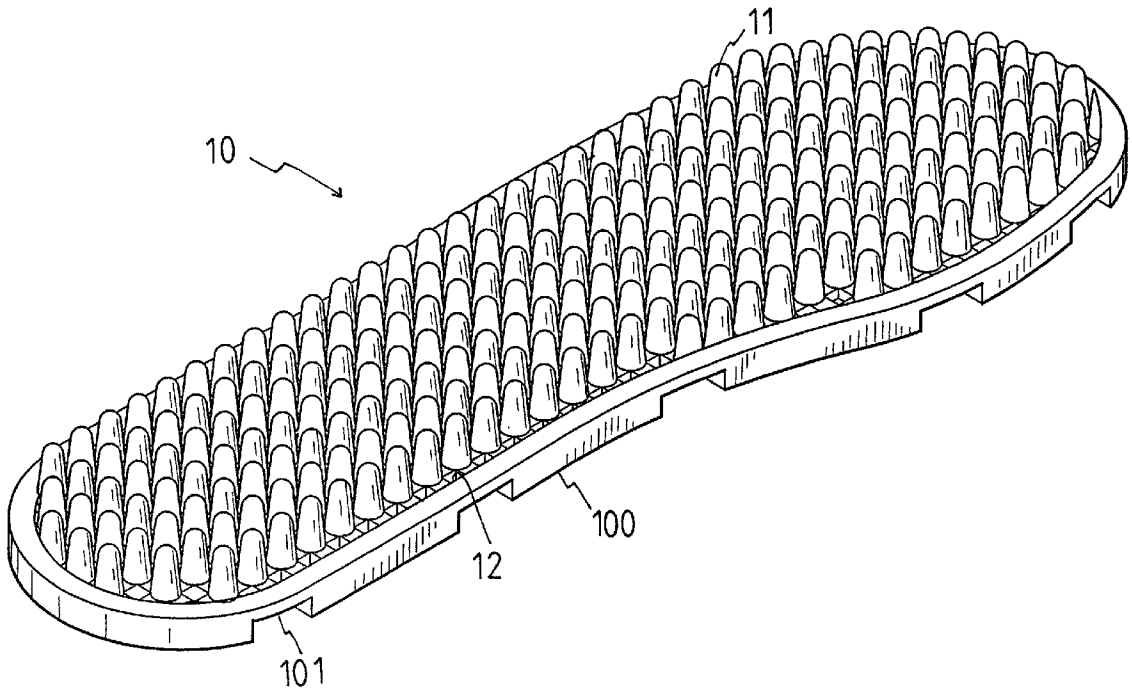
(57) **ABSTRACT**

A sole for footwear includes a sole body having a plurality of protrusions extending from a top surface of the sole body so as to support the wearer's foot. A plurality of apertures are defined through said sole body and located between said protrusions.



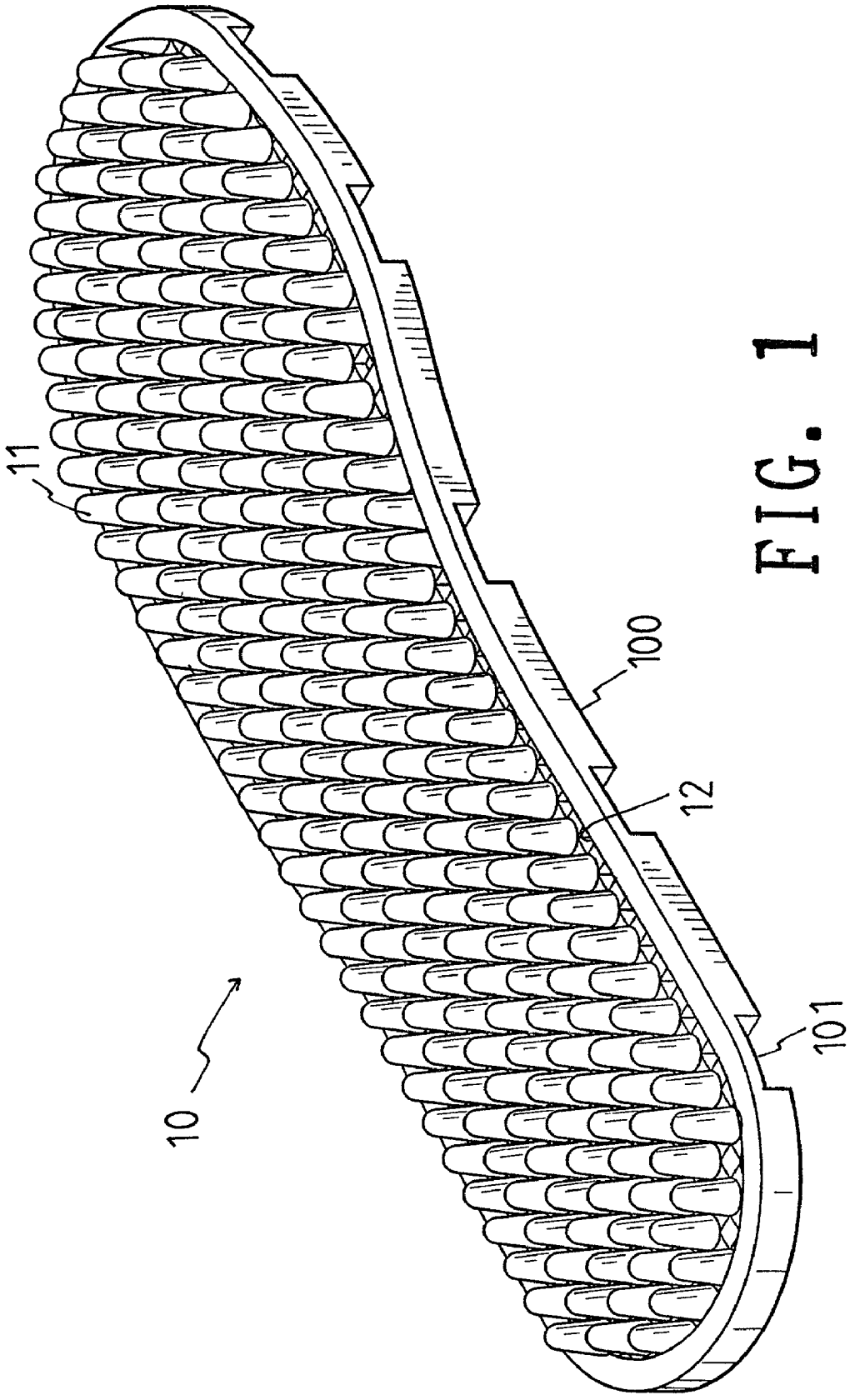


FIG. 1

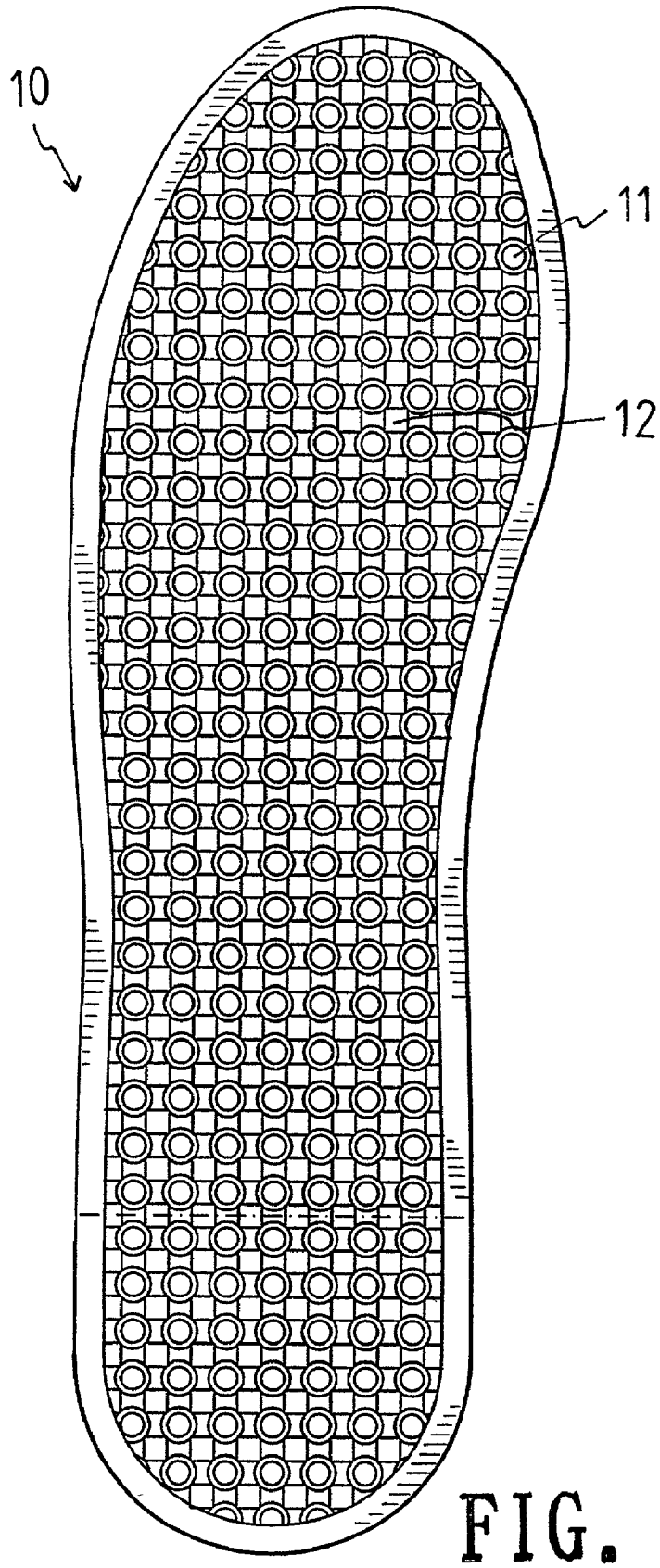


FIG. 2

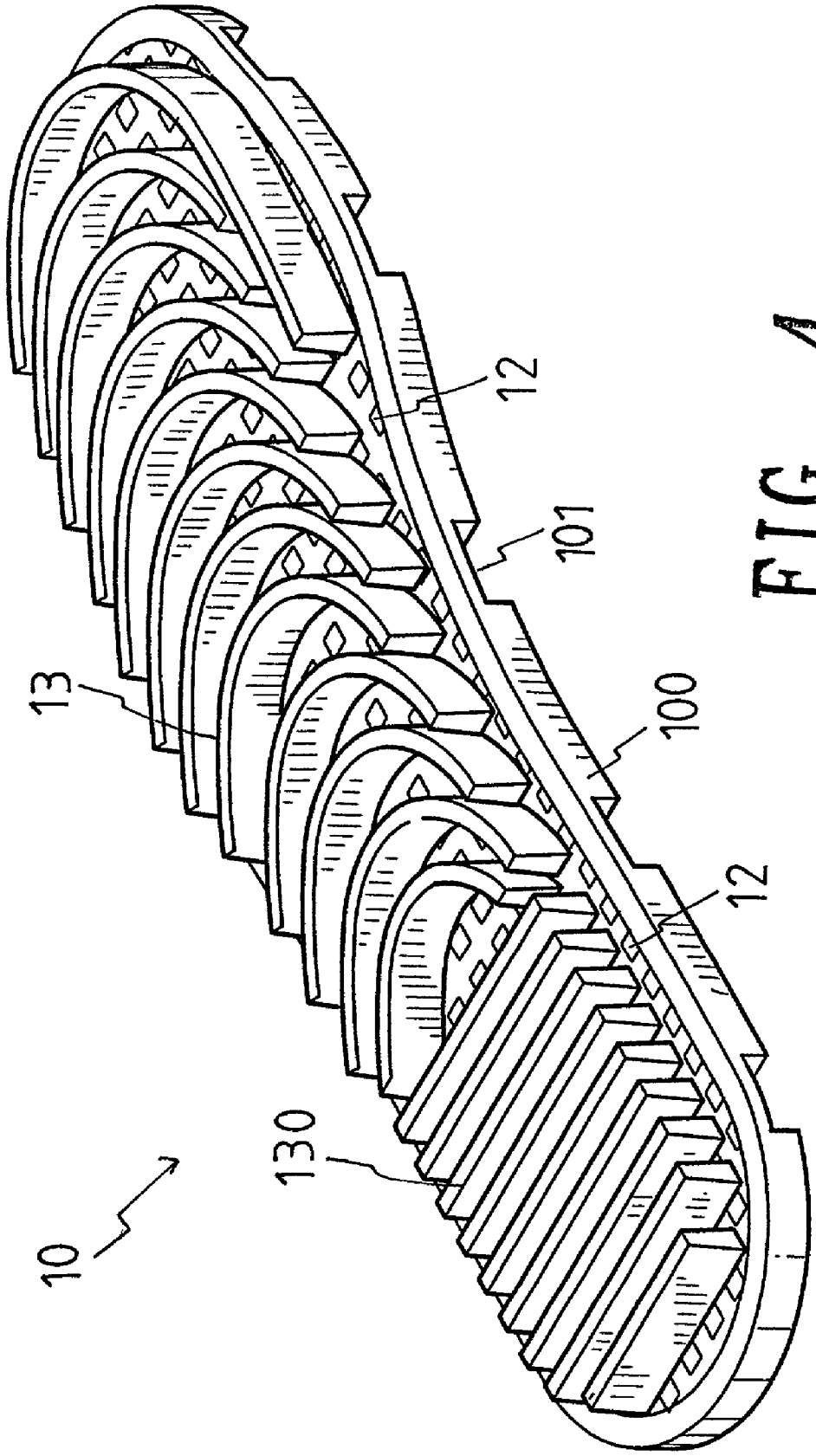


FIG. 4

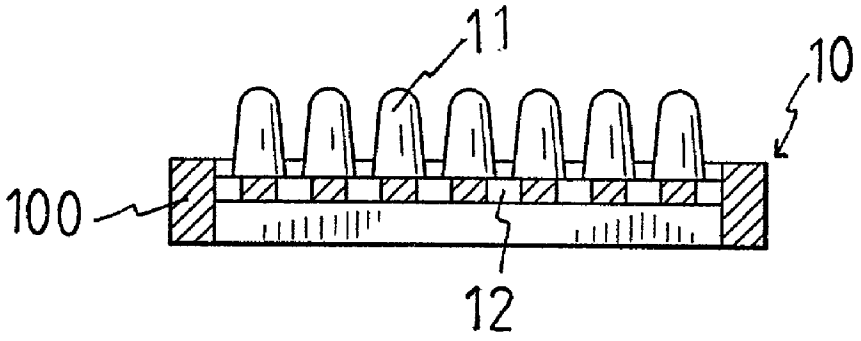


FIG. 5

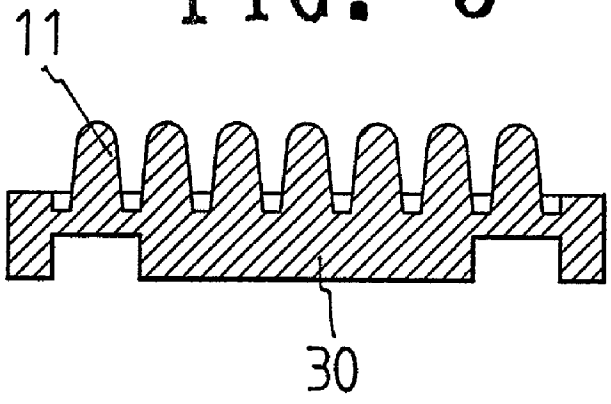


FIG. 3

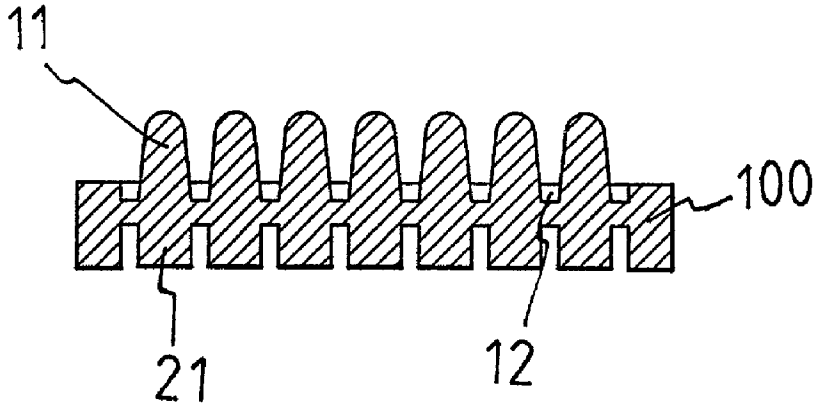


FIG. 9

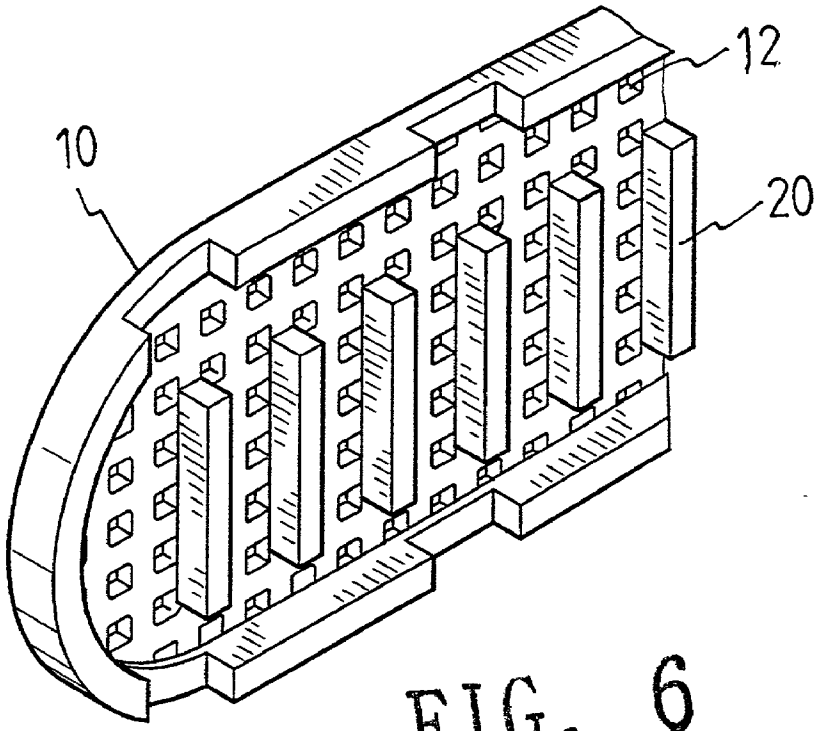


FIG. 6

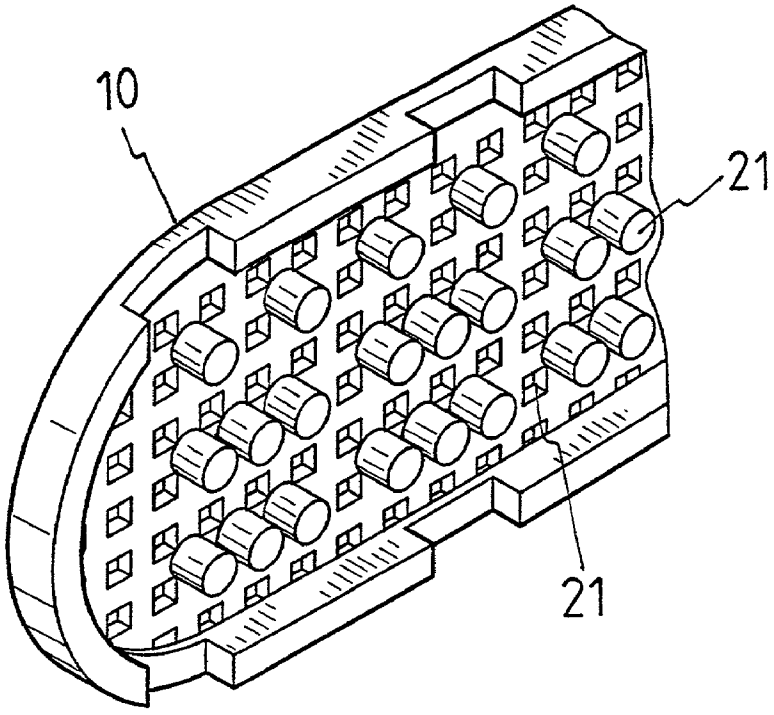


FIG. 7

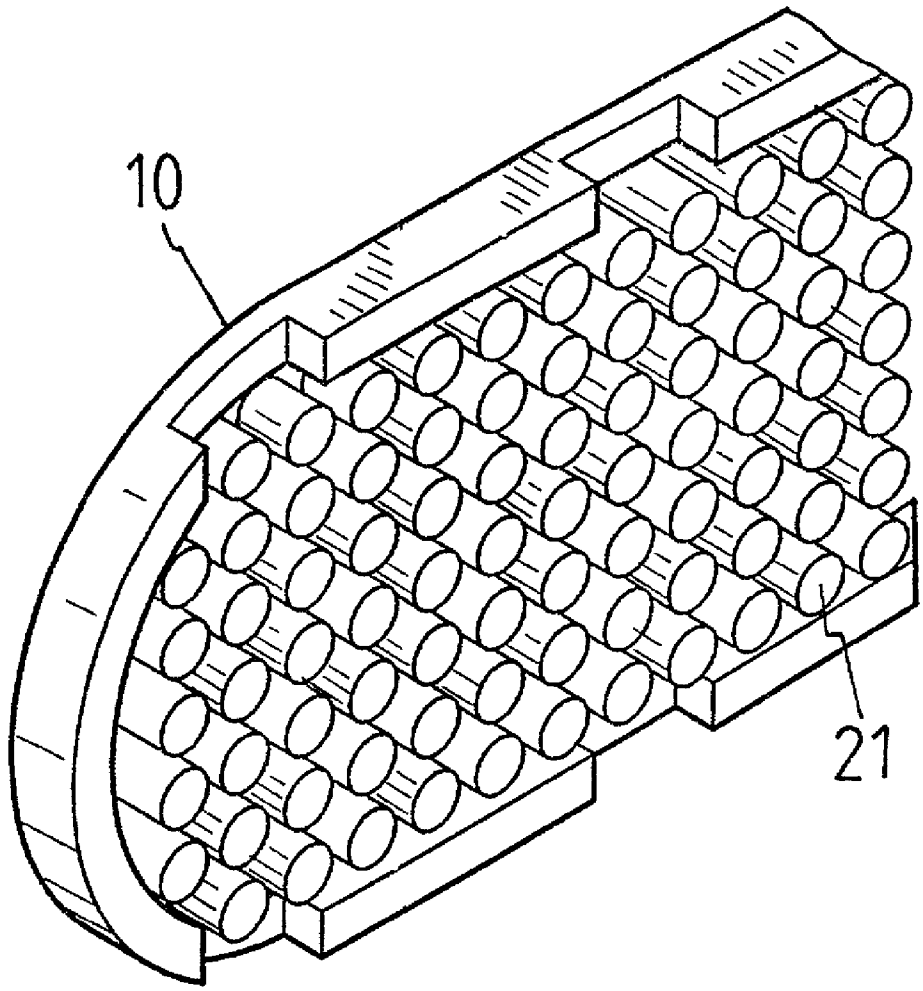


FIG. 8

WATER DRAINABLE SOLE FOR FOOTWEAR

FIELD OF THE INVENTION

[0001] The present invention relates to a sole structure for footwear and has a plurality of protrusions which support the wearer's foot and water flows between the protrusions so that the wearer's foot will not wet.

BACKGROUND OF THE INVENTION

[0002] A conventional shoes used in some specific places such as washrooms where generally have wet floors are usually designed to have a totally covered toe portion so as to avoid water to access the wearer's foot. However, these shoes or boots do not have well ventilation feature so that the feet in the shoes sweat and cause bad smell. In Asia, there is a drain hole in the floor outside of the bathtub so that people take shower or clean the floor will wet the floor and water will drain from the drain hole. In order not to wet the second user's feet, a pair of shoes will be prepared in the bathroom so that the users wear the shoes and their feet will not be wet. However, there is water trapped in recessed area of the shoes so that the user's feet still get wet.

[0003] The present invention intends to provide a sole of footwear wherein a plurality of protrusions extend from the surface of the sole so that water is drained between the protrusions.

SUMMARY OF THE INVENTION

[0004] In accordance with one aspect of the present invention, there is provided a sole for footwear and comprising a sole body having a top surface and a bottom. A plurality of protrusions extend from the top surface of the sole body and a plurality of apertures are defined through the sole body and located between the protrusions.

[0005] The primary object of the present invention is to provide a sole that has rounded protrusions extending from the top surface of the sole body so that water flows between the protrusions and the wearer's foot supported on the protrusions will not be wet.

[0006] These and further objects, features and advantages of the present invention will become more obvious from the following description when taken in connection with the accompanying drawings which show, for purposes of illustration only, several embodiments in accordance with the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] **FIG. 1** is a perspective view to show a sole for footwear of the present invention;

[0008] **FIG. 2** is a top plan view to show the sole for footwear of the present invention;

[0009] **FIG. 3** is a cross sectional view to show another embodiment of the sole for footwear of the present invention;

[0010] **FIG. 4** is a perspective view to show another embodiment of the sole for footwear of the present invention;

[0011] **FIG. 5** is a cross sectional view to show the sole for footwear of the present invention;

[0012] **FIG. 6** is a perspective view to show the bottom of the sole for footwear of the present invention;

[0013] **FIG. 7** is a perspective view to show another embodiment of the bottom of the sole for footwear of the present invention;

[0014] **FIG. 8** is a perspective view to show yet another embodiment of the bottom of the sole for footwear of the present invention, and

[0015] **FIG. 9** is a perspective view to show a further embodiment of the bottom of the sole for footwear of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0016] Referring to **FIGS. 1, 2** and **5**, the sole for footwear of the present invention comprises a sole body **10** having a top surface, a bottom and a skirt flange **100** which extends from a periphery of the sole body **10** and a plurality of notches **101** are defined through the skirt flange **100**. A plurality of protrusions **11** extend from the top surface of the sole body **10** and each of the protrusions **11** has a rounded top end so that water will not stay on the top of the protrusions **11**. A plurality of apertures **12** are defined through the sole body **10** and located between the protrusions **11**. By the sole of the present invention, water will flow through the notches **101** in the skirt flange **100**. When water comes from top of the sole before the users wear the sole of footwear, will drain through the apertures **12** so that no water is trap or stays on the top surface of the sole body **10**.

[0017] **FIG. 3** shows that that a block **30** extends from the bottom of the sole body **10** so as to lift the distance between the top surface of the sole body **10** and the floor. **FIG. 4** shows that the protrusions **11** may be made to be arcuate plates **13** and/or straight plates **13**.

[0018] **FIGS. 6 and 7** respectively show that a plurality of support members extend from the bottom of the sole body **10** wherein the support members can be straight ribs **20** as shown in **FIG. 6**, cylindrical rods **21** as shown in **FIG. 7**. Each of the support members **21**/**20** has a flat surface on a distal end thereof as shown in **FIG. 9** so as to have a stable contact relationship with the floor. **FIG. 8** shows that the number or density of the support members **21** can be made to provide a suitable support ability for the load.

[0019] While we have shown and described various embodiments in accordance with the present invention, it should be clear to those skilled in the art that further embodiments may be made without departing from the scope and spirit of the present invention.

What is claimed is:

1. A sole for footwear comprising:

a sole body having a top surface and a bottom, a plurality of protrusions extending from said top surface of the sole body and a plurality of apertures defined through said sole body and located between said protrusions.

2. The sole as claimed in claim 1, wherein each of said protrusions has a rounded top end.

3. The sole as claimed in claim 1, wherein said protrusions are arcuate plates.

4. The sole as claimed in claim 1, wherein said protrusions are straight plates.

5. The sole as claimed in claim 1 further comprising a block extending from said bottom of said sole body.

6. The sole as claimed in claim 1 further comprising a plurality of support members extending from said bottom of said sole body.

7. The sole as claimed in claim 6 wherein each of said support members has a flat surface on a distal end thereof.

8. The sole as claimed in claim 1 further comprising a skirt flange extending from a periphery of said sole body and a plurality of notches defined through said skirt flange.

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