(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 000 040 A2**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
10.12.2008 Bulletin 2008/50

(51) Int Cl.:
A43B 17/02 *(2006.01)* ***A43B 17/08*** *(2006.01)*

(21) Application number: **08425302.0**

(22) Date of filing: **30.04.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(30) Priority: **08.06.2007 IT RM20070324**

(71) Applicants:
- **SSL Healthcare Italia S.p.A.**
  40132 Bologna (IT)
- **Zafan S.r.l.**
  63019 Sant'Elpidio a Marte (AP) (IT)

(72) Inventors:
- **Menichini, Franco**
  20148 Milano (MI) (IT)
- **Veneziani, Roberto**
  26013 Crema (CR) (IT)

(74) Representative: **Iannone, Carlo Luigi et al**
Barzanò & Zanardo Roma S.p.A.
Via Piemonte 26
00187 Roma (IT)

(54) **Improved insole for foot massage**

(57) The invention concerns to an improved insole (1) for massaging the foot, characterized in that it provides a raised portion (2), with elastic properties, in correspondence of the beginning of the plantar arc zone, so as to follow a more correct anatomy of the foot, and in that an anatomic housing is provided in correspondence of the heel, said housing containing a gel insert (3), anchored to the insole (1) only on its rear portion so that displacement forward of the insole (1) makes the same insole (1) sliding under the insert (3) without any movement of the same insert.

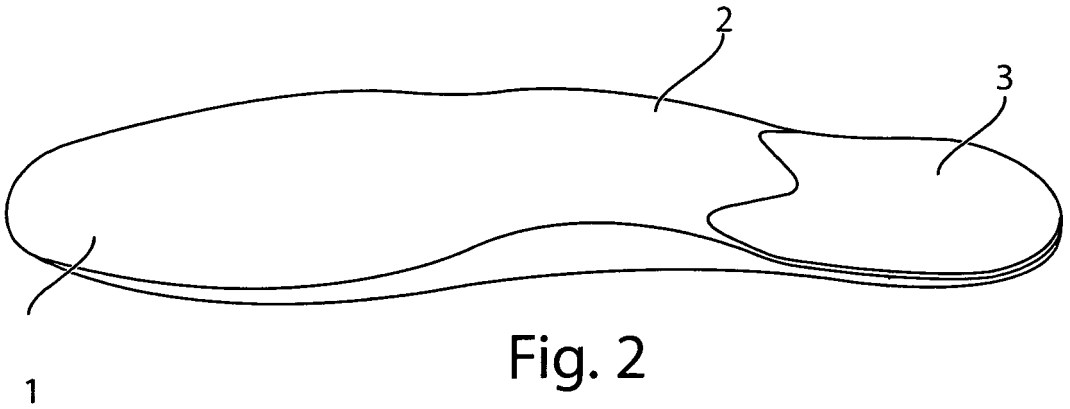

Fig. 2

EP 2 000 040 A2

Description

[0001] The present invention concerns an improved insole for foot massage.

[0002] More specifically, the invention concerns an insole that, inserted within any kind of shoes, contacting the foot, permits massaging the same foot while walking.

[0003] The use of insoles within shoes in order to improve comfort of the user had a great development in the last years.

[0004] They are particularly insoles mainly aiming to make more comfortable resting the foot on the bottom of the shoe.

[0005] By the Italian Utility model application n° MC2000U000018, filed on June 18, 2000, it has been suggested an insole with such features to permit massaging the foot while deambulation.

[0006] Particularly, the insole described in the above application suggests a product that, in order to massage the foot while deambulation, has a dimension lower than the bottom of the shoe within which it is inserted, and provides, on the portion contacting the foot, knurling, such as spots, lines and like. Furthermore, an elastic or movable part is realized on the rear portion of the insole, or it is provided a mechanical movable system in order to obtain a similar effect.

[0007] Applicants, after having carefully examined the above mentioned document, and having taken into consideration features and technical problems of the solution described therein, have realized an improvement of the known solution, permitting solving all the drawbacks of the same.

[0008] It is therefore specific object of the present invention an improved insole for massaging the foot, characterized in that it provides a raised portion, with elastic properties, in correspondence of the beginning of the plantar arc zone, so as to follow a more correct anatomy of the foot, and in that an anatomic housing is provided in correspondence of the heel, said housing containing a gel insert, anchored to the insole only on its rear portion so that displacement forward of the insole makes the same insole sliding under the insert without any movement of the same insert.

[0009] Preferably, according to the invention, a perforated zone is provided on the front part of the insole permitting passage of air between inner base of the shoe and the same insole when a pressure occurs, thus preventing an excessive perspiration of the foot.

[0010] Still according to the invention, a little raise is realized on the rear portion of the lower part of the insole, in order to optimize position of the heel and to increase its capability of absorbing shocks.

[0011] Furthermore, according to the invention, said insole can provide surface knurling.

[0012] Present invention will be now described for illustrative and not limitative purposes according to preferred embodiments, with particular reference to the figures of the enclosed drawings, wherein,

figure 1 shows a schematic view of a first embodiment of the insole according to the invention;
figure 2 shows a schematic view of a second embodiment of the insole according to the invention;
figure 3 shows a schematic view of a third embodiment of the insole according to the invention; and
figure 4 shows a schematic view of a fourth embodiment of the insole according to the invention.

[0013] Observing the figures of the enclosed drawings, and first figure 1, it is shown a first insole according to the invention, providing a part 2, which is raised and with elastic properties, in a more central position, in correspondence of the beginning of the plantar arc zone, so as to follow a more correct foot anatomy.

[0014] With respect to the solution described in the Italian Utility model application n° MC2000U000018, positioning of raised part 2 here, besides advantage relevant to correct following of foot anatomy, permits a better and much easier positioning within every shoe, including women shoe with taco. On the contrary, solution providing part of heel raised obliges insertion of the insole within a shoe suitable to contain the same.

[0015] Coming now to observe figure 2, it is noted that in the rear part of insole 1, in correspondence of the heel, an anatomic housing (not shown in the figure) is obtained, containing a gel insert 3, anchored to the insole 1 only in its rear part, so that forward motion of insole 1 makes the same sliding under insert 3, without displacing the same.

[0016] Said solution cannot be provided in an insole as described in the Italian Utility model application n° MC2000U000018, since heel pressure would have had caused a little displacement of the same heel.

[0017] Furthermore, as shown in figure 3, a perforated zone 4 can be provided on the front part of insole 1, permitting passage of air between inner base of the shoe and the insole 1 when a pressure occurs, thus preventing excessive perspiration of the foot.

[0018] Finally, observing figure 4, a little raise can be realized on the rear end of the lower part of the insole 1, in order to optimize position of heel and to increase its capability of absorbing shocks.

[0019] The present invention has been described for illustrative but not limitative purposes, according to its preferred embodiments, but it is to be understood that modifications and/or changes can be introduced by those skilled in the art without departing from the relevant scope as defined in the enclosed claims.

Claims

1. Improved insole for massaging the foot, **characterized in that** it provides a raised portion, with elastic properties, in correspondence of the beginning of the plantar arc zone, so as to follow a more correct anatomy of the foot, and **in that** an anatomic housing is provided in correspondence of the heel, said hous-

ing containing a gel insert, anchored to the insole only on its rear portion so that displacement forward of the insole makes the same insole sliding under the insert without any movement of the same insert.

2. Insole for massaging foot according to claim 1, **characterized in that** a perforated zone is provided on the front part of the insole permitting passage of air between inner base of the shoe and the same insole when a pressure occurs, thus preventing an excessive perspiration of the foot.

3. Insole for massaging foot according to claim 1 or 2, **characterized in that** a little raise is realized on the rear portion of the lower part of the insole, in order to optimize position of the heel and to increase its capability of absorbing shocks.

4. Insole for massaging foot according to claim 1, 2 or 3, **characterized in that** said insole provides surface knurling.

5. Insole for massaging foot according to each one of the preceding claims, substantially as illustrated and described.

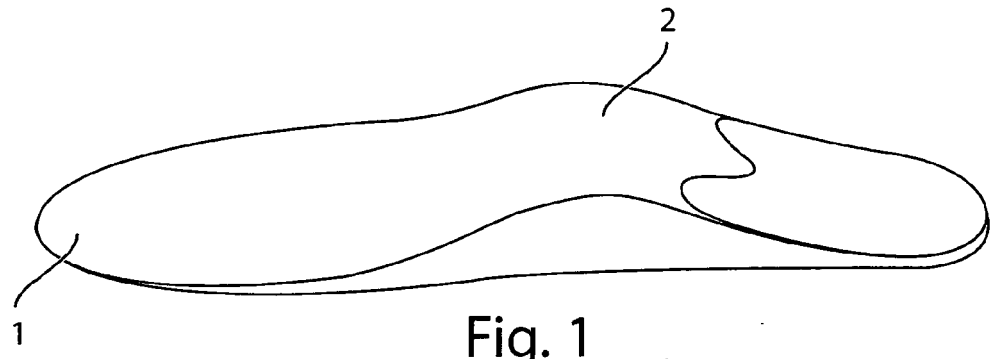

Fig. 1

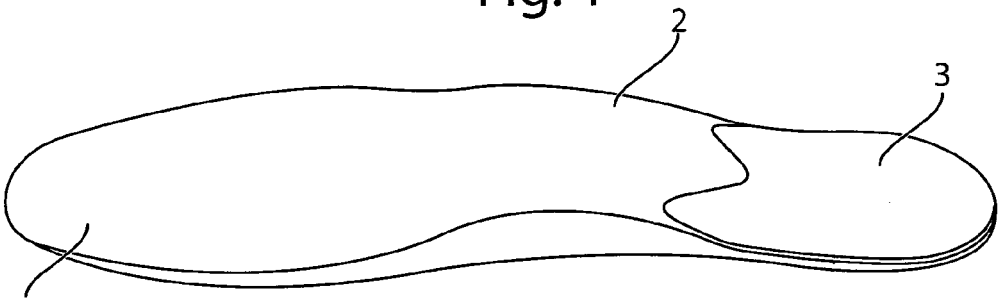

Fig. 2

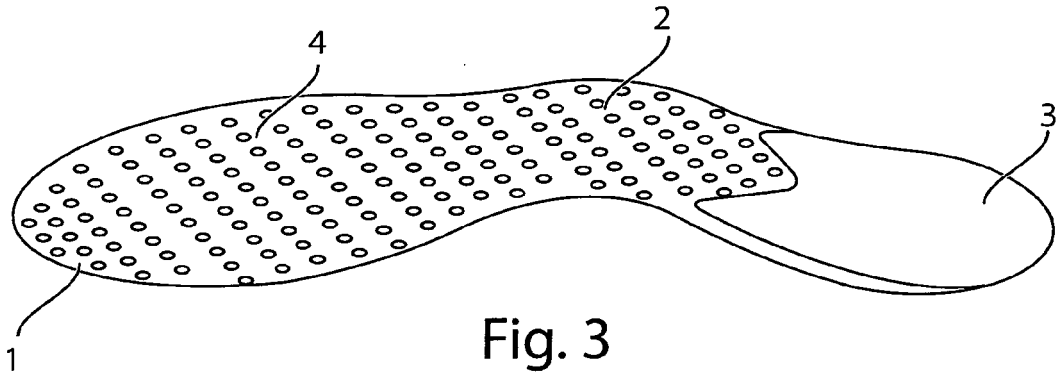

Fig. 3

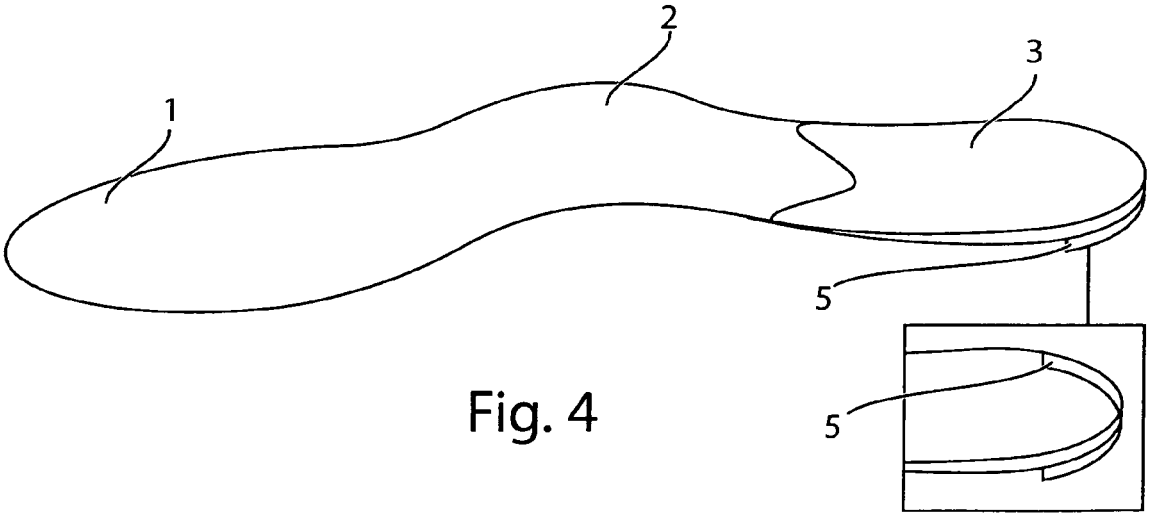

Fig. 4

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- IT MC20000018 U **[0005] [0014] [0016]**