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(54) **SINGLE-USE ANTI-MOISTURE BOOT**

(57) A single use damp-proof boot for use on wet floors, where a barrier against dampness is required for the protection of both the feet and the legs of the user, preventing the ingress of water or dampness into its interior, it being formed by the combination of a rubber item which constitutes the non-slip base of the boot on the floor and whose upper surface is duly shaped for its anatomical fitting to the lower surface of the foot, and a flexible plastic item which constitutes the upper and the legging of the boot, it being fixed to the aforementioned rubber item by means of adhesive via the contact surfaces of both items, said plastic item also featuring a workable closing element at its mouth.

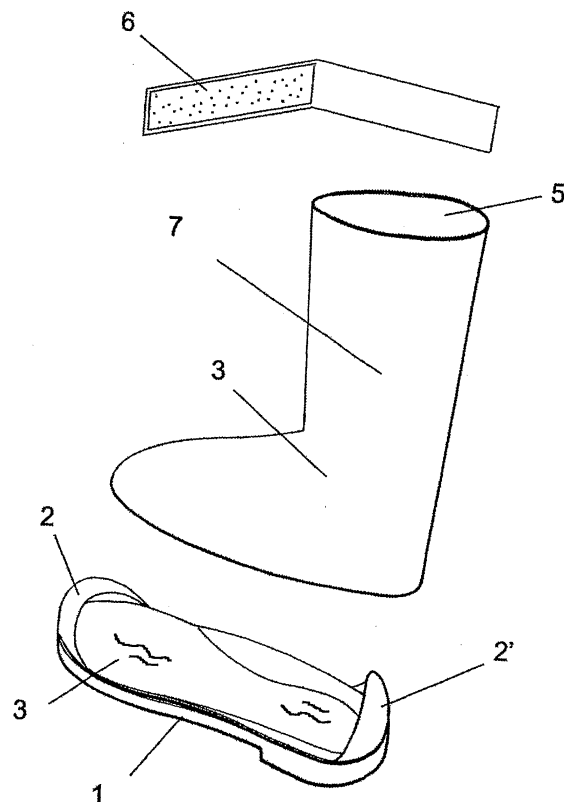


FIG. 1

Description

Object of the invention

[0001] This invention relates to a boot of the type intended to be used on damp and/or flooded floors, where a barrier against dampness is required for the protection of both the feet and the legs of the user up to a suitable height, preventing the ingress of water or dampness in its interior.

[0002] The object of the invention is the obtaining of a boot which, besides fulfilling the function described above, will allow its manufacture at a sufficiently low cost for it to feature the characteristic of it being for a single use.

Background of the invention

[0003] Boots with the aforementioned features with regard to the damp barrier effect are already known; these are usually materialised in a single moulded rubber article wherein the sole, the upper and the legging consist of a single piece, and wherein the legging sometimes covers or protects the lower leg of the user, while in other cases it extends considerably further, covering the thigh as well. These boots occasionally feature internal lining, which makes them more comfortable.

[0004] In any case, these boots are costly, so much so that their purchase is only justified when a relatively frequent use of the same is foreseen, though it is totally inappropriate when their use will be sporadic, not only due to the aforementioned cost, but also to the space which they occupy.

[0005] On the other hand, the very nature of this type of boots makes necessary a considerably wide legging, in order to facilitate the insertion and removal of the foot; a consequence of this is that it facilitates greatly the ingress of water into its interior via its mouth, when the water level might on occasion surpass the height of the boot, or simply when there is water above that level, for example held by bushes and other plants which surpass the height of the boot.

Description of the invention

[0006] The single use damp-proof boot proposed by the invention solves in a totally satisfactory manner the problems described above, consisting of a low-cost, disposable solution which can notwithstanding be re-used a limited number of times and which also permits its storage in a minimal amount of space.

[0007] For this reason, and more specifically, the boot proposed by the invention is materialised in a rubber item which constitutes the base of the boot, which rests on the floor, acting as a sole, which basically has a non-slip function; for this reason its thickness may be very reduced, preferably with an anatomical shape on its upper surface for its perfect adaptation to the foot, and with

raised sections at its ends, corresponding to the toe and the heel, for its better fixing to the same, said rubber item being complemented with a flexible plastic item, shaped like a sock and which at its corresponding sector is affixed by means of adhesive to the rubber item; the aforementioned plastic item being sufficiently large to facilitate the insertion of the foot into its interior, and featuring at its mouth an adhesive strip, for example of a "Velcro®" type in order to suitably bind said mouth to the leg of the user, the reason for this being twofold: in the first place, to stabilise the boot on said leg in order to combat the tendency of the plastic material which constitutes the legging to bunch together, and secondly, in order to seal said mouth against the leg in order to make impossible the ingress of water into the interior of the boot.

[0008] Starting from this basic structure it is feasible to foresee the use of a re-usable adhesive for the joining of the two items, that made of rubber and that of plastic, in order to recover the rubber item, allowing a subsequent reuse of the same while eliminating the plastic item which, due to its being the weaker of the two, is the item which will deteriorate first; or simply in order to maintain the boot in hygienic conditions, as it is in the interior of the plastic item where an accumulation of sweat is foreseeable; for this reason, the elimination of said item is advisable.

Description of the drawings

[0009] To complement the description being carried out and with the aim of aiding a better understanding of the characteristics of the invention, in accordance with a preferred practical embodiment of the same, a set of drawings is attached as an integral part of said description, wherein the following has been portrayed for illustrative and not limitative purposes:

- Figure 1 Portrays an exploded perspective view of a single use damp- proof boot executed in accordance with the object of this invention.
- Figure 2 Portrays a side elevational view in longitudinal cross-section of the set portrayed in Figure 1, duly assembled.

Preferred embodiment of the invention

[0010] In view of the above figures, it may be seen that the boot advocated is constituted from a rubber item (1) which forms a type of sole of a reduced thickness, which is designed to be adapted to the lower surface of the foot of the user and which by means of raised sections at its ends (2, 2') is also adapted to the foot in the regions of the toe and heel, in order to obtain a greater relative stability between said rubber item (1) and the foot.

[0011] The rubber item (1) is complemented with a plastic item (3) which forms a type of sock, and which is affixed to the rubber item (1) by means of a layer of adhesive (4) which affects the contact surfaces of both

items.

[0012] The wall of this plastic item (3) is of a very reduced thickness, is flexible, and therefore inexpensive; and at the level of its mouth (5) it features a workable closure, for example a strip of Velcro® (6), designed to be bound around the leg, for example just below the knee, stabilising the boot and principally preventing the tendency of the legging (7) to bunch together due to the very nature of the plastic material of which it is comprised.

[0013] Furthermore, and as has been mentioned above, the binding effect obtained by means of the adhesive strip of Velcro® (6) or similar entails the impossibility of water entering the interior of the boot.

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Claims

1. A single use damp-proof boot, of the type designed to be used on damp or flooded floors, **characterised in that** it is constituted by means of the functional combination of two items, a rubber item which constitutes the non-slip base of the boot against the floor, forming a type of sole of reduced thickness, and a flexible plastic item, whose wall is also of minimum thickness and which, acting as a sock, forms the upper and the legging of the boot, it being affixed to the rubber item by means of adhesive, via the contact surfaces of both items. 20
2. A single use damp-proof boot, according to claim 1, **characterised in that** the rubber item features an upper surface duly shaped for its anatomical fitting to the lower surface of the foot, and **in that** it incorporates raised sections at its ends which, corresponding to the toe and the heel, improve the relative stability between both items. 35
3. A single use damp-proof boot, according to preceding claims, **characterised in that** the plastic sock-like item features at its mouth a workable closing element, for example an adhesive strip of the Velcro® type or similar. 40
4. A single use damp-proof boot, according to preceding claims, **characterised in that** the adhesive joining both items, that of plastic and that of rubber, is a re-usable adhesive which allows the successive attachment of several plastic items to the same rubber item. 45

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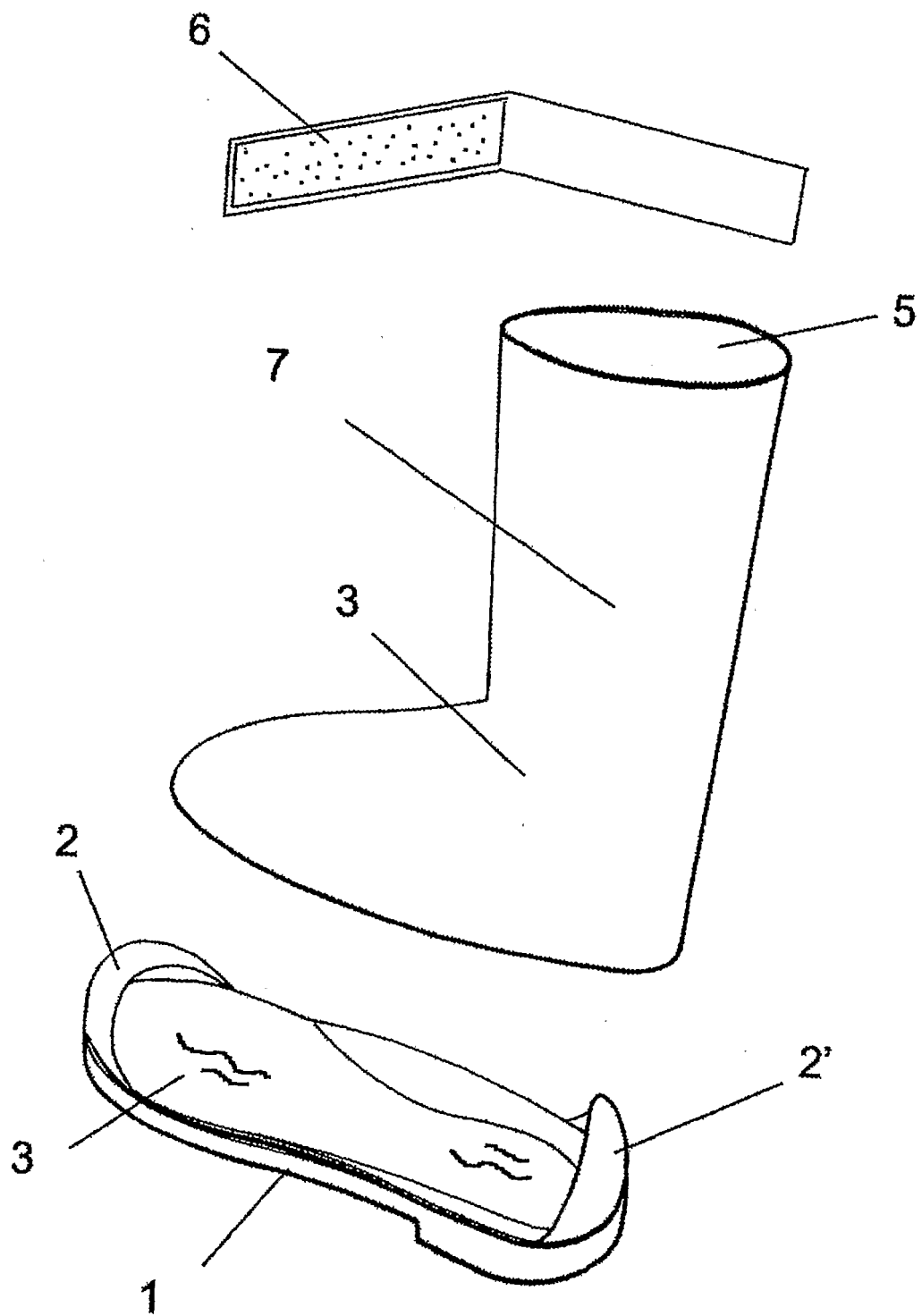


FIG. 1

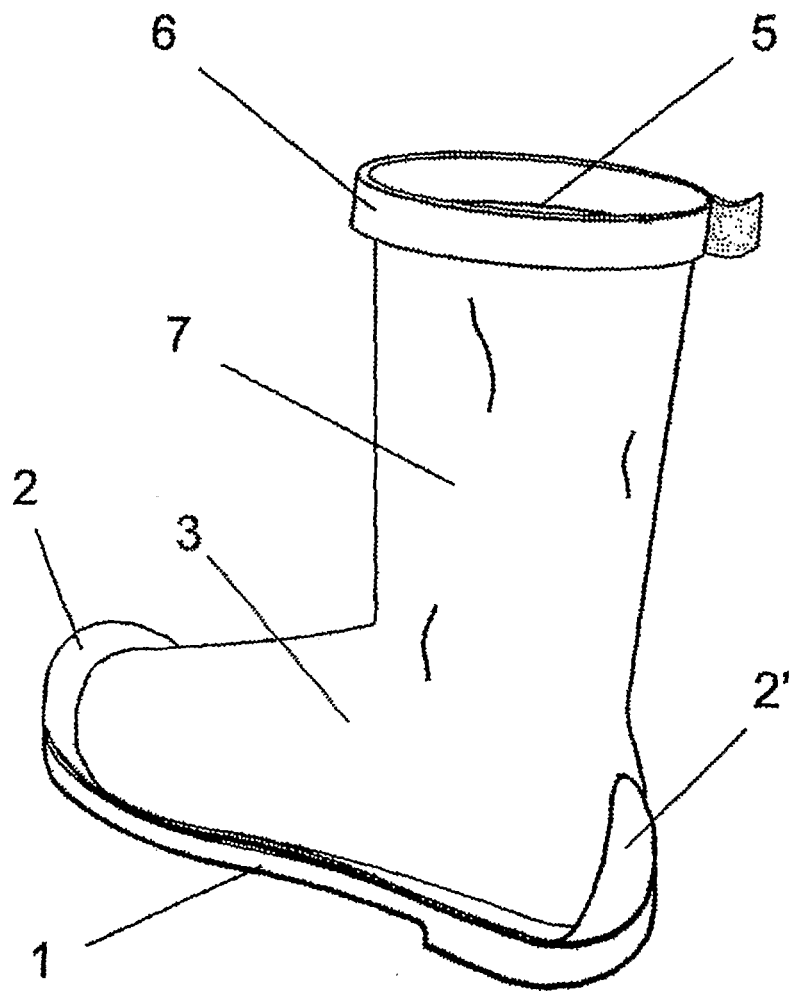


FIG. 2

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

see extra sheet

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A43B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

OEPMPAT, EPODOC, WPI, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ES 1008473 U (ELOY ALDAVERO MORA) 16.04.1989, column 1, line 47 - column 2, line 66; figure 1.	1-4
Y	WO 2004039197 A1 (LACROSSE FOOTWEAR INC ; THOMAS KENT A ; RINEHART ROBERT G) 13.05.2004, pages 4-5; figures.	1-4
A	CA 2328530 A1 (RYU JAE DOO) 17.06.2001, page 5, line 21 - page 7, line 10; figures.	1-4
A	FR 2736805 A3 (REDIN GORRAIZ JUAN MARIA) 24.01.1997, page 3, line 28 - page 4, line 5; figures	1-4

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance.		
"E" earlier document but published on or after the international filing date		
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"O" document referring to an oral disclosure use, exhibition, or other means	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other documents, such combination being obvious to a person skilled in the art
"P" document published prior to the international filing date but later than the priority date claimed		
	"&"	document member of the same patent family

Date of the actual completion of the international search

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Date of mailing of the international search report

(06/09/2007)

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INTERNATIONAL SEARCH REPORT

International application No.

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C (continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of documents, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4333192 A (STOCKLI et al.) 08.06.1982, figures.	1-4
A	ES 1043532 U (FRANCISCO RODRIGUEZ FERNANDO ; FABRIZIO GARCIA SERGIO) 01.01.2000, column 2, lines 12-34; figures.	1-4

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EP 2 016 847 A1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/ ES 2007/000258

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Form PCT/ISA/210 (patent family annex) (April 2007)

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