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(12) # EUROPEAN PATENT APPLICATION

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A request for correction in the description, claims and abstract has been filed pursuant to Rule 88 EPC. A decision on the request will be taken during the proceedings before the Examining Division (Guidelines for Examination in the EPO, A-V, 2.2).

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(54) **Doormat or floor covering intended for use, inter alia, in an entrance hall or the like.**

(57) The invention relates to a mat, in particular a doormat or such a textile product consisting of an alternation of stips (2) with brushing and strips (3) with drying properties for the soles, characterised in that said mat consists on its useful side of needle felt and channels (4) being provided between strips of needle felt (2) provided thereto and consisting of felt threads with brushing properties, in which channels strips (3) with drying properties are fixed to the mat.

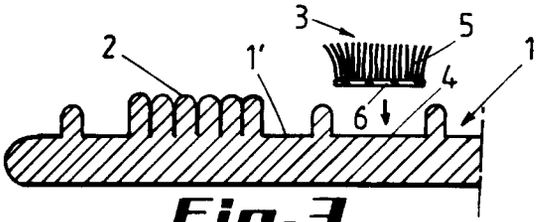


Fig.3

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This invention relates to a mat, in particular a doormat or such a textile product consisting of an alternation of strips with brushing and strips with drying properties for the soles.

An object of the invention is to provide a mat, in particular a doormat or a similar textile product which can be manufactured in a technically reliable way.

In order to reach the above indicated object, the mat, in particular the doormat, consists on its useful side of needle felt and channels being provided between strips of needle felt provided thereto and consisting of felt threads with brushing properties, in which channels strips with drying properties are fixed to the mat.

In an embodiment appropriate for an excellent industrial production, said strips with brushing properties consist of needle felt and said strips with drying properties consist of so-called tufted material, said strips with drying properties being composed of water absorbent fibres which are connected to a carrier which is itself attached to the needle felt of which the mat is made.

Other details and advantages of the invention will become apparent from the following description of a doormat or floor covering according to the invention destined amongst others for an entrance hall or the like. This description is only given by way of example and does not limit the invention. The reference numerals relate to the figures annexed hereto.

Figure 1 is a top view on a preferably applied embodiment of a doormat according to the invention.

Figure 2 is a section according to line II-II from figure 1.

Figure 3 shows on a larger scale a portion of the section according to figure 2, wherein a strip with drying properties is represented before being glued onto the support layer.

The doormat as illustrated in these different figures is clearly only a possible embodiment. This example is therefore only destined to illustrate the idea of the invention.

Further the term "doormat" has to be understood in a wide sense and embraces here both smaller according to predetermined dimensions finished doormats and larger products which may be placed in entrance halls and which are wether or not delivered in rolls. These latter products correspond therefore also to the term doormat.

The doormat according to the annexed figures is composed of the alternation of strips 2 with brushing and strips 3 with drying properties onto a support layer 1. The term "strip" refers to all geometrical shapes, i.e. elongated strips, herringbone or twill effects, block patterns etc.

Referring to figures 1 to 3, the support layer 1 can be seen with the alternation of strips 2 with brushing properties and stips 3 with drying properties. The brushing effect is achieved by making use of needle felt, the texture of the felt showing a rough surface thanks to the technical characteristics of the used monofilaments. Indeed, a good brushing effect can only be obtained by using resilient synthetic fibres which, thanks to the needle felt structure, form loops enhancing the brushing effect.

Between the strips 2 and the strips 3 are provided deeper channels 1' for receiving released materials such as dust, sand, mud.

The strips 3 with drying properties consist in a preferably applied embodiment of tufted material. The tufted fibres 5 are connected in a usual way to a carrier 6 (figure 3) and are edged along their longitudinal edges by a supporting needle felt structure (figures 2 and 3) causing the fibres of the strip 3 with drying properties to remain nicely compact and providing a protection along their bumper edges.

The carrier 6 to which the fibres 5 of the strips 3 are connected, consist of any material, usually a synthetic material which is itself glued onto the support layer of the doormat.

Figure 3 shows very clearly how the strips 3 will be fixed onto the support layer 1. Usually, the layer 6 is glued onto the felt layer 1. In practice, when the strips 3 with drying properties consist of tufted fibres, these fibres are also present below the layer 6. In this case, these fibres are impregnated with glue. Consequently, these fibres can be identified then with the layer 6.

As it can be deduced from figure 2, the felt thickness is considerably reduced below the carrier 6 belonging to the strips 3 with drying properties. This reduced felt thickness is substantially equal to the reduction at the channels 1'.

Thanks to the appropriate choice of the dimensions of the strips composing the doormat, a shoe sole can be subjected at the same time to a scrubbing and a drying action. The distance measured from centre line to centre line between the strips with scrubbing properties and the strips with drying properties equals about 6 cm. Clearly, this choice of dimension is in no event limiting for the invention. In the preamble, it has already been set forth that instead of parallel strips other patterns can be applied. Essential remains the provision of choosing the alternation of strips with different properties in such a manner that a shoe sole is subjected at the same time to a scrubbing and to a drying action.

Further it is useful to provide between strips with the same or with similar properties channels 4 for receiving dirt, dust, mud, etc.

The clear advantage of the invention may certainly be seen in the possibility to join to textile components with one another without having to use components of metal or synthetic profiles and the like.

The invention is not limited to the hereabove described embodiment and many modifications could be applied hereto without leaving the scope of the application.

Claims

1. A mat, in particular a doormat or such a textile product consisting of an alternation of stips (2) with brushing and strips (3) with drying properties for the soles, characterised in that said mat consists on its useful side of needle felt (2) and channels (4) being provided between strips of needle felt (2) provided thereto and consisting of felt threads with brushing properties, in which channels strips (3) with drying properties are fixed to the mat.

2. A doormat according to claim 1, characterised in that said strips with brushing properties (2) consist of textile threads providing a rough surface.

3. A doormat according to claim 2, characterised in that said strips (2) with brushing properties have such a structure that, in cross-section, the strips (2) have a rounded profile and further a slope whereby the scraped dirt is removed laterally.

4. A doormat according to any one of the claims 1-3, characterised in that said strips with drying properties (3) consist of a so-called tufted material.

5. A doormat according to any one of the claims 1-3, characterised in that said strips (3) with drying properties consist of a woven material.

6. A doormat according to any one of the claims 1-3, characterised in that said strips (3) with drying properties have a knitted structure.

7. A doormat according to any one of the claims 5-9, characterised in that said strips (3) with drying properties are composed of water absorbent fibres which are connected to a carrier (6) which is itself glued in said channels (4) to the needle felt of which the mat is made.

8. A doormat according to any one of the claims 1-7, characterised in that said strips (2) with brushing properties and said strips (3) with drying properties are lying in the form of belts with an optimum interval of about 6 cm.

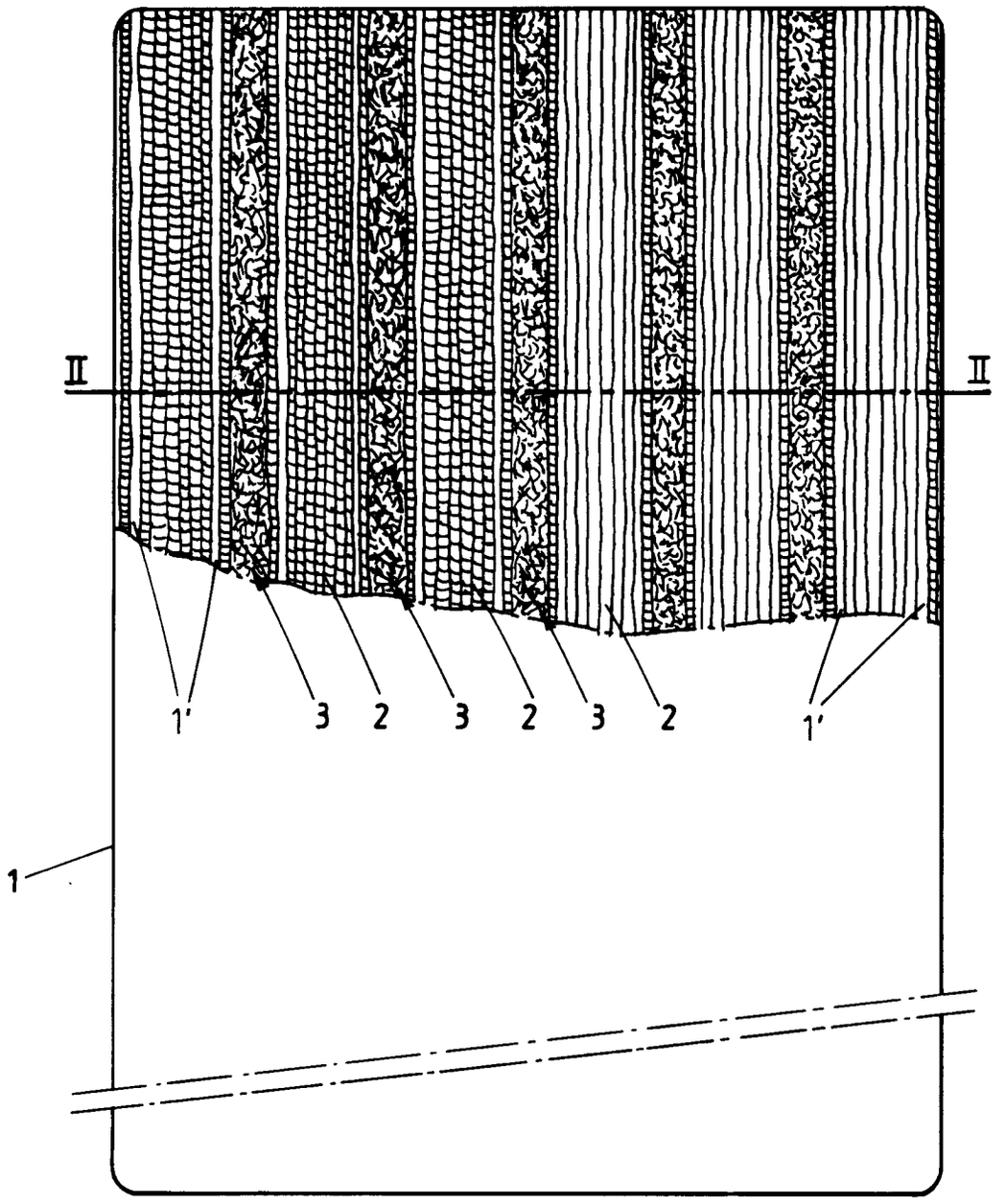


Fig.1

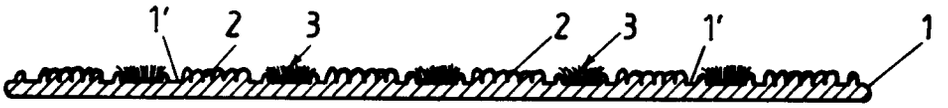


Fig.2

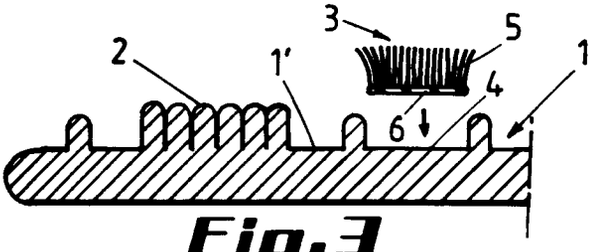


Fig.3

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EUROPEAN SEARCH REPORT

Application Number
EP 93 20 3616

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X	DE-U-87 00 459 (NITEX GMBH) * page 1, paragraph 1 - page 6, last paragraph; figures *	1,2,4,8	A47L23/26 A47G27/02
A	---	5,6,10	
A	EP-A-0 289 880 (ARENS) * column 6, line 27 - column 12, line 56; figures *	1-6,8	
A	---		
A	GB-A-2 010 087 (KTL PLASTICS EQUIPMENT AND ENGENEERING SERVICES LIMITED) * the whole document *	1,4,5	
A	---		
A	EP-A-0 514 191 (SMITH) * the whole document *	1,7	
A	---		
A	DE-A-22 52 179 (CHEMIEGESELLSCHAFT GUNDERNHAUSERN MBH) * page 2, last paragraph *	4-6	
A	---		
A	DE-U-86 03 057 (ERWIN MÜLLER GMBH & CO) * page 3, line 1 - page 5, line 20; figures *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.5) A47L A47G
A	---		
A	GB-A-2 241 166 (TAYLOR)		

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	31 March 1994	Vistisen, L

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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