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(54) **Covering material and method for manufacturing such a covering material**

(57) The present invention relates to a covering material (1) comprising a carrier material (2) made of PVC-coated yarns, in which said covering material (1) com-

prises one or more flocked zones. By providing such zones on the covering material (1) made of PVC-coated yarns, the sitting comfort of the furniture which is covered with such a material will increase significantly.

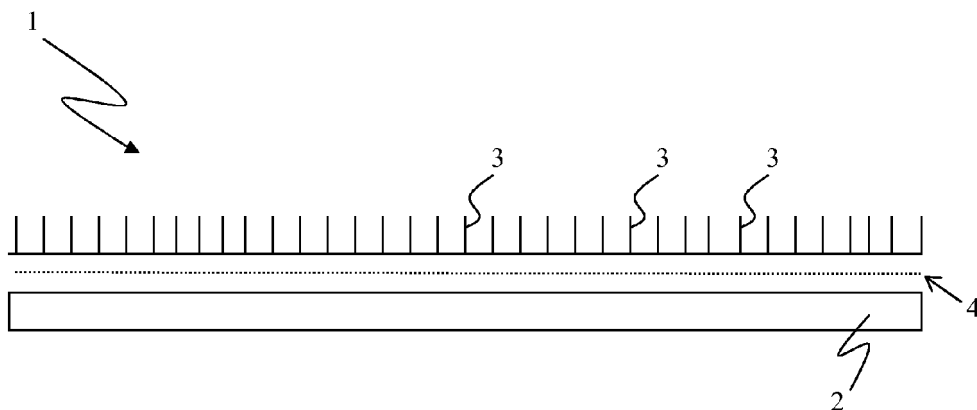


Fig. 1

EP 2 572 801 A1

Description

[0001] The present invention relates to, on the one hand, a covering material comprising a carrier material made of PVC-coated yarns. On the other hand, the present invention relates to a method for manufacturing such a covering material.

[0002] The covering material according to the present invention can, inter alia, be used as covering for both outdoor furniture, such as for example beanbags, loungers, chairs and the like, and as covering for indoor furniture, without thereby wanting to limit the possible uses of the present invention.

[0003] Covering material which is made of PVC-coated yarn has already been commercially available for a considerable time. Due to its weatherproof nature and its resistance to tearing, such covering material is often used as self-supporting textile for outdoor furniture. Despite its many good properties, furniture which is covered with covering material made of PVC-coated yarn has the considerable drawback that the sitting comfort is inadequate.

[0004] It is therefore an object of the present invention to provide a covering material which, in use, will considerably improve the sitting comfort for the user.

[0005] The object of the invention is achieved by providing a covering material comprising a carrier material made of PVC-coated yarns, in which said covering material comprises one or more flocked zones. By providing such zones on the covering material made of PVC-coated yarns, the sitting comfort of the furniture which is covered with such a material will increase significantly.

[0006] Within the context of the present invention, the term "flocked zones" is understood to mean: zones in the covering material which comprise flock fibres which are secured to the carrier material by means of an adhesive connection. The flock fibres in question are preferably made of polyester, polyamide, viscose or cotton. The flock fibres are water- and dirt-repellent.

[0007] In a preferred embodiment of the covering material according to the invention, said zones comprise flock fibres which have a thickness in the range between 1 dTex and 5 dTex. In particular, said zones comprise flock fibres which have a length between 0.1 mm and 5 mm. In particular, said flock fibres are attached to the carrier material by means of an adhesive connection. The adhesive connection used is more particularly suitable to attach the flock fibres to PVC-coated yarns. The adhesive used is conductive, elastic and weather-proof.

[0008] According to a more particular embodiment of the covering material according to the invention, said carrier material is a woven, knitted or interwoven material.

[0009] Another object of the present invention relates to a method for manufacturing a covering material for furniture, which method comprises the following steps:

- supplying a carrier material made from PVC-coated yarn;
- applying a conductive adhesive layer to at least one

zone of the carrier material supplied;

- applying flock fibres to the zones provided with adhesive by means of an electrostatic field;
- drying the carrier material.

[0010] The present invention will now be explained in more detail with reference to the following detailed description of some embodiments of the covering material according to the present invention. This description and these examples are solely intended to give an explanation and to indicate further advantages and particulars of these coverings according to the invention, and can therefore by no means be interpreted as a limitation of the area of application of the invention or of the patent rights defined in the claims.

[0011] In this detailed description, reference numerals are used to refer to the attached drawings, in which:

- *Fig. 1 diagrammatically shows the covering material according to the invention;*
- *Fig. 2 diagrammatically shows the method according to the invention.*

[0012] The covering material (1) according to the present invention and as illustrated diagrammatically in Fig. 1 is composed of a covering material (2), made of PVC-coated yarns. The covering material (2) may be a woven, knitted or interwoven material. Covering materials (1) made from such a material have already been commercially available for a considerable time, mainly as a self-supporting textile for outdoor furniture. However, a recurring complaint from consumers about these is that the sitting comfort of this known covering material is not satisfactory. According to the present invention, this problem is solved by providing the covering material (2) with one or more zones which comprise short fibres, so-called flock fibres (3). The presence of such "flocked" zones will significantly improve the sitting comfort of the furniture which is covered with such a material.

[0013] The flock fibres (3) used are made of polyester, polyamide, viscose or cotton, preferably have a thickness in the range from 1 dTex to 5 dTex, and a length of between 0.1 mm and 5 mm. The thinner the fibres (3), the softer the flocked surface is to the touch. It is important that the flock fibres (3) meet stringent criteria regarding colourfastness and rubbing fastness.

[0014] The way in which the covering material (1) according to the invention is formed is diagrammatically illustrated in Fig. 1. In this case, a carrier material (2) is provided with a conductive adhesive layer by means of a coating system (5) and template (6). Using an electrode (7), the flock fibres (3) are charged electrostatically and hurled at the conductive adhesive layer in this state. As a result of the charge in the fibre and the vibration of the carrier material, all the flock fibres (3) will stand upright. After the flock fibres (3) have been applied, the unit will be cured in a drying device (8) to form the flocked end product (1).

[0015] The covering material (1) according to the present invention is self-supporting, water-permeable, dirt-repellent and offers good sitting comfort. It is preferably used as covering for both outdoor furniture, such as for example beanbags, loungers, chairs and the like, and as covering for indoor furniture.

Claims

1. Covering material (1) comprising a carrier material (2) made of PVC-coated yarns, **characterized in that** said covering material (1) comprises one or more flocked zones.
2. Covering material (1) according to Claim 1, **characterized in that** said zones comprise flock fibres (3) which have a thickness in the range between 1 dTex and 5 dTex.
3. Covering material (1) according to Claim 1 or 2, **characterized in that** said zones comprise flock fibres (3) which have a length between 0.1 mm and 5 mm.
4. Covering material (1) according to one of the preceding claims, **characterized in that** said carrier material (2) is a woven, knitted or interwoven material.
5. Covering material (1) according to one of the preceding claims, **characterized in that** said flock fibres (3) are made of polyester, polyamide, viscose or cotton.
6. Covering material (1) according to one of Claims 2 to 5, **characterized in that** said flock fibres (3) are attached to the carrier material by means of an adhesive connection.
7. Method for manufacturing a covering material (1) for furniture, **characterized in that** the method comprises the following steps:
 - supplying a carrier material (2) made from PVC-coated yarn;
 - applying a conductive adhesive layer (4) to at least one zone of the carrier material (2) supplied;
 - applying flock fibres (3) to the zones provided with adhesive by means of an electrostatic field;
 - drying the carrier material (2).

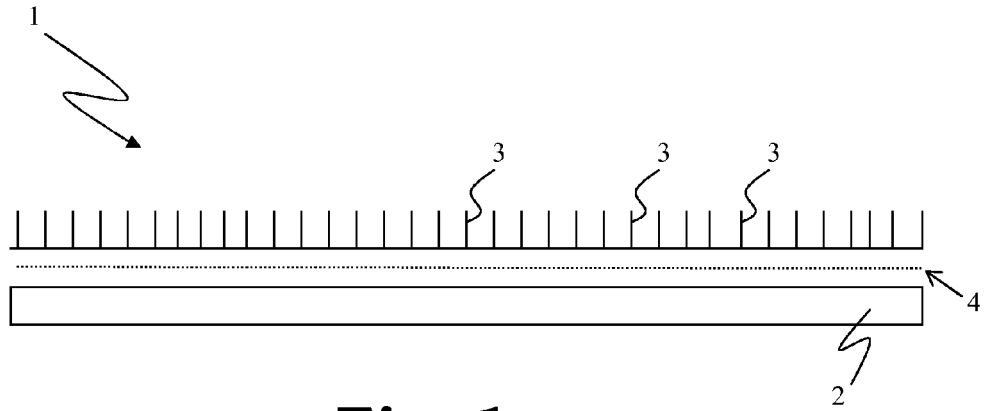


Fig. 1

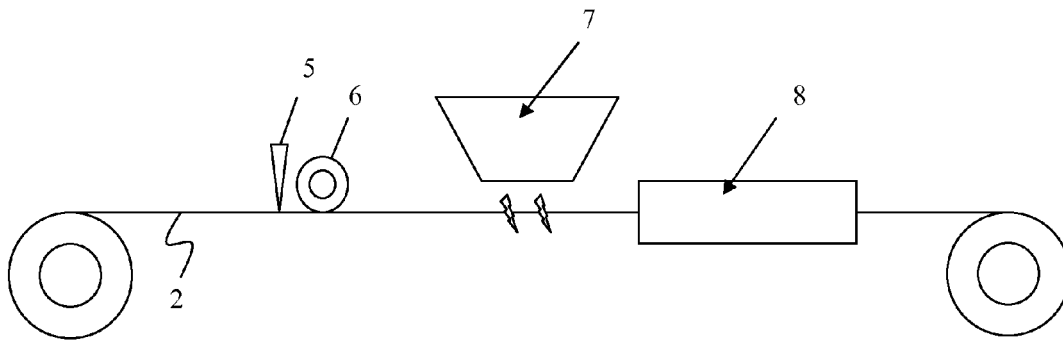


Fig. 2



EUROPEAN SEARCH REPORT

Application Number
EP 12 18 5445

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	DE 203 00 748 U1 (PIMIENTO OHG [DE]) 13 March 2003 (2003-03-13) * page 1, paragraph 2; claim 4 * * page 3, line 12 - line 24 * -----	1-7	INV. B05D1/16 B32B3/10 B32B5/16 B32B5/26 D06Q1/10
A	US 2010/035054 A1 (WHITE ROGER GORDON [GB]) 11 February 2010 (2010-02-11) * paragraphs [0001] - [0022], [0033] * -----	1-7	
A	WO 2009/002286 A1 (FLOKSER TEKSTIL SANAYI TICARET [TR]; TUKEK RAFET [TR]) 31 December 2008 (2008-12-31) * page 2, line 1 - page 4, line 17 * -----	1-7	
A	DE 35 08 995 A1 (TOYODA GOSEI KK [JP]) 19 September 1985 (1985-09-19) * page 1, line 1 - page 2, line 2; claims 1-4 * -----	1-7	
			TECHNICAL FIELDS SEARCHED (IPC)
			D06M B05D B32B D06Q D01F D04H
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 November 2012	Examiner Okunowski, Joachim
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 12 18 5445

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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05-11-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 20300748 U1	13-03-2003	NONE	
US 2010035054 A1	11-02-2010	EP 1863636 A1	12-12-2007
		GB 2424654 A	04-10-2006
		US 2010035054 A1	11-02-2010
		WO 2006103470 A1	05-10-2006
WO 2009002286 A1	31-12-2008	NONE	
DE 3508995 A1	19-09-1985	AU 572972 B2	19-05-1988
		AU 3982185 A	19-09-1985
		CA 1224397 A1	21-07-1987
		DE 3508995 A1	19-09-1985
		JP 1629762 C	20-12-1991
		JP 2052623 B	14-11-1990
		JP 60192620 A	01-10-1985
		US 4587149 A	06-05-1986