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(54) **Method of applying glitter to an article, and relative glitter transfer**

(57) A method of applying glitter (4) to an article (9), and including the steps of forming a glitter transfer (1) by depositing a release adhesive (3) on a temporary backing (2), and by applying glitter (4) to the release ad-

hesive (3); applying an attach adhesive (8) to the article (9); hot-pressing the glitter transfer (1) onto the article (9) with the glitter (4) contacting the attach adhesive (8); and removing the temporary backing (2).

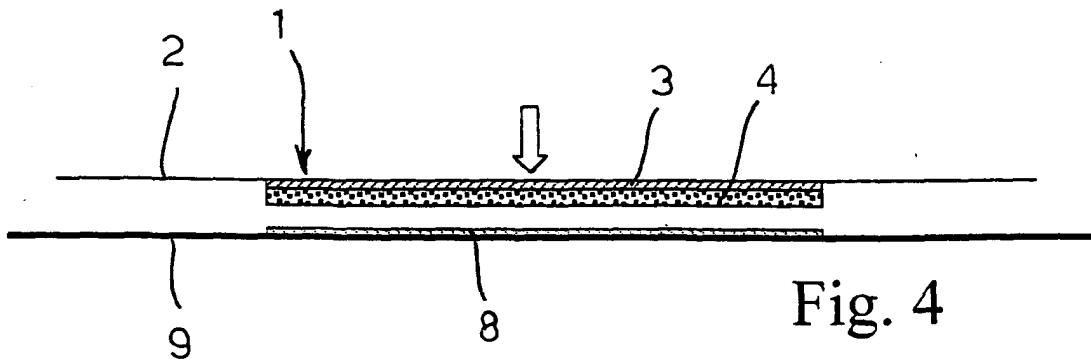
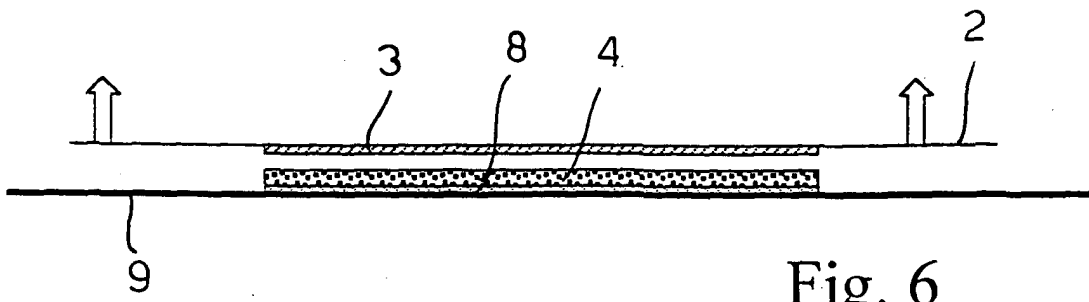


Fig. 4



Description

[0001] The present invention relates to a method of applying glitter to an article, e.g. an article of clothing.

[0002] The term "glitter" is intended to mean a cluster of particles of shiny and/or iridescent material, which can be applied to an article to produce a characteristic "sequin-like" decoration. Such particles normally comprise flat fragments of plastic sheet material, e.g. PVC or PPL, or of metal sheet material, e.g. aluminium.

[0003] Various method of applying glitter to an article are known.

[0004] A first method consists in direct application by immersion: adhesive is first applied to the article, e.g. using a stencil, and the article is immersed in a tank of glitter, which only adheres to the adhesive-coated area.

[0005] This method has various drawbacks. In particular, adhesion by straightforward contact is poor, and traces of glitter inevitably also cling to the non-adhesive-coated areas.

[0006] A second method consists in transfer application.

[0007] In this method, a transfer is formed by applying release adhesive to a temporary backing, e.g. a sheet of paper material, depositing the glitter onto the release adhesive, and covering the glitter with a layer of attach adhesive. The transfer so formed is then hot-pressed onto the article, so that the attach adhesive secures the glitter to the article, and the heat-melt release adhesive allows removal of the temporary backing.

[0008] This method is unreliable and difficult to set up, on account of the variability of the adhesive properties, which may result in poor glitter adhesion or excessive grip of the release adhesive, thus resulting in flaking of the temporary backing on removal.

[0009] A third method consists in applying a glitter-containing paste using a stencil, but requires the use of very fine glitter capable of getting through the open areas of the stencil. For this reason, and the fact that the glitter is incorporated in a paste, the aesthetic effect achievable is limited, and the decoration fairly rigid.

[0010] It is an object of the present invention to provide a method of applying glitter to an article, designed to eliminate the aforementioned drawbacks typically associated with known methods.

[0011] According to the present invention, there is provided a method of applying glitter to an article, comprising the steps of:

- forming a glitter transfer by applying release adhesive to a temporary backing, and by applying glitter to the release adhesive;
- applying attach adhesive to the article;
- hot-pressing the glitter transfer onto the article, with the glitter contacting the attach adhesive; and
- removing the temporary backing.

[0012] The present invention also relates to a glitter

transfer comprising a temporary backing of sheet material; a layer of release adhesive; and a layer of glitter applied to the release adhesive; no further layer of adhesive being applied to said glitter before the glitter is attached to an article for decoration.

[0013] A preferred, non-limiting embodiment of the present invention will be described by way of example with reference to the accompanying drawings, in which:

Figure 1 shows a schematic section illustrating a first step in a method in accordance with the invention;

Figure 2 shows a schematic section illustrating a second step in the method;

Figure 3 shows a schematic section illustrating a third step in the method;

Figure 4 shows a schematic section illustrating a fourth step in the method;

Figure 5 shows a schematic section illustrating a fifth step in the method;

Figure 6 shows a schematic section illustrating a sixth step in the method.

[0014] Figures 1 and 2 show preliminary steps in the method to form a glitter transfer 1.

[0015] Glitter transfer 1 substantially comprises a temporary backing 2 of sheet material; a layer of release adhesive 3; and a layer of glitter 4.

[0016] Temporary backing 2 is conveniently defined by a sheet of translucent polyester of 40-80 g/m², and preferably 50-60 g/m², substance, and preferably comprises a substantially smooth face 5a, and a rougher face 5b to improve grip of release adhesive 3.

[0017] In a first step in the method (Figure 1), the layer of release adhesive 3 is applied to face 5b of temporary backing 2 using any known method, e.g. spread by a doctor blade (not shown) through a first stencil 6 onto a given area of temporary backing 2.

[0018] In a second step in the method (Figure 2), glitter 4 is applied to the layer of release adhesive 3, preferably by electrostatic deposition through a second stencil 7.

[0019] In Figure 2, the area of glitter 4 coincides with that of layer 3, which must obviously be at least equal to the glitter area, but which may be larger to avoid register problems.

[0020] The above areas, obviously, need not necessarily be continuous, and may be defined by a number of separate areas defining specular images of the desired decorations, e.g. patterns or writing.

[0021] At the end of the Figure 2 step, glitter transfer 1 is complete.

[0022] Figure 3 shows the step of applying a layer of attach adhesive 8 to an article 9 for decoration. The area to which attach adhesive 8 is applied corresponds to the shape of the desired decoration. Any known attach adhesive may be used, e.g. NEO PASTE METAL M adhesive marketed by LAMBERTI S.p.A. of Albizzate, Italy.

Attach adhesive 8 may be applied using any known method, e.g. spread through a stencil 10.

[0023] The transfer (Figure 4) is placed on article 9 with the layer of glitter 4 contacting and matching the layer of release adhesive 8; and Figure 5 shows the step of pressing transfer 1 onto article 9.

[0024] The transfer is conveniently hot-pressed on at a pressure of 1.5-2 bars, at a temperature, for example, of 160°C for 20 s, and conveniently on a flat press 11. During this step, glitter 4 is attached to article 9, and release adhesive 3 melts.

[0025] Figure 6 shows the final step of removing temporary backing 2 from the article.

[0026] The advantages of the method according to the invention will be clear from the foregoing description. In particular, it provides for eliminating all the drawbacks typically associated with known techniques, and for obtaining highly attractive glitter decorations with no contamination of the article itself.

[0027] The method is reliable, repeatable, and also economical, in that applying the attach adhesive to the article, as opposed to the transfer, greatly simplifies production and subsequent handling of the transfer, while in no way complicating manufacture of the article itself. In fact, the step of applying the attach adhesive to the article can be integrated easily into the stencil printing process to which the article, e.g. article of clothing, is normally subjected to colour it and/or form printed decorations. The attach adhesive merely constitutes, so to speak, "an extra colour" in the normal article stencil printing process.

[0028] Clearly, changes may be made to the method and transfer as described herein without, however, departing from the scope of the present invention.

Claims

1. A method of applying glitter (4) to an article, comprising the steps of:

- forming a glitter transfer (1) by applying release adhesive (3) to a temporary backing (2), and by applying glitter (4) to the release adhesive (3);
- applying attach adhesive (8) to the article (9);
- hot-pressing the glitter transfer (1) onto the article (9), with the glitter (4) contacting the attach adhesive (8); and
- removing the temporary backing (2).

2. A method as claimed in Claim 1, **characterized in that** said step of applying attach adhesive (8) to said article (9) is performed using a stencil.

3. A glitter transfer comprising a temporary backing (2); a layer of release adhesive (3) applied to said temporary backing (2); and a layer of glitter (4) applied to said layer of release adhesive (3); no further

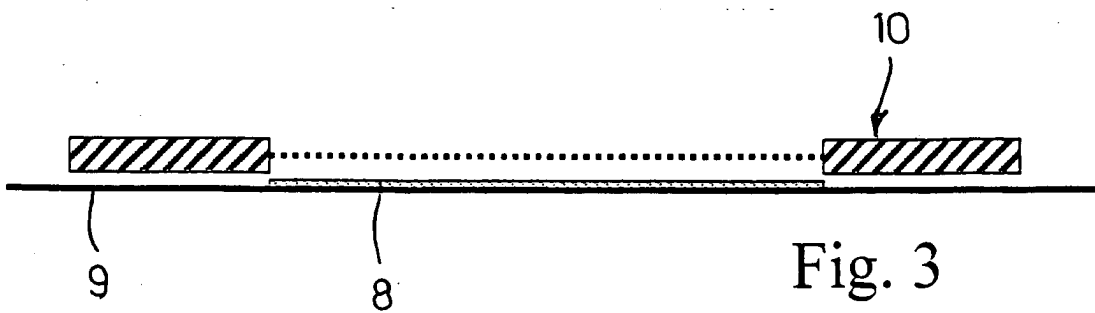
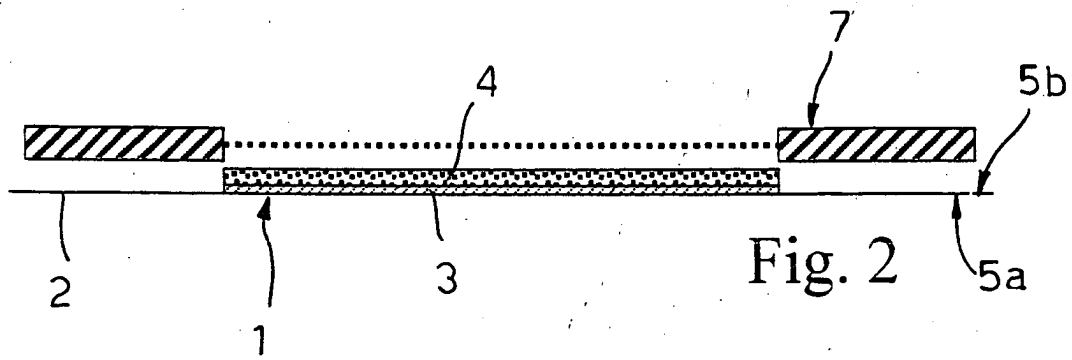
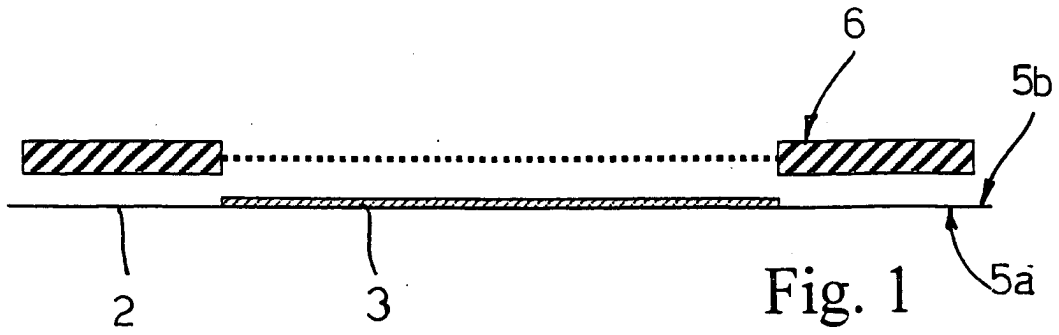
layer of adhesive being applied to said layer of glitter (4).

4. A glitter transfer as claimed in Claim 3, **characterized in that** said temporary backing is a sheet (2) of polyester.

5. A glitter transfer as claimed in Claim 4, **characterized in that** said sheet (2) of polyester is rougher on one face (5b); said layer of release adhesive (3) being applied to said face (5b).

6. A glitter transfer as claimed in Claim 4 or 5, **characterized in that** said sheet (2) of polyester is of 40 to 80 gr/m² substance.

7. A glitter transfer as claimed in Claim 4 or 5, **characterized in that** said sheet (2) of polyester is of 50 to 60 gr/m² substance.



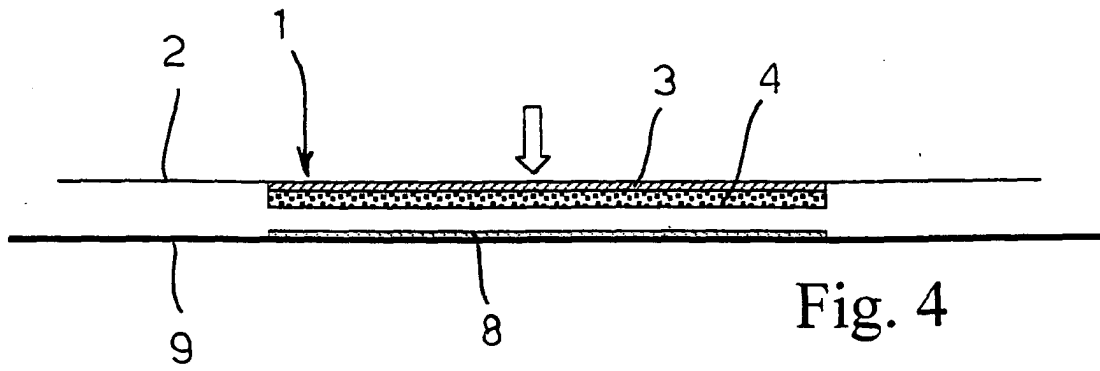


Fig. 4

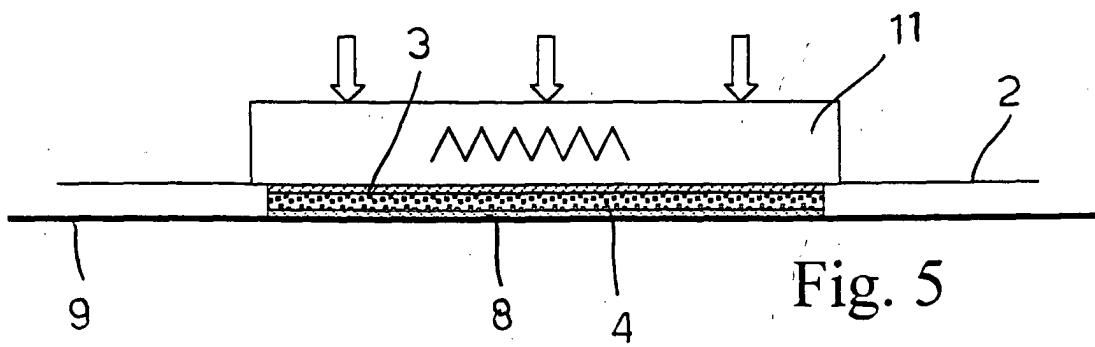


Fig. 5

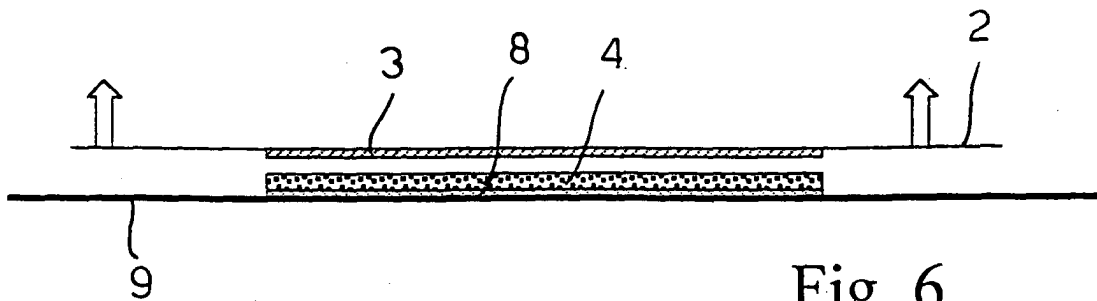


Fig. 6



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 01 4918

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B44C
Place of search	Date of completion of the search	Examiner	
MUNICH	21 October 2003	Sartor, M	
CATEGORY OF CITED DOCUMENTS		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
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EP 03 01 4918

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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