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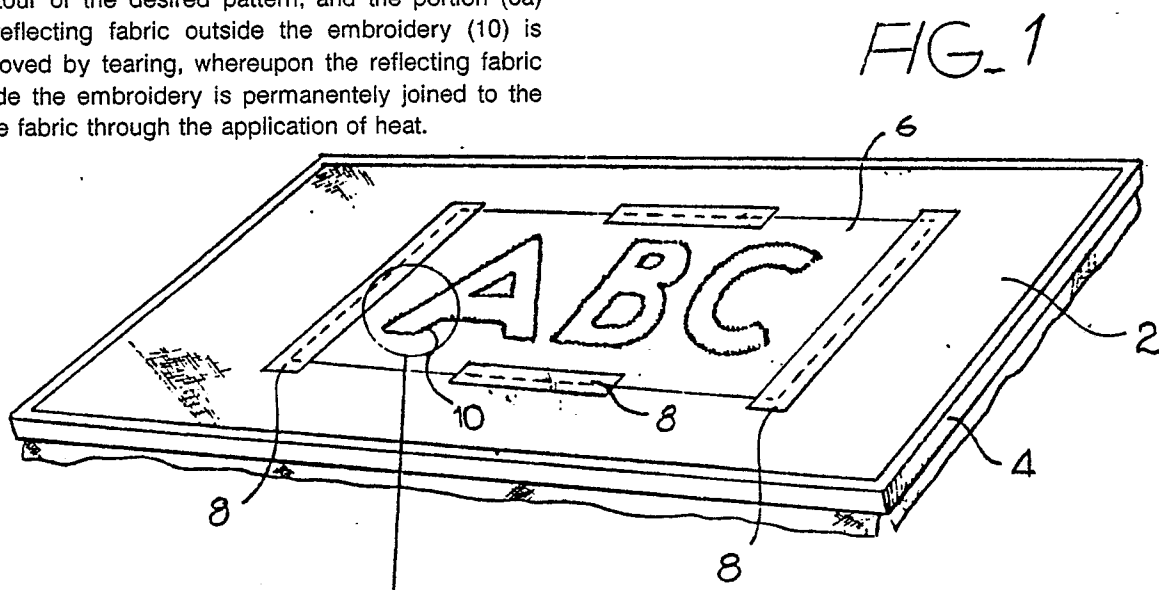
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(54) A process for applying an ornamental and/or identification pattern on a fabric through a transfer technique.

(57) In order to apply an ornamental and/or identification pattern on a base fabric (2) through a transfer technique, the base fabric (2) is positioned over a tambour (4), a strip of thermally stickable light reflecting fabric (6) is applied over the base fabric (2), and such strip (6) is temporarily fastened to the fabric by adhesive tape (8) or the like, then an embroidery (10) is applied to the two superimposed layers of base fabric and reflecting fabric along the contour of the desired pattern, and the portion (6a) of reflecting fabric outside the embroidery (10) is removed by tearing, whereupon the reflecting fabric inside the embroidery is permanently joined to the base fabric through the application of heat.

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A PROCESS FOR APPLYING AN ORNAMENTAL AND/OR IDENTIFICATION PATTERN ON A FABRIC THROUGH A TRANSFER TECHNIQUE

This invention relates to a process for applying, through a transfer technique, an ornamental and/or identification pattern on a fabric.

The process according to the invention is particularly foreseen for applying ornamental and/or identification patterns on dressing articles and/or accessories to be worn, particularly such as hiking knapsacks or the like, over which it is desirable to obtain ornamental patterns or marks that are well visible even under poor light conditions, and which are to be weather- and wash-proof.

The process of the invention is characterized in that it comprises the steps of:

- positioning the base fabric over a tambour,
- applying a strip of light reflecting fabric which is thermally stickable to the base fabric, and temporarily fastening said strip to the base fabric by means of adhesive tape or the like,
- embroidering the two superimposed layers of base fabric and reflecting fabric along the contour of the desired pattern, said embroidering being carried out with closed applied stitches in order to form a line of detach between the inner and the outer portions of the embroidered pattern,
- removing the portion of reflecting fabric outside the embroidery by tearing along said line of detach, and thermally sticking the portion of reflecting fabric within the embroidery to the base fabric.

Additional advantages and characteristics of the process according to the invention will result from the detailed description which follows, together with the attached drawings, in which:

Fig. 1 illustrates a step of the application process;

Fig. 2 shows an enlarged particular of Fig. 1; and

Fig. 3 is a cross-section view along line III-III of Fig. 2.

With reference to the drawings, a sheet of base fabric 2, e.g. a polyamide synthetic fabric or the like, is positioned over a rectangular tambour or embroidery frame 4. The base fabric is preferably treated in advance by a fixing of the ready-to-print type with fluoridated products that do not contain silicone products, e.g. the product Scotch Gard marketed by 3M Italia.

Over the base fabric it is then applied a strip of reflecting fabric 6 which is thermally stickable to the former through a transfer technique, and the strip is then attached to the base fabric by means of adhesive tape 8. A preferred reflecting fabric is the SCOTCH LITE TRANSFER (trade mark) from 3M Italia.

Thereafter a dense stitches embroidery 10 is

carried out over the two superimposed layers of base fabric and reflecting fabric along the contour of the desired ornamental and/or identification pattern, thus forming a weakened zone of the reflecting fabric along such contour. Thanks to the weakening along the contour of the reflecting fabric, the portions 6a of the reflecting fabric that are outside the embroidery are easily removed along the weakening contour. Such portions 6a are therefore removed by tearing.

The final step provides for permanently anchoring the reflecting fabric to the base fabric through hot sticking. The hot sticking can be accomplished by methods known per se, such as heat pressing, the application of high frequency load or ultrasounds.

The process according to the invention allows for the application of ornamental patterns at a cost greatly reduced in respect of the conventional methods. More particularly, the use of a reflecting fabric within the embroidery and the application of an ornamental pattern to a dressing article or an accessory such as a knapsack, does not only improve the aesthetic appearance thereof, but also contributes to safety by making possible to trace the person wearing such articles or accessories under poor visibility conditions.

The ornamental and/or identification patterns so realized are further resistant to bad weather and washing.

Therefore there are to be considered as falling within the scope of the present invention the ornamental or identification patterns applied to dressing articles and accessories through the described process, as well as the dressing articles or accessories, in particular knapsacks, bearing such ornamental and/or identification patterns.

Moreover, without changing the principle of the invention, the modalities of carrying out the process and the embodiment details could be widely modified in respect to what has been illustrated as a non limiting example, without falling outside of the scope of the invention.

Claims

1. A process for applying an ornamental and/or identification pattern on a fabric through a transfer technique, characterized in that it comprises the steps of:

- positioning the base fabric (2) over a tambour (4),
- applying a strip of light reflecting fabric (6) which is thermally stickable to the base fabric (2), and

temporarily fastening said strip (6) to the base fabric (2) by means of adhesive tape (8) or the like,
- embroidering the two superimposed layers of base fabric and reflecting fabric along the contour of the desired pattern, said embroidering (10) being carried out with closed applied stitches in order to form a line of detach between the inner and the outer portions (6a) of the embroidered pattern,
- removing the portion (6a) of reflecting fabric outside the embroidery (10) by tearing along said line of detach, and thermally sticking the portion of reflecting fabric within the embroidery (10) to the base fabric (2).

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2. A process as claimed in claim 1, characterized in that the thermally sticking operation is carried out through hot pressing.

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3. A process as claimed in claim 1, characterized in that the thermally sticking operation is carried out through the application of high frequency.

4. A process as claimed in claim 1, characterized in that the thermally sticking operation is carried out through the application of ultrasounds.

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5. A process as claimed in any of claims 1 to 4, characterized in that the base fabric is treated in advance with a fixing composition based on fluorated products.

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6. A process as claimed in any of claims 1 to 5, characterized in that the thermally stickable reflecting fabric is the SCOTCH LITE TRANSFER 8910 fabric.

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7. An ornamental and/or identification pattern obtained through the process according to any of claims 1 to 6.

8. A dressing article or accessory, particularly a knapsack, comprising an ornamental and/or identification pattern obtained through the process according to any of claims 1 to 6.

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FIG. 1

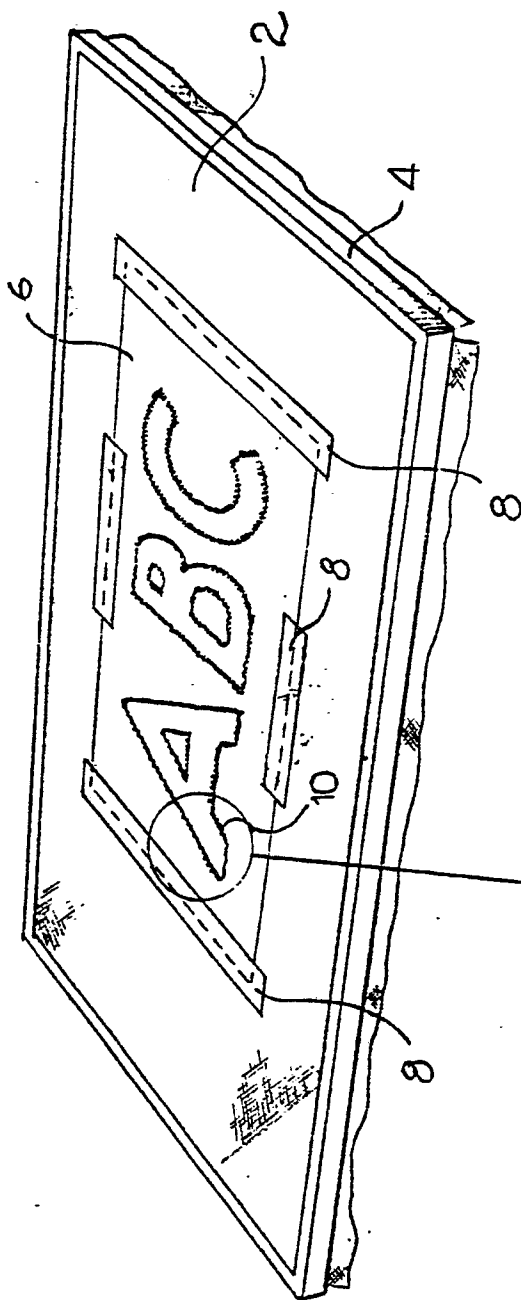


FIG. 2

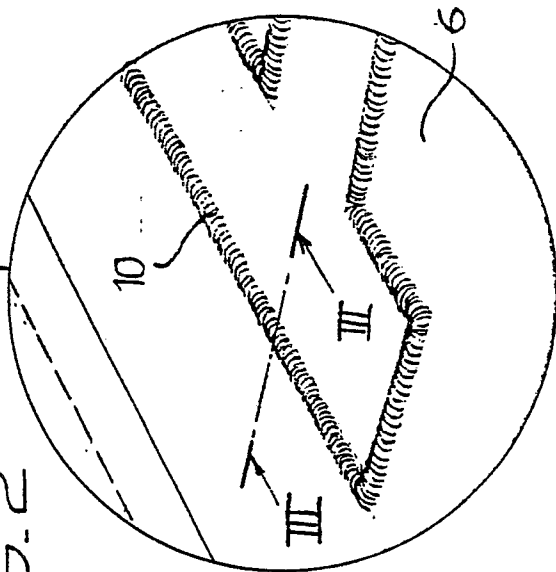


FIG. 3

