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(54) **Method for fixing a logo label to an upper of an article of footwear**

(57) A method for fixing a logo label (20) to an upper (10) of an article of footwear is provided. The upper (10) has a protective skin (11) formed thereon. The method includes the steps of: (a) forming a cavity (12) in the pro-

TECTIVE SKIN (11) OF THE UPPER (10) BY USING A LASER BEAM; (b) FILLING THE CAVITY (12) IN THE PROTECTIVE SKIN (11) WITH AN ADHESIVE; AND (c) ADHERING THE LOGO LABEL (20) TO THE UPPER (10) THROUGH THE ADHESIVE IN THE CAVITY (12) IN THE PROTECTIVE SKIN (11).

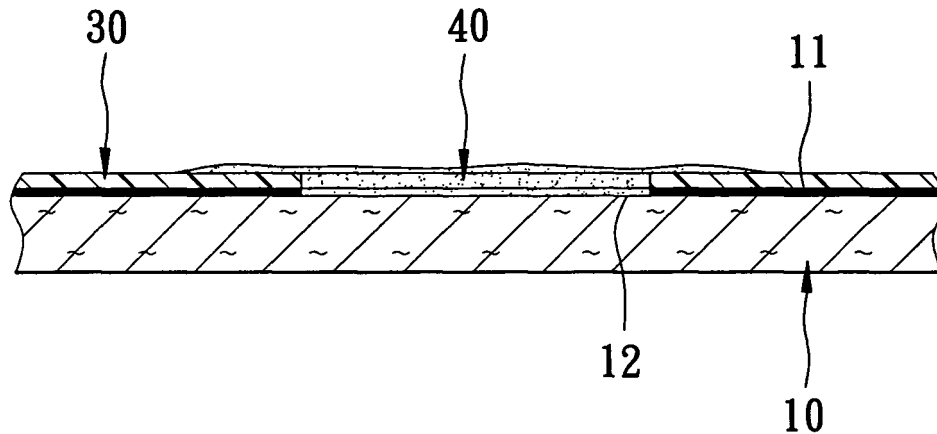


FIG. 4

Description

[0001] This invention relates to a method for fixing a logo label to an article, more particularly to a method for fixing a logo label to an upper of an article of footwear.

[0002] Generally, an article of footwear bears a logo label on an upper thereof for showing a trademark or for ornamentation purposes. The upper of the article of footwear is normally coated with a protective skin. Since this protective skin is smooth, the logo label, such as logo labels made from plastic, rubber or cloth materials, is difficult to be adhered to the upper of the article of footwear through an adhesive, and is normally attached to the upper through stitching techniques, which is laborious and time-consuming.

[0003] Therefore, the object of the present invention is to provide a method for fixing a logo label to an upper of an article of footwear that is clear of the aforesaid drawback of the prior art.

[0004] According to this invention, there is provided a method for fixing a logo label to an upper of an article of footwear. The upper has a protective skin formed thereon. The method includes the steps of: (a) forming a cavity in the protective skin of the upper by using a laser beam; (b) filling the cavity in the protective skin with an adhesive; and (c) adhering the logo label to the upper through the adhesive in the cavity in the protective skin.

[0005] Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiment of this invention, with reference to the accompanying drawings, in which:

Fig. 1 is a flow diagram to illustrate consecutive steps of the preferred embodiment of a method for fixing a logo label to an upper of an article of footwear according to this invention;

Fig. 2 is a schematic view to illustrate preparation of a logo label and an upper of an article of footwear used in the method according to this invention;

Fig. 3 is a schematic view to illustrate how a cavity in a protective skin of the upper is formed by using a laser beam;

Fig. 4 is a schematic view to illustrate the step of filling the cavity in the protective skin with an adhesive; and

Fig. 5 is a schematic view to illustrate consecutive steps of removing the cover layer from the protective skin and subsequently adhering the logo label to the upper of the article.

[0006] Referring to Figs. 1 and 2, the preferred embodiment of a method for fixing a logo label to an upper of an article of footwear involves preparation of a logo label 20 and an upper 10 of an article of footwear. The upper 10 of the article of footwear is coated with a protective skin 11 that can be colored. In this preferred embodiment, the protective skin 11 is preferably coated with a releasable cover layer 30.

[0007] Referring to Figs. 1 and 3, a portion of the releasable cover layer 30 and a portion of the protective skin 11 coated on the upper 10 of the article of footwear are removed by a laser beam from a laser device 100, so as to form a cavity 12 in the protective skin 11 and a hole in the cover layer 30. The hole in the cover layer 30 is registered with and conforms to the cavity 12 in the protective skin 11. The laser device 100 may be a laser engraving machine. The frequency, current, power, moving speed and trace of light spots of the laser beam can be adjusted so as to form the hole in the cover layer 30 and the cavity 12 in the protective skin 11 that have a desired shape corresponding to that of the logo label.

[0008] As shown in Figs. 1 and 4, before removal of the cover layer 30, an adhesive 40 is filled in the hole in the cover layer 30 and the cavity 12 in the protective skin 12.

[0009] As shown in Figs. 1 and 5, the cover layer 30 is removed from the protective skin 11, and the logo label 20 is adhered to the upper 10 of the article of footwear through the adhesive 40 in the cavity 12 in the protective skin 11.

[0010] With the cover layer 30 attached to the protective skin 11, filling operation of the adhesive 40 as shown in Fig. 4 is facilitated, and undesired application of the adhesive 40 to a periphery of the cavity 12 or the upper 10 is prevented.

[0011] As compared to the stitching operation in the conventional method, the use of the laser device 100 and the adhesive 40 in this invention simplifies the method for fixing the logo label to the upper of the article of footwear and thus, the cost of the method can be decreased.

Claims

1. A method for fixing a logo label (20) to an upper (10) of an article of footwear, the upper (10) having a protective skin (11) formed thereon, **characterized by** the steps of:

- (a) forming a cavity (12) in the protective skin (11) of the upper (10) by using a laser beam;
- (b) filling the cavity (12) in the protective skin (11) with an adhesive; and
- (c) adhering the logo label (20) to the upper (10) through the adhesive in the cavity (12) in the protective skin (11).

2. The method of claim 1, **characterized in that** the method further comprises attaching a releasable cover layer (30) to the protective skin (11) prior to the formation of the cavity (12) in the protective skin (11), the cover layer (30) being formed with a hole by the laser beam during step (a), the hole in the cover layer (30) being registered with and conforming to the cavity (12) in the protective skin (11) so as to prevent undesired application of the adhesive to

a periphery of the cavity (12) during step (b).

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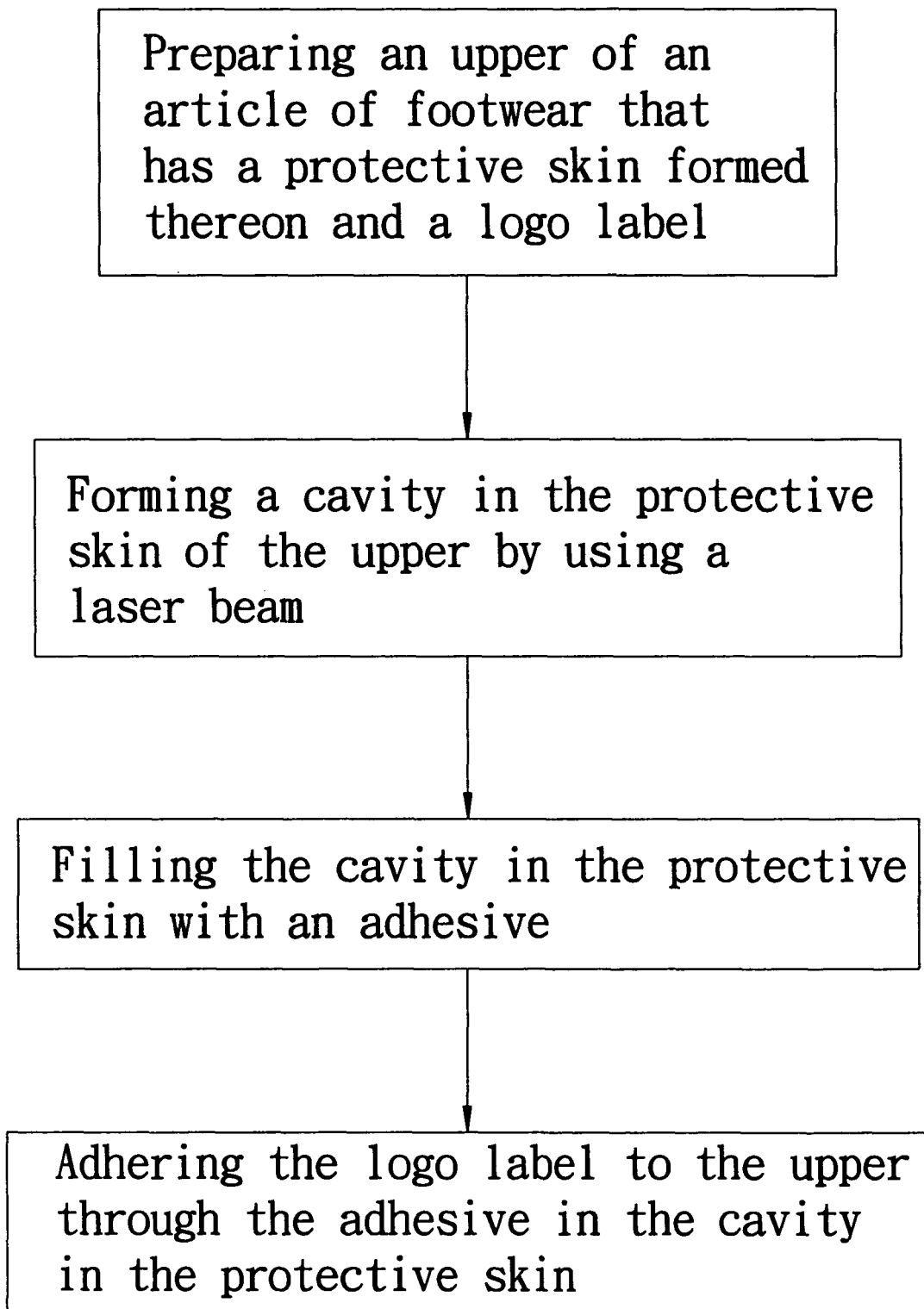


FIG. 1

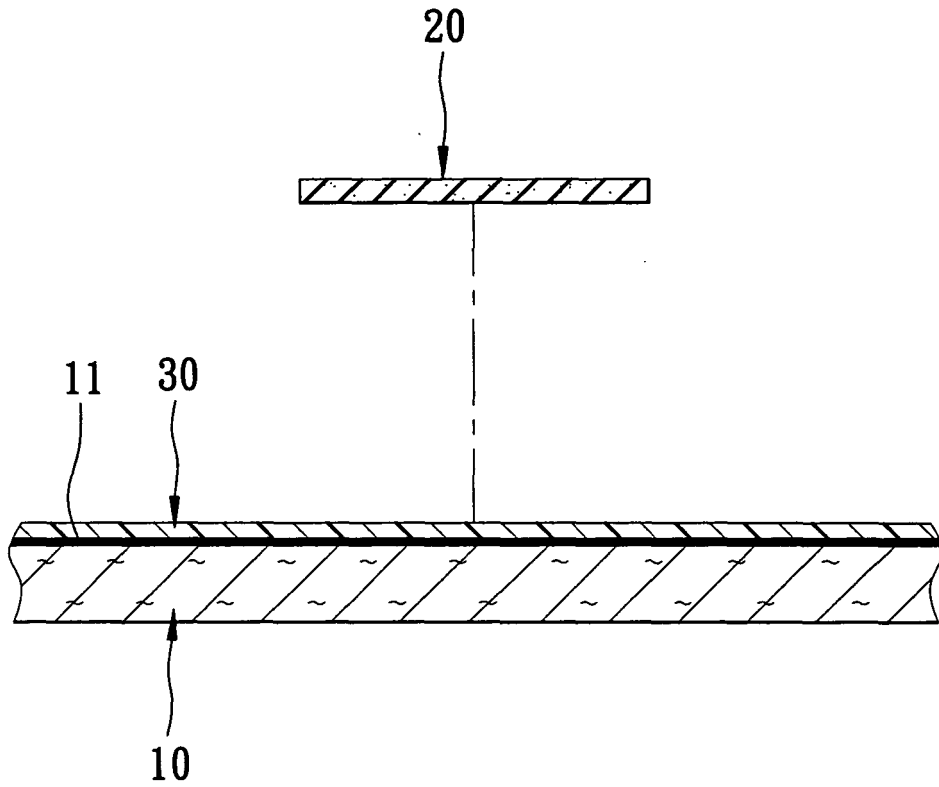


FIG. 2

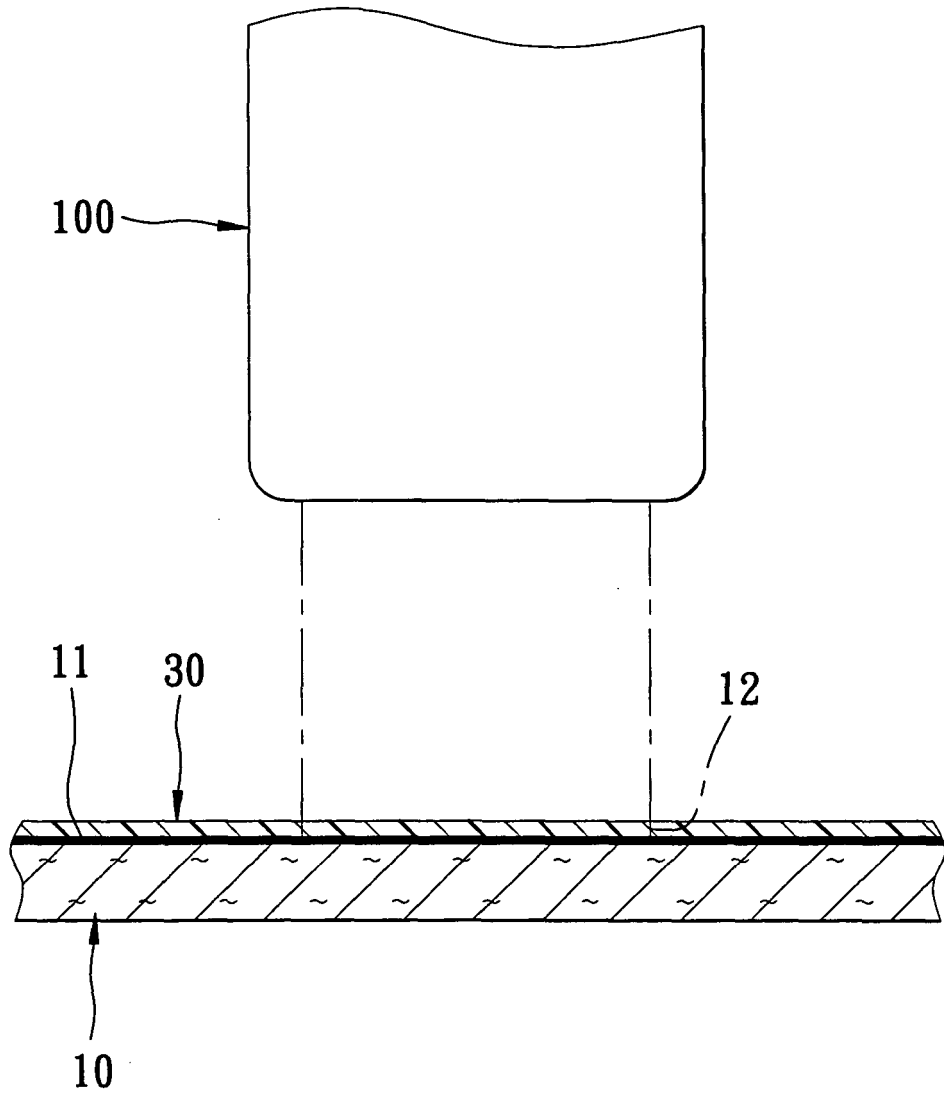


FIG. 3

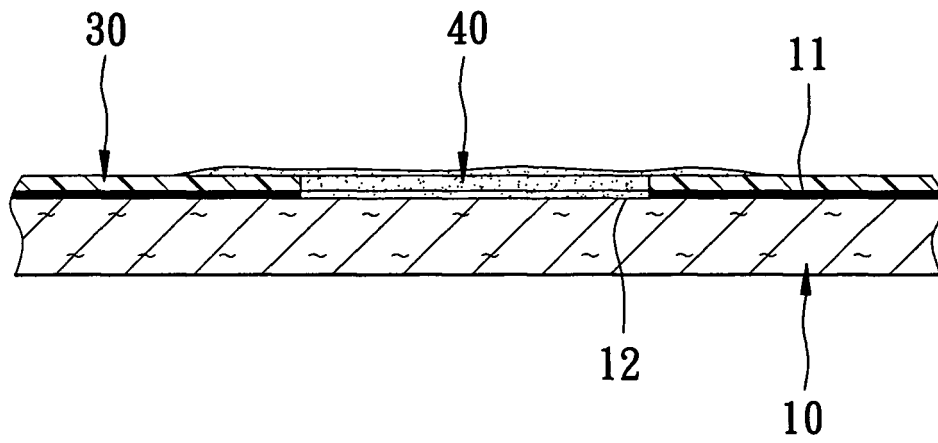


FIG. 4

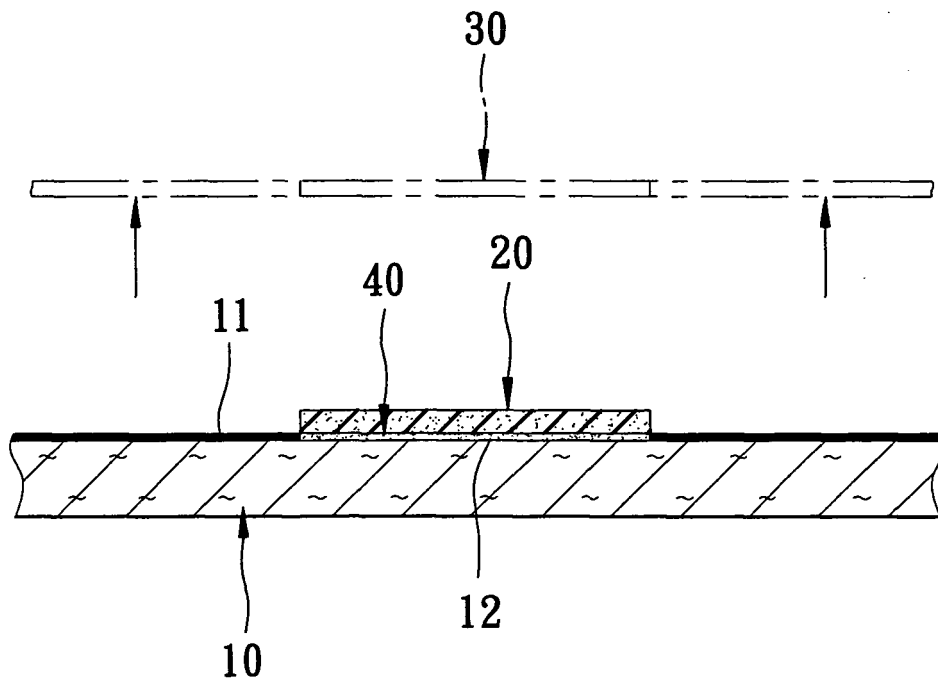


FIG. 5



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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A43B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 9 February 2005	Examiner Claudel, B
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
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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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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