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(11) **EP 2 246 266 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
03.11.2010 Bulletin 2010/44

(51) Int Cl.:
B65D 23/00 *(2006.01)*

(21) Application number: **10157759.1**

(22) Date of filing: **25.03.2010**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR
Designated Extension States:
AL BA ME RS

(30) Priority: **31.03.2009 IT MI20090509**

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(54) **A label construction with a built-in handle, for hanging infusion bottles and vessels**

(57) A label construction (1) with a built-in handle, for hanging infusion liquid administering bottles and vessels, **characterized in that** said label construction comprises a first either transparent or mat plastics self-adhesive film (2), thereon a base label (3) showing target patterns and wordings is printed; a transparent silicone paint layer adjustably printed on said base label at a region of said base label provided for forming therein said handle (4), and a second transparent self-adhesive film (5) covering all the surface of the label.

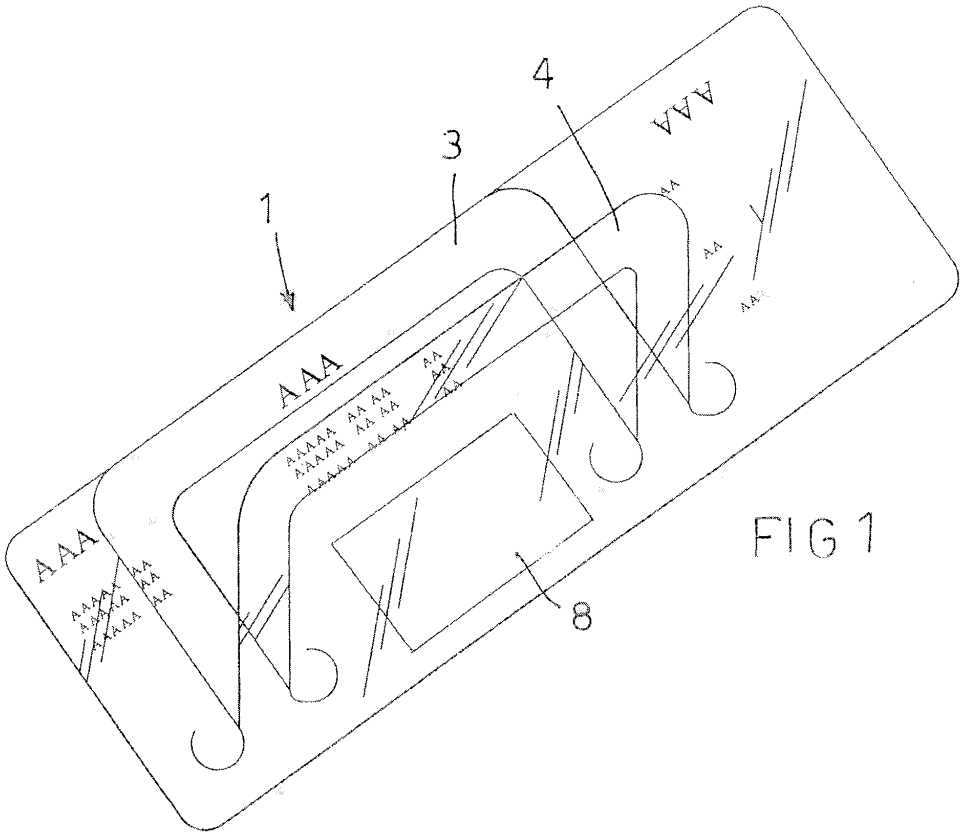

FIG 1

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Description

BACKGROUND OF THE INVENTION

[0001] The present invention relates to a label construction with a built-in handle, for hanging infusion bottles and vessels in general.

[0002] A number of self-adhesive devices, for example two adhesive devices previously patented by the same Applicant, to hang or suspend infusion liquid administering bottles and vessels to a support are already know.

[0003] Said devices have two operating functions, that is a label function for indicating the product to be administered and a hook function for hanging the vessel to a support generally constituted by a vertical pole or upright including a horizontal bracket.

[0004] Prior labels are substantially of two types, the first of which is a single-layer label comprising a hanging or suspending handle formed on the label surface, by removing an adhesive material at the handle region, whereas the second label type comprises two label layers, to one of which is applied a prediecut outer handle element, said label element being transparent for allowing an underlying label indicating portion to be read out.

[0005] The above prior labels are affected by some drawbacks.

[0006] The single-layer label has the drawback of interrupting the label continuity as the label handle is raised thereby either interrupting words written on the label or greatly reducing the space for writing wordings and instructions thereon, and limiting graphic material patterns to be applied to the label body and label handle, in particular written great length words or text patterns, or company logos and marks considering that each product supplier will user a property label type.

[0007] Prior labels with applied handles require moreover a lot of complex machining operations, such as printing the label and applying a separate handle element thereto.

[0008] Thus, the above second label is very expensive and complex, because of very strict requirements the thus formed label must meet.

SUMMARY OF THE INVENTION

[0009] Accordingly, the aim of the present invention is to provide a label construction with a built-in handle, for hanging infusion liquid administering bottles and vessels, adapted to overcome the above mentioned drawbacks.

[0010] Within the scope of the above mentioned aim, a main object of the invention is to provide such a label construction made by a single pass of a printing machine without interrupting already printed wordings and allowing to preserve any desired original graphic patterns as required by a customer.

[0011] Another object of the present invention is to provide such a compact label construction devoid of label projections hindering labeled vessel packaging operation.

[0012] Another object of the present invention is to provide such a label construction much cheaper than prior double-layer handle label constructions.

[0013] Yet another object of the present invention is to provide such a product tracking service label with a very small base label pattern surface.

[0014] According to one aspect of the present invention, the above mentioned aim and objects, as well as yet other objects, which will become more apparent hereinafter, are achieved by a label construction with a built-in handle, for hanging infusion liquid administering bottles and vessels, **characterized in that** said label construction comprises a first plastics self-adhesive film, either transparent or mat, thereon a base label showing target patterns and wordings is printed; a transparent silicone paint layer adjustably printed on said base label at a region of said base label provided for forming therein said handle, and a second transparent self-adhesive film covering all the surface of the label.

[0015] According to one aspect of the present invention, the second transparent or clear self-adhesive film, covering all said surface of the label is bound or laminated to said base label in the same printing machine.

[0016] Alternatively, it is possible to provide a handle which can be opened or raised, by printing a transparent or clear silicone paint on a material layer at a handle forming region, the thus made laminated assembly being subjected to a double die-cutting operation to form said handle, by a half cut, and for cutting through a handle contour.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] Further characteristics and advantages of the present invention will become more apparent hereinafter from the following detailed disclosure of a preferred, though not exclusive, embodiment of the invention, which is illustrated, by way of an indicative, but not limitative, example in the accompanying drawings, where:

Figure 1 is a perspective view of the label construction with a built-in handle according to the invention, and being illustrated with the handle withdrawn therefrom and in a ready for use condition;

Figure 2 is a perspective view of a bottle or vessel including the label according to the present invention in which the label handle has not been withdrawn;

Figure 3 is a schematic perspective view showing an application of a second self-adhesive transparent or clear film, covering all of the surface of the label;

Figure 4 is a perspective view of the self-adhesive transparent or mat plastics material film thereon the base label supporting a wording pattern has been printed:

Figure 5 is yet another perspective view of a label coil or roll portion, with the labels in an already printed condition, and ready to be taken for application to

respective bottles or vessels;
Figure 6 schematically shows a removal or detachment of a label from the label coil or roll;
and
Figure 7 is an exploded perspective view showing the label construction according to the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0018] With reference to the number references of the above mentioned figures, the adhesive label construction with a built-in handle, according to the present invention, which has been generally indicated by the reference number 1, is made starting from a self-adhesive plastic film coil or roll 2, said film being either clear or mat, and thereon being printed a base label 3 including a target word pattern.

[0019] Then, a clear silicone paint is printed in a registered condition on the region for forming the label handle 4 therein, to allow said handle to be opened or raised as desired.

[0020] To the above mentioned layer is coupled or laminated, in a printing machine, a second self-adhesive clear film 5 covering all the label surface.

[0021] Alternately to the above disclosed method, it is further possible to provide an openable handle 4 by printing a clear silicone paint on the clear film adhesive side at the region thereat the label handle 4 will be formed, the thus made laminated material being subjected to a double die-cutting operation to form a half-cut defining said handle 4, and for cutting through the label 1 handle contour 6.

[0022] The handle 4 is accordingly arranged within a film 5, having a same size as the base label, said handle being formed therefrom at a use time.

[0023] To allow said handle 4 to be easily opened, with said handle contour embedded in a surface of the base label, said label construction comprises screen printed ridges 7 on the bottom layer 3 to allow a gripping region to be raised therefrom.

[0024] Moreover, from the top clear film 5 it is possible to form a further small auxiliary self-adhesive label 8 to be over-printed upon packaging a drug to allow the drug user to apply data related to the drug being administered on a patient clinic data sheet or on another information medium.

[0025] It has been found that the invention fully achieves the intended aim and objects, since it provides a novel label construction, which may be made in a single operating passage through the printing machine. And which, in its use condition, that is with the bottle or vessel suspended by the label handle, prevents wordings from being interrupted.

[0026] The label construction according to the present invention allows moreover to preserve a starting graphic pattern as desired by the customer.

[0027] The subject label, moreover, is very compact, since it is devoid of projections susceptible to hinder labeled vessel packaging operations.

[0028] Moreover, the label construction according to the present invention is much cheaper than prior double-layer handle labels.

[0029] Another important advantage of the label construction according to the present invention is that it allows to form herein a service or auxiliary drug tracking label, without increasing the surface of the base label.

[0030] In practicing the invention, the used materials, as well as the contingent size and shapes, can be any, depending on requirements.

Claims

1. A label construction with a built-in handle, for hanging infusion liquid administering bottles and vessels, **characterized in that** said label construction comprises a first either transparent or mat plastics self-adhesive film , thereon a base label showing target patterns and wordings is printed; a transparent silicone paint layer adjustably printed on said base label at a region of said base label provided for forming therein said handle, and a second transparent self-adhesive film covering all the surface of the label.

2. A label construction, according to claim 1, **characterized in that** said second transparent or clear self-adhesive film is bound or laminated to said base label in the same printing machine.

3. A label construction, according to claim 1, **characterized in that** said handle can be opened by printing a transparent or clear silicone paint on a material layer at a region provided for forming therein said handle, the thus made laminated assembly being subjected to a double die-cutting operation to form said handle, by a half cut, and for cutting through the handle contour.

4. A label construction, according to claim 1, **characterized in that** said handle is arranged within a film having a same size as said base label, to be formed at an use time.

5. A label construction, according to claim 1, **characterized in that,** to allow said handle to be easily opened, with said handle contour embedded in a surface of the base label, said label construction comprises screen printed ridges which are screen printed on a label bottom layer, to cause a gripping region to be raised therefrom.

6. A label construction, according to claim 1, **characterized in that** said label construction comprises an auxiliary self adhesive label formed in a clear or

transparent top film and overprinted in a drug or medicament packaging step, to allow a drug or medicament user to mark the administered product data on a clinical card of the patient or on another medium.

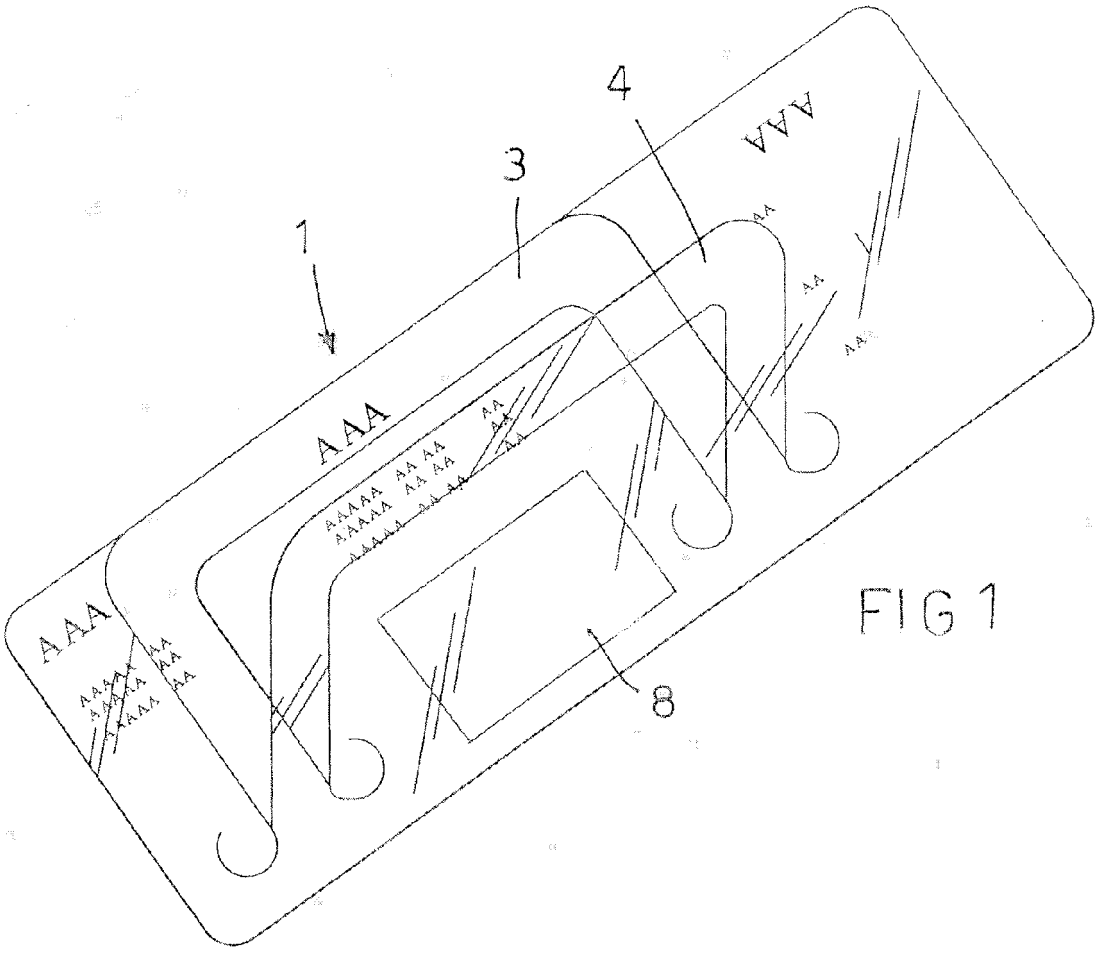

FIG 1

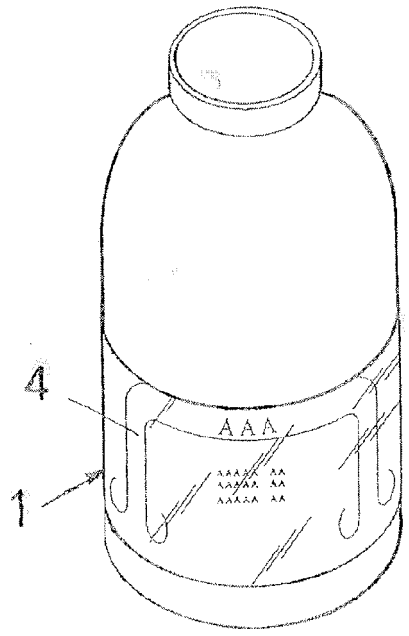

FIG 2

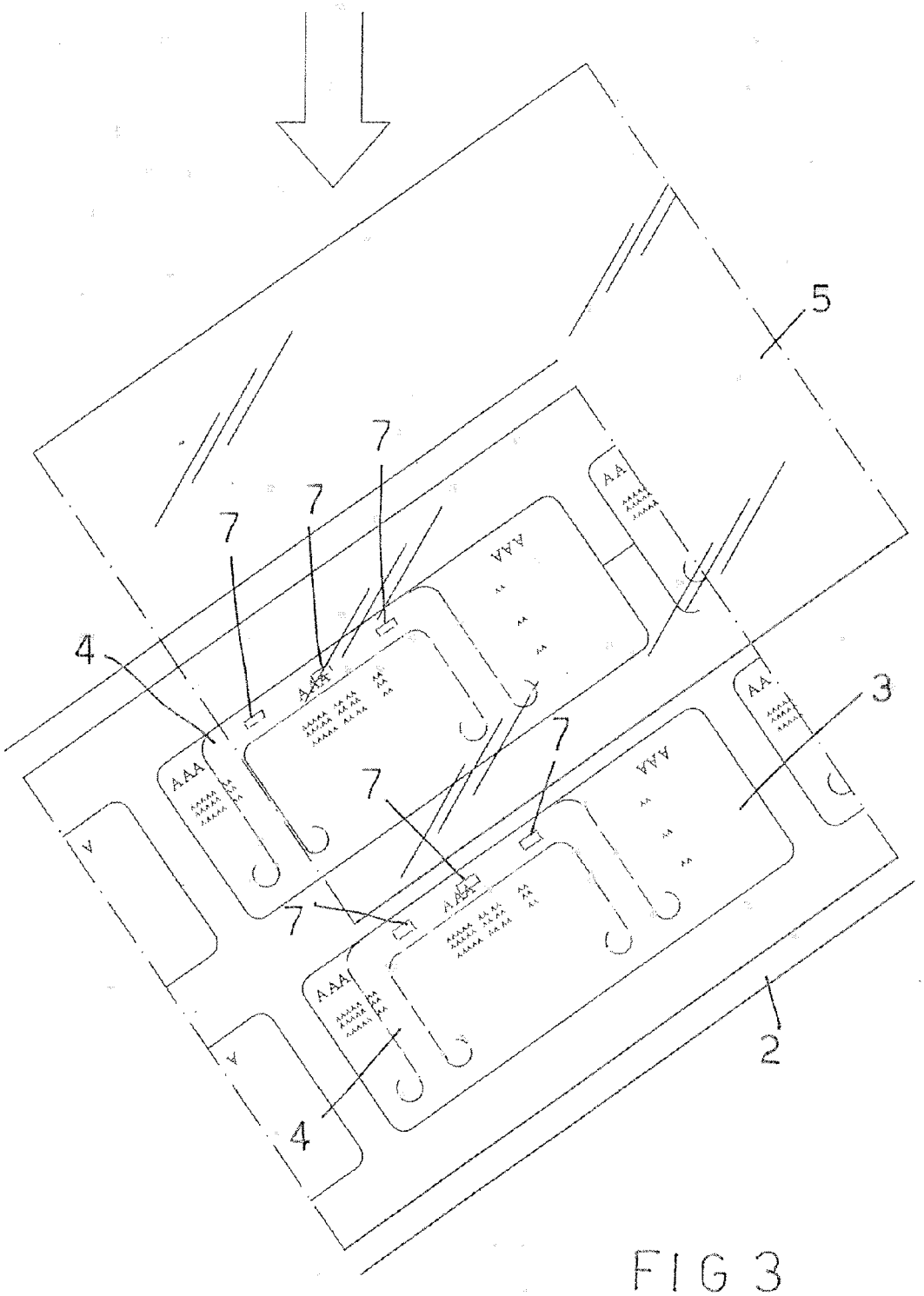

FIG 3

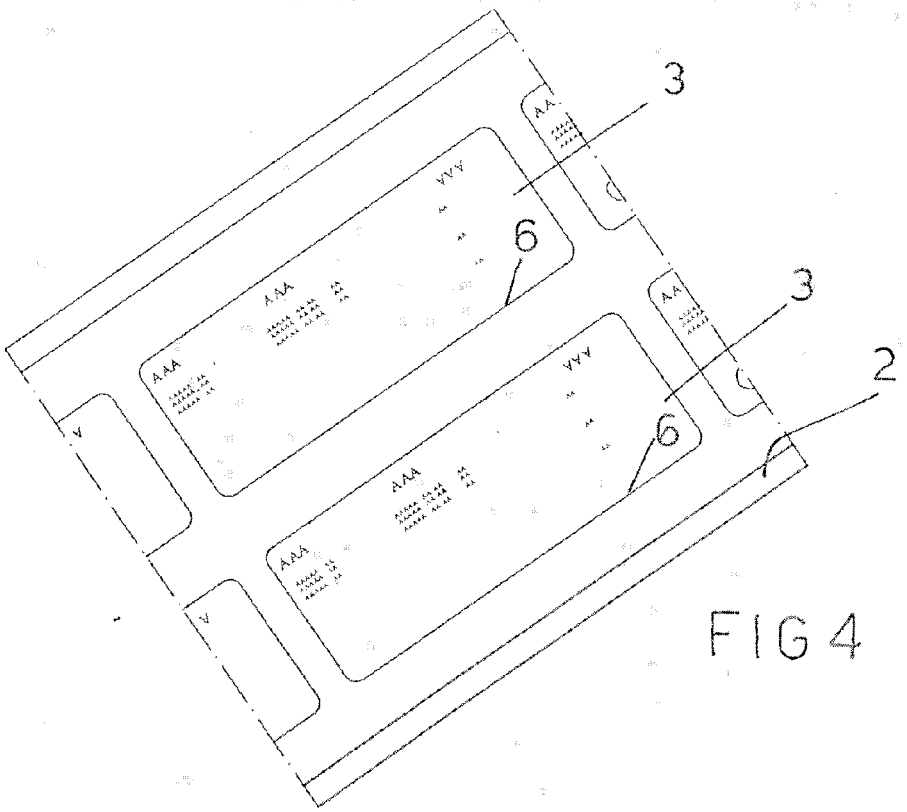

FIG 4

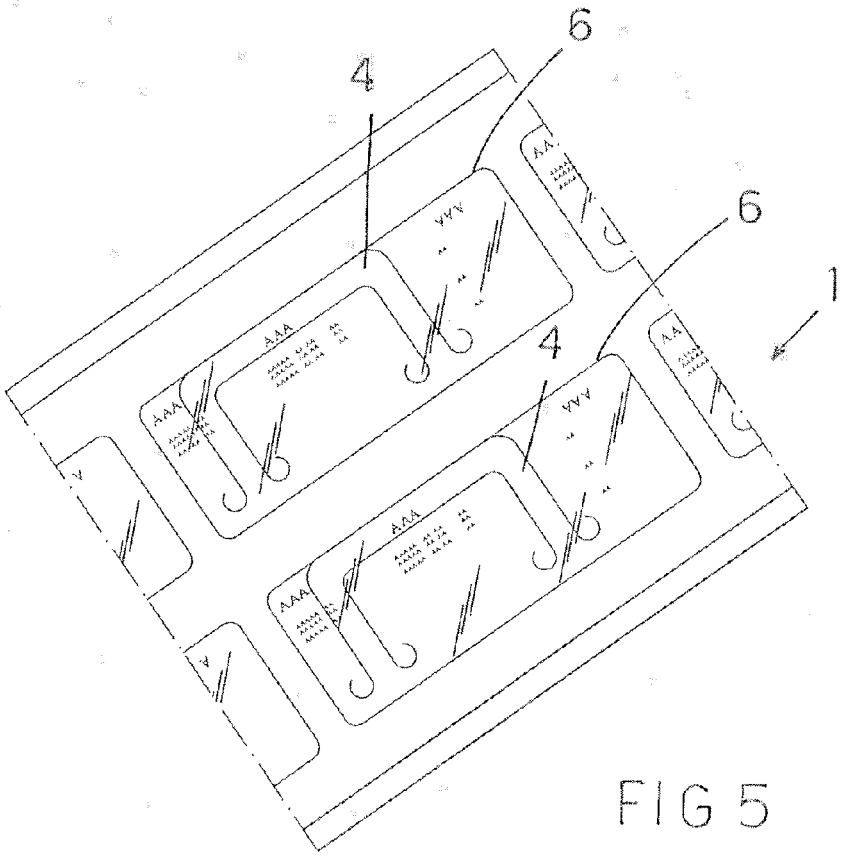

FIG 5

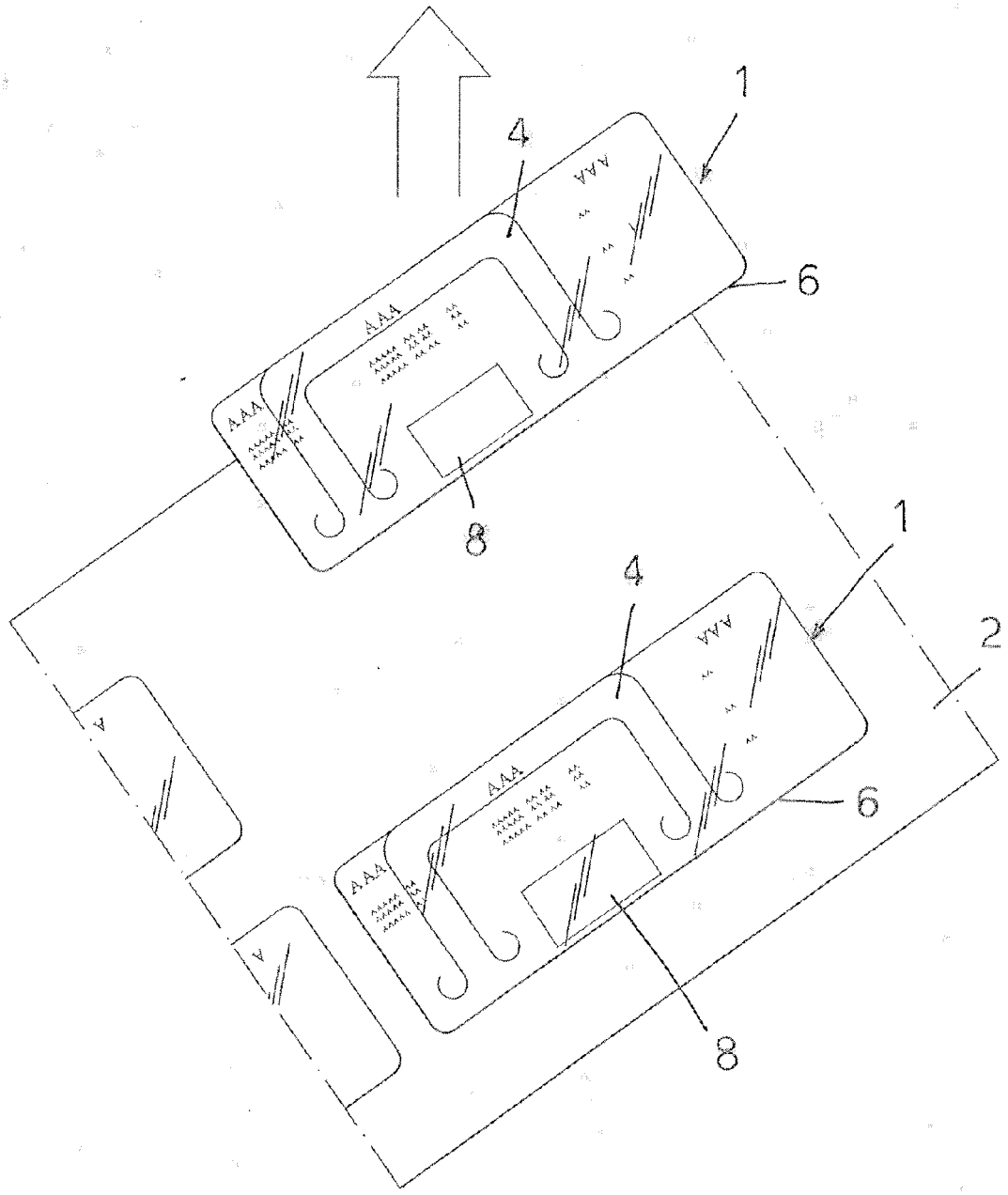

FIG 6

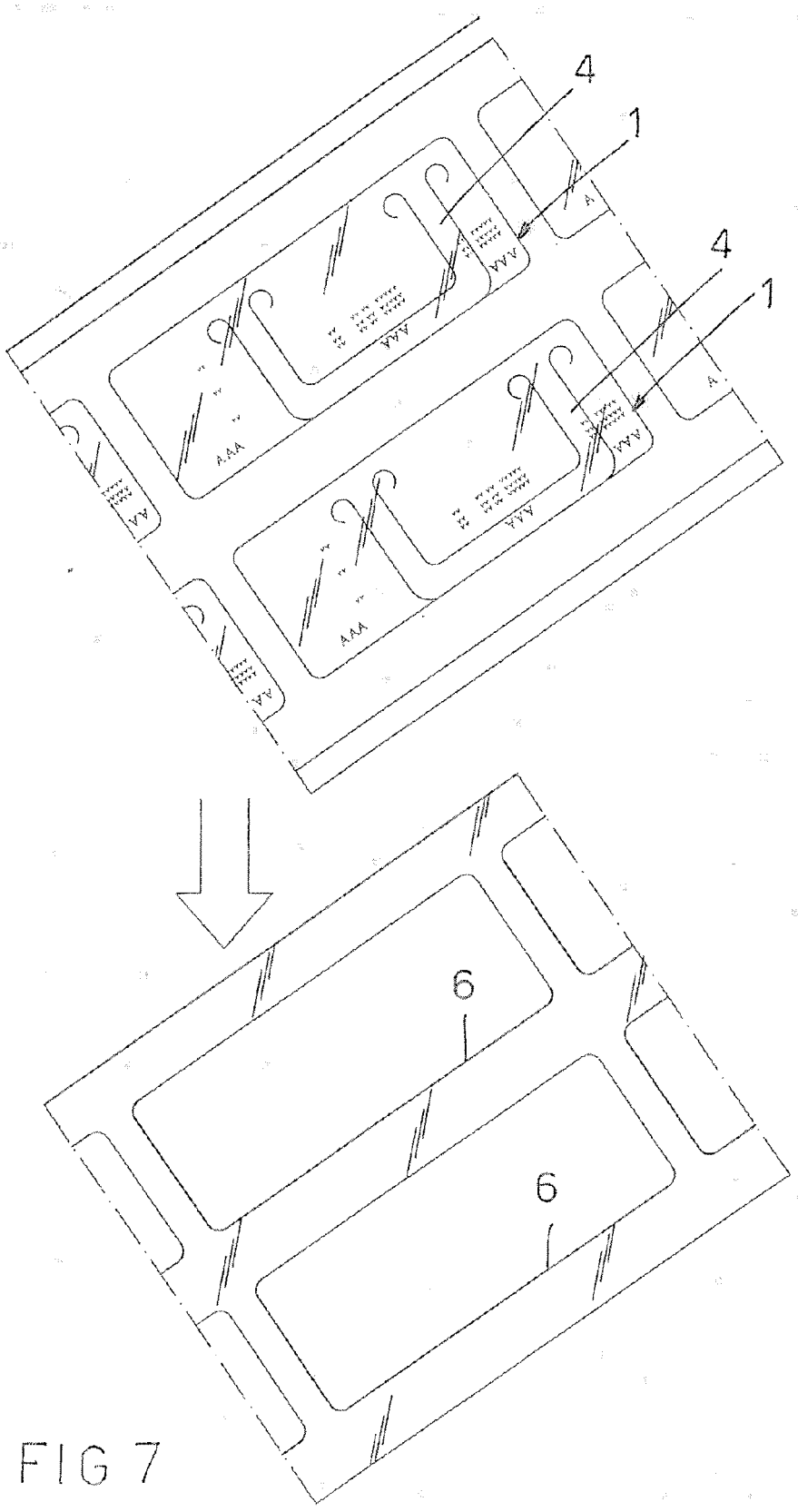

FIG 7

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EUROPEAN SEARCH REPORT

Application Number
EP 10 15 7759

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	US 6 272 780 B1 (SATAMIAN HRATCH [US]) 14 August 2001 (2001-08-14) * column 4, line 45 - column 5, line 6 * * column 5, line 56 - column 6, line 25 * * column 7, line 15 - line 52 * * column 8, line 20 - line 25 * * column 9, line 23 - line 34; figures * * column 12, line 4 - line 28 * -----	1-4,6 5	INV. B65D23/00
Y	US 5 829 788 A (JACKSON MERRILL JAY [US]) 3 November 1998 (1998-11-03) * column 6, line 48 - column 7, line 8; figures 5,9b,10 * -----	5	
A	US 5 135 125 A (ANDEL DENNIS J [US] ET AL) 4 August 1992 (1992-08-04) * column 3, line 46 - column 4, line 10; figures * -----	1-6	
			TECHNICAL FIELDS SEARCHED (IPC) B65D B41J G09F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	15 June 2010	Zanghi, Amedeo

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 10 15 7759

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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15-06-2010

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82