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(54) **Blank and a carton formed therefrom**

(57) A blank of stiff but foldable material forms a carton which is openable for display and removal of products

(18) contained therein. At least part of an inner side of the blank is formed with exposed flutes (19) of corrugated board material so as to engage with the products.

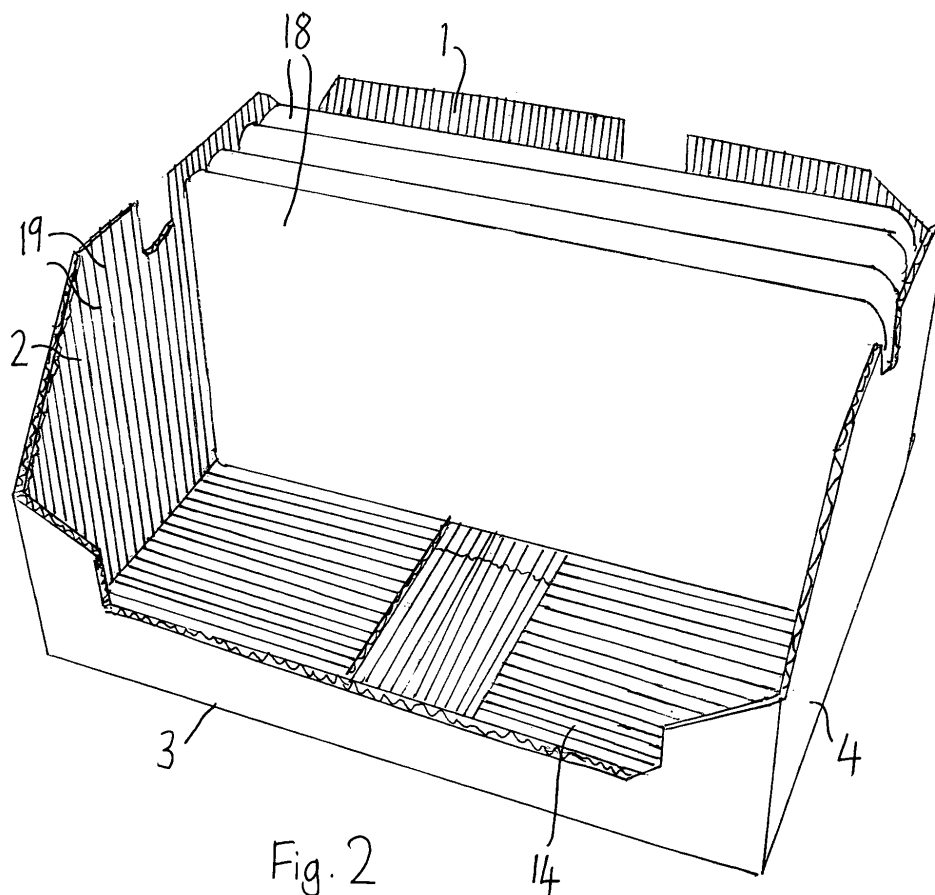


Fig. 2

## Description

**[0001]** This invention relates to a blank for forming a packaging carton and to a carton formed therefrom.

**[0002]** A known carton used for displaying products, for example on a shelf in a store, is formed from blank of stiff but foldable material for forming a packaging carton, comprising a series of panels joined at fold lines for providing a front panel, two side panels and a rear panel of the carton, a slit running along said series of panels to define a removable part of each panel, the removable part being joined to the remainder of the blank by web portions which interrupt said slit.

**[0003]** The carton may for example be used to display substantially planar products such as packaged ready sliced cooked meats or rashers of bacon, or products in blister packs such as air fresheners or toilet blocks. When the carton is full such products are disposed vertically. However as products are removed from the front of the carton, the remaining products tend to slip forwards and eventually lie flat on the bottom of the carton. Depending on the position of the shelf, such products may not be visible.

**[0004]** With the aim of alleviating this disadvantage, the present invention provides a blank of stiff but foldable material, for forming a carton which is openable for display and removal of products contained therein, wherein at least part of an inner side of the blank is formed with exposed flutes of corrugated board material so as to engage with the products.

**[0005]** In one embodiment, the blank is formed from double-faced corrugated paperboard with an additional corrugated layer on its inner side. This can also be thought of as "double wall" paperboard with one planar layer removed.

**[0006]** The blank may comprise a series of panels joined at fold lines for providing a front panel, two side panels and a rear panel of the carton, a slit running along said series of panels to define a removable part of each panel, the removable part being joined to the remainder of the blank by web portions which interrupt said slit.

**[0007]** The invention also provides a packaging carton formed from the blank defined above.

**[0008]** The invention will now be described in more detail, by way of example only, with reference to the accompanying drawings, in which:

**[0009]** Figure 1 shows a blank according to an embodiment of the invention; and

**[0010]** Figure 2 shows an opened carton formed from the blank of Figure 1.

**[0011]** Figure 1 shows the inside of a "Z-folded" paperboard blank. Although not shown in Figure 1, this inner side of blank has an exposed corrugated layer, the flutes running in the direction of the arrow.

**[0012]** The blank comprises a main rear panel 1, a left side panel 2, a lower front panel 3 and a right side panel 4, joined in a series at fold lines. A further series of panels comprising an upper rear panel 5, an upper left side panel

6, a main front panel 7 and an upper right side panel 8 is separated from the first series of panels by a slit 9. Spanning the slit are a rear web portion 10, joining the main rear panel 1 to the upper rear panel 2, a left web portion 11, joining the left side panel 2 to the upper left side panel 7, and a right web portion 12, joining the right side panel 8 to the upper right side panel 4. The web portions 10, 11, 12 have been folded in a "Z-fold" i.e. in opposite directions at their ends, to close up the slit 9.

**[0013]** A top flap 13 is joined to a top edge of each of the upper panels 5, 6, 7, 8. A base flap 14 is joined to a bottom edge of each of the main/lower panels 1, 2, 3, 4. Tabs 15 are joined at the free edge of the main rear panel 1 and upper rear panel 5.

**[0014]** The blank has a finger-engaging hole 17 in the main front panel 7.

**[0015]** In order to form a carton, the blank is folded to form a tube, the tabs 15 being glued to the inside of the right side panels 4, 8. The bottom flaps 14 are then folded and sealed together and, after filling, the top flaps 13 are folded and sealed together.

**[0016]** The upper part of the carton can easily be removed by freeing the main front panel 7 from behind the lower front panel 3 using the hole 17. On pulling the main front panel 7 further, the web portions 10, 11, 12 are detached from the panels 1, 2, 4 respectively. The front and top of the carton are open for removal of contents.

**[0017]** Figure 2 shows the opened carton after removal of some but not all of the contained products 18. The exposed flutes 19 retain the remaining products 18 vertical, visible and in an aesthetically pleasing condition.

**[0018]** The blank shown in Figure 1 is particularly suitable for manual erection. It could be supplied with the upper section (panels 5, 6, 7, 8 and 13) either extended or pre-folded and glued to panels 1, 2, 3, 4. After folding and sealing the bottom flaps 14 the carton could be filled and sealed either manually or using a simple machine.

## Claims

1. A blank of stiff but foldable material, for forming a carton which is openable for display and removal of products (18) contained therein, wherein at least part of an inner side of the blank is formed with exposed flutes (19) of corrugated board material so as to engage with the products.
2. A blank according to claim 1, formed from double-faced corrugated paperboard with an additional corrugated layer on its inner side.
3. A blank according to claim 1 or 2, comprising a series of panels joined at fold lines for providing a front panel (3), two side panels (2, 4) and a rear panel (1) of the carton, a slit (9) running along said series of panels to define a removable part (7, 6, 8, 5) of each panel, the removable part being joined to the remain-

der of the blank by web portions (10,11,12) which interrupt said slit.

4. A packaging carton formed from the blank according to claim 1, 2 or 3.

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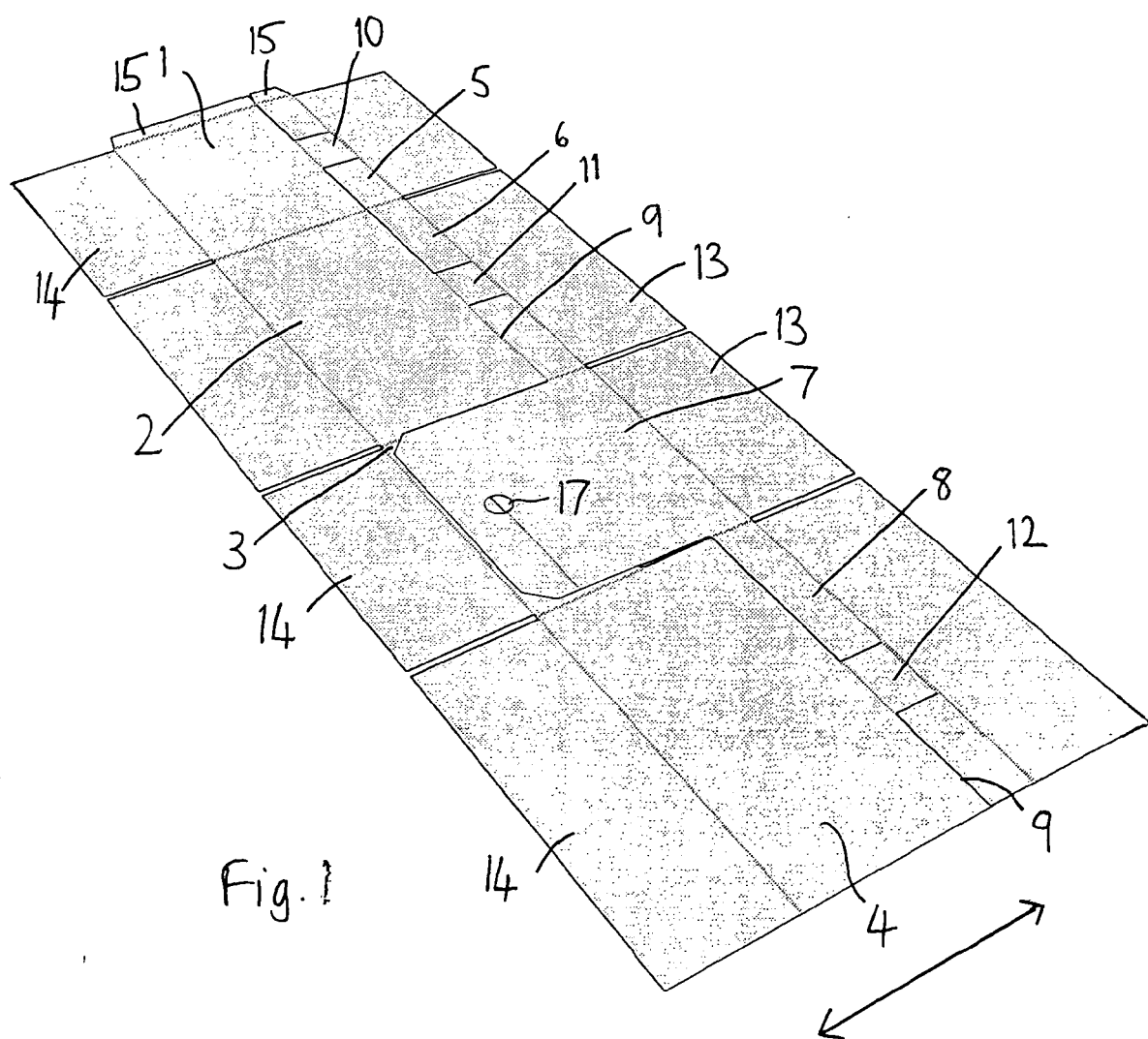
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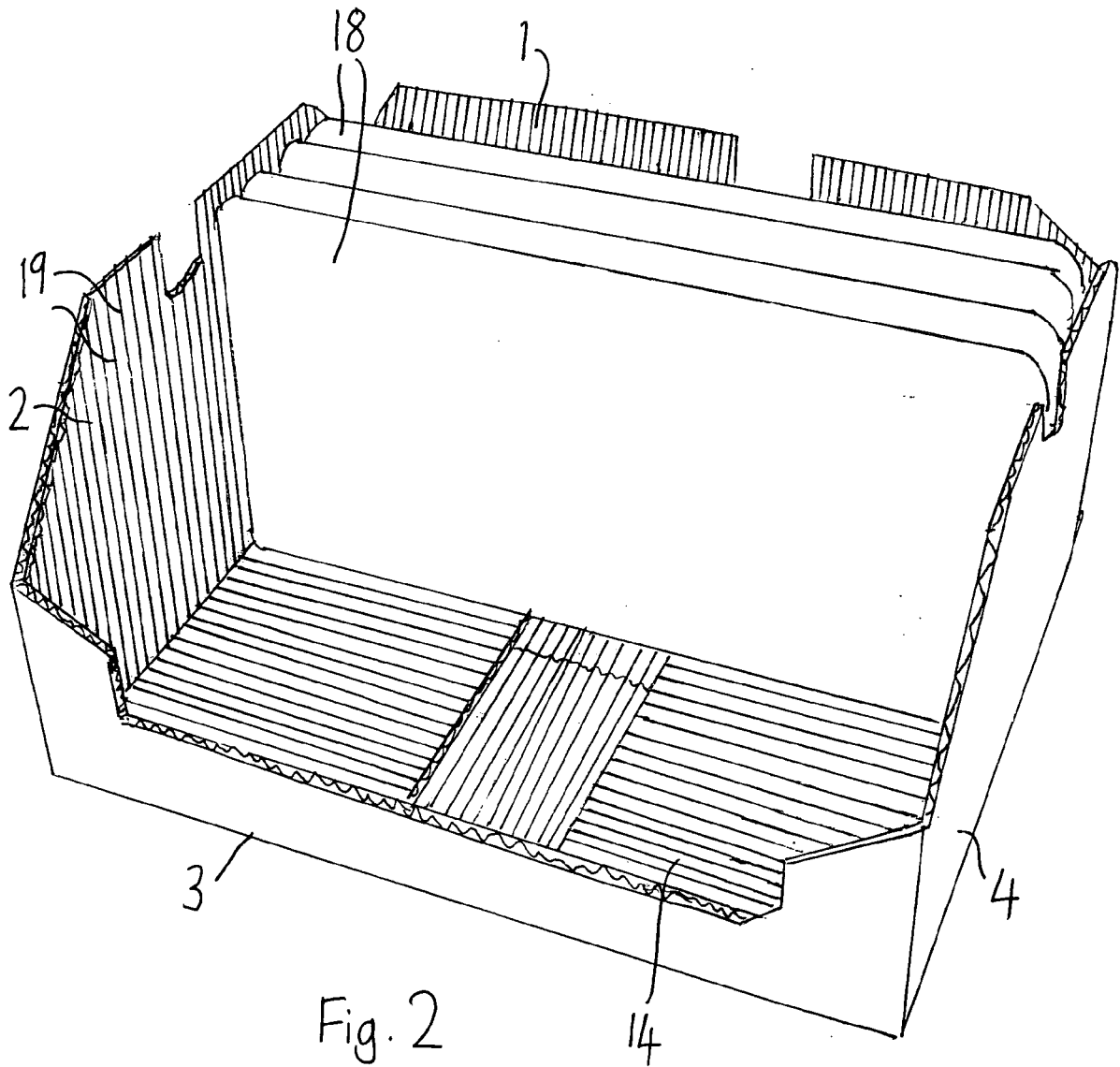
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## EUROPEAN SEARCH REPORT

Application Number  
EP 08 25 2955

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	----- DE 200 00 449 U1 (THIMM VERPACKUNG GMBH & CO [DE]) 27 April 2000 (2000-04-27) * abstract; figures * * page 9, paragraph 5 - page 18, paragraph 1 *	1-4	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 November 2008	Examiner Dederichs, August
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 ..... &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C01)

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

EP 08 25 2955

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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26-11-2008

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EPO FORM P0459

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