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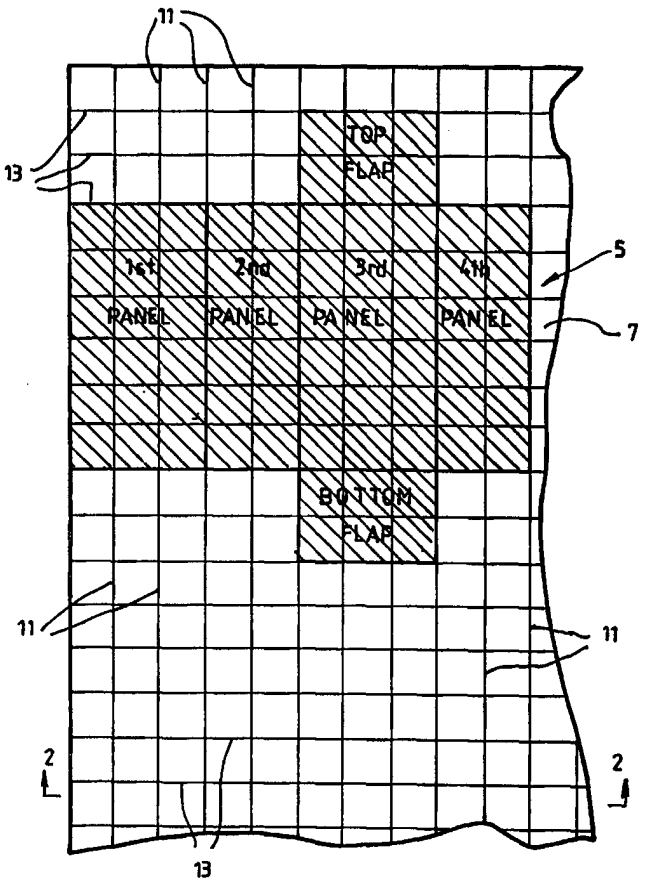
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With international search report.
With amended claims.

(54) Title: A PACKAGE

(57) Abstract

A packaging product for forming a package is disclosed. The package product comprises a planar member, with at least one surface (3) of the planar member having a first array of parallel creases (11) and a second array of parallel creases (13) perpendicular to the first array of creases, which creases define cutting lines and/or fold lines for forming the sides and the end flaps of the package.



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A PACKAGE

The present invention relates to a package.

The present invention relates particularly to a package product for forming a package.

A disadvantage of conventional packages that are available at retail outlets, such as post offices, is that the packages are of a predetermined size and there is a limited range of different sizes. Therefore, often, an object to be packaged is considerably smaller than the package and this results in a waste in packaging material and, in some situations, damage to the object during transport.

An object of the present invention is to provide a packaging product that can be used to form a range of packages of varying shape and size.

According to the present invention there is provided a packaging product for forming a package, which packaging product comprises a planar member, with at least one surface of the planar member having a first array of parallel creases and a second array of parallel creases perpendicular to the first array of creases, which creases define cutting lines and/or fold lines for forming the sides and the end flaps of the package.

In use, in a situation where the packaging product is too large for the object to be packaged, a package for the object is formed by cutting out a section of the packaging product along creases which match the size of the object and, thereafter, folding the cut-out section

along creases to form the sides and end flaps of the package.

Alternatively, in use, in a situation where the packaging product is the required size and shape to form a package for an object to be packaged, the package is formed by selectively folding the packaging product along creases to form the sides and end flaps.

It is preferred that the packaging product be quadrilateral.

It is preferred particularly that the packaging product be rectangular or square.

It is preferred that the spacing between adjacent creases in the first array of creases be 10-30mm.

It is preferred that the spacing between adjacent creases in the second array of creases be 10-30mm.

In one embodiment it is preferred that the first and second arrays of creases form a square pattern which defines a plurality of square panels.

In another embodiment it is preferred that the first and second arrays of creases form a rectangular pattern which defines a plurality of rectangular panels.

It is preferred that the planar member be a laminate of a face sheet and a single face corrugated member.

It is preferred particularly that the face sheet be a carton board or a heavy paper material.

It is preferred that the single face corrugated

member comprise a laminate of a backing sheet and a corrugated sheet.

It is preferred that the creases be formed in one surface only of the planar member. In use, this surface forms the internal surface of a package.

It is preferred particularly that the creases be formed in the single face corrugated member.

According to the present invention there is provided a package formed from the packaging product described in the above paragraphs.

The present invention is described further by way of example with reference to the accompanying drawings, of which:

Figure 1 is a top plan view of a packaging product in accordance with the present invention; and

Figure 2 is a section along the line 2 - 2 of Figure 1.

The packaging product shown in the Figures is suitable for forming a range of packages of different shapes and sizes that have rigid sides and square corners.

The packaging product is suitable particularly, although by no means exclusively, for forming packages for transporting objects by courier or post.

The packaging product comprises a planar member formed as a laminate of:

i. a face sheet 3 (shown in Figure 2 and the reverse face to that shown in Figure 1)

formed from a carton board; and

ii. a corrugated single face member 5 formed from a paper backing sheet 7 and a corrugated paper sheet 9 (Figure 2 only).

The packaging product further comprises two mutually perpendicular parallel arrays of creases 11,13 formed in the corrugated single face member 5 which enable the packaging product to be selectively folded, as described by way of example hereinafter, to match the size of an object to be packaged.

In the preferred embodiment of the present invention the creases 11, 13 do not deform the face sheet 3 so that the face sheet 3 presents a smooth surface as the outer surface of a package formed from the packaging product.

With reference to Figure 1, the arrays of creases 11, 13 are positioned to form a square pattern.

The present invention is not limited to such an arrangement and, by way of example, the arrays of creases 11, 13 may form a rectangular pattern. In some situations a rectangular pattern may be preferable in terms of increasing the flexibility when determining package size and shape.

Typically, the spacing between adjacent creases in each array of creases 11, 13 is 10-30 mm.

The length and width dimensions of the packaging product may be selected as required.

Typically, the packaging product is rectangular in shape and 100 cm long and 60 cm wide.

There are a number of different methods of using the packaging product to form a package for an object. With reference to Figure 1, one method comprises:

i. placing the object to be packaged on the packaging product and marking the closest creases 11, 13 to the edges of the surface of the object at that time contacting the packaging product, thereby to define a first side panel of the package;

ii. successively repositioning the object on adjacent sections of the packaging product and marking the closest creases 11, 13 to define the second, third, and fourth side panels and the top and bottom flaps of the package;

iii. cutting out the blank for the package along the marked creases 11, 13; and

iv. folding the panels and flaps to form the package.

Many modifications may be made to the preferred embodiment of the packaging product of the present invention described above without departing from the spirit and scope of the present invention.

By way of example, whilst the preferred embodiment of the packaging product comprises a laminate of a carton board face sheet and a corrugated single face member formed from paper, it can readily be appreciated that the present invention is not so limited and extends to any suitable construction of the planar member formed from any suitable material(s). In particular, the planar member may be formed from heavier or lighter material depending on

the application. Equally, the planar member may have a different structure depending on the application.

CLAIMS:

1. A packaging product for forming a package, which packaging product comprises a planar member, with at least one surface of the planar member having a first array of parallel creases and a second array of parallel creases perpendicular to the first array of creases, which creases define cutting lines and/or fold lines for forming the sides and the end flaps of the package.

2. The packaging product defined in claim 1 wherein the packaging product is quadrilateral.

3. The packaging product defined in claim 2, wherein the packaging product is rectangular or square.

4. The packaging producing defined in any one of the preceding claims, wherein the spacing between adjacent creases in the first array of creases is 10-30mm.

5. The packaging product defined in any one of the preceding claims, wherein the spacing between adjacent creases in the second array of creases is 10-30mm.

6. The packaging product defined in any one of the preceding claims, wherein the first and second arrays of creases form a square pattern which defines a plurality of square panels.

7. The packaging product defined in any one of claims 1 to 6 wherein the first and second arrays of creases form a rectangular pattern which defines a plurality of rectangular panels.

8. The packaging product defined in any one of the preceding claims the creases are formed in one surface

only of the planar member.

9. A package formed from the packaging product described in any one of the preceding claims.

AMENDED CLAIMS

[received by the International Bureau on 11 June 1998 (11.06.98); original claim 1 amended; remaining claims unchanged (2 pages)]

1. A packaging product for forming a package for an object, which packaging product comprises a planar member, with at least one surface of the planar member having a first array of parallel creases and a second array of parallel creases perpendicular to the first array of creases, which creases define cutting lines and/or fold lines that provide a range of options for forming the sides and the end flaps of the package to suit the dimensions of an object to be packaged.

2. The packaging product defined in claim 1 wherein the packaging product is quadrilateral.

3. The packaging product defined in claim 2, wherein the packaging product is rectangular or square.

4. The packaging producing defined in any one of the preceding claims, wherein the spacing between adjacent creases in the first array of creases is 10-30mm.

5. The packaging product defined in any one of the preceding claims, wherein the spacing between adjacent creases in the second array of creases is 10-30mm.

6. The packaging product defined in any one of the preceding claims, wherein the first and second arrays of creases form a square pattern which defines a plurality of square panels.

7. The packaging product defined in any one of claims 1 to 6 wherein the first and second arrays of creases form a rectangular pattern which defines a plurality of rectangular panels.

8. The packaging product defined in any one of the preceding claims the creases are formed in one surface only of the planar member.

9. A package formed from the packaging product described in any one of the preceding claims.

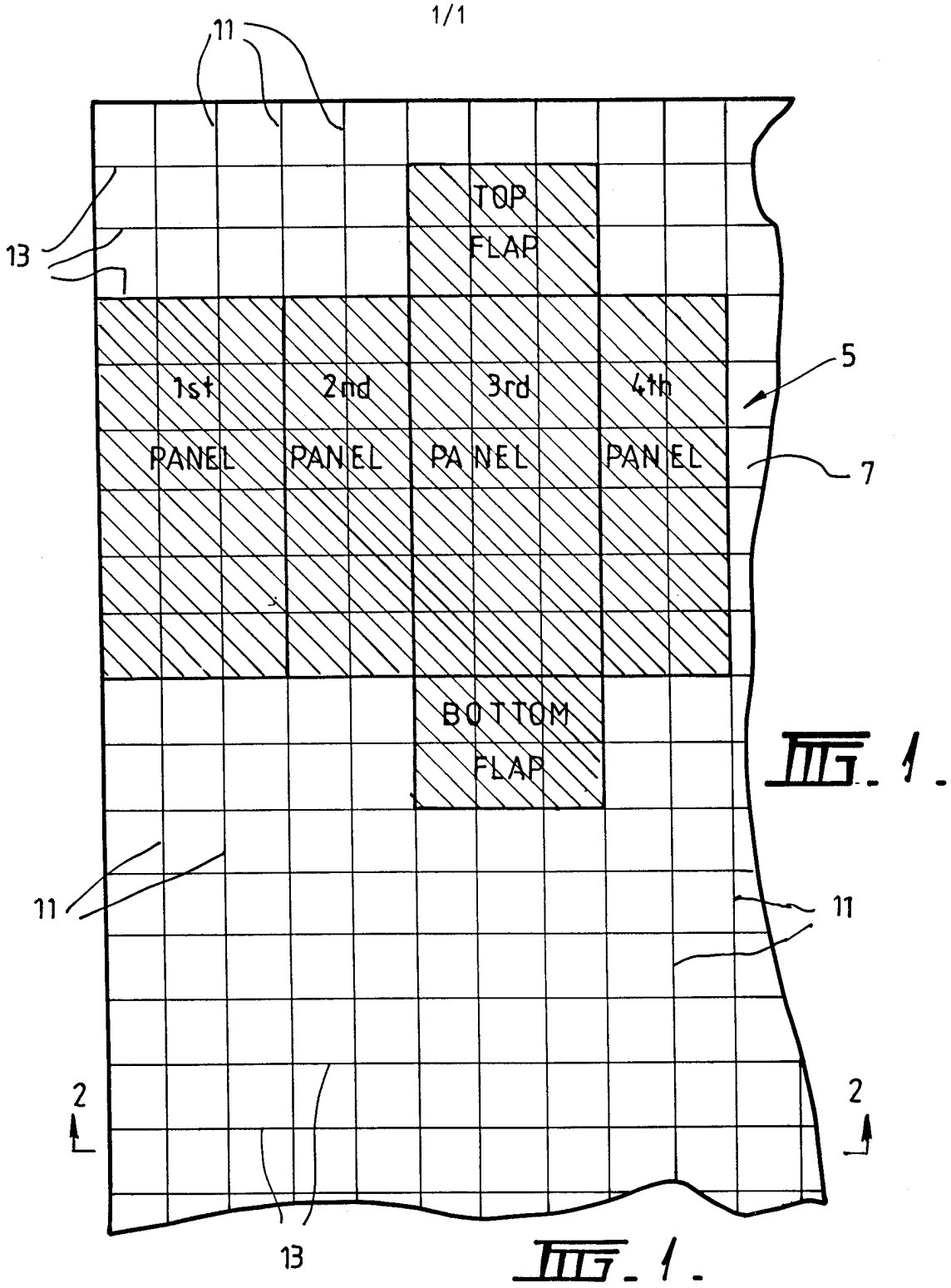

11
13
TOP
FLAP
1st
PANEL
2nd
PANEL
3rd
PANEL
4th
PANEL
5
7
BOTTOM
FLAP
11
11
2
2
13

FIG. 1.

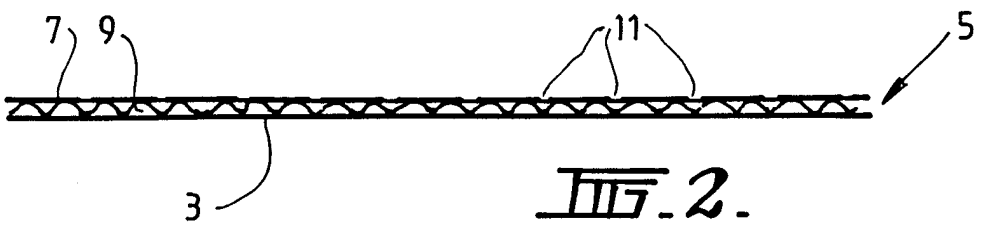

7
9
11
5
3

FIG. 2.

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/AU 98/00126

A. CLASSIFICATION OF SUBJECT MATTER

Int Cl[6]: B65D 65/12, 75/26, 27/00, 5/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC B65D 65/IC, 75/IC, 5/IC, 27/IC

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
-

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US, 4735356, A (ENGEL) 5 April 1988 see Abstract, figs 1 and 5.	1-9
X	FR 1132786, A (S.A.R.L. DITE C.I.P.I.M.E.X.) 15 March 1957 see figs 1-7	1-9
X	US, 4291807, A (GIORDANO et al.) 29 September 1981 see figs 1 & 2	1-9

[X] Further documents are listed in the continuation of Box C

[X] See patent family annex

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31 March 1998	17 APR 1998
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INTERNATIONAL SEARCH REPORT

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C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US, 2301618, A (A.R. CURTIS) 10 November 1942 see figs 1 to 5	1-9
X	US, 5054644, A (GREENSLADE) 8 October 1991 see fig 1	1-9
X	AU, 64288/86, A (PAPER CIRCLE PTY LTD) 30 April 1987 see fig 1	1-9
X	US 2481288, A (J. CAGE) 6 September 1949 see fig 1	1-9
P,X	DE 19629448 A (SIEGER DIETER)29 January 1998 see figs 1 to 5.	1-9

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Information on patent family members

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
US	5054644	EP	420472	GB	2236304	US	5054644

END OF ANNEX