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(12) # EUROPEAN PATENT APPLICATION

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(71) Applicant: **Instance, David John**
Past Heap Farm Pembury
Tunbridge Wells Kent(GB)

(72) Inventor: **Instance, David John**
Past Heap Farm Pembury
Tunbridge Wells Kent(GB)

(74) Representative: **Pendlebury, Anthony et al,**
Page, White & Farrer 5 Plough Place New Fetter Lane
London EC4A 1HY(GB)

(54) **A label.**

(57) A label for a container comprising a longitudinal strip (2) divided into a series of panels (10, 11, 12, 13) by a plurality of transverse fold lines (14, 15, 16), the first two of the panels (10, 11) forming a front cover and a back cover respectively for enveloping the remaining panel or panels (12, 13) of the strip when folded, the transverse fold lines (14, 15, 16) being spaced along the strip so that upon folding of the strip the said remaining panel or panels (12, 13) is or are folded to lie over the back cover (11) and is or are in turn covered by folding of the front cover (10) about the fold line (14) between the front and back covers (10, 11) and wherein the front cover (10) may extend beyond the area occupied by the back cover (11), and a band of adhesive (19) is provided on the inner face of the free outer edge (18) of the front cover panel (10) adjacent to said outer edge for securing the outer edge (18) of the front cover (10) either to the back of the folded panel or panels (12, 13) along a region adjacent the fold line (15) which lies between the back cover (11) and the said remaining panel or panels (12, 13), or to the surface of a support web for carrying the label, the front cover panel (10) being arranged to be torn or otherwise opened to give access to the interior of the folded label.

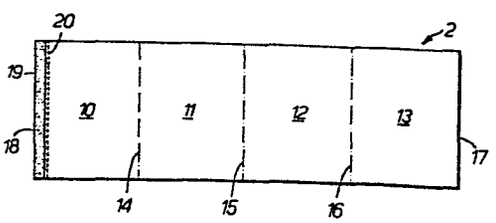

FIG. 1.

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A LABEL

The present invention relates to a label, and more particularly to labels intended to be stuck on to containers such as boxes, packets, bottles or tins.

The present invention provides labelling means which provide a relatively large surface area for carrying printed information without taking up a large amount of the available surface area of the container.

According to the present invention there is provided a label for affixing to a container comprising a longitudinal strip divided into a series of panels by a plurality of transverse fold lines, the first two of the panels forming a front cover and a back cover respectively for enveloping the remaining panel or panels of the strip when folded, the transverse fold lines being spaced along the strip so that upon folding of the strip the said remaining panel or panels is or are folded to lie over the back cover and is or are in turn covered by folding of the front cover about the fold line between the front and back covers and wherein the front cover may extend beyond the area occupied by the back cover, and a band of adhesive is provided on the inner face of the free outer edge of the front cover panel adjacent to said outer edge for securing the outer edge of the front cover either to the back of the folded panel or panels along a region

adjacent the fold line which lies between the back cover and the said remaining panel or panels, or to the surface of a support web for carrying the label, the front cover panel being arranged to be torn or otherwise opened to give access to the interior of the folded label.

If desired, the label may additionally comprise at least one further row of panels, for example one, two or more further rows of panels, hingedly connected along one or both longitudinal edges of the said longitudinal strip of panels. The or each further row of panels may extend parallel to or perpendicular to the longitudinal strip of panels.

Alternatively, the label may additionally comprise at least one further panel hingedly connected along one or both longitudinal edges of the said longitudinal strip of panels.

In a preferred embodiment of the label of the present invention, the label further comprises a support web to which the said back cover is adhered, the surface area of the support web being greater than that of the front or back cover of the strip thereby providing additional area for carrying printed matter.

In one arrangement the front cover panel of the label includes at least one weakened tear line along which the front cover panel can be severed to allow for the required access to the interior of the label.

Preferably, the front cover panel includes two parallel weakened tear lines, spaced apart to provide a narrow strip which can be torn away to give access to the interior of the label.

In an alternative arrangement, the adhesive used in the band of adhesive on the inner face of the front cover panel is a re-sealable adhesive so as to allow the outer edge of the front cover panel to be selectively detached and re-attached and thereby provide for the required access to the interior of the folded label.

Preferably a succession of labels in accordance with the present invention is adhered to the upper surface of a length of a release backing material and wound into a reel for subsequent removal from the backing material and application to a container to be labelled.

Various embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

Firgures 1 and 2 respectively illustrate a label in accordance with the invention before and after folding,

Figure 3 shows a perspective view of the label of Figures 1 and 2 after tearing of the tear line and unfolding of the label,

Figure 4 illustrates a different label in accordance with the invention after folding,

Figures 5 and 6 respectively illustrate a further embodiment of a label in accordance with the invention before and after folding,

Figures 7 and 8 illustrate another embodiment of a label in accordance with the present invention in the closed and opened condition respectively, and

Figures 9, 10, 11 and 12 illustrate further embodiments of a label in accordance with the present invention including additional panels or additional rows of panels.

In the Figures, like reference numerals refer to like parts.

Referring to Figure 1, a label in accordance with the invention is made from a longitudinal strip 2 of paper, one end of the strip having a band of adhesive 19 extending along the inner surface thereof parallel to the edge 18 of the label. A weakened tear line 20 is formed adjacent one side of the band of adhesive. The remainder of the strip 2 is divided by transverse fold lines 14, 15, 16 into four panels 10, 11, 12, 13; these fold lines need not exist prior to the folding operations used to form the label during its manufacture.

The upper surface of each of panels 10, 11, 12 and 13 may carry printed information as can the lower surface of each of panels 10, 12, and 13. The lower surface of panel 11 which is to be adhered to a container or to a support web is not normally printed but may be if desired.

In use the label is folded as shown in Figure 2 by doubling the panel 13 on the right-hand side of the label about fold line 16 so that it lies against panel 12, and thereby doubling panels 12 and 13 together about fold line 15 so that they lie against the inner face of panel 11. Panel 11 acts as a back cover for folded panels 12 and 13. Finally, panel 10 on the left-hand side of the strip 2 is folded about fold line 14 to lie over folded panels 12 and 13 and thereby to act as a front cover for the folded panels of the label. The outer edge of panel 10

is then attached to panel 12 by means of the band of adhesive 19. The fold lines 14, 15 and 16 on the strip 2 are spaced from one another in such a manner that panels 12 and 13 after folding are both contained within the front and back cover panels 10 and 11.

The folded labels may be applied directly to containers on which they are to be used by means of a suitable adhesive 21 on the underside of panel 11, suitably in the form of a continuous layer, or in the form of bands of adhesive.

Alternatively, as shown in Figure 4, the labels may be applied to a support web 26 which has an adhesive on its underside suitable for adhering the support web carrying the folded label to a container.

The support web 26 serves to provide additional areas for carrying further printed matter.

If desired, a number of such folded labels are carried in succession on a length of release backing material which for convenience of handling is wound into a reel which when subsequently labelling containers can be unwound so that the labels can be removed from the backing material and applied to containers to be labelled.

Apart from the underside of panel 11 which is adhered to the container or to the support web, the upper and lower faces of all the other panels, 10, 12 and 13 may

each carry printed instructions or any other desired information. The outer face of cover panel 10 will generally carry instructions indicating how to gain access to the information printed inside the label, for example by tearing along tear line 20. If desired, printed lines may be used to indicate where the label should be torn along the weakened tear line. Having torn the label along weakened tear line 20, the cover panel 10 can be unfolded about fold line 14 allowing access to the information contained on panels 11, 12 and 13 by unfolding along fold lines 15 and 16 as shown in Figure 3.

In the alternative embodiment of Figure 4, the label is the same as the label of Figures 1 to 3 except that the width of the cover panel 10 is such that the cover panel has an edge portion 22 which in the folded condition extends beyond the right-hand edge of the folded panels 12 and 13. In this arrangement, the band of adhesive 24 for keeping the cover panel closed is carried on the said edge portion 22 and in use is adhered not to the back of the folded panel 12 but to the support web 26. When the tear line 20 is broken in order to gain access to the information on the inside of the label, the edge portion 22 of the cover panel 10 remains attached to the support web 26.

The tear line 20 need not be positioned immediately

adjacent the said band of adhesive 19. It may be positioned along any transverse axis of the front cover panel 10 parallel to the fold lines. For example, as illustrated in Figures 5 and 6 the tear line 20 may be located parallel to and adjacent the fold line 14 on the right-hand side of front cover panel 10.

It will be appreciated that although the labels described above have been illustrated as having only two panels to the right of back cover panel 11, if a greater amount of information must be provided on the label, a longer strip may be used and this may be folded so that there are three or more panels beyond the back cover panel 11.

Referring to Figures 7 and 8 there is shown a further alternative embodiment of a label in accordance with the present invention. In this embodiment the label is formed from a longitudinal strip 30, divided by two fold lines 32 and 34 into three panels 36, 38, 40. The rear face of the central panel 38 is adhered to a support web 42 which extends on either side of the central panel 38 to form lateral side panels 44 and 46 which provide additional surface areas for displaying further printed matter.

In the closed position panel 36 is folded inwardly about fold line 32 to lie against panel 38 which acts

as the said back cover and panel 40 is folded inwardly over panel 36 about fold line 34 to lie over folded panel 36 and thereby to give a label having a flat configuration. The outer edge 48 of panel 40 carries on its inner face a band of adhesive to ensure that panel 40 remains in a folded position over panel 36 until it is desired to open the label. To allow for opening of the label, there are provided on the panel 40 two parallel weakened tear lines 50 and 52 located immediately inwards from the band of adhesive and spaced slightly apart to provide a narrow strip 54 which can be torn away to give access to the interior of the label by allowing the panels 40 and 36 of the label to be unfolded.

Preferably, a plurality of such labels are carried in succession on a length of a release backing material 56 which is wound into a reel for convenience of handling. When labelling containers, the labels on the reel are removed from the backing material as the reel is unwound and are applied to containers which are to be labelled.

Generally to prepare labels in accordance with the invention, a continuous sheet of material is printed as required and folded along longitudinal fold lines corresponding to fold lines 14, 15, 16 or 32, 34 to give a multiple ply flat tube of printed material. The underside of this tube, corresponding to the underside of back cover

panel 11 or 38 may carry a suitable adhesive coating for direct application of labels cut from the tube to a container. However, more commonly, the back cover 11 or 38 of the label is adhered to a continuous length of a support web 26 or 56 which has a self-adhesive underside lined with a removable backing sheet of release material. If desired the said support web may also carry printed information. The assembly of folded tube and support web is then passed through a die-cutting apparatus where labels of the required dimensions are cut in conventional manner. After removal of the superfluous portions of materials, one obtains a backing sheet carrying a plurality of the folded labels of the invention, which backing sheet is conveniently wound into a reel. In some instances the support web 26 can be dispensed with and the folded tube applied directly to a backing sheet for die-cutting of the required labels and winding of the backing sheet into a reel.

As will be seen from the embodiments shown in Figures 9 to 12, if additional areas for printing textual information are required, the label may be designed to include one or more further rows of panels hingedly connected to one or both longitudinal edges of the longitudinal strip of panels (10, 11, 12, 13). Thus, for example, one additional row of panels (61, 62, 63) may be hingedly connected below the strip

of panels (10, 11, 12, 13) as shown in Figure 9, or similarly one additional row of panels (71, 72, 73) may be hingedly connected above the strip of panels (10, 11, 12, 13) as shown in Figure 10. If desired, one, or more, such additional rows may be added both above and below the longitudinal strip of panels (10, 11, 12, 13) as shown in Figure 11.

In use the additional rows of panels are folded inwardly about respective fold lines 60 and 70 along the longitudinal edges of the strip of panels so that they lie flat over the longitudinal strip of panels, and then the resultant strip of panels is folded onto the back cover panel 11 and covered by front cover panel 10 as described above to provide a folded label.

In each of the labels shown in Figures 9, 10 and 11 the additional rows of panels are parallel to the longitudinal strip of panels (10, 11, 12, 13); however, it is also possible, as shown in Figure 12, to include rows of panels (81, 82) perpendicular to the longitudinal strip of panels (10, 11, 12, 13). In use, panel 82 is first folded about fold line 80 onto panel 81, and the resultant two-ply layer is folded about fold-line 84 onto panel 11, whereupon panels 12 and 13 are folded over as described before, followed finally by folding and adhering of the front cover panel 10 over the various folded panels lying over rear panel 11.

Alternatively, a single panel such as panel 81 may be hingedly connected to one or both longitudinal edges of the longitudinal strip of panels (10, 11, 12, 13). This arrangement is not specifically illustrated.

In each case in the embodiments of Figures 9 to 12 the front cover panel is arranged to be torn about weakened tear lines or otherwise opened as described above to allow the user to gain access to the interior of the folded label once the label is applied to a container.

In all the embodiments shown in Figures 9 to 11, if desired the label can be carried on a support web (not shown) as described in relation to Figure 4, thereby to give yet further areas for carrying printed matter.

CLAIMS:

1. A label for a container characterised in that the label comprises a longitudinal strip (2) divided into a series of panels (10, 11, 12, 13) by a plurality of transverse fold lines (14, 15, 16), the first two (10, 11) of the panels forming a front cover and a back cover respectively for enveloping the remaining panel or panels (12, 13) of the strip when folded, the transverse fold lines (14, 15, 16) being spaced along the strip so that upon folding of the strip the said remaining panel or panels (12, 13) is or are folded to lie over the back cover (11) and is or are in turn covered by folding of the front cover (10) about the fold line (14) between the front and back covers and wherein the front cover may extend beyond the area occupied by the back cover, and a band of adhesive (19) is provided on the inner face of the free outer edge (18) of the front cover panel (10) adjacent to said outer edge for securing the outer edge (18) of the front cover (10) either to the back of the folded panel or panels (12, 13) along a region adjacent the fold line (15) which lies between the back cover (11) and the said remaining panel or panels (12, 13), or to the surface of a support web (26) for carrying the label, the front cover panel (10) being arranged to be torn or otherwise opened to give access to the interior of the folded label.

2. A label according to Claim 1, characterised in that the label further comprises at least one further panel hingedly connected along one or both longitudinal edges of the said longitudinal strip (2) of panels (10, 11, 12, 13).

3. A label according to Claim 1, characterised in that the label further comprises at least one further row of panels (61, 62, 63; 71, 72, 73) hingedly connected along one or both longitudinal edges (60; 70) of the said longitudinal strip (2) of panels (10, 11, 12, 13).

4. A label according to Claim 3, wherein the or each further row (61, 62, 63; 71, 72, 73) extends parallel to the said longitudinal strip (2) of panels (10, 11, 12, 13).

5. A panel according to Claim 3, wherein the or each further row (81, 82) extends perpendicular to the said longitudinal strip (2) of panels (10, 11, 12, 13).

6. A label according to any one of the preceding claims, characterised in that the label further comprises a support web (26; 42) to which the said back cover (11; 38) is adhered, the surface area of the support web (26; 42) being greater than that of the front (10; 40) or back (11; 38) cover of the strip thereby providing additional area for carrying printed matter.

7. A label according to any one of the preceding claims, wherein the band of adhesive (19) is a re-sealable adhesive so as to allow the outer edge (18) of the front cover panel (10) to be reversibly detached and thereby provide for the required access to the interior of the folded label.

8. A label according to any one of Claims 1 to 6, wherein the front cover panel (10) includes a weakened tear line (20) along which the front cover panel (10) can be severed to allow for the required access to the interior of the folded label.

9. A label according to Claim 8, wherein the weakened tear line (20) is positioned adjacent and parallel to the band of adhesive (19).

10. A label according to Claim 8, wherein the weakened tear line (20) is positioned adjacent and parallel to the fold line (14) between the front cover (10) and back cover (11) panels.

11. A label according to any one of Claims 1 to 6, and 8 to 10, wherein the front cover panel (40) includes two parallel weakened tear lines (52, 54) spaced apart to provide a narrow strip (54) which can be torn away to give access to the interior of the label.

12. A reel of release backing material carrying thereon a succession of labels as claimed in any one of the preceding claims.

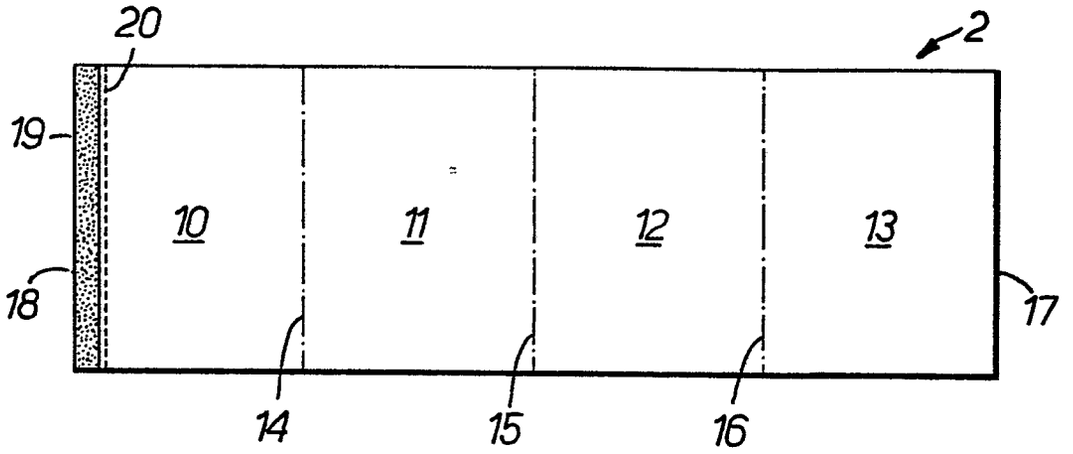

FIG. 1.

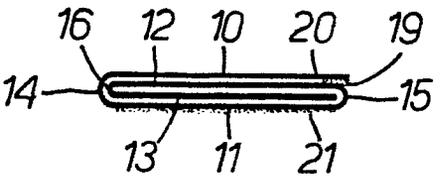

FIG. 2.

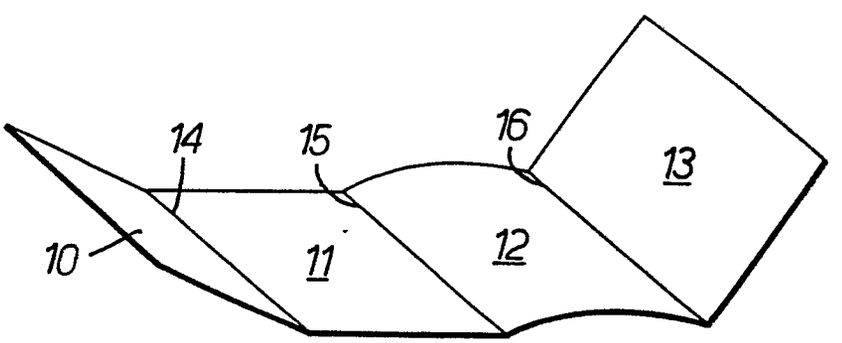

FIG. 3.

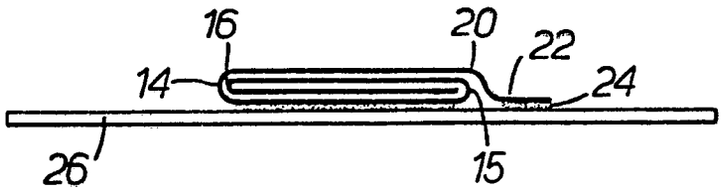

FIG. 4.

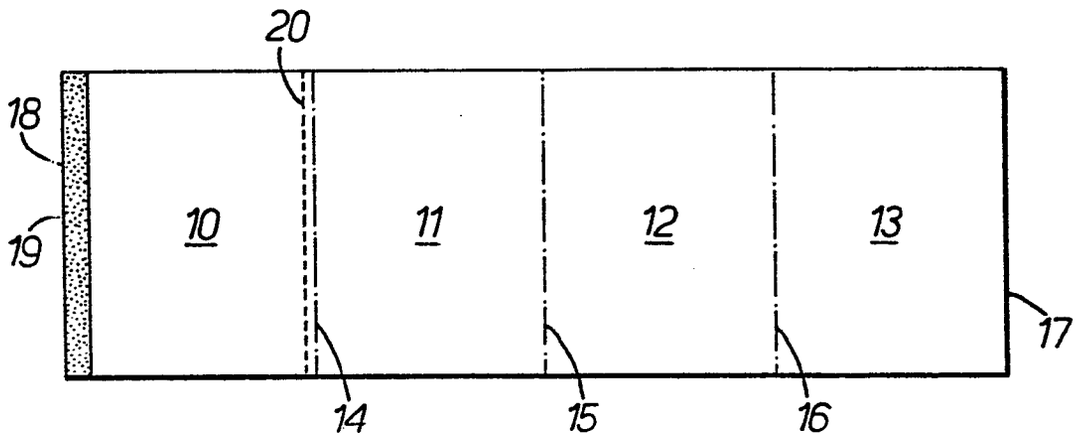

FIG. 5.

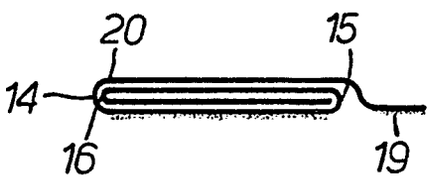

FIG. 6.

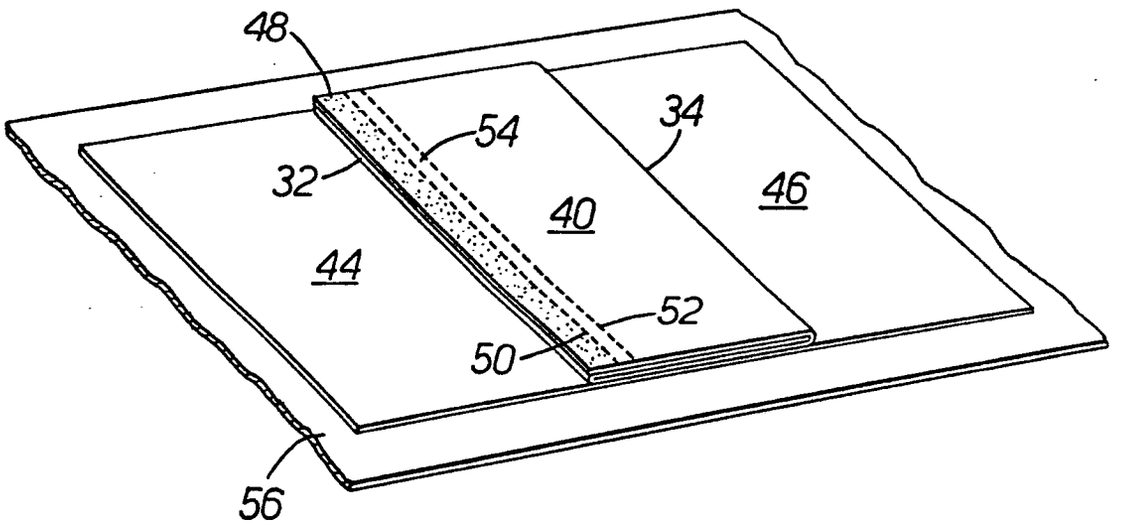

FIG. 7.

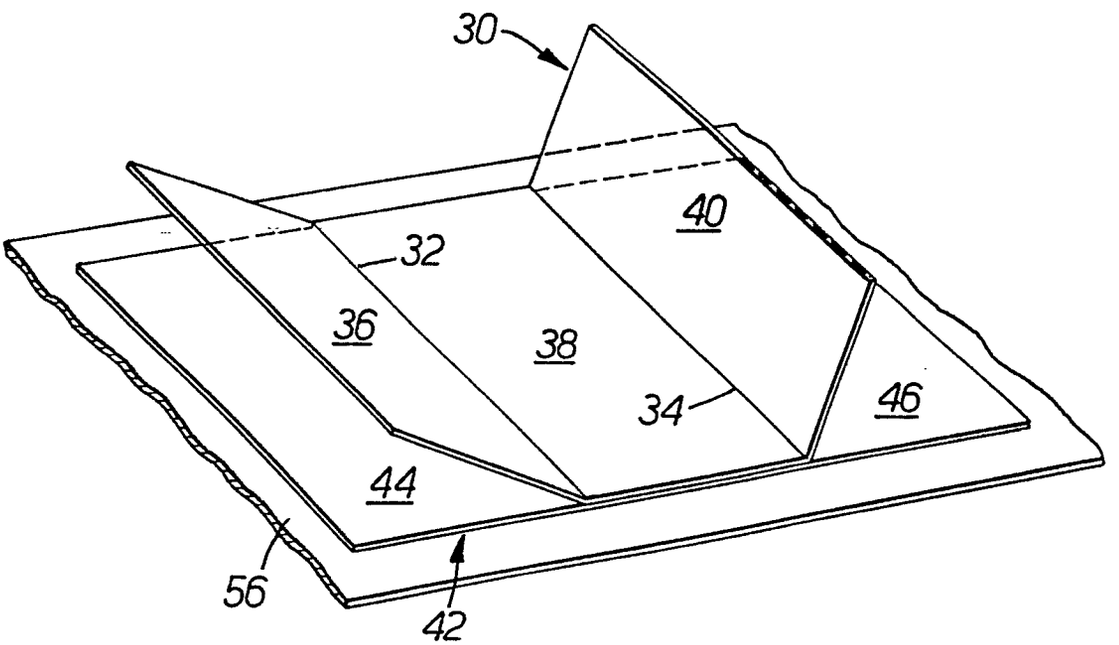

FIG. 8.

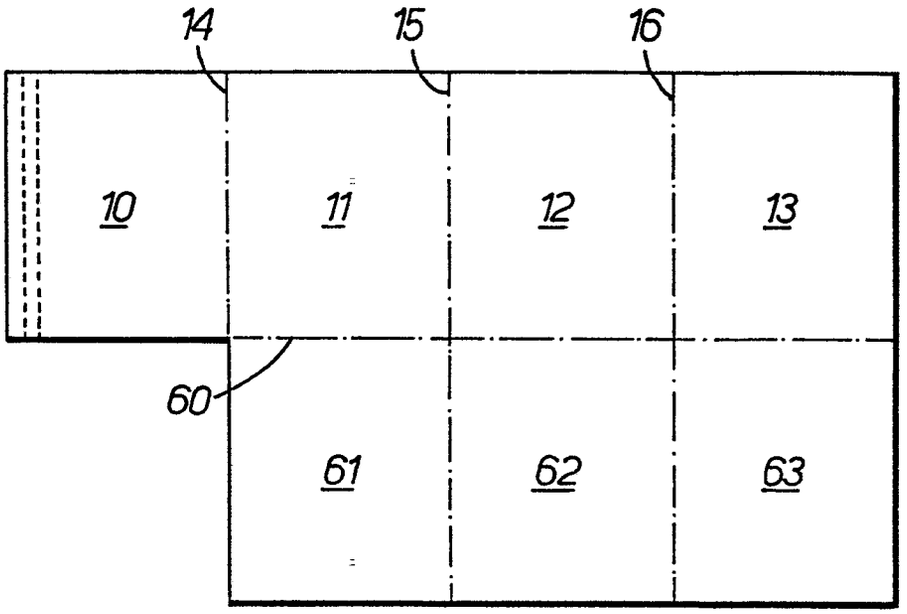

FIG. 9.

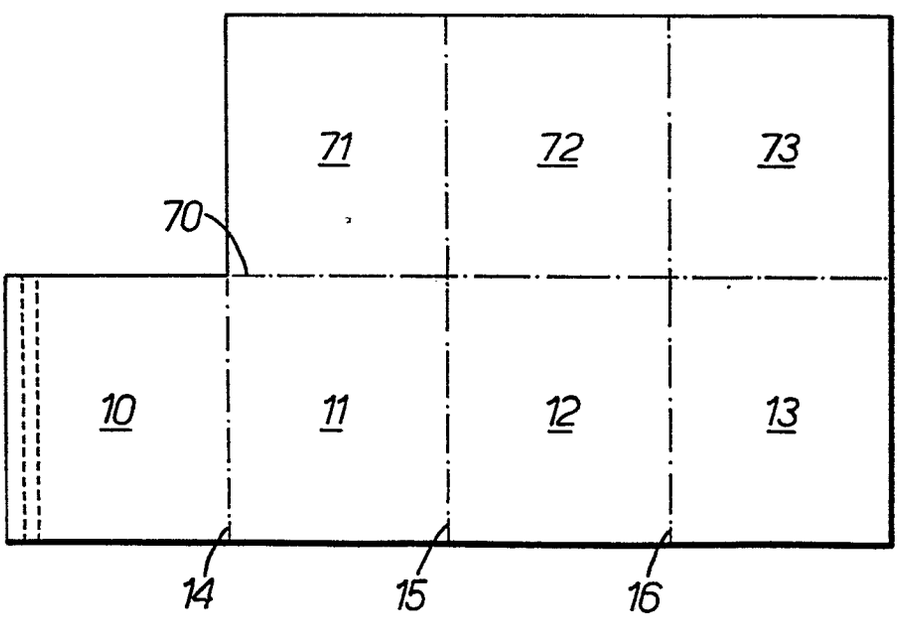

FIG. 10.

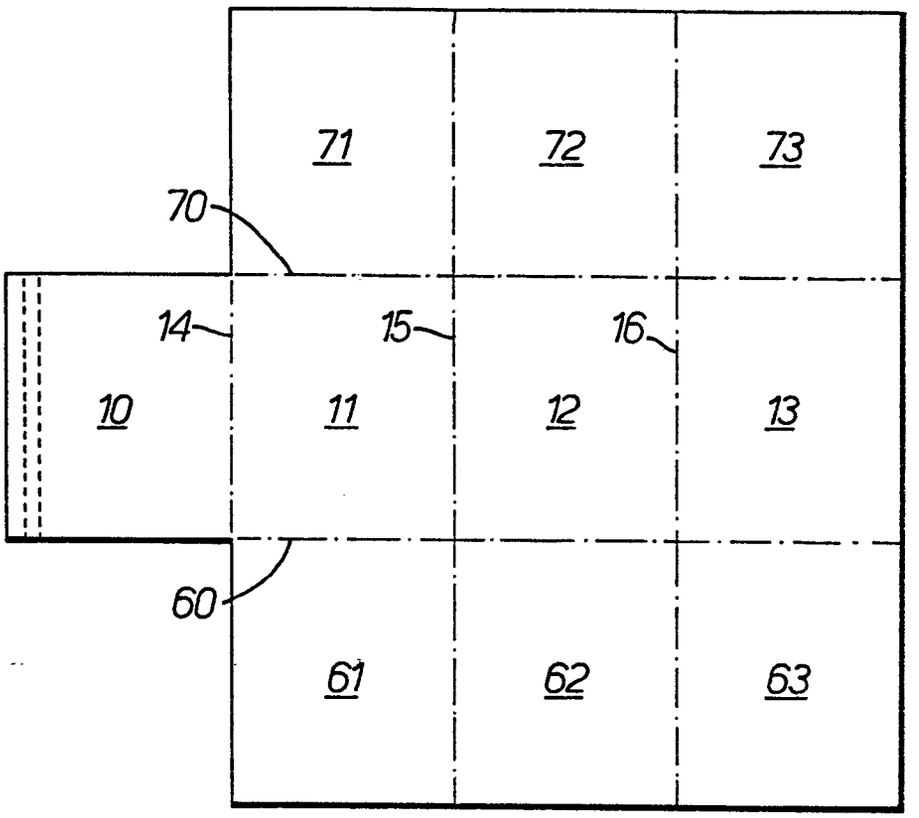
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FIG. 11.

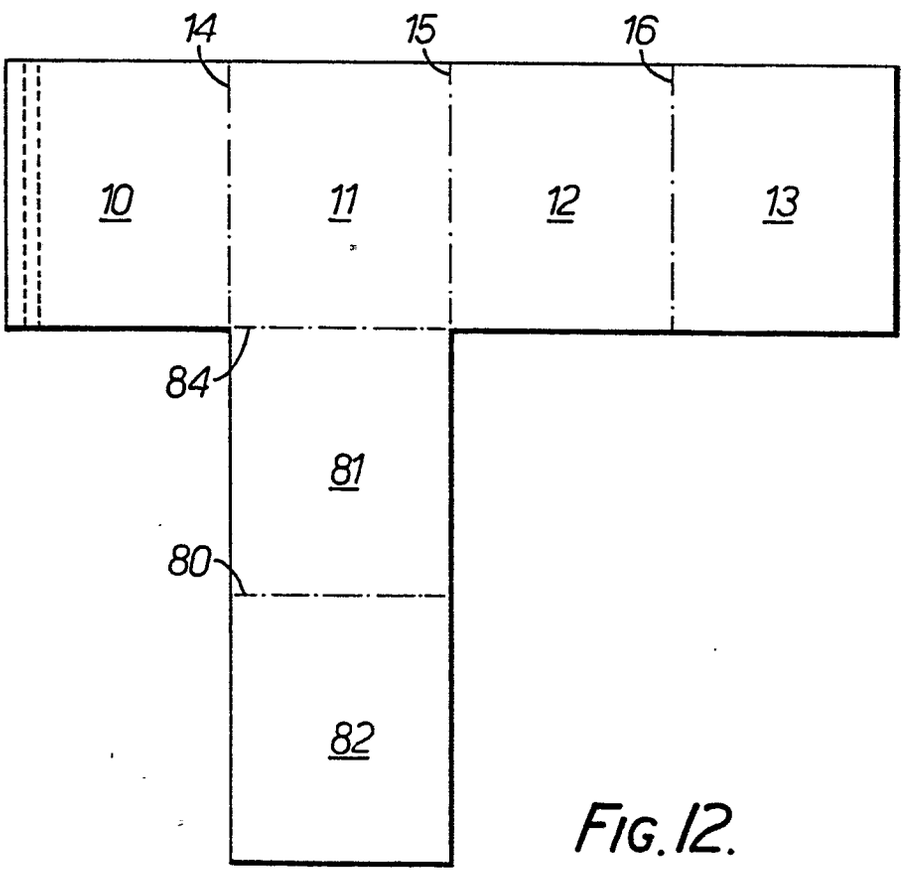
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FIG. 12.

European Patent Office

EUROPEAN SEARCH REPORT

0087987
Application number

EP 83 30 1151

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
X	EP-A-0 043 179 (D.C. DENNY et al.) * Page 1, line 6 - page 2, line 15 *	1,7-12	G 09 F 3/02 G 09 F 3/10
A	US-A-1 864 526 (R.R. BROWN) * Whole document *	1	
A	FR-A-1 274 343 (F. VATTER KG) * Whole document *	2,3,5	
A	DE-U-7 819 743 (KAUFHALLE GMBH) * Page 4, paragraph 4 - page 5, paragraph 1 *	2	

TECHNICAL FIELDS SEARCHED (Int. Cl. ³)

G 09 F 3/00

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	26-05-1983	BOTTERILL K.J.

CATEGORY OF CITED DOCUMENTS

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