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(54)

Two pack package with connector

(57)

A container for smoking articles comprises at least two hingedly connected packs, each for housing a separate bundle of smoking articles. The container comprises: a first pack having a first wall; a second pack having a first wall; and a connector (10) hingedly coupled to the first wall of the first pack along a first fold line and hingedly coupled to the first wall of the second pack along a second fold line substantially perpendicular to the first fold line. The two hingedly connected packs may be hinged about either of the two perpendicular fold lines.

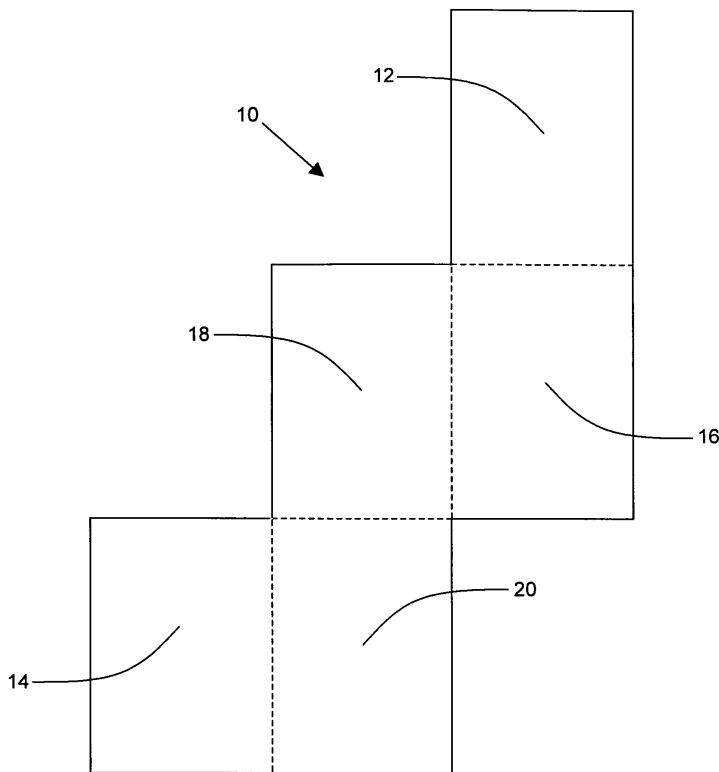


Figure 1

Description

[0001] WO-A-2006/079799 discloses packages comprising two packs connected in a Jacob's ladder arrangement by at least first and second straps and blanks and a method for forming such packages.

[0002] In one aspect, WO-A-2006/079799 describes a package comprising: first and second packs each capable of containing items, each pack having a first face bound by a first edge and a second edge, the second edge being parallel to the first edge; and means, connecting the first and second packs, which means comprising first and second straps which are attachable to the first and second packs; wherein, in a first position of the packs the first face of the first and second packs face each other with the first edges of the first and second pack adjacent to each other and the second edges of the first and second pack adjacent each other, the first and second straps extending across the first face and being hinged about the first and second edges, wherein the first strap is hinged about the first edge of the first pack and hinged about the second edge of the second pack and the second strap is hinged about the second edge of the first pack and hinged about the first edge of the second pack, whereby the first and second packs are movable, one relative to the other between at least the first position, a second position in which the second pack is rotated relative to the first pack about the first edge and a third position in which the second pack is rotated relative to the first pack about the second edge.

[0003] In another aspect, WO-A-2006/079799 describes a blank for forming the means comprising first and second straps that connects the first and second packs of the package, which comprises a single sheet of material, having at least a first region providing a first strap and a second region providing a second strap, the regions being adjoined by a line operable to separate the first region from the second region, the line having a first, second and third section thereon, the second section being a weakened section such that the first and second regions are separable, and the first and second sections being cut portions extending from respective ends of the weakened section to the edge of the sheet.

[0004] In a further aspect, WO-A-2006/079799 describes another blank for forming the means comprising first and second straps that connects the first and second packs of the package, which comprises a single sheet of material having a first elongate section in which there is an elongate hole having major edges which are spaced apart and a second section aligned with the hole and extending from a minor edge of the first section, the second section having a maximum width substantially equal or less than the minimum width of the hole and a length greater than the length of the hole such that a free minor edge of the second section is threadable through the hole and capable of attaching to the free minor edge of the first section.

[0005] The first and second packs of all of the pack-

ages described in the specification and shown in the drawings of WO-A-2006/079799 are connected in a Jacobs Ladder arrangement by a separate joining blank or by a separate Jacobs Ladder structure. To manufacture the packages, a separate joining blank is either fixed to the first and second packs or the first and second packs are positioned within, and in some cases fixed to, two pack containing sections in a separate Jacobs Ladder structure.

[0006] It would be desirable to provide a container comprising two or more packs connected in a Jacob's ladder or similar arrangement that can be manufactured in a simple way.

[0007] According to the invention there is provided a container for smoking articles comprising at least two hingedly connected packs, each for housing a separate bundle of smoking articles, the container comprising: a first pack having a first wall with opposed first and second edges; a second pack having a first wall with opposed first and second edges; and a connector hingedly coupled to the first wall of the first pack along a first fold line and hingedly coupled to the first wall of the second pack along a second fold line substantially perpendicular to the first fold line.

[0008] The first pack and the second pack of containers according to the invention are hingeable relative to one another about the first fold line between a first position and a second position. In the first position the first walls of the first and second packs are parallel and opposed and the first edges of the first walls of the first and second packs are adjacent and the second edges of the first walls of the first and second packs are adjacent. In the second position the first walls of the first and second packs are substantially coplanar.

[0009] The first pack and the second pack of containers according to the invention are also hingeable relative to one another about the second fold line between the initial position and a third position in which the first walls of the first and second packs are substantially coplanar.

[0010] The first pack and the second pack of containers according to the invention are thus advantageously hingedly connected in a double hinged manner not dissimilar to a Jacob's ladder arrangement by the connector. Furthermore, the first pack and the second pack of containers according to the invention are advantageously hingeable in two substantially perpendicular directions relative to one another.

[0011] The connector of containers according to the invention may be integral with the first pack, integral with the second pack or integral with the first pack and the second pack. Alternatively, the first pack, the second pack and the connector of containers according to the invention may be formed from separate blanks.

[0012] In a preferred embodiment of the invention, the container comprises a separate connector comprising at least three hinged panels, the connector comprising: a first panel affixed to the first wall of the first pack; a second panel affixed to the first wall of the second pack; and a

third panel hingedly connected to the first panel along the first fold line and hingedly coupled to the second panel along the second fold line.

[0013] In this preferred embodiment, the at least three hinged panels of the connector overlie one in the first position. In the second position the third panel of the connector overlies the second panel of the connector and in the third position the third panel of the connector overlies the first panel of the connector.

[0014] The third panel of the connector may be hingedly connected to the second panel along the second fold line. Alternatively, the connector may further comprises a fourth panel that is hingedly connected to the third panel along the second fold line and hingedly coupled to the second panel along a third fold line substantially perpendicular to the second fold line.

[0015] Where the connector further comprises a fourth panel, the first pack and the second pack of containers according to the invention are also hingeable relative to one another about the third fold line between the first position and a fourth position in which the first walls of the first and second packs are substantially coplanar. The third panel of the connector overlies the second and fourth panels of the connector in the second position, the fourth panel of the connector overlies the second panel of the connector in the third position and the fourth panel of the connector overlies the first and third panels of the connector in the fourth position.

[0016] The provision of a connector comprising at least four hinged panels advantageously allows the first pack and the second pack of containers according to the invention to be hinged in three different directions relative to one another.

[0017] The fourth panel may be hingedly connected to the second panel along the third fold line. Alternatively, the connector may further comprises a fifth panel that is hingedly connected to the fourth panel along the third fold line and hingedly coupled to the second panel along a fourth fold line substantially perpendicular to the third fold line.

[0018] Where the connector further comprises a fifth panel, the first pack and the second pack are hingeable relative to one another about the fourth fold line between the first position and a fifth position in which the first walls of the first and second packs are substantially coplanar. The third panel of the connector overlies the second, fourth and fifth panels of the connector in the second position, the fourth panel of the connector overlies the second and fifth panels of the connector in the third position, the fifth panel of the connector overlies the second panel of the connector in the fourth position and the fifth panel of the connector overlies the first, third and fourth panels of the connector in the fifth position.

[0019] The provision of a connector comprising at least five hinged panels advantageously allows the first pack and the second pack of containers according to the invention to be hinged in four different directions relative to one another.

[0020] Preferably, the fifth panel is hingedly connected to the second panel along the fourth fold line. However, if desired, the connector may further comprise a sixth panel that is hingedly connected to the fifth panel along the fourth fold line and hingedly connected to the second panel along a fifth fold line substantially perpendicular to the fourth fold line.

[0021] In alternative embodiments of the invention, the container comprises an integral connector comprising one or more panels of similar construction to the separate connectors comprising at least three hinged panels described above. Throughout the specification the term "integral" denotes that the connector and the first wall of one or both of the first and second packs of containers according to the invention are formed from a single piece of material, for example, from the same blank.

[0022] The integral connector may be integral with the first pack and hingedly connected to the first wall of the first pack along the first fold line. In this case, the first wall of the first pack replaces the first panel of the separate connectors previously described above. Alternatively, or in addition, the integral connector may be integral with the second pack and hingedly connected to the first wall of the second pack along the second fold line. In this case, the first wall of the second pack replaces the second panel of the separate connectors previously described above.

[0023] Preferably, the first fold line is a lateral fold line and the second fold line is a longitudinal fold line. More preferably, the first fold line is a lateral horizontal fold line and the second fold line is a longitudinal vertical fold line.

[0024] Preferably, first fold line is substantially parallel and adjacent to a third edge of the first wall of the first pack, which is substantially perpendicular to the opposed first and second edges thereof. Preferably, the second fold line is substantially parallel and adjacent to a first one of the first edge of the first wall of the first pack and the second edge of the first wall of the first pack.

[0025] Where the connector comprises a fourth panel, the third fold line is preferably substantially parallel and adjacent to a fourth edge of the first wall of the first pack, which is opposed to the third edge of the first wall of the first pack and substantially perpendicular to the opposed first and second edges thereof. Where the connector further comprises a fifth panel, the fourth fold line is preferably substantially parallel and adjacent to a second one of the first edge of the first wall of the first pack and the second edge of the first wall of the first pack.

[0026] One or both of the first pack and the second pack of containers according to the invention may be a slide and shell pack comprising an outer shell and an inner slide within the outer shell. Alternatively or in addition, one or both of the first pack and the second pack of containers according to the first aspect of the invention may be a hinge-lid pack comprising a lower box portion and an upper lid portion hinged to the lower box portion.

[0027] Where the first pack is a slide and shell pack, the connector is preferably of substantially the same di-

mensions as the first wall of the first pack. Where the second pack is a slide and shell pack, the connector of the second pack is preferably of substantially the same dimensions as the first wall of the second pack.

[0028] Where the first pack is a hinge-lid pack, the connector is preferably of substantially the same dimensions as the lower box portion of the first wall of the first pack. Where the second pack is a hinge-lid pack, the connector is preferably of substantially the same dimensions as the lower box portion of the first wall of the second pack.

[0029] Preferably, the first pack and the second pack of containers according to the invention are both slide and shell packs or both hinge-lid packs. It will be appreciated, however, that containers according to the invention may comprise a first pack and a second pack provided with different types of opening and closing means. For example, the first pack may be a hinge-lid pack and the second pack may be a slide and shell pack.

[0030] Where both the first pack and the second pack of containers according to the invention are hinge-lid packs, the first pack may have a hinge-lid pivotable about a hinge line extending across the first wall of the first pack and the second pack may have a hinge-lid pivotable about a hinge line extending across the first wall of the second pack.

[0031] In alternative embodiments of the invention, the first pack may have a hinge-lid pivotable about a hinge line extending across a second wall of the first pack that is parallel and opposed to the first wall of the first pack and the second pack may have a hinge-lid pivotable about a hinge line extending across a second wall of the second pack that is parallel and opposed to the first wall of the second pack.

[0032] Where, the first pack, the second pack and the connector of containers according to the invention are formed from separate blanks, the connector is preferably adhered to the first pack and the second pack in order to form the container. The connector may, for example, be adhered to the first pack and the second pack using hot melt adhesive, contact adhesive or double sided adhesive tape.

[0033] However, it will be appreciated that, a variety of other known means may be employed to affix the connector of containers according to the invention to the first and second packs thereof such as, for example, hook and loop type fasteners, magnetic fasteners or mating plug (male) and socket (female) type fasteners.

[0034] Containers according to the invention preferably further comprise retention means to provide resistance to movement of the first and second packs from the first position to the second third or fourth position, such that a positive force must be applied by a consumer to hinge the first and second packs relative to one another from the first position to the second, third and fourth position. If desired, containers according to the invention may comprise retention means that provides a positive force, which urges movement of the first pack and the second pack towards the first position.

[0035] For example, the first pack and the second pack of containers according to the invention may be releasably connected in the first position by the releasable engagement of first retention means provided on the first pack and second retention means provided on the second pack. The first retention means and the second retention means may comprise any suitable known magnetic fasteners, mechanical fasteners, adhesive fasteners or combinations thereof. For example, the first retention means and the second retention means may comprise one or more releasable pressure-actuated hook-and-loop type fasteners, snap fasteners or other mating plug (male) and socket (female) type fasteners.

[0036] Containers according to the invention may comprise two or more hingedly connected packs, each for housing a bundle of smoking articles, for example cigarettes, such as conventional lit-end cigarettes or cigarettes for use with electrical smoking systems (for example cigarettes of the type disclosed in US-A-5 692 525), cigars or cigarillos. Preferably, containers according to the invention comprise two or more hingedly connected packs, each for housing a separate bundle of cigarettes.

[0037] Through an appropriate choice of the dimensions thereof, the first pack and the second pack of containers according to the invention may be designed to house separate bundles of different numbers of cigarettes. Alternatively or in addition, the first pack and the second pack of containers according to the invention may be designed to house separate bundles of cigarettes of different dimensions (for example, cigarettes of different length or different circumference). The first pack and the second pack of containers according to the invention may, for example, be designed to house separate bundles of different numbers of short (between about 70 mm and about 75 mm in length), regular size (about 80mm in length), king size (about 84 mm in length), super-king size, slim, super-slim or wide cigarettes.

[0038] Through an appropriate choice of the dimensions of the first pack and the second pack thereof, containers according to the invention may also be designed to hold different total numbers of smoking articles. For example, containers for cigarettes according to the invention may comprise a first pack and a second pack for housing, in combination, a total of twenty or twenty-one regular size cigarettes. Alternatively, containers for cigarettes according to the invention may comprise a first pack and a second pack for housing, in combination, a total of seventeen or eighteen wide cigarettes.

[0039] The length, width and depth of the first pack and the second pack of containers according to the invention may be such that, when in the initial position, the resultant overall dimensions of the containers are similar to, or substantially the same as, the dimensions of a conventional disposable pack of smoking articles. For example, the length, width and depth of the first pack and the second pack may be such that, in the initial or first position, the resultant overall dimensions of the container are similar to the dimensions of a conventional disposable hinge-

lid pack of twenty cigarettes.

[0040] Containers according to the invention may advantageously comprise first packs and second packs for housing separate bundles of smoking articles of different types. A wide variety of different types of cigarettes are produced and sold. For example, different types of tobacco having unique characteristic tastes and aromas, such as Burley, Oriental and Virginia tobacco, are used alone or in varying amounts in tobacco blends to produce brands of cigarettes having different characteristic tastes. In addition, both plain cigarettes and cigarettes having many different types of filter tips are manufactured as well as cigarettes of differing length (for example, regular size, king size or super-king size), circumference (for example, slim or super-slim), strength of taste, resistance to draw and total particulate matter delivery. Furthermore, cigarettes containing flavourings such as menthol are also available.

[0041] Containers according to the invention may comprise first packs and second packs for housing separate bundles of cigarettes of a different tobacco blend or flavour. Alternatively, or in addition, containers according to the invention may comprise first packs and second packs for housing separate bundles of cigarettes of a different size (different length, different circumference or both different length and different circumference).

[0042] The first pack and the second pack of containers according to the invention may be of the same or different cross-section. For example, one or both of the first pack and the second pack of containers according to the invention may be rectangular, square, triangular, pentagonal, hexagonal, D-shaped, semi-circular or semi-oval in cross-section.

[0043] Preferably, the first pack and the second pack of containers according to the invention are substantially parallelepipedal. More preferably, the first pack and the second pack of containers according to the invention are substantially cuboid.

[0044] The first pack and the second pack of containers according to the invention may have one or more right-angled longitudinal edges, one or more right-angled transverse edges, one or more rounded longitudinal edges, one or more rounded transverse edges, one or more bevelled longitudinal edges, one or more bevelled transverse edges or any suitable combination thereof.

[0045] Preferably, the first pack and the second pack of containers according to the invention are of substantially the same shape. The dimensions of the first pack and the second pack of containers according to the invention may be the same or different. Preferably, the first pack and the second pack of containers according to the invention are of different dimensions. More preferably, the first pack and the second pack of containers according to the invention are of substantially the same length and width, but of different depth.

[0046] Preferably, the first wall of the first pack and the first wall of the second pack of containers according to the invention are of substantially the same dimensions.

[0047] Preferably, the first wall of the first pack and the first wall of the second pack are major walls of the packs. Preferably, the first wall of the first pack is a front wall or a rear wall of the first pack. Preferably, the first wall of the second pack is a front wall or a rear wall of the second pack.

[0048] The first pack and the second pack of containers according to the invention are preferably formed from one or more folded laminar blanks, more preferably from one or more folded laminar cardboard blanks.

[0049] The exterior surfaces of the first packs, second packs and connectors of containers according to the invention may be printed, embossed, debossed or otherwise embellished (for example using labels or stickers) with manufacturer or brand logos, trade marks, slogans and other consumer information and indicia. It will be appreciated that the same or different manufacturer and brand logos, trade marks, slogans, and other consumer information and indicia may be applied to the exterior surfaces of the first packs, second packs and connectors.

[0050] The connectors of containers according to the invention may be formed from one or more suitable materials including, but not limited to, paperboard, cardboard, plastic, metal (such as, for example, aluminium), transparent or opaque foil (such as, for example, polyethylene (PE) or polyethylene terephthalate (PET) foils) and laminated material (such as, for example, paper/aluminium, plastic/paper/aluminium or other laminates).

[0051] Containers according to the invention may comprise connectors having one or more windows or cut-outs provided therein. In preferred embodiments, the one or more windows or cut-outs interact or cooperate with images provided on the first walls of the first packs, second packs or first and second packs of the containers to generate further images.

[0052] Containers according to the invention may comprise more than two packs. Third and subsequent packs of containers according to the invention may be connected to one or more other packs thereof in the same or a different manner to that in which the first pack and the second pack are hingedly connected.

[0053] Preferably, where containers according to the invention comprise three or more packs, each pack of the container is hingedly connected in a double hinged manner to at least one other pack thereof by a connector. For example, containers according to the invention may comprise three, four, five or six packs hingedly connected by two, three, four or five connectors, respectively, wherein each pack of the container is hingedly connected in a double hinged manner to either one or two other packs thereof.

[0054] The invention will be further described, by way of example only, with reference to the accompanying drawing in which:

[0055] Figure 1 shows the inner surface of a blank for forming the connector of a container according to an embodiment of the invention.

[0056] In Figure 1, solid lines are used to denote cut

lines or outer borders of the blanks. Dashed lines are used to denote lines, which are formed by compressing or partially cutting the material of the blanks by creasing, scoring, embossing or an equivalent process, along which the blanks are bent upon erection of the containers or parts of containers formed there from or which act as hinge.

[0057] Figure 1 shows a blank 10 for forming a separate connector of a container according to an embodiment of the invention, which is formed from at least three blanks. The blank 10 comprises five rectangular panels, a first panel 12, a second panel 14, a third panel 16, a fourth panel 18 and a fifth panel 20, which are hingedly connected to one another along alternate horizontal and vertical fold lines.

[0058] As shown in Figure 1, the upper edge of the third panel 16 is connected to the lower edge of the first panel 12 along a first horizontal fold line and the left side edge of the third panel 16 is connected to the right side edge of the fourth panel 18 along a second vertical fold line. The upper edge of the fifth panel 20 is connected to the lower edge of the fourth panel 18 along a third horizontal fold line and the left side edge of the fifth panel 20 is connected to the right side edge of the second panel 14 along a fourth vertical fold line.

[0059] To form a container according to the invention, the second 12, third 16, fourth 18 and fifth 20 panels of the blank 10 are folded through 180 degrees about the horizontal and vertical fold lines such that the panels of the blank 10 overlie one another. In the folded blank 10, the third panel 16 overlies the first panel 12 the fourth panel 18 overlies the third panel 16, the fifth panel 20 overlies the fourth panel 18 and the second panel 14 overlies the fifth panel 20. To complete formation of the container, the outer surface of the first panel 12 is affixed to the first wall of a first pack and the outer surface of the second panel 14 is affixed to the first wall of a second pack.

[0060] In use, the first pack and the second pack of the container may be hinged in four different directions, up, down, left and right, relative to one another about the about the horizontal and vertical fold lines of the connector.

Claims

1. A container for smoking articles comprising at least two hingedly connected packs, each for housing a separate bundle of smoking articles, the container comprising:

a first pack having a first wall;
a second pack having a first wall; and
a connector (10) hingedly coupled to the first wall of the first pack along a first fold line and hingedly coupled to the first wall of the second pack along a second fold line substantially per-

pendicular to the first fold line.

2. A container according to claim 1 wherein the connector (10) is integral with at least one of the first pack and the second pack.

3. A container according to claim 2 wherein the connector (10) is integral with the first pack and the second pack.

4. A container according to claim 1 comprising a connector (10) comprising at least three hinged panels, the connector comprising:

a first panel (12) affixed to the first wall of the first pack;
a second panel (14) affixed to the first wall of the second pack; and
a third panel (16) hingedly connected to the first panel (12) along a first fold line and hingedly coupled to the second panel (14) along a second fold line substantially perpendicular to the first fold line.

5. A container according to claim 4 wherein the connector (10) further comprises:

a fourth panel (18) hingedly connected to the third panel (16) along the second fold line and hingedly coupled to the second panel (12) along a third fold line substantially perpendicular to the second fold line.

5. A container according to claim 5 wherein the connector (10) further comprises:

a fifth panel (20) hingedly connected to the fourth panel (18) along the third fold line and hingedly connected to the second panel (12) along a fifth fold line substantially perpendicular to the fourth fold line.

6. A container according to any preceding claim wherein the first pack and the second pack are slide and shell packs.

7. A container according to any preceding claim wherein the first pack and the second pack are hinge-lid packs.

8. A container according to claim 7 wherein the first pack has a hinge-lid pivotable about a hinge line extending across the first wall of the first pack and the second pack has a hinge-lid pivotable about a hinge line extending across the first wall of the second pack.

9. A container according to claim 7 wherein the first

pack has a hinge-lid pivotable about a hinge line extending across a second wall of the first pack that is parallel and opposed to the first wall of the first pack and the second pack has a hinge-lid pivotable about a hinge line extending across a second wall of the second pack that is parallel and opposed to the first wall of the second pack. 5

10. A container according to any preceding claim wherein the first pack and the second pack are of different dimensions. 10

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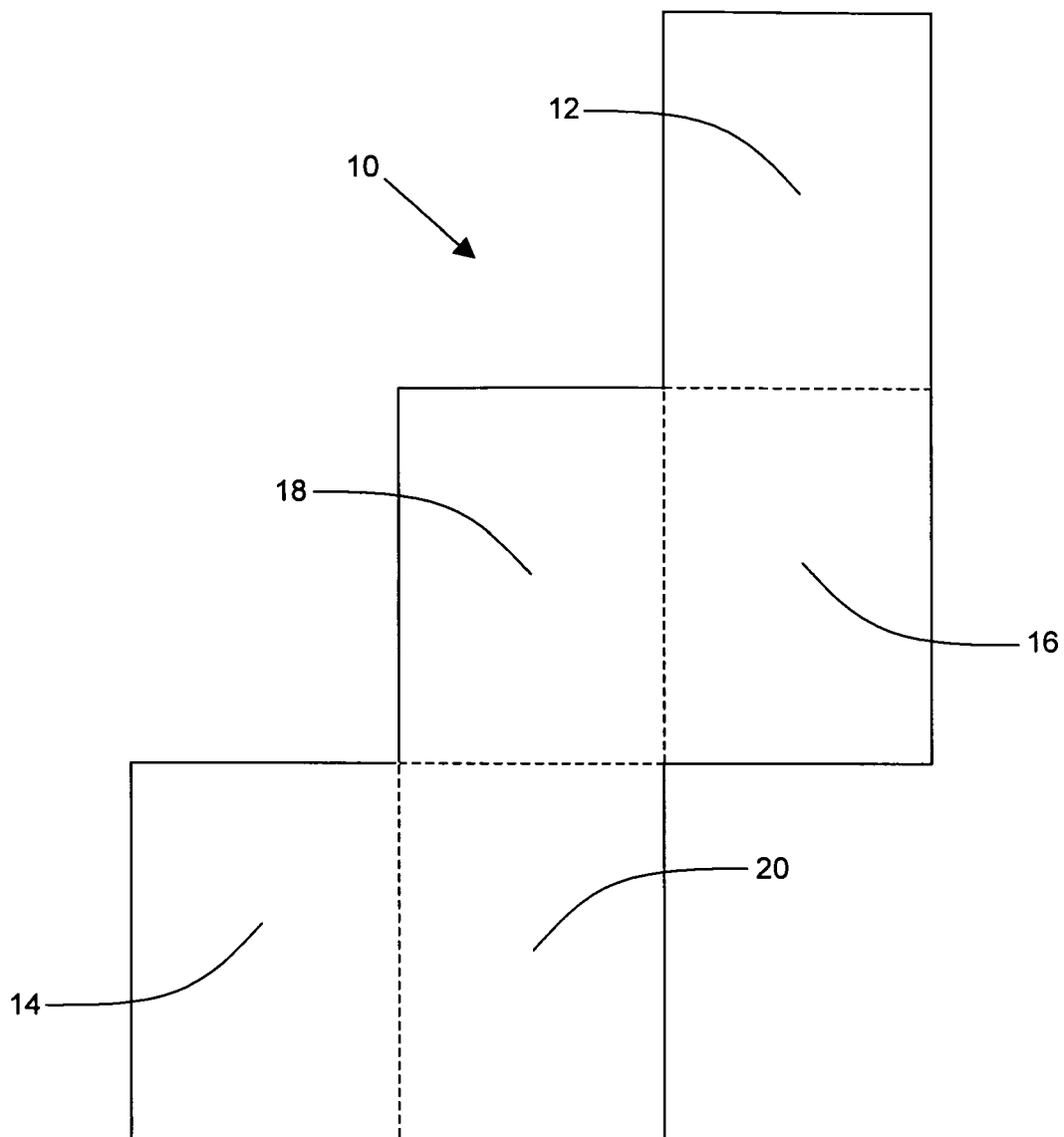


Figure 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 25 2888

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 1 801 031 A (JT INTERNAT S A [CH]) 27 June 2007 (2007-06-27) * paragraphs [0009], [0014], [0018], [0019], [0024] - [0041]; figures 1-8 *	1-10	INV. B65D85/10
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 27 December 2007	Examiner Leijten, René
<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 & : 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 07 25 2888

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27-12-2007

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