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(54) **CARTON**

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CARTON

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(56) References cited:  
**EP-A- 0 442 179 FR-A- 2 715 632  
US-A- 2 975 954 US-A- 3 197 115  
US-A- 3 298 596 US-A- 3 886 901  
US-A- 4 432 489 US-A- 5 853 120**

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## Description

**[0001]** This invention relates to a carton according to the preamble of claim 1, and particularly but not necessarily exclusively to a carton for holding sandwiches therein.

**[0002]** It is known to provide a carton, such as sandwich carton, with a plurality of wall panels which, when constructed, form a closed carton. One of the wall panels can be moved between open and closed conditions to allow insertion and/or removal of one or more items in/out the carton. Such cartons typically have the function of holding the contents therein until the same is purchased by a user, whereafter the contents are removed and the carton is disposed of.

**[0003]** US4432489 discloses a pie carton which has a triangular top closure and bottom support panel with side wall panels attached to the same. The triangular top closure is hingedly connected to a side wall to allow opening and closing of the carton. Frangible tear strips can be provided on the side walls to allow the carton to be adhered shut and then to be subsequently opened. The carton has only a single level of access into the interior thereof and the carton has only a single use when opened using this single level of access.

**[0004]** It is an aim of the present invention to provide a carton, wherein the carton can be put to further use, at least temporarily, following opening of the carton.

**[0005]** It is a further aim of the present invention to provide a carton having alternative opening means for accessing the contents of the carton.

**[0006]** According to a first aspect of the present invention there is provided a carton for holding one or more items, said carton formed from a blank and said blank including two side walls which are substantially triangular in shape and a rear wall, base wall and front wall which arc substantially quadrilateral in shape, the walls joined together when assembled in such a manner so as to define a closed carton having a substantially triangular cross section, characterised in that the two triangular side walls are each joined to opposite sides of the base wall along fold lines and the rear wall is joined to an end of the base wall along a fold line, the front wall is hingedly connected to at least one of the triangular side walls, frangible means being provided along a part or whole of the rear and base wall to allow a part of said walls to be separated or removed on breaking of said frangible means, and wherein on removal of said frangible means at least one of the triangular side walls adjacent a remaining portion of the rear and base wall is movable relative to the front wall to open said carton.

**[0007]** Thus, the present invention provides a new opening mechanism for allowing a user to gain easy access to the contents of the carton. The carton is typically a one use only carton and is disposed of after use.

**[0008]** In one embodiment the carton defines a single cavity or compartment therein. However, in an alternative embodiment one or more walls or partition means can

be provided in the interior of the assembled carton to define more than one compartment therein.

**[0009]** Preferably the carton is formed from a single blank.

5 **[0010]** At least one of the external walls, and preferably all of the external walls of the carton, when in an erect form, is substantially smooth and even without any creases provided thereon. This enables uninterrupted graphics to be displayed on each wall, thereby increasing the aesthetic appeal of the carton.

10 **[0011]** Preferably the second wall and/or the at least one further wall forms a tray element or surface upon movement of said at least one further wall relative to said second wall. Thus, it can be seen that the carton can be put to further use by moving the carton from a first pre-defined shape wherein a closed carton is formed to a second pre-defined shape wherein a tray element is formed. The tray element can be used to support one or more items stored in the carton thereon upon opening of the carton.

20 **[0012]** Preferably one or more of the remaining portions of the at least first wall form one or more side walls of said tray element.

25 **[0013]** Preferably the second wall is provided substantially opposite to said at least first wall when the carton is in a closed assembled condition.

**[0014]** Preferably the frangible means arc provided along a part or whole of at least two walls of the carton. The two walls of the carton are typically adjacent and/or joined to each other when the carton is assembled.

30 **[0015]** Preferably a plurality of frangible means are provided on the carton. The plurality of frangible means arc each typically independently removable or breakable with respect to the other frangible means.

35 **[0016]** In one embodiment the width of the at least first wall is different to the length of the same and the frangible means are typically provided along the length of said wall.

**[0017]** Preferably the frangible means arc provided longitudinally of the carton.

40 **[0018]** The frangible means can include any or any combination of one or more weakened portions, perforations, cut portions and/or the like.

45 **[0019]** The frangible means can be broken to access the contents of the carton and/or further closure means can be provided on the carton via which a user can access the contents of the carton.

**[0020]** In one embodiment the carton includes at least a front wall, rear wall, base and side walls.

50 **[0021]** Preferably the frangible means are provided along a whole or part of the base and/or rear wall of the carton. Thus, in one embodiment the means for opening the carton is typically hidden from the view of a potential purchaser when the carton is displayed on a shelf in a retail outlet, thereby providing the front of the carton with an improved aesthetic appearance and increasing the appeal of the carton/product to the purchaser.

**[0022]** In the above embodiment, at least the front of the carton typically forms the base of the tray element

once the frangible means have been removed. Thus, the front of the carton can form the second wall and at least the rear of the carton can form the first wall.

**[0023]** Preferably at least the front wall of the carton is formed from or provided with transparent material thereon to allow a user to view the contents of the carton when the carton is in a closed condition.

**[0024]** In one embodiment a pre-determined shaped window is provided in the front wall of the carton and transparent material is joined to the walls of the carton surrounding the window to cover the window.

**[0025]** The transparent material can be joined to the carton via any or any combination of heat welding, adhesive, staples, clips and/or the like.

**[0026]** Preferably the side walls of the carton are substantially triangular in shape. Further preferably the side walls of the carton are in the form of isosceles triangles.

**[0027]** In a preferred embodiment the carton is in the form of a sandwich pack for holding one or more sandwiches therein. The sandwiches can be viewed through the front wall and/or side walls of the carton.

**[0028]** The front wall of the carton can be provided with a flange or lip which extends outwardly from the side walls, base and/or rear walls of the carton. In one example, the side walls, base and/or rear walls are provided with a lip portion which engages with an edge of said front wall when the carton is formed.

**[0029]** Preferably the lip portion engages with a rear surface of the front wall of the carton when formed.

**[0030]** The lip portion can be engaged to the front wall via any or any combination of adhesive, heat scaling, staples, clips and/or the like.

**[0031]** The second wall or front wall of the carton can be moved from a closed condition when the carton is assembled to an open condition to allow access to the contents of the carton as an alternative opening mechanism to the frangible means if required.

**[0032]** In one embodiment the carton is formed from a board material and said board material is provided with at least one coating layer thereon which, in the presence of heat, becomes adhesive to allow engagement of one or more walls of the carton. For example, the coating layer can include a plastic coating, thereby providing a moisture barrier.

**[0033]** Preferably one or more web portions are provided adjacent one or more corners of said carton. The web portions prevent leakage of any fluid or other matter from the carton in use.

**[0034]** Each web portion can include at least two sections joined together along a fold line and said sections are provided between two or more adjacent walls of the carton. During assembly of the carton, one of the sections is typically folded onto the other section and a surface of said sections is then typically adhered to a wall of the carton, such as for example an interior wall of the carton.

**[0035]** In one embodiment of the present invention there is provided a carton for holding one or more items, said carton including a plurality of walls which are joined

together when assembled in such a manner so as to define a closed carton of pre-defined shape and wherein frangible means are provided along a part or whole of at least one of said walls and breaking of said frangible means allows the carton to be moved from a closed condition to an open condition, said carton forming a tray like element in said open condition.

**[0036]** In a further aspect of the present invention there is provided blank for forming a carton for holding one or more items, said blank including all plurality of wall panels joined together by fold lines and movable with respect to each other so that when assembled form a closed carton of having a substantially triangular cross section, said blank including two side walls which are substantially triangular in shape and a rear wall, base wall and front wall which are substantially quadrilateral in shape, characterised in that the two triangular side walls are each joined to opposite sides of the base wall along fold lines and the rear wall is joined to an end of the base wall along a fold line, the front wall is hingedly connected to at least one of the triangular side walls, frangible means being provided along a part or whole of the rear and base wall panel to allow a part of said walls to be separated or removed on breaking of said frangible means, and wherein on removal of said frangible means at least one of the triangular side walls adjacent a remaining portion of the rear and base wall is movable relative to the front wall to open said carton when formed.

**[0037]** In one embodiment there is provided a method of constructing a carton.

**[0038]** In one embodiment of the present invention there is provided a carton for holding one or more items, said carton including a plurality of walls which are joined together when assembled in such a manner so as to define a closed carton of pre-defined shape, frangible means being provided along a part or whole of at least a first wall to allow a part of said first wall to be separated or removed on breaking of said frangible means, and wherein a remaining portion of the first wall or at least one further wall adjacent a remaining portion of the first wall is hingedly connected to a second wall and said remaining portion of the first wall or said at least one further wall is movable relative to said second wall on removal of said frangible means to open said carton.

**[0039]** The advantage of the carton according to the present invention is that it provided a substantially sealed container when in a closed condition, thereby making it suitable for the containment of food products therein so as to maintain the freshness of the food for an extended period of time compared to existing cartons. The carton is "sealed" in that the shelf life of the product is increased and this term therefore covers either hermetically sealed and non-hermetically sealed arrangements. Removal of the frangible means allows a tray element to be formed from or with the carton, thereby allowing the contents of the carton, such as food, to be located therein to make the same more easily accessible to a user. Although the carton of the present invention is

of particular use with food products, the present invention is not limited to such application.

**[0040]** An embodiment of the present invention is described below with reference to the accompanying figures, wherein:

Figure 1 is a view of a carton blank in one embodiment;

Figures 2a-2c illustrates a front, perspective and rear views of the carton blank in figure 1 when assembled;

Figure 3 illustrates a view of the carton when formed with the front wall of the carton open; and

Figure 4 illustrates a view of the carton following manipulation to form a carton forming a tray element.

**[0041]** Referring to figure 1, there is illustrated a carton blank 2 for forming a sandwich pack 4 when assembled.

**[0042]** The carton blank includes a rear panel 6 which is substantially rectangular in shape. A base panel 8 is joined to rear panel 6 along fold line (shown by dotted lines) 10. Side panels 12, 14, substantially in the form of isosceles triangles, are joined to either side of base panel 8 along fold lines 16, 18.

**[0043]** Web portions 20, 22, 24 and 26 are provided between rear panel 6 and side panels 12, 14. More specifically, web portion 20 is joined to rear panel 6 along fold line 28, web portion 22 is joined along a first side to web portion 20 via fold line 30 and to side panel 12 via fold line 32. Web portion 24 is joined to rear panel 6 along fold line 34, web portion 26 is joined along a first side to web portion 24 via fold line 36 and to side panel 14 via fold line 38.

**[0044]** Web portions 20, 24 are provided along substantially the entire length of rear panel 6, whereas web portions 22, 26 are provided along only part of the length of side walls 12, 14 respectively. Thus, the top corners 40, 42 of web portions 22, 26 end short of top corners 44, 46 of side panels 12, 14 respectively. In addition, a substantially V-shaped notch 48, 50 is provided in each of web portions 22, 26 adjacent fold lines 30, 36 respectively.

**[0045]** A front panel 52 is joined to side panel 14 along fold line 54. A window 56 is defined in front panel 52 such that the contents of the carton 2 can be viewed when the carton is formed and loaded with said contents. In order to seal the window 56 and to prevent the contents of the carton from falling out thereof, a suitable material can be provided over the window, such as a transparent plastics material. This transparent plastics material is typically adhered to the surround of the window during or prior to erection of the carton.

**[0046]** The transparent material can be provided at least partially along the side panel 14 of the carton in addition to the front panel so that a user can view the contents of the carton from the side. In the embodiment

illustrated, the fold line 54 is formed in a V shape to allow a part of window 56 to be provided on side panel 11.

**[0047]** Frangible means in the form of parallel perforation lines 58, 60 are provided centrally along the length of the rear panel 6 and base panel 8. The perforation lines can be formed in the carton using any conventional technique, such as die cutting. The frangible means can be provided at any location on the carton walls if required (i.e. offset to the left or to the right).

**[0048]** A tab or lip portion 62 is joined to rear panel 6 along fold line 64. An extension portion 66 is joined to tab portion 62 along fold line 68.

**[0049]** A tab or lip portion 70 is joined to side panel 12 along fold line 72. An extension portion 74 is joined to tab portion 70 along fold line 76.

**[0050]** A tab or lip portion 78 is joined to base panel 8 along fold line 80. A tab portion 82 is provided at the end of perforation lines which protrudes from tab portion 78.

**[0051]** In an alternative to tab portion 82, a frangible or recessed portion can be provided along a peripheral edge of front panel 52. The recess portion or removal of the frangible portion to form the recess portion provides gripping means to allow a user to open front panel 52 if required.

**[0052]** On construction of the blank 2, web portion 22 is folded onto side panel 12 via fold line 32 and the rear of web portion 20 is folded onto the rear of web portion 22, thereby bringing side panel 12 and rear panel 6 into abutting relationship. Web portions 20, 22 are adhered together and to side panel 12 via heat sealing or other adhesive as is described in more detail below. Web portion 26 is folded onto side panel 14 via fold line 42 and the rear of web portion 24 is folded onto the rear of web portion 24, thereby bringing side panel 14 into abutting relationship with rear panel 6. Web portions 24, 26 are adhered together and to side panel 14 via heat sealing or other adhesive. Thus, with the carton formed, side panels 12, 14 are substantially perpendicular to base panel 8 and to rear panel 6.

**[0053]** The V-shaped notches 48, 50 and the shortened fold lines 32, 34 allow a near free edge to be provided on the interior side panels of the carton when created.

**[0054]** The web portions 24, 26 reduce the likelihood of oil from the sandwiches and/or other contents from the sandwiches leaking out of the carton when the carton is in an upright position, thereby helping to seal the carton when in a closed condition.

**[0055]** The contents of the carton are loaded into the partially formed carton, shown in figure 3, via open end 84. Front panel 52 is then folded over the open end 84 and tab portions 62, 70 and 78 are brought into engagement with the free edges of front panel 52 to form protruding lip portions. These lip portions provide a gripping surface by which the carton can be easily handled and carried by a user. In addition, the entire front panel 52 is free for printing and/or design work to be located thereon without obstruction from any closure, folding or engage-

ment portions, thereby increasing the aesthetic appeal of the product to a user.

**[0056]** The board from which the carton is formed is typically provided with a heat sensitive adhesive coating thereon. When heat is provided to the lip portions formed by bringing tab portions 62, 70 and 78 into abutment with front panel 52, the respective panel and portions are adhered together to form the closed carton as shown in figures 2a-2c. The extension portions 74 and 68 overlap in this adhered position to provide secure and scaled engagement of the lip portion.

**[0057]** When a user wishes to extract the contents of the carton from the carton, they can separate the tab portions 62, 70 and 78 from front panel 52 and access the contents via open end 84. However, in a preferred method of opening the carton, the user typically grips a tab portion 82 and breaks the frangible means along lines 58, 60 to remove strip 84 from the carton. Frangible means can also be provided along tab portions 62 and 78, thereby allowing separation of the remaining rear and base panel portions 6, 8 from front panel 52. The remaining rear and base panel portions 6, 8 can then be moved outwardly of each other by pivoting the same about fold lines 54 and 72 to form a tray element, as shown in figure 4. In this second carton arrangement, front panel 52 and side panels 12, 14 form the base of the tray element. Remaining rear and base panel portions 6, 8 form shallow side walls of the tray element. The sandwiches can therefore be supported on the base of the tray element and can be easily accessed by a user.

**[0058]** Frangible portions can also be provided on or adjacent the lip or rab portions to allow easy opening of the carton via front panel 52.

**[0059]** The carton of the present invention can be provided in any suitable shape, size and/or design and the blank can be formed from any suitable material.

**[0060]** The carton is typically formed from single layer board material having at least one coating layer provided thereon. When heat is applied to the coating layer, the layer becomes adhesive and allows panels of the carton to be adhered together on application of pressure and heat thereto, thereby removing the requirement for adhesive to be separately applied to the carton as is conventionally the case.

**[0061]** The carton is typically delivered to a customer in blank form, each blank is inserted into a forming machine/apparatus which automatically erects the carton and heat seals the relevant portions of the carton together. The sandwich is then located in the open end of the carton and the front panel is heat sealed to a closed position via the flange elements.

## Claims

1. A carton for holding one or more items, said carton formed from a blank (2) and said blank (2) including two side walls (12, 14) which are triangular in shape

and a rear wall (6), base wall (8) and front wall (52) which are quadrilateral in shape, the walls joined together when assembled in such a manner so as to define a closed carton having a triangular cross section, the two triangular side walls (12, 14) are each joined to opposite sides of the base wall (8) along fold lines (16, 18) and the front wall (52) is hingedly connected to at least one of the triangular side walls (12, 14), frangible means (58, 60, 82, 84) being provided along a part or whole of the rear (6) and base wall (8) to allow a part of said walls (12, 14) to be separated or removed on breaking of said frangible means (58, 60), and wherein on removal of said frangible means (58, 60, 82, 84) at least one of the triangular side walls (12, 14) adjacent a remaining portion of the rear and base wall (6, 8) is movable relative to the front wall (52) to open said carton, **characterised in that**, the rear wall (6) is joined to an end of the base wall (8) along a fold line (10).

2. A carton according to claim 1 wherein the base, front and/or rear walls (6, 8, 52) are rectangular in shape.
3. A carton according to claim 1 wherein the front wall (52) and the at least one triangular side wall (12, 14) forms a tray element or tray surface when the carton is opened and upon movement of the at least one triangular side wall (12, 14) relative to the front wall (52).
4. A carton according to claim 3 wherein one or more remaining portions of the rear and/or base wall (6, 8) form one or more side walls of the tray element.
5. A carton according to claim 1 wherein a plurality of frangible means (58, 60) are provided on the carton and each frangible means is independently removable or breakable with respect to the other frangible means,
6. A carton according to claim 1 wherein the frangible means (58, 60) are provided longitudinally of the assembled carton.
7. A carton according to claim 1 wherein the frangible means (58, 60) includes any or any combination of one or more weakened portions, perforations or cut portions.
8. A carton according to claim 1 wherein the front (52) and/or at least one triangular wall (12, 14) is/are formed from or includes transparent material.
9. A Carton according to claim 1 wherein the front wall (52) of the carton can be moved from a closed condition when the carton is assembled to an open condition to allow access to the contents of the carton.

10. A carton according to claim 1 wherein the front wall (52) of the carton has a flange or lip portion which extends outwardly of the triangular side walls (12, 14). 5
11. A carton according to claim 10 wherein one or more of the triangular side walls (12, 14) of the carton has a flange or lip portion (70) which engages the flange or lip portion of the front wall (52) of the carton. 10
12. A carton according to claim 11 wherein the flange or lip portions (70) are engaged via any or any combination of adhesive, heat scaling, staples or clips. 15
13. A carton according to claims 10 or 11 wherein the flange or lip portions (70) have frangible means on or adjacent the same to allow opening of the carton via the front wall of the carton. 15
14. A carton according to claim 1 wherein the carton is formed from board material. 20
15. A carton according to claim 14 wherein the board material has at least one coating provided thereon and, in the presence of heat, becomes adhesive to allow engagement of one or more walls or parts of the carton together. 25
16. A carton according to claim 1 wherein one or more web portions are provided adjacent one or more corners of the carton when assembled. 30
17. A carton according to claim 16 wherein each web portion include at least two sections (20, 22, 24, 26) joined together along a fold line (30, 36) and said sections are provided between two or more adjacent walls of the carton. 35
18. A carton according to claim 1 wherein a single cavity is defined in the carton. 40
19. A carton according to claim 1 wherein one or more walls or partition means are provided in the interior of the carton to define two or more compartments. 45
20. A carton according to claim 1 wherein the carton is formed from a single blank (2).
21. A blank (2) for forming a carton for holding one or more items, said blank including a plurality of wall panels joined together by fold lines and movable with respect to each other so that when assembled form a closed carton of having a triangular cross section, said blank (2) including two side walls (12, 14) which are triangular in shape and a rear wall (6), base wall (8) and front wall (52) which are quadrilateral in shape, the two triangular side walls (12, 14) are each joined to opposite sides of the base wall (8) along

fold lines (16, 18) and the front wall (52) is hingedly connected to at least one of the triangular side walls (12, 14), frangible means (58, 60, 82, 84) being provided along a part or whole of the rear (6) and base wall (8) panel to allow a part of said walls (12, 14) to be separated or removed on breaking of said frangible means (58, 60), and wherein on removal of said frangible means (58, 60, 82, 84) at least one of the triangular side walls (12, 14) adjacent a remaining portion of the rear and base wall (6, 8) is movable relative to the front wall (52) to open said carton when formed, **characterised in that** the rear wall (6) is joined to an end of the base wall (8) along a fold line (10).

#### Patentansprüche

1. Packung zur Aufnahme von einem oder mehreren Artikeln, wobei die Packung aus einem Stanzteil (2) hergestellt ist und das genannte Stanzteil (2) zwei Seitenwände (12, 14), die eine dreieckige Form haben, und eine Rückwand (6), eine Bodenwand (8) und eine vordere Wand (52), die eine vierseitige Form haben, hat, die Wände, wenn sie aufgestellt sind, so aneinandergesetzt sind, dass sie eine geschlossene Packung mit einem dreieckigen Querschnitt definieren, die zwei dreieckigen Seitenwände (12, 14) jeweils an gegenüberliegende Seiten der Bodenwand (8) an Falzlinien (16, 18) entlang angefügt sind und die vordere Wand (52) an wenigstens eine der dreieckigen Seitenwände (12, 14) angelenkt ist, teilweise oder ganz entlang der Rück- (6) und Bodenwand (8) Sollbruchmittel (58, 60, 82, 84) bereitgestellt sind, damit ein Teil der genannten Wände (12, 14) nach Bruch der genannten Sollbruchmittel (58, 60) getrennt oder entfernt werden kann, und wobei nach Entfernen der genannten Sollbruchmittel (58, 60, 82, 84) wenigstens eine der dreieckigen Wände (12, 14) neben einem übrigen Teil der Rück- und der Bodenwand (6, 8) relativ zu der vorderen Wand (52) beweglich ist zum Öffnen der genannten Packung, **dadurch gekennzeichnet, dass** die Rückwand (6) an einer Falzlinie (10) entlang an ein Ende der Bodenwand (8) angefügt ist.
2. Packung nach Anspruch 1, bei der die Boden-, die vordere und/oder die Rückwand (6, 8, 52) eine rechteckige Form haben.
3. Packung nach Anspruch 1, bei der die vordere Wand (52) und die wenigstens eine dreieckige Seitenwand (12, 14) ein Schalenelement oder eine Schalenelement bilden, wenn die Packung geöffnet wird und nach Bewegen der wenigstens einen dreieckigen Seitenwand (12, 14) relativ zu der vorderen Wand (52).

4. Packung nach Anspruch 3, bei der ein oder mehrere übrige Teile der Rück- und/oder Bodenwand (6, 8) eine oder mehrere Seitenwände des Schalelements bilden.
5. Packung nach Anspruch 1, wobei an der Packung mehrere Sollbruchmittel (58, 60) bereitgestellt sind und jedes Sollbruchmittel im Verhältnis zu den anderen Sollbruchmitteln unabhängig entfernbar oder brechbar ist.
6. Packung nach Anspruch 1, bei der die Sollbruchmittel (58, 60) in Längsrichtung der zusammengebauten Packung bereitgestellt sind.
7. Packung nach Anspruch 1, bei der das Sollbruchmittel (58, 60) eine(n) beliebige(n) von einem/r oder mehreren geschwächten Teilen, Perforationen oder geschnittenen Teilen oder eine Kombination davon aufweist.
8. Packung nach Anspruch 1, bei der die vordere (52) und/oder wenigstens eine dreieckige Wand (12, 14) aus transparentem Material hergestellt ist oder transparentes Material aufweist.
9. Packung nach Anspruch 1, bei der die vordere Wand (52) der Packung aus einem geschlossenen Zustand, wenn die Packung hergestellt ist, auf einen offenen Zustand bewegt werden kann, um Zugriff auf den Inhalt der Packung zu ermöglichen.
10. Packung nach Anspruch 1, bei der die vordere Wand (52) der Packung einen Flansch- oder Lippenteil hat, der sich von den dreieckigen Seitenwänden (12, 14) nach außen erstreckt.
11. Packung nach Anspruch 10, bei der eine oder mehrere der dreieckigen Seitenwände (12, 14) der Packung einen Flansch- oder Lippenteil (70) hat/haben, der mit dem Flansch- bzw. Lippenteil der vorderen Wand (52) der Packung in Eingriff ist.
12. Packung nach Anspruch 11, bei der die Flansch- oder Lippenteile (70) beliebig durch Klebstoff, Verschweißen, Klammern oder Klemmen oder eine beliebige Kombination von diesen miteinander in Eingriff gebracht sind.
13. Packung nach Anspruch 10 oder 11, bei der die Flansch- oder Lippenteile (70) Sollbruchmittel an oder neben denselben aufweisen, um das Öffnen der Packung über die vordere Wand der Packung zu ermöglichen.
14. Packung nach Anspruch 1, wobei die Packung aus Kartonmaterial hergestellt ist.
15. Packung nach Anspruch 14, bei der das Kartonmaterial mit wenigstens einer Beschichtung auf ihm versehen ist und bei Vorhandensein von Wärme klebfähig wird, um das Ineingriffbringen von einer oder mehreren Wänden oder Teilen der Packung miteinander zu ermöglichen.
16. Packung nach Anspruch 1, bei der ein oder mehrere Stegteile neben einer oder mehreren Ecken der Packung bereitgestellt sind, wenn sie hergestellt ist.
17. Packung nach Anspruch 16, bei der jeder Stegteil wenigstens zwei Abschnitte (20, 22, 24, 26) hat, die entlang einer Falzlinie (30, 36) miteinander verbunden sind, und wobei die genannten Abschnitte zwischen zwei oder mehr aneinandergrenzenden Wänden der Packung bereitgestellt sind.
18. Packung nach Anspruch 1, bei der in der Packung ein einzelner Hohlraum definiert wird.
19. Packung nach Anspruch 1, bei der im Inneren der Packung eine oder mehrere Wände oder Unterteilungen bereitgestellt sind, um zwei oder mehr Fächer zu definieren.
20. Packung nach Anspruch 1, bei der die Packung aus einem einzelnen Stanzteil (2) hergestellt wird.
21. Stanzteil (2) zum Herstellen einer Packung zur Aufnahme von einem oder mehreren Artikeln, wobei das genannte Stanzteil mehrere Wandsegmente hat, die durch Falzlinien miteinander verbunden sind und in Bezug aufeinander beweglich sind, so dass sie, wenn sie zusammengefügt sind, eine geschlossene Packung mit einem dreieckigen Querschnitt bilden, wobei das genannte Stanzteil (2) zwei Seitenwände (12, 14), die eine dreieckige Form haben, und eine Rückwand (6), eine Bodenwand (8) und eine vordere Wand (52), die eine vierseitige Form haben, hat, die zwei dreieckigen Wände (12, 14) jeweils an gegenüberliegende Seiten der Bodenwand (8) an Falzlinien (16, 18) entlang angefügt sind, die vordere Wand (52) an wenigstens eine der dreieckigen Seitenwände (12, 14) angelenkt ist, teilweise oder ganz entlang des Rück- (6) und Bodenwandsegments (8) Sollbruchmittel (58, 60, 82, 84) bereitgestellt sind, damit ein Teil der genannten Wände (12, 14) nach Bruch der genannten Sollbruchmittel (58, 60) getrennt oder entfernt werden kann, und wobei bei Entfernen der genannten Sollbruchmittel (58, 60, 82, 84) wenigstens eine der dreieckigen Wände (12, 14) neben einem übrigen Teil der Rück- und der Bodenwand (6, 8) relativ zu der vorderen Wand (52) beweglich ist zum Öffnen der genannten Packung, **dadurch gekennzeichnet, dass** die Rückwand (6) an einer Falzlinie (10) entlang an ein Ende der Bodenwand (8) angefügt ist.

## Revendications

1. Carton destiné à contenir un ou plusieurs articles, ledit carton étant formé à partir d'une ébauche (2) et ladite ébauche comportant deux parois latérales (12, 14) qui ont une forme triangulaire, et une paroi arrière (6), une paroi de base (8) et une paroi frontale (52) qui ont une forme quadrilatérale, les parois étant jointes les unes aux autres une fois qu'elles sont assemblées, de manière à définir un carton fermé ayant une coupe transversale triangulaire, les deux parois latérales triangulaires (12, 14) étant chacune jointes aux côtés opposés de la paroi de base (8) le long de lignes de pliage (16, 18), et la paroi frontale (52) étant raccordée de façon articulée à l'une au moins des parois latérales triangulaires (12, 14), alors que des moyens de rupture (58, 60, 82, 84) sont prévus le long d'une partie ou de la totalité de la paroi arrière (6) et de la paroi de base (8) pour permettre la séparation ou l'enlèvement d'une partie desdites parois (12, 14) lors de la cassure desdits moyens de rupture (58, 60) et cas dans lequel, lors de l'enlèvement desdits moyens de rupture (58, 60, 82, 84), l'une au moins des parois latérales triangulaires (12, 14) en position adjacente à une portion restante de la paroi arrière et de la paroi de base (6, 8), est mobile par rapport à la paroi frontale (52) afin d'ouvrir ledit carton, **caractérisé en ce que** la paroi arrière (6) est jointe à une extrémité de la paroi de base (8) le long d'une ligne de pliage (10). 5
2. Carton selon la revendication 1, la paroi de base, la paroi frontale et/ou la paroi arrière (6, 8, 52) ayant une forme rectangulaire. 10
3. Carton selon la revendication 1, la paroi frontale (52) et ladite au moins une paroi latérale triangulaire (12, 14) constituant un élément plateau ou une surface en plateau lorsque le carton est ouvert et lors du mouvement de ladite au moins une paroi latérale triangulaire (12, 14) par rapport à la paroi frontale (52). 15
4. Carton selon la revendication 3, une ou plusieurs portions restantes de la paroi arrière et/ou de la paroi de base (6, 8) formant une ou plusieurs parois latérales de l'élément plateau. 20
5. Carton selon la revendication 1, une pluralité de moyens de rupture (58, 60) étant prévue sur le carton et chaque moyen de rupture pouvant être enlevé ou cassé de façon indépendante par rapport aux autres moyens de rupture. 25
6. Carton selon la revendication 1, les moyens de rupture (58, 60) étant prévus dans le plan longitudinal du carton assemblé. 30
7. Carton selon la revendication 1, les moyens de rupture (58, 60) englobant l'un quelconque ou une combinaison quelconque des éléments suivants, à savoir une ou plusieurs portions affaiblies, perforations ou portions coupées. 35
8. Carton selon la revendication 1, la paroi frontale (52) et/ou au moins une paroi triangulaire (12, 14) étant formée(s) à partir d'une matière transparente ou inclut une matière transparente. 40
9. Carton selon la revendication 1, la paroi frontale (52) du carton pouvant être déplacée d'un état fermé lorsque le carton est assemblé vers un état ouvert pour permettre d'accéder au contenu du carton. 45
10. Carton selon la revendication 1, la paroi frontale (52) du carton comportant une portion bride ou lèvre qui s'étend vers l'extérieur des parois latérales triangulaires (12, 14). 50
11. Carton selon la revendication 10, une ou plusieurs des parois latérales triangulaires (12, 14) du carton comportant une portion bride ou lèvre (70) qui s'engage avec la portion bride ou lèvre de la paroi frontale (52) du carton. 55
12. Carton selon la revendication 11, les portions bride ou lèvre (70) étant engagées grâce à l'un quelconque ou une combinaison quelconque des éléments suivants, à savoir un adhésif, un processus de thermoscellage, des agrafes ou des clips. 60
13. Carton selon les revendications 10 ou 11, les portions bride ou lèvre (70) comportant des moyens de rupture sur celles-ci, ou en en position adjacente à celles-ci, pour permettre l'ouverture du carton via la paroi frontale du carton. 65
14. Carton selon la revendication 1, le carton étant formé à partir d'une matière cartonnée. 70
15. Carton selon la revendication 14, la matière cartonnée comportant au moins un revêtement lequel est prévu sur celle-ci et, et en présence de chaleur, il devient adhésif pour permettre l'engagement d'une ou de plusieurs parois ou parties du carton l'une avec l'autre. 75
16. Carton selon la revendication 1, une ou plusieurs portions de bande continue étant prévues en position adjacente à un ou plusieurs angles du carton lorsqu'il est assemblé. 80
17. Carton selon la revendication 16, chaque portion de bande continue incluant au moins deux sections (20, 22, 24, 26) jointes l'une à l'autre le long d'une ligne de pliage (30, 36) et lesdites sections étant placées 85

entre deux ou plusieurs parois adjacentes du carton.

18. Carton selon la revendication 1, une seule cavité étant définie dans le carton.

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19. Carton selon la revendication 1, une ou plusieurs parois ou moyens de division étant ménagés dans le volume interne du carton afin de définir un ou plusieurs compartiments.

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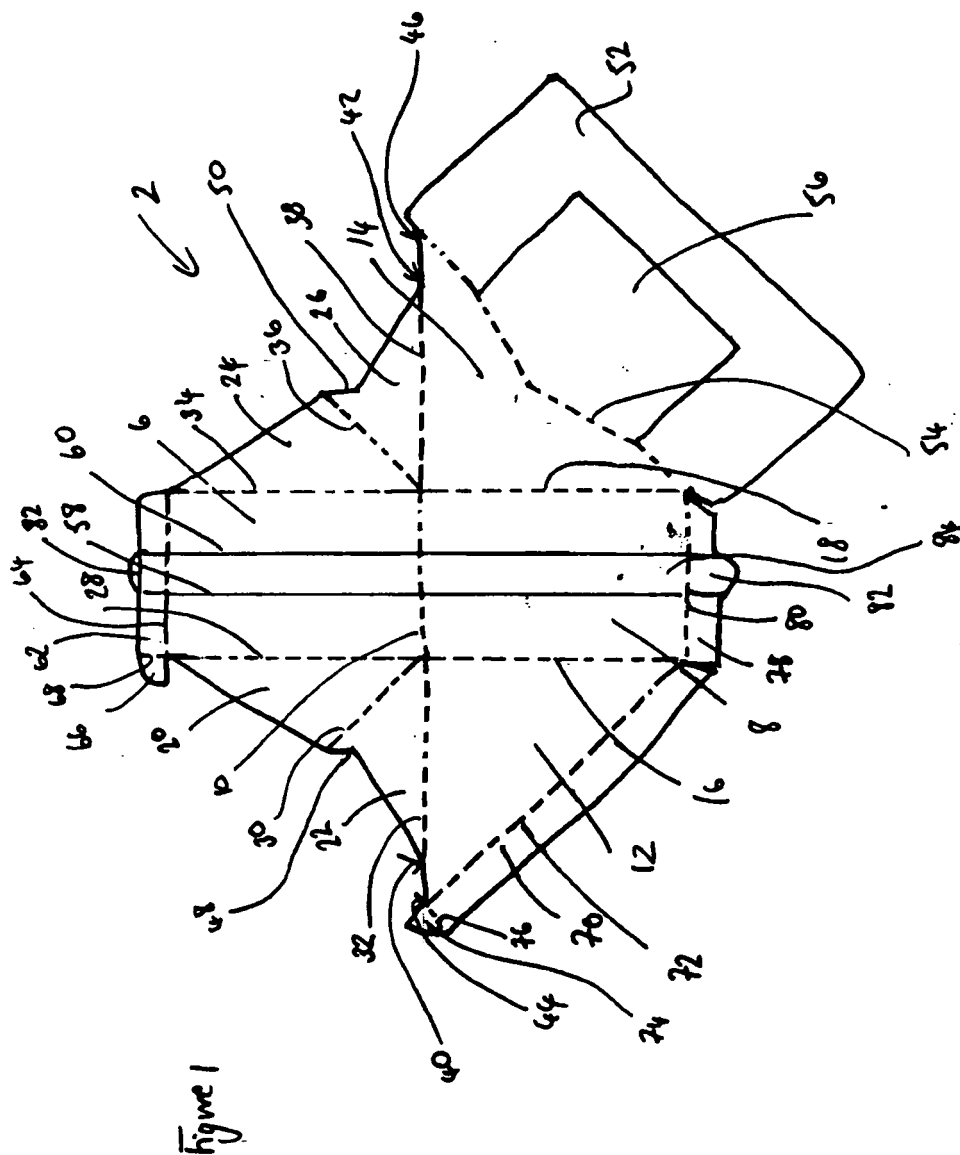
20. Carton selon la revendication 1, le carton étant formé à partir d'une seule ébauche (2).

21. Ébauche (2) pour former un carton destiné à contenir un ou plusieurs articles, ladite ébauche englobant une pluralité de panneaux de paroi qui sont réunis les uns aux autres par des lignes de pliage et pouvant être déplacés les uns par rapport aux autres de sorte que, lorsqu'ils sont assemblés, ils forment un carton fermé ayant une coupe transversale triangulaire, ladite ébauche (2) comportant deux parois latérales (12, 14) qui ont une forme triangulaire, et une paroi arrière (6), une paroi de base (8) et une paroi frontale (52) qui ont une forme quadrilatérale, les deux parois latérales triangulaires (12, 14) étant jointes aux côtés opposés de la paroi de base (8) le long de lignes de pliage (16, 18), et la paroi frontale (52) étant raccordée de façon articulée à l'une au moins des parois latérales triangulaires (12, 14), alors que des moyens de rupture (58, 60, 82, 84) sont prévus le long d'une partie ou de la totalité du panneau de paroi arrière (6) et de paroi de base (8) pour permettre la séparation ou l'enlèvement d'une partie desdites parois (12, 14) lors de la cassure desdits moyens de rupture (58, 60) et cas dans lequel, lors de l'enlèvement desdits moyens de rupture (58, 60, 82, 84), l'une au moins des parois latérales triangulaires (12, 14) en position adjacente à une portion restante de la paroi arrière et de la paroi de base (6, 8), est mobile par rapport à la paroi frontale (52) afin d'ouvrir ledit carton une fois qu'il est formé, **caractérisé en ce que** la paroi arrière (6) est jointe à une extrémité de la paroi de base (8) le long d'une ligne de pliage (10).

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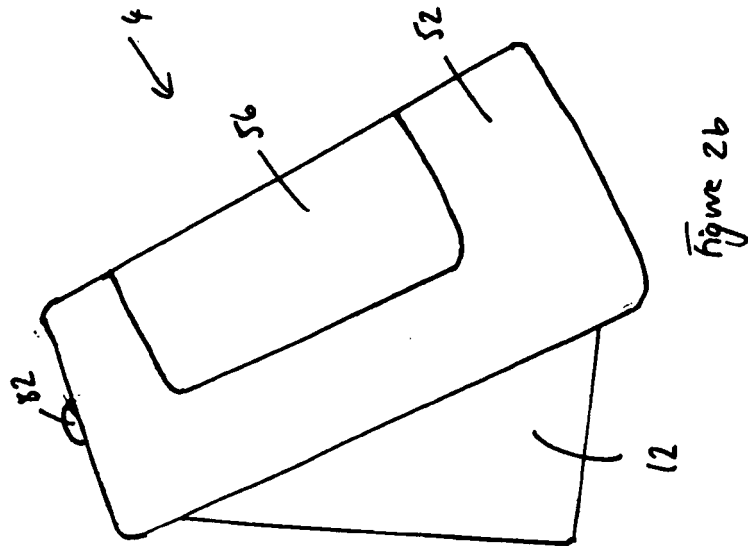


Figure 2b

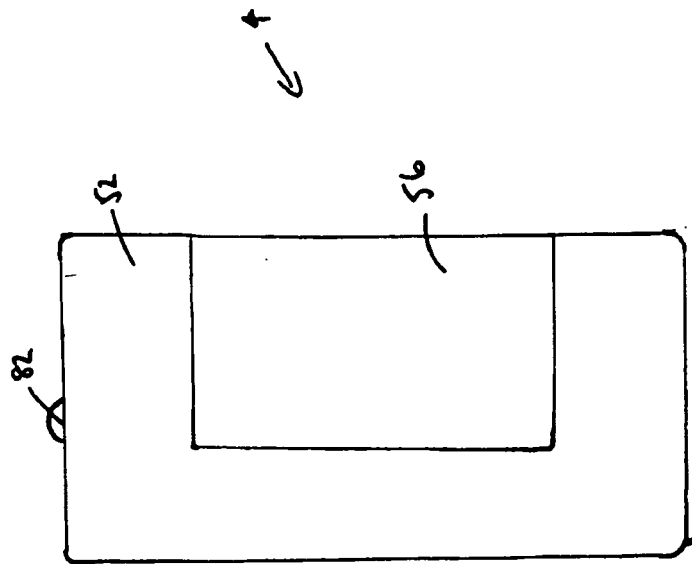


Figure 2a

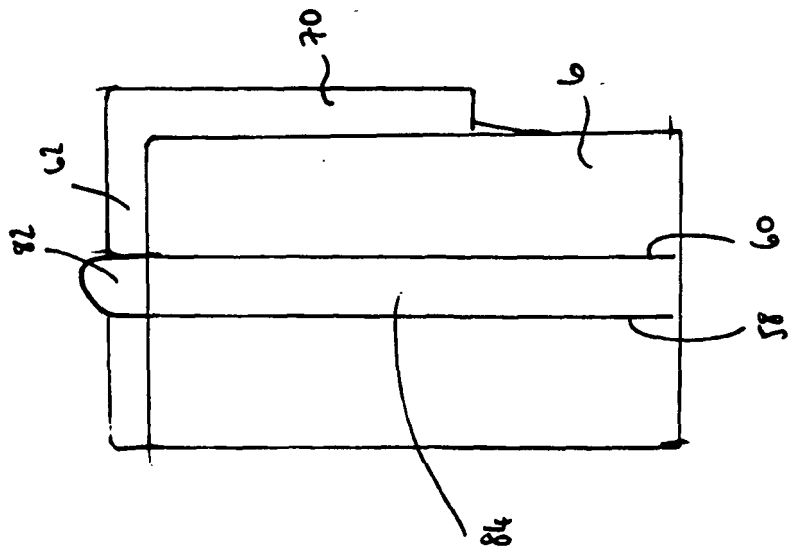
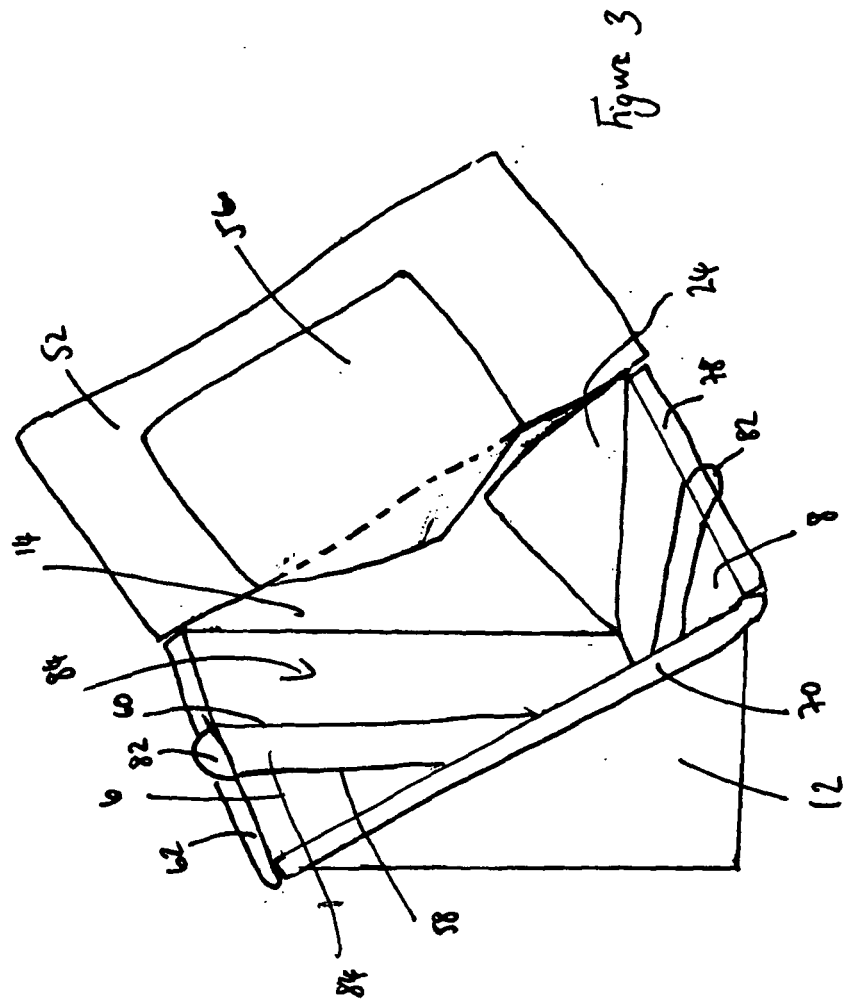
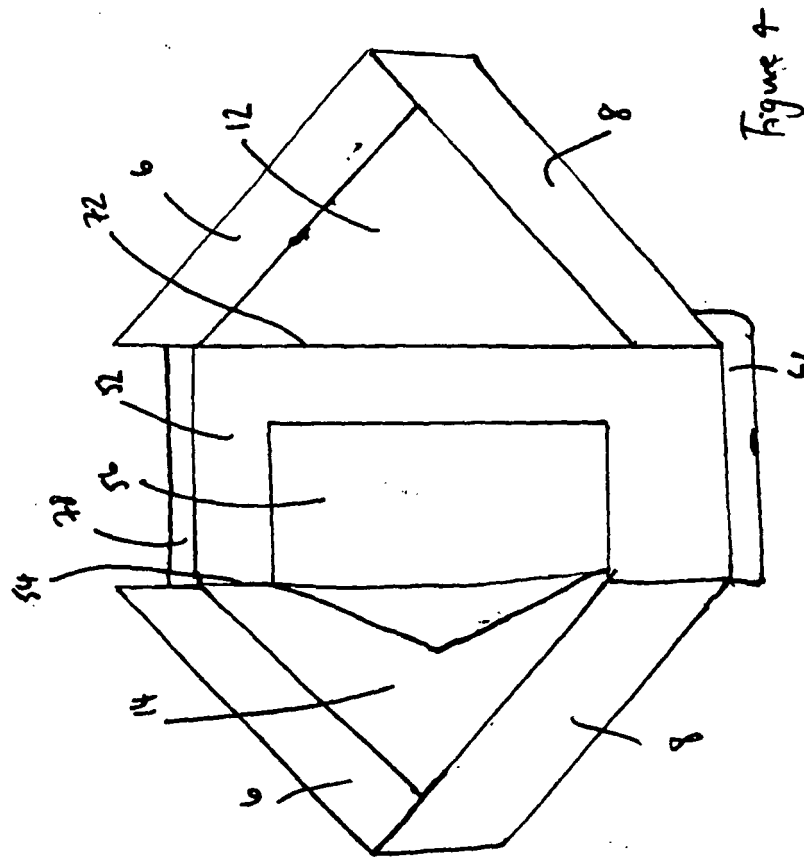


Figure 2c





**REFERENCES CITED IN THE DESCRIPTION**

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**Patent documents cited in the description**

- US 4432489 A [0003]