(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 679 509 A1**

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
01.01.2014 Bulletin 2014/01

(21) Application number: **12749600.8**

(22) Date of filing: **15.02.2012**

(51) Int Cl.:
B65D 5/38 *(2006.01)* ***B65D 85/60*** *(2006.01)*

(86) International application number:
PCT/JP2012/053558

(87) International publication number:
WO 2012/114960 (30.08.2012 Gazette 2012/35)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **24.02.2011 JP 2011038540**

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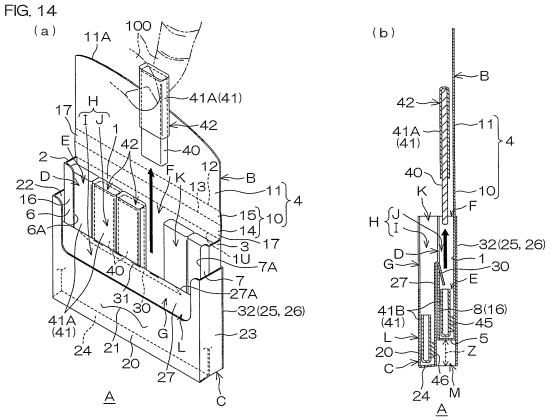
(54) PACKAGING CONTAINER AND CONFECTIONARY IN PACKAGING CONTAINER

(57) A packaging container is provided, which is configured such that a plurality of food pieces are contained in anteroposteriorly overlapping relation in a plurality of rows, and satisfies requirements for the compactness of the container and the pick-out easiness for picking out each of the food pieces. In a packaging container (A) having a slidable configuration, chewing gum pieces (40) (food strips) can be contained upright in side-by-side relation in a front chamber (L) and in a rear chamber (B) located behind the front chamber (L) . The rear chamber (B) is combined with the front chamber (L) so as to be slidable upward with respect to the front chamber (L). Therefore, there is no need to preliminarily provide a raised bottom portion in a rear portion of the packaging container (A) for locating chewing gum strips (40) contained in a rear row (rear chamber(B)) at a higher height level than chewing gum strips (40) contained in a front row (front chamber (L)), but the chewing gum strips (40) can be easily picked out by sliding the rear chamber (B) upward with respect to the front chamber (L) as required to locate the rear row chewing gum strips (40) at a higher height level than the front row chewing gum strips (40). This obviates the need for providing the raised bottom portion, thereby achieving the size reduction of the packaging container (A).

FIG. 14



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Description

TECHNICAL FIELD

[0001] The present invention relates to a packaging container for containing food, particularly a confectionery product. The invention further relates to a confectionery product contained in the packaging container.

BACKGROUND ART

[0002] PLT 1 proposes a packaging box, as a packaging container, which contains sheet-shaped content pieces such as of chewing gum, chocolate or candy.
In the packaging box described in PLT 1, a plurality of content pieces are contained upright in overlapping relation in two rows, i.e., in a front row and a rear row. The packaging box has a bottom partly raised such that a rear bottom portion is higher than a front bottom portion. In the packaging box, content pieces contained in the rear row are located at a higher height level than content pieces contained in the front row. Therefore, when a lid of the packaging box is opened to uncover an upper portion of the container box, the content pieces in the front and rear rows can be easily picked out.

CITATION LIST

PATENT LITERATURE

[0003]

PLT 1: JP-HEI11(1999)-1220A1

SUMMARY OF INVENTION

TECHNICAL PROBLEM

[0004] The bottom of the packaging box of PLT 1 is partly raised and, therefore, the packaging box has a correspondingly greater height.
Where all the content pieces in the front row are eaten up, for example, a relatively great dead space is present in front of the content pieces contained in the rear row. Therefore, it is inconvenient to carry a packaging box having a needless dead space with a reduced number of content pieces.

[0005] In view of the foregoing, it is a principal object of the present invention to provide a packaging container which is configured such that a plurality of food pieces are contained in anteroposteriorly overlapping relation in a plurality of rows, and satisfies requirements for the compactness of the container and the pick-out easiness for picking out each of the food pieces.
It is another object of the present invention to provide a convenient packaging container which can be reused with its size (thickness) reduced after some of food pieces contained in the container are eaten.

[0006] It is further another object of the present invention to provide a confectionery product contained in the packaging container described above.

SOLUTION TO PROBLEM

[0007] According to an inventive aspect of claim 1, there is provided a packaging container of paper having a slidable configuration for containing elongated food strips, the packaging container including a front chamber adapted to contain elongated food strips upright in side-by-side relation, and a rear chamber provided behind the front chamber and adapted to contain elongated food strips upright in side-by-side relation, wherein the rear chamber is combined with the front chamber so as to be slidable upward with respect to the front chamber.

[0008] According to an inventive aspect of claim 2, the rear chamber is decombined from the front chamber to provide an independently usable package in the packaging container of claim 1.
According to an inventive aspect of claim 3, the rear chamber has a rear chamber front wall, rear chamber left and right side walls, a rear chamber bottom wall and a rear chamber rear wall in the packaging container of claim 2, and has a take-out window provided in the rear chamber front wall as a cut-out portion extending downward from an upper edge of the rear chamber front wall for exposing upper portions of the strips contained in the rear chamber forward, and an extension portion which defines a flap extending upward from an upper edge of the rear chamber rear wall and folded forward and downward to cover an upper wall and a front upper portion of the packaging container.

[0009] According to an inventive aspect of claim 4, a portion of the extension portion defining the upper wall of the packaging container includes a second folding guide provided in an anteroposteriorly middle portion of the upper wall as extending horizontally in the packaging container of claim 3 and, when the rear chamber is independently used, the extension portion is folded along the second folding guide, whereby a rear portion of the upper wall serves as an upper wall of the rear chamber, and a front portion of the upper wall and the flap cooperatively function as a flap covering a front portion of the rear chamber with a crease therebetween removed.

[0010] According to an inventive aspect of claim 5, the front chamber includes a packaging container front wall, packaging container left and right side walls, a packaging container rear wall, a front chamber bottom wall and a partition wall disposed within the packaging container to serve as a front chamber rear wall in the packaging container of claim 3 or 4, and has a take-out window provided in an upper portion of the packaging container front wall as a cut-out portion extending from an upper edge of the packaging container front wall for exposing upper portions of the strips contained in the front chamber forward.

[0011] According to an inventive aspect of claim 6, the partition wall has a smaller height than the packaging

container rear wall, and has an engagement piece provided at least in a middle portion of an upper edge thereof and folded rearward in the packaging container of claim 5.
According to an inventive aspect of claim 7, the rear chamber is combined with the front chamber so as to be accommodated in a space located behind the front chamber between the partition wall of the front chamber and the packaging container rear wall and having upper and lower open ends in the packaging container of claim 6.

[0012] According to an inventive aspect of claim 8, the extension portion has stoppers provided on laterally opposite sides thereof, and the stoppers are engaged with upper edges of the packaging container left and right side walls to prevent the rear chamber from being withdrawn from the space in the packaging container of claim 7.
According to an inventive aspect of claim 9, the engagement piece is engaged with an upper edge of the rear chamber front wall to prevent the rear chamber from moving further upward with respect to the front chamber in the packaging container of claim 7 or 8.

[0013] According to an inventive aspect of claim 10, the packaging container rear wall has a band portion extending vertically for dividing the packaging container rear wall into left and right portions in the packaging container of claim 9.
According to an inventive aspect of claim 11, there is provided a multi-chamber packaging container of paper having a slidable N-chamber configuration (wherein N is a positive integer not less than 2) for containing elongated food strips, the packaging container including a first chamber adapted to contain elongated food strips upright in side-by-side relation, and second to N-th chambers provided behind the first chamber and each adapted to contain elongated food strips upright in side-by-side relation, wherein the N-th chamber is combined with the (N-1)-th chamber so as to be slidable upward with respect to the (N-1)-th chamber.

[0014] According to an inventive aspect of claim 12, there is provided a packaged confectionery product comprising a packaging container according to any one of claims 1 to 11, and a plurality of elongated confectionery strips such as of chewing gum, chocolate or candy individually wrapped with wrapping sheets and accommodated in a food containing chamber of the packaging container, wherein parts of outer surfaces of the individual wrapping sheets are bonded to an interior surface of the food containing chamber by bonding means for maintaining the individually wrapped confectionery strips in an accommodated state.

ADVANTAGEOUS EFFECTS OF INVENTION

[0015] According to the inventive aspect of claim 1, the front chamber and the rear chamber provided behind the front chamber are each capable of containing the elongated food strips upright in side-by-side relation in the paper packaging container of the slidable configuration. The rear chamber is combined with the front chamber so as to be slidable upward with respect to the front chamber. Therefore, there is no need to preliminarily provide a raised bottom portion in a rear portion of the packaging container for locating the strips contained in the rear row (rear chamber) at a higher height level than the strips contained in the front row (front chamber), but the rear chamber can be slid upward with respect to the front chamber as required to locate the rear row strips at a higher height level than the front row strips. Thus, the size reduction of the packaging container can be achieved without the need for providing the raised bottom portion.

[0016] If a food strip in the rear row is to be eaten, the strip can be easily picked out from the rear row strips located at a higher height level than the front row strips by sliding the rear chamber upward with respect to the front chamber.
That is, the packaging container can satisfy the requirements for the compactness and the pick-out easiness for picking out the food pieces (strips) contained in anteroposteriorly overlapping relation in the plurality of rows.

[0017] According to the inventive aspect of claim 2, the rear chamber is decombined from the front chamber to provide an independently usable package. Therefore, when the front chamber becomes a dead space after the strips contained in the front chamber are eaten up, the rear chamber is separated from the front chamber. Thus, the remaining strips can be compactly carried in the rear chamber. That is, after some of the strips are eaten, the packaging container can be conveniently reused with its size (thickness) reduced.

[0018] According to the inventive aspect of claim 3, the upper portions of the strips contained in the rear chamber are exposed forward from the take-out window provided in the rear chamber front wall of the rear chamber. Therefore, the strips contained in the rear chamber can be accessed through the take-out window to be thereby easily picked out.
The extension portion extending upward from the upper edge of the rear chamber rear wall of the rear chamber is folded forward and downward along the predetermined folding guide to serve as the flap to cover the upper wall and the front upper portion of the packaging container. This obviates the need for providing the flap for each of the front chamber and the rear chamber to cover the upper wall and the front upper portion of the packaging container, thereby reducing the number of components.

[0019] According to the inventive aspect of claim 4, the portion of the extension portion defining the upper wall of the packaging container has the second folding guide provided in the anteroposteriorly middle portion of the upper wall as extending horizontally. With the extension portion folded along the second folding guide, the portion of the extension portion defining the rear portion of the upper wall of the packaging container serves as the upper wall of the rear chamber when the rear chamber is independently used. The portion of the extension portion defining the front portion of the upper wall of the packaging

container and the flap cooperatively function as the flap covering the front portion of the rear chamber with the crease therebetween removed.

[0020] Therefore, where the rear chamber is combined with the front chamber, the extension portion of the rear chamber serves as the flap for the entire packaging container. Where the rear chamber is separated from the front chamber for independent use, the extension portion of the rear chamber serves as the flap of the rear chamber. This obviates the need for separately providing a component serving as the flap for the entire packaging container and a component serving as the flap for the rear chamber, thereby reducing the number of components.

When the rear chamber is independently used, the extension portion covers the front portion of the rear chamber, whereby the strips contained in the rear chamber can be prevented from dropping out forward.

[0021] According to the inventive aspect of claim 5, the front chamber includes the packaging container front wall, the packaging container left and right side walls, the packaging container rear wall, the front chamber bottom wall, and the partition wall disposed within the packaging container to serve as the front chamber rear wall.

The upper portions of the strips are exposed forward from the take-out window provided in the upper portion of the packaging container front wall. Therefore, the strips contained in the front chamber can be accessed from the take-out window to be thereby easily picked out.

[0022] According to the inventive aspect of claim 6, the height of the partition wall is smaller than the height of the packaging container rear wall. This prevents the increase in the height of the entire packaging container due to the provision of the partition wall.

The engagement piece folded rearward is provided on at least the middle portion of the upper edge of the partition wall.

[0023] According to the inventive aspect of claim 7, the rear chamber is combined with the front chamber so as to be accommodated in the space located behind the front chamber between the partition wall of the front chamber and the packaging container rear wall and having the upper and lower open ends. Thus, the rear chamber is vertically slidable with respect to the front chamber in the space.

In this case, according to the inventive aspect of claim 8, the stoppers provided on the laterally opposite sides of the extension portion are respectively engaged with the upper edges of the packaging container left and right side walls, thereby preventing the rear chamber from being withdrawn from the space.

[0024] According to the inventive aspect of claim 9, the engagement piece is engaged with the upper edge of the rear chamber front wall to prevent the rear chamber from moving further upward with respect to the front chamber. Therefore, the rear chamber can be combined with the front chamber so as to be slidable upward by a predetermined distance with respect to the front chamber.

According to the inventive aspect of claim 10, the packaging container rear wall can be divided into the left and right portions by tearing off the band portion of the packaging container rear wall. Thus, the rear chamber can be taken out from the space between the partition wall of the front chamber and the packaging container rear wall for use as the independent package.

[0025] According to the inventive aspect of claim 11, the packaging container has the N-chamber configuration including the first chamber serving as the front chamber and the second to N-th chambers serving as the rear chamber, and the second to N-th chambers are each slidable upward.

According to the inventive aspect of claim 12, the confectionery product is provided which can be carried in a hygienic way and can be easily eaten.

BRIEF DESCRIPTION OF DRAWINGS

[0026]

FIG. 1 is an expansion plan view of a rear chamber B of a packaging container A according to one embodiment of the present invention.

FIG. 2 is a perspective view of the rear chamber B in a complete state with a lid 4 open.

FIGS. 3 are six side views, particularly, FIGS.3(a), 3(b), 3(c), 3(d), 3(e) and 3(f) are a front view, a left side view, a right side view, a plan view, a bottom view and a rear view, respectively.

FIG. 4 is an expansion plan view of a main portion C of the packaging container A.

FIGS. 5 are perspective views of the main portion C in a complete state, the main portion C being seen from a position closer to the overhead position in FIG. 5(b) than in FIG. 5(a).

FIGS. 6 are six side views of the main portion C in the complete state, particularly, FIGS. 6(a), 6(b), 6 (c), 6(d), 6(e) and 6(f) are a front view, a left side view, a right side view, a plan view, a bottom view and a rear view, respectively.

FIGS. 7 are diagrams for explaining how to wrap a chewing gum piece 40 (food strip) with a wrapping sheet 41 to provide a food unit 42, particularly, FIG. 7(a) illustrates a chewing gum piece 40 placed on a wrapping sheet 41, and FIG. 7(b) illustrates a food unit 42 completed with the chewing gum piece 40 wrapped with the wrapping sheet 41.

FIGS. 8 (a), 8(b), 8 (c) and 8 (d) are a perspective view illustrating the rear chamber B in the complete state with food units accommodated therein, a cross sectional view of the rear chamber B of FIG. 8(a), a perspective view illustrating the main portion C in the complete state with food units 42 accommodated therein, and a cross sectional view of the main portion C of FIG. 8(c), respectively.

FIG. 9 is an exploded perspective view for explaining a state in which the rear chamber B is to be combined

with the main portion C.

FIG. 10 (a) is a perspective view of the packaging container A in a complete state with the lid 4 open, and FIG. 10(b) is a sectional view of the packaging container A of FIG. 10(a) as seen from a right side.

FIGS. 11 are six side views of the packagingcontainer A in the complete state, particularly, FIGS.11(a), 11(b), 11(c), 11(d), 11 (e) and 11 (f) are a front view, a left side view, a right side view, a plan view, a bottom view and a rear view, respectively.

FIG. 12 illustrates a state in which the lid 4 shown in FIG. 10(a) is closed.

FIGS. 13 illustrate a state in which one of the food units 42 is taken out of the main portion C, particularly, FIGS. 13(a) and 13(b) are a perspective view from the same position as in FIG. 10(a) and a sectional view from the same position as in FIG. 10(b), respectively.

FIGS. 14 illustrate a state in which one of the food units 42 is taken out of the rear chamber B, particularly, FIGS. 14(a) and 14(b) are a perspective view from the same position as in FIG. 13(a) and a sectional view from the same position as in FIG. 13 (b), respectively.

FIG. 15 is a perspective view of the packaging container A in which the food units 42 are contained in the rear chamber B and the main portion C with the rear chamber B slid upward.

FIG. 16 is a perspective view illustrating a state in which a band portion 29 of the main portion C is torn off.

FIG. 17 is a perspective view of the rear chamber B in the complete state with the lid 4 closed.

FIGS. 18 are diagrams illustrating other examples of the individual wrapping of the strip (chewing gum piece) 40.

DESCRIPTION OF EMBODIMENTS

[0027] Referring to the drawings, an embodiment of the present invention will hereinafter be described specifically.

A packaging container A according to the embodiment of the present invention is a packaging container of paper adapted to contain a plurality of chewing gum strips (food pieces). The packaging container A includes a rear chamber B and a main portion C. First, the rear chamber B and the main portion C will each hereinafter be described.

FIG. 1 is an expansion plan view of the rear chamber B of the packaging container A according to the embodiment of the present invention. FIG. 2 is a perspective view of the rear chamber B in a complete state with a lid 4 open. FIGS. 3 are six side views of the rear chamber B in the complete state.

[0028] The rear chamber B is fabricated from a crease pattern X made of a single paper sheet as shown in FIG. 1. The crease pattern X is formed by cutting the single paper sheet (cardboard or the like) according to the expansion plan view of the rear chamber B.

The crease pattern X, i.e., the rear chamber B as seen in the expansion plan view, includes a rear chamber rear wall 1 having a horizontally elongated rectangular shape. The rear chamber rear wall 1 has a left edge 1L and a right edge 1R vertically extending parallel to each other, and an upper edge 1U and a lower edge 1D extending parallel to each other laterally (horizontally) perpendicularly to the left and right edges 1L, 1R.

[0029] The rear chamber B as seen in the expansion plan view includes a rear chamber left side wall 2 which is continuous leftward from the left edge 1L, a rear chamber right side wall 3 which is continuous rightward from the right edge 1R, a lid 4 (extension portion) which is continuous upward from the upper edge 1U, and a rear chamber bottom wall 5 which is continuous downward from the lower edge 1D. The rear chamber left side wall 2 and the rear chamber right side wall 3 each have a vertically elongated rectangular shape, and have the same size. The rear chamber bottom wall 5 has a horizontally elongated rectangular shape. The longitudinal dimensions of the rear chamber left side wall 2 and the rear chamber right side wall 3 are equal to the widthwise dimension of the rear chamber rear wall 1. The longitudinal dimension of the rear chamber bottom wall 5 is equal to the longitudinal dimension of the rear chamber rear wall 1. The rear chamber left side wall 2, the rear chamber right side wall 3 and the rear chamber bottom wall 5 have substantially the same widthwise dimension.

[0030] The rear chamber B as seen in the expansion plan view includes a left extension piece 6 which is continuous leftward from an edge (left edge in FIG. 1) 2L of the rear chamber left side wall 2 opposite from the left edge 1L, a right extension piece 7 which is continuous rightward from an edge (right edge in FIG. 1) 3R of the rear chamber right side wall 3 opposite from the right edge 1R, and a front extension plate 8 which is continuous downward from an edge (lower edge in FIG. 1) 5D of the rear chamber bottom wall 5 opposite from the lower edge 1D.

[0031] The left extension piece 6 and the right extension piece 7 are vertically elongated L-shaped plates having the same size, and symmetrically disposed on opposite sides of the rear chamber rear wall 1. In FIG. 1, the right extension piece 7 has an L-shape, while the left extension piece 6 has a left-right reversed L-shape. The left extension piece 6 has a J-shaped edge (J-edge) 6A on its left upper side thereof, and the right extension piece 7 has a left-right reversed J-shaped edge (J-edge) 7A on its right upper side. The (maximum) longitudinal dimensions of the left extension piece 6 and the right extension piece 7 are equal to the longitudinal dimensions of the rear chamber left side wall 2 and the rear chamber right side wall 3.

[0032] The front extension plate 8 has a horizontally elongated rectangular shape, and has a longitudinal dimension that is equal to the longitudinal dimension of

the rear chamber bottom wall 5 and a widthwise dimension that is approximately half the widthwise dimension of the rear chamber rear wall 1. The front extension plate 8 has a generally M-shaped incision 9 provided in a center position thereof as extending thicknesswise through the front extension plate 8.

The lid 4 includes a first lid portion 10 and a second lid portion 11 which are arranged in this order from the upper edge 1U of the rear chamber rear wall 1 and unitary with each other.

[0033] The first lid portion 10 has a horizontally elongated rectangular shape, and has a longitudinal dimension that is slightly greater than the longitudinal dimension of the rear chamber rear wall 1 and a widthwise dimension that is approximately twice the widthwise dimension of the rear chamber left side wall 2, the rear chamber right side wall 3 and the rear chamber bottom wall 5. Left and right edges of the first lid portion 10 are curved to be slightly bulged horizontally outward to serve as stoppers 17. The longitudinal dimension of the first lid portion 10 is slightly greater than the longitudinal dimension of the rear chamber rear wall 1 by the dimensions of the left and right stoppers 17.

[0034] The second lid portion 11 has a horizontally elongated rectangular shape, and has a longitudinal dimension that is equal to the longitudinal dimension of the rear chamber rear wall 1 and a widthwise dimension that is approximately three fourths the widthwise dimension of the rear chamber rear wall 1. A first folding guide 12 horizontally extends between the first lid portion 10 and the second lid portion 11. A distal edge (upper edge in FIG. 1) 11A of the second lid portion 11 opposite from the first folding guide 12 is curved to project away from the first folding guide 12. A left portion of the distal edge 11A is more away from the first folding guide 12 than a right portion of the distal edge 11A.

[0035] The first lid portion 10 has a second folding guide 13 provided in a widthwise generally middle portion thereof as extending parallel to the first folding guide 12. The second folding guide 13 generally divides the first lid portion 10 into two portions, i.e., a first piece 14 adjacent to the upper edge 1U of the rear chamber rear wall 1 and a second piece 15 adjacent to the first folding line 12.

The rear chamber left side wall 2, the rear chamber right side wall 3, the lid 4 and the rear chamber bottom wall 5 (front extension plate 8) of the crease pattern X are folded to the same side (forward of the paper face in FIG. 1) perpendicularly to the rear chamber rear wall 1 along corresponding folding lines defined by the left edge 1L, the right edge 1R, the upper edge 1U and the lower edge 1D of the rear chamber rear wall 1.

[0036] In turn, the left extension piece 6 and the right extension piece 7 are folded toward each other (laterally inward) perpendicularly to the rear chamber left side wall 2 and the rear chamber right side wall 3 along the left edge 2L of the rear chamber left side wall 2 and the right edge 3R of the rear chamber right side wall 3.

Subsequently, the front extension plate 8 is folded toward the left extension piece 6, the right extension piece 7 and the rear chamber rear wall 1 perpendicularly to the rear chamber bottom wall 5 along the lower edge 5D of the rear chamber bottom wall 5. Then, a lower portion of the left extension piece 6 below the J-shaped edge 6A is opposed to a left edge portion of the front extension plate 8, while a lower portion of the right extension piece 7 below the J-shaped edge 7A is opposed to a right edge portion of the front extension plate 8. In this state, the lower portion of the left extension piece 6 below the J-shaped edge 6A is bonded to the left edge portion of the front extension plate 8, and the lower portion of the right extension piece 7 below the J-shaped edge 7A is bonded to the right edge portion of the front extension plate 8, whereby the rear chamber B is completed as shown in FIG. 2.

[0037] The front extension plate 8, a portion of the left extension piece 6 having the J-shaped edge 6A, and a portion of the right extension piece 7 having the J-shaped edge 7A are unified together to define a horizontally elongated generally U-shaped rear chamber front wall 16 of the rear chamber B thus completed. The J-shaped edges 6A, 7A and an upper edge of the front extension plate 8 are continuous in a generally U-shape. The rear chamber front wall 16 has a horizontally elongated rectangular take-out window D defined by these edges as a cut-out portion extending downward from the upper edge thereof.

[0038] The rear chamber B has a box shape which is anteroposteriorly flat (in a direction in which the rear chamber front wall 16 and the rear chamber rear wall 1 are opposed to each other), and has an accommodation space E defined by the rear chamber front wall 16, the rear chamber rear wall 1, the rear chamber left side wall 2 and the rear chamber right side wall 3. The front side of the paper face in FIG. 2 is a front side of the rear chamber B, and the rear side of the paper face in FIG. 2 is a rear side of the rear chamber B. The accommodation space E has a lower end closed with the rear chamber bottom wall 5, and an open upper end serving as a horizontally elongated rectangular take-out port F defined from lateral sides by the upper edges of the rear chamber left side wall 2 and the rear chamber right side wall 3. The take-out port F and the take-out window D are continuous to each other.

[0039] It is noted that the six side views of the rear chamber B are shown in FIGS. 3.

FIG. 4 is an expansion plan view of the main portion C of the packaging container A. FIGS. 5 are perspective views of the main portion C in a complete state. FIGS. 6 are six side views of the main portion C in the complete state.

The main portion C is fabricated from a crease pattern Y made of a single paper sheet as shown FIG. 4. The crease pattern Y is formed by cutting the single paper sheet (cardboard or the like) according to the expansion plan view of the main portion C.

[0040] The crease pattern Y, i.e., the main portion C as seen in the expansion plan view, includes a horizontally elongated generally U-shaped packaging container front wall 20 having the same size as the rear chamber front wall 16 (see FIG. 2) described above. Therefore, the packaging container front wall 20 has a take-out window G provided in an upper portion thereof and having the same size as the take-out window D (see FIG. 2) of the rear chamber front wall 16. The take-out window G is a cut-out portion extending from an upper edge of the packaging container front wall 20. The packaging container front wall 20 has an incision 21 provided in a center position of a lower portion thereof below the take-out window G and having the same shape as the incision 9 (see FIG. 2) of the front extension plate 8. The incision 21 has a vertically inverted generally M-shape in FIG. 4, and extends thicknesswise through the packaging container front wall 20. The packaging container front wall 20 has a left edge 20L and a right edge 20R vertically extending parallel to each other, and a lower edge 20D laterally (horizontally) extending perpendicularly to the left edge 20L and the right edge 20R.

[0041] The main portion C as seen in the expansion plan view includes a packaging container left side wall 22 which is continuous leftward from the left edge 20L, a packaging container right side wall 23 which is continuous rightward from the right edge 20R, and a front chamber bottom wall 24 which is continuous downward from the lower edge 20D. The packaging container left side wall 22 and the packaging container right side wall 23 each have a vertically elongated rectangular shape, and have the same size. The front chamber bottom wall 24 has a horizontally elongated rectangular shape. The longitudinal dimensions of the packaging container left side wall 22 and the packaging container right side wall 23 are equal to the (maximum) widthwise dimension of the packaging container front wall 20. The longitudinal dimension of the front chamber bottom wall 24 is equal to the longitudinal dimension of the packaging container front wall 20. The widthwise dimensions of the packaging container left side wall 22 and the packaging container right side wall 23 are approximately twice the widthwise dimension of the front chamber bottom wall 24.

[0042] The main portion C as seen in the expansion plan view includes a left extension plate 25 which is continuous leftward from an edge (left edge in FIG. 4) 22L of the packaging container left side wall 22 opposite from the left edge 20L, a right extension plate 26 which is continuous rightward from an edge (right edge in FIG. 4) 23R of the packaging container right side wall 23 opposite from the right edge 20R, and a front chamber rear wall 27 which is continuous downward from an edge (lower edge in FIG. 4) 24D of the front chamber bottom wall 24 opposite from the lower edge 20D.

[0043] The left extension plate 25 has a horizontally elongated rectangular shape. The left extension plate 25 has a longitudinal dimension that is equal to the longitudinal dimension of the packaging container front wall 20, and a widthwise dimension that is equal to the (maximum) widthwise dimension of the packaging container front wall 20. The left extension plate 25 has a pair of perforation lines 28 provided laterally adjacent to the packaging container left side wall 22 and extending vertically in a widthwise direction thereof across the left extension plate 25. A portion of the left extension plate 25 defined between the pair of perforation lines 28 serves as a zipper band portion 29 extending vertically.

[0044] The right extension plate 26 has a vertically elongated isosceles trapezoidal shape having a lower base defined by the right edge 23R of the packaging container right side wall 23 and tapered toward an upper base thereof (rightward away from the right edge 23R in FIG. 4).

The front chamber rear wall 27 has a horizontally elongated rectangular shape. The front chamber rear wall 27 has a longitudinal dimension that is equal to the longitudinal dimension of the front chamber bottom wall 24, and a widthwise dimension that is smaller than the widthwise dimension of the left extension plate 25, e.g., approximately three fourths the widthwise dimension of the left extension plate 25.

[0045] The main portion C as seen in the expansion plan view has an engagement piece 30 which is continuous downward from a horizontally middle portion of a distal edge (lower edge) 27A of the front chamber rear wall 27 opposite from the lower edge 24D of the front chamber bottom wall 24. The main portion C has a perforation line 31 provided along the distal edge 27A between the front chamber rear wall 27 and the engagement piece 30 as extending horizontally. The engagement piece 30 has a horizontally elongated isosceles trapezoidal shape having a lower base defined by the perforation line 31 and tapered toward an upper base thereof (downward away from the perforation line 31 in FIG. 4). The engagement piece 30 may be regarded as a part of the front chamber rear wall 27.

[0046] The packaging container left side wall 22 (left extension plate 25), the packaging container right side wall 23 (right extension plate 26) and the front chamber bottom wall 24 (front chamber rear wall 27 and engagement piece 30) of the crease pattern Y are folded to the same side (rearward of the paper face in FIG. 4) perpendicularly to the packaging container front wall 20 along corresponding folding lines defined by the left edge 20L, the right edge 20R and the lower edge 20D of the packaging container front wall 20.

In turn, the front chamber rear wall 27 (engagement piece 30) is folded upward perpendicularly to the front chamber bottom wall 24 along the lower edge 24D of the front chamber bottom wall 24. Then, the front chamber rear wall 27 (engagement piece 30) is opposed to and spaced rearward (backward) from the packaging container front wall 20. At this time, the distal edge 27A of the front chamber rear wall 27 serves as an upper edge of the front chamber rear wall 27.

[0047] Subsequently, the engagement piece 30 is fold-

ed (rearward) away from the packaging container front wall 20 along the perforation line 31 on the distal edge 27A.

In turn, the left extension plate 25 and the right extension plate 26 are folded toward each other (horizontally inward) perpendicularly to the packaging container left side wall 22 and the packaging container right side wall 23 along corresponding folding lines defined by the left edge 22L of the packaging container left side wall 22 and the right edge 23R of the packaging container right side wall 23. Then, a right edge portion (left edge portion before the folding in FIG. 4) of the folded left extension plate 25 is overlaid on the right extension plate 26 from a rear side, so that the left extension plate 25 and the right extension plate 26 are opposed to and spaced rearward from the front chamber rear wall 27 and the folded engagement piece 30. In this state, overlapping portions of the left extension plate 25 and the right extension plate 26 are bonded to each other, whereby the main portion C is completed as shown in FIGS. 5. FIGS. 5 (a) and 5 (b) are perspective views of the main portion C. The main portion C is seen from a position closer to the overhead position in FIG. 5(b) than in FIG. 5(a).

[0048] In the completed main portion C, the left extension plate 25 and the right extension plate 26 bonded together cooperatively define a horizontally elongated rectangular packaging container rear wall 32. The packaging container rear wall 32 has the same size as the left extension plate 25. The band portion 29 of the left extension plate 25 is located slightly rightward away from the left edge of the packaging container rear wall 32 as extending vertically across the packaging container rear wall 32. As will be described later, the packaging container rear wall 32 can be divided into left and right portions on opposite sides of the band portion 29 by tearing off the band portion 29 along the perforation lines 28.

[0049] The main portion C has a box shape which is anteroposteriorly flat (in a direction in which the packaging container front wall 20 and the packaging container rear wall 32 are opposed to each other), and has an accommodation space H defined by the packaging container front wall 20, the packaging container rear wall 32, the packaging container left side wall 22 and the packaging container right side wall 23. The front side of the paper face in FIGS. 5 is the front side of the main portion C, and the rear side of the paper face in FIGS. 5 is the rear side of the main portion C. In the main portion C, the front chamber rear wall 27 is disposed between the packaging container front wall 20 and the packaging container rear wall 32 as extending parallel to the packaging container front wall 20 and the packaging container rear wall 32, whereby the accommodation space H is anteroposteriorly partitioned into two spaces generally, i.e., a front space I adjacent to the packaging container front wall 20 (on the front side) and a rear space J adjacent to the packaging container rear wall 32 (on the rear side). The front chamber rear wall 27 is a partition wall which partitions the accommodation space H (the inside of the main portion C or the packaging container A). The front space I and the rear space J are anteroposteriorly flat box-shaped spaces having substantially the same size.

[0050] The front chamber rear wall 27 has a smaller height than the packaging container rear wall 32. Therefore, the distal edge 27A (upper edge) of the front chamber rear wall 27 is located at a lower height level than the upper edge of the packaging container rear wall 32. Thus, the front space I and the rear space J communicate with each other above the front chamber rear wall 27. Since the height of the front chamber rear wall 27 is smaller than the height of the packaging container rear wall 32, it is possible to prevent the height increase of the entire main portion C (in other words, the entire packaging container A) due to the provision of the front chamber rear wall 27.

[0051] The engagement piece 30 of the front chamber rear wall 27 is folded back to the rear space J.

An upper end of the accommodation space H is open upward to serve as a take-out port K defined from lateral sides by upper edges of the packaging container left side wall 22 and the packaging container right side wall 23 and having a horizontally elongated rectangular shape. The take-out port K is continuous to the take-out window G of the packaging container front wall 20.

The front space I, which is a generally front half portion of the accommodation space H, has a lower end closed with the front chamber bottom wall 24 (see FIG. 5(b)) and an upper end which is open upward to define a generally front half portion of the take-out port K. An upper portion of the front space I is open forward from the take-out window G.

[0052] Here, the front chamber L is constituted by the packaging container front wall 20, the front chamber rear wall 27, the front chamber bottom wall 24, and generally front half portions of the packaging container left side wall 22 and the packaging container right side wall 23, which cooperatively define the front space I of the accommodation space H. The front chamber L may further include generally rear half portions of the packaging container left side wall 22 and the packaging container right side wall 23, and the packaging container rear wall 32. In this case, the entire main portion C serves as the front chamber L.

[0053] The rear space J, which is a generally rear half portion of the accommodation space H, has a lower end having a horizontally elongated rectangular shape and opening downward to serve as an insertion port M (to be described later with reference to FIG. 6(e)) defined anteroposteriorly by lower edges of the front chamber rear wall 27 and the packaging container rear wall 32, and an upper end which opens upward to define a generally rear half portion of the take-out port K. That is, the rear space J is a space located between the front chamber rear wall 27 and the packaging container rear wall 32 and having upper and lower openings.

[0054] It is noted that the six side views of the main portion C are shown in FIGS. 6.

The rear chamber B and the main portion C thus completed are combined together, thereby completing the packaging container A. Before the combination of the rear chamber B and the main portion C is described, chewing gum pieces 40 to be accommodated as the food strips in the packaging container A will be described.

FIGS. 7 are diagrams for explaining how to individually wrap a chewing gum piece 40 (food strip) with a wrapping sheet 41 to provide a food unit 42.

[0055] Referring to FIG. 7(a), the chewing gum piece 40 has a vertically-elongated rectangular-solid thin block shape (elongated strip shape). The longitudinal dimension of the chewing gum piece 40 is slightly smaller than the widthwise dimensions of the rear chamber rear wall 1 (see FIG. 2) of the rear chamber B and the packaging container rear wall 32 (see FIGS. 5).

The chewing gum piece 40 is wrapped with the wrapping sheet 41. The food unit 42 is constituted by the chewing gum piece 40 and the wrapping sheet 41 which wraps the chewing gum piece 40.

[0056] Examples of the wrapping sheet 41 include a so-called foil paper sheet, a wax paper sheet and a film. In an expanded state, the wrapping sheet 41 is a rectangular sheet which is large enough to wrap the chewing gum piece 40. The wrapping sheet 41 has a perforation line 43 provided closer to one of longitudinally opposite edges as extending widthwise of the wrapping sheet 41 across the wrapping sheet 41.

As shown in FIG. 7 (a), a single chewing gum piece 40 is placed on a center portion of a single wrapping sheet 41 with its longitudinal axis aligning with the longitudinal axis of the wrapping sheet 41. Portions of the wrapping sheet 41 protruding from the chewing gum piece 40 are folded, whereby the chewing gum piece 40 is wrapped with the wrapping sheet 41 as shown in FIG. 7(b). The food unit 42 is provided by thus wrapping (individually wrapping) the chewing gum piece 40 with the wrapping sheet 41. The food unit 42 has a vertically elongated block shape having a size that is slightly greater than the chewing gum piece 40 by the thickness of the wrapping sheet 41. With the food unit 42 vertically postured, the perforation line 43 of the wrapping sheet 41 of the food unit 42 is located in a longitudinal (vertical) position closer to the lower edge thereof as extending (horizontally) widthwise of the food unit 42 to surround the chewing gum piece 40. With the food unit 42 vertically postured, the perforation line 43 divides the wrapping sheet 41 wrapping the chewing gum piece 40 into a separation portion 41A located on an upper side of the perforation line 43 and a fixing portion 41B located on a lower side of the perforation line 43.

[0057] It is noted that a wrapping sheet not formed with the perforation line 43 may be used as the wrapping sheet 41.

A plurality of such food units 42 (here, twelve food units for the single packaging container A) are prepared.

FIGS. 8 (a), 8(b), 8(c) and 8(d) are a perspective view illustrating the rear chamber B in the complete state with food units accommodated therein, a cross sectional view of the rear chamber B of FIG. 8(a), a perspective view illustrating the main portion C in the complete state with food units 42 accommodated therein, and a cross sectional view of the main portion C of FIG. 8(c), respectively.

[0058] As shown in FIG. 8(a), six food units 42 out of the twelve food units 42 (chewing gum pieces 40) are contained upright in side-by-side relation in the accommodation space E of the rear chamber B. As shown in FIG. 8(b), an adhesive agent (which may be an adhesive tape) 45 is applied to a horizontally extending zone on a lower edge portion of a front surface of the rear chamber rear wall 1 of the rear chamber B facing to the accommodation space E. The fixing portions 41B of the wrapping sheets 41 of the respective food units 42 (see FIG. 7(b)) are bonded to the rear chamber rear wall 1 by the adhesive agent 45 in the accommodation space E. With the six food units 42 accommodated in the accommodation space E (in the rear chamber B), as shown in FIG. 8(a), upper portions of the food units 42 are exposed forward from the take-out window D of the rear chamber front wall 16 and exposed upward from the take-out port F.

[0059] Before the fabrication of the rear chamber B, the food units 42 to be accommodated in the rear chamber B are bonded to the rear chamber rear wall 1 of the crease pattern X (see FIG. 1). When the rear chamber B is thereafter fabricated, the rear chamber B is completed with the food units 42 accommodated in the accommodation space E. Of course, the food units 42 may be accommodated in the rear chamber B after the fabrication.

As shown in FIG. 8(c), the other six food units 42 out of the twelve food units 42 are contained upright in side-by-side relation in the front space I of the front chamber L of the main portion C. As shown in FIG. 8(d), an adhesive agent (which may be an adhesive tape) 46 is applied to a horizontally extending zone on a lower edge portion of a front surface of the front chamber rear wall 27 of the front chamber L. The fixing portions 41B of the wrapping sheets 41 of the respective food units 42 (see FIG. 7(b)) are bonded to the front chamber rear wall 27 by the adhesive agent 46 in the front space I. With the six food units 42 accommodated in the front space I (front chamber L), as shown in FIG. 8(c), upper portions of these food units 42 are exposed forward from the take-out window G of the packaging container front wall 20 and exposed upward from the take-out port K.

[0060] Before the fabrication of the front chamber L, the food units 42 to be accommodated in the front chamber L are bonded to the front chamber rear wall 27 of the crease pattern Y (see FIG. 4). When the front chamber L (main portion C) is thereafter fabricated, the front chamber L is completed with the food units 42 accommodated in the front space I. Of course, the food units 42 may be accommodated in the front chamber L after the fabrication.

With the six food units 42 accommodated in each of the

rear chamber B and the main portion C (front chamber L), the rear chamber B is combined with the main portion C to complete the packaging container A.

[0061] FIG. 9 is an exploded perspective view for explaining a state in which the rear chamber B is combined with the main portion C. FIG. 10(a) is a perspective view of the packaging container A in the complete state with the lid 4 open, and FIG. 10(b) is a sectional view of the packaging container A of FIG. 10 (a) as seen from a right side. FIGS. 11 are six side views of the packaging container A in the complete state.

As shown in FIG. 9, the lid 4 of the rear chamber B is opened. At this time, the lid 4 extends upward from the upper edge (upper edge 1U) of the rear chamber rear wall 1, and is generally flush with the rear chamber rear wall 1. In turn, with the take-out window D of the rear chamber B and the take-out window G of the main portion C directing in the same direction (forward in FIG. 9), the rear chamber B is opposed to the rear half portion of the take-out port K of the main portion C from above, and then the rear chamber B and the main portion C are relatively moved so that the rear chamber bottom wall 5 of the rear chamber B is inserted into the rear half portion of the take-out port K. Therefore, the rear chamber B may be moved to the main portion C with the main portion C kept stationary or, conversely, the main portion C may be moved to the rear chamber B.

[0062] Thus, the rear chamber B is inserted into the rear half portion of the take-out port K to be thereby accommodated in the rear space J of the main portion C. Here, the first lid portion 10 of the lid 4 has the left and right stoppers 17 and, therefore, has the greatest horizontal dimension (is broadest) in the rear chamber B and the main portion C. Therefore, when a portion of the rear chamber B other than the lid 4 is completely accommodated in the rear space J of the main portion C as shown in FIGS. 10, the stoppers 17 provided on the left and right sides of the first lid portion 10 of the lid 4 respectively abut against (engage with) the upper edges of the packaging container left side wall 22 and the packaging container right side wall 23 of the main portion C from above. This prevents the rear chamber B from being further inserted into the rear space J, thereby preventing the rear chamber B from being withdrawn from the rear space J through the insertion port M in the bottom of the main portion C. Thus, the rear chamber B is combined with the front chamber L so as to be accommodated in the rear space J behind the front chamber L, whereby the packaging container A is completed.

[0063] In this state, the lid 4 completely protrudes upward from the take-out port K of the main portion C. In this state, the upper edges of the rear chamber rear wall 1, the rear chamber left side wall 2, the rear chamber right side wall 3 and the rear chamber front wall 16 of the rear chamber B provided behind the front chamber L are located at the same height level as the upper edges of the packaging container front wall 20, the packaging container left side wall 22, the packaging container right side wall 23 and the packaging container rear wall 32 of the main portion C. In this state, the lower edges of the rear chamber rear wall 1, the rear chamber left side wall 2, the rear chamber right side wall 3 and the rear chamber front wall 16 are located at the same height level as the lower edges of the packaging container front wall 20, the packaging container left side wall 22, the packaging container right side wall 23, the front chamber rear wall 27 and the packaging container rear wall 32. Therefore, when the packaging container A is seen from the front side, the rear chamber B (except for the lid 4) completely overlaps with the front chamber L of the main portion C. At this time, the food units 42 contained in the rear chamber B and the food units 42 contained in the front chamber L are located at the same height level, so that upper edges of all the food units 42 are located at the same height level.

[0064] At this time, as shown in FIG. 10(b), the upper edge of the front extension plate 8 of the rear chamber front wall 16 of the rear chamber B is opposed to and spaced a predetermined distance from the engagement piece 30 of the front chamber rear wall 27 of the main portion C (more strictly, a portion around a connection between the folded engagement piece 30 and the front chamber rear wall 27). The rear space J in which the rear chamber B is accommodated has upper and lower open ends, so that the rear chamber B is vertically slidable with respect to the front chamber L (main portion C) in the rear space J. However, the upper edge of the front extension plate 8 of the rear chamber B engages with the engagement piece 30 of the front chamber L from below as will be described later, so that the upward slidable distance of the rear chamber B is limited to a predetermined distance.

[0065] The completed packaging container A is of a slidable configuration, and has an anteroposteriorly flat box shape. The front side of the paper face in FIG. 10 (a) is the front side of the packaging container A, and the rear side of the paper face in FIG. 10(a) is the rear side of the packaging container A.

It is noted that the six side views of the packaging container A are shown in FIGS. 11.

FIG. 12 illustrates a state in which the lid 4 is closed in FIG. 10(a).

[0066] In the completed packaging container A, as described above, the lid 4 is still open as shown in FIG. 10 (a), and extends upward from the upper edge of the rear chamber rear wall 1 (upper edge 1U). The lid 4 is folded forward perpendicularly to the rear chamber rear wall 1 along the upper edge 1U of the rear chamber rear wall 1. Further, the second lid portion 11 of the lid 4 is folded downward perpendicularly to the first lid portion 10 along the fist folding guide 12. Thus, the lid 4 is closed as shown in FIG. 12.

[0067] In this state, the lid 4 serves as a flap. The first lid portion 10 of the lid 4 covers the upper wall of the packaging container A, and the second lid portion 11 of the lid 4 covers the front upper portion of the packaging

container A (the upper portion of the packaging container front wall 20). Therefore, the take-out port K of the main portion C in the upper wall of the packaging container A is closed with the first lid portion 10. In other words, the first lid portion 10 defines the upper wall of the packaging container A. In this case, there is no need to provide a flap for each of the front chamber L and the rear chamber B to cover the upper wall and the front upper portion of the packaging container A, thereby reducing the number of components.

[0068] Here, the second folding guide 13 which divides the first lid portion 10 into the first piece 14 and the second piece 15 is provided in an anteroposteriorly middle portion of the first lid portion 10 (the upper wall of the packaging container A) as extending horizontally. Further, the take-out window G provided in the upper portion of the packaging container front wall 20 is closed with the second lid portion 11. Then, the distal edge 11A of the second lid portion 11 is inserted into the incision 21 of the packaging container front wall 20, whereby the second lid portion 11 is engaged with the packaging container front wall 20 so as to prevent the lid 4 from being withdrawn. Thus, the lid 4 is kept closed. The packaging container A with the lid 4 closed is like a mailing envelope.

[0069] FIGS. 13 illustrate a state in which one of the food units 42 is taken out of the main portion C, particularly, FIGS. 13(a) and 13(b) are a perspective view from the same position as in FIG. 10(a) and a sectional view from the same position as in FIG. 10 (b), respectively. FIGS. 14 illustrate a state in which one of the food units 42 is taken out of the rear chamber B, particularly, FIGS. 14 (a) and 14 (b) are a perspective view from the same position as in FIG. 13(a) and a sectional view from the same position as in FIG. 13 (b), respectively. FIG. 15 is a perspective view of the packaging container A in which the food units 42 are accommodated in the rear chamber B and the main portion C, and the rear chamber B is slid upward.

[0070] When the chewing gum pieces 40 contained in the packaging container A are to be eaten, the distal edge 11A of the second lid portion 11 is disengaged from the incision 21 of the packaging container front wall 20 to open the lid 4 as shown in FIGS. 13.

It is assumed, for example, that an eater is to sequentially eat the chewing gum pieces 40 located in the front row in the front chamber L of the packaging container A. In this case, the upper portions (the separation portions 41A of the wrapping sheets 41) of the food units 42 (chewing gum pieces 40) contained in the front chamber L are exposed forward from the take-out window G provided in the upper portion of the packaging container front wall 20 of the front chamber L (main portion C). Therefore, any one of the chewing gum pieces 40 contained in the front chamber L can be accessed from the take-out window G to be easily picked by finger tips 100. Then, the food unit 42 thus picked by the finger tips 100 is pulled up from the take-out port K of the main portion C as indicated by a bold arrow.

[0071] As shown in FIG. 13(b), the fixing portions 41B of the wrapping sheets 41 are fixed to the main portion C by the adhesive agent 46, so that the separation portion 41A and the fixing portion 41B of the wrapping sheet 41 of the food unit 42 thus picked out are separated from each other. Thus, the picked food unit 42 is further picked out of the front chamber L with the separation portion 41A combined with the wrapped chewing gum piece 40. The other food units 42 are fixed to the main portion C by the adhesive agent 46, so that these food units 42 are not displaced in the front chamber L.

[0072] The eater can eat the chewing gum piece 40, while holding a portion of the chewing gum piece 40 of the picked food unit 42 exposed from the separation portion 41A by eater's mouth.

The eater picks out the other food units 42 from the front chamber L in the same manner to eat the chewing gum pieces 40 of the respective food units 42.

Where the wrapping sheet not formed with the perforation line 43 is used as the wrapping sheet 41, or where the chewing gum pieces 40 are each individually wrapped with a transparent film 51 or a plastic case 52 according to a modification to be described later (to be described with reference to FIGS. 18), the entire food unit 42 thus individually wrapped can be picked out, while the wrapping sheet, the transparent film 51 or the case 52 is entirely disconnected from the adhesive agent 46.

[0073] After all the food units 42 are picked out of the front chamber L, as shown in FIGS. 14, only the rear chamber B is pulled up (for example, by holding the lid 4). Alternatively, the rear chamber bottom wall 5 exposed from the insertion port M of the main portion C (see FIG. 14(b)) may be pushed up. In either of these ways, the rear chamber B is slid upward with respect to the front chamber L (main portion C). When the upper edge of the front extension plate 8 of the rear chamber front wall 16 of the rear chamber B is engaged with the engagement piece 30 of the front chamber rear wall 27 of the main portion C (more strictly, the connection portion between the folded engagement piece 30 and the front chamber rear wall 27) from below as shown in FIG. 14(b), the rear chamber B is prevented from being moved further upward with respect to the front chamber L. The rear chamber B is thus combined with the front chamber L, so that the front extension plate 8 can be slid upward by the predetermined distance Z to be brought into engagement with the engagement piece 30. By sliding the rear chamber B upward by the predetermined distance Z, the rear chamber B and the front chamber L are located in offset relation.

[0074] With the rear chamber B thus slid upward, an upper portion of the rear chamber B excluding the lid 4 projects upward from the take-out port K of the main portion C. Therefore, the upper portions of the food units 42 in the rear chamber B also project upward from the take-out port K of the main portion C.

Since the upper portions of the food units 42 (the separation portions 41A of the packaging sheets 41) are ex-

posed forward from the take-out window D provided in the upper portion of the rear chamber B, the food units 42 (chewing gum pieces 40) contained in the rear chamber B can be accessed from the take-out window D to be easily picked by the finger tips 100. In turn, the food unit 42 thus picked by the finger tips 100 is pulled up from the take-out port F of the rear chamber B as indicated by a bold arrow. As shown in FIG. 14(b), the fixing portions 41B of the wrapping sheets 41 are fixed to the rear chamber B by the adhesive agent 45, so that the separation portion 41A and the fixing portion 41B of the wrapping sheet 41 of the picked food unit 42 are separated from each other. Thus, the picked food unit 42 is further picked out of the rear chamber B with the separation portion 41A combined with the wrapped chewing gum piece 40. The other food units 42 are fixed to the rear chamber B by the adhesive agent 45, so that these food units 42 are not displaced in the rear chamber B.

[0075] The eater can eat the chewing gum piece 40, while holding a portion of the chewing gum piece 40 exposed from the separation portion 41A of the picked food unit 42 by eater's mouth.

The eater picks out the other food units 42 from the rear chamber B in the same manner to eat the chewing gum pieces 40 of the respective food units 42. If some of the food units 42 remain in the rear chamber B, the rear chamber B may be slid downward by the predetermined distance Z. Thus, the rear chamber B (except for the lid 4) is completely accommodated in the rear space J of the main portion C (see FIGS. 10). At this time, the left and right stoppers 17 of the first lid portion 10 of the lid 4 respectively abut against the packaging container left side wall 22 and the packaging container right side wall 23 of the main portion C from above. Thus, the rear chamber B accommodated in the rear space J is prevented from being withdrawn from the insertion port M provided in the bottom of the main portion C.

[0076] As described above, the rear chamber B is combined with the front chamber L so as to be slidable upward with respect to the front chamber L by the predetermined distance Z. Therefore, the chewing gum pieces 40 contained in the rear row (rear chamber B) can be located at a higher height level than the chewing gum pieces 40 contained in the front row (front chamber L) (see FIG. 15) by sliding the rear chamber B upward with respect to the front chamber L as required without preliminarily providing a raised bottom portion in the rear portion of the packaging container A to locate the rear row chewing gum pieces 40 at a higher height level than the front row chewing gum pieces 40. This obviates the need for providing the raised bottom portion, thereby achieving the size reduction of the packaging container A.

[0077] If the eater is to eat the chewing gum pieces 40 contained in the rear row, the rear chamber B is slid upward with respect to the front chamber L, whereby the eater can easily pick out any of the rear row chewing gum pieces 40 located at a higher height level than the front row chewing gum pieces 40.

That is, the packaging container A satisfies the requirements for the compactness of the container and the pick-out easiness for picking out each of the food pieces (chewing gum pieces 40) contained in a plurality of rows in anteroposteriorly overlapping relation.

[0078] The eating order described above is given by way of example. Alternatively, the chewing gum pieces 40 of the food units 42 contained in the rear chamber B may be first eaten with the rear chamber B slid upward before the food units 42 contained in the front chamber L are taken out as shown in FIG. 15.

If not all the chewing gum pieces 40 are eaten, the lid 4 is closed with some of the chewing gum pieces 40 of the food units 42 left in the front chamber L and the rear chamber B (see FIG. 12).

[0079] FIG. 16 is a perspective view illustrating a state in which the band portion 29 of the main portion C is torn off. FIG. 17 is a perspective view of the rear chamber B in the complete state with the lid 4 closed.

Where all the chewing gum pieces 40 contained in the front chamber L are eaten up with the food units 42 remaining in the rear chamber B, the band portion 29 of the packaging container rear wall 32 of the main portion C is torn off as shown in FIG. 16. Then, the packaging container rear wall 32 is divided into the left portion and the right portion, so that only the rear chamber B can be taken out of the rear space J through a space between the left portion and the right portion of the packaging container rear wall 32.

[0080] The rear chamber B is thus decombined from the main portion C (front chamber L) to thereby provide an independently usable package. Therefore, where the front chamber L becomes a dead space after all the chewing gum pieces 40 contained in the front chamber L are eaten up (see FIG. 14), the rear chamber B is separated from the front chamber L. Thus, the rear chamber B which has a thickness approximately half the thickness of the original packaging container A can be compactly carried with the remaining chewing gum pieces 40 contained therein. That is, after some of the chewing gum pieces 40 are eaten, a part of the packaging container A having a reduced size (reduced thickness) can be conveniently used.

[0081] If the chewing gum pieces 40 of the food units 42 contained in the rear chamber B are not to be eaten, a crease formed along the first folding guide 12 of the lid 4 (see FIG. 12) is removed. That is, a crease present between the second piece 15 defining the front portion of the first lid portion 10 (the upper wall of the packaging container A) and the second lid portion 11 defining the flap of the packaging container A is removed. Thus, the first lid portion 10 and the second lid portion 11 become flush with each other.

[0082] In turn, the second piece 15 and the second lid portion 11 are folded forward and downward perpendicularly to the first piece 14 (along the second folding guide 13) to form a crease along the second folding guide 13. Thus, the lid 4 is closed as shown in FIG. 17. In this state,

the first piece 14 defining the rear portion of the first lid portion 10 of the lid 4 serves as an upper wall of the rear chamber B, while the second piece 15 and the second lid portion 11 function as a flap covering a front portion of the rear chamber B.

[0083] Where the rear chamber B is combined with the front chamber L, the lid 4 of the rear chamber B serves as the flap of the entire packaging container A (see FIG. 12). Where the rear chamber B is independently separated from the front chamber L, the lid 4 of the rear chamber B serves as the flap of the rear chamber B (see FIG. 17). Without the need for separately providing the flap for the entire packaging container A and the flap for the rear chamber B, the number of the components can be reduced.

[0084] Where the separate rear chamber B is closed with the lid 4, the first piece 14 of the first lid portion 10 of the lid 4 covers the upper wall of the rear chamber B, while the second piece 15 and the second lid portion 11 of the lid 4 cover the front upper portion of the rear chamber B (the upper portion of the rear chamber front wall 16). Therefore, the take-out port F provided in the upper wall of the rear chamber B is closed with the first piece 14, while the take-out window D provided in the upper portion of the rear chamber front wall 16 is closed with the second piece 15 and the second lid portion 11. Where the rear chamber B is independently used, the lid 4 covers the front portion and the upper portion of the rear chamber B, thereby preventing the chewing gum pieces 40 from being withdrawn forward out of the rear chamber B.

[0085] The distal edge 11A of the second lid portion 11 is inserted in the incision 9 of the rear chamber front wall 16, whereby the lid 4 is engaged with the rear chamber front wall 16 to be maintained in a closed state so as not to be withdrawn from the rear chamber front wall 16. The rear chamber B with the lid 4 closed is like a mailing envelope.

When the eater is to eat the chewing gum pieces 40 contained in the rear chamber B, the eater disengages the distal edge 11A of the second lid portion 11 from the incision 9 of the rear chamber front wall 16 to open the lid 4 as shown in FIG. 2. Then, the eater picks one of the food units 42 in the aforementioned manner to pull up the food unit 42 from the take-out port F, and eats the chewing gum piece 40 of this food unit 42.

[0086] In the embodiment described above, the strip-shaped chewing gum pieces 40 are each individually wrapped with a wrapping sheet 41 to provide the food unit 42. The food unit 42 is not limited to that prepared by wrapping (individually wrapping) the chewing gum piece with the wrapping sheet 41. For example, as shown in FIGS. 18(a) and 18(b), the food unit 42 may be prepared by covering a strip-shaped chewing gum piece 40 with transparent films 51 and then heat-sealing upper, lower, left and right peripheral portions of the transparent films 51 to provide heat-seal portions 51h to seal the chewing gum piece 40 between the transparent films 51. In this case, a slight gap may be left between the transparent films 51 and the chewing gum piece 40 when the chewing gum piece 40 is sealed. Alternatively, the chewing gum piece 40 may be sealed after the inside space is evacuated to remove the gap. In these cases, the transparent films 51 intimately contact the chewing gum piece 40, so that the chewing gum piece 40 is not exposed to the outer atmosphere. This improves the quality protection of the chewing gum piece 40.

[0087] As in the case of the wrapping with the wrapping sheet 41, the transparent films 51 may each have a perforation line or a fragile line to be divided into upper and lower portions along the line, so that the chewing gum piece 40 can be taken out with its lower portion exposed. As shown in FIG. 18 (c), the strip-shaped chewing gum piece 40 may be sealed in a plastic case 52 to provide the food unit 42.

[0088] Where the food units 42 are each prepared by sealing the chewing gum piece 40 between the transparent films 51 as shown in FIGS. 18(a) and 18(b), the strip-shaped chewing gum pieces 40 can be compactly contained upright in side-by-side relation with their laterally opposite edge portions overlapped at a predetermined pitch. Further, the appearance can be improved.

It should be understood that the present invention be not limited to the embodiment described above, but various modifications may be made within the scope of the present invention defined by the claims.

[0089] In the packaging container A, the food units 42 are accommodated in the front chamber L and the rear chamber B to be contained in the two rows, i.e., in the front and rear rows by way of example (see FIGS. 10). Alternatively, the food units 42 may be contained in three or more rows arranged anteroposteriorly with provision of a plurality of rear chambers B. In this case, the rear chambers B are pull up stepwise, so that the food units 42 can be easily picked out from the respective rear chambers B.

[0090] The front chamber L and the rear chamber B are each adapted to contain six food units 42 in side-by-side relation, but the number of the food units 42 to be contained in each of the front chamber L and the rear chamber B may be properly changed.

Referring to FIG. 7, the food units 42 are each arranged so that the wrapping sheet 41 is divided into the separation portion 41A and the fixing portion 41B when the food unit 42 is taken out of the packaging container A (see FIGS. 13 and 14), but the wrapping sheet 41 is not necessarily required to be divided. In this case, there is no need to provide the perforation line 43 in the wrapping sheet 41, and the food unit 42 is taken out of the packaging container A without the division of the wrapping sheet 41. The food units 42 are preferably temporarily (weakly) bonded to the packaging container A (the rear chamber B and the main portion C, see FIGS. 13 and 14) by the adhesive agent 45, 46, so that the food units 42 can be easily taken out of the packaging container A without breaking the wrapping sheets 41.

[0091] Further, a necessary number of food units 42

may be first bundled with bundling sheets (not shown), and then the resulting bundles of food units 42 may be respectively set in the front chamber L and the rear chamber B. In this case, the bundles of the food units 42 may be respectively bonded to the crease patterns X and Y (see FIGS. 1 and 4) before the fabrication of the front chamber L and the rear chamber B. When the front chamber L and the rear chamber B are thereafter fabricated, the bundles of the food units 42 are respectively accommodated in the front chamber L and the rear chamber B.

[0092] In order to close the lid 4, the distal edge 11A of the second lid portion 11 is inserted into the incision 9, 21 (see FIGS. 12 and 17) not by way of limitation, but a chevron-shaped incision provided in a center portion of the second lid portion 11 or in a portion of the second lid portion 11 adjacent to the distal edge 11A may be engaged with the incision 9, 21.

In order to combine the rear chamber B with the main portion C (front chamber L) (for the production of the packaging container A), the rear chamber B may be first accommodated in the rear space J to be combined with the main portion C without bonding the left extension plate 25 and the right extension plate 26 of the main portion C to each other. Then, the packaging container A may be completed by bonding the left extension plate 25 and the right extension plate 26 together (see FIG. 9).

[0093] In this embodiment, the chewing gum pieces are employed as the strips to be contained in the packaging container A, but other examples of the strips include chocolate strips and candy strips.

REFERENCE SIGNS LIST

[0094]

1: REAR CHAMBER REAR WALL
1L: LEFT EDGE
1R: RIGHT EDGE
1U: UPPER EDGE
1D: LOWER EDGE
2: REAR CHAMBER LEFT SIDE WALL
2L: LEFT EDGE
3: REAR CHAMBER RIGHT SIDE WALL
3R: RIGHT EDGE
4: LID
5: REAR CHAMBER BOTTOM WALL
5D: LOWER EDGE
6: LEFT EXTENSION PIECE
6A: J-SHAPED EDGE
7: RIGHT EXTENSION PIECE
7A: J-SHAPED EDGE
8: FRONT EXTENSION PLATE
9: INCISION
10: FIRST LID PORTION
11: SECOND LID PORTION
11A: DISTAL EDGE
12: FIRST FOLDING GUIDE
13: SECOND FOLDING GUIDE
14: FIRST PIECE
15: SECOND PIECE
16: REAR CHAMBER FRONT WALL
17: STOPPER
20: PACKAGING CONTAINER FRONT WALL
20L: LEFT EDGE
20R: RIGHT EDGE
20D: LOWER EDGE
21: INCISION
22: PACKAGING CONTAINER LEFT SIDE WALL
22L: LEFT EDGE
23: PACKAGING CONTAINER RIGHT SIDE WALL
23R: RIGHT EDGE
24: FRONT CHAMBER BOTTOM WALL
24D: LOWER EDGE
25: LEFT EXTENSION PLATE
26: RIGHT EXTENSION PLATE
27: FRONT CHAMBER REAR WALL
27A: DISTAL EDGE
28: PERFORATION LINE
29: BAND PORTION
30: ENGAGEMENT PIECE
31: PERFORATION LINE
32: PACKAGING CONTAINER REAR WALL
40: STRIP
41: WRAPPING SHEET
41A: SEPARATION PORTION
41B: FIXING PORTION
42: FOOD UNIT
43: PERFORATION LINE
45: ADHESIVE AGENT
46: ADHESIVE AGENT
51: TRANSPARENT FILM
51h: HEAT SEAL
52: PLASTIC CASE
100: FINGER TIP
A: PACKAGING CONTAINER
B: REAR CHAMBER
C: MAIN PORTION
D: TAKE-OUT WINDOW
E: ACCOMMODATION SPACE
F: TAKE-OUT PORT
G: TAKE-OUT WINDOW
H: ACCOMMODATION SPACE
I: FRONT SPACE
J: REAR SPACE
K: TAKE-OUT PORT
L: FRONT CHAMBER
M: INSERTION PORT
X: CREASE PATTERN
Y: CREASE PATTERN
Z: PREDETERMINED DISTANCE

Claims

1. A packaging container of paper having a slidable configuration for containing elongated food strips,

the packaging container comprising:

a front chamber adapted to contain elongated food strips upright in side-by-side relation; and
a rear chamber provided behind the front chamber and adapted to contain elongated food strips upright in side-by-side relation;
wherein the rear chamber is combined with the front chamber so as to be slidable upward with respect to the front chamber.

2. The packaging container according to claim 1, wherein the rear chamber is decombined from the front chamber to provide an independently usable package.

3. The packaging container according to claim 2, wherein the rear chamber has a rear chamber front wall, rear chamber left and right side walls, a rear chamber bottom wall and a rear chamber rear wall, and has a take-out window provided in the rear chamber front wall as a cut-out portion extending downward from an upper edge of the rear chamber front wall for exposing upper portions of the strips contained in the rear chamber forward, and an extension portion which defines a flap extending upward from an upper edge of the rear chamber rear wall and folded forward and downward to cover an upper wall and a front upper portion of the packaging container.

4. The packaging container according to claim 3,
wherein a portion of the extension portion defining the upper wall of the packaging container includes a second folding guide provided in an anteroposteriorly middle portion of the upper wall as extending horizontally,
wherein, when the rear chamber is independently used, the extension portion is folded along the second folding guide, whereby a rear portion of the upper wall serves as an upper wall of the rear chamber, and a front portion of the upper wall and the flap cooperatively function as a flap covering a front portion of the rear chamber with a crease therebetween removed.

5. The packaging container according to claim 3 or 4,
wherein the front chamber includes a packaging container front wall, packaging container left and right side walls, a packaging container rear wall, a front chamber bottom wall and a partition wall disposed within the packaging container to serve as a front chamber rear wall,
wherein the front chamber has a take-out window provided in an upper portion of the packaging container front wall as a cut-out portion extending from an upper edge of the packaging container front wall for exposing upper portions of the strips contained in the front chamber forward.

6. The packaging container according to claim 5, wherein the partition wall has a smaller height than the packaging container rear wall, and has an engagement piece provided at least in a middle portion of an upper edge thereof and folded rearward.

7. The packaging container according to claim 6, wherein the rear chamber is combined with the front chamber so as to be accommodated in a space located behind the front chamber between the partition wall of the front chamber and the packaging container rear wall and having upper and lower open ends.

8. The packaging container according to claim 7,
wherein the extension portion has stoppers provided on laterally opposite sides thereof,
wherein the stoppers are engaged with upper edges of the packaging container left and right side walls to prevent the rear chamber from being withdrawn from the space.

9. The packaging container according to claim 7 or 8, wherein the engagement piece is engaged with an upper edge of the rear chamber front wall to prevent the rear chamber from moving further upward with respect to the front chamber.

10. The packaging container according to claim 9, wherein the packaging container rear wall has a band portion extending vertically for dividing the packaging container rear wall into left and right portions.

11. A multi-chamber packaging container of paper having a slidable N-chamber configuration (wherein N is a positive integer not less than 2) for containing elongated food strips, the packaging container comprising:

a first chamber adapted to contain elongated food strips upright in side-by-side relation,; and
second to N-th chambers provided behind the first chamber and each adapted to contain elongated food strips upright in side-by-side relation;
wherein the N-th chamber is combined with the (N-1) -th chamber so as to be slidable upward with respect to the (N-1)-th chamber.

12. A packaged confectionery product comprising:

a packaging container according to any one of claims 1 to 11; and
a plurality of elongated confectionery strips such as of chewing gum, chocolate or candy individually wrapped with wrapping sheets and accommodated in a food containing chamber of the

packaging container;
wherein parts of outer surfaces of the individual wrapping sheets are bonded to an interior surface of the food containing chamber by bonding means for maintaining the individually wrapped confectionery strips in an accommodated state.

FIG. 1

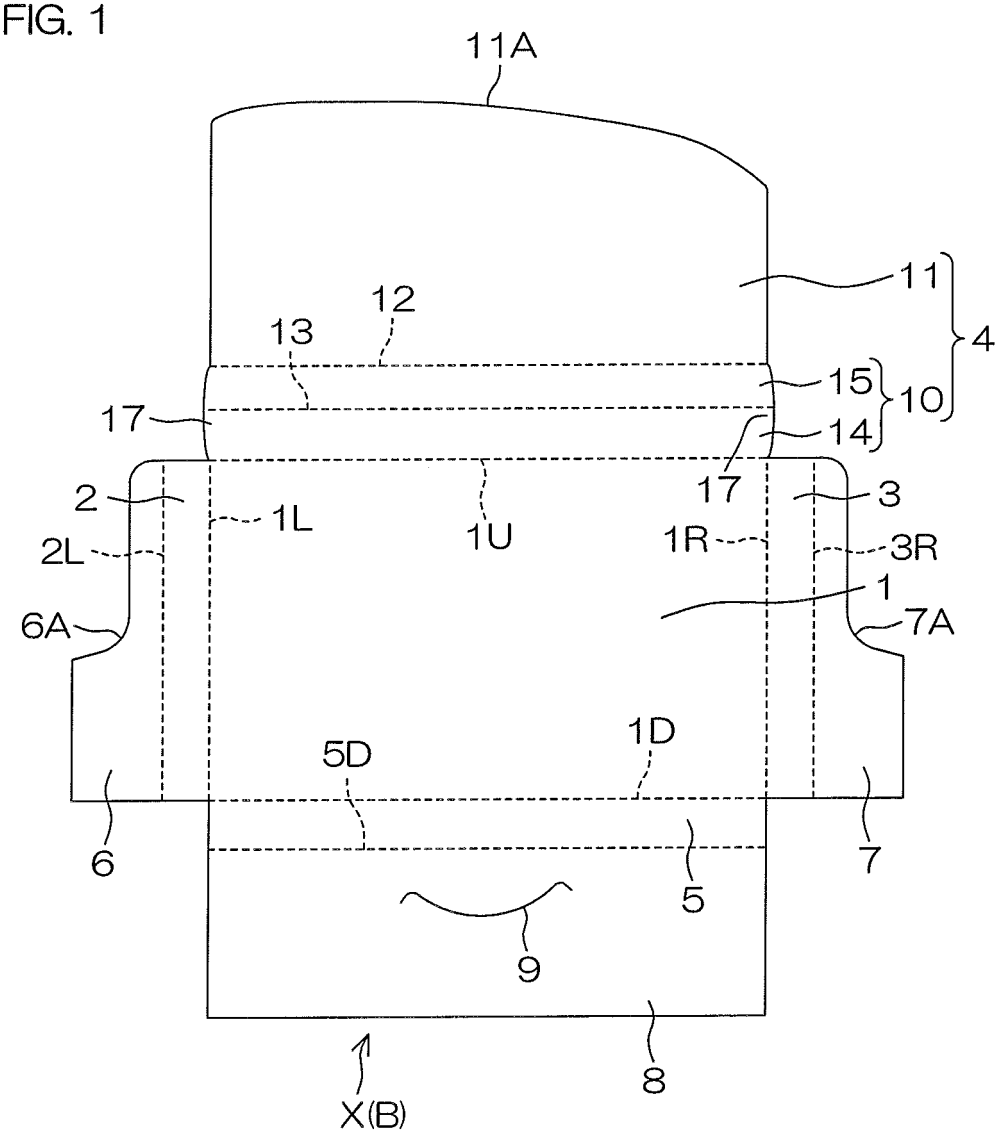
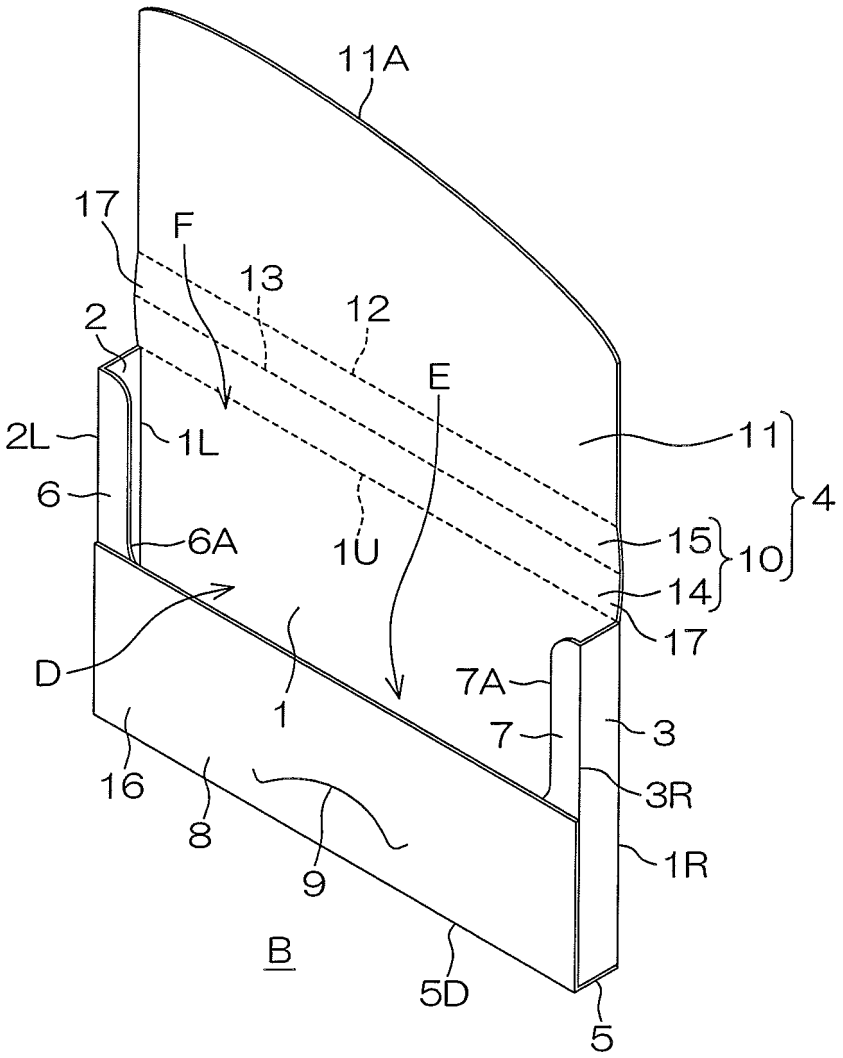


FIG. 2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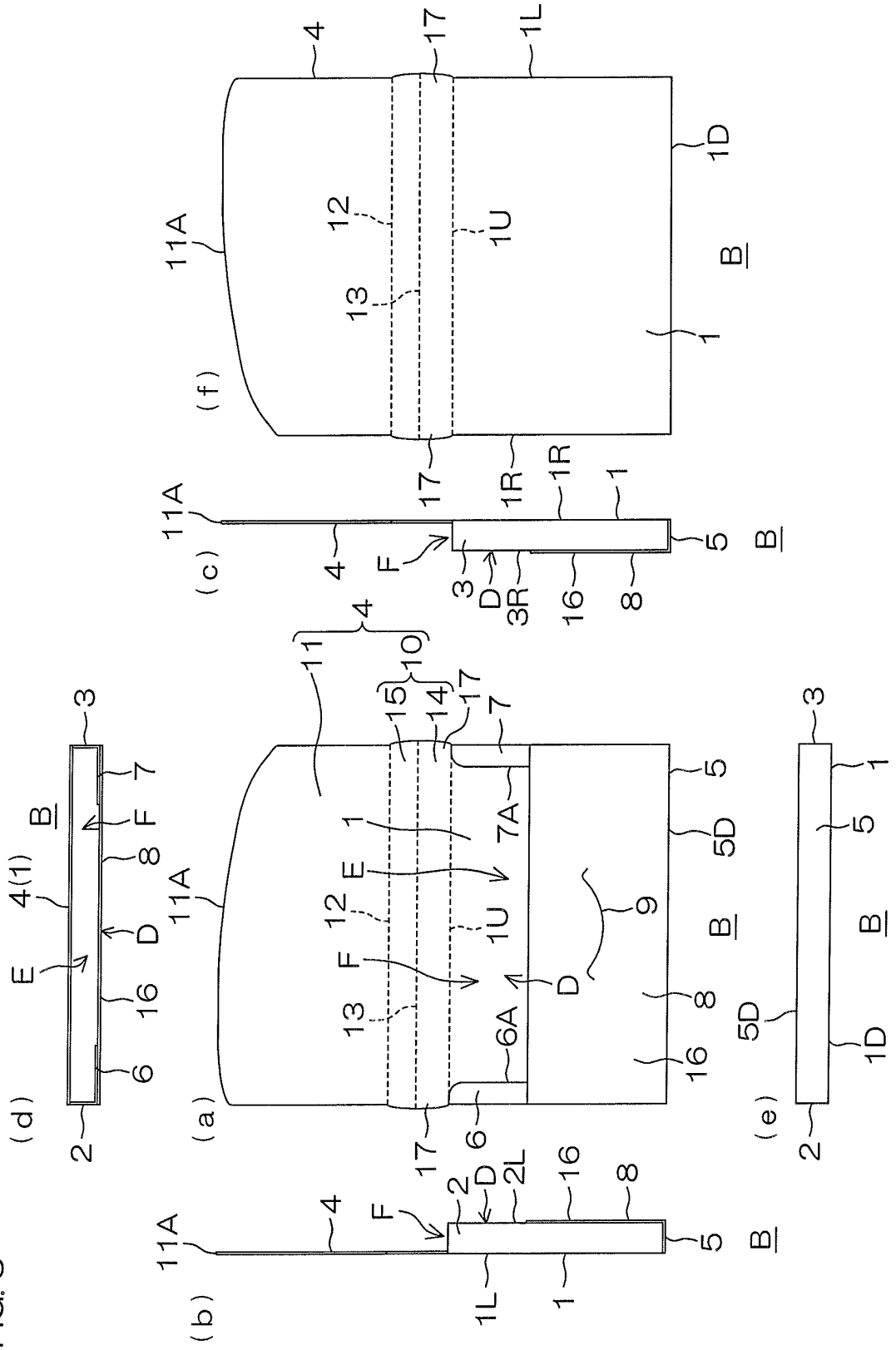
7A
7
3
16
8
9
3R
1R
B
5D
5

FIG. 3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B
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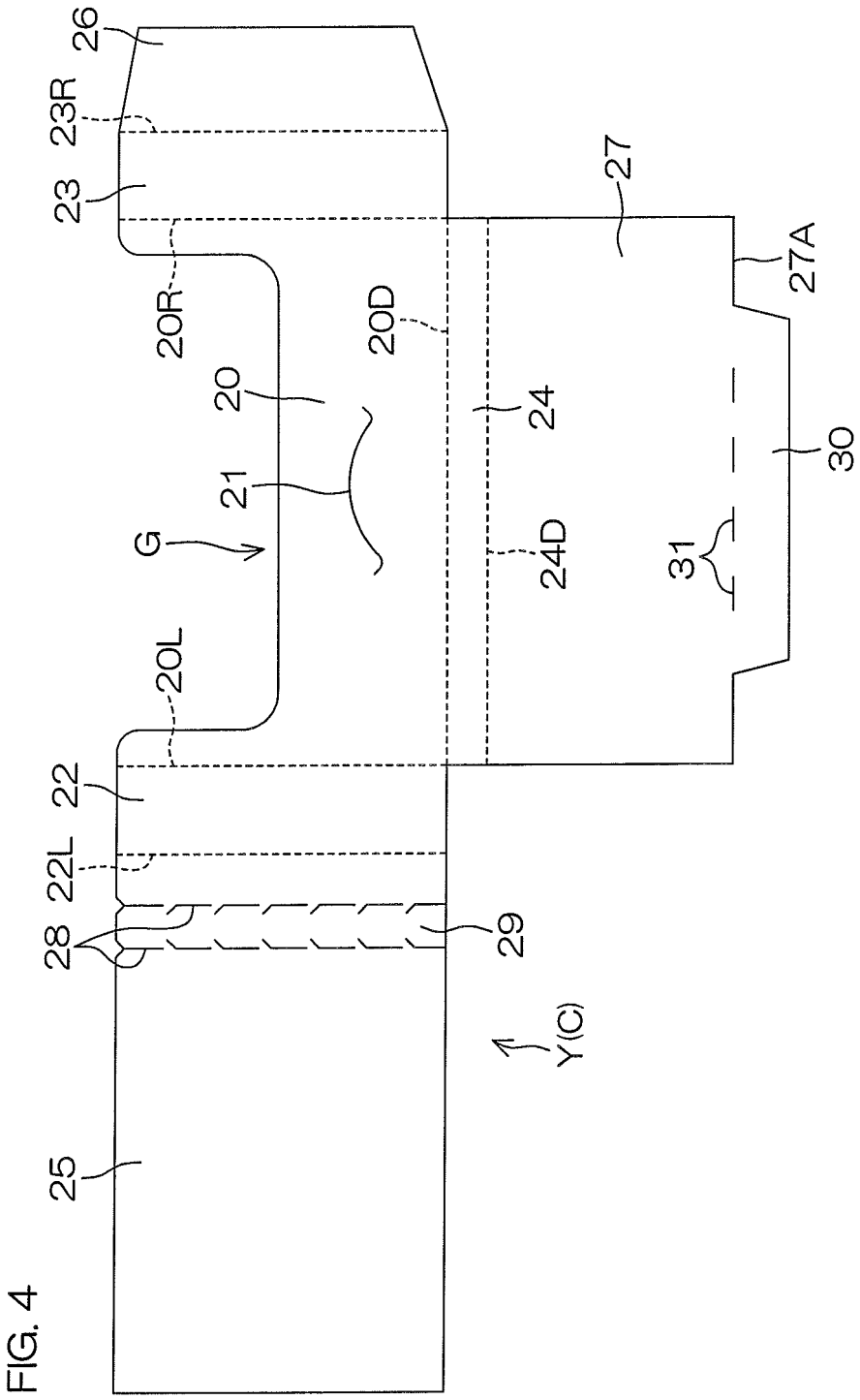
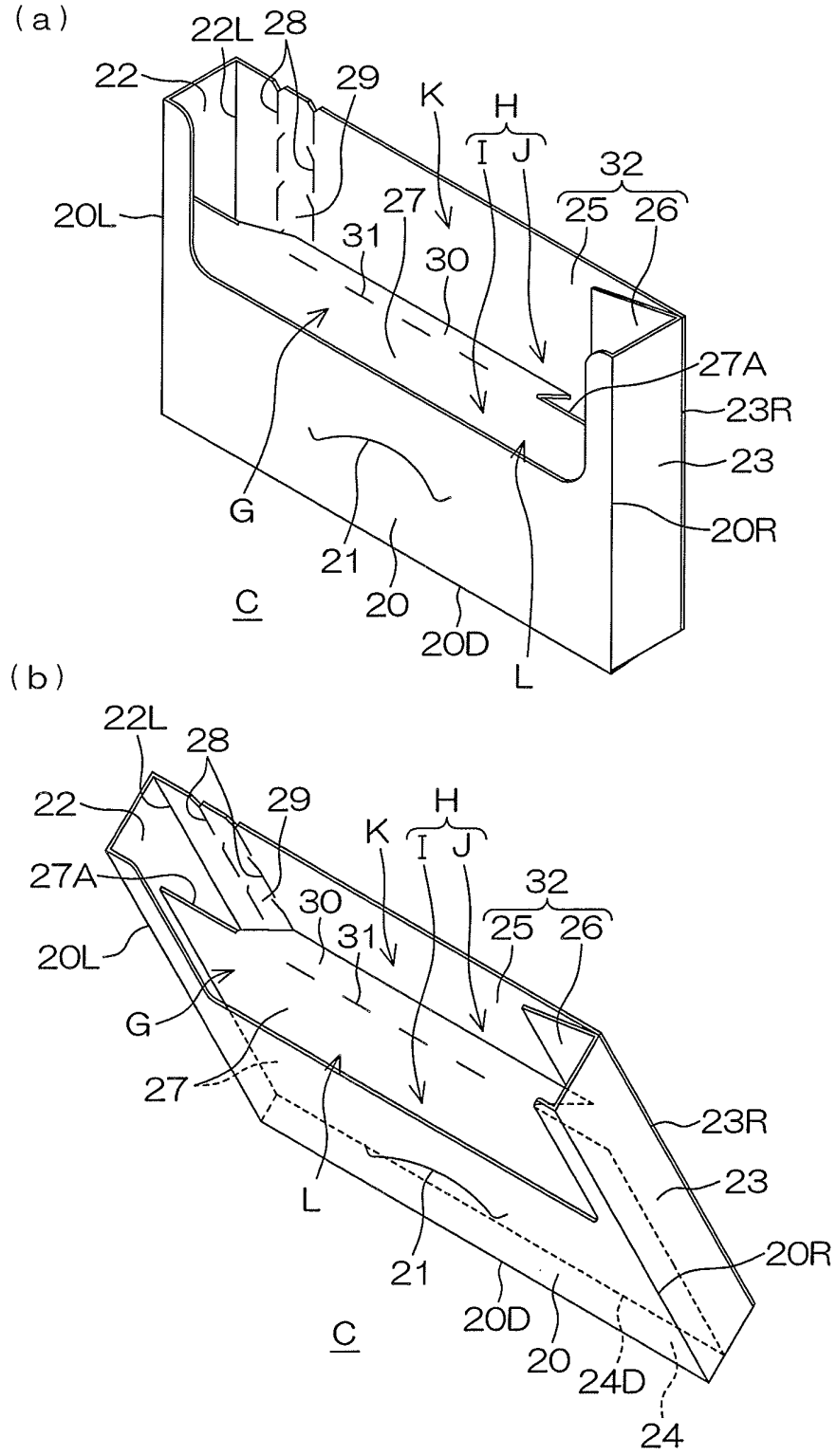


FIG. 4

FIG. 5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G
20R
21
C
20
20D
L
(b)
22L
28
22
29
K
H
I
J
32
25
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20D
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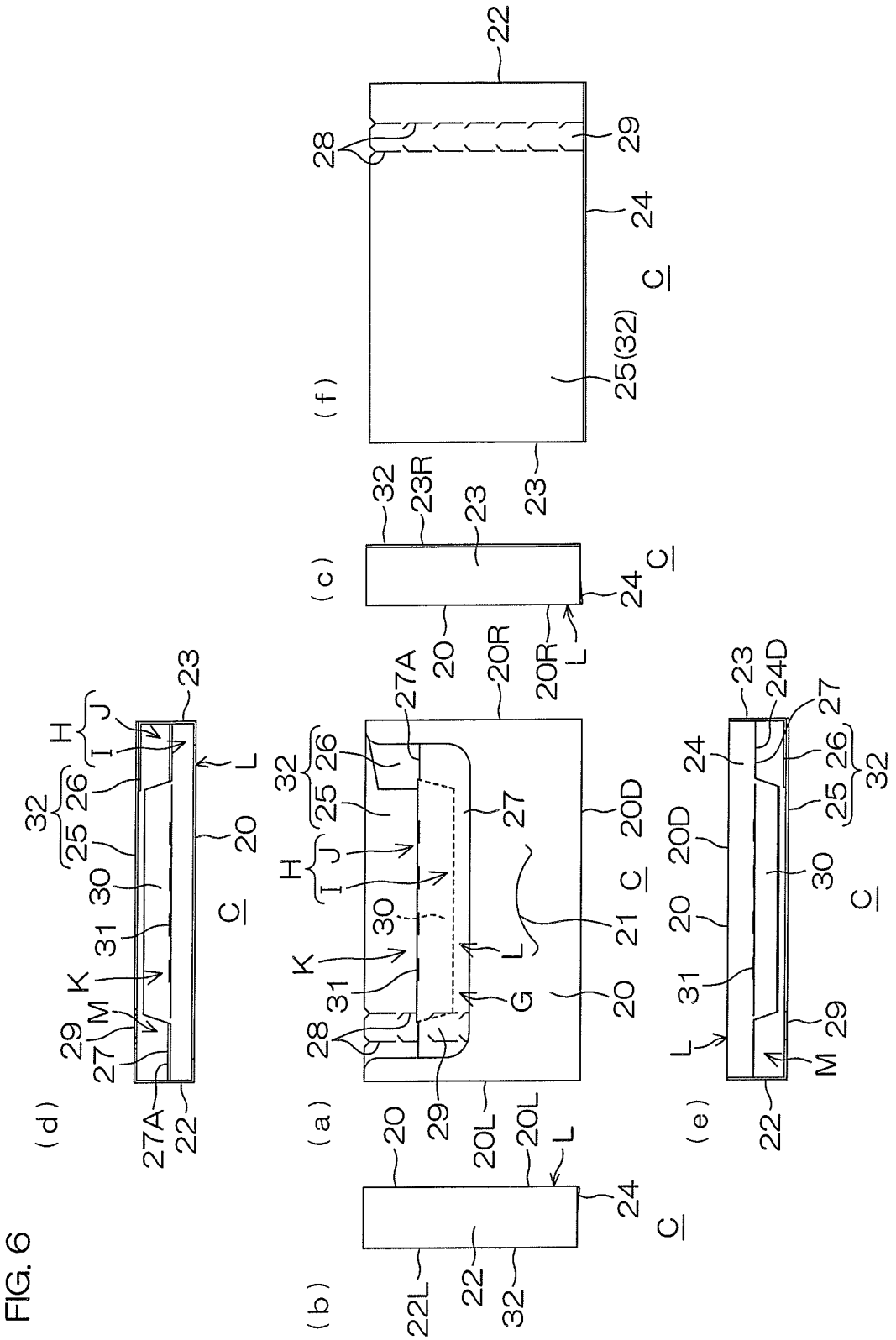
20
24D
24

FIG. 6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20R
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27A
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31
32

FIG. 7

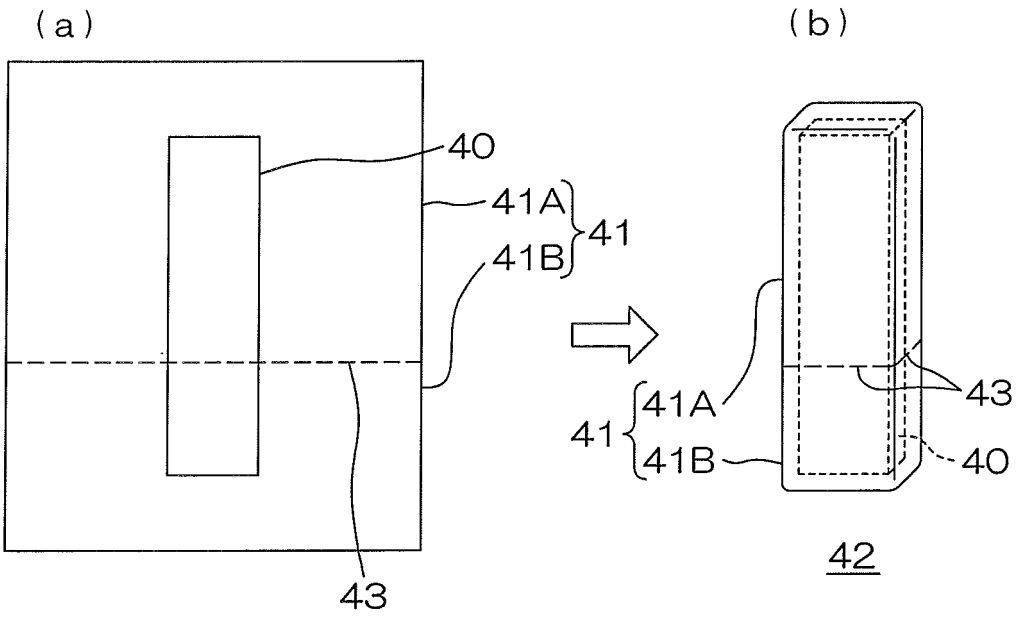
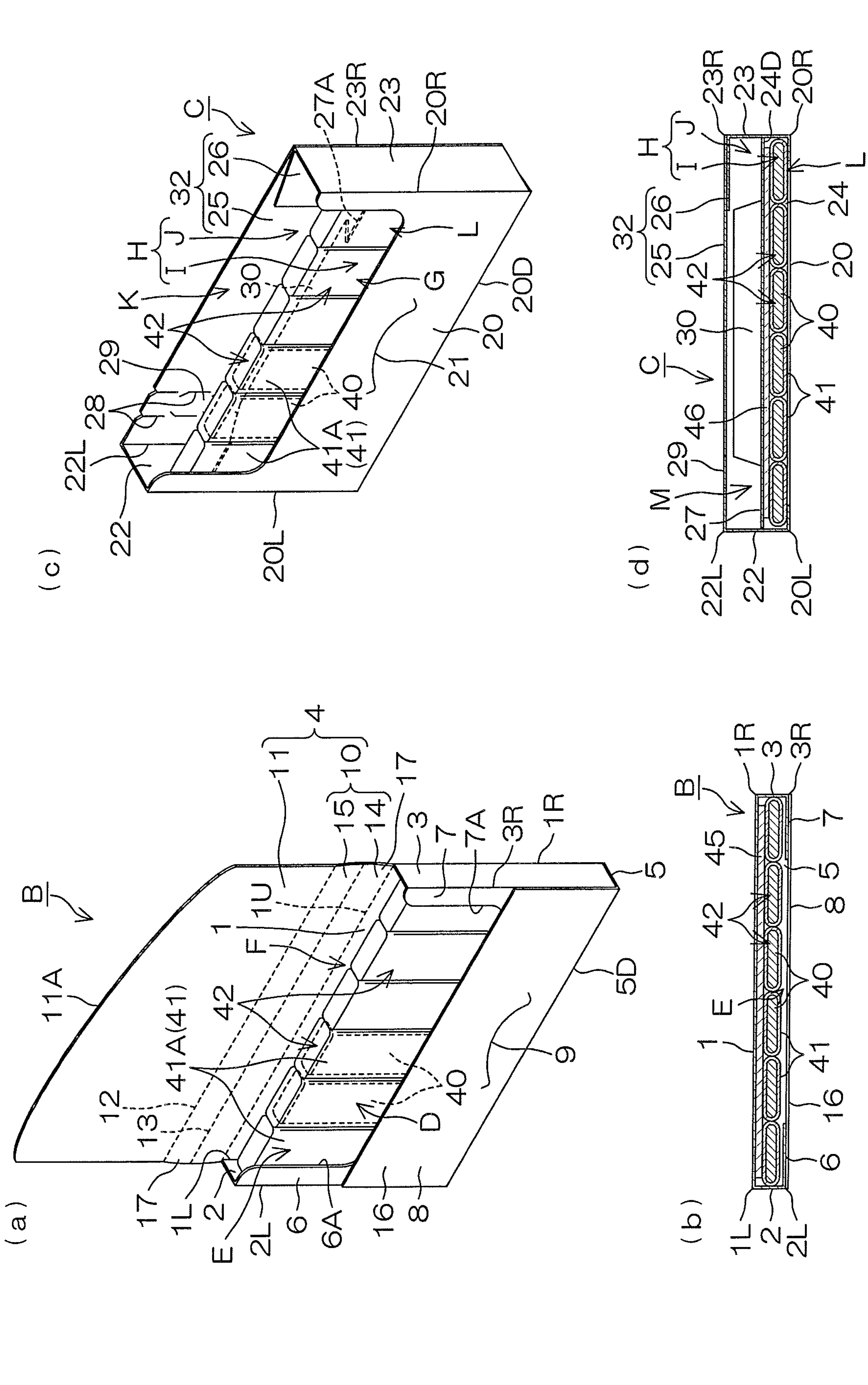


FIG. 8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3
7
7A
3R
1R
5
5D
9
F
42
41A(41)
12
13
40
D
17
1L
2
2L
6
6A
16
8
E
(b)
B
1R
3
3R
7
45
5
8
42
40
E
1
41
16
6
1L
2
2L
(c)
C
26
25
32
27A
23R
23
20R
H
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J
K
L
G
30
42
29
28
22L
22
41A
(41)
40
21
20
20D
20L
(d)
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20R
H
J
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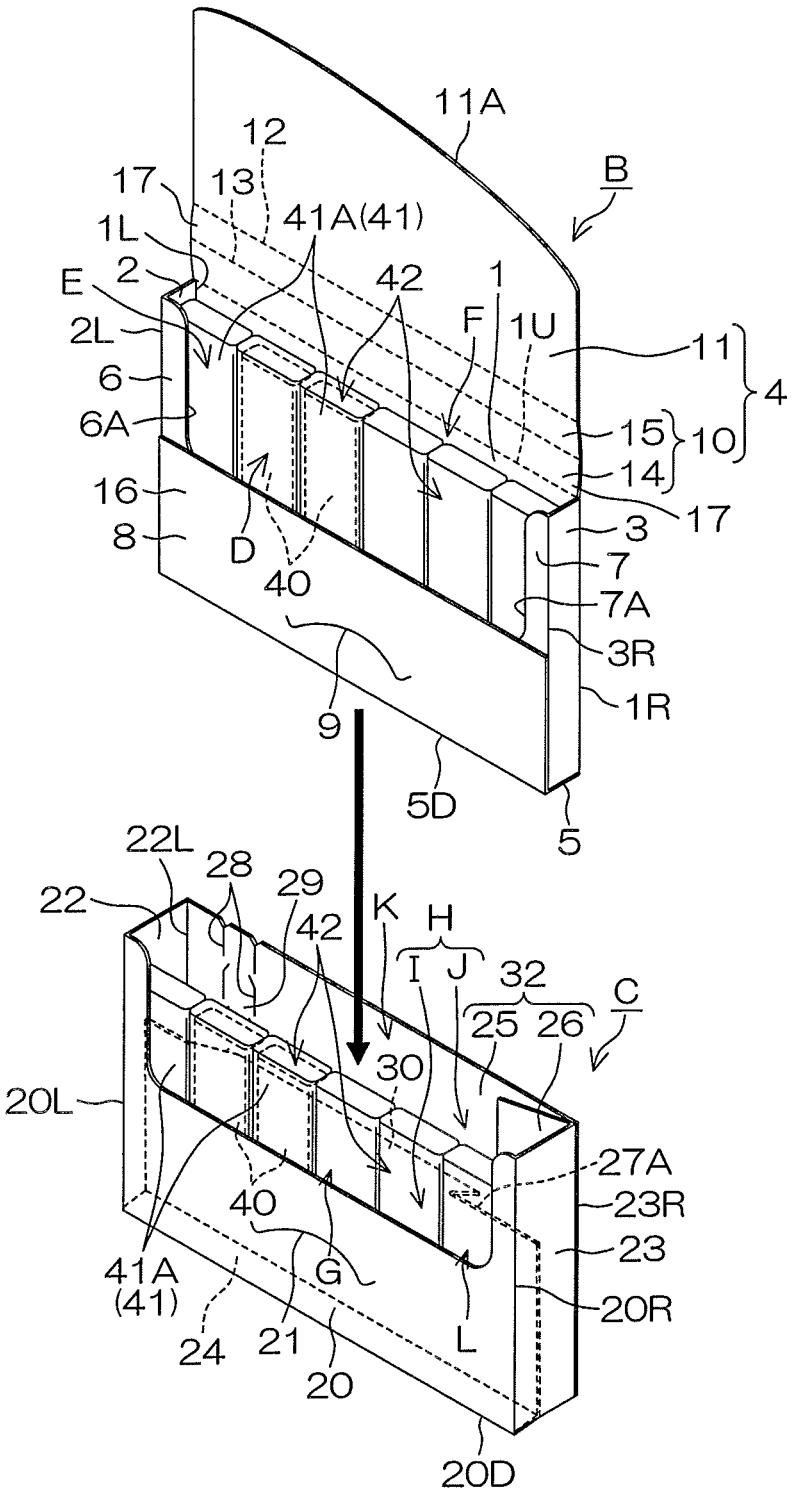
22L
22
20L

FIG. 9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6A
14
16
17
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40
7
7A
3R
9
1R
5D
5
22L
28
29
22
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K
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I
J
32
C
25
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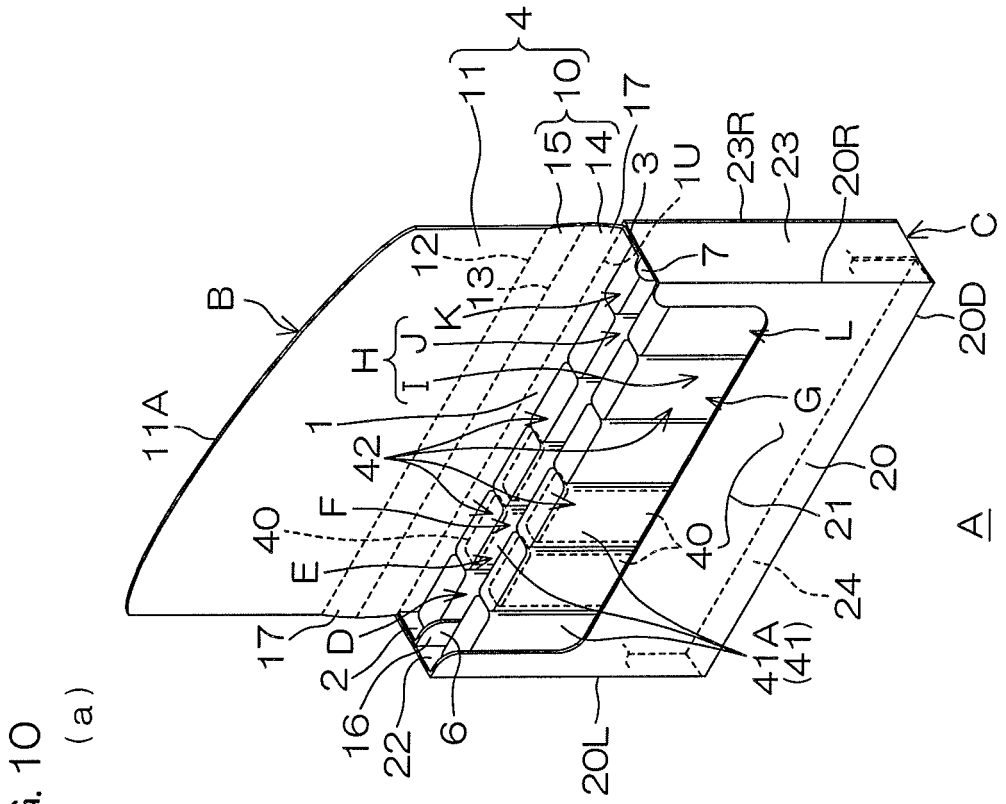
FIG. 10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K
L
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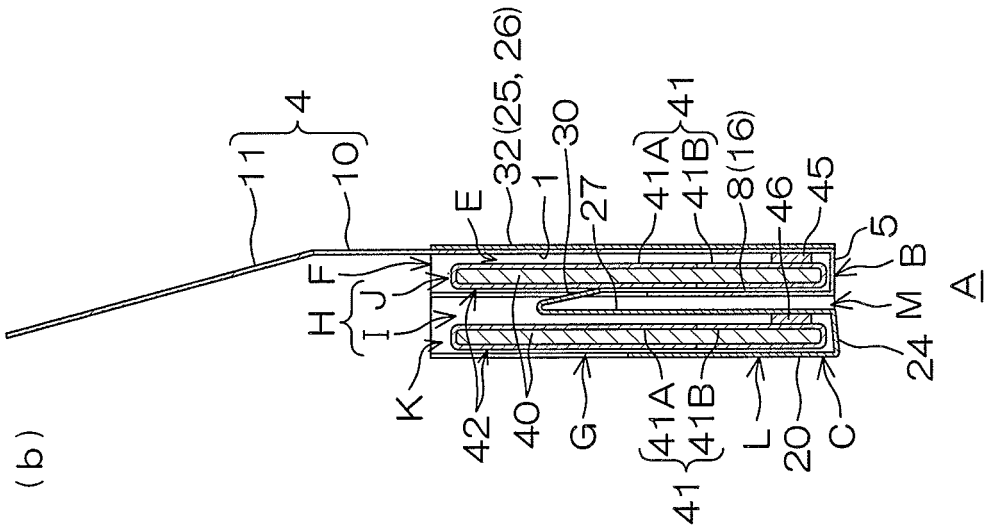
(41)
A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32(25, 26)
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41A
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41
8(16)
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45
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B
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L
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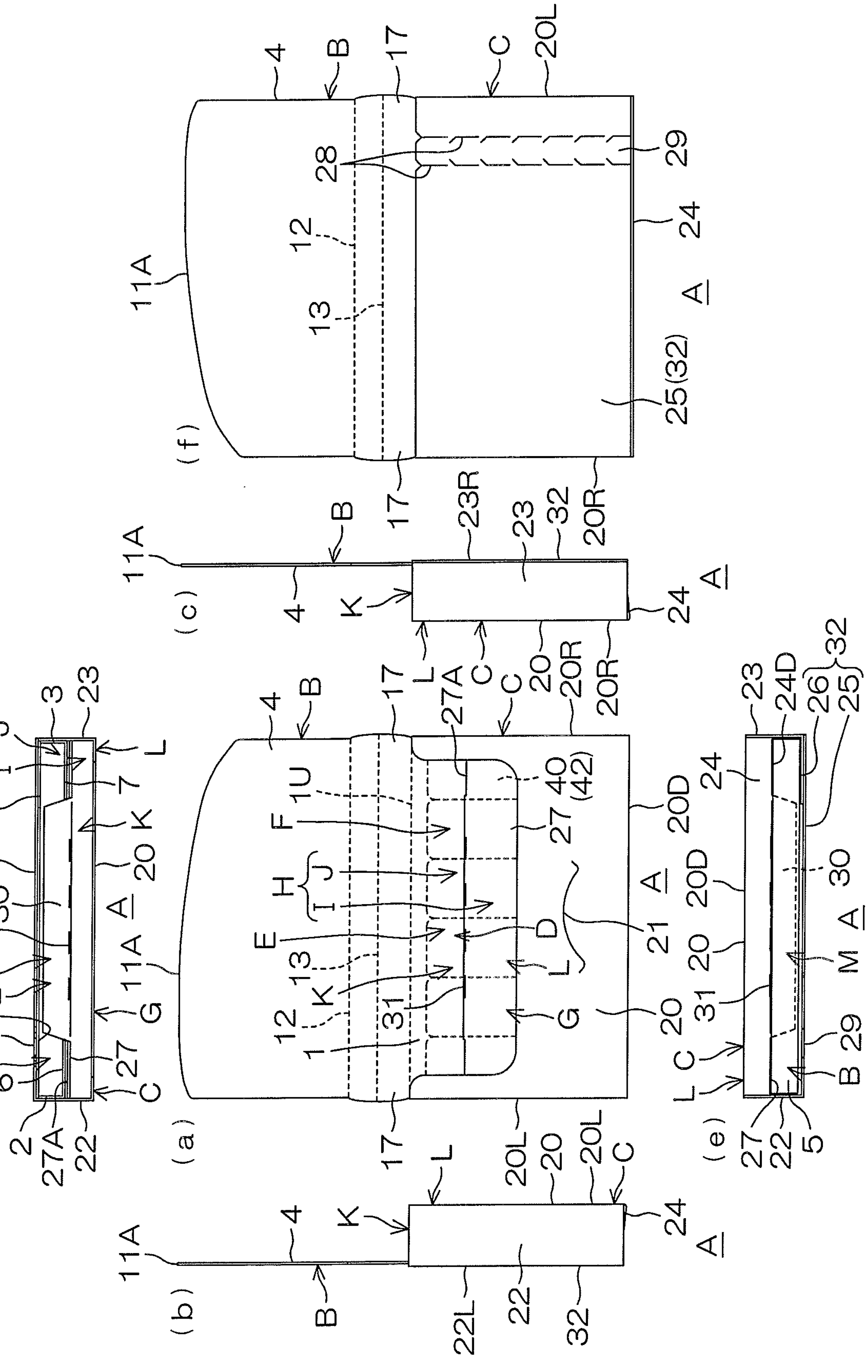
C
24

FIG. 11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25(32)
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23R
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K
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24D
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20D
27A
1U
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22L
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FIG. 12

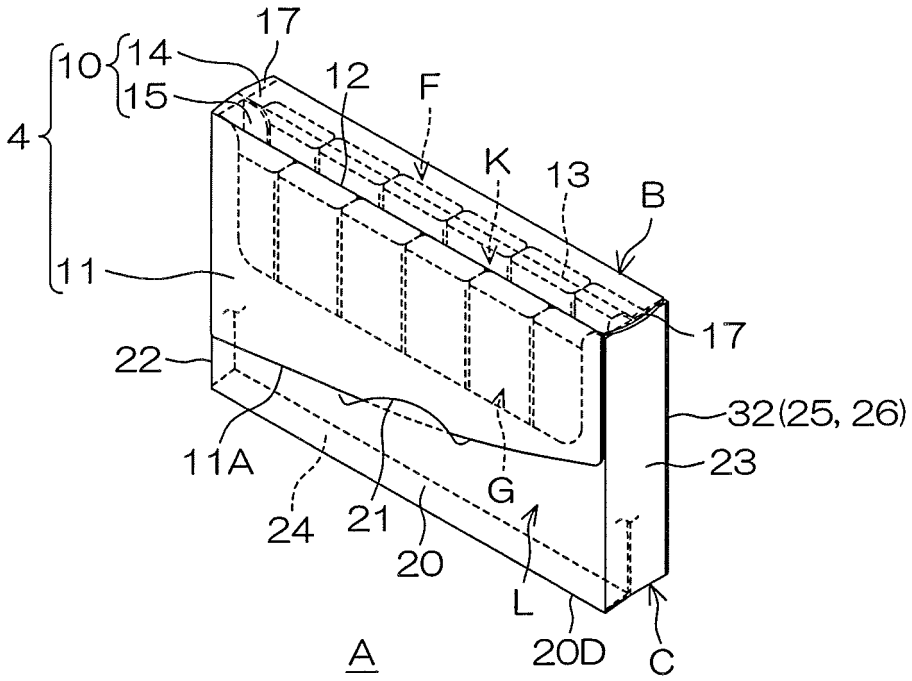
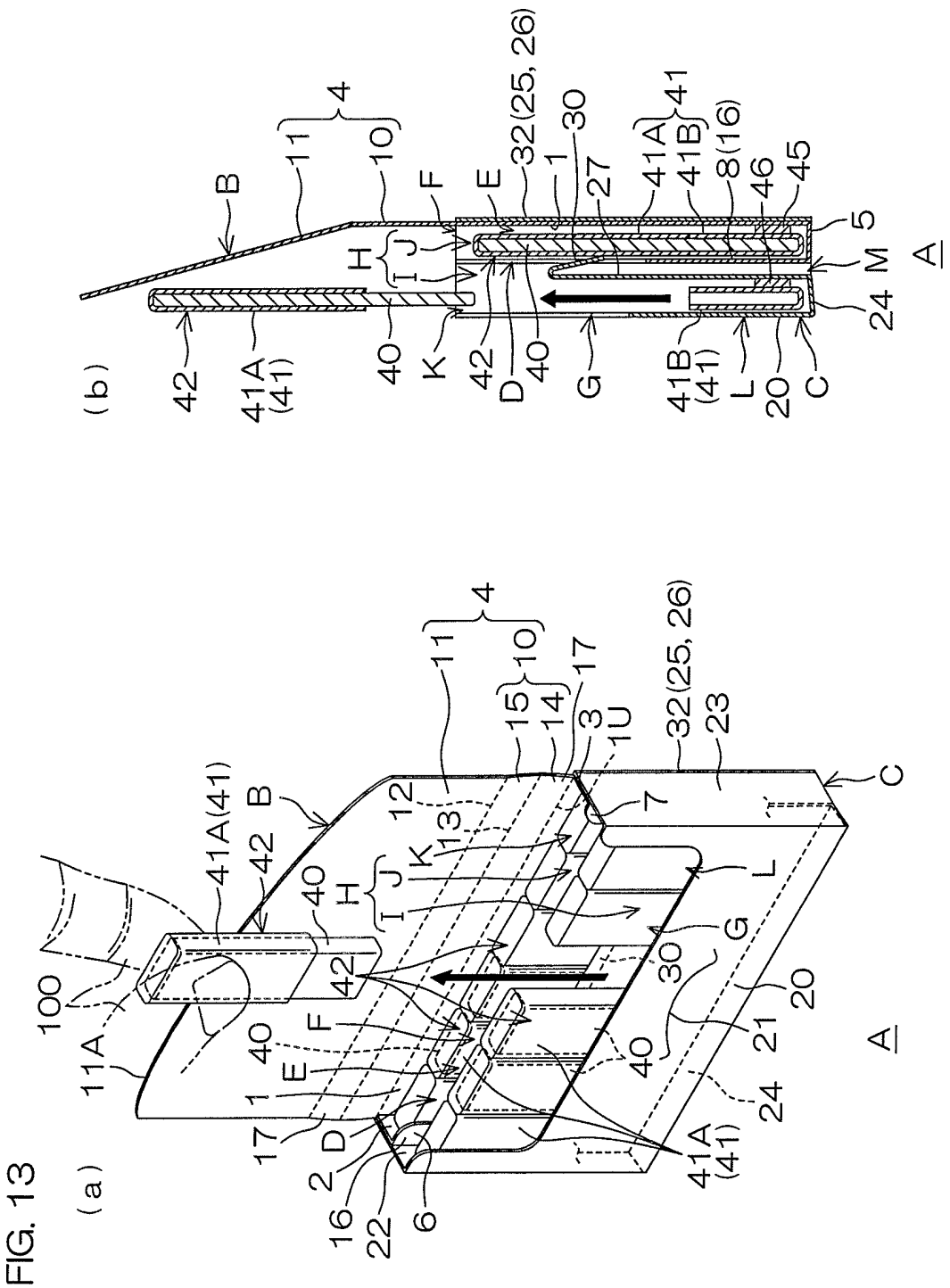


FIG. 13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8(16)
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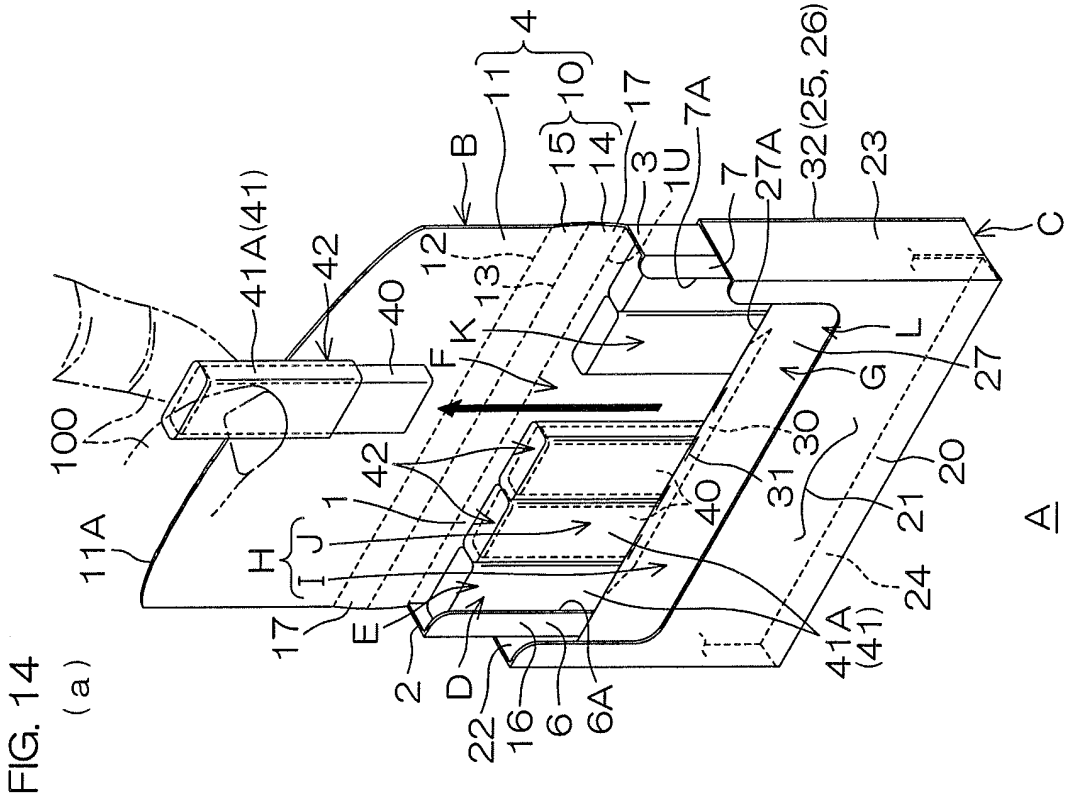
100
1U

FIG. 14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6A
A

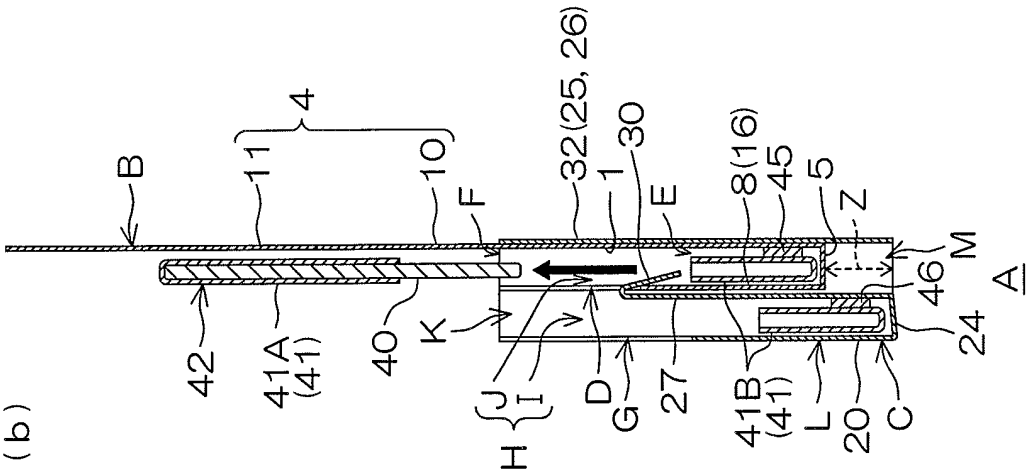
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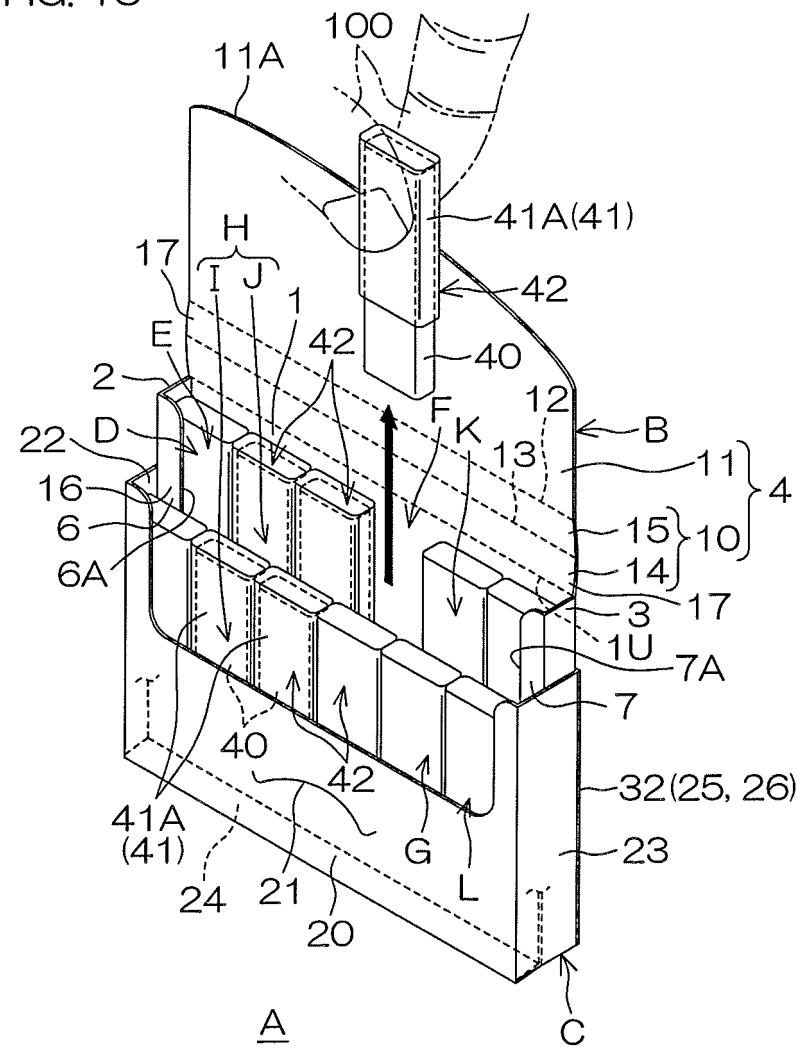
FIG. 15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10
6A
14
17
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A
C

FIG. 16

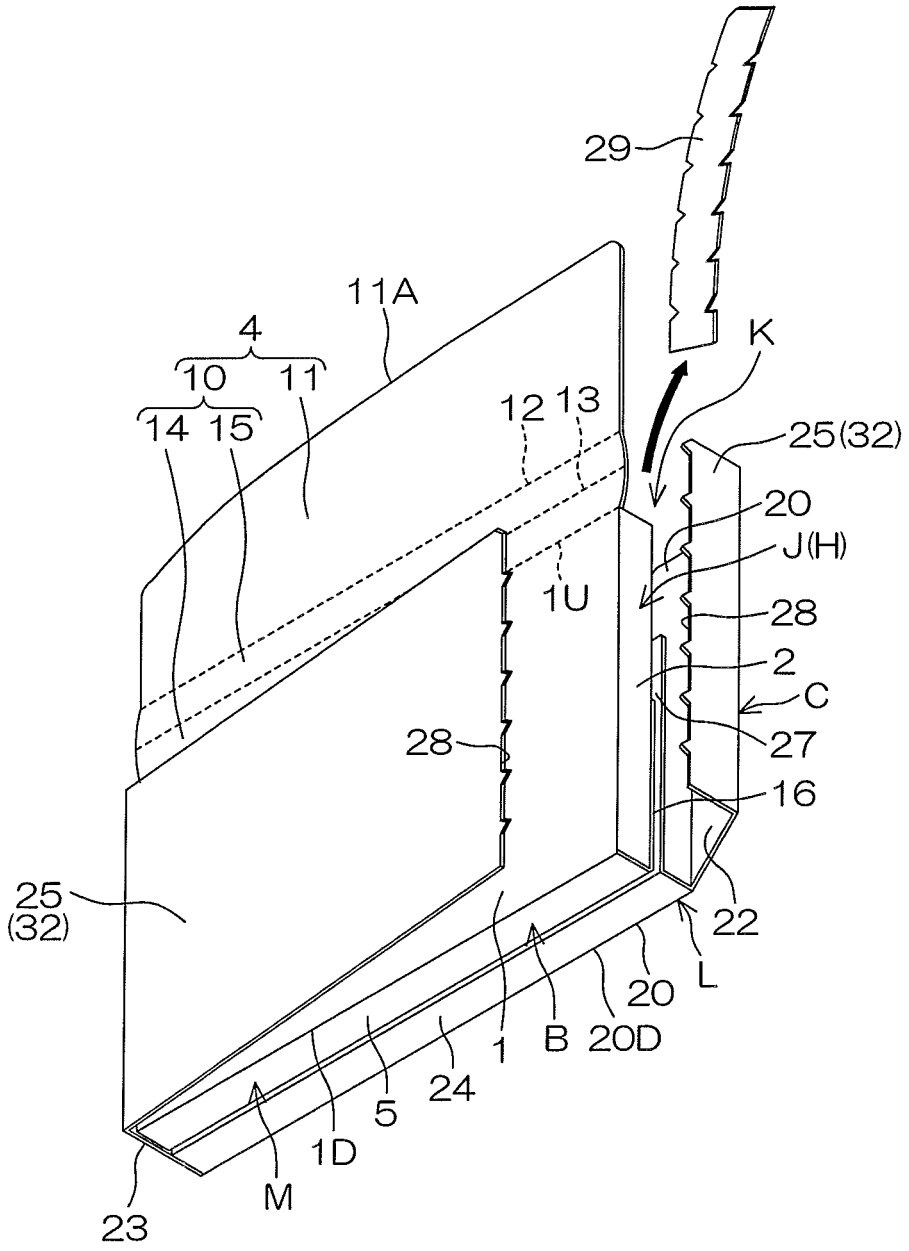
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FIG. 17

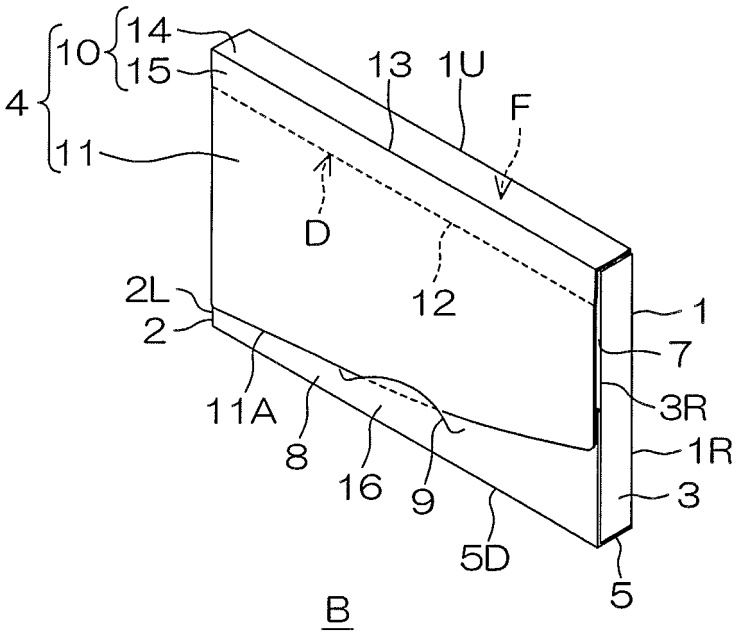
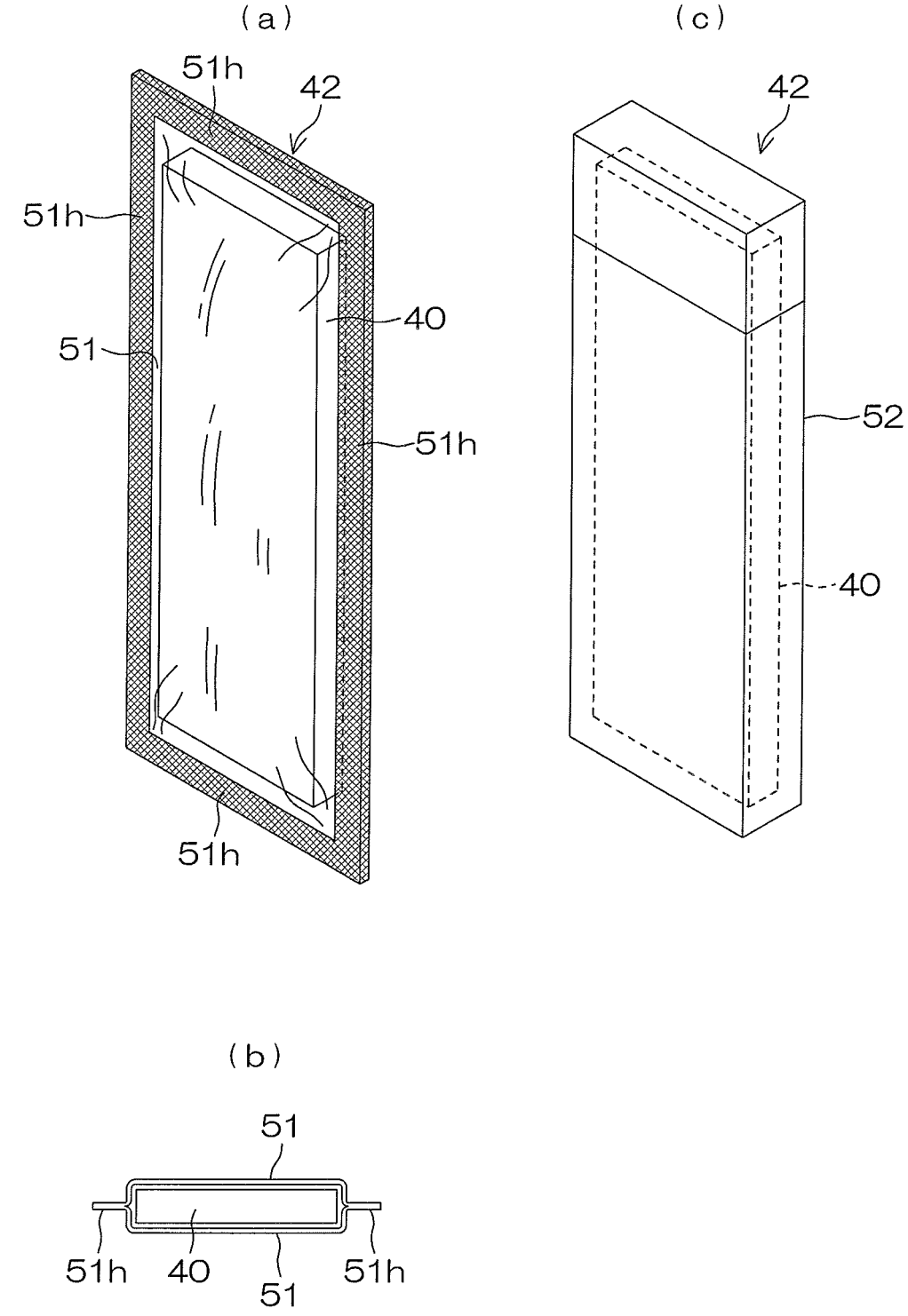


FIG. 18



INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2012/053558

A. CLASSIFICATION OF SUBJECT MATTER
B65D5/38(2006.01)i, *B65D85/60*(2006.01)i

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B65D5/00-5/76, B65D85/60, B65D21/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2012
Kokai Jitsuyo Shinan Koho 1971-2012 Toroku Jitsuyo Shinan Koho 1994-2012

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	JP 44-007833 Y1 (Dainippon Printing Co., Ltd.), 25 March 1969 (25.03.1969), entire text; all drawings (Family: none)	1-2,11 12 3-10
Y A	JP 2011-501719 A (MEZZINI, Sergio), 13 January 2011 (13.01.2011), entire text; all drawings & US 2010/0187145 A1 & EP 2162361 A & WO 2008/155626 A2	12 3-10
Y A	JP 2007-537103 A (Cadbury Adams USA L.L.C.), 20 December 2007 (20.12.2007), entire text; all drawings & EP 1751024 A & WO 2005/110042 A2	12 3-10

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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07 May, 2012 (07.05.12)	22 May, 2012 (22.05.12)
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INTERNATIONAL SEARCH REPORT

International application No.
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 11-001221 A (Dainippon Printing Co., Ltd.), 06 January 1999 (06.01.1999), entire text; all drawings (Family: none)	1-12
A	CD-ROM of the specification and drawings annexed to the request of Japanese Utility Model Application No. 099413/1991(Laid-open No. 042123/1993) (Yanai Shiko Kabushiki Kaisha), 08 June 1993 (08.06.1993), entire text; all drawings (Family: none)	1-12
A	US 2009/0151115 A1 (Marianne Christine KLEIN), 18 June 2009 (18.06.2009), entire text; all drawings (Family: none)	1-12
A	CD-ROM of the specification and drawings annexed to the request of Japanese Utility Model Application No. 081120/1991(Laid-open No. 034119/1993) (Sanyo Electric Co., Ltd.), 07 May 1993 (07.05.1993), entire text; all drawings (Family: none)	1-12

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