

[19]	INTELLECTUAL PROPERTY PHILIPPINES		
[12]	INVENTION PUBLICATION		
[11]	Publication Number:	12016501417	Document Code: B1
[22]	Publication Date:	31/8/2016	
[21]	Application Number:	12016501417	Document Code: A
[22]	Date Filed:	18/7/2016	
[54]	Title:	BOX FOR PACKAGING AND DISPLAY	
[71]	Applicant(s):	RENGO CO LTD	
[72]	Inventor(s):	NISHIKAWA YOICHI ISHIKAWA ATSUO OTANI MASAYOSHI ISHII KAZUYUKI HASHIMOTO AKIRA ZHANG ZHENG	
[30]	Priority Data:	18/8/2014 JP20140165685	
[51]	International Class 8:	B65D 5/52 20060101AFI20180709BHPH;	
[57]	Abstract:	<p>A box for packaging and for display which makes it possible to package products efficiently, transport the products while being sufficiently protected, and which, at a storefront, can be converted into a display state without being severed, thus making it possible to display the products in a visually pleasant manner. The box includes inner flaps (4) formed with insertion holes (8), and outer flaps (6) which form the front surface of the 10 box during display. One of the outer flaps (6) is formed with a distal scoreline (9) and a middle scoreline (10) which extend in the width direction and located, respectively, at the distal end portion and the proximal portion of the outer flap (6). The one of the outer flaps (6) includes insertion pieces (11) defined by cuts extending from the distal scoreline (9). In order to 15 convert the box into the display state, the one of the outer flaps (6) is opened, and bent, outside of the inner flaps (4), along the distal score line (9) and the middle scoreline (10) in the same direction. Then the insertion pieces (11), which protrude from the distal scoreline (9), are inserted into the insertion holes (8) of the inner flaps (4) to keep the outer flap (6) bent along the scorelines.</p>	

Fig. 3 is a perspective view of the same in the display state.

Fig. 4 shows a blank to be formed into a box for packaging and for display according to a second embodiment of the present invention.

Fig. 5 is a perspective view of the box of the second embodiment,
5 showing its packaging state.

Fig. 6 is a perspective view of the same in the display state.

Fig. 7 is a perspective view of a box for packaging and for display disclosed in Patent document 1, showing its packaging state.

Fig. 8 is a perspective view of the box shown in Fig. 7, showing its
10 display state.

Fig. 9 is a perspective view of a box for packaging and for display disclosed in Patent document 2, showing its display state.

BEST MODE FOR EMBODYING THE INVENTION

15 The first embodiment of the present invention is now described with reference to Figs. 1 to 3.

The box for packaging and display according to the present invention is formed from a corrugated paperboard blank shown in Fig. 1.
20 Commercial products are packaged in the box in the state of Fig. 2, and are displayed in the state of Fig. 3.

The blank shown in Fig. 1 includes a pair of end panels 1, and a pair of side panels 2 arranged alternately with, and integrally connected to, the end panels 1. A connecting piece 3 is integrally connected to the outer side
25 edge of one of the side panels 2 that is located at one end of the blank. Inner flaps 4 are integrally connected to the top edges of the respective end panels

1, while inner flaps 5 are integrally connected to the bottom edges of the respective end panels 1. Outer flaps 6 are integrally connected to the top edges of the respective side panels 2, while outer flaps 7 are integrally connected to the bottom edges of the respective side panels 2.

5

Substantial portions of the inner flaps 4, which are located at the upper portion of the blank, are cut out, except their portions which become the lower portion of the box during display, into a horizontal L shape. With this arrangement, an opening is defined between the opposed distal end edges of the inner flaps 4 during display. Depending on the strength of the paperboard or on the nature of the commercial products, portions of the inner flaps 4 may be removed along cut lines defined e.g. by perforations, or folded to the inside of the box.

15 Each inner flap 4 is formed with an insertion hole 8 located slightly spaced apart from its side edge which becomes the bottom edge during display and in the vicinity of the boundary between the inner flap 4 and the end panel 1. The insertion hole 8 is formed by a cut line defined by perforations and forming a push-in piece 8a. The end portion of the insertion hole 8 which becomes its inner end portion during display is in the form of a slit having an upwardly bent end portion. The push-in piece 8a is pivotable about a ruled line at its end which becomes its bottom end during display.

25 One of the outer flaps 6 that is to be located at the lower front portion of the box during display has a distal scoreline 9 and a middle scoreline 10 which both extend in the width direction of the box and

provided, respectively, at the distal edge portion and the proximal portion of the outer flap 6. The distal scoreline 9 is parallel to the boundary between the outer flap 6 and the side panel 2, and forms a score defined by discontinuous cuts. The middle scoreline 10 is curved in an arc shape such
5 that its central portion is located closer to the boundary between the outer flap 6 and the side panel 2, and is a ruled line formed by pressing the corrugated paperboard from the back side thereof.

This outer flap 6 also includes insertion pieces 11 formed outside of
10 the respective ends of the distal scoreline 9 by cutting toward the distal ends of the outer flap 6. Each insertion piece 11 has a width gradually increasing from its distal end toward its proximal end, and is formed with a step due to the inner side edge of the proximal portion being constricted. The insertion pieces 11 may be provided slightly inwardly of the respective
15 side edges of the outer flap 6.

A lock 12 defined by two tapered cuts is provided at the ridge between the outer flap 6 which is to be located at the upper portion of the box during display and the corresponding side panel 2.

20

At the upper portion of each end panel 1, there are provided a finger inserting portion 13 formed by a cut line defined by perforations, and a tab 14 also formed by a cut line defined by perforations so as to be contiguous with the top end of the finger inserting portion 13. In order to reduce the
25 amount of the connecting piece 3 protruding into the box when the box is used for packaging, the flutes of the connecting piece 3 and the outer end portion of the opposite end panel 1 are crushed in the direction of thickness

of the paperboard (the crushed portions are shown by hatching in the figures).

In order to form the blank into a box in which commercial products
5 can be packaged, the blank is first folded along two ruled lines extending
along the orthogonally arranged ridges between the respective end panels 1
and the corresponding side panels 2, and in this state, the connecting piece
3 is bonded to the inner surface of the end portion of the opposite end panel
1 where the flutes have been crushed.

10

Then, in packaging commercial products, as shown in Fig. 2, the two
end panels 1 and the two side panels 2 are formed into a rectangular
tube-shaped peripheral wall, and the inner flaps 5 and the outer flaps 7,
which are located at the lower portion of the peripheral wall, are bent so as
15 to overlap with each other and fixed together by an adhesive tape 15 to close
the bottom opening of the box. In this state, the commercial products are
placed into the box through the top opening of the box.

Thereafter, the inner flaps 4, located at the upper portion of the box,
20 are bent toward each other, and the outer flaps 6 are bent so as to be
superposed on the front surfaces of the inner flaps 4. In this state, the flaps
4 and 6 are fixed together by an adhesive tape 15 to close the top opening of
the box such that this adhesive tape 15 overlaps the tabs 14 at the
respective end portions of the tape 15.

25

In order to display the products in the box, the finger inserting
portions 13 are pushed in, the tabs 14 are pinched and severed from the end

panels 1, and the tape 15 is peeled off to open the box. Then, as shown in Fig. 3, the box, which is used both for packaging and for display, is rolled by 90 degrees so that the overlapping surfaces of the inner flaps 4 and the outer flaps 6 face the front side, with the outer flap 6 that is formed with the distal scoreline 9 and the middle scoreline 10 located at the lower portion of the box.

Then, with the outer flap 6 that is located at the upper portion of the box folded back onto the front surface of the side panel 2, the lock 12 is bent to keep the outer flap 6 folded back. This outer flap 6 may be formed with a cut line at its proximal portion so that the outer flap 6 may be severed from the box along the cut line.

Further, the outer flap 6 located at the lower portion of the box is bent inwardly, outside the inner flaps 4, along the distal scoreline 9 and the middle scoreline 10 in the same direction into a triangular tube shape such that the portion of the outer flap 6 between the distal scoreline 9 and the distal edge of the outer flap 6 is superposed on the front surfaces of the inner flaps 4 at their lower portions, and such that the insertion pieces 11, which protrude when the outer flap 6 is bent along the distal scoreline 9, are inserted into the insertion holes 8.

In this state, under the repulsive force of the push-in pieces 8a when the push-in pieces 8a are pushed into the box by the insertion pieces 11, the insertion pieces 11 reliably engage the end edges of the insertion holes 8. Moreover, since the steps at the proximal portions of the insertion pieces 11 mesh with the slit-like portions of the insertion holes 8, the insertion pieces

11 even more reliably and inseparably engage the insertion holes 8, thus keeping the lower outer flap 6 bent inwardly, while defining an opening between the end edges of the opposed inner flaps 4 through which the products in the box can be seen.

5

Since this box, which can be used for both packaging and display, can be converted from the packaging state to the display state simply by opening the outer flaps 6 with the outer flaps 6 facing the front side, inwardly bending the lower outer flap 6, and inserting the insertion pieces
10 11 into the insertion holes 8, the box can be easily converted into the display state without the need to sever the corrugated paperboard by tearing, and without producing waste due to partial removal of the corrugated paperboard. Moreover, since no cut lines due to tearing form, the box presents a good appearance during display.

15

Since, to display the products, the lower outer flap 6 is bent inwardly outside the inner flaps 4, it is not necessary to keep the box in the packaged state spaced from the products in the box, which makes it possible to fill the box with products to the limit, thus improving the packaging
20 efficiency and reducing the transportation cost. By filling the box to the limit, it is also possible to prevent damage to the products due to the products moving about in the box during transportation.

Since, to display the products, the lower outer flap 6 is bent
25 inwardly along the distal scoreline 9 and the middle scoreline 10 into the shape of a triangular tube such that its portion between the distal edge of the outer flap 6 and the distal scoreline 9 is superposed on the front

surfaces of the inner flaps 4, it is possible to easily position the insertion pieces 11 relative to the insertion holes 8 and thus to easily insert the insertion pieces 11 into the insertion holes 8. Also, since the insertion pieces 11 are inserted into the insertion holes 8 so as to be superposed on the back surfaces of the inner flaps 4, faces of the products in the box will never be
5 damaged by the tips of the insertion pieces 11.

Further, since the middle scoreline 10 is arcuately curved to increase the repulsive force of the outer flap 6 when the outer flap 6 is bent,
10 the insertion pieces 11 are pressed in the direction in which the insertion pieces 11 are inserted deeper into the insertion holes 8, and thus are less likely to be pulled out of the insertion holes 8. As a result, the box can be rigidly retained in the display state, so that the products in the box are less likely to fall forward out of the front opening of the box.

15

When the lower outer flap 6 is bent along the distal scoreline 9 and the middle scoreline 10 in the same direction, its portion between the distal scoreline 9 and the middle scoreline 10 will face obliquely upward. Thus, this portion can be effectively used as an area for printing e.g., an
20 advertising copy of the products in the box.

The second embodiment of the present invention is now described with reference to Figs. 4 to 6. In the description of the second embodiment, elements corresponding to those of the first embodiment are denoted by
25 identical numerals, and their description is omitted, while only those features that are different from those of the first embodiment are mainly discussed.

In this embodiment, as shown in Fig. 4, which shows the blank of this embodiment, the insertion pieces 11 are formed on the outer flap 6 which is to be located at the front lower portion of the box during display by cut lines which, conversely to the first embodiment, extend from the distal scoreline 9 toward the proximal portion of the outer flap 6, and which each has no step similar to the step in the first embodiment at the inner side edge of its proximal portion, and thus extend smoothly and arcuately from its distal end to proximal end.

10

The insertion holes 8 have no slit-like portions similar to the ones in the first embodiment, with which the steps of the insertion pieces 11 mesh, and are each formed only by the cut line defining the push-in piece 8a, and the ruled line about which the push-in piece 8a is pivotable.

15

The side panel 2 which is to be located at the top of the box during display is formed with a cut line extending to the upper outer flap 6 and defining a cut-apart portion 16, and is further formed with a cut line at the portion of the cut-apart portion 16 which is to be located at its rear end during display to define a finger inserting portion 17. The lock 12 in the first embodiment is not provided in the second embodiment.

In order to form the blank of the second embodiment into a box with commercial products packaged therein, as in the first embodiment and as shown in Fig. 5, the pair of end panels 1 and the pair of side panels 2 are bent to form a rectangular tubular peripheral wall; the inner flaps 5 and the outer flaps 7, which are located at the lower portion of the peripheral

wall, are bent so as to overlap with each other and fixed together by an adhesive tape 15 to close the bottom opening of the box; the commercial products are placed into the box through the top opening of the box; and the inner flaps 4 and the outer flaps 6, which are located at the top of the box, are bent to overlap with each other and fixed together by an adhesive tape 15 to close the top opening of the box.

In order to display the products in the box, the adhesive tape 15 closing the top of the box is peeled off to open to the box, and as shown in Fig. 6, the box, which is used both for packaging and for display, is rolled by 90 degrees so that the overlapping surfaces of the inner flaps 4 and the outer flaps 6 face the front side, with the outer flap 6 that is formed with the distal scoreline 9 and the middle scoreline 10 located at the lower portion of the box. Then, the lower outer flap 6 is bent along the distal scoreline 9 and the middle scoreline 10 in the same direction into a triangular tubular shape such that the portion of the outer flap 6 between the distal edge of the outer flap 6 and the distal scoreline 9 is superposed on the front surfaces of the inner flaps 4 at their lower portions, and such that the insertion pieces 11, which protrude when the outer flap 6 is bent along the distal scoreline 9, are inserted into the insertion holes 8.

Further, the side panel 2 that is located at the top of the box is pulled forwardly and upwardly by inserting a finger into the finger inserting portion 17 to remove the cut-apart portion 16 by severing the side panel 2 along the cut line, and simultaneously remove the outer flap 6 located at the upper front side of the box, which is connected to the cut-apart portion 16.

In this display state, under the repulsive force of the lower outer flap 6 when the flap 6 is bent along the middle scoreline 10, and under the repulsive force of the push-in pieces 8a when the push-in pieces 8a are pushed into the box by the insertion pieces 11, not only are the insertion pieces 11 less likely to disengage from the insertion holes 8, but the insertion pieces 11 also protrude vertically upwardly from the portion of the lower outer flap 6 between the distal edge of the outer flap 6 and the distal scoreline 9 so as to be superposed on the inner surfaces of the inner flaps 4. Thus, even if the lower outer flap 6 is pulled forward after the outer flap 6 has been bent along the two scorelines in the same direction, the insertion pieces 11 will never be pulled out of the insertion holes 8, so that the lower outer flap 6 remains bent along the two scorelines, unless the portions of the outer flap that are bent along the two scorelines are compressed vertically. This prevents damage to the outer appearance of the box and the commercial value of the products in the box while the products are in display.

While in the embodiments, the middle scoreline 10 is curved arcuately, the middle scoreline 10 may be curved in a corrugated pattern, or may be a V-shaped or serration-shaped bent line comprising straight line segments. Any of these alternative middle scorelines serves to increase the repulsive force of the outer flap 6 when the outer flap 6 is bent along the middle scoreline 10. Also, even if the middle scoreline 10 is a straight line extending parallel to the boundary between the outer flap 6 and the side panel 2, if the corrugated paper board can generate enough repulsive force, the above-mentioned effect will be obtained.

In the embodiment, the outer flap 6 which is to be located on the front lower portion of the box during display is bent along the distal scoreline 9 and the middle scoreline 10 in the same direction. In addition to, or instead of, bending this outer flap 6 in this manner, the outer flap which is to be located at the front upper portion of the box during display may be formed with the distal scoreline 9 and the middle scoreline 10 so that this outer flap 6 can be bent along the distal scoreline 9 and the middle scoreline 10 in the same direction.

DESCRIPTION OF THE NUMERALS

1. End panel
2. Side panel
3. Connecting piece
- 4, 5. Inner flap
- 6, 7. Outer flap
8. Insertion hole
- 8a. Push-in piece
9. Distal scoreline
10. Middle scoreline
11. Insertion piece
12. Lock
13. Finger inserting portion
14. Tab
15. Adhesive tape
16. Cut-apart portion
17. Finger inserting portion

SPECIFICATION

TITLE OF THE INVENTION: BOX FOR PACKAGING AND DISPLAY

TECHNICAL FIELD

5 This invention relates to a box made from cardboard such as corrugated paper board, and can be used to package commercial products for transportation and also to display the commercial products.

BACKGROUND ART

10 Commercial products, such as confectionery, packed in a plurality of bags are ordinarily packaged in a corrugated box such that the plurality of bags are piled one on another in a flat state to prevent damage to the contents in the bag. To display the products in the box at a store, a side panel of the corrugated box is sometimes cut out with a knife so that the
15 products can be seen through the opening formed by cutting out the side panel. With this arrangement, however, the faces of the bags in which are packed the commercial products cannot be seen, so that the box cannot be effectively used for sales promotion.

20 To improve the effects of sales promotion, the below-identified Patent document 1 proposes a box for packaging and for display shown in Figs. 7 and 8. This box is a slotted-type corrugated box including a pair of end panels 51 and a pair of side panels 52 that form a peripheral wall of the box, inner flaps 53 extending from the top edges of the respective end
25 panels 51, and outer flaps 54 extending from the top edges of the respective side panels 52, and can be sealed by bonding the inner flaps 53 to the outer flaps 54.

One of the outer flaps 54, which are brought into abutment with each other at the top surface of the box, is formed with a lateral cut line 55 extending its entire width. The inner flaps 53, which overlap with the back surface of the one of the outer flaps 54, are each formed with an opening-defining cut line 56 extending along the lateral cut line 55 of the inner flap 53 from the distal edge of the inner flap 53 toward the proximal edge of the inner flap 53, bent at an intermediate portion of the inner flap 53, and extending to the side edge of the inner flap 53 that is superposed on the other of the outer flaps 54. Each inner flap 53 is further formed with an intermediate cut line 57 extending along the abutment edges of the outer flaps 54 from the distal edge of the inner flap 53 to the opening-defining cut line 56.

The other of the outer flaps 54 includes a lock 58 formed at the proximal ridge thereof by two tapered cut lines.

To display the products in this box, the box is tipped by 90 degrees so that the superposed surface of the inner flaps 53 and the outer flaps 54 faces the front, and as shown in Fig. 8, the outer flap 54 that is located at the lower front portion of the box is severed along the lateral cut line 55, and the outer flap 54 at the upper front portion of the box is opened. When this outer flap 54 is opened, as shown in Fig. 8, the inner flaps 53 are severed along the respective opening-defining cut lines 56 and intermediate cut lines 57. Thus, the superposed surface is opened with portions of the inner flaps 53 bonded to the upper outer flap 54.

Then, by folding back the upper outer flap 54, and bending the lock 58, the upper outer flap 54 is retained in the position in which the upper outer flap 54 extends along the outer surface of the side panel 52, so that the superposed surface remains open, and the products in the box can be
5 shown through this opening.

The below-identified Patent document 2 discloses a box for packaging and for display shown in in Fig. 9. As with the box shown in Figs. 7 and 8, this box is also a slotted-type corrugated box. To display the
10 products in this box, with the superposed surface of inner flaps 63 and outer flaps 64 opened to the front, the inner flaps 63 on both sides are each bent inwardly along two scorelines, the lower outer flap 64 is then bent inwardly along two scorelines between the opposed inner flaps 63, and engaging pieces 65 protruding from both sides of the lower outer flap 64 is pushed
15 into engaging holes 66 formed in the respective inner flaps 63 to keep the box in the display state.

PRIOR ART DOCUMENTS

PATENT DOCUMENTS

20 Patent document 1: JP Patent 3810377

Patent document 2: JP Patent Publication 2002-179054A

SUMMARY OF THE INVENTION

OBJECT OF THE INVENTION

25 To display the products in the box for packaging and for display disclosed in Patent document 1, it is necessary to tear the corrugated paperboard along the lateral cut line 55 and the opening-defining cut lines

56. It is difficult and laborious to tear the box in this manner. Also, since the portion of the lower outer flap 54 between its distal end and the lateral cut line 55 is cut apart from the box, and has to be disposed of at a predetermined waste collecting area. During display, the lateral cut line 55 and the opening-defining lines 56, which define the peripheral edge of the opening, tend to be irregularly corrugated, thus ruining the appearance of the box.

To display the products in the box for packaging and for display disclosed in Patent document 2, it is necessary to inwardly bend each of the inner flaps 63 and the lower outer flap 64 along two scorelines. Thus, when packaging the products, it is necessary to provide a space between the products and the inner surface of the box. Such a space not only reduces the packaging efficiency of products, but also increases the possibility of damage to the products during transportation as a result of the products moving about in the box. Further, during display, the inner flaps 63 and the lower outer flap 64 could be partly unwound due to repulsive force, thus ruining the appearance of the box.

An object of the present invention is to provide a box for packaging and for display which makes it possible to package products efficiently, transport the products while being sufficiently protected, and which, at a storefront, can be converted into a display state without being severed, thus making it possible to display the products in a visually pleasant manner.

MEANS FOR ACHIEVING THE OBJECT

In order to achieve this object, the present invention provides a box

for packaging and for display comprising a pair of end panels and a pair of side panels, the end panels and the side panels forming a peripheral wall, inner flaps integrally connected to the respective end panels, outer flaps integrally connected to the respective side panels, wherein the box is
5 configured such that by superposing the inner flaps and the outer flaps one over another to form a superposed surface, and sealing the superposed surface, the box is converted into a packaging state in which products can be packaged in the box, and by opening, in the packaging state, the superposed surface in a forward direction, the box is converted into a
10 display state in which the products in the box can be displayed, wherein one of the inner flaps is formed with an insertion hole, wherein one of the outer flaps, which face the forward direction during the display state, is formed with a distal scoreline and a middle scoreline provided, respectively, at a distal edge portion and a proximal portion of said one of the outer flaps to
15 extend in a width direction, wherein said one of the outer flaps is formed with an insertion piece defined by a cut extending from the distal scoreline, wherein the box is configured such that when converted into the display state, by opening the outer flaps, an opening through which the products in the box is seen is defined between the inner flaps, which are opposed to
20 each other, and said one of the outer flaps is bent, outside of the inner flaps, along the distal scoreline and the middle scoreline in the same direction such that a portion of said one of the outer flaps between a distal edge of said one of the outer flaps and the distal scoreline is superposed on front surfaces of the inner flaps, and the insertion piece, which protrudes from
25 the distal scoreline, is inserted into the insertion hole of said one of the inner flaps, thereby keeping said one of the outer flaps bent along the distal scoreline and the middle scoreline.

Preferably, said one of the outer flaps has no middle scoreline other than said middle scoreline, and configured to be formed into a triangular tube when bent along the distal scoreline and the middle scoreline in the same direction in order to convert the box into the display state. With this arrangement, the one outer flap can be more reliably kept in the bent state.

Preferably, the middle scoreline is one of a curved line and a bent line. Such a middle scoreline increases the repulsive force when the outer flap is bent along the middle scoreline, thereby preventing the insertion piece from being pulled out of the insertion hole.

ADVANTAGES OF THE INVENTION

The box for packaging and for display can be easily converted from the packaging state into the display state, simply by opening one of the outer flaps which face the front, bending the one of the outer flaps along two scorelines in the same direction, and inserting the insertion piece into the insertion hole.

By using inner flaps formed with cutouts beforehand, it is not necessary to cut the inner flaps, so that no waste is produced by cutting the inner flaps. Also, since the peripheral edge of the opening during display is not formed by tearing the corrugated paperboard, the peripheral edge of the opening will not ruin the appearance of the box during display.

Since the one of the outer flaps is bent, outside of the inner flaps, in the same direction along two scorelines, it is not necessary to provide a

space between products and the box when packaging the products. This makes it possible to tightly and efficiently package the products in the box. By tightly packaging the products, it is possible to prevent damage to the products during transportation because the products cannot move about in
5 the box.

Since, during display, said one of the outer flaps is formed into a triangular tube by bending it along the distal scoreline and the middle scoreline in the same direction so that the portion of the outer flap between
10 the distal scoreline and the distal edge of the outer flap is superposed on the front surfaces of the inner flaps, the insertion piece can be easily positioned relative to the insertion hole, and thus can be easily inserted into the insertion hole.

15 Since a curved line or a bent line is used as the middle scoreline to increase the repulsive force when the outer flap is bent, the insertion piece is pressed in the direction in which the insertion piece is inserted deeper into the insertion hole, thus making it more difficult for the insertion piece to be pulled out of the insertion hole. As a result, the box can be more
20 rigidly held in the display state, and more effectively prevents the products from falling forward.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 shows a blank to be formed into a box for packaging and for
25 display according to a first embodiment of the present invention.

Fig. 2 is a perspective view of the box of the first embodiment, showing its packaging state.

What is claimed is:

1. A box for packaging and for display, comprising a pair of end panels
5 (1) and a pair of side panels (2), the end panels and the side panels forming
a peripheral wall, inner flaps (4) integrally connected to the respective end
panels (1), outer flaps (6) integrally connected to the respective side panels
(2), wherein the box is configured such that by superposing the inner flaps
(4) and the outer flaps (6) one over another to form a superposed surface,
10 and sealing the superposed surface, the box is converted into a packaging
state in which products can be packaged in the box, and by opening, in the
packaging state, the superposed surface in a forward direction, the box is
converted into a display state in which the products in the box can be
displayed,

15 characterized in that one of the inner flaps (4) is formed with an
insertion hole (8), wherein one of the outer flaps (6), which face the forward
direction during the display state, is formed with a distal scoreline (9) and a
middle scoreline (10) provided, respectively, at a distal edge portion and a
proximal portion of said one of the outer flaps (6) to extend in a width
20 direction, wherein said one of the outer flaps (6) is formed with an insertion
piece (11) defined by a cut extending from the distal scoreline (9),

wherein the box is configured such that when converted into the
display state, by opening the outer flaps (6), an opening through which the
products in the box is seen is defined between the inner flaps (4), which are
25 opposed to each other, and said one of the outer flaps (6) is bent, outside of
the inner flaps (4), along the distal scoreline (9) and the middle scoreline
(10) in the same direction such that a portion of said one of the outer flaps

(6) between a distal edge of said one of the outer flaps (6) and the distal scoreline (9) is superposed on front surfaces of the inner flaps (4), and the insertion piece (11), which protrudes from the distal scoreline (9), is inserted into the insertion hole (8) of said one of the inner flaps (4), thereby
5 keeping said one of the outer flaps (6) bent along the distal scoreline (9) and the middle scoreline (10), and

wherein said one of the outer flaps (6) has no middle scoreline other than said middle scoreline (10), and configured to be formed into a triangular tube when bent along the distal scoreline (9) and the middle
10 scoreline (10) in the same direction in order to convert the box into the display state.

2. The box for packaging and for display of claim 1, wherein the middle scoreline (10) is one of a curved line and a bent line.

15

3. A box for packaging and for display comprising a pair of end panels (1) and a pair of side panels (2), the end panels and the side panels forming a peripheral wall, inner flaps (4) integrally connected to the respective end panels (1), outer flaps (6) integrally connected to the respective side panels
20 (2), wherein the box is configured such that by superposing the inner flaps (4) and the outer flaps (6) one over another to form a superposed surface, and sealing the superposed surface, the box is converted into a packaging state in which products can be packaged in the box, and by opening, in the packaging state, the superposed surface in a forward direction, the box is
25 converted into a display state in which the products in the box can be displayed,

characterized in that one of the inner flaps (4) is formed with an

insertion hole (8), wherein one of the outer flaps (6), which face the forward direction during the display state, is formed with a distal scoreline (9) and a middle scoreline (10) provided, respectively, at a distal edge portion and a proximal portion of said one of the outer flaps (6) to extend in a width direction, wherein said one of the outer flaps (6) is formed with an insertion piece (11) defined by a cut extending from the distal scoreline (9),

wherein the box is configured such that when converted into the display state, by opening the outer flaps (6), an opening through which the products in the box is seen is defined between the inner flaps (4), which are opposed to each other, and said one of the outer flaps (6) is bent, outside of the inner flaps (4), along the distal scoreline (9) and the middle scoreline (10) in the same direction such that a portion of said one of the outer flaps (6) between a distal edge of said one of the outer flaps (6) and the distal scoreline (9) is superposed on front surfaces of the inner flaps (4), and the insertion piece (11), which protrudes from the distal scoreline (9), is inserted into the insertion hole (8) of said one of the inner flaps (4), thereby keeping said one of the outer flaps (6) bent along the distal scoreline (9) and the middle scoreline (10), and

wherein the middle scoreline (10) is one of a curved line and a bent line.

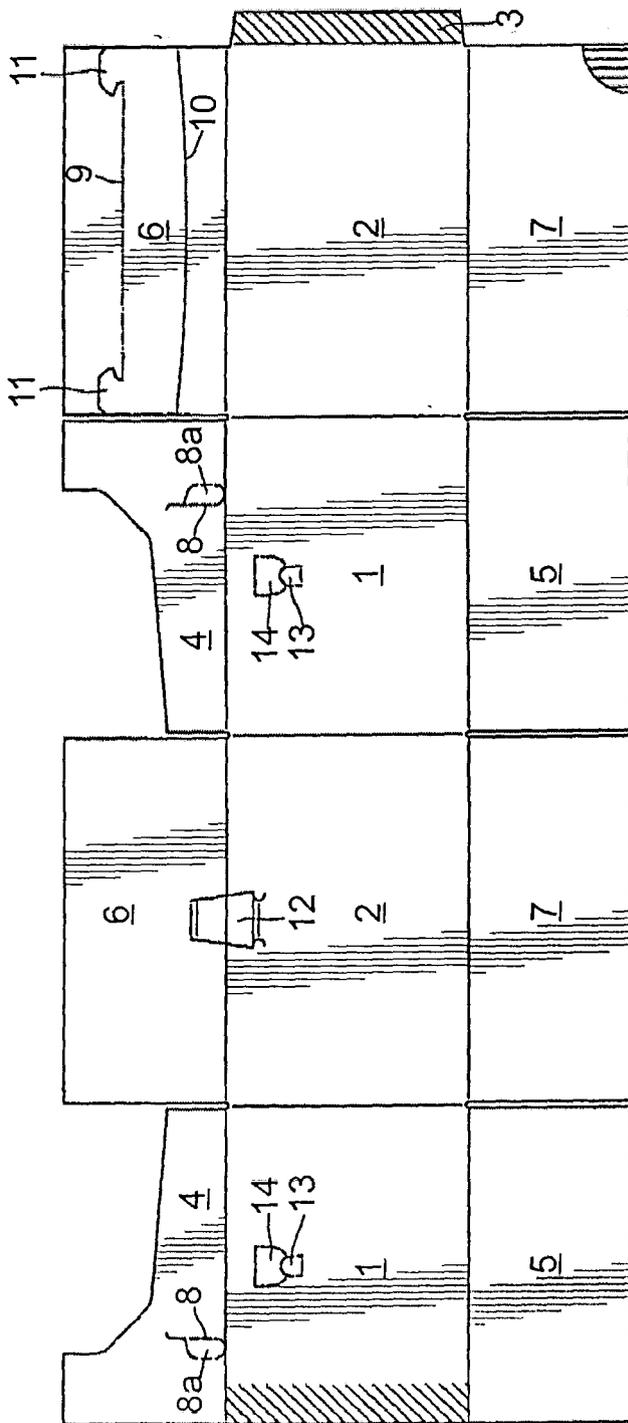


FIGURE 1

RECEIVED
 U.S. PATENT OFFICE
 1964 JUN 10 10 11 AM
 350

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES

by:


 ASTERIA I. MERCADO

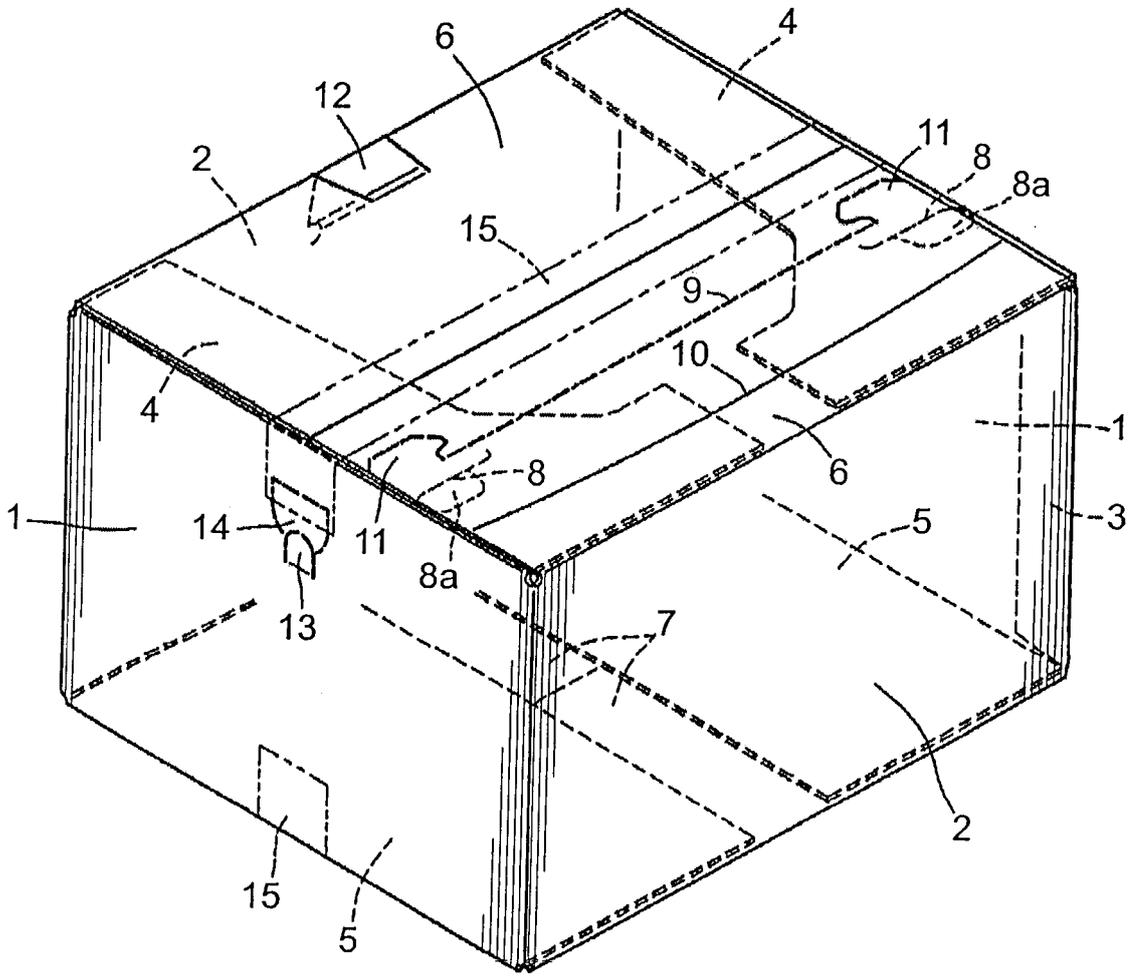


FIGURE 2

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES

by: *[Signature]*

ASTERIA I. MERCADO

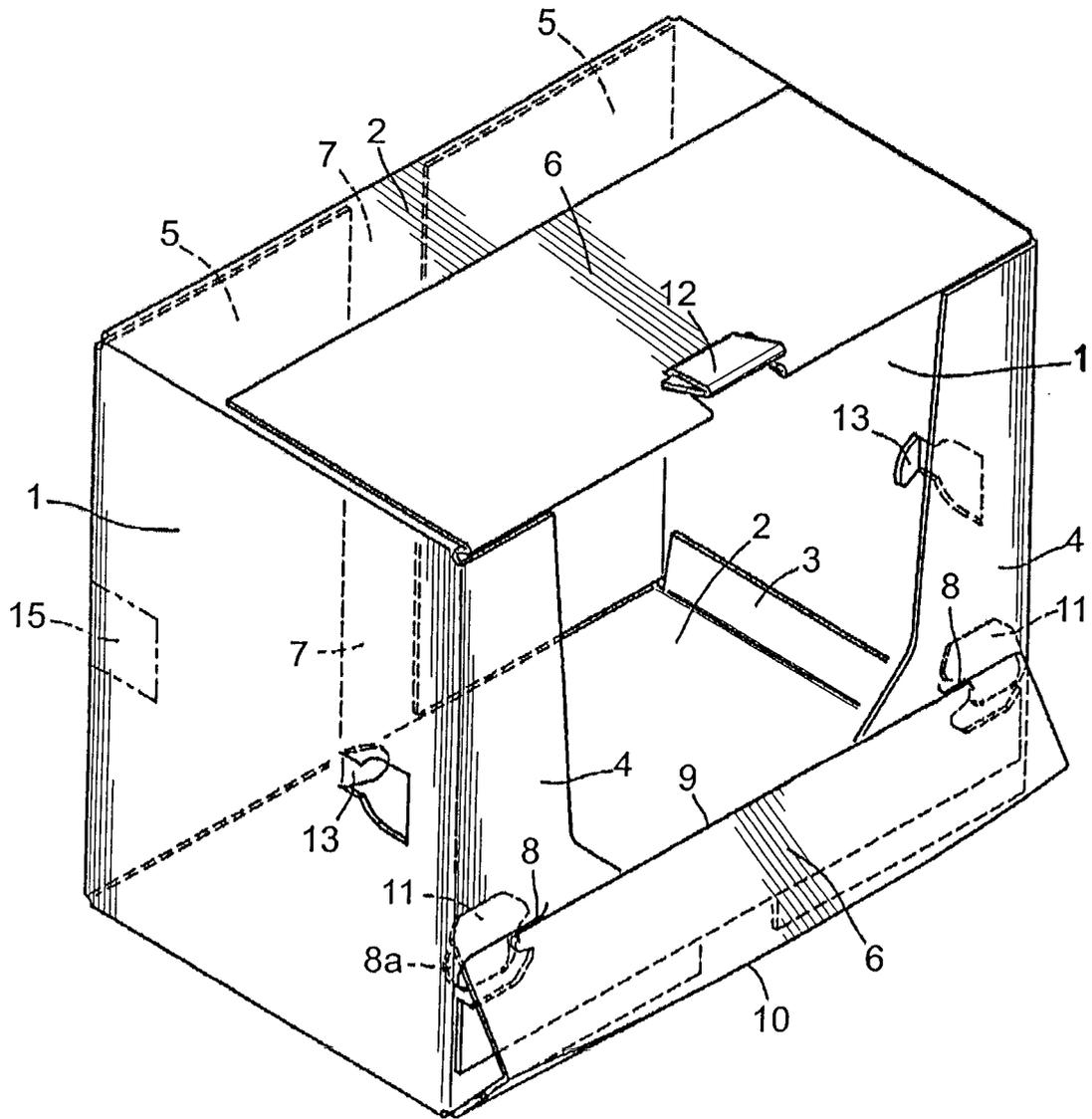


FIGURE 3

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES

by:

Asteria I. Mercado
ASTERIA I. MERCADO

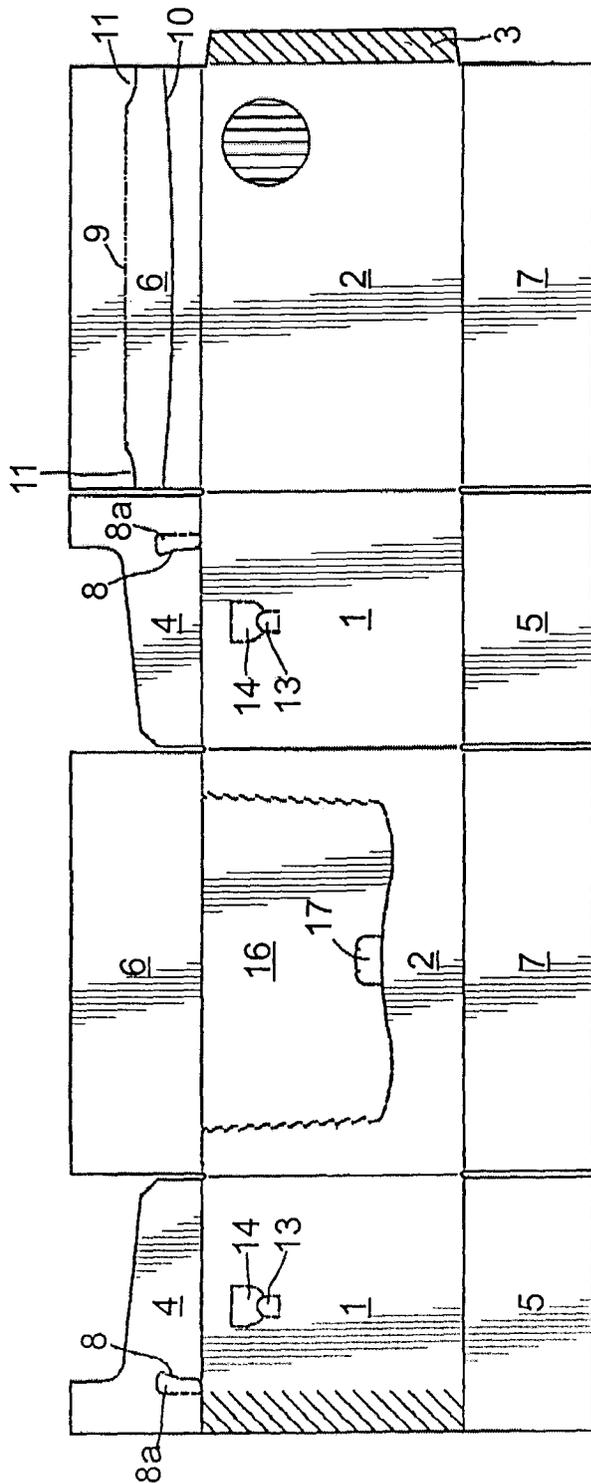


FIGURE 4

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES

by:

Asteria L. Mercado

ASTERIA L. MERCADO

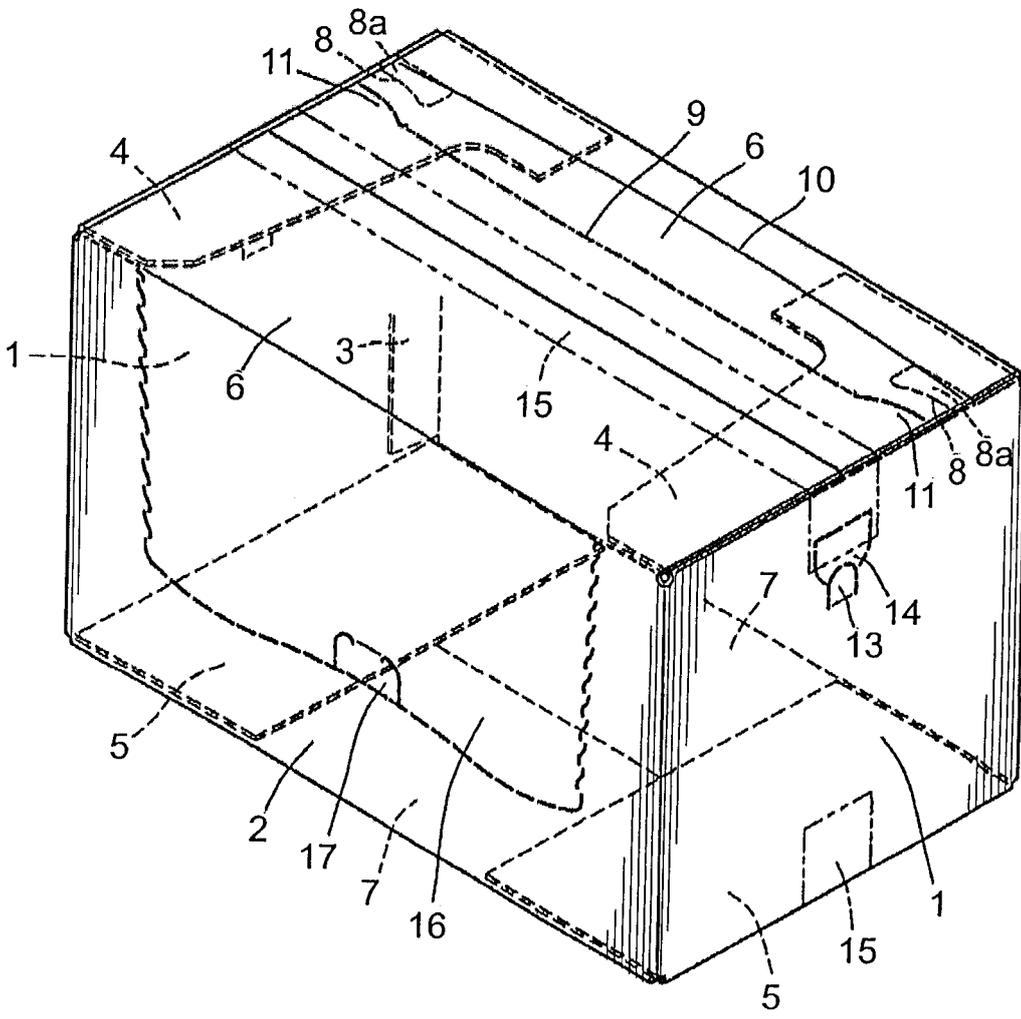


FIGURE 5

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES

by: *[Signature]*
ASTERIA I. MERCADO

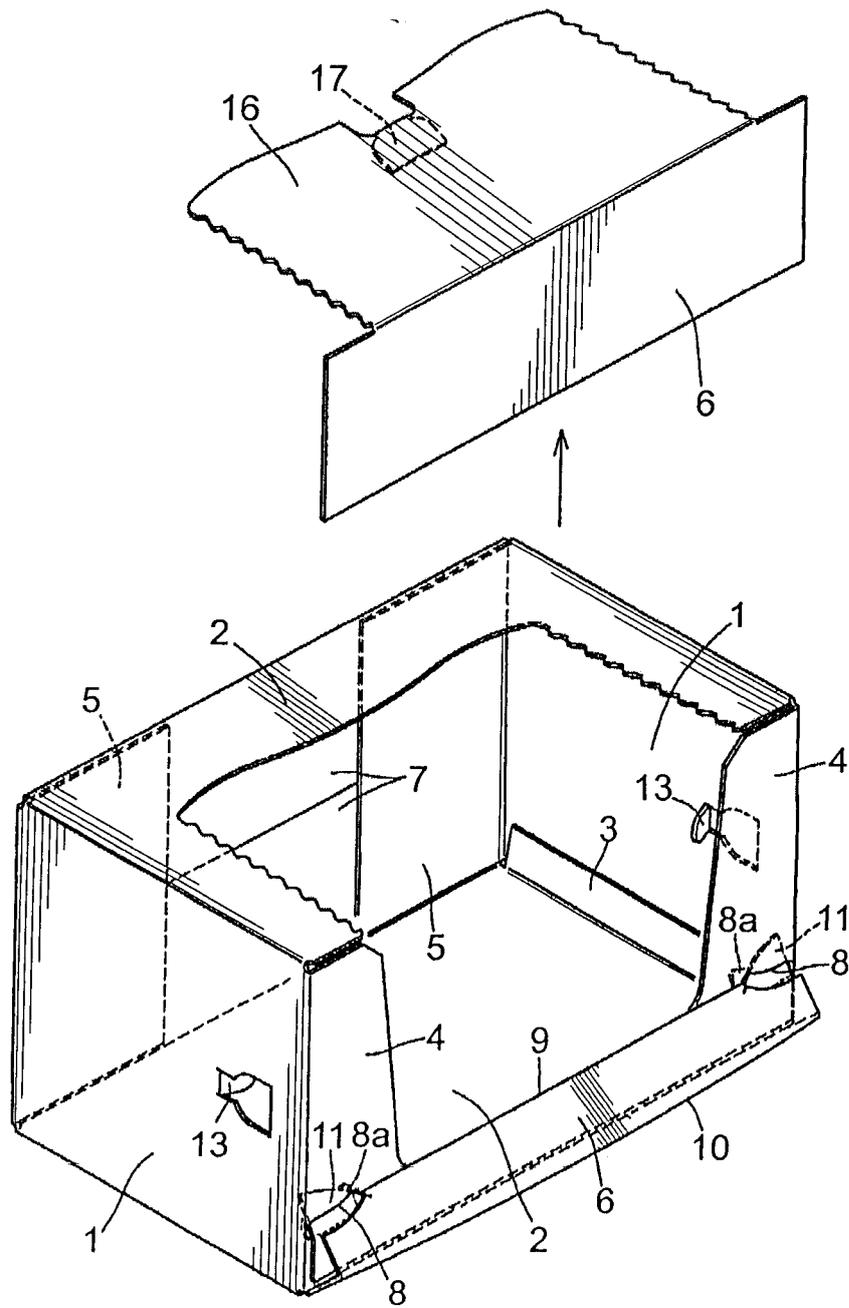


FIGURE 6

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES
by:

Asteria I. Mercado
ASTERIA I. MERCADO

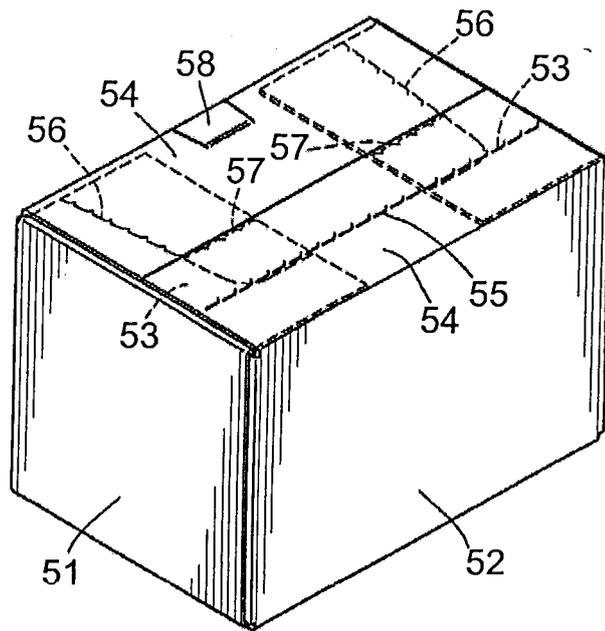


FIGURE 7

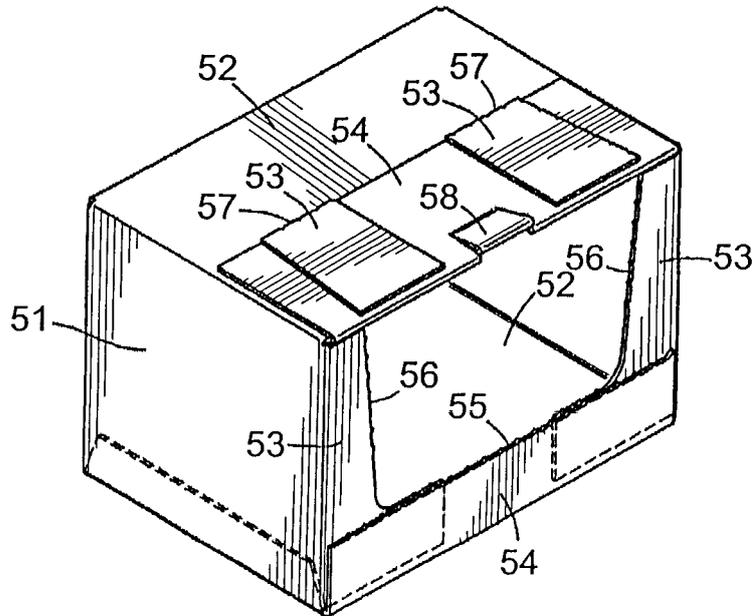


FIGURE 8

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES

by:

ASTERIA I. MERCADO

RECEIVED
MAY 10 1988
U.S. PATENT OFFICE

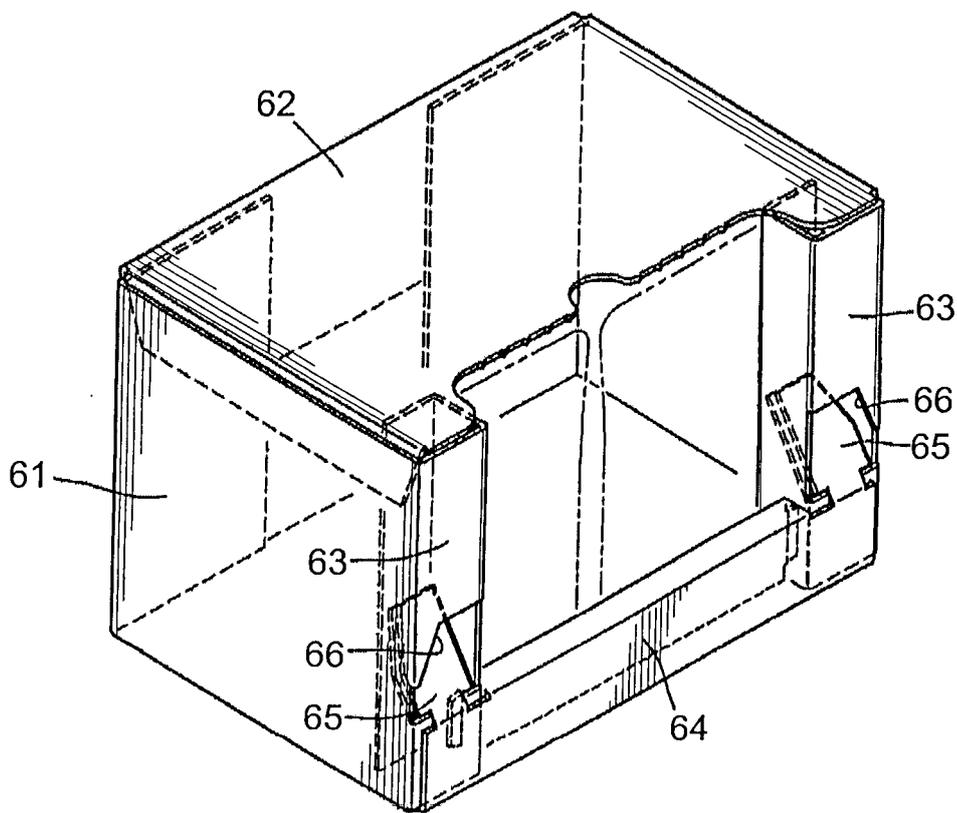


FIGURE 9

RENGO CO., LTD.
Applicant

E. B. ASTUDILLO & ASSOCIATES

by:

ASTERIA I. MERCADO