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 Amended claims in accordance with Rule 137(2) EPC.

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(54) **One piece double fronted display box**

(57) Display box assembly in one piece based on a single sheet which is provided with two large lateral sections, joined by a section which, when the box is assembled, adopts a back position and emerging from the ends of the large lateral front sections one of which is joined by means of a tear line so that it may be removed, and another which has a window which is pre-cut in the factory with finished edges, where it joins the double front, which

is fitted in a groove made for this purpose on the double front, with the closing tab being at a lower height than the double front, as this is arranged on its inside face. Due to its configuration, material is not duplicated, the display window is provided with finished edges, and a box is obtained which is easier to stack, and which is made from one piece and its assembly may be mechanised, without the need for any special machinery.

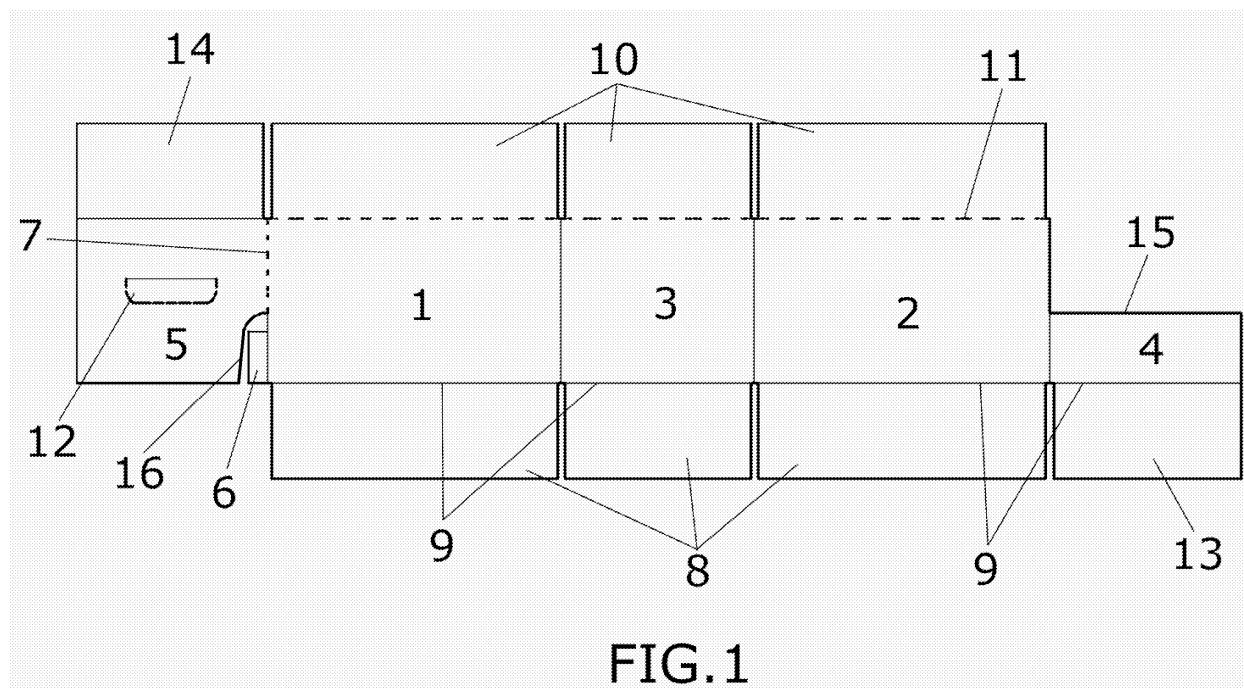


FIG.1

Description

OBJECT OF THE INVENTION

[0001] The object of the present invention is a display box based on a single laminar part appropriately cut out of the type of box comprising a single piece used initially for the transport of products and which, having arrived at the distribution point can be used as a display case on opening the box.

[0002] The present invention is characterised by the fact that the display box comprises a single part, and not two parts as occurs with other display boxes which have a base and an upper removable part. The display case in question comprises a single piece and serves as a display once it has been opened or when the front and/or flaps of the boxes have been removed.

[0003] The present invention is also characterised by its special configuration and design of the cut sheet used to make up the box from which numerous advantages derive, such as the fact that it provides greater resistance on stacking, no duplication of material and the fact that it is easily convertible to a display box once it has reached the distribution or sales point.

[0004] Therefore the present invention is included within the scope of cardboard boxes based on sheets of stamped or cut out cardboard, and more precisely within the scope of single piece display boxes.

BACKGROUND TO THE INVENTION

[0005] To date display boxes may be "twin pack" boxes comprising two parts which may be separated when they reach the distribution or sales point, having a lower and an upper part.

[0006] Other display boxes comprise a single piece based on one sheet having removed the parts of the box such as the front or flaps.

[0007] "Twin pack" type display boxes are based on two sheets, the manufacturing process is complex and requires more execution time, and in addition it is less resistant when stacked, as the resistance is weakened due to the cuts and/or perforations in the walls offering resistance.

[0008] On the other hand display boxes comprising a single piece have some disadvantages when converting to a display case, since in general they require the removal of a part along the tear line, which presupposes that the edge of the window through which the product is displayed will be badly finished due to the tearing of the lines. These tear lines, as in the previous case, also diminish resistance. Furthermore, at times one-piece display boxes duplicate a large amount of material.

[0009] Therefore the purpose of the present invention is to overcome the previous disadvantages by developing a one-piece display box obtained from a single sheet which is easier to convert into a display, where the edge of the window through which the product is displayed is

perfectly finished and is not torn with tear lines and where in addition the box has a greater capacity for stacking and where as little material as possible is duplicated, attempting to minimise perforations and cuts in the walls, as in addition to being aesthetically undesirable, they diminish resistance as they cut the cardboard channels.

DESCRIPTION OF THE INVENTION

[0010] The display box which is the object of the present invention comprises, as the title of the invention states, a single sheet in one piece. The sheet may be made from cardboard or any other similar material, and it shall be cut and stamped and the folding lines shall be creased and tearable so that finally when the box arrives at its distribution point the part which is not integral to the display may be removed.

[0011] The sheet has a series of lateral sections, a back part, a cut front part and a double front which is removed when the display box reaches its distribution or sales point.

[0012] Flaps emerge from the upper or lower part of the lateral sections and the back section for configuring the upper closure of the box, and the bottom of the box respectively. The upper flaps are removable as where they join the lateral and back sections they are provided with a tear line.

[0013] As the front part is machine cut defining a window it is not provided with an upper flap but it does have a lower one in order to form the base of the display box. On the other hand the double front is joined laterally to one of the lateral sections by means of a tear line and it is provided in its upper part with a flap in order to close the top part of the box.

[0014] The double front is provided with a series of tear lines which comprise a window acting as a handle, the sole purpose of which is to assist in the removal and tearing of the double front though a lateral tear line which joins the lateral section of the box.

[0015] In addition, in order to assemble the box, the stamped cut sheet is provided on one of the larger lateral sections, specifically that which joins the removable double front, with a tab for closing the display box, and which adheres to the non visible side of the cut front.

[0016] In order to place this joining or closing tab without interference the double front is provided with a cut out which is formed to fit the tab of the interior join.

[0017] As a result of this configuration and arrangement of the joining or closing tab, since it is arranged on the unseen part of the cut front, an aesthetic effect is obtained as well as achieving the required purpose.

[0018] Therefore, as a result of the geometry described, specific advantages are obtained such as the fact that the edge of the display window is perfectly cut and finished as it comes from the factory and, in addition, hardly any material is duplicated and the double front which is removed is carried out by means of a lateral tear line which is not visible when the double front is removed,

also creating an aesthetic effect as no flaps are indicated on the visible side of the cut front. In addition, as the display box is configured in a single piece, higher boxes are obtained which have greater resistance when stacked and their assembly can be mechanised without the need for special machinery to manufacture the sheet.

DESCRIPTION OF THE DRAWINGS

[0019] In order to complement the description which follows and to provide a better understanding of the characteristics of the invention the present report is accompanied by a set of drawings which represent the most significant details of the invention in an illustrative manner which is in no way restrictive.

Figure 1 shows a representation of a sheet used in forming the display box when it is folded out and indicating the cut outs folds and tear lines.

Figure 2, shows the sheet when it has been folded and how it is distributed when ready for use.

Figure 3 shows the display box in its final form.

Figures 4 and 5 show the actions to be carried out in order to use the box as a display.

PREFERRED EMBODIMENT OF THE INVENTION

[0020] In the light of the figures a preferred embodiment of the invention proposed is described below.

[0021] Figure 1 shows the single sheet used to make up the display box which is the object of the invention and which has two larger sides (1) and (2) joined by means of a section which has a back position (3), from the free end of the side section (2) a cut front (4) emerges which has an edge (15) cut in the factory with finished edges, with the cut front (4) being lower in height than the larger side sections (1) and (2) and the back section (3).

[0022] A double front (5) is joined to the larger side section (1) by one of its edges which is joined to said larger lateral section (1) along part of its length by means of a tear line (7).

[0023] In addition a tab (6) emerges from the edge of the join of the larger side section (1) with the double front (5) which joins or closes the whole. In order to ensure that it does not interfere with the double front (5), said front is provided with a groove (16) in the form of the tab (6), and where said tab (6) is arranged. In addition the height of the tab (6) does not exceed the height of the cut front (4) so that it will not be visible when the box is made up.

[0024] From the upper edge of the large lateral sides (1) and (2) and from the back section (3) upper closing flaps (10) emerge joined to said large lateral sections (1) and (2) by means of a tear line (11), which, once the box

is made up, will enable its subsequent removal.

[0025] In addition, from the lower edge of the large side sections (1) and (2) and of the back section (3) lower closing flaps (8) emerge, joined by means of a fold line (9).

[0026] As the cut front (4) is lower than the rest of the sections it is only provided with one lower flap (13) which, together with the lower closing flaps (8) enables the base of the box to be assembled.

[0027] The double front (5) is not provided with an emerging lower flap however, it is provided with an upper flap (14) which together with the flaps (10) enables the upper part of the display box to be closed. Joining the flap (14) to the double front (5) does not require a tear line as when the double front is removed it is completely removed along with its flap no (14).

[0028] The double front (5) is provided with a cut out which forms a window (12) which acts as a handle used to facilitate the removal of the double front, having inserted the hand into said window (12) and pulling it.

[0029] Figure 2 shows how the sheet is composed for its distribution when perfectly folded, in particular indicating the manner in which the closing tab (6) is fixed in the interior part of the arrangement.

[0030] Figure 3 shows how the display box is formed, indicating in particular how the cut front (4) and the double front (5) which is subsequently removable are superimposed. In order to remove this as shown in figure 4, the tear line (7) should be torn and as there is no connection or join with the rest of the box, it is possible to proceed to the complete removal of the double front (5) together with its flap (14). Finally, as shown in figure 5, the tear lines (11) should be torn in order to remove the upper closing flaps (10) of the box, thus assembling the box as a display box.

[0031] The essential nature of this invention is not altered by variations in materials, form, shape and arrangement of the component elements which are described in a manner which is in no way restrictive but which is sufficient to for an expert to proceed to its reproduction.

Claims

1. Double fronted display box which is assembled from a single sheet and which is provided with larger side sections (1) and (2) joined together by means of a section which adopts a back position (3) in addition to flaps for the upper and lower closure of the box, **characterised in that** a cut front (4) is joined to the large side section from the lower edge of which emerges a tab (13) and on the other side of the large lateral section (1) a double front (5) is joined by means of a tear line (7) from which an upper tab (14) emerges, and in addition a closing tab (6) emerges from the large lateral section (1) on its edge where it joins with the double front (5) said tab (6) being fitted in a groove (1.6) provided for this purpose on the double front (5) and at a lower height than the

cut front (4) with said closing tab (6) being arranged on the invisible face of the cut front (9).

2. Double fronted display box, according to claim one **characterised in that** the cut front (4) is provided with a finished edge (15). 5
3. Double fronted display box, according to claim one **characterised in that** from the large lateral sections (1) and (2) and from the back section (3), upper closing flaps (10) emerge, joined to said sections by means of a tear line (11). 10
4. Double fronted display box according to claim 1 **characterised in that** from the lower edge of the large lateral sides (1) and (2) and of the back section (3) emerge lower flaps (8) joined to said sections by means of fold lines (9). 15
5. Double fronted display case according to claim 1 **characterised in that** the double front (5) has some cut outs which form a window (12) which acts as a handle. 20

4. Double fronted display box according to claim 1 **characterised in that** from the lower edge of the large lateral sides (1) and (2) and of the back section (3) emerge lower flaps (8) joined to said sections by means of fold lines (9).

5. Double fronted display case according to claim 1 **characterised in that** the double front (5) has some cut outs which form a window (12) which acts as a handle.

Amended claims in accordance with Rule 137(2) EPC. 25

1. Double fronted display box which is assembled from a single sheet and which is provided with larger side sections (1) and (2) joined together by means of a section which adopts a back position (3) in addition to flaps for the upper and lower closure of the box, **characterised in that** a cut front (4) is joined to one of said large side section by the edge opposite the back section whereby a lower tab (13) emerges from the lower edge of the cut front and a double front (5) is joined on the other one of said large side sections by the edge opposite the back section by means of a tear line (7) whereby an upper tab (14) emerges from the upper edge of the double front, and in addition a closing tab (6) emerges from the large lateral section (1) on its edge where it joins with the double front (5) said tab (6) being fitted in a groove (16) provided for this purpose on the double front (5) and at a lower height than the cut front (4) with said closing tab (6) being arranged on the invisible face of the cut front (4). 30 35 40 45

2. Double fronted display box, according to claim one **characterised in that** the cut front (4) is provided with a finished edge (15). 50

3. Double fronted display box, according to claim one **characterised in that** from the large lateral sections (1) and (2) and from the back section (3), upper closing flaps (10) emerge, joined to said sections by means of a tear line (11). 55

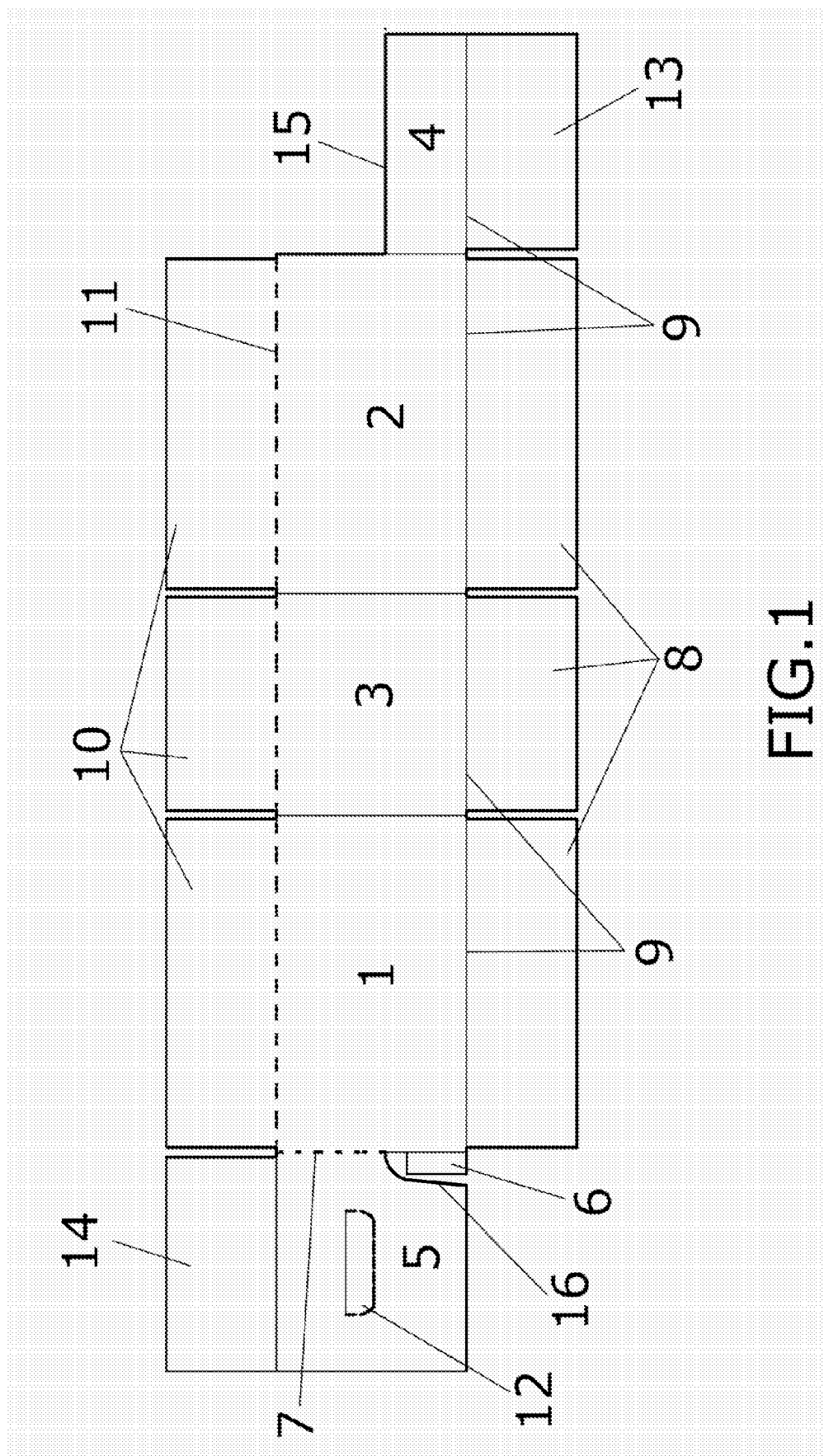


FIG.1

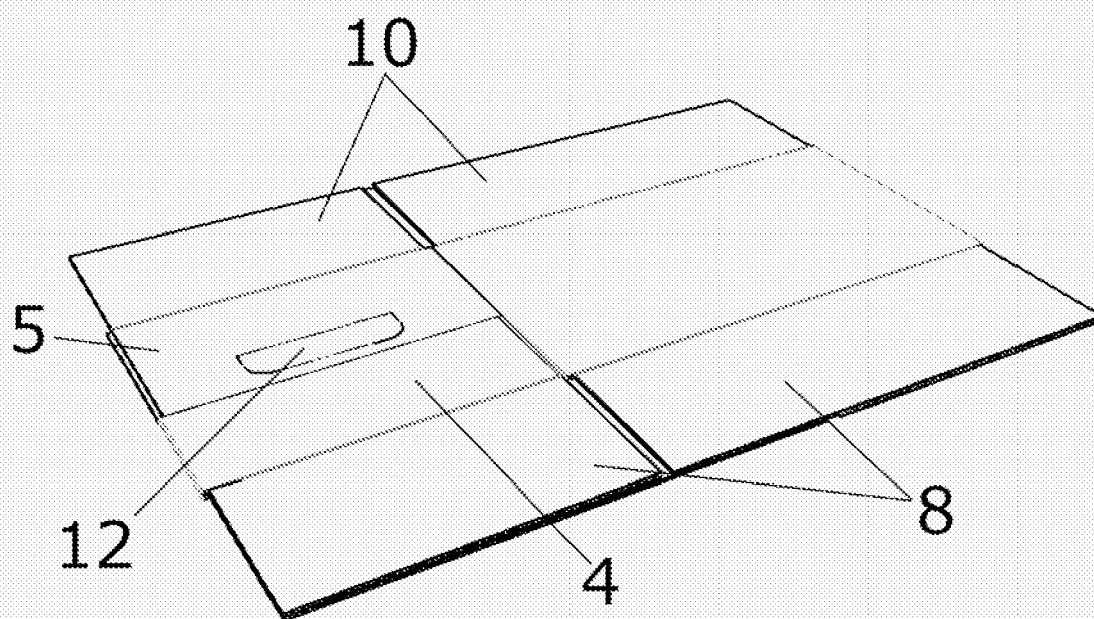


FIG. 2

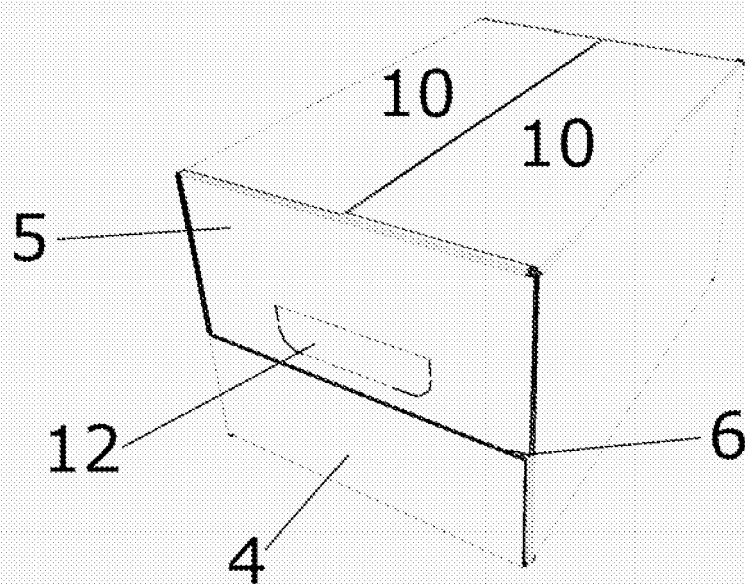
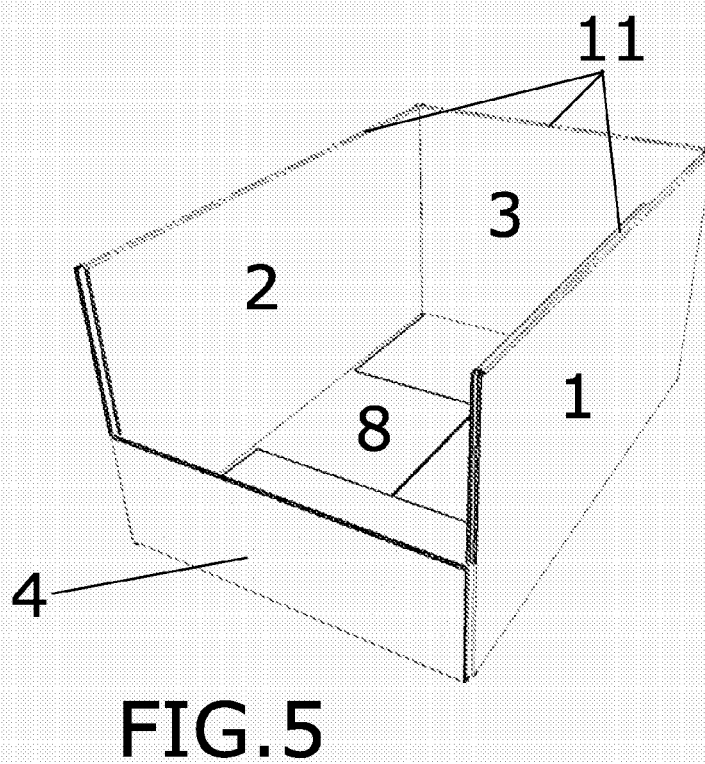
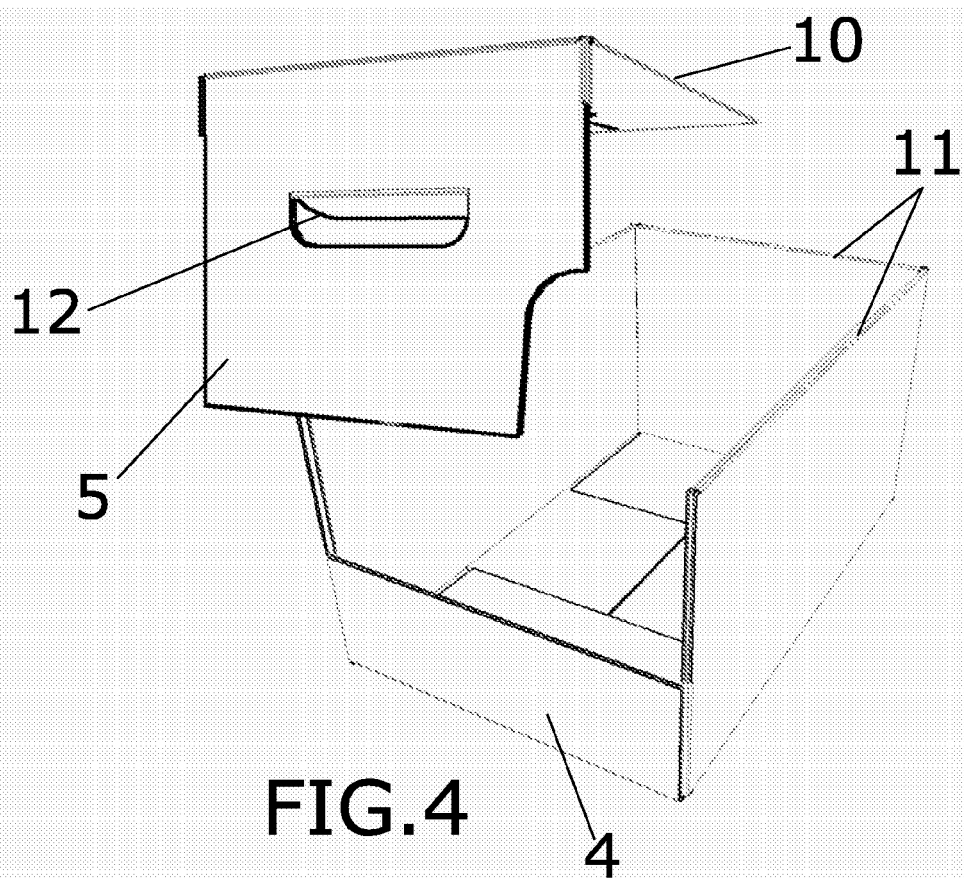


FIG. 3



20-08-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6189780	B1	20-02-2001	NONE

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82