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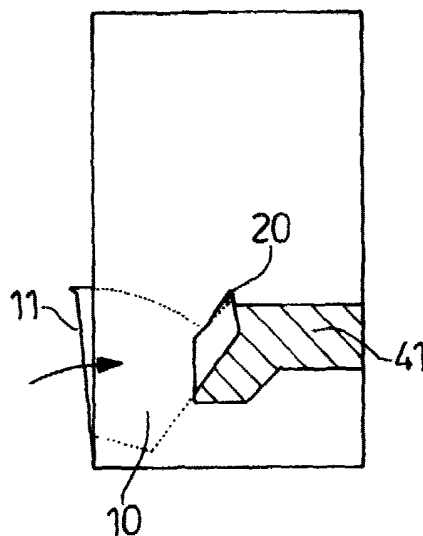
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(54) **Box with child-deterrent means**

(57) The present invention is directed to a box (1) comprising top and bottom sides opposing each other, left and right sides opposing each other, and front and back sides opposing each other, one wall comprising a basculating drawer door (11) provided with one sliding flap (10) which extends in at least one of the adjacent walls, said basculating drawer door (11) giving/prevent-

ing access to the inside of the box (1), characterized in that said box (1) comprises a means (40,41) for releasably blocking the drawer door (11). Preferably, the greatest height of the drawer door (11), as measured between the top edge and the bottom edge of the door (11), is greater than the front to back dimension of the carton while the opening angle is greater than 45°.

Fig. 8b



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Description

Field of the invention

[0001] The present invention relates to a carton container with a drawer door which opens to allow access to the contained product, in particular products such as detergent tablets.

Background of the invention

[0002] Boxes with a drawer door for automatic dish-washing tablets are representative of the various containers for consumer products to which the present invention can apply. Such boxes are typically made out of cardboard and have a substantially parallelepipedal shape with six sides and twelve edges, respectively, the top, bottom, back, front, left and right sides. An edge is defined as the intersection of two sides and named so as to clearly mention the two adjacent sides which are linked through this edge, for example: the edge which comprised between the front side and the bottom side will be named as the front/bottom edge. For definition purposes as well, we will consider that in normal upright position, the top and bottom sides are in the horizontal plane, the four other sides being vertical. If the front side is facing an observer, the left side of the carton is on the left of the observer, the right is on the right of the observer, and the back side is invisible to the observer.

[0003] Such boxes are usually folded and glued from a die cut, or blank, which is the corresponding flat structure. The die cut is preferably made out of one single piece for cost reasons. Cardboard is not isotropic material and so, it has a grain direction, which is the preferred direction along which the die cut is more resistant. In the case of corrugated cardboard, the grain direction corresponds to the direction of the corrugations.

[0004] Such boxes typically comprise a drawer door which is hingeably attached to the rest of the carton by its bottom edge, so that it can basculate in open/close position to respectively give/prevent access to the interior of the box. The basculating drawer door comprises two sliding flaps that are slidably positioned into the left and right sides of the carton. These sliding flaps normally comprise a stopping means, for example a hook that stops the drawer door in the open position at a given angle.

[0005] Boxes as described above have a number of disadvantages. These boxes can be used for different kind of products, such as sweets and other food products, but they are also used for dangerous products such as, for example, detergent tablets. Such detergent tablet are usually stored in a practical place, since they are used very often, in some cases, once a day. A major risk is that young children can grab the box, play with it, and easily access the detergent product inside the box. It has been shown that in all cases, it takes only a few seconds for a child to open the drawer of the box and

access the detergent product. The longer it takes for the child to open the drawer, the more chances an adult has to notice it and stop the child.

Another disadvantage is that for a given opening angle of the drawer door, the height of the drawer door is usually linked to the dimensions of the sliding flaps: while it is possible to have a drawer door height which is greater than the front to back dimension, this is only possible in the case the opening angle of the drawer door is 45° as a maximum. This causes a limitation in the drawer door functionality, opening angle, and product accessibility. Moreover, for a given volume, the front to back dimensions are such that the overall proportions of the carton limit the height and width of the box, and thus, the shelf impression and impact (i.e. the facing) of the package on the consumer.

[0006] It is a main object of the present invention to provide a box suitable for storing and dispensing detergent tablets, the box comprising a basculating drawer door to give/prevent access to the tablets, said box comprising a means for releasably blocking the drawer door.

[0007] It is another object of the present invention is to provide the user with a box which comprises a drawer door, the drawer door having at least one, but preferably two sliding flaps with reduced height, so that the drawer door height dimensions can be greater than the front to back dimensions of the box for a given opening angle, thus increasing visibility and accessibility of the product.

[0008] It is a further object of the present invention to provide the consumer with a box with drawer door, the drawer door comprising inclinations on its top portion that provide increased accessibility to the product from the beginning of use until the end.

[0009] It is another object of the present invention to provide a carton with narrower front to back dimensions that deliver, for a given volume, a better shelf impression, as well as reduced packaging material consumption, and increased robustness.

[0010] It is another preferred object of the present invention to provide a carton that, for stiffness reasons is constructed so that the carton grain direction is vertical during stacking and transportation of the carton, that is to say, the direction of the gravity should be the grain direction when the carton is stacked or transported.

[0011] It is then another preferred object of the present invention to provide a carton that is made out of a single die cut, that is folded and glued so as to be delivered flat to erecting machines, formed, filled and glued, such as standard normal erectable cartons, and so that the sliding flaps are kept free of glue.

[0012] It is a further preferred object of the present invention to provide the consumer with a carton that features a tear strip, as a tamper-evidence means, that breaks when the drawer is first inclined, and thus, indicates if the carton has already been opened.

Summary of the invention

[0013] The present invention is directed to a box comprising top and bottom sides opposing each other, left and right sides opposing each other, and front and back sides opposing each other, one wall comprising a basculating drawer door provided with one sliding flap which extends in at least one of the adjacent walls, said basculating drawer door giving/preventing access to the inside of the box, characterized in that said box comprises a means for releasably blocking the drawer door. Preferably, the greatest height of the drawer door, as measured between the top edge and the bottom edge of the door, is greater than the front to back dimension of the carton while the opening angle is greater than 45°.

[0014] Another further aspect of the present invention is related to the die cut embodiments corresponding to the above described carton.

Brief description of the drawings

[0015] The invention will now be explained in detail with reference to the accompanying drawings, in which:

- Figure 1 is a perspective view of the carton in closed position.
- Figure 2 is a profile view of the carton showing the drawer door in open position, when the side tear strip for child-deterrence is still in place.
- Figure 3 is a profile view of the carton showing the drawer door in closed position, when the side tear strip for child-deterrence is still in place.
- Figure 4 is a plan view showing the external side of a one-piece die cut corresponding to a carton with drawer height inferior or equal to the front to back dimension.
- Figure 5 is a plan view showing the external side of two separate pieces of a die cut, corresponding to a carton with drawer height which is greater than the front to back dimension
- Figure 6 is a plan view showing the internal side of a two-piece die cut with the internal drawer panel glued onto the external drawer panel.
- Figure 7.a is an enlarged view of the internal side of the external drawer panel showing the cut lines that delimit the internal layer of the carton tear strip.
- Figure 7.b is an enlarged view of the external side of the external drawer panel showing the cut lines that delimit the external layer of the carton tear strip.
- Figure 8.a is schematic profile view showing the side tear strip being removed to activate the child-deterrent drawer-locking means. In the embodiment shown on this figure, the tear strip is being removed while the drawer door is in open position.
- Figure 8.b is a schematic profile view of the box of the present invention, when the side tear strip has been removed, and the drawer is in the closed position. The hook of the sliding flap is protruding and

overlapping a portion of the side wall of the box, thus locking the drawer door in closed position.

- Figure 8.c is a schematic profile view of the box of the present invention, when the side tear strip has been removed. Arrows show how the user is pressing on the hook of the sliding flap, and pulling on the drawer door to open it. The drawer door is shown in partially open position.

Detailed description of the invention

The box

[0016] As shown in figure 1, a box (1) is provided which comprises top and bottom sides opposing each other, left and right sides opposing each other, and front and back sides opposing each other. As it will be explained in more detailed hereafter, one side of the box (1) comprises a basculating drawer door (11) provided with at least one sliding flap (10) which extends in at least one of the adjacent sides - or walls - of the box (1), said basculating drawer door giving/preventing access to the inside of the box (1). The top side is on the top of the box (1) when it is standing upright, the front side being visible by an observer, while the back side is hidden. Each side can have various shapes but preferably has a rectangular shape. The overall proportions of the box (1) may vary in order to adapt to different volumes of contents.

The box (1) is made out of plain or corrugated cardboard (such as mini, micro, B-fluting...) or any other suitable material, for example plastic. It can be entirely made out of cardboard or plastic, or several materials can be used in a combination. Moreover in the case the box is made out of plain or corrugated cardboard, one can add a moisture protective barrier, for example a coating can be applied to the box, or a barrier film can be wrapped around the box, once it has been formed, filled and closed. In a preferred embodiment, the box is a carton made out of F-flute cardboard. Each side of the box (1) is made out of at least one layer of material. If a layer covers the entire surface of one side of the box (1), it is called a panel. If it covers only a portion of said side, it is then called a flap. Optionally, one or more side of the box (1) comprises at least one portion which is made out of a full-transparent semi-rigid material so as to create a transparent window through which the contents of the box (1) is visible from the outside when the drawer door (11) is in the closed position. The window can be of any shape. For technical reasons, it is preferably located into a side which comprises a single layer.

[0017] The box (1) as described in the present application is formed out of a corresponding die cut which is folded and glued. The glue can be applied in different ways, for instance, cold glue can be applied by rollers, or hot melt glue can be applied by glue guns, nozzles or pattern plates. Depending on the shape of the die cut, the forming and filling process can vary: in a first em-

bodiment of a process, the die cut is made out of separate elements, as shown in figure 5, which are glued together, then the folding operation is done at the same time as the filling operation, on the production line. In a second embodiment of a forming/filling process, as shown in figure 4, which is a standard process known by those skilled in the art, the die cut is made out of a single piece in which the drawer door (11) panel is folded and glued on the panel which comprises the precut opening. On the filling line, the preformed box (1) is fed as a flat element, it is then erected in standard forming machines, a first side is formed and glued, it is then filled with the box (1) contents, and the opposite side is then formed and glued so as to close the box (1). Both above mentioned folding, gluing, and filling processes of a die cut so as to form the corresponding box (1), are well known by people skilled in the art.

[0018] One of the sides of the box (1) comprises an opening (12) so that the user can access the contents. The opening (12) is preferably positioned at the bottom portion of the front side. While its shape is preferably the same as the shape of the reclosable drawer door (11), it necessarily comprises inclinations (13) at its bottom part, as shown in figure 1, so as to allow the bottom portion of the left and right panels to be attached to the front side, and so, not to be loose.

The basculating drawer door

[0019] The box (1) of the present invention comprises a drawer door (11) for closing the opening (12). Said drawer door (11) is achieved by cutting at least one portion of one side of the box (1) so that it remains attached only by one edge (16) to the rest of the box (1), said remaining portion thus acting as a hinge (16). The drawer door (11) can basculate around the hinge (16) in open/close position to respectively give/prevent access to the inside of the box (1). The basculating drawer door (11) further comprises at least one but preferably two sliding flaps (10), as shown in figures 1 to 3 and 8.a to 8.c, that are used to guide and maintain a drawer door (11) during the operations of opening and closing, as well as to define a specific opening angle at which the drawer door (11) is to be stopped. In a preferred embodiment of the present invention, the left and right sides of the box (1) are made out of at least two layers (a panel and/or a flap). At least one portion of the space which is defined between these layers is free of glue, so that a sliding flap can be slidably inserted herebetween. Panels, flaps, sliding flaps may feature inclinations or cut outs so as to use a minimum amount of material. All along the present description, the flaps and panels will have the denomination of the side they cover (i.e. the front panel corresponds to the front side), once the box (1) has been formed. Moreover for clarity purposes, all along the description, the side containing the drawer door (11) will be defined as the front panel.

The basculating drawer door (11) is composed of,

at least two layers: firstly, an external drawer panel (14) which is attached to the bottom side of the box (1) through the bottom/front edge (16), said edge (16) being used as a hinge, and secondly an internal drawer panel (15) to which at least one, preferably two sliding flaps (10) are attached (see figure 4). The internal and external drawer panels are glued together, so as to form the drawer door (11) which is rotateably attached to the rest of the box (1) by its bottom edge (16) as shown in figure 2, and which comprises at least one, preferably two sliding flaps (10) slidably positioned into the left and right sides of the box (1) - see figures 2 and 3 -.

Each of the sliding flaps (10) is designed in a substantially arcuate shape and preferably comprises at least one stopping means, for example a hook (20), so that the drawer door (11) is stopped in the open position at a defined opening angle, which is preferably greater than 30°, more preferably greater than 45°. The length of a sliding flap is defined as the distance between, firstly the edge which links the front panel of the basculating drawer door to said sliding flap, and secondly the free end of said sliding flap. Moreover, each sliding flap is slidably positioned into the corresponding side of the box (1): the right side of the box (1) is made out of 2 layers (each layer can be a panel or a flap), and the space between these layers is free of glue, so that the sliding flap which is positioned hereinto is free to move slidably. Furthermore, for a given volume of the box (1), and since the height of the edge linking a sliding flap to the drawer door (11) is reduced, the overall size of this sliding flap, and more specifically its length can be reduced, so as to be less than the drawer door (11) height. Furthermore, the sliding flaps (10) feature inclinations (21), as shown in figures 2, 3, 4, 5, so that the two layers constitutive of the right and left sides are glued together, especially in the bottom portions of said left and right sides, while the front to back dimension is preferably equal to the length of a sliding flap. Then, the length of the sliding flaps (10) is the sole limiting factor to define the front to back dimension of the box (1), this front to back dimension can be reduced down to less than the height of the drawer door (11), thus giving increased accessibility and visibility to the contents throughout the use of the box (1).

[0020] The overall shape and dimensions of the drawer door (11) are the same as for the box (1) opening. However, this shape may feature all types of inclinations or curved corners so as to reduce the proportions of the sliding flaps (10) while keeping the functionality of the opening. Moreover and preferably, the bottom edge of the internal drawer panel (15) which hingedly links the drawer door (11) to the rest of the package, does not comprise inclinations at its bottom part. The top edge of the drawer door (11) features inclinations or curved corners (17), as shown in figure 1, so that the extremities of the top edge of the drawer door (11) correspond to the upper extremity of the edge between a sliding flap and the drawer door (11). The reduction of height of the

left and right edges of the drawer panel allows to reduce the size of the sliding flaps (10), while keeping the functionality of the hook (20) of the sliding flaps (10) that stop the drawer door (11) at a given opening angle which is preferably greater than 45°.

[0021] In the preferred embodiment the top edge of the drawer door (11) comprises curved corners (17). Since the corresponding shape of the box opening (12) features straight inclinations, overlaps (18) are created, as shown in figure 1, so that a sound effect is created, at the opening and closing operations, but especially at the closing operation.

The drawer door (11) preferably features a facilitating opening means which is located so as to improve the ease of opening by the user. For example, at least one opening notch (19) is positioned along at least one edge of the drawer, preferably the upper edge of the drawer door (11), as shown in figure 1.

The means for releasably blocking the drawer door

[0022] The box (1) according to the present invention can be used for different kind of products, such as sweets and other food products, but it is primarily meant for packing of dangerous products such as, for example, detergent tablets. Such detergent tablets are usually stored in a practical place since they are used very often along the week, in some cases, once a day. A major risk is that young children can grab the box, play with it, and easily access the detergent product inside the box, ingest it with risk that they get injured. It has been shown that in all cases, it takes only a few seconds for a child to open the drawer of the box and access the detergent product. The longer it takes for the child to open the drawer, the more chances an adult has to notice it and stop the child before she/he has a chance to eat one tablet.

A means to render the drawer more difficult, because non-obvious, to open is defined as child-deterrent, as opposed to a child-proof means that renders a package impossible to open for the child - no matter how long the child tries -. In the context of the present invention, a good child-deterrent means is achieved by a means for releasably blocking the drawer door, which is meant to give enough time for an adult to notice that the child is playing with the box (1), and stop her/him before she/he has a chance to access the contents.

The means for releasably blocking the drawer door of the present invention is preferably achieved by pre-cutting a portion (40) of the side into which a sliding flap is positioned to create a child-deterrent tear strip (40), as shown in figures 1 to 8c. The consumer has then the choice to: (a) leave the precut portion (40) in place, in which case the means for releasably blocking the drawer door (11) will not be activated, or (b) activate the means for releasably blocking the drawer door by tearing the precut portion (40) from the rest of the box (1).

Once the precut portion (40) has been removed,

it cannot be replaced and an opening (41) is created in the side, as shown in figures 8.b and 8.c. The removed tear strip portion (40) will be appropriately chosen so that the hook (20) of the sliding flap (10) is locked in it, since the free end of said sliding flap, and in particular the hook portion (20) is protruding outside said opening and overlapping one portion of the box's side, as shown in figure 8.b. It might be preferred that the user folds the hook outwardly from the side wall of the box (1), at first use, so that said hook (20) will protrude even more during future opening attempts, and will block more efficiently the drawer door. Optionally, the die cut can be provided with a pre-folding line, so that the hook (20) will be bent even more easily. This prevents the drawer door (11) from basculating, and giving access to the box (1) contents. In order to unlock the drawer door (11), the user has to apply coordinate movements to press on the protruding hook (20), and pull the drawer door (11) as shown with the arrows in figure 8.c, so that the hook (20) can escape from the child-deterrent opening (41). It has been found that such coordinate movements are very difficult to apply for young children, and as such, they constitute a good child-deterrent means.

The tamper evident means

[0023] Additionally, the box (1) preferably features a tamper-evidence means. A tamper evidence means is a seal-like means that allows a consumer to see immediately if the box (1) has already been opened, while she/he is looking for the product on the shelf of the store. The way the tamper evidence means indicates if the box (1) as already been opened must be immediate and obvious, moreover it must be designed so that it cannot be replaced after the first opening of the box (1). Several possibilities for tamper evidence means are applicable to the present invention. For example, a tear strip (22) is located in, at least, the front side of the box (1), and connected to the upper edge of the drawer door (11), so as to follow the inclinations or curves (17) of the drawer door (11). In one preferred embodiment of the present invention, the tear strip (22) is a part of the box (1), that is to say, it has been precut in the front panel, as an integral part of the carton die cut, and said removable tear strip links the top of the drawer to the front panel of the box (1) when said box (1) has not yet been opened. In another embodiment, to the cardboard tear strip (22) as described above is fixed a separate element, for example it is a band of polyethylene terephthalate (PET), or any other suitable plastic material, which is fixed in the inside of the horizontal portion of the tear strip (22). In this way, the horizontal portion of the tear strip (22) is reinforced.

The die cut

[0024] A second aspect of the description of the present invention will now be directed to two die cut em-

bodiments, corresponding to the above described box (1). It is however to be kept in mind that other possibilities of die cuts can be applied for forming a box (1) as above-described.

[0025] In a first embodiment as shown in figure 4, all the different elements of the box (1) (panels, flaps, sliding flaps (10)...) are part of a single die cut which is first partially folded and glued before it can be fed on the production line, filled and closed; this process is well known from the people skilled in the art of making cartons out of die cuts.

In figure 4, the side which is shown is the surface which will be printed (external side). All the elements of the die cut (panels, flaps, sliding flaps (10)) that are adjacent to each other, are hingeably attached through lines of weakness (25), so as to prepare and facilitate the folding operation of the die cut into an erected box (1). This die cut comprises a right and left sliding flaps (10), which are hingeably attached to an internal drawer panel (15). The internal drawer panel (15) is hingeably attached to an extension of the internal drawer panel (15) that is hingeably attached to a back panel. Right and left side flaps (26) are hingeably attached to the back panel (27), which is attached to a top panel (28). Right and left top flaps (29) are hingeably attached to the top panel (28), which is attached to a front panel (30). To the front panel (30) are hingeably attached left and right side panels (31) as well as a bottom panel (32). Finally, left and right bottom flaps (33) are hingeably attached to the bottom panel (32).

[0026] Cut lines are made in the front panel so as to delimit the shape of the external drawer panel (14), and the tear strip (22) as well.

For the external drawer panel (14), the cut lines correspond to the upper and lower inclinations, to the left and right edges, and to the top and bottom edges of the external drawer panel (14). They are preferably cut in a discontinuous way (dotted cut lines) so as to keep the external drawer panel (14) attached to the left and right panels, in the region of the upper inclinations and in the region of the left and right edges, before the first opening of the box (1). Dotted cut lines also prevent the tear strip (22) from being loose in the region of the inclinations.

In one embodiment of the present invention, at least one, but preferably two tongues or portions of the cardboard are created by splitting the layer of the box (1) in the region of the tear strip (22) into two parts, when the tear strip (22) is removed at the first opening. The purpose for this is to improve the tamper evidence means efficiency, and mostly to improve the strength of the box (1) in this area. This is made by applying cut lines through half the depth of the cardboard layer in areas that are different over the internal and external sides of the external drawer panel (14). Thus, as shown in figures 7.a and 7.b, this delimits first and second overlapping precut areas (34) in the cardboard layer, that are split apart from each other when the tear strip (22) is

peeled away. The external layer of these overlapping precut areas (34) is part of the tear strip (22) (see figure 7.a), and thus, is peeled away with it. The internal layer of the first overlapping precut area is part of the front panel (see figure 7.b). The internal layer of the second overlapping precut area is part of the external drawer panel (14) and is glued onto the internal drawer panel (15). First and second overlapping precut areas (34) are split apart from each other in such a way that, once the tear strip (22) has been removed, it is not possible to replace it, and moreover, it is obvious that it has been removed, since the split surfaces show the mid-layer that has no coating.

[0027] In figures 4 or 5, the precut portion corresponding to the child-deterrent opening (41) and removable child-deterrent tear strip portion (40) previously described can be seen. Most preferably, the precut (40) is made in the external side flap, and does not extend along the whole width of the flap, so as not to weaken the structure of the box (1).

[0028] Finally, a long opening is preferably cut along the line of weakness which links the internal drawer panel (15) and the extension of the internal drawer panel that improves the folding properties of the line of weakness and mostly to allow the hinge of the drawer door (11) to function properly once the internal (15) and external (14) drawer panels have been glued together.

[0029] In a second embodiment of the present invention as shown in figures 5 and 6, the die cut is made out of at least 2 separate elements: the internal drawer panel (15) has previously been cut separately and then glued on the rest of the die cut. A 2-piece die cut is usually fed on the production line in a totally open position. It is then partially folded and glued, then it is filled with the contents and then closed. This process of entirely folding the box (1) out of an open die cut, directly on the filling line is also known from the people skilled in the art.

[0030] All different embodiments of the present invention that are applicable to a single piece die cut are also applicable in this case of a die cut that is composed of multiple parts. However, the extension of the internal drawer panel (15) is replaced by a single connecting flap (35) (see figures 5, 6) that allows to connect the bottom part of the back panel to the rear part of the bottom panel. In this second embodiment of a die cut applicable to the present invention, the internal drawer panel (15) is a separate element whose external surface (which is usually covered with a protective coating) is glued onto the internal side of the external drawer panel (14), as shown in figure 6.

In the present execution, the die cut is fed on to the filling/folding line in a flat position, however it is already folded since the connecting flap (35) is glued onto the internal surface of the rear portion of the bottom panel. So, on the line, the die cut is erected, one of the sides is closed, the box (1) is then filled and its other side is finally closed. This process of forming, filling and closing a box (1) from a flat die cut which is already partially

folded is a standard process which is well known by those skilled in the art.

Finally, as for the embodiment of a single piece die cut, the dimensions of the flaps may vary, as well as the order in which the different panels and flaps are folded and glued, so as to build a functional box (1) as previously described.

[0031] The box of the present invention is best achieved when combining at least some of the different preferred embodiments previously described. For example, it will be apparent that combining the means for blocking the drawer door, together with a tamper-evident means will provide increased benefit to the consumer.

Claims

1. A box (1) comprising top and bottom sides opposing each other, left and right sides opposing each other, and front and back sides opposing each other, one wall comprising a basculating drawer door (11) provided with at least one sliding flap (10) which extends in at least one of the adjacent walls, said basculating drawer door (11) giving/preventing access to the inside of the box (1), **characterized in that** said box (1) comprises means (40, 41) for releasably blocking the drawer door (11).

2. A box (1) according to claim 1, wherein said means for releasably blocking the drawer door (11) is achieved by providing said at least one of said adjacent walls with one removable tear-strip portion (40) which, once removed creates an opening (41) into which the hook (20) of the sliding flap (10) is releasably locked.

3. A box (1) according to any of the preceding claims, which is made out of cardboard.

4. A box (1) according to any of the preceding claims, wherein said at least adjacent walls comprise two layers between which a sliding flap (10) is free to slide, said removable tear strip portion (40) being cut into the external layer.

5. A box (1) according to any of the preceding claims, wherein the shape of the sliding flap (10) is such that the drawer door (11) can open at an angle which is greater than 30°, more preferably greater than 45°, and the greatest height of the basculating drawer door (11), measured between the top edge and the bottom edge of the door, is greater than the front to back dimension of the box.

6. A box (1) according to any of the preceding claims, wherein the length of a sliding flap (10), defined as the distance between, firstly the edge which links

the basculating drawer door (11) and said sliding flap (10), and secondly the free end of said sliding flap (10), is equal to the front to back dimension of the box.

7. A box (1) according to claims 1 to 6, which is made out of a one-piece die cut.

8. A box (1) according to claims 1 to 6, which is made out of a die cut comprising multiple pieces glued or adhered together.

9. A box (1) according to any of the preceding claims, which comprises a means that produces a sound effect at closing/opening (12) of the box.

10. A box (1) according to any of the preceding claims, which further features a tamper-evidence means.

11. A box (1) according to claim 10, wherein the tamper evidence means is achieved by using a tear strip which is a detachable portion of the front panel linking the top of the drawer to the front panel.

12. A box (1) according to claim 10, wherein the tamper evidence means is achieved by using a plastic tear strip which is attached to the inside of a portion of the front panel linking the top of the drawer to the front panel.

Fig. 1

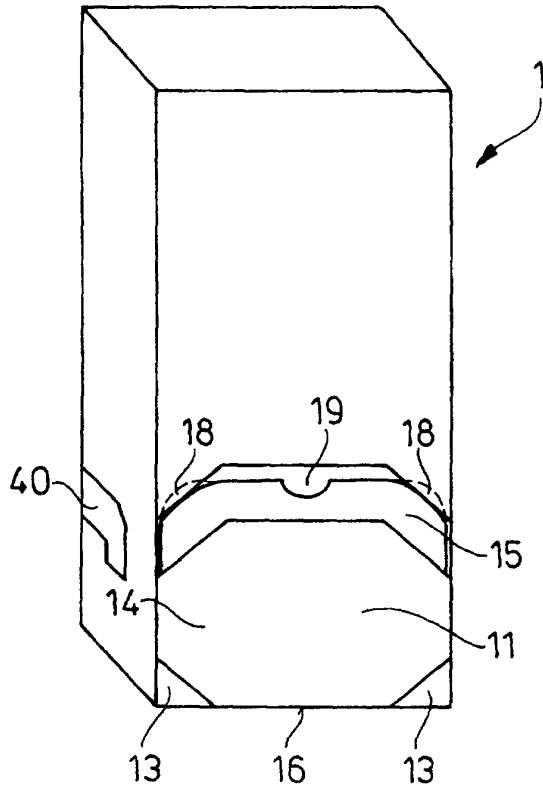


Fig. 2

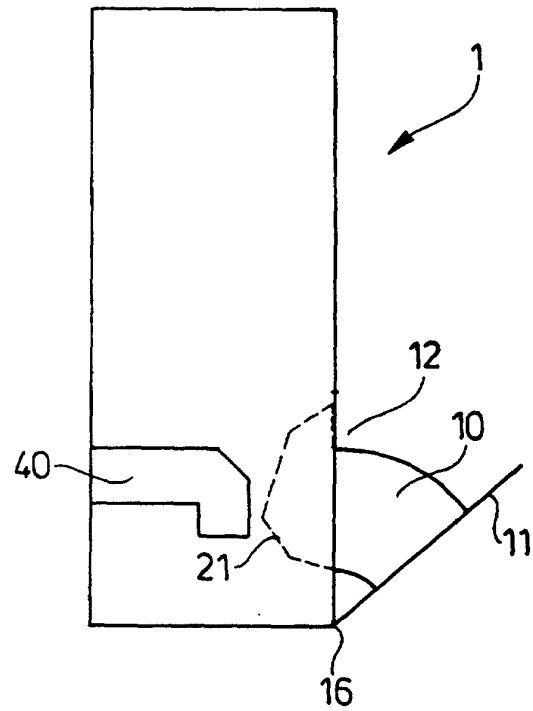


Fig. 3

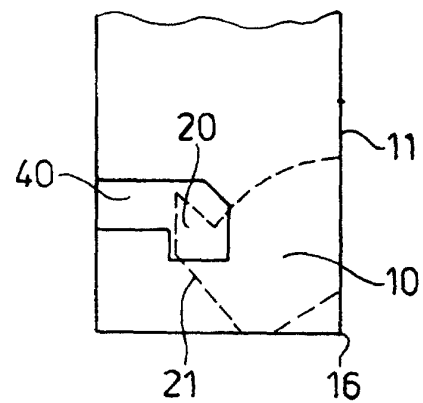


Fig. 4

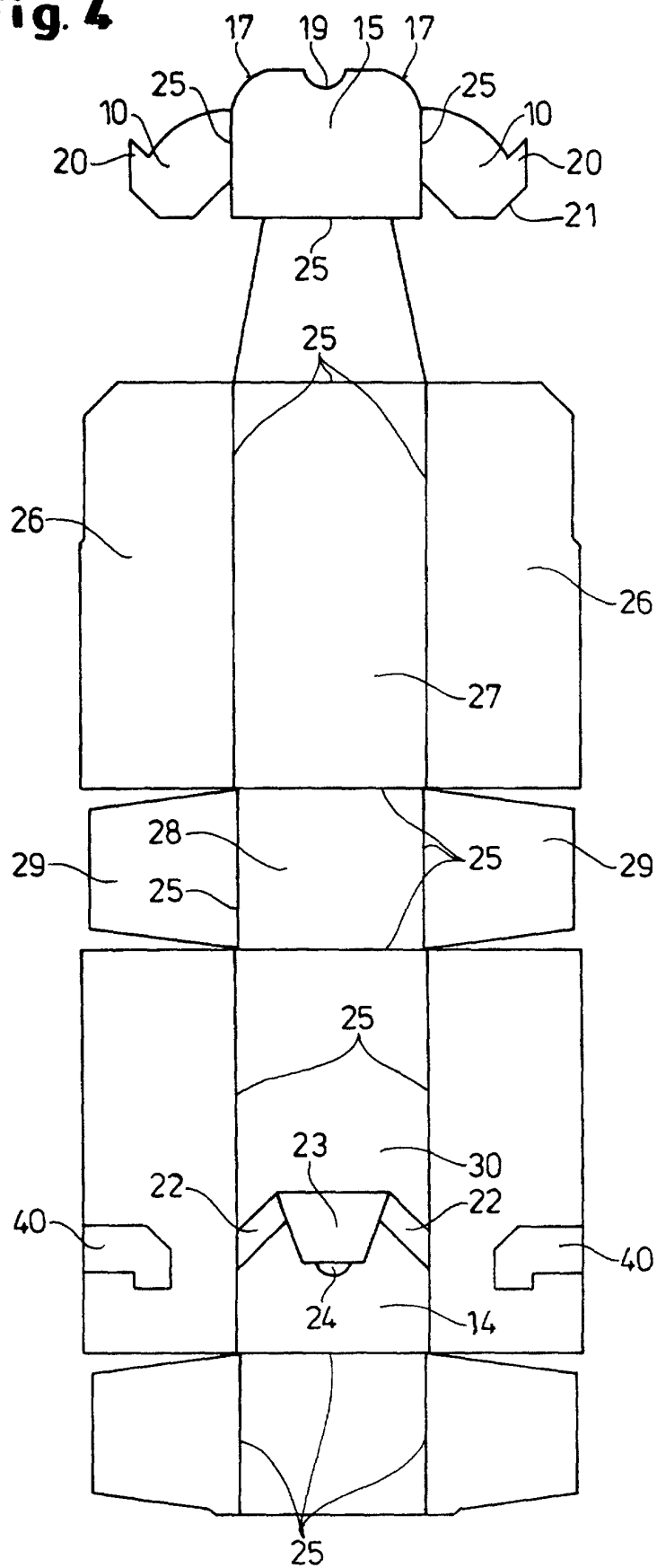


Fig. 5

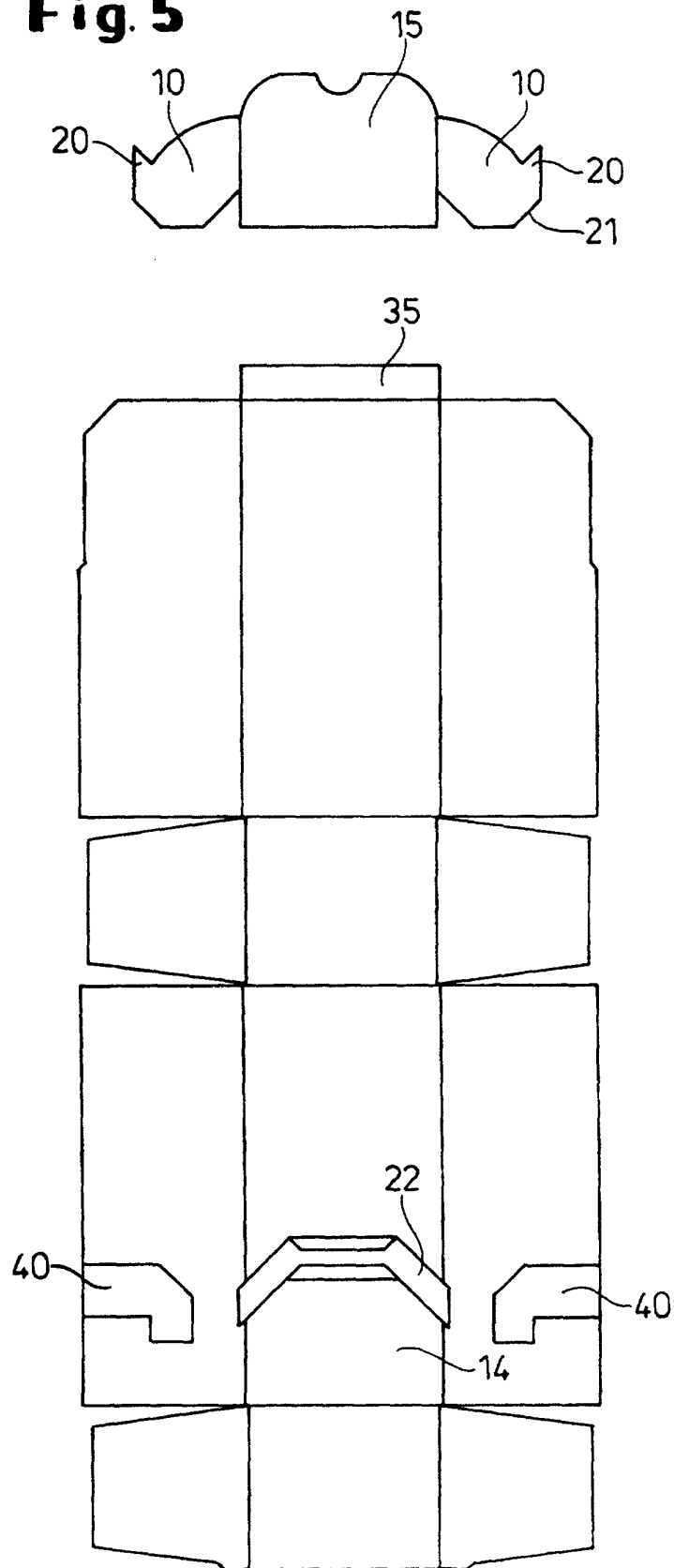


Fig. 6

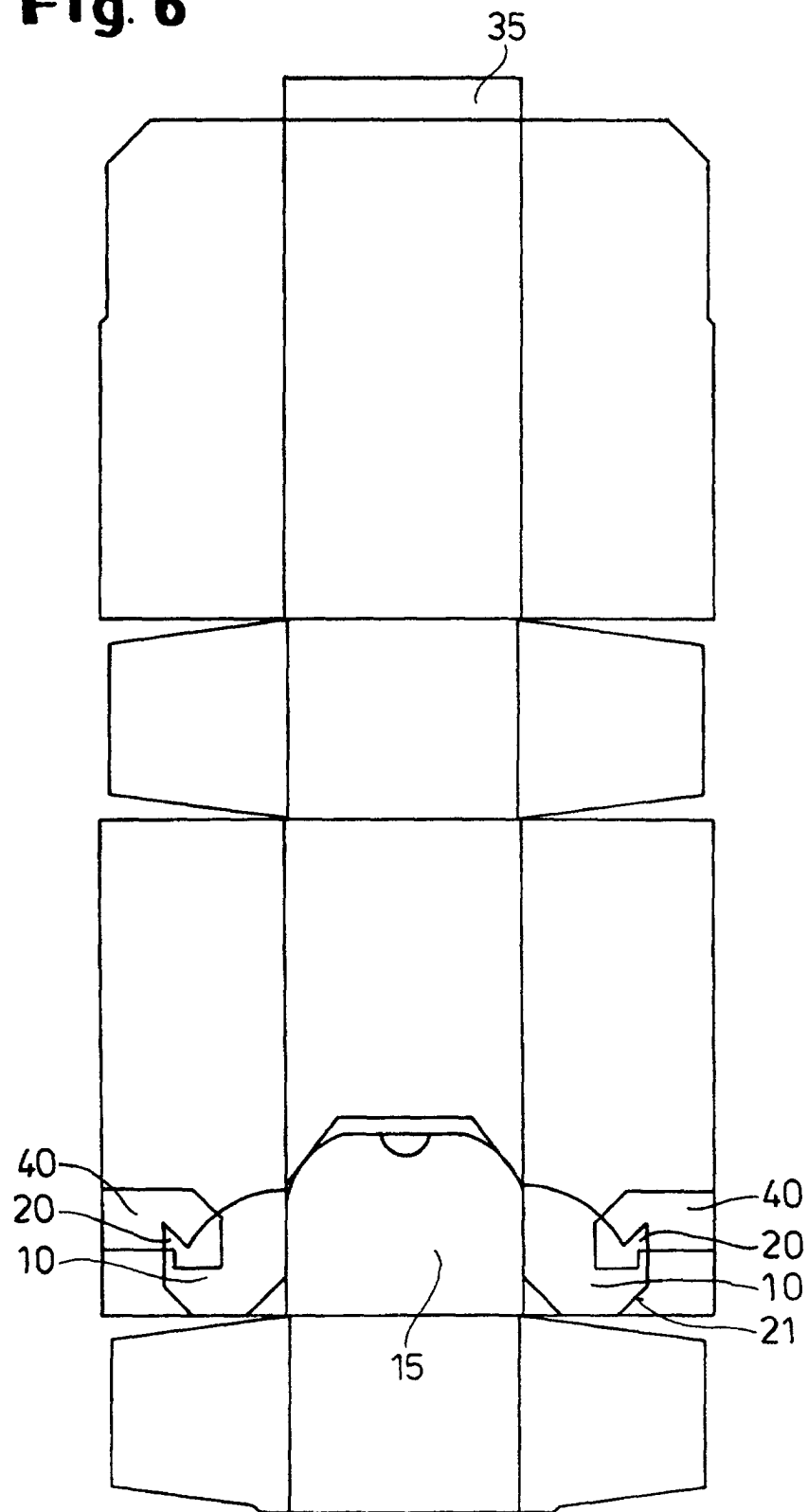


Fig. 7a

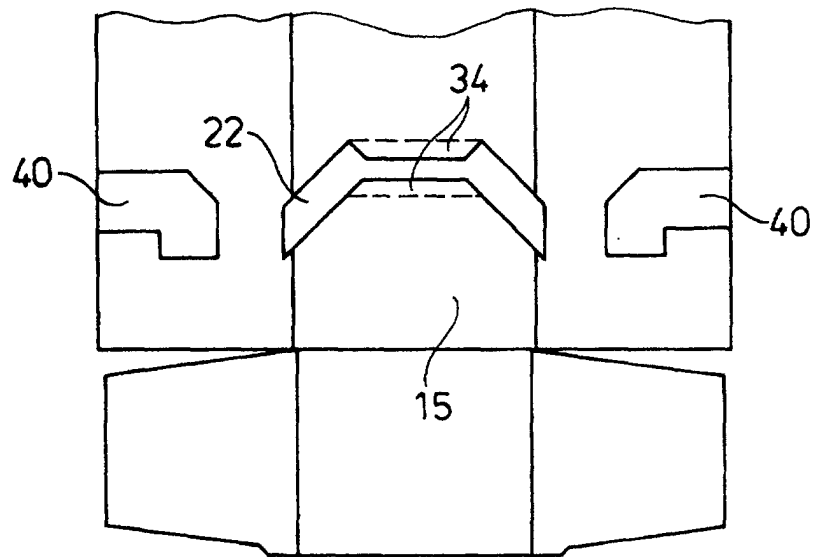


Fig. 7b

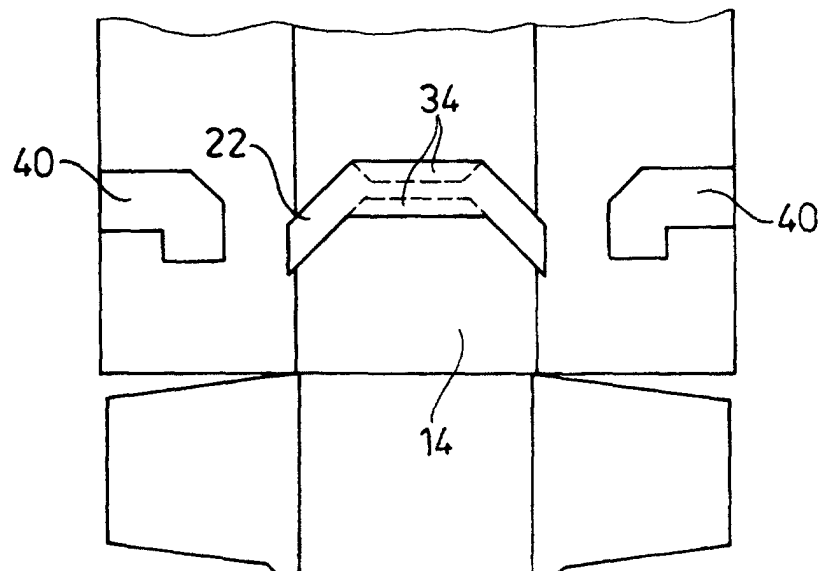


Fig. 8a

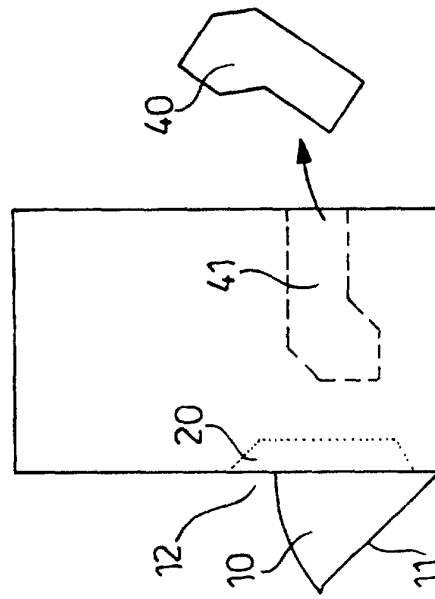


Fig. 8b

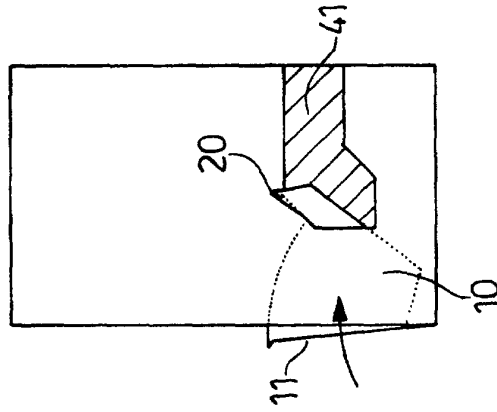
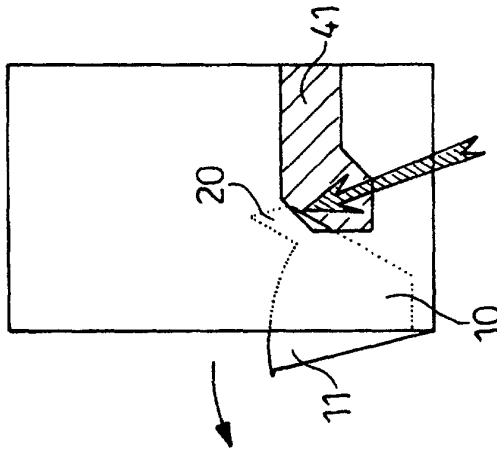


Fig. 8c





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 00 87 0046

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A	* page 12, line 28 - line 32; figures 1,2 *	2	
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THE HAGUE		8 August 2000	Berrington, N
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