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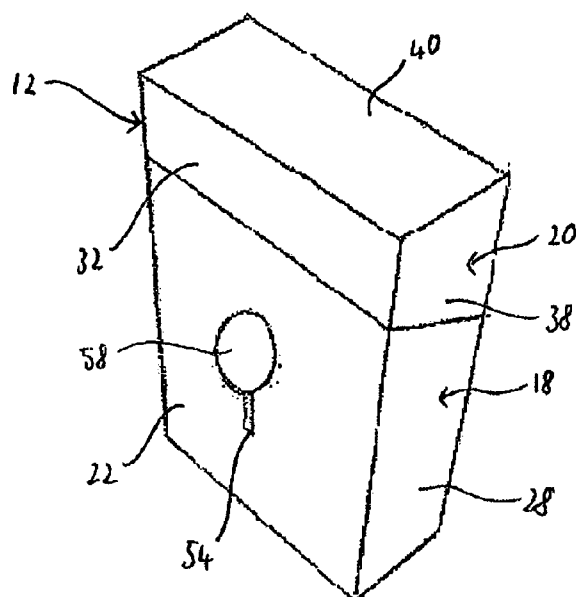


Figure 1

(57) Abstract: A slide and shell container (10) for consumer goods comprises an outer shell (12) and an inner slide (14) for housing the consumer goods. The outer shell (12) comprises a box (18) and a lid (20), wherein the lid (20) is resiliently biased towards an open lid position. The inner slide (14) has an opening and is slidable within the outer shell (12) between a first slide position and a second slide position. In the first slide position, the inner slide (14) is capable of retaining the lid (20) of the outer shell (12) in a closed lid position. The lid (20) is moveable from the closed lid position to the open lid position by movement of the inner slide (14) from the first slide position to the second slide position.

SLIDE AND SHELL CONTAINER WITH RESILIENTLY BIASED LID

The present invention relates to a novel slide and shell container for consumer goods. The container finds particular application as a container for elongate smoking
5 articles, such as cigarettes.

It is known to package consumer goods in containers comprising an outer shell or sleeve and an inner slide or tray in which the consumer goods are housed and which is slidable within the outer shell. To remove consumer goods from such containers, a consumer slides the inner slide from an initial position within the outer shell to an open lid
10 position in which the inner slide projects outwardly from the outer shell, in order to partially expose an open end or side of the inner slide.

For example, EP-A-1 847 478 and US-A-3 400 874 both disclose slide and shell containers wherein the slide comprises a box and a lid, wherein the lid is attached to the box across a hinge line. The lid includes a flap on the outside thereof, which engages with a flap
15 on the inner surface of the shell as the shell is moved into the open lid position of the container. The flap is pulled along with the shell, thereby pivoting the lid about the hinge line to open the slide to allow access to the consumer goods.

It would be desirable to provide a novel slide and shell container that can be conveniently opened and closed. In addition, it would be desirable to provide a novel slide
20 and shell container that can be efficiently filled and assembled.

According to the invention there is provided: a slide and shell container for consumer goods comprising: an outer shell comprising a box and a lid, wherein the lid is resiliently biased towards an open lid position; and an inner slide for housing the consumer goods, the inner slide having an opening. The inner slide is slidable within the outer shell between a first
25 slide position and a second slide position. In the first slide position, the inner slide is capable of retaining the lid of the outer shell in a closed lid position. The lid is moveable from the closed lid position to the open lid position by movement of the inner slide from the first slide position to the second slide position.

Preferably, the lid of the outer shell comprises a lid front wall, a lid rear wall, a first lid
30 side wall, a second lid side wall and a lid top wall, and the box of the outer shell comprises a box front wall, a box rear wall, a box bottom wall, a first box side wall and a second box side wall. Typically, the upper end of the box portion is open to enable access to the consumer goods as well as movement of the inner slide within the outer shell.

The terms "front", "rear", "upper", "lower", "side", "top", "bottom", "left", "right" and other
35 terms used to describe relative positions of the components of containers according to the invention refer to the container in an upright position with the lid at the top end and the hinge

on the back. When the container in the upright position is open, the consumer goods contained in the inner slide may be removed from the top end of the container.

The terms "left" and "right" are used with reference to side walls of the container when the container is viewed from the front in its upright position.

5 The term "longitudinal" refers to a direction from bottom to top or vice versa. The term "transverse" refers to a direction perpendicular to the longitudinal direction.

Similarly, the terms "upwards" and "downwards" are used to describe the movement of the sliding element relative to the housing of containers according to the invention when the container is in an upright position.

10 The lid of the outer shell of containers according to the invention is retained in its closed lid position due to an interaction or engagement between the inner slide and the outer shell when the inner slide is in its first slide position. This interaction acts against the resilient bias of the lid such that the lid is unable to move to its open lid position until the inner slide is moved from the first slide position to the second slide position. In order to open the lid of the
15 outer shell, the consumer must therefore apply a positive force to move the inner slide to the second slide position and overcome the interaction between the lid and the inner slide, thereby releasing the lid such that it is free to spring to its open lid position. Advantageously, the likelihood that the container is inadvertently opened between uses is reduced.

Preferably, the first slide position of the inner slide is such that when the lid is in the
20 closed lid position a part of the inner slide lies within the lid. The inner slide can thereby block the movement of the lid to its open lid position. For example, where the lid is a hinge lid, the lid can be prevented from pivoting towards its open position by the portion of the inner slide lying within the lid.

Alternatively or in addition, a frictional interaction between the outer surfaces of the
25 inner slide and the inner surfaces of the lid of the outer shell may prevent the lid springing to its open lid position until a positive force is applied. Sufficient friction between the contacting surfaces of the outer shell and the inner slide may be achieved by providing an inner slide which is a friction fit within the lid of the outer shell. Alternatively or in addition, containers according to the invention may comprise one or more high friction surfaces. Alternatively or
30 in addition, containers according to the invention may further comprise at least one friction element to increase the friction between the lid of the outer shell and the inner slide.

Preferably, the inner slide is movable in a substantially vertical direction relative to the outer shell. Particularly preferably, the inner slide is moved in a downwards direction relative to the outer shell in order to move it from the first slide position to the second slide
35 position and an upwards direction in order to return it to the first slide position.

Optionally, the outer shell and inner slide may be arranged such that once the lid of the outer shell is in its open lid position, the inner slide may be moved between the first and second slide positions, independently of the lid. This allows the inner slide to be returned to the first slide position whilst the lid is open such that at least a part of the inner slide projects
5 out from the outer sleeve. This may advantageously improve access to the consumer goods within the inner slide by means of the opening therein.

The opening in the inner slide may extend over all or part of one or more walls of the inner slide. Preferably, the opening extends over at least the top wall of the inner slide so that the consumer goods within the inner slide may be removed from the upper end.
10 Particularly preferably, the opening also extends down a portion of the upper end of the front wall of the inner slide, to facilitate removal of the consumer goods.

In containers according to the invention, the opening in the inner slide will typically be at least partially uncovered when the inner slide is in the first slide position, so that the consumer can access the consumer goods. The opening may be provided such that when
15 the inner slide is in the second slide position the opening is fully covered by one or more walls of the outer sleeve. In this case, access to the consumer goods would not be possible in the second slide position of the inner slide and the inner slide must be moved from the second slide position to the first slide position with the lid open to uncover at least a portion of the opening.

Alternatively, the opening may be at least partially uncovered in the second slide position such that the consumer goods may be accessed in either the first slide position or the second slide position. Preferably, the opening is further uncovered as the inner slide is moved from the second slide position to the first slide position to improve access to the consumer goods. Alternatively, movement of the inner slide from the second slide position to
25 the first slide position may not uncover any more of the opening but may move the opening to a more accessible position for the consumer, for example, away from the box of the outer shell.

The lid of the outer shell may be separable from the box or may be connected to the box in some way such that the lid remains attached to the remainder of the container when it
30 is in its open lid position. Preferably, the lid is hingedly connected to the box across a hinge line. Upon movement of the inner slide from the first slide position to the second slide position, the hinge lid will automatically pivot about the hinge line, away from the box of the outer shell, to its open lid position.

The term "hinge line" refers to a line about which the lid may be pivoted in order to
35 open the container. A hinge line may be, for example, a fold line or a score line in the panel forming the rear wall of the container. Alternatively, a hinge line may be a fold line or a score

line in a piece of material bridging the lower edge of the rear wall of the lid and the top edge of the rear wall of the box. Such a piece of material may be, for example, a label that is permanently or removably attached to the rear wall of the lid and the rear wall of the outer shell. Preferably, the hinge line is positioned along the rear wall of the outer shell at a level
5 below the top edge of the rear wall.

Typically, it will be desired to reclose the container after opening by returning the lid to its closed lid position. The means and method for closing the lid will depend upon the construction of the lid and the way in which it is connected to the box, if at all. In the embodiments in which the lid is a hinge lid, the lid may be returned to the closed lid position
10 by applying a force to pivot it back towards the opening. This force may be applied directly or indirectly to the lid.

Containers according to the invention may be provided with any suitable means for resiliently biasing the lid of the outer shell towards the open lid position. Where the lid is a hinge lid, the hinge line may be provided such that the lid naturally moves to the open lid
15 position. This may be the case, for example, where the outer shell is formed of a fibrous material and the hinge line is a score line or fold line. The lid will be biased towards a position in which the fibres at the score or fold line are compressed as little as possible.

Preferably, the lid is a hinge lid that is resiliently biased towards the open lid position by a first resilient member arranged between the lid rear wall and the inner slide. The first
20 resilient member may be integral to the rear wall of the lid. Alternatively, the first resilient member may be a separate portion of the container which is adhered to at least one of the rear wall of the lid and the inner slide. Alternatively still, the first resilient member may be fitted between the lid of the outer shell and the inner slide such that it remains in position without the need for adhesion, for example, by means of one of more engaging flaps.

The first resilient member is preferably a compression spring member provided
25 between the rear wall of the lid and the inner slide. The tension in the compression spring member is released as the lid is moved from the closed lid position to the open lid position. In order to close the lid, a sufficient force must therefore be applied to compress the spring member, such that the lid can be closed over the inner slide. In the absence of a sufficient
30 force, the compression spring member will spring back to its original shape, causing the lid to pivot into its open lid position and move away from the inner slide.

In a preferred embodiment, the first resilient member is provided by a laminar sheet of, for example, cardboard or plastic which has been folded or corrugated such that movement of the lid from the open lid position to the closed lid position compresses the folds
35 or corrugations. The material from which the laminar sheet is formed must be sufficiently

resilient that it returns to substantially the original shape once the compressive force has been removed.

In a particularly preferred embodiment, the first resilient member is provided by a laminar sheet which has been folded about a single fold line to form two panels. One or
5 more panels of the first resilient member may be provided by one or more of the panels forming the rear wall of the lid of the outer shell.

Preferably, the inner slide is resiliently biased towards the first slide position. This means that a force is required to move the inner slide from the first slide position to the second slide position and once that force is removed, the inner slide will automatically revert
10 back to the first slide position. Particularly preferably, the inner slide is resiliently biased towards the first slide position by a second resilient member arranged between the inner slide and the outer shell. Advantageously, the provision of the second resilient member provides a more secure closure of the lid of the outer shell, since the inner slide will remain biased in the first slide position, holding the lid closed, until a positive force is applied.

The second resilient member is preferably a compression spring member, which is compressed as the inner slide is moved from the first slide position to the second slide position. In a preferred embodiment, the second resilient member is provided by a folded or corrugated laminar sheet, as described above in relation to the first resilient member. The second resilient member may be integral to at least one of the inner slide and the outer shell
20 or may be fitted or adhered between the inner slide and the outer shell. In a particularly preferred embodiment, the second resilient member is provided between the bottom wall of the inner slide and the bottom wall of the outer shell.

Preferably, containers according to the present invention are arranged such that the movement of the inner slide relative to the outer housing is limited. This is to ensure that the
25 inner slide is not pushed out of the outer shell beyond its first slide position, thereby reducing the risk of the inner slide becoming separated from the outer shell. For example, the inner slide may be connected to the outer shell, directly or indirectly. Alternatively, the arrangement of one or both of the first and second resilient members may limit the movement of the inner slide relative to the outer shell.

Preferably, one or more cut outs are provided in the outer shell of containers according to the invention. In use, a consumer may grasp the inner slide through the one or more cut outs in order to move it between the first slide position and the second slide position. Particularly preferably, a pair of opposed, elongate cut outs are provided at the side edges of the front wall of the outer shell for this purpose.

In certain preferred embodiments, the inner slide is moveable by means of an opening button connected to the inner slide and passing through a cut out in the outer shell.

In such embodiments, the inner slide can be moved between the first slide position and the second slide position through the movement of the button. The opening button may be operated using a single finger or thumb. The provision of an opening button for moving the inner slide between the first slide position and the second slide position and opening the lid of the outer shell therefore enables the container to be conveniently opened using a single hand.

The container may be formed from any suitable materials including, but not limited to, cardboard, paperboard, plastic, metal, or combinations thereof. Preferably, the outer shell and inner slide are each formed from one or more folded laminar cardboard blanks and preferably, the cardboard has a weight of between about 100 grams per square metre and about 350 grams per square metre.

The inner slide and outer shell may be formed of the same or different materials to each other. When the same material is used to form both the inner slide and the outer shell, the thickness of the materials may be the same or different to each other and the finishing of the materials may be the same or different. Additionally, one or more of the blanks may be made of transparent material.

Containers according to the invention may be in the shape of a rectangular parallelepiped, with right-angled longitudinal and right-angled transverse edges. Alternatively, the container may comprise one or more rounded longitudinal edges, rounded transverse edges, bevelled longitudinal edges or bevelled transverse edges, or combinations thereof. For example, the container according to the invention may comprise, without limitation:

- One or two longitudinal rounded or bevelled edges on the front wall, and/or one or two longitudinal rounded or bevelled edges on the back wall.
- One or two transverse rounded or bevelled edges on the front wall, and/or one or two transverse rounded or bevelled edges on the back wall.
- One longitudinal rounded edge and one longitudinal bevelled edge on the front wall, and/or one transverse rounded edge and one transverse bevelled edge on the back wall.
- One or two transverse rounded or bevelled edges on the front wall and one or two longitudinal rounded or bevelled edges on the front wall.
- Two longitudinal rounded or bevelled edges on a first side wall or two transverse rounded or bevelled edges on the second side wall.

Where the container comprises one or more rounded edges and is made from one or more laminar blanks, preferably the blanks comprise three, four, five, six or seven scoring lines or creasing lines to form each rounded edge in the assembled container. The scoring lines or creasing lines may be either on the inside of the container or on the outside of the

container. Preferably, the scoring lines or creasing lines are spaced from each other by between about 0.3 mm and 4 mm.

Preferably, the spacing of the creasing lines or scoring lines is a function of the thickness of the laminar blank. Preferably, the spacing between the creasing lines or scoring
5 lines is between about 0.5 and about 4 times larger than the thickness of the laminar blank.

Where the container comprises one or more bevelled edge, preferably the bevelled edge has a width of between about 1 mm and about 10 mm, preferably between about 2 and about 6 mm. Alternatively, the container may comprise a double bevel formed by three parallel creasing or scoring lines that are spaced such that two distinct bevels are formed on
10 the edge of the container.

Where the container comprises a bevelled edge and is made from one or more laminar blanks, the bevel may be formed by two parallel creasing lines or scoring lines in the laminar blank. The creasing lines or scoring lines may be arranged symmetrically to the edge between a first wall and a second wall. Alternatively, the creasing lines or scoring lines
15 may be arranged asymmetrically to the edge between the first wall and the second wall, such that the bevel reaches further into the first wall of the container than into the second wall of the container.

Alternatively, the container may have a non-rectangular transversal cross section, for example polygonal such as triangular or hexagonal, semi-oval or semi-circular.

Containers according to the invention find particular application as packs for elongate smoking articles such as, for example, cigarettes, cigars or cigarillos. It will be appreciated that through appropriate choices of the dimensions thereof, containers according to the invention may be designed for different numbers of conventional size, king size, super-king size, slim or super-slim cigarettes. Alternatively, other consumer goods may be housed
25 inside the container.

Through an appropriate choice of the dimensions thereof, containers according to the invention may be designed to hold different total numbers of smoking articles, or different arrangements of smoking articles. For example, through an appropriate choice of the dimensions thereof, containers according to the invention may be designed to hold a total of
30 between ten and thirty smoking articles.

The smoking articles may be arranged in different collations, depending on the total number of smoking articles. For example, the smoking articles may be arranged in a single row of six, seven, eight, nine or ten. Alternatively, the smoking articles may be arranged in two or more rows. The two or more rows may contain the same number of smoking articles.
35 For example, the smoking articles may be arranged in: two rows of five, six, seven, eight, nine or ten; three rows of five or seven; or four rows of four, five or six. Alternatively, the two

or more rows may include at least two rows containing different number of smoking articles to each other. For example, the smoking articles may be arranged in: a row of five and a row of six (5-6); a row of six and a row of seven (6-7); a row of seven and a row of eight (7-8); a middle row of five and two outer rows of six (6-5-6); a middle row of five and two outer rows of seven (7-5-7); a middle row of six and two outer rows of five (5-6-5); a middle row of six and two outer rows of seven (7-6-7); a middle row of seven and two outer rows of six (6-7-6); a middle row of nine and two outer rows of eight (8-9-8); or a middle row of six with one outer row of five and one outer row of seven (5-6-7).

Containers according to the present invention may hold smoking articles of the same type or brand, or of different types or brands. In addition, both filterless smoking articles and smoking articles with various filter tips may be contained, as well as smoking articles of differing length (for example, between about 40 mm and about 180 mm), diameter (for example, between about 4 mm and about 9 mm). In addition, the smoking articles may differ in strength of taste, resistance to draw and total particulate matter delivery. Preferably, the dimensions of the container are adapted to the length of the smoking articles, and the collation of the smoking articles. Typically, the outer dimensions of the container are between about 0.5 mm to about 5 mm larger than the dimensions of the bundle or bundles of smoking articles housed inside the container.

The length, width and depth of containers according to the invention may be such that, in the closed lid position, the resultant overall dimensions of the container are similar to the dimensions of a typical disposable hinge-lid pack of twenty cigarettes.

Preferably, containers according to the invention have a height of between about 60 mm and about 150 mm, more preferably a height of between about 70 mm and about 125 mm, wherein the height is measured from the top wall to the bottom wall of the container.

Preferably, containers according to the invention have a width of between about 12 mm and about 150 mm, more preferably a width of between about 70 mm and about 125 mm, wherein the width is measured from one side wall to the other side wall of the container.

Preferably, containers according to the invention have a depth of between about 6 mm and about 100 mm, more preferably a depth of between about 12 mm and about 25 mm wherein the depth is measured from the front wall to the back wall of the container (comprising the hinge between box and lid).

Preferably, the ratio of the height of the container to the depth of the container is in between about 0.3 to 1 and about 10 to 1, more preferably between about 2 to 1 and about 8 to 1, most preferably between about 3 to 1 and 5 to 1

Preferably, the ratio of the width of the container to the depth of the container is in between about 0.3 to 1 and about 10 to 1, more preferably between about 2 to 1 and about 8 to 1, most preferably between about 2 to 1 and 3 to 1.

5 Preferably, the ratio of the height of the lid back wall to the height of the box back wall of the outer sleeve is between about 0 to 1 (hinge located at the top edge of the container) to about 1 to 1, more preferably, between about 1 to 5 and about 1 to 10, most preferably, between about 1 to 6 to about 1 to 8.

10 Preferably, the ratio of the height of the lid front wall of the outer sleeve to the height of the box front wall of the outer sleeve is between about 1 to 0 (lid covering the entire front wall) to about 1 to 10, more preferably, between about 1 to 1 and about 1 to 5, most preferably, between about 1 to 2 and about 1 to 3.

15 Where the container comprises smoking articles, the container may further comprise waste-compartments (for example for ash or butts) or other consumer goods, for example matches, lighters, extinguishing means, breath-fresheners or electronics. The other consumer goods may be attached to the outside of the container, contained within the container along with the smoking articles, in a separate compartment of the container or combinations thereof.

20 The exterior surfaces of containers according to the invention may be printed, embossed, debossed or otherwise embellished with manufacturer or brand logos, trade marks, slogans and other consumer information and indicia.

Where the inner slide of a container according to the present invention contains a bundle of cigarettes or other elongate smoking articles, the smoking articles are preferably wrapped in an inner liner of, for example, metal foil or metallised paper.

25 Once filled, containers according to the invention may be shrink wrapped or otherwise over wrapped with a transparent polymeric film of, for example, high or low density polyethylene, polypropylene, oriented polypropylene, polyvinylidene chloride, cellulose film, or combinations thereof in a conventional manner. Where containers according to the invention are over wrapped, the over wrapper may include a tear tape. In addition, the over wrapper may be printed with images, consumer information or other data.

30 The invention will be further described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 shows a perspective view of a container according to a first embodiment of the present invention, with the lid of the outer shell in its closed lid position;

35 Figure 2a shows a cross-sectional side view of the container of Figure 1 with the lid of the outer shell in the closed lid position and the inner slide in an upper position;

Figure 2b shows a cross-sectional side view of the container of Figure 1 with the lid of the outer shell in the open lid position and the inner slide in a lower position;

Figure 3 shows a perspective view of the container of Figures 1 and 2 with the lid of the outer shell in an open lid position and the inner slide in its second slide position;

5 Figures 4a and 4b show the laminar blanks for forming the outer shell and inner slide, respectively, of the container of Figures 1 to 3; and

Figure 5 shows a perspective view of a container according to a second embodiment of the present invention, with the lid of the outer shell in its closed lid position.

10 In Figures 4a and 4b dashed lines are used to indicate the position of hinge lines in the laminar blanks. These figures are not drawn to scale.

The container 10 according to the first embodiment of the present invention, shown in Figures 1 to 3, is a rectangular parallelepiped and comprises an outer shell 12 and an inner slide 14 mounted within the outer shell 12. A bundle of smoking articles 16 is housed in the inner slide of the container.

15 The outer shell 12 comprises a box 18 and a lid 20 connected to the box along a hinge line extending substantially horizontally across the back wall of the outer shell 12. The box has a front wall 22, a back wall 24, a left side wall 26, a right side wall 28 and a bottom wall 30. The upper side of the box is open, to provide an opening through which the inner slide 14 and the consumer goods therein can be accessed. The front wall 22 is provided with
20 an elongate cut out or slit 54, extending longitudinally along approximately the central third of the front wall.

The lid 20 has a front wall 32, a back wall 34, a left side wall 36, a right side wall 38 and a top wall 40. When the outer shell 12 is closed, the free edges of the walls of the lid 20 abut the free edges of the walls of the box 18 along a line of abutment. In the closed lid
25 position of the lid, the walls of the lid 20 therefore form extensions of the corresponding walls of the box 18 to define the walls of the outer shell 12.

The lid back wall 34 is formed from an inner lid back wall panel 34a and an outer lid back wall panel 34b. An opening flap 42 extends from the bottom edge of the inner lid back wall panel 34a and is folded upwards back towards the inner lid back wall panel 34b about a
30 hinge line extended substantially horizontally between the opening flap 42 and the inner lid back wall panel 34a. As a result of the resilience of the material from which the outer shell 12 is formed, in the absence of any applied force, the opening flap 42 and the inner lid back wall panel 34a will tend to move away from each other in order to open up the fold or score line. With the inner slide in place, the movement of the opening flap 42 is restricted such that the
35 lid 20 cannot pivot backwards. The lid 20 is thereby resiliently biased towards its open lid position. As can be seen from Figure 2a, when the container 10 is assembled and the lid 20

is in its closed lid position, the opening flap 42 lies between the lid back wall 34 and the inner slide 14.

The inner slide 14 comprises a front wall 44, a back wall 46, a left side wall 48, a right side wall 50 and a bottom wall 52. The upper side of the inner slide 14 is open, to provide an opening through which the smoking articles 16 can be accessed. Furthermore, a cut out 60 is provided at the upper edge of the front wall 44 of the inner slide, in order to extend the opening and facilitate removal of the smoking articles. The inner slide 14 is approximately the same width and depth as the outer shell 12, so that it is a relatively tight fit within the outer shell but is moveable therein. However, as can be seen from Figures 2a and 2b, the length of the inner slide 14 is less than that of the outer shell 12 to allow for the movement of the inner slide within the outer shell.

The bottom wall 52 of the inner slide 14 is formed from an inner bottom wall panel 52a and an outer bottom wall panel 52b. A spring member 56 extends from the back edge of the outer bottom wall panel 52b and is folded back towards the bottom wall 52 of the inner slide about a hinge line extended substantially horizontally between the spring member 56 and the outer bottom wall panel 52b. The spring member 56 is also folded several times in the form of a concertina. At each fold, the spring member 56 is folded back on itself to form panels of substantially the same width as each other and substantially the same dimensions as the bottom wall of the inner slide. The fold lines are substantially parallel to each other and lie substantially horizontally when the container 10 is assembled, parallel to the front and back edges of the bottom wall 52 of the inner slide.

As can be seen from Figures 2a and 2b, when the container 10 is assembled, the spring member 56 is mounted between the bottom wall 52 of the inner slide 14 and the box bottom wall 30. In the absence of any force, the spring member 56 expands to fill any available space between the bottom wall 52 of the inner slide and the box bottom wall 30 and pushes the inner slide 14 into the upper position shown in Figure 2a.

The inner slide 14 is moveable between the first, upper position shown in Figure 2a and the second, lower position shown in Figure 2b. In the upper position, the inner slide 14 is moved upwards as far as possible within the outer shell 12 so that the top edges of the inner slide 14 lie against the top wall 40 of the outer shell 12. In this position, the upper part of the inner slide 14 fills the lid 20 of the outer shell. In the lower position, the inner slide 14 is moved towards the bottom of the outer shell 12 so that the top edges of the inner slide lie below the level of the hinge line 8 between the lid 20 and box 18 of the outer shell.

An opening button 58 is provided on the front wall 22 of the box of the outer shell 12. The opening button 58 is connected to the front wall 44 of the inner slide 14 through the elongate slit 54 in the front wall 22 of the box and is free to move within the slit 54.

Movement of the inner slide 14 within the outer shell 12 can therefore be brought about through the sliding movement of the opening button 58 within the slit 54.

In order to open the outer shell 12 of the container 10, the inner slide 14 must be forced in a downwards direction using the opening button 58, until the upper edges of the inner slide 14 moves below the level of the line of abutment between the front walls of the box and lid of the outer shell. The movement of the opening flap 42 and the inner lid back wall panel 34a away from each other then causes the lid to pivot backwards to its open lid position in the direction shown by the arrow in Figure 2b. As the inner slide 14 is pushed downwards, the spring member 56 is compressed. As soon as the force on the inner slide 14 is removed or sufficiently reduced by releasing the opening button 58, the spring member 56 reverts to its original shape, causing the inner slide 14 to spring back to the upper position.

With the lid 20 in its open lid position and the inner slide 14 in the upper position, as shown in Figure 3, the smoking articles 16 may be removed from the inner slide 14 through the opening in the upper end of the inner slide 14. In order to close the outer shell 12, the consumer must move the inner slide 14 to the lower position, pivot the lid 20 back to its closed lid position and release the inner slide 14 to its upper position whilst holding the lid 20 in its closed lid position.

The outer shell 12 and inner slide 14 are formed from the laminar cardboard blanks shown in Figure 4a and 4b, respectively. The reference numerals used in Figures 4a and 4b correspond to those used in Figures 1, 2a and 2b such that each panel of the blank has been labelled with the reference numeral used to refer to the wall or flap formed by that panel in the assembled container. Where a wall is described above as being formed from two overlying panels, the inner and outer panels of that wall have been denoted using an 'a' and 'b' suffix, respectively.

The container 100 according to the second embodiment of the present invention, shown in Figure 5, is similar in construction and function to the container shown in Figures 1 to 3. However, the container shown in Figure 5 does not include an opening button for moving the inner slide between the first slide position and the second slide position. Instead, the outer shell 112 includes a pair of opposed elongate cut outs 114 extending in a longitudinal direction down the front edges of the box, along which the front wall of the box meets the side walls of the box. As shown in Figure 5, a portion of each cut out 114 is provided on the front wall of the box and the remaining portion is provided on the side wall, so that each cut out 114 has an L-shaped transverse cross section. In order to move the inner slide relative to the outer shell, the consumer can grasp the inner slide directly through the cut outs 114 in the outer shell.

CLAIMS

1. A slide and shell container for consumer goods comprising:

an outer shell comprising a box and a lid, wherein the lid is resiliently biased towards
5 an open lid position; and

an inner slide for housing the consumer goods, the inner slide having an opening,
wherein the inner slide is slidable within the outer shell between a first slide position and a
second slide position,

wherein in the first slide position, the inner slide is capable of retaining the lid of the
10 outer shell in a closed lid position and wherein the lid is moveable from the closed lid
position to the open lid position by movement of the inner slide from the first slide position to
the second slide position.

2. A slide and shell container according to claim 1 wherein movement of the inner slide
15 to the first slide position when the lid is in the open lid position at least partially exposes the
opening in the inner slide.

3. A slide and shell container according to claim 1 or 2 wherein the lid of the outer shell
comprises a lid front wall, a lid rear wall, a first lid side wall, a second lid side wall and a lid
20 top wall and wherein the lid is resiliently biased towards the open lid position by a first
resilient member arranged between the lid rear wall and the inner slide.

4. A slide and shell container according to claim 3 wherein the first resilient member is
integral to the rear wall of the lid.

5. A slide and shell container according to any preceding claim wherein the inner slide
25 is resiliently biased towards the first slide position.

6. A slide and shell container according to claim 5 wherein the inner slide is resiliently
30 biased towards the first slide position by a second resilient member arranged between the
inner slide and the outer shell.

7. A slide and shell container according to claim 6 wherein at least one of the first and
second resilient members comprises a laminar panel having one or more folds therein.

8. A slide and shell container according to any preceding claim wherein one or more cut outs are provided in the outer shell.
9. A slide and shell container according to claim 8 wherein a pair of opposed, elongate cut outs are provided at the side edges of the front wall of the outer shell.
10. A container according to any preceding claim wherein the inner slide is moveable by means of a button connected to the inner slide and passing through a cut out in the outer shell.
11. A container according to any preceding claim wherein the first slide position of the inner slide is such that when the lid is in the closed lid position a part of the inner slide lies within the lid, thereby retaining the lid in the closed lid position.
12. A container according to any preceding claim, wherein the lid and the box of the outer shell are connected by a hinge on the back wall of the outer shell.
13. A container according to any preceding claim comprising smoking articles.

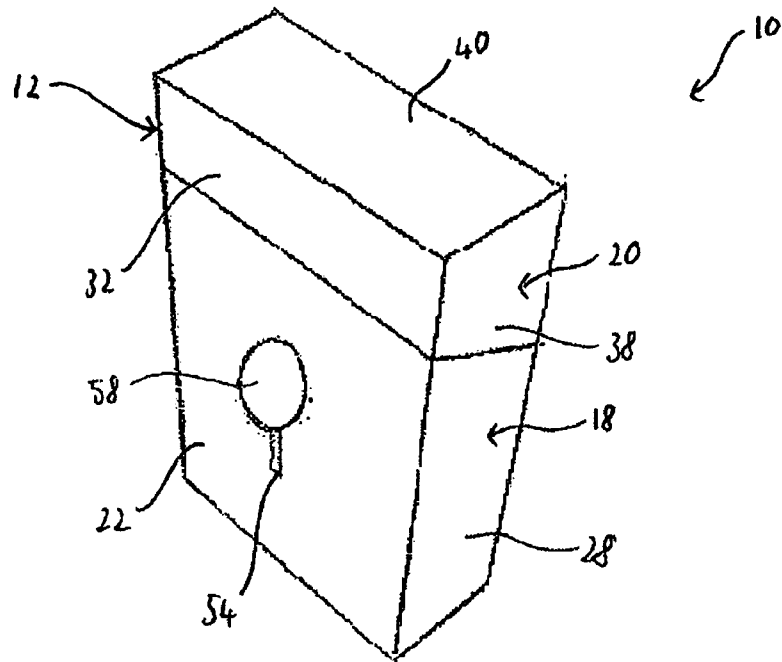


Figure 1

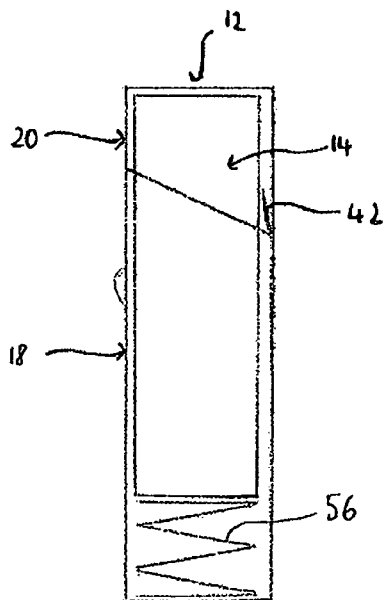


Figure 2a

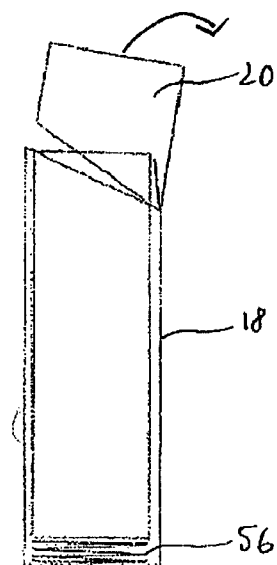


Figure 2b

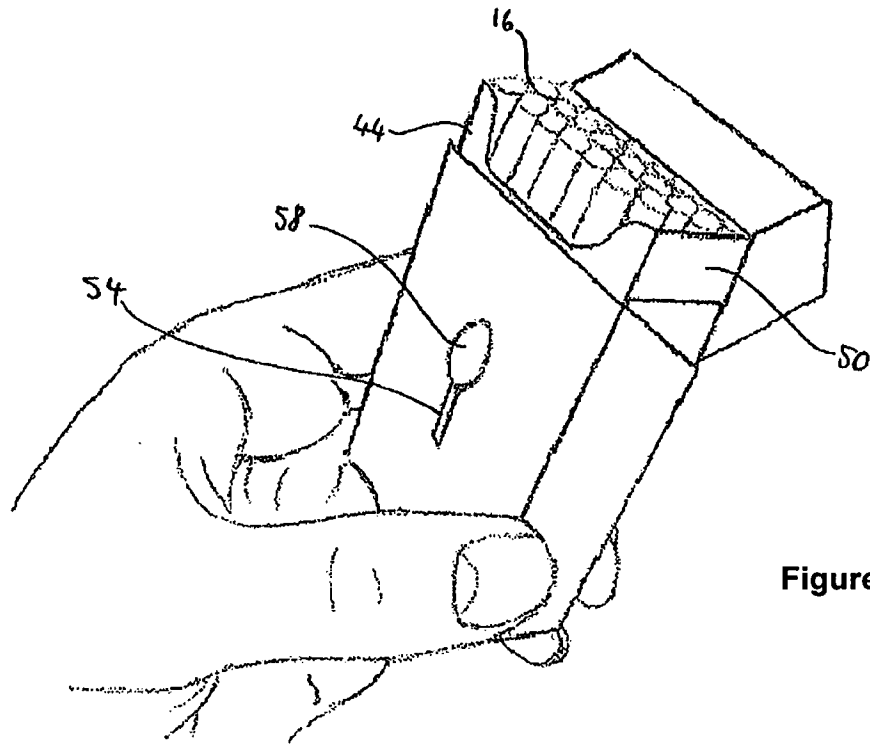


Figure 3

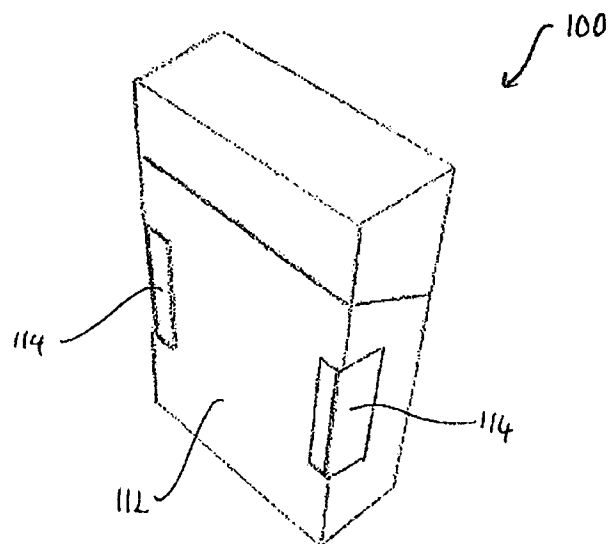
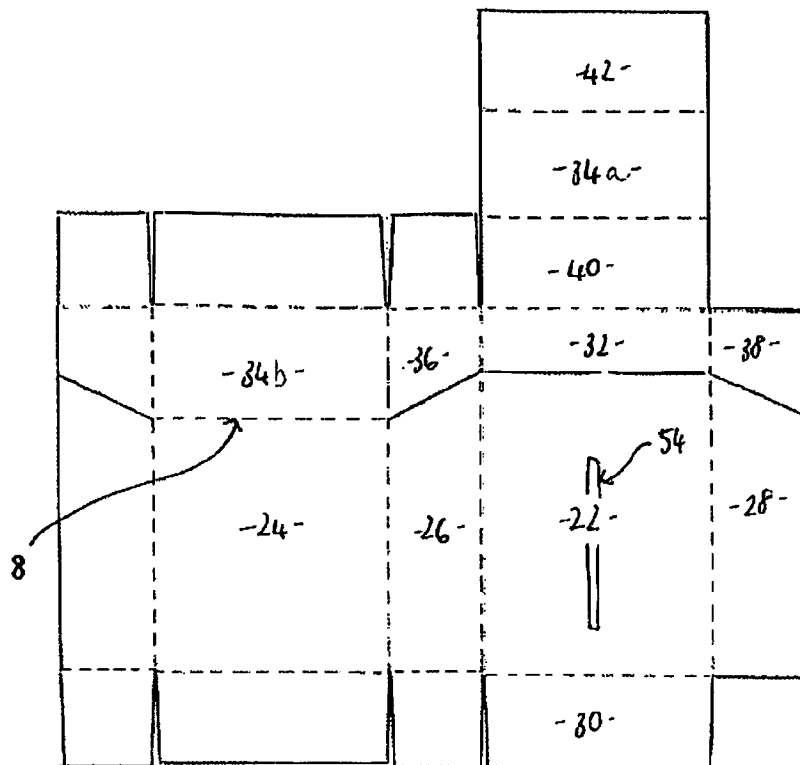
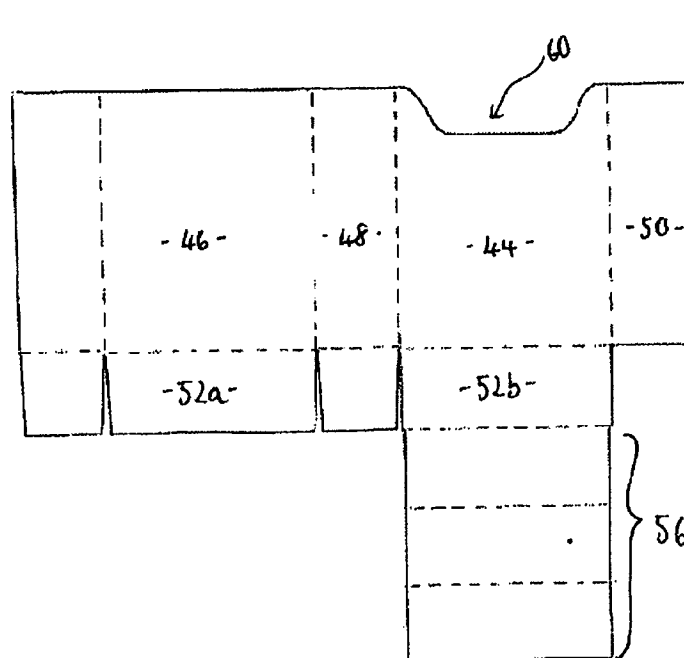


Figure 5



12

Figure 4a



14

Figure 4b

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2010/003827

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65D5/38 B65D83/08 B65D85/10
ADD.

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 295 17 933 U1 (CD CARTONDRUCK GMBH [DE]) 4 January 1996 (1996-01-04) page 7, line 6 - line 21; figures 1-5	1-13
A	EP 0 928 751 A (R J REYNOLDS INTERNATIONAL B V [CH]) 14 July 1999 (1999-07-14) figures 3,4	1-13

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

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"E" earlier document but published on or after the international filing date

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

28 October 2010

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11/11/2010

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2010/003827

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
DE 29517933	U1	04-01-1996	EP	0775636 A1	28-05-1997
EP 0928751	A	14-07-1999	AU	2276599 A	26-07-1999
			WO	9935056 A1	15-07-1999
			EP	1044144 A1	18-10-2000