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(54) Title: SLIDE AND SHELL CONTAINER WITH PIVOTABLE INNER SLIDE

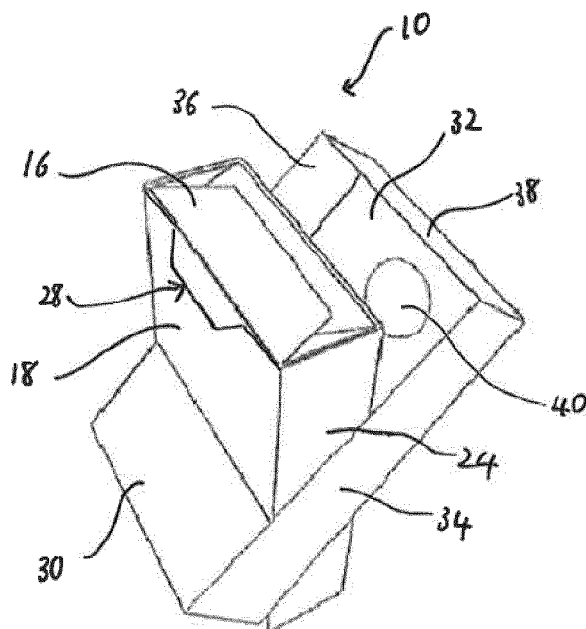


Figure 3

(57) Abstract: A container (10)(50) for consumer goods (16) comprises: an outer shell (14)(54) having an opening at the front wall of the container; and an inner slide (12)(52) comprising an opening and mounted in the outer shell for pivotal movement relative to the outer shell between a closed position in which the opening in the inner slide is inaccessible, and an open position in which at least a part of the inner slide projects through the opening in the outer shell such that the opening in the inner slide is accessible. The inner slide (12)(52) and outer shell (14)(54) are connected to each other along a hinge line extending across the back wall of the container, wherein the inner slide is pivotable about the hinge line. The inner slide (12)(52) and outer shell (14)(54) are integrally formed from a single laminar blank (110)(150).



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SLIDE AND SHELL CONTAINER WITH PIVOTABLE INNER SLIDE

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 articles, such as cigarettes.

It is known to package consumer goods in containers comprising an outer shell or sleeve and an inner slide in which the consumer goods are housed and which is slidable within the outer shell, in a longitudinal direction. To remove consumer goods from such containers, a consumer slides the inner slide from an initial, closed position within the outer shell to an open 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.

Containers in which consumer goods are housed in an inner slide that is pivotably mounted within an outer shell are also known. This type of container is commonly referred to as a "wing" pack. For example, US-A-3 881 559 and US-A-4 172 520 both disclose slide and shell containers having a pivotable inner slide. The containers disclosed there are made from at least two blanks.

It would be desirable to provide a novel slide and shell container that can be assembled and filled more efficiently. It would further be desirable if such a slide and shell container could be formed of a laminar blank that can be produced in a simple and efficient process.

According to the invention there is provided a container for consumer goods comprising:

an outer shell having an opening at the front wall of the container; and an inner slide comprising an opening. The inner slide is mounted in the outer shell for pivotal movement relative to the outer shell between a closed position in which the opening of the inner slide is inaccessible, and an open position in which the inner slide projects through the opening in the outer shell such that the opening of the inner slide is accessible. The inner slide and outer shell are connected to each other along a hinge line extending across the back wall of the container, opposed to the front wall. The inner slide is pivotable about the hinge line between the closed position and the open position. The outer shell and the inner slide are integrally formed from a single laminar blank.

The term "hinge line" refers to a line about which the inner slide may be pivoted relative to the outer shell in order to open the container. A hinge line may be, for example, a fold line or a score line in one or more of the panels forming the back wall of the container.

The terms "front", "back", "upper", "lower", "side", "top", "bottom", "left", "right" and other terms used to describe relative positions of the components of a container according to the invention refer to the container in an upright position with the hinge line along which the

inner slide and the outer shell are connected extending across the back wall. In order to open the container the inner slide is pivoted out through the opening at the front wall of the container, towards the consumer.

The integration of the outer shell and the inner slide into a single laminar blank provides manufacturing advantages. In particular, through the use of a single laminar blank the production process of the containers according to the invention can be made simpler and more efficient than the corresponding processes for containers of the prior art for slide and shell containers.

In the prior art containers the inner slide and outer shell are formed of separate and distinct laminar blanks which must be produced and printed separately before being assembled and combined to form the final container. The handling and assembly of the separate laminar blanks for the inner slide and outer shell typically requires relatively complex manufacturing processes. In contrast, the use of a single laminar blank to form both the inner slide and the outer shell of containers according to the invention enables the use of simpler and more efficient machinery and processes. In many cases, the assembly of the containers from the single laminar blanks can be carried out using existing packaging machinery.

In addition, there is greater flexibility in the processing of the single laminar blank, since the integration of the inner slide and outer shell enables the container to be partially assembled whilst remaining flat. This enables the blank manufacturer to partially assemble the container prior to transport to the manufacturer of the consumer goods who will complete the assembly and filling of the container. This makes the overall production process more efficient for the manufacturer of the consumer goods and allows the manufacturer to use the existing packaging apparatus and methods for assembly.

The integration of the inner slide and the outer shell into a single laminar blank also provides improvement in the opening mechanism of the container since the inner slide is more securely connected to the outer shell. The movement of the inner slide relative to the outer shell is therefore constrained and the inner slide is substantially restricted to the pivotal motion required in order to move the inner slide to an open position.

The inner slide and the outer shell of containers according to the invention are joined along the hinge line which extends across the back wall of the container. The hinge line preferably extends substantially horizontally across the full width of the back wall of the container. The hinge line is preferably positioned at an intermediate height between the top and bottom edges of the back wall. The height of the hinge line will typically be adjusted according to the position and size of the opening in the front wall through which the inner slide projects in the open position.

The back wall of the container will typically be formed of two or more back wall panels extending along all or a part of the length of the back wall, across the width of the back wall in a substantially transverse direction. The back wall panels overlie each other when the inner slide is in the closed position within the outer shell to provide a complete back wall. The inner slide preferably includes one or more slide back wall panels and the outer shell also preferably includes one or more shell back wall panels.

The hinge line preferably extends across a back wall panel of the container such that a first portion of the back wall panel on one side of the hinge line is integral with the inner slide. A second portion of the back wall panel on the other side of the hinge line is integral with the outer shell. Preferably, the first portion of the back wall panel is adhered to a slide back wall panel. Preferably, the second portion of the back wall panel is adhered to a shell back wall panel.

In the open position of the inner slide, the inner slide projects through the opening in the front wall of the container to allow access to the consumer goods that are housed within the inner slide. Where the inner slide is of similar dimensions to the outer shell, one or more additional openings may be required in the outer shell in order to allow sufficient movement of the inner slide such that it can be pivoted to the open position. Preferably, an additional opening is therefore provided in the back wall of the outer shell. Alternatively or in addition to an opening in the back wall, an additional opening may be provided in the bottom wall of the outer shell.

Particularly preferably, the outer shell is open at the bottom end of the container, so that the outer shell does not incorporate a bottom wall. The absence of a bottom wall may advantageously simplify the assembly procedure of the container, since the folding and adhering of the bottom wall panels of the container is simplified over containers in which both the inner slide and outer shell include bottom walls formed of overlying bottom wall panels.

In embodiments in which the outer shell is open at the bottom end, the outer shell preferably comprises support flaps extending from one or more of the bottom edges of the outer shell at the opening. For example, a support flap may be provided at the bottom edge of each side of the outer shell. The support flaps are preferably folded inwards about the bottom edge towards the inner surface of the corresponding wall panel. Particularly preferably, the support flaps are adhered to the inner surface of the corresponding wall panel.

The provision of support flaps advantageously provides the outer shell with improved rigidity and an improved ability to withstand any wear resulting from repeated usage of the container. In addition, the inclusion of the support flaps provides a smoother and more

aesthetically pleasing edge at the bottom of the outer shell than would be provided by a cut edge.

Preferably, the main opening in the front wall of the outer shell, through which the inner slide projects in the open position, extends over all or a part of the front wall of the container. Preferably, the opening extends along a part of the length of the front wall with one or more front wall panels additionally provided in the outer shell. This may provide structural rigidity to the outer shell.

In addition, the inclusion of an opening in the first wall that has a length that is shorter than the length of the inner slide may restrict the extent of the pivotal movement of the inner slide out through the opening. The open position of the inner slide may therefore advantageously be more clearly defined, since pivotal movement of the inner slide beyond a predefined open position will be prevented.

Preferably, the opening in the front wall extends along at least a half of the length or height of the front wall of the container, more preferably at least two thirds, with the remainder of the front wall provided by the one or more front wall panels. The size of the part of the inner slide that projects through the opening in the outer shell in the open position and the area of the access opening that is accessible can be modified through the adjustment of the height of the opening in the outer shell relative to the overall height of the container.

In particularly preferred embodiments of the invention, the main opening in the outer shell is provided at the upper end of the front wall such that in the open position of the inner slide a first corner of the inner slide projects through the opening. An access opening is provided at the corresponding first corner of the inner slide so that the access opening is accessible when the first corner of the inner slide projects through the opening in the outer shell in the open position.

Preferably, the outer shell comprises one or more cut outs extending from the opening in the front wall. Preferably, a pair of opposed cut outs is provided wherein each cut out extends from the opening in the front wall into the side wall. The provision of the cut outs adjacent the opening advantageously allow the consumer to more easily grasp the inner slide through the opening in order to pull it out through the opening. This facilitates the opening of the container in order to access the consumer goods.

Alternatively or in addition to the one or more cut outs extending from the opening in the front wall, the outer shell preferably comprises one or more cut outs in the back wall. The provision of cut outs in the back wall allows the consumer to apply a pushing force on the inner slide in order to move the inner slide towards the open position. This therefore further facilitates the opening of the container to access the consumer goods. Preferably, the one or more cut outs in the back wall are substantially circular or oval in shape and are

of a sufficient size to enable a finger or thumb to be placed through the cut out and into contact with the back wall of the inner slide.

In certain embodiments, additional cut outs or cuts may be provided in the outer shell in order to reveal the underlying surface of the inner slide. For example, a pattern of cut outs or cuts may be provided in order to reveal a design element on the exterior surface of the inner slide. With an appropriate combination of cut outs and design elements, it may be possible to provide visual effects, such as animation, as the inner slide is moved between the closed position and the open position.

As described above, in the closed position the inner slide is within the outer shell and the interior of the inner slide is inaccessible so that the consumer goods cannot be removed. This is the position in which the inner slide will typically remain during storage. In the open position of the inner slide, the interior of the inner slide is accessible to the consumer in the so that one or more consumer goods can be removed. The inner slide therefore includes an access opening which is uncovered, or capable of being uncovered, when the inner slide is in the open position. In the closed position, the access opening is preferably covered by one or more of the walls of the outer shell. The covering or closing of the access opening protects the consumer goods within the inner slide and helps to retain the freshness of the consumer goods.

The access opening is positioned at least in the part of the inner slide that projects through the opening in the front wall of the outer shell in the open position of the inner slide. The size and shape of the access opening in the inner slide can advantageously be adjusted in order to suit the size and shape of the consumer goods to be housed within the inner slide. Furthermore, if desired, the size of the access opening can be selected so that only a single consumer good or a small group of consumer goods is dispensed from within the inner slide.

In certain preferred embodiments of the invention, at least a part of the top wall of the inner slide is open in order to provide access to the interior of the inner slide in the open position. In the closed position of the inner slide, the opening in the top wall is covered by the top wall of the outer shell. When the inner slide is pivoted into the open position, the access opening is uncovered. The consumer goods can then be lifted out of the inner slide from the top end. The top of the inner slide may be fully open so that the inner slide does not include a top wall panel. Alternatively, an opening may be provided in the top wall of the inner slide which extends along only the part of the inner slide that projects through the opening in the outer shell. If desired, the opening may extend at least part way across other adjacent walls of the inner slide, such as for example the front wall. In alternative embodiments, an access opening is provided in the front wall of the inner slide or a side wall.

The access opening is preferably provided in one or more walls of the inner slide such that it is automatically uncovered when the inner slide is moved to the open position. Alternatively, the inner slide may be provided with a lid or cap which must be opened or removed in order to expose the access opening in the inner slide. For example, the inner slide may be provided with a hinge lid which can be pivoted to an open position when the inner slide is in the open position.

Preferably, the inner slide comprises one or more cut outs extending from the access opening. For example, where at least a part of the top wall is open to provide the access opening, one or more cut outs extending from the opening are preferably provided. Preferably, a pair of opposed cut outs is provided which extend into the adjacent side walls of the inner slide. The cut outs advantageously facilitate access to the consumer goods within the inner slide and the removal of the consumer goods from the inner slide through the access opening.

Preferably, where the access opening is provided in the top wall of the inner slide, the front wall of the inner slide extends above the level of the adjacent side walls at the opening. This means that the level of the top, free edge of the slide front wall is a small distance above the level of the top, free edges side walls. This extension of the slide front wall advantageously ensures that any gap between the top edge of the front wall and the top wall of the outer shell is minimised. This prevents the visibility of the consumer goods in the closed position and may additionally provide extra protection to the consumer goods.

Preferably, the internal dimensions of the outer shell are substantially the same as the external dimensions of the inner slide, so that inner surfaces of the outer shell overlie the outer surfaces of the inner slide in the closed position. In the closed position, the inner slide is therefore entirely within the outer shell.

In use, frictional forces generated between the outer surfaces of the inner slide and the inner surfaces of the outer shell resist pivotal movement of the inner slide between the closed position and the open position. This advantageously prevents opening and closing of the container without the application of a positive force by the consumer.

Preferably, containers according to the invention further comprise at least one friction element to further increase the friction between the outer shell and the inner slide. Alternatively or in addition to the at least one friction element, suitable retention means may be provided to retain the inner slide in the closed position. For example, the retention means may include one or more magnets, Velcro[®] strips, low-tack adhesives, embossed or debossed areas on at least one of the outer shell and the inner slide.

In certain preferred embodiments, the retention means comprises at least one retention tab provided on the inner slide. The at least one retention tab is capable of engaging with the outer shell in order to retain the inner slide in the closed position within the

outer shell until a positive force is applied. The at least one retention tab may engage with a corresponding tab provided on the inside of the outer shell, wherein the engagement of the tabs means that a greater force is required in order to move the inner slide towards the open position.

Alternatively and preferably, the outer shell includes one or more cut outs on the inner surface thereof, wherein the at least one retention tab engages with the one or more cut outs when the inner slide is in the closed position. In order to move the inner slide relative to the outer shell towards the open position, a sufficient force must be applied to disengage the retention tab from the corresponding cut out. Preferably, the wall of the outer shell comprising the one or more cut outs is formed of an inner wall panel and an outer wall panel, wherein the one or more cut outs are provided in the inner wall panel only, so that they are not visible from the outside of the container.

In preferred embodiments of the invention in which the top wall of the inner slide is open to provide the access opening, a retention tab is preferably provided at the top edge of the back wall of the inner slide. A corresponding cut out is provided in the inner top wall panel of the outer shell, adjacent to the back edge of the top wall.

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

Containers according to the invention may be in the shape of a rectangular parallelepiped, with right-angled longitudinal and right-angled transverse edges. Typically, the depth of a rectangular parallelepipedal container is different to the width of the container so that the container includes one pair of opposed, vertical walls that are wider and have a larger surface area than the other pair of opposed, vertical walls. The hinge line between the inner slide and the outer shell may be provided on one of the wider, vertical walls or on one or the narrower, vertical walls.

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, preferably the laminar blank comprises 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 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 the edge of the container.

Where the container comprises a bevelled edge, 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 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. In preferred embodiments of the invention a bundle of smoking articles is housed within the inner slide.

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 inside the inner slide of 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 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. 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 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 bottom wall to the top 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 150 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 line).

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.

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.

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.

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 one or more a tear tapes. In addition, the over wrapper may be printed with images, consumer information or other data.

Preferably, containers according to the invention are formed from a single laminar blank, which includes a slide-defining portion for forming the inner slide and a shell-defining portion for forming the outer shell. A hinge line is provided in the blank between the shell-defining portion and the slide-defining portion.

Containers according to the invention can advantageously be assembled from the single laminar blank using conventional assembly methods and apparatus, as described in more detail below. For example, the containers can be automatically assembled on a standard Bergami® machine, of the type used to assemble conventional packs of smoking articles.

The present invention also provides a laminar blank for forming a container according to the invention as described above. The laminar blank comprises a slide-defining portion for

forming the inner slide and a shell-defining portion for forming the outer shell. The slide-defining portion and the shell-defining portion are integrally formed in the laminar blank and connected to each other along a hinge line extending across a back wall panel of the laminar blank. Suitable cuts or cut outs may be provided on the laminar blank in order to form the necessary openings in the inner slide and outer shell.

In order to form a container according to the invention, the laminar blank incorporating the hinge line is first partially assembled by folding it along the longitudinal fold lines and gluing the inner slide and outer shell defining portions at their respective side walls, so as to form an open ended sleeve with the inner slide within the outer shell. The resultant open ended sleeve can advantageously be flattened at this stage for efficient storage or transport. Where present, the support flaps extending from the bottom edges of the shell side wall panels are preferably folded upwards and glued to the inner surface of the corresponding shell side wall as part of this initial, partial assembly process.

In the same or a separate process to the partial assembly described above, the consumer goods are then inserted into the inner slide through one of the open ends. As the filled pack progresses through an automatic packing machine, the inner bottom wall panel of the inner slide is folded inward towards the consumer goods. Glue is applied to the outer surface of the inner bottom wall panels. Following the application of the glue, the outer bottom wall panel of the inner slide is folded inwards towards the inner bottom wall panels so that the outer bottom wall panel of the inner slide is adhered to the inner bottom wall panel of the inner slide and similarly for the outer shell.

During assembly of the container, the panels of the blank forming the top walls of the inner slide and outer shell, where present, are automatically folded inwards and glued in the conventional manner.

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

Figure 1 shows a perspective front view of a container according to the invention, with the inner slide in a closed position;

Figure 2 shows a perspective back view of the container of Figure 1;

Figure 3 shows a perspective front view of the container of Figures 1 and 2, with the inner slide in an open position;

Figure 4 shows a single laminar blank for forming the container of Figures 1 to 3;

Figure 5 shows a perspective front view of an alternative container according to the invention, with the inner slide in a closed position;

Figure 6 shows a perspective back view of the container of Figure 5 with the inner slide in an open position; and

Figure 7 shows a single laminar blank for forming the container of Figures 5 and 6.

The container 10 shown in Figure 1 is a rectangular parallelepiped and comprises an outer shell 14 and an inner slide 12 mounted within the outer shell 14. A wrapped bundle of smoking articles 16 is housed in the inner slide 12 of the container 10. The inner slide 12 is pivotable relative to the outer shell 14 about a hinge line 'A' extending substantially horizontally across the back of the container 10.

The inner slide 12 has a front wall 18, a back wall 20, a left side wall 22, a right side wall 24 and a bottom wall 26. The front wall 18 and the back wall 20 are opposed to each other and have a width that is greater than the width of the side walls 22, 24. The overall width of the container 10 is therefore greater than the depth of the container when the container is viewed from the front.

The bottom wall 26 is formed from an inner bottom wall panel 26a and an overlying outer bottom wall panel 26b. The back wall 20 is formed from an inner back wall panel 20a extending the full height of the inner slide 12 and an outer back wall panel 20b overlying the inner back wall panel 20a. The outer back wall panel 20b extends from the bottom edge of the back wall to the hinge line A approximately one third of the way up the back wall 20, as will be described in more detail below.

The top side of the inner slide 12 is open, to provide an access opening through which the smoking articles 16 within the inner slide 12 can be accessed when the inner slide 12 is in an open position, as shown in Figure 3. The front wall 18 of the inner slide 12 comprises a trapezoidal cut out 28 extending from the top edge. This facilitates the removal of smoking articles 16 from the inner slide 12 in the open position. It may also enable the consumer to grasp the inner slide 12 in order to pull it forward to open the container. As can be seen from Figure 4, the upper edges of the front wall 18 at either side of the cut out 28 extend slightly beyond the upper edges of the adjacent side walls 22, 24.

The outer shell 14 comprises a front wall 30, a back wall 32, a right side wall 34, a left side wall 36 and a top wall 38. The internal dimensions of the outer shell 14 are similar to the internal dimensions of the inner slide 12 such that in the closed position the inner slide 12 sits entirely within the outer shell 14 with the walls of the outer shell 14 overlying the corresponding walls of the inner slide 12.

The front wall 30 of the outer shell 14 extends from the bottom edge of the outer shell 14 to a height of approximately one third of the overall height of the container 10. The remainder of the front side of the outer shell 14 is open to provide an opening through which the inner slide 12 projects in the open position, as shown in Figure 3.

The back wall 32 of the outer shell 14 is formed from an inner back wall panel 32a and an overlying outer back wall panel 32b. Both the inner 32a and outer 32b back wall panels extend from the top edge of the outer shell 14 and have a height of approximately two thirds of the overall height of the container 10. The outer back wall panel 32b extends to

the hinge line A and is integrally formed with the outer back wall panel 20b of the inner slide 12. The back wall 32 includes an oval cut out 40 extending through both of the back wall panels. The cut out 40 exposes an area of the underlying slide back wall 20 so that the consumer can push the inner slide 12 through the cut out 40 in order to move it towards the open position. The bottom side of the outer shell 14 is open, to allow for the movement of the inner slide 12 into the open position.

A support flap 42 extends from the bottom edge of each of the side walls 34, 36 of the outer shell 14. In the assembled container 10, each of the support flaps 42 has been folded by 180 degrees and adhered to the inner surface of the corresponding side wall. The support flaps 42 provide additional rigidity to the outer shell 14 and help to maintain the structural integrity of the outer shell 14.

The container 10 described above may be formed from the single laminar blank 110 shown in Figure 4. In Figure 4, the dashed lines indicate fold lines and the solid lines indicate cut lines. The reference numerals of the panels in the blank correspond to the reference numerals of the corresponding walls in the assembled container.

The blank 110 comprises a slide-defining portion 112 for forming the inner slide 12 and a shell-defining portion 114 for forming the outer shell 14. The slide-defining portion 112 and the shell-defining portion 114 are integrally formed from the single laminar blank 110 and are connected to each other along the hinge line A. The hinge line A extends across an intermediate panel in the blank and defines the outer shell back wall panel 20b below the hinge line and the outer shell back wall panel 32b above the hinge line. The hinge line A is in the form of a crease or score line in the blank 110.

Figure 1 shows the container 10 with the inner slide 12 in a closed position. In the closed position, the inner slide 12 is positioned fully within the outer shell 14 so that the opening at the top end of the inner slide 12 is fully covered by the top wall 38 of the outer shell 14.

In order to move the inner slide 12 to the open position shown in Figure 3, the inner slide 12 may be pushed in a forward direction by applying a force through the cut out 40 in the back wall 32 of the outer shell 14. Alternatively or in addition, the inner slide 12 may be pulled in the forward direction by grasping the inner slide 12 through the cut out 28 in the front wall 18 of the inner slide. The inner slide 12 pivots relative to the outer shell 14 about the hinge line A into the open position shown in Figure 3.

In the open position, the top end of the inner slide 12 projects through the opening in the front wall of the outer shell 14. The top side of the inner slide 12 is fully uncovered so that the smoking articles within the inner slide 12 can be accessed and removed through the opening. In addition, the bottom end of the inner slide 12 projects through out through the back of the outer shell 14. The inner slide 12 is prevented from pivoting any further from the

open position by the abutment of the inner slide 12 with the top edge of the front wall 30 of the outer shell 14. The inner slide 12 is returned to the closed position by pivoting it in a backwards direction towards the back wall 32 of the outer shell 14.

The container 10 may be assembled from the blank 110 in the manner described above. Firstly, the slide-defining portion 114 is folded along its longitudinal, vertical edges and the outer back wall panel 60b is adhered to the inner back wall panel 60a. The support flaps 42 of the shell-defining portion 114 are adhered to the inner surfaces of the side walls 34,36. Then, the shell-defining portion 114 is also folded along its longitudinal, vertical edges and secured around the partially assembled inner slide 12 by adhering the outer back wall panel 32b to the inner back wall panel 32a.

The wrapped bundle of smoking articles 16 is then inserted through one of the open ends of the partially assembled container and the panels forming the top wall 38 of the outer shell 14 and the bottom wall 26 of the inner slide 12 are then folded closed using a standard packing machine.

Figures 5 and 6 show an alternative container 50 according to the invention which is similar in construction to the container 10 shown in Figures 1 to 3 and includes an inner slide 52 and an outer shell 54. However, as described in more detail below, the hinge line A about which the inner slide 52 and outer shell 54 are connected is provided on a narrower side of the container 50 so that a different pivotal movement is required to move the inner slide 12 into the open position.

The inner slide 52 has a front wall 58, a back wall 60, a left side wall 62, a right side wall 64 and a bottom wall 66. The front wall 58 and the back wall 60 have a width that is shorter than the width of the side walls 62, 64 such that the overall width of the container 10 is less than the depth of the container when the container 50 is viewed from the front. The construction of the walls of the inner slide 52 is otherwise the same as that described above in relation to the container 10.

As in the container 10, the front wall 58 of the inner slide 52 of container 50 extends slightly above the side walls 62,64 at the top edge of the inner slide 52. In addition, as can be seen from Figure 7, a small retention flap or protrusion 90 extends from the top edge of the back wall 58. The function of the retention flap 90 will be described below.

As can be seen in Figure 7, an additional panel 94 extends from the side edge of the inner back wall panel 60a. In the assembled container 50 the additional panel 94 is folded at approximately 90 degrees to the inner back wall panel 60a and adhered to the inner surface of the left side wall panel 62 in order to provide additional rigidity to the inner slide 52.

The outer shell 54 comprises a front wall 70, a back wall 72, a right side wall 74, a left side wall 76 and a top wall 78. Support flaps 42 extend from the side walls 74,76 as described above for container 10.

As in the container 10, the outer shell 54 of container 50 includes an opening at the front side, above the front wall 70. A pair of opposed, triangular cut outs 68 extend from the side edges of the opening in the front wall 70 across the side walls 74,76. This facilitates the grasping of the inner slide 52 by the consumer in order to move the inner slide 52 towards the open position shown in Figure 6. The triangular cut outs 68 are provided in place of the oval cut out 40 in the container 10.

An additional cut out 92 in the shape of a slit is provided in the inner panel 68a of the top wall 68 of the outer shell 54. The cut out 92 is positioned adjacent to the left side edge of the top wall 68 and substantially parallel to that edge. In the closed position of the inner slide 52 shown in Figure 5, the retention flap 90 on the inner slide engages with the cut out 92 in order to retain the inner slide 52 in the closed position.

As in the container 10, the back wall 60 of the inner slide 52 comprises an inner back wall panel 60a and an outer back wall panel 60b and the back wall 72 of the outer shell 54 comprises an inner back wall panel 72a and an outer back wall panel 72b. The outer back wall panels of the inner slide 52 and outer shell 54 are integrally formed and are defined either side of the hinge line A which extends substantially vertically across the back of the container 50.

The container 50 may be formed from the laminar blank 150 shown in Figure 7, which includes a slide-defining portion 152 for forming the inner slide 52 and an integral shell-defining portion 154 for forming the outer shell 54. A hinge line A is provided as in the laminar blank 110 for forming the container 10. The method of assembling the container 50 from the blank 150 is the same as that described above for container 10.

CLAIMS

1. A container for consumer goods comprising:
an outer shell having an opening at the front wall of the container; and
an inner slide comprising an opening, wherein the inner slide is mounted in the outer shell for pivotal movement relative to the outer shell between a closed position in which the opening of the inner slide is inaccessible, and an open position in which the inner slide projects through the opening in the outer shell such that the opening of the inner slide is accessible,

wherein the inner slide and outer shell are connected to each other along a hinge line extending across the back wall of the container, opposed to the front wall, wherein the inner slide is pivotable about the hinge line between the closed position and the open position and wherein the inner slide and outer shell are integrally formed from a single laminar blank.
2. A container according to claim 1 wherein the back wall comprises a back wall panel including the hinge line, wherein a portion of the back wall panel on one side of the hinge line is integral with the inner slide and a portion of the back wall panel on the other side of the hinge line is integral with the outer shell.
3. A container according to Claim 1 or 2 wherein the outer shell is open at the bottom end.
4. A container according to any preceding claim wherein the opening in the outer shell is provided at the upper end of the front wall of the container such that in the open position of the inner slide a first corner of the inner slide projects through the opening, wherein an access opening is provided in the first corner of the inner slide.
5. A container according to any preceding claim wherein the outer shell comprises one or more cut outs extending from the opening.
6. A container according to any preceding claim wherein the outer shell comprises one or more cut outs in the back wall of the container.
7. A container according to any preceding claim wherein at least a part of the top wall of the inner slide is open in order to provide access to the opening of the inner slide in the open position.

8. A container according to claim 7 wherein the inner slide comprises one or more cut outs extending from the open part of the top wall of the inner slide.
9. A container according to claim 7 or 8 wherein the front wall of the inner slide defining the first wall of the container extends above the level of the adjacent walls at the open part of the top wall of the inner slide.
10. A container according to any preceding claim further comprising retention means for retaining the inner slide in the closed position.
11. A container according to claim 10 wherein the retention means comprises at least one retention flap provided on the inner slide which is capable of engaging with the outer shell.
12. A container according to claim 11 wherein an inner panel of the outer shell comprises a cut out and wherein the retention flap of the inner slide engages with the cut out in the inner panel of the outer shell to retain the inner slide in the closed position.
13. A container according to any preceding claim comprising an additional flap extending from a free edge of the back wall of the inner slide, wherein the additional flap is adhered to the inner surface of an adjacent wall.
14. A container according to any preceding claim wherein smoking articles are housed within the inner slide.
15. A laminar blank for forming the container according to any preceding claim, the blank comprising: a slide-defining portion for forming the inner slide and a shell-defining portion for forming the outer shell, wherein the slide-defining portion and the shell-defining portion are integrally formed and connected to each other along a hinge line extending across a back wall panel of the laminar blank.

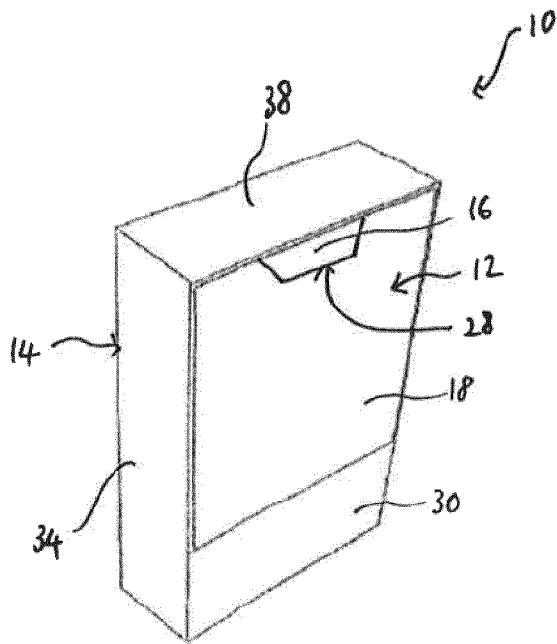


Figure 1

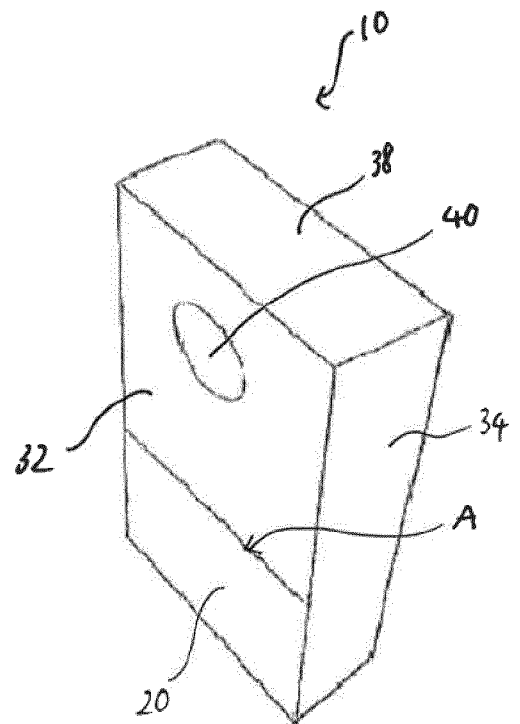


Figure 2

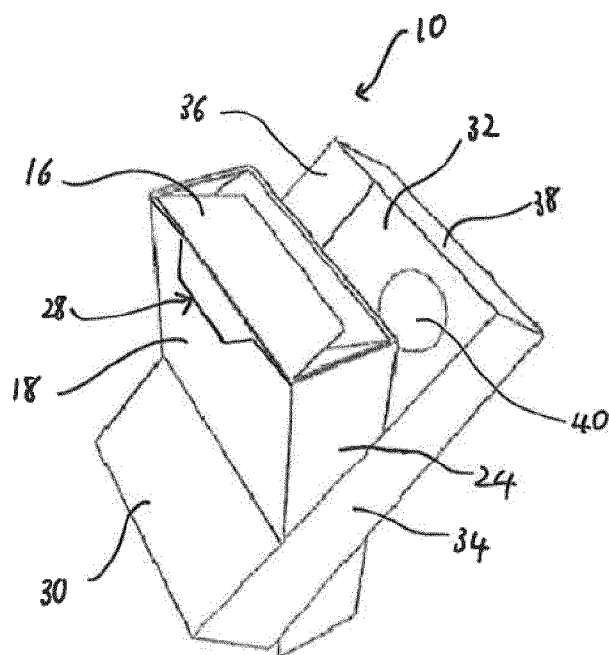


Figure 3

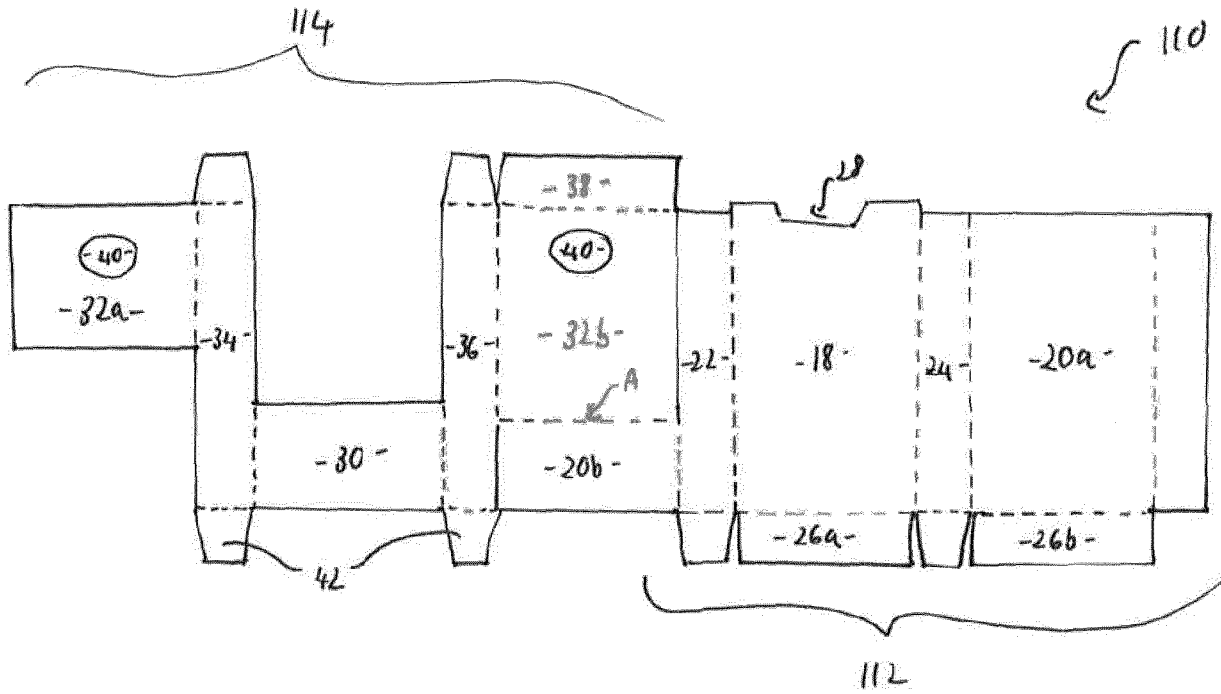


Figure 4

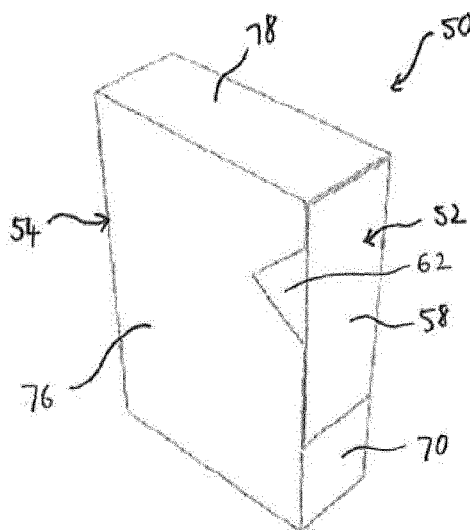


Figure 5

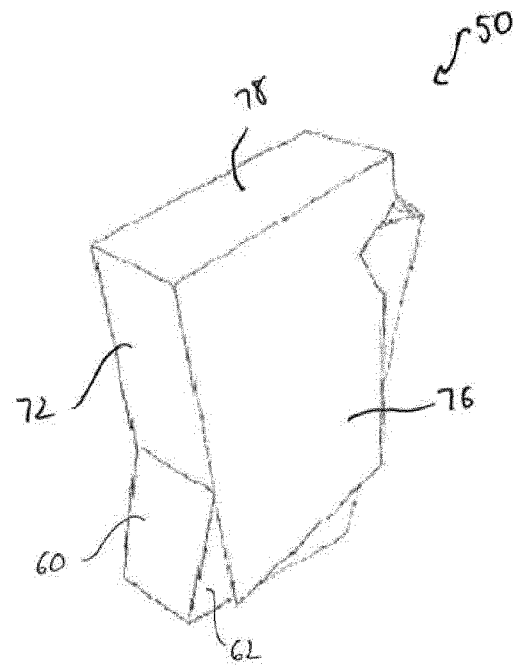


Figure 6

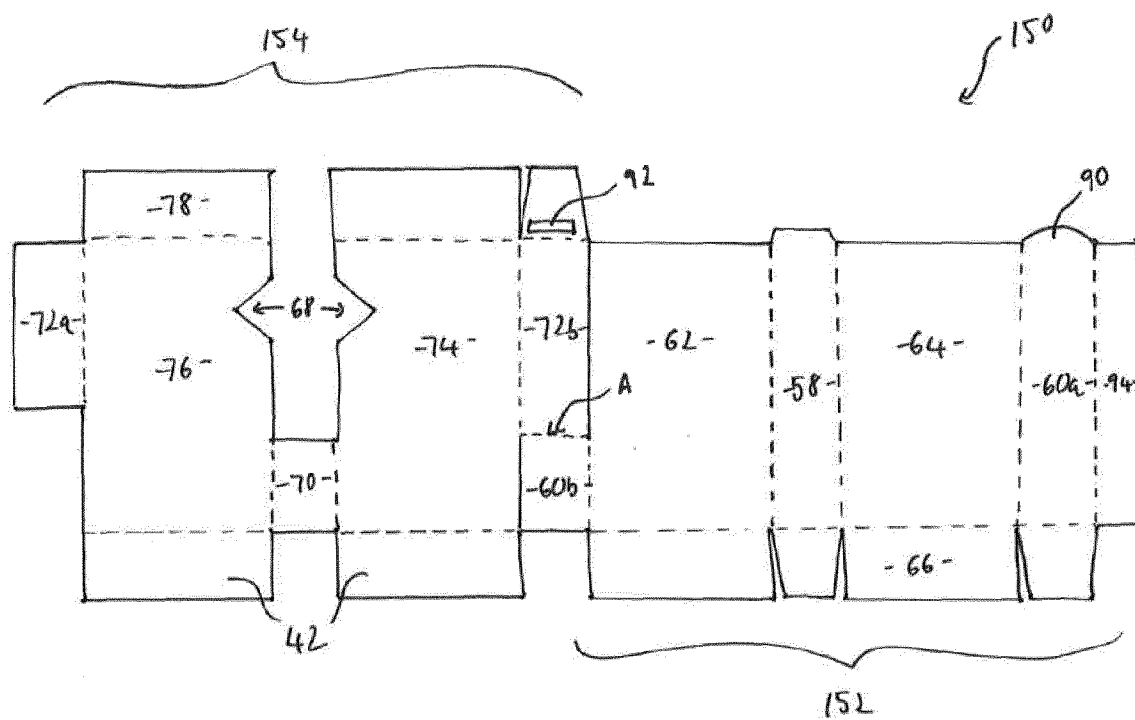


Figure 7

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2012/063970

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65D85/10 B65D5/72
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 practicable, search terms used)

EPO-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 20 2007 012493 U1 (GUNDLACH VERPACKUNG GMBH [DE]) 8 November 2007 (2007-11-08) paragraph [0024] paragraph [0029]; figures 5-6 -----	1-15
A	CH 339 117 A (BARBEY BERTRAND [CH]) 15 June 1959 (1959-06-15) page 2, line 17 - page 2, line 63; figure 5 -----	1-15



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"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

"&" document member of the same patent family

Date of the actual completion of the international search

5 November 2012

Date of mailing of the international search report

16/11/2012

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2012/063970

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 202007012493 U1	08-11-2007	NONE	
CH 339117	A	15-06-1959	NONE