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## (54) Container and blanks

(57) A container (2) (50) (90), which finds particular application as a container for elongate smoking articles such as cigarettes, has a flat wall, a substantially opposed curved wall and a cross section consisting of a curved portion and a straight portion between the ends of the curved portion, and comprises: a shell (4)(52)(92); and a receptacle (6)(54)(94) within the shell and having an opening therein. The receptacle (6) (54) (94) is moveable between a closed position, in which the opening of the receptacle (6) (54) (94) is covered by the shell, and an open position in which the receptacle (6)(54)(94) projects from the shell (4) (52) (92) at least partially exposing the opening. The receptacle (6) is preferably mounted within the shell (4) for rotational movement relative thereto (6) between the closed position and the open position.

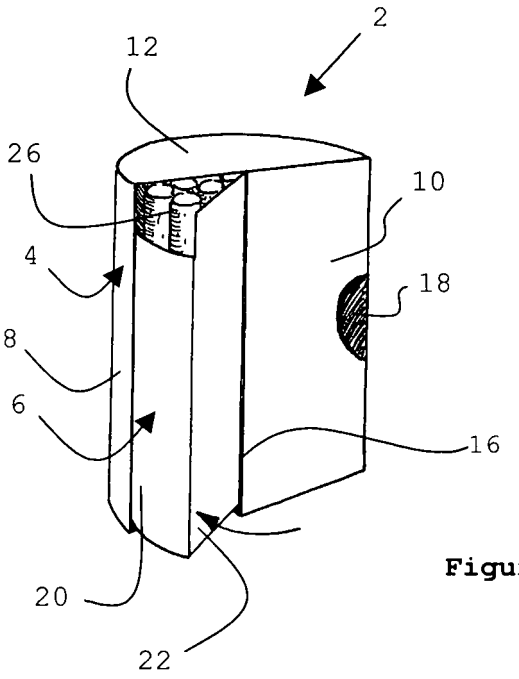


Figure 2

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## Description

**[0001]** The present invention relates to a novel container, which finds particular application as a container for elongate smoking articles such as cigarettes.

**[0002]** It is known to package elongate smoking articles and other consumer goods in containers formed from folded laminar blanks. Elongate smoking articles, such as cigarettes and cigars, are commonly sold in hinge lid packs constructed from one-piece laminar cardboard blanks. However, containers for elongate smoking articles and other consumer goods having two portions, a shell and an inner shell, formed from separate laminar blanks are also known. In such containers, the smoking articles or other consumer goods are housed in the inner shell, which is mounted within the shell for movement relative thereto between a closed position, in which the consumer goods are not accessible, and an open position, in which a consumer may remove consumer goods from the inner shell of the container.

**[0003]** According to the present invention there is provided a container having a flat wall, a substantially opposed curved wall and a cross section consisting of a curved portion and a straight portion between the ends of the curved portion, the container comprising: a shell; and a receptacle within the shell and having an opening therein, the receptacle being moveable between a closed position, in which the opening of the receptacle is covered by the shell and an open position in which the receptacle projects from the shell at least partially exposing the opening. The provision of a curved wall at the rear of the container results in a more ergonomic container design, which fits more comfortably and snugly in the palm of the hand while the container is opened or closed and while items within the container are removed.

**[0004]** Preferably, the curved portion of the cross section of the container is a simple convex curve and more preferably, a semi-circular curve. The cross section of the container may be, for example, a semi-ellipse, semi-circle or semi-oval, or may be a variants of such shapes in which the curved edge comprises one or more minor straight portions.

**[0005]** Preferably, the inner transverse cross section of the shell is of substantially the same dimensions as the outer transverse cross section of the receptacle so that in the closed position, the receptacle fits snugly inside the shell with the outer surface of the receptacle in contact with the inner surface of the shell. In use, frictional forces generated between the outer surface of the receptacle and the inner surface of the shell resist movement of the receptacle relative to the shell between the closed position and the open position, thereby advantageously preventing opening and closing of the container without the application of a positive force by the consumer.

**[0006]** In a preferred embodiment of the present invention, the receptacle is mounted within the shell for rotational movement relative thereto between the closed position and the open position.

**[0007]** Preferably, the receptacle rotates about an axis extending across the flat wall of the container between opposed end walls of the container. In particularly preferred embodiments, the axis runs along an edge of a flat wall of the shell.

**[0008]** Preferably, a cut-out is provided in the flat wall of the shell along an edge opposed to the said edge along which the axis runs.

**[0009]** In use, a consumer may advantageously apply a rotational force to the receptacle through the cut-out portion in the flat wall of the shell in order to move the receptacle relative thereto from the closed position to the open position.

**[0010]** In an alternative embodiment of the present invention, the receptacle is slidably moveable between the closed position and the open position.

**[0011]** Preferably, the opening is in a flat wall of the receptacle.

**[0012]** More preferably, the receptacle comprises a flap in an end wall thereof adjacent the opening, the flap being pivotable between a closed position, in which the flap closes the said end of the receptacle, and an open position, in which the interior of the receptacle is accessible through the said end.

**[0013]** In the closed position, the flap closes the end of the receptacle so that elongate smoking articles or other consumer goods contained therein are not exposed. In use, when the receptacle is in the open position, the flap may be moved by the consumer from the closed position to the open position in order to facilitate the removal of consumer goods from the receptacle.

**[0014]** Preferably, in the closed position the flap covers at least a portion of the opening adjacent the end of the receptacle. Where the receptacle of a container according to the invention contains elongate smoking articles such as cigarettes, the provision of a flap that extends over at least a portion of the opening adjacent the end of the receptacle advantageously protects the ends of the smoking articles.

**[0015]** In a further embodiment of the present invention, the receptacle rotates about an edge of the flat wall of the container. Preferably, the straight edge is the straight edge of an end wall of the container and preferably, the receptacle and the shell are connected along the edge about which the receptacle rotates.

**[0016]** Preferably, at least one cut-out is provided along a straight edge of the curved wall of the shell. More preferably, a pair of opposed cut-outs are provided along opposite edges of the curved wall of the shell. In use, a consumer may grasp the receptacle through the cut-out (s) provided along the edge(s) of the shell in order to pivot the receptacle relative to the shell from the closed position to the open position. The provision of one or more cut-outs in the shell thereby advantageously facilitates movement of the receptacle from the closed position to the open position by the consumer.

**[0017]** Preferably, the opening of the receptacle is located at an end of the receptacle and is defined by the

edges of flat and curved walls of the receptacle, wherein the flat wall of the receptacle extends beyond the curved wall thereof at the said end.

**[0018]** Variation in the height of the edges of the receptacle that define the opening advantageously facilitates removal of elongate smoking articles or other consumer goods from the receptacle in the open position.

**[0019]** 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 of the shell and receptacle thereof, containers according to the invention for different numbers of conventional size, king size, super-king size, slim or super-slim cigarettes may be designed.

**[0020]** The shell and receptacle of the container may be formed from any suitable materials including, but not limited to, for example cardboard, paperboard, plastic, metal, or any combination thereof. Preferably, the shell and receptacle of the container are formed from folded laminar blanks, more preferably from folded laminar cardboard blanks.

**[0021]** The external surfaces of the shell and receptacle may be printed, embossed, debossed or otherwise embellished (for example, using labels or stickers) with manufacturer or brand logos, trade marks, slogans and other consumer information and indicia.

**[0022]** Where the receptacle 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.

**[0023]** Once filled, containers according to the invention may be shrink wrapped or otherwise over wrapped with a transparent polymeric film of, for example, polyethylene or polypropylene in a conventional manner. Where containers according to the invention are over wrapped, the over wrapper may include a tear tape.

**[0024]** According to the present invention there is further provided a first blank for forming the receptacle or the shell of a container comprising a receptacle and a shell, the blank comprising a first wall panel, foldably connected to a second wall panel, and a third wall panel having a curved edge and a straight edge between the ends of the curved edge, the third wall panel being foldably connected along its straight edge to the first wall panel.

**[0025]** According to the present invention there is further provided a second blank for forming the receptacle or the shell of a container comprising an housing and a shell, the blank comprising: a first wall panel, a second wall panel and a third wall panel, the second and third wall panels each having a curved edge and a straight edge between the ends of the curved edge and being foldably connected along their curved edges to respective opposite edges of the first wall panel.

**[0026]** 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 of cigarettes according to a first embodiment of the present invention with the receptacle in the closed position;

Figure 2 shows a perspective view of the container of Figure 1 with the receptacle in the open position;

Figure 3 shows a plan view of a one-piece laminar cardboard blank for forming the shell of the container of Figures 1 and 2;

Figure 4 shows a plan view of a one-piece laminar cardboard blank for forming the receptacle of the container of Figures 1 and 2;

Figure 5 shows a perspective view of a container of cigarettes according to a second embodiment of the present invention with the receptacle in the closed position;

Figure 6 shows a perspective view of the container of Figure 5 with the receptacle in the open position;

Figure 7 shows a plan view of a one-piece laminar cardboard blank for forming the shell of the container of Figures 5 and 6;

Figure 8 shows a plan view of a one-piece laminar cardboard blank for forming the receptacle of the container of Figures 5 and 6;

Figure 9 shows a perspective view of a container of cigarettes according to a third embodiment of the present invention with the receptacle in the closed position;

Figure 10 shows a perspective view of the container of Figure 9 with the receptacle in the open position; and

Figure 11 shows a plan view of a one-piece laminar cardboard blank for forming the shell of the container of Figures 9 and 10.

Figure 12 shows a plan view of a one-piece laminar cardboard blank for forming the receptacle of the container of Figures 9 and 10.

**[0027]** The term 'longitudinal' is used throughout the following description of the embodiments to mean the direction parallel to the axis of the elongate smoking articles inside the container.

**[0028]** The term 'transverse' is used throughout the following description of the embodiments to mean the direction orthogonal to the axis of the elongate smoking articles inside the container.

**[0029]** A container 2 of cigarettes 26 according to a first preferred embodiment of the present invention is shown in Figures 1 and 2. The container 2 has a substantially semi-circular transverse cross section and generally comprises two portions, a shell 4 and a receptacle 6, which is mounted within the shell 4.

**[0030]** The shell 4 has a curved longitudinal rear wall 8 having a semi-circular transverse cross section, a flat longitudinal front wall 10 and opposed semi-circular top 12 and bottom 14 walls, which close the ends of the shell

4. The front wall 10 of the shell 4 extends transversely from the right hand longitudinal edge of the rear wall 8 to approximately half way between the right hand longitudinal edge and the left hand longitudinal edge of the rear wall 8. As described further below, the rectangular opening in the shell 4 defined by the left hand longitudinal edge 16 of the front wall 10, the left hand longitudinal edge of the rear wall 8 and the semi-circular top 12 and bottom 14 walls allows for rotational movement of the receptacle 6 relative to the shell 4 about the left hand longitudinal free edge 16 of the front wall 10. As shown in Figures 1 and 2, a semi-circular cut-out 18 extending from the right hand longitudinal edge of the rear wall 8 is provided in the front wall 10 of the shell 4, approximately halfway between the opposed semi-circular top 12 and bottom 14 walls.

**[0031]** A longitudinal tab 13 extends from the longitudinal edge 16 of the shell. The tab 13 is folded towards the inside of the shell 4 and is adhered to centre of the flat front wall 22 of the receptacle 6. This ensures that the receptacle 6 cannot be separated from the shell 4, while allowing for up to 180 degrees rotation of the receptacle 6 about the longitudinal edge 16.

**[0032]** The receptacle 6 has an open upper end and comprises a curved longitudinal rear wall 20 having a semi-circular transverse cross section, a flat longitudinal front wall 22 and a semi-circular bottom wall 24 (not shown), which closes the bottom end of the receptacle 6. The outer transverse cross section of the receptacle 6 is of substantially the same dimensions as the inner transverse cross section of the shell 4, so that the receptacle nests within the shell in the closed position as shown in Figure 1.

**[0033]** As shown in Figure 2, the receptacle 6 contains a plurality of cigarettes 26, which may be removed through the open upper end of the receptacle 6 when the receptacle 6 is in the open position. The flat front wall 22 of the receptacle 6, which extends between the longitudinal edges of the rear wall 20 thereof, is of substantially the same height in the longitudinal direction of the container as the rectangular opening in the shell 4. The curved rear wall 20 of the receptacle 6 is, however, of reduced height compared to the flat front wall 22, so that the upper edge of the rear wall 20, at the open upper end of the receptacle 6, is below the upper edge of the front wall 22 thereof. As a result, the upper ends of the cigarettes 26 contained in the receptacle 6 protrude above the upper edge of the rear wall 20, thereby advantageously facilitating removal of cigarettes 26 from the receptacle 6 by the consumer in the open position.

**[0034]** As shown in Figure 1, in the closed position, the front wall 10 of the shell 4 overlies and is parallel to the front wall 22 of the receptacle 6 and the rectangular opening in the shell 4 is closed by the front wall 22 of the receptacle 6.

**[0035]** In use, to gain access to the cigarettes 26 in the container 2, a consumer pushes on the receptacle 6 through the cut-out portion 18 provided in the front wall 10 of the shell in order to rotate the receptacle 6 relative to the shell 4 about the left hand longitudinal edge 16 of the front wall 10 of the shell 4, in the direction indicated by the arrow in Figure 1. A consumer may rotate the receptacle 6 relative to the shell 4 up to a maximum of 180 degrees.

**[0036]** Laminar cardboard blanks 30, 40 from which the shell 4 and the receptacle 6 of the container 2 of Figures 1 and 2 may be formed are shown in Figures 3 and 4, respectively. Corresponding reference numerals are used in Figures 3 and 4 for elements of the shell blank 30 and the receptacle blank 40 that are similar or related to elements of the container 2 of Figures 1 and 2 previously described.

**[0037]** In order to construct the shell 4 of container 2, the opposed semi-circular top 12 and bottom 14 wall panels, and the front wall panel 10 of the shell blank 30, are folded about the appropriate score lines (shown in Figure 3 as dashed lines). The trapezoidal flaps 15 and 11 along the top and bottom edges of the front 10 and rear 8 wall panels are affixed to the corresponding semi-circular wall panels 12 and 14. Similarly, in order to construct the receptacle 6 of the container 2, the semi-circular bottom wall panel 24 and the rear wall panel 20 of the receptacle blank 40 are folded about the appropriate score lines (shown in Figure 4 as dashed lines). The trapezoidal flaps 23 along the bottom edge of the rear wall panel 20 are affixed to the semi-circular bottom wall panel 24 and the longitudinal flap 21 extending from the side edge of the rear wall panel 20 is affixed to the front wall panel 22. The constructed receptacle 6 is introduced into the constructed shell 4 and the hinge flap 13 of the shell 4, which extends from the side edge of the front wall panel 10, is folded about the score line 16 and affixed to the middle of front wall 22 of the receptacle 6. The term 'score line' is used to indicate a line formed by, for example, creasing, scoring, perforating, embossing or otherwise compressing, cutting or weakening the blanks 30, 40. All tabs are affixed to the corresponding panels by means of an adhesive, in a conventional manner.

**[0038]** A container 50 of cigarettes according to a second embodiment of the present invention is shown in Figures 5 and 6. As in the first embodiment described above, the container 50 has a substantially semi-circular transverse cross section and generally comprises two portions, a shell 52 and a receptacle 54, which is mounted within the shell 52.

**[0039]** The shell 52 is of the same construction as the receptacle 6 of the container according to the first embodiment of the invention shown in Figures 1 and 2 and has a curved longitudinal rear wall 56 with a semi-circular transverse cross section, a flat longitudinal front wall 58, and a semi-circular bottom wall 60 (not shown), which closes the bottom end of the shell 52. As shown in Figure 1, the receptacle 54 is received in the shell 52, for longitudinal slidable movement relative thereto, through the open upper end of the shell 52.

**[0040]** The curved rear wall 56 of the shell 52 is of

reduced height in the longitudinal direction of the container 50 compared to the flat front wall 58 thereof, so that the upper edge of the rear wall 56, at the open upper end of the shell 52, is below the upper edge of the flat front wall 52. As a result, the upper ends of the cigarettes 26 contained in the receptacle 54 protrude above the upper edge of the rear wall 20, thereby advantageously facilitating removal of cigarettes 26 from the receptacle 54 by the consumer in the open position.

**[0041]** The receptacle 54 is open-fronted and comprises a curved longitudinal rear wall 62, having a semi-circular transverse cross section, that extends longitudinally between opposed semi-circular top 64 and bottom 66 walls, which close the ends of the receptacle 54. The outer transverse cross section of the receptacle 54 is of substantially the same dimensions as the inner transverse cross section of the shell 52, so that the receptacle 54 nests within the shell 52 in the closed position as shown in Figure 5.

**[0042]** The curved rear wall 62 of the receptacle 54 is of substantially the same height in the longitudinal direction of the container 50 as the flat front wall 58 of the shell 52. Consequently, when the receptacle 54 is in the closed position shown in Figure 5, an upper portion of the receptacle 54 extends above the upper edge of the curved rear wall 56 of the shell 52. This advantageously facilitates slidable movement of the receptacle 54 relative to the shell 52 from the closed position shown in Figure 5 to the open position shown in Figure 6.

**[0043]** The receptacle 54 further includes a flap 68 comprising two panels 70, 72 connected along a fold line 74. The first panel 70 of the flap 68 is defined in the semi-circular top wall 64 of the receptacle 54 by a pair of parallel lines of perforations 76 extending perpendicularly from the fold line 74, which forms the straight edge of the semi-circular top wall 64 of the receptacle 54, to a second fold line 78 parallel thereto. As shown in Figure 6, the second panel 72, which is folded through 90 degrees relative to the first panel 70 about the fold line 74, extends from the top wall 64 of the receptacle 54 over an upper portion of the open front face thereof.

**[0044]** Figure 5 shows the container 50 with the receptacle 54 in a closed position wherein the receptacle 54 is inside the shell 52 and the open front face of the receptacle 54 is entirely covered by the flat front wall 58 of the shell 52. In the closed position, the second panel 72 of the flap 68 lies between the upper end of the cigarettes 69 contained in the receptacle 54 and the front wall 58 of the shell 52.

**[0045]** In use, to gain access to the cigarettes 69 in the container 50, a consumer pulls the receptacle 54 upwardly, in the direction indicated by the arrow in Figure 5, in order to slide the receptacle 54 longitudinally relative to the shell 52 from the closed position shown in Figure 5 to the open position shown in Figure 6.

**[0046]** With the receptacle 54 in the open position shown in Figure 6, the consumer may grasp the second panel 72 of the flap 68 and pull it upwardly, as indicated by the arrow in Figure 6, in order to tear along the parallel lines of perforations 76 in the top wall 64 of the receptacle that define the edges of the first panel 70 of the flap 68. The flap 68 may then be folded away from the open front face of the receptacle 52 about the fold line 78 connecting it to the remainder of the top wall 64 of the receptacle 54. This creates an opening in the receptacle that extends from the front face partially across the top wall 64 thereof, which advantageously facilitates the removal of cigarettes 69 from the receptacle 54.

**[0047]** Laminar cardboard blanks 80, 85 from which the shell 52 and the receptacle 54 of the container 50 of Figures 5 and 6 may be formed are shown in Figures 7 and 8, respectively. The blank 80 for forming the shell 52 shown in Figure 7 is of similar construction to the blank 40 shown in Figure 4 for forming the receptacle 6 of the container 2 according to the first embodiment of the invention previously described.

**[0048]** In order to construct the shell 52 of container 50, the semi-circular bottom wall panel 60 and the rear wall panel 56 of the shell blank 80 are folded about the appropriate score lines (shown in Figure 7 as dashed lines). The trapezoidal flaps 57 along the bottom edge of the rear wall panel 56 are affixed to the semi-circular bottom wall panel 60 and the longitudinal flap 55 extending from the side edge of the rear wall panel 56 is affixed to the front wall panel 58. Similarly, in order to construct the receptacle 54 of the container 50, the opposed semi-circular top 64 and bottom 66 wall panels are folded about the appropriate score lines and affixed to the trapezoidal flaps 67 along the top and bottom edges of the rear wall panel 62 on either side of the end wall panels. The second panel 72 of the circular top wall 64 is folded about the score line 74. The constructed receptacle 54 is introduced into the shell 52 so that flap 72 lies behind the front wall 58 of the shell 52. The blanks may additionally comprise interacting retention flaps (not shown) that keep the receptacle 54 inside the shell 52 once inserted. All tabs are affixed to the corresponding panels by means of an adhesive, in a conventional manner.

**[0049]** A container 90 of cigarettes according to a third embodiment of the present invention is shown in Figures 9 and 10. As in the first and second embodiment previously described, the container 90 according to the third embodiment of the invention has a substantially semi-circular transverse cross section and generally comprises two portions, a shell 92 and a receptacle 94, which is mounted within the shell 92.

**[0050]** The shell 92 is open-fronted and comprises a curved longitudinal rear wall 96, having a semi-circular transverse cross section, that extends longitudinally between opposed semi-circular top 98 and bottom 100 walls, which close the ends of the shell 92. A longitudinal tab 103 extending from each edge of the rear wall 96 is folded against the inside surface of the rear wall 96 to provide a folded edge at the side edges of the shell, rather than a cut edge. The provision of the longitudinal tab improves the aesthetic appearance of the shell, as well

as providing a strengthened free edge. A pair of opposed semi-circular cut-outs 102 are provided along the longitudinal free edges of the curved rear wall 96 of the shell 92.

**[0051]** The receptacle 94 has an open upper end and comprises a curved longitudinal rear wall 104 having a semi-circular transverse cross section, a flat longitudinal front wall 106 and a semi-circular bottom wall 108 that closes the bottom end of the receptacle 94. As in the first and second embodiments of the invention previously described, the outer transverse cross section of the receptacle 94 is of substantially the same dimensions as the inner transverse cross section of the shell 92, so that the receptacle 94 nests within the shell 92 in the closed position as shown in Figure 9.

**[0052]** The transverse straight edge of the bottom wall 100 of the shell 92 is connected to the transverse straight edge of the bottom wall 108 of the receptacle 94 by means of a hinge flap 99, (as shown in Figure 11), which extends from the straight edge of the bottom wall of the shell 92 and is folded and adhered to the bottom wall of the receptacle 94.

**[0053]** As shown in Figure 10, the receptacle 92 contains a plurality of cigarettes 110, which may be removed through the open upper end of the receptacle 94 when the receptacle 94 is in the open position. The flat front wall 106 of the receptacle 94, which extends between the longitudinal edges of the curved rear wall 104 thereof, is of substantially the same height in the longitudinal direction of the container 90 as the open front face of the shell 92. The curved rear wall 104 of the receptacle 94 is, however, of reduced height compared to the flat front wall 106, thereof, so that the upper edge of the rear wall 104, at the open upper end of the receptacle 94, is below the upper edge of the front wall 106. As a result, the upper ends of the cigarettes 110 contained in the receptacle 94 protrude above the upper edge of the rear wall 104, thereby advantageously facilitating removal of cigarettes 110 from the receptacle 94 by the consumer in the open position.

**[0054]** In use, to gain access to the cigarettes 110 in the container 90, the consumer grasps the rear wall 104 of the receptacle 94, on either side thereof, through the opposed cut-outs 102 provided along the longitudinal free edges of the rear wall 96 of the shell 92. To open the container 90, the consumer then pulls the receptacle 94 forwards and downwards, in the direction shown by the arrow in Figure 9, in order to pivot the receptacle 94 relative to the shell 92 about the transverse straight edge of the bottom wall 108 of the receptacle 94.

**[0055]** As the receptacle 94 pivots about the transverse straight edge of its bottom wall 108, along which it is connected to the shell 92, an upper portion of the receptacle 94 is projected outwardly from the shell 92 through the open front face thereof exposing a portion of the open upper end of the receptacle 94 through which cigarettes 110 in the receptacle 94 may then be removed by the consumer.

**[0056]** Laminar cardboard blanks 120, 130 from which the shell 92 and the receptacle 94 of the container 90 of Figures 9 and 10 may be formed are shown in Figures 11 and 12, respectively. The blank 130 for forming the receptacle 94 shown in Figure 10 is of similar construction to the blank 40 shown in Figure 4 for forming the receptacle 6 of the container 2 according to the first embodiment of the invention and the blank 80 shown in Figure 7 for forming the shell 52 of the container 50 according to the second embodiment of the invention previously described.

**[0057]** In order to construct the shell 92 of container 90, the opposed semi-circular top 100 and bottom 98 wall panels of the shell blank 120 are folded along appropriate score lines and affixed to the trapezoidal flaps 105 along the top and bottom edges of the rear wall panel 96 on either side of the end wall panels. Flaps 103 are folded inward in order to create the semi circular form of cut-outs 102. Similarly, in order to construct the receptacle 94 of the container 90, the semi-circular bottom wall panel 108 and the rear wall panel 104 are folded about the appropriate score lines (shown in Figure 12 as dashed lines). The trapezoidal flaps 107 along the bottom edge of the rear wall panel 104 are affixed to the bottom end wall panel 108 and the longitudinal flap 105 extending from the side edge of the rear wall panel 104 is affixed to the front wall panel 106. The constructed receptacle 94 is introduced into the constructed shell 92 and the hinge flap 99 of the shell, which extends from the straight edge of the bottom end wall 98, is folded about the appropriate score line and affixed to the bottom wall 108 of the receptacle 94. The container 90 may comprise an additional retention means (not shown) to limit the opening angle of the container 90. All tabs are affixed to the corresponding panels by means of an adhesive, in a conventional manner.

**[0058]** The surface of the laminar blanks shown in Figures 3, 4, 7, 8, 11 and 12 that form the outer surfaces of the shell and receptacle of the containers according to the first, second and third embodiments of the invention may be printed, embossed, debossed or otherwise embellished (for example, using labels or stickers) with manufacturer or brand logos, trade marks, slogans and other consumer information and indicia.

**[0059]** It will be appreciated that while the containers according to the first, second and third embodiments of the invention described above have semi-circular transverse cross sections, containers according to the present invention having other substantially semi-elliptical transverse cross sections, as previously defined, may also be designed.

**[0060]** Furthermore, while the invention has been exemplified with reference to containers of cigarettes, it will be appreciated that containers according to the invention for other consumer goods may be similarly designed.

## Claims

1. A container (2)(50)(90) having a flat wall, a substantially opposed curved wall and a cross section consisting of a curved portion and a straight portion between the ends of the curved portion, the container comprising:

   a shell (4) (52) (92); and
   a receptacle (6)(54)(94) within the shell and having an opening therein,
   the receptacle (6)(54)(94) being moveable between a closed position, in which the opening of the receptacle (6)(54)(94) is covered by the shell and an open position in which the receptacle (6) (54) (94) projects from the shell (4) (52) (92) at least partially exposing the opening.

2. A container (2) according to claim 1 wherein the receptacle (6) is mounted within the shell (4) for rotational movement relative thereto (6) between the closed position and the open position.

3. A container (2) according to claim 2 wherein the receptacle (6) rotates about an axis (16) extending across the flat wall of the container between opposed end walls of the container.

4. A container (2) according to claim 3 wherein the axis runs along an edge (16) of a flat wall (10) of the shell (4).

5. A container (2) according to claim 4 wherein a cut-out is provided in the flat wall (10) of the shell (4) along an edge opposed to the said edge (16) along which the axis runs.

6. A container (50) according to claim 1 wherein the receptacle (54) is slidably moveable between the closed position and the open position.

7. A container (50) according to claim 6 wherein the opening is in a flat wall of the receptacle (54).

8. A container (50) according to claim 7 wherein the receptacle (54) comprises a flap (68) in an end wall (64) thereof adjacent the opening, the flap (68) being pivotable between a closed position, in which the flap (68) closes the said end of the receptacle (54), and an open position, in which the interior of the receptacle (54) is accessible through the said end.

9. A container (90) according to claim 2 wherein the receptacle (94) rotates about an edge of the flat wall of the container.

10. A container (90) according to claim 9 wherein the straight edge is the straight edge of an end wall of the container (90).

11. A container (90) according to claim 10 wherein at least one cut-out (102) is provided along a straight edge of the curved wall of the shell (92).

12. A container (90) according to claim 9, 10 or 11 wherein the opening of the receptacle (94) is located at an end of the receptacle (94) and is defined by the edges of flat and curved walls of the receptacle (6), wherein the flat wall of the receptacle extends beyond the curved wall thereof at the said end.

13. A container (2) (50) (90) according to any preceding claim wherein the said cross section is substantially semi-circular.

14. A container (2)(50)(90) according to any preceding claim for elongate smoking articles.

15. A blank (40) (80) (130) for forming the receptacle or the shell of a container comprising a receptacle and a shell, the blank comprising a first wall panel (20) (56) (104), foldably connected to a second wall panel (22) (58) (106), and a third wall panel (24)(60)(108) having a curved edge and a straight edge between the ends of the curved edge, the third wall panel (24) (60) (108) being foldably connected along its straight edge to the first wall panel (20)(56)(104).

16. A blank (30)(85)(120) for forming the receptacle or the shell of a container comprising an housing and a shell, the blank comprising:

    a first wall panel (8) (62) (96), a second wall panel (12) (64) (98) and a third wall panel (14)(66) (100), the second and third wall panels each having a curved edge and a straight edge between the ends of the curved edge and being foldably connected along their curved edges to respective opposite edges of the first wall panel (8)(62)(96).

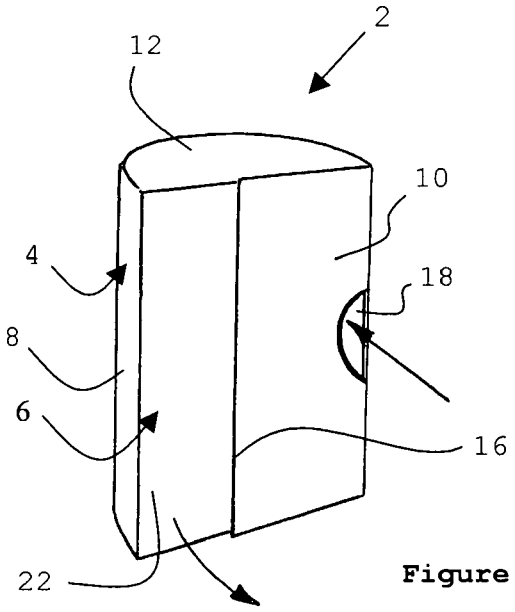


Figure 1

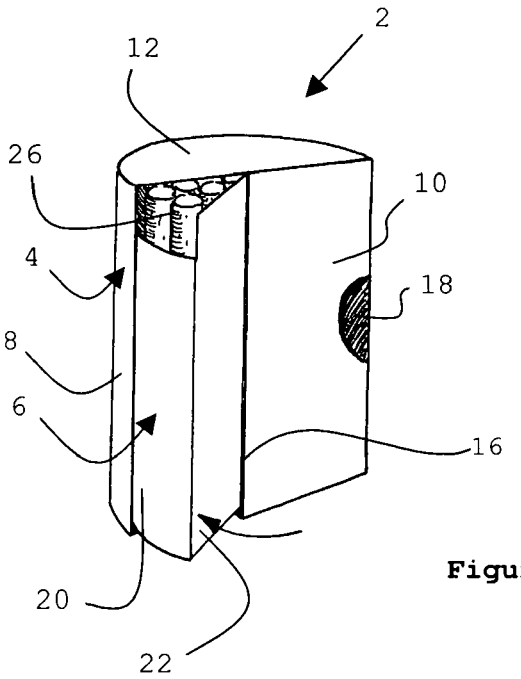


Figure 2

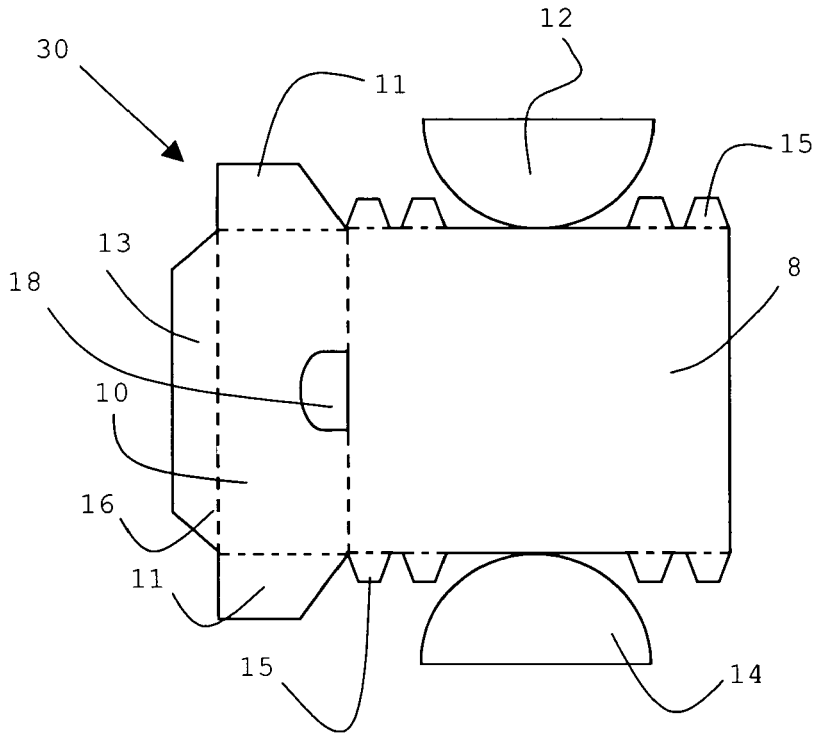


Figure 3

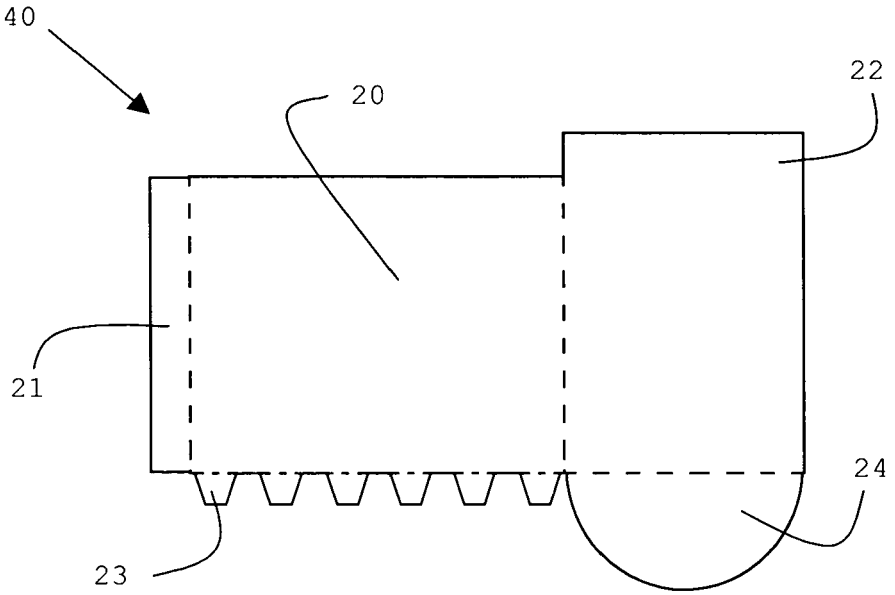


Figure 4

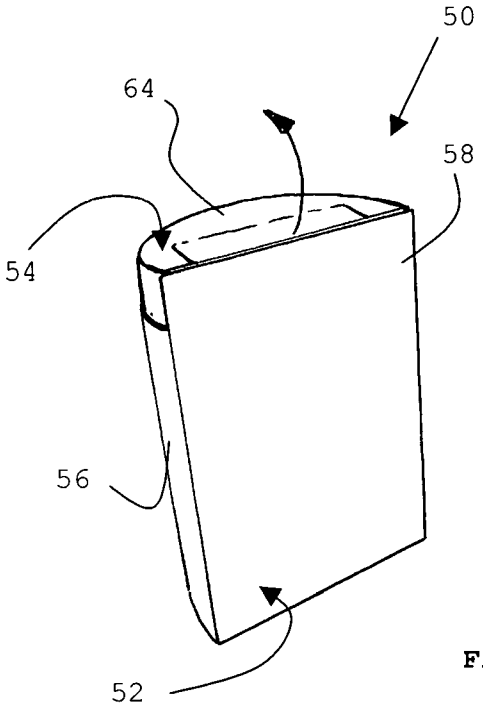


Figure 5

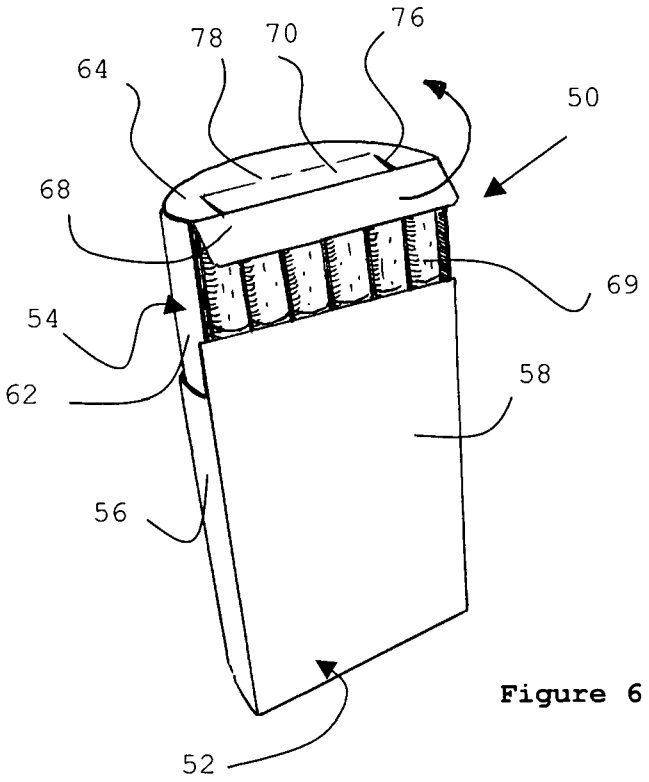


Figure 6

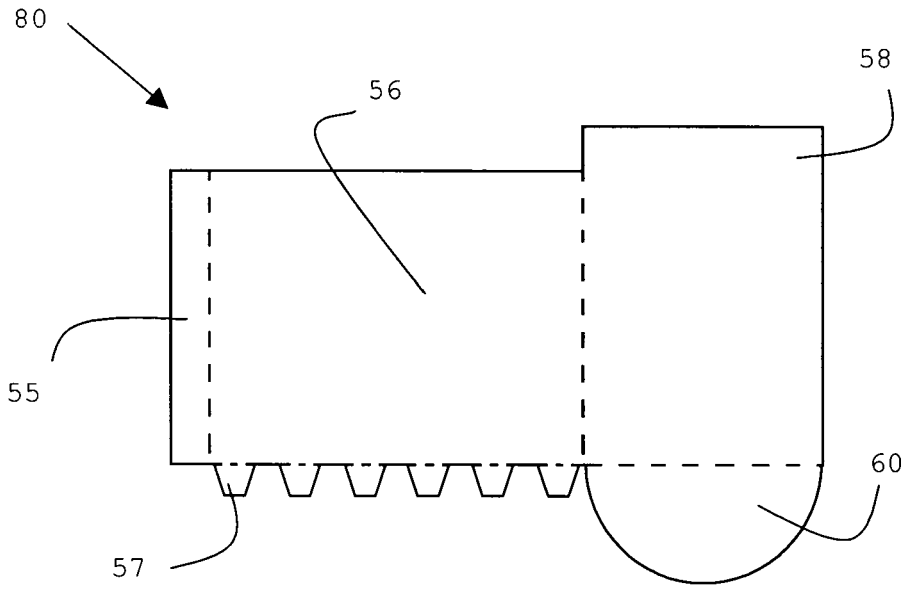


Figure 7

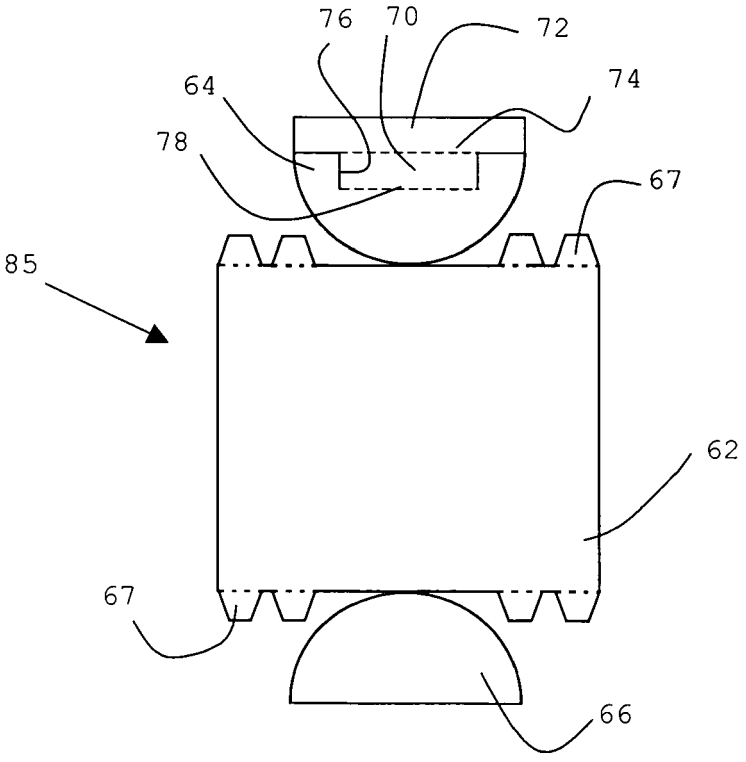


Figure 8

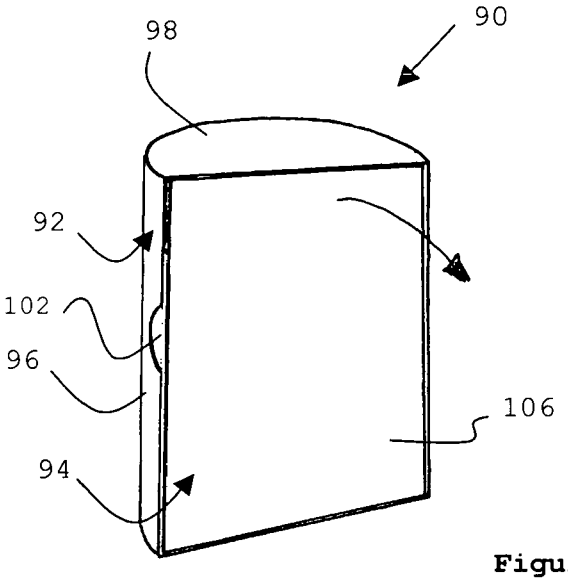


Figure 9

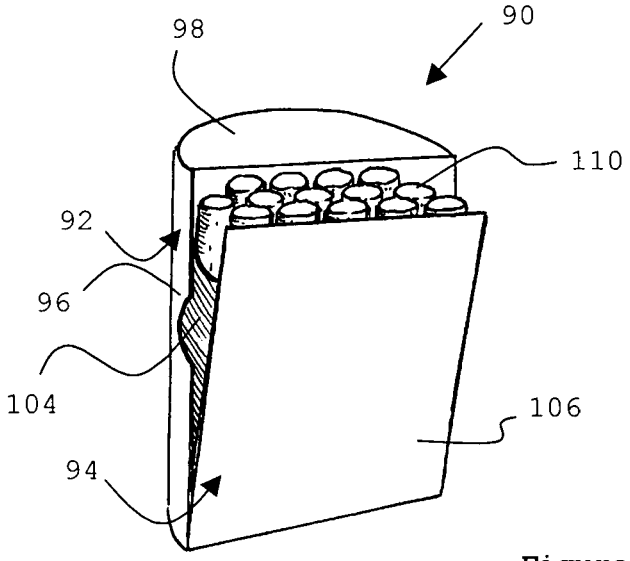


Figure 10

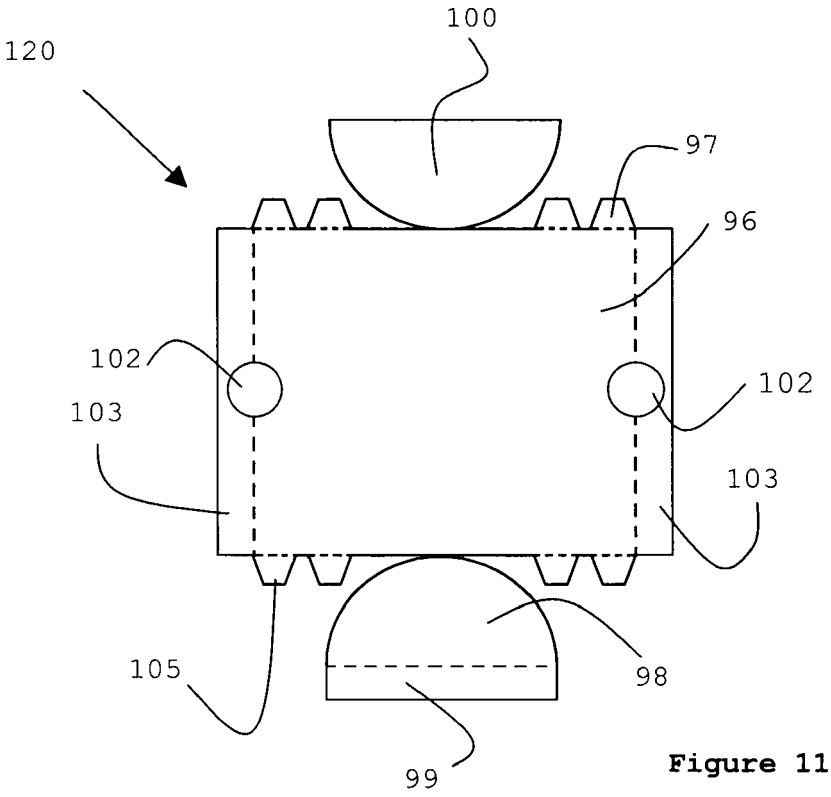


Figure 11

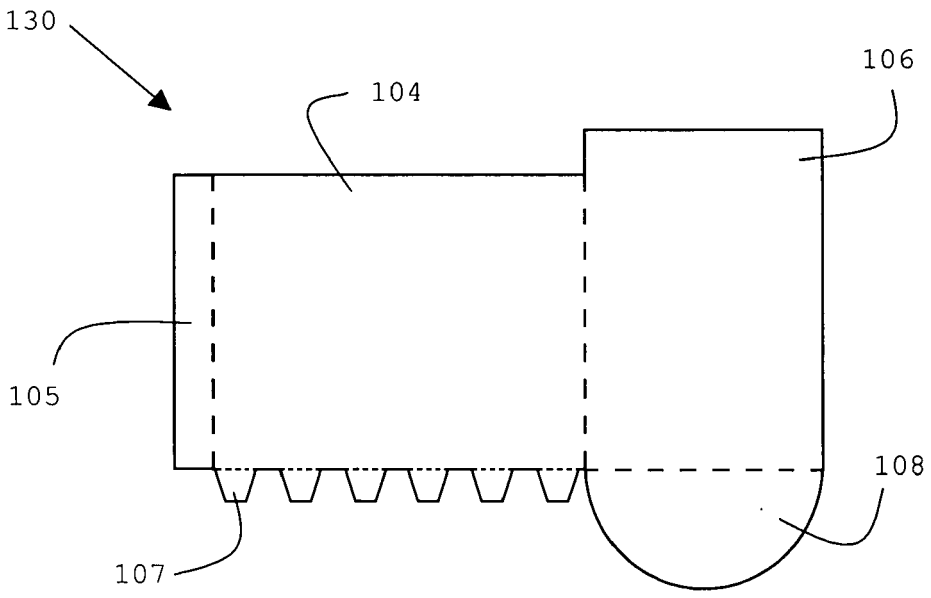


Figure 12

European Patent Office

# EUROPEAN SEARCH REPORT

Application Number
EP 06 25 6147

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| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
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The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| Munich | 16 April 2007 | Piolat, Olivier |

CATEGORY OF CITED DOCUMENTS

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