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**(54) HINGE LID CONTAINER WITH AUDIBLE INDICATION OF CLOSING**

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**CONTENANT À COUVERCLE ARTICULÉ DOTÉ D'UN SIGNAL DE FERMETURE AUDIBLE**

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## Description

**[0001]** The present invention relates to a novel hinge lid container, which finds particular application as a container for consumer goods, for example 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 having a box portion for housing the smoking articles and a lid portion connected to the box portion about a hinge line extending across the rear wall of the container. Such packs are typically constructed from one-piece laminar cardboard blanks. In use, the lid portion is pivoted about the hinge line to open the pack and so gain access to the smoking articles held in the box portion.

**[0003]** Hinge lid containers are commonly used for packaging cigarettes and other consumer goods which are adversely affected by prolonged contact with air or moisture. Prior to the first opening, a container will typically be wrapped in an outer wrapper. However, this wrapper must be at least partially removed in order to access the consumer goods and will not typically be re-applied or re-sealed each time the container is opened and closed. It is therefore important that the container can be closed securely in order to prevent the inadvertent loss of some of the consumer goods or parts of the consumer goods. The loss of parts of consumer goods may be inconvenient, for example, where the consumer goods are smoking articles and the parts of the consumer goods are so called tobacco shorts. Tobacco shorts are small pieces of cut tobacco that get detached from the open end of the cigarette through transport and handling.

**[0004]** EP0894737 discloses a hinge lid container for consumer goods comprising: a box with a box front wall; an inner frame mounted within the box and comprising a frame front wall; and a hinge lid connected to the box along a hinge line and pivotable about the hinge line between a closed position and an open position. The hinge lid comprises a lid front wall and a lid flap hingedly connected to the lid front wall and folded inwardly towards the inner surface of the lid front wall. Other examples of containers for consumer goods are known from WO00/51897 and WO2010/063569.

**[0005]** It would be desirable to provide a hinge lid container with a novel arrangement for allowing the consumer to confirm that the container is fully closed between uses and that the consumer goods within the container will remain inside the container. It would be particularly desirable if such an arrangement could ensure that the hinge lid remains in the closed position between uses and that inadvertent or accidental opening of the hinge lid is avoided.

**[0006]** According to the present invention there is provided a hinge lid container for consumer goods comprising: a box comprising a box front wall; an inner frame mounted within the box and comprising a frame front wall;

and a hinge lid connected to the box along a hinge line and pivotable about the hinge line between a closed position and an open position. The box front wall comprises a cut out portion therein and a portion of the frame front wall is exposed through the cut out portion in the box front wall. The hinge lid container further comprises a spacer element arranged between the box and the inner frame and providing separation between the box front wall and the frame front wall. The hinge lid comprises a lid front wall and a lid flap hingedly connected to the lid front wall and folded inwardly towards the inner surface of the lid front wall. When the hinge lid is in the closed position the lid front wall overlies the cut out portion in the box front wall and during pivotal movement of the hinge lid from the open position to the closed position, at least a part of the lid flap slides along the box front wall and into the cut out portion in the box front wall, thereby generating a sound.

**[0007]** The terms "front", "back", "upper", "lower", "side", "top", "bottom", "left", "right" and other terms used to describe relative positions of the components of containers according to the invention refer to the container in an upright position. When the container in the upright position is open, the consumer goods may be removed from the upper end of the container.

**[0008]** The term "hinge line" refers to a line about which the hinge lid may be pivoted in order to open the container. A hinge line may be, for example, a fold line or a score line in the panel forming the back wall of the container. Alternatively, a hinge line may be a fold line or a score line in a piece of material bridging the lower edge of the back wall of the hinge lid and the upper edge of the back wall of the box. Such a piece of material may be, for example, a label that is permanently or removably attached to the back wall of the lid portion and the back wall of the box. Preferably, the hinge line is positioned along the back wall of the container at a level below the upper edge of the container.

**[0009]** The production of a sound during movement of the hinge lid of the container according to invention from the open position to the closed position advantageously provides the consumer with an audible indication of closure of the container. The production of a sound upon closure of a container may advantageously be employed, for example, to provide the consumer with an audible indication that the container has been correctly or fully closed, thereby ensuring that all parts of the consumer goods are retained within the container. For example it is ensured that no tobacco shorts will fall out of the container during transport between uses.

**[0010]** In the hinge lid containers of the present invention, the cut out portion in the box front wall forms a recess together with the underlying frame front wall. A sound will typically be generated as the lid flap, or the part of the lid flap in contact with the box front wall passes over the edge of the cut out portion and drops into the recess. As the lid flap or part of the lid flap drops into the recess, it springs against the surface of the frame front wall due

to the resilient bias of the lid flap away from the lid front wall. The sound will typically be heard as an audible 'click' or snapping noise.

**[0011]** The inclusion of a spacer element between the box and the inner frame provides a separation between the box front wall and the frame front wall. This increases the depth of the recess formed by the cut out portion and the underlying frame front wall. The additional depth of the recess advantageously increases the distance over which the lid flap or part thereof must drop before hitting the surface of the inner frame front wall. Due to the resilient force that biases the lid flap, the lid flap is accelerated towards the bottom of the recess and reaches a higher velocity, the deeper the recess is. The higher the velocity at which the part of the lid flap contacts the frame front wall, the better is the audibility of the sound generated.

**[0012]** The position and configuration of the spacer element is preferably such that the element itself does not extend underneath the cut out portion in the box front wall. This arrangement maximises the depth of the recess formed by the cut out portion and the frame front wall.

**[0013]** Preferably, in the closed position of the hinge lid at least a part of the lid flap engages with an edge of the cut out portion to lock the hinge lid in the closed position. Typically, a free edge of the lid flap abuts the upper edge of the cut out portion in the closed position. In order to open the hinge lid, it is necessary to apply a positive force to release the lid flap from engagement with the edge of the cut out portion. The likelihood of the hinge lid being inadvertently moved to an open position is therefore significantly reduced. This prevents the consumer goods or parts of the consumer goods from falling out of the container.

**[0014]** Preferably, as the hinge lid is moved from the closed position to the open position the lid flap is released from engagement with the edge of the cut out portion, thereby generating a second sound. The production of a sound upon opening of a hinge lid container according to the invention may advantageously be employed, for example, to provide an audible indication of tampering with the contents of the container. In addition, the sounds generated upon closing and upon opening of the container advantageously improve the quality perception of the closing mechanism.

**[0015]** In certain preferred embodiments of the hinge lid container according to the present invention, the lid flap lies between the box front wall and the frame front wall when the hinge lid is in the closed position. This provides a similar function to the engagement of the lid flap with an edge of the cut out portion, as described above, in that the position of the lid flap locks the hinge lid in the closed position and ensures that the hinge lid is not moved to an open position until a positive force is applied to release the lid flap.

**[0016]** The spacer element may take a variety of forms and preferably provides a separation between the box

front wall and the frame front wall which is at least the same as the thickness of the box front wall and more preferably, greater than the thickness of the box front wall.

5 **[0017]** Preferably, the spacer element is in the form of a spacer panel, which extends over some or all of the area of the box front wall. The spacer panel may be provided such that it lies substantially flat between the box front wall and the frame front wall. In this case the separation between the box front wall and the frame front wall is substantially equal to the thickness of the spacer panel. Alternatively, the spacer panel may be provided such that it lies at an angle to the box front wall and the frame front wall. In this arrangement, the separation between the box front wall and the frame front wall will typically be greater than the thickness of the spacer panel. The separation will depend upon the angle of the spacer panel.

10 **[0018]** As described above, any increase in the separation between the box front wall and the frame front wall increases the effective depth of the recess formed by the cut out portion in the box front wall and the frame front wall. This increases the distance over which the part of the lid flap must drop before hitting the surface of the frame front wall. As described above, this improves the audibility of the sound generated as the hinge lid is moved to the closed position.

15 **[0019]** Where a spacer panel is provided, the spacer panel and the box front wall are preferably connected along a hinge line extending across an edge of the box front wall. Particularly preferably, the spacer panel is connected to the box front wall along the top edge of the box front wall, so that the spacer panel can be conveniently folded between the box and the inner frame. This arrangement also enables the spacer panel to be integrally formed with the box, from a single laminar blank.

20 **[0020]** The spacer panel may be connected to the box front wall along the hinge line only, so that the spacer panel is free to move relative to the box about the hinge line and is restrained only by the position of the frame front wall. With this arrangement, the spacer panel may project at an angle to the box front wall, increasing the separation between the box front wall and the frame front wall, as described above. This arrangement may be preferred for embodiments in which the lid flap lies between the box front wall and the frame front wall in the closed position of the hinge lid, as described above.

25 **[0021]** Alternatively, the spacer panel may be adhered or attached to the inner surface of the box front wall, for example by means of an adhesive. In this case, the spacer panel will lie flat against the box front wall and the separation between the box front wall and the frame front wall will be substantially equal to the thickness of the spacer panel and the adhesive layer.

30 **[0022]** Alternatively, or in addition to any attachment between the box front wall and the frame front wall, the spacer panel may optionally be adhered or attached to the frame front wall. For example, in a particularly pre-

ferred embodiment of the present invention, the spacer panel is attached to the frame front wall, but the spacer panel and the box front wall are connected along the hinge line only. In this embodiment, the edge of the cut out portion in the box front wall is typically separated from both the underlying spacer panel and the frame front wall. This arrangement is particularly suitable for embodiments in which it is desired to produce an additional sound upon opening of the hinge lid.

**[0023]** The spacer panel or other type of spacer element may extend over substantially the entire area of the box front wall. In this case, the size and shape of the spacer element will be substantially the same as that of the box front wall. Alternatively, the spacer element may cover only a portion of the area of the box front wall. For example, where a spacer panel extends from a hinge line along the top edge of the box front wall, the spacer panel may extend only part way down the box front wall or may extend all of the way to the bottom edge of the box front wall.

**[0024]** In certain embodiments, the spacer panel may extend under at least a part of the cut out portion in the box front wall. In such cases, the spacer panel preferably comprises a cut out portion which substantially coincides with the cut out portion in the box front wall, so that the spacer panel is not visible through the cut out portion in the box front wall and does not affect the depth or shape of the recess. Preferably, the cut out portion in the spacer panel is at least slightly larger than the cut out portion in the box front wall so that the alignment of the cut out portions is easier. Where the spacer panel does not coincide with the entire cut out portion, it may be sufficient to provide a smaller cut out portion in the spacer panel, provided that the spacer panel is cut away such that it is not visible through the cut out portion in the box front wall.

**[0025]** The lid flap of hinge lid containers according to the present invention is hingedly connected to the lid front wall, preferably along the bottom edge of the lid front wall. The lid flap is folded inwardly towards the inner surface of the lid front wall. Preferably, the width of the lid flap is less than the width of the lid front wall so that the lid flap does not extend all the way to the side edges of the lid front wall.

**[0026]** Preferably, the dimensions and position of the cut out portion in the box front wall are such that the part of the lid flap that comes into contact with the box front wall can be fully received into the cut out portion in the closed position of the hinge lid. In certain embodiments, the width of the cut out portion is greater than the width of the lid flap so that the entire lid flap can readily slide into the cut out portion as the hinge lid is moved to the closed position. The provision of a lid flap that has a width less than the width of the container means that the cut out portion does not need to extend all of the way across the box front wall. This ensures that the effect of the cut out on the structural rigidity of the container is maintained as small as possible. In other embodiments, the cut out portion may be adapted to receive only a portion of the

lid flap.

**[0027]** In certain embodiments, the lid flap is connected to the lid front wall along the hinge line only. The lid flap is typically resiliently biased away from the inner surface of the lid front wall such that in the open position of the hinge lid, the lid flap projects at an angle from the lid front wall. In this case, as the hinge lid is moved to the closed position, the free edge of the lid flap comes into contact with the box front wall before any other part of the lid flap. The free edge of the lid flap slides along the box front wall and eventually drops into the recess formed by the cut out portion on the box front wall and the frame front wall. A sound is generated as the lid flap springs against the frame front wall at the bottom of the recess.

**[0028]** The lid flap may be formed of a single portion with a straight free edge. Alternatively, the lid flap may comprise a first lid flap portion and a second lid flap portion, both of which are hingedly connected to the lid front wall along the same hinge line. Preferably, the first lid flap portion extends beyond the second lid flap portion such that during the pivotal movement of the hinge lid towards the closed position the first lid flap portion slides into the cut out portion before the second lid flap portion, thereby generating two successive sounds.

**[0029]** In other embodiments of the present invention, the lid flap is attached to the inner surface of the lid front wall such that the edge of the lid flap is no longer free to slide into the cut out portion. Instead, the lid flap comprises a cut line forming a retention tab connected to the lid flap along a hinge line and projecting away from the lid flap. During movement of the hinge lid towards the closed position, the free edge of the retention tab slides along the box front wall and into the recess formed by the cut out portion. A sound is generated as the retention tab springs against the frame front wall. Preferably, in the closed position of the hinge lid, the retention tab lies between the box front wall and the frame front wall. Particularly preferably, an additional sound is generated as the hinge lid is moved to the open position and the retention tab is released from the cut out portion.

**[0030]** The configuration of the cut out portion in the box front wall will depend upon the shape and orientation of the lid flap. As described above, the position, dimensions and shape of the cut out portion must be such that at least a part of the lid flap can readily slide into the cut out portion as the hinge lid is moved towards the closed position.

**[0031]** Preferably, the cut out portion comprises at least one elongate cut out portion extending across the box front wall. The at least one elongate cut out portion preferably extends in a substantially horizontal direction across the box front wall. Where two or more cut out portions are provided, the cut out portions may be separate from each other or may be connected together to form an integral cut out portion.

**[0032]** In one preferred embodiment of the present invention, the box front wall comprises a first cut out portion and a second cut out portion vertically offset from the first

cut out portion and the hinge lid comprises a first lid flap portion and a second lid flap portion. As the hinge lid container is moved to the closed position, the first lid flap portion slides into the first cut out portion at a different time to when the second lid flap portion slides into the second cut out portion, thereby generating two successive sounds. Preferably, the first lid flap portion extends beyond the second lid flap portion and the first cut out portion is provided above the second cut out portion.

**[0033]** Preferably, the first and second cut out portions in the box front wall are connected to form an integral, Z-shaped cut out. However, in certain embodiments the first and second cut out portions may not be connected to each other.

**[0034]** In the closed position of the lid, the lid front wall overlies the cut out portion in the box front wall. Therefore, unlike in many standard hinge lid packs, the lower edge of the lid front wall does not abut the upper edge of the box front wall. Instead, in the closed position a lower part of the lid front wall overlaps with an upper part of the box front wall. In certain embodiments, the lower part of each lid side wall may similarly overlap with the upper part of the corresponding box side wall in the closed position of the hinge lid. Alternatively, the lower edge of each lid side wall may abut the upper edge of the corresponding box side wall in the closed position of the hinge lid. In this case, the lid front wall extends beyond the lower edges of the lid side walls.

**[0035]** The invention is further directed to a method of creating a sound with a hinge lid container wherein the method comprises the steps of providing a hinge lid container comprising a lid with a lid flap and a box front wall with a front wall cut out, wherein the cut out comprises a cut out bottom wall, providing a spacer panel between the front wall cut out and the cut out bottom wall and closing the container such that the lid flap slides into the cut out, thereby generating a sound when the lid flap strikes the cut out bottom wall.

**[0036]** In a further embodiment of the method according to the invention, the method further comprises the step of opening the container such that the lid flap comes into an interlocking position with the edge of the front wall cut out before the lid is fully opened and wherein the lid flap generates a second sound when the lid flap is released from the interlocking position when further opening the lid.

**[0037]** The container may be formed from any suitable materials including, but not limited to, cardboard, paperboard, plastic, or combinations thereof. Preferably, the container is formed from one or more folded laminar cardboard blanks and preferably, the cardboard has a weight of between about 100 grams per square metre and about 350 grams per square metre.

**[0038]** Containers according to the invention may be in the shape of a rectangular parallelepiped, with right-angled longitudinal and right-angled transverse edges. Alternatively, the container may comprise one or more rounded longitudinal edges, rounded transverse edges,

bevelled longitudinal edges or bevelled transverse edges, or combinations thereof. For example, the container according to the invention may comprise, without limitation:

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

**[0039]** Where the container comprises one or more rounded edges and is made from one or more laminar blanks, preferably the blanks comprise three, four, five, six or seven scoring lines or creasing lines to form each rounded edge in the assembled container. The scoring lines or creasing lines may be either on the inside of the container or on the outside of the container. Preferably, the scoring lines or creasing lines are spaced from each other by between about 0.3 mm and 4 mm.

**[0040]** 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.

**[0041]** 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.

**[0042]** Where the container comprises a bevelled edge and is made from one or more laminar blanks, the bevel may be formed by two parallel creasing lines or scoring lines in the laminar blank. The creasing lines or scoring lines may be arranged symmetrically to the edge between a first wall and a second wall. Alternatively, the creasing lines or scoring lines 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.

**[0043]** Alternatively, the container may have a non-rectangular transversal cross section, for example polygonal such as triangular or hexagonal, semi-oval or semi-cir-

cular.

**[0044]** Containers according to the invention find particular application as packs for elongate smoking articles such as, for example, cigarettes, cigars or cigarillos. It will be appreciated that through appropriate choices of the dimensions thereof, containers according to the invention may be designed for different numbers of conventional size, king size, super-king size, slim or super-slim cigarettes. Alternatively, other consumer goods may be housed inside the container.

**[0045]** 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.

**[0046]** 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).

**[0047]** 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.

**[0048]** The length, width and depth of containers ac-

ording to the invention may be such that, in the closed lid position, the resultant overall dimensions of the container are similar to the dimensions of a typical disposable hinge-lid pack of twenty cigarettes.

5 **[0049]** 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.

10 **[0050]** 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.

15 **[0051]** 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.

20 **[0052]** 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

25 **[0053]** 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.

30 **[0054]** The interior surfaces or exterior surfaces of containers or both interior and 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.

35 **[0055]** The consumer goods within the containers according to the invention may be individually wrapped. This has the advantage that once the container according to the invention is opened and a first consumer good is removed, the remainder of the consumer goods are still wrapped and remain such protected from dust, sunlight or other environmental influences.

40 **[0056]** 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.

45 **[0057]** Preferably, containers according to the invention are formed from a single laminar blank, which is provided with a box-defining portion incorporating the cut out portion in the box front wall, and a lid-defining portion incorporating the lid flap.

55 **[0058]** The invention will be further described, by way

of example only, with reference to the accompanying drawings in which:

Figure 1 shows a container according to a first embodiment of the present invention with the hinge lid in an open position;

Figure 2 shows a side view of the top part of container of Figure 1;

Figure 3 shows the cardboard blank for forming the container of Figures 1 and 2;

Figure 4 shows a cardboard blank for forming a container according to a second embodiment of the present invention; and

Figure 5 shows a cardboard blank for forming a container according to a third embodiment of the present invention.

**[0059]** The hinge lid container 10 shown in Figures 1 and 2 is a rectangular parallelepiped and comprises a lower box 12 and an upper lid 14 that is hinged to the box 12 along a hinge line extending substantially horizontally along the back wall of the container. A bundle of cigarettes (not shown) is housed in the box 12 of the container 10. The overall size of container 10 is substantially the same as that of a standard hinge lid cigarette pack. The container is formed from the laminar blank 110 shown in Figure 3.

**[0060]** The box 12 has a box front wall 16, a box left side wall 18, a box right side wall 20, a box back wall 22, and a box bottom wall 24. The upper side of the box 12 is open, to provide an upper opening through which the cigarettes can be removed. An elongate, rectangular cut out 30 is provided at the upper end of the box front wall 16. The cut out 30 extends in a substantially horizontal direction across the box front wall 16. The width of the cut out 30 is less than the overall width of the box front wall 16 so that the ends of the cut out 30 are located at a short distance from the side edges of the box front wall 16.

**[0061]** The lid 14 has a lid front wall 16a, a lid left side wall 18a, a lid right side wall 20a, a lid back wall 22a and a lid top wall 26. When the container 10 is closed, the free edges of the lid side walls 18a, 20a abut the free edges of the corresponding box side walls 18, 20. However, the lid front wall 16a extends beyond the free edges of the lid side walls 18a, 20a such that in the closed position of the lid, the lid front wall 16a overlaps the upper part of the box front wall 16 and covers the cut out portion 30.

**[0062]** As can be seen from Figures 1 to 3, the lid 14 further comprises a lid flap 32 which is connected to the lid front wall 16a along a fold line extending across the bottom edge of the lid front wall 16a. The lid flap 32 is folded inwardly towards the inner surface of the lid front wall 16a. As shown in Figure 2, in the open position of the lid 14 the lid flap 32 lies at an angle of approximately 45 degrees to the lid front wall 16a.

**[0063]** An inner frame 34 is mounted within the box 12,

in the conventional manner. The inner frame 34 comprises a frame front wall 36, a frame left side wall 38 and a frame right side wall. The upper edges of the inner frame 34 extend above the upper edges of the box 12 and the frame front wall 36 is provided with a cut out at the top edge, to facilitate removal of the smoking articles from the box portion 12. A portion of the frame front wall 36 is visible through the cut out 30 in the box front wall 16.

**[0064]** The box 12 further comprises a spacer panel 40 which is connected to the box front wall 16 along a fold line extending across the top edge of the box front wall 16. The spacer panel 40 has substantially the same width as the box front wall 16 but has a height corresponding to approximately one quarter the height of the box front wall 16. The spacer panel 40 is folded inwardly towards the inner surface of the box front wall 16 and extends to a position just below the cut out 30 in the box front wall 16.

**[0065]** The spacer panel 40 includes a cut out 30a which is similar in shape to the cut out 30 in the box front wall but slightly larger. This means that when the spacer panel 40 is folded against the box front wall 16, the cut out 30a in the spacer panel 40 underlies the cut out 30 in the box front wall 16 and the spacer panel 40 is not visible from the front of the container 10.

**[0066]** The spacer panel 40 lies between the box front wall 16 and the frame front wall 36 and is attached to the frame front wall 36 by means of a suitable adhesive. The spacer panel 40 therefore provides a separation between the box front wall 16 and the frame front wall 36 corresponding approximately to the thickness of the spacer panel, or slightly greater. The combination of the overlying cut outs 30, 30a and the frame front wall 16 forms an elongate recess 50 in the front wall of the box 12, the purpose of which will be described below.

**[0067]** Figure 1 shows the container 10 with the lid 14 in an open position. As the lid 14 is pivoted towards its closed position, the free edge of the lid flap 32 comes into contact with the box front wall 16. As the lid is moved further, the edge of the lid flap 32 slides along the box front wall 16 and just before the lid 14 reaches its closed position, the edge of the lid flap 32 slides over the edge of the cut out 30 and drops into the recess 50. The lid flap 32 springs against the frame front wall 36 at the bottom of the recess 50 and this generates an audible sound, which gives an indication of the closure of the container 10.

**[0068]** In the closed position of the lid 14 the lid flap 32 lies within the recess 50 and the free edge of the lid flap 32 engages with the upper edge of the cut out 30 to effectively lock the lid in the closed position.

**[0069]** As the lid 14 is pivoted back towards the open position, the lid flap 32 is released from the recess 50 and an audible sound is generated as the edge of the lid flap 32 passes over the upper edge of the cut out 30.

**[0070]** In order to form the container 10, the blank 110 shown in Figure 3 is folded around a wrapped bundle of cigarettes and glued as necessary, using standard meth-

ods and machinery. Once assembled, the container 10 is overwrapped with a transparent wrapper.

**[0071]** A container according to a second embodiment of the present invention may be formed from the laminar blank 200 shown in Figure 4. The laminar blank 200 and the resultant container are similar to those described above and shown in Figures 1 to 3 except for the shape and form of the cut out in the box front wall and the lid flap. As shown in Figure 4, in the laminar blank 200 the cut out 230 in the box front wall 16 has a Z-shape, formed of a left cut out portion 230a and a right cut out portion 230b. The right cut out portion 230b is positioned vertically below the level of the left cut out portion 230a and the cut out portions 230a,b are connected together by an intermediate cut out portion. A cut out 240 is also provided in the spacer panel, which corresponds in shape to the cut out 230 in the box front wall but is slightly larger.

**[0072]** In place of the single lid flap 32 of container 10, the laminar blank 200 comprises two adjacent lid flaps: a left lid flap 250 and a right lid flap 252, both of which are connected to the lid front wall at the hinge line across the bottom edge of the lid front wall. The left lid flap 250 extends further from the hinge line than the right lid flap 252.

**[0073]** In the assembled container, as the lid is moved towards the closed position, the left lid flap 250 drops into the recess formed by the left cut out portion 230a shortly before the right lid flap 252 drops into the recess formed by the right cut out portion 230b. This generates two, successive sounds as the lid is closed.

**[0074]** A container according to a third embodiment of the present invention may be formed from the laminar blank 300 shown in Figure 5. The laminar blank 300 and the resultant container are similar to those described above and shown in Figures 1 and 2. However, the lid flap 332 of the blank 300 extends further from the hinge line so that the area of the lid flap 332 is increased compared to the lid flap 32 of container 10. In addition, the laminar blank 300 further comprises a U-shaped cut out 310 in the lid flap 332. The ends of the U-shaped cut out 310 are connected by a hinge line 312 and the U-shaped cut out 310 and the hinge 312 together define a retention tab 320.

**[0075]** When the blank 300 is assembled to form a container, the lid flap 332 is attached to the inner surface of the lid front wall by means of a suitable adhesive. The U-shaped cut out 310 is provided in the centre of the lid flap 332 and the retention tab 320 is folded outwardly from the lid flap 332, along the hinge line 312. In the open position of the lid, the retention tab projects upwardly and outwardly from the hinge line 312 at an angle of approximately 45 degrees to the lid flap.

**[0076]** As the lid is moved to the closed position, the retention tab 320 slides along the box front wall and drops into the recess formed by the cut out in the box front wall, in a similar manner to that described above in relation to the lid flap 32 of container 10. Therefore, in the container assembled from the blank 300 it is the retention tab and

not the lid flap that generates the sound as the container is closed, although the mechanism is similar in each case. The retention tab 320 hooks between the box front wall and the frame front wall, as described above for the lid flap, in order to lock the lid in the closed position.

## Claims

1. A hinge lid container (10) for consumer goods comprising:
  - a box (12) comprising a box front wall (16);
  - an inner frame (34) mounted within the box (12) and comprising a frame front wall (36); and
  - a hinge lid (14) connected to the box along a hinge line and pivotable about the hinge line between a closed position and an open position, wherein the hinge lid (14) comprises a lid front wall (16a) and a lid flap (32; 250, 252; 332) hingedly connected to the lid front wall (16a) and folded inwardly towards the inner surface of the lid front wall (16a);
  - characterised in that** the box front wall (16) has a cut out portion (30; 230) therein and a portion of the frame front wall (36) is exposed through the cut out portion (30; 230) in the box front wall (16); the hinge lid container (10) further comprising a spacer element arranged between the box (12) and the inner frame (34) and providing separation between the box front wall (16) and the frame front wall (36), wherein when the hinge lid (14) is in the closed position the lid front wall (16a) overlies the cut out portion (30; 230) in the box front wall (16) and wherein during pivotal movement of the hinge lid (14) from the open position to the closed position, at least a part of the lid flap (32) slides along the box front wall (16) and into the cut out portion (30; 230) in the box front wall (16).
2. A hinge lid container according to claim 1 wherein in the closed position of the hinge lid (14) at least a part of the lid flap (32; 250, 252; 332) engages with an edge of the cut out portion (30) to lock the hinge lid (14) in the closed position.
3. A hinge lid container according to claim 2 wherein as the hinge lid (14) is moved from the closed position to the open position the lid flap (32; 250, 252; 332) is released from engagement with the edge of the cut out portion (30; 230).
4. A hinge lid container according to any preceding claim wherein the spacer element comprises a spacer panel (40) connected to the box front wall (16) along a hinge line extending across an edge of the box front wall (16).



5. A hinge lid container according to claim 4 wherein the spacer panel (40) is connected to the frame front wall (36) and wherein the spacer panel (40) and the box front wall (16) are connected along the hinge line only.
6. A hinge lid container according to claim 4 or 5 wherein the spacer panel (40) comprises a cut out portion (30; 230) and wherein the cut out portion (30; 230) in the spacer panel (40) substantially coincides with the cut out portion (30; 230) in the box front wall (16).
7. A hinge lid container according to any preceding claim wherein the lid flap comprises a first lid flap portion (250) and a second lid flap portion (252), wherein the first lid flap portion (250) extends beyond the second lid flap portion (252) such that during the pivotal movement of the hinge lid (14) towards the closed position the first lid flap portion (250) slides into the cut out portion (30; 230) before the second lid flap portion (252), thereby generating two successive sounds.
8. A hinge lid container according to any preceding claim wherein the box front wall (16) comprises a first cut out portion (230a) and a second cut out portion (230b) vertically offset from the first cut out portion (230a) and wherein the hinge lid (14) comprises a first lid flap portion (250) and a second lid flap portion (252), wherein the first lid flap portion (250) slides into the first cut out portion (230a) at a different time to when the second lid flap (252) portion slides into the second cut out portion (230b), thereby generating two successive sounds.
9. A hinge lid container according to claim 8 wherein the first lid flap portion (250) extends beyond the second lid flap portion (252) and wherein the first cut out portion (230a) is provided above the second cut out portion (230b).
10. A hinge lid container according to any preceding claim wherein in the closed position of the hinge lid (14) the lid flap (32; 250, 252; 332) lies between the box front wall (16) and the frame front wall (36).
11. A hinge lid container according to any preceding claim wherein the lid flap (332) is attached to the inner surface of the lid front wall (16a) and wherein the lid flap (332) comprises a cut line (310) forming a retention tab (320) connected to the lid flap (332) along a hinge line and projecting away from the lid flap (332), wherein during pivotal movement of the hinge lid (14) towards the closed position the retention tab (320) slides along the box front wall (16) and into the cut out portion (30) in the box front wall (16).
12. A hinge lid container according to any preceding

claim containing a plurality of smoking articles.

13. A hinge lid container according to any of the preceding claims, wherein the lid flap (32; 250, 252; 332) generates a sound when the container (10) is closed or the lid flap (32; 250, 252; 332) generates a sound when the container (10) is opened or the lid flap (32; 250, 252; 332) generates a sound when the container (10) is closed and when the container (10) is opened
14. A method of creating a sound with a hinge lid container, comprising the steps of providing a hinge lid container comprising a lid with a lid flap and a box front wall with a front wall cut out, wherein the cut out comprises a cut out bottom wall; providing a spacer panel between the front wall cut out and the cut out bottom wall; and closing the container such that the lid flap slides into the cut out, thereby generating a sound when the lid flap strikes the cut out bottom wall.
15. A method according to claim 14, further comprising the step of opening the container such that the lid flap comes into an interlocking position with the edge of the front wall cut out before the lid is fully opened and wherein the lid flap generates a second sound when the lid flap is released from the interlocking position when further opening the lid.

#### Patentansprüche

1. Klappdeckelbehälter (10) für Verbrauchsartikel, der Folgendes umfasst:
- eine Schachtel (12), die eine vordere Schachtelwand (16) aufweist;
- einen in der Schachtel (12) montierten inneren Rahmen (34), der eine Rahmenvorderwand (36) aufweist; und
- einen Klappdeckel (14), der mit der Schachtel entlang einer Klapplinie verbunden und um die Klapplinie zwischen einer geschlossenen Position und einer offenen Position geschwenkt werden kann, wobei der Klappdeckel (14) eine Deckelvorderwand (16a) und eine Deckelklappe (32; 250, 252; 332) aufweist, die klappbar mit der Deckelvorderwand (16a) verbunden und in Richtung auf die Innenfläche der Deckelvorderwand (16a) nach innen gefaltet ist;

**dadurch gekennzeichnet, dass** die Schachtelvorderwand (16) einen ausgeschnittenen Abschnitt (30; 230) darin aufweist und ein Abschnitt der Rahmenvorderwand (36) durch den ausgeschnittenen Abschnitt (30; 230) in der Schachtelvorderwand (16)

- exponiert ist; wobei der Klappdeckelbehälter (10) ferner ein Abstandshalterelement umfasst, das zwischen der Schachtel (12) und dem inneren Rahmen (34) angeordnet ist und eine Trennung zwischen der Schachtelvorderwand (16) und der Rahmenvorderwand (36) bildet, wobei die Deckelvorderwand (16a), wenn der Klappdeckel (14) in der geschlossenen Position ist, über dem ausgeschnittenen Abschnitt (30; 230) in der Schachtelvorderwand (16) liegt und wobei bei der Schwenkbewegung des Klappdeckels (14) von der offenen Position in die geschlossene Position wenigstens ein Teil der Deckelklappe (32) entlang der Schachtelvorderwand (16) in den ausgeschnittenen Abschnitt (30; 230) der Schachtelvorderwand (16) gleitet.
- 5
2. Klappdeckelbehälter nach Anspruch 1, wobei in der geschlossenen Position des Klappdeckels (14) wenigstens ein Teil der Deckelklappe (32; 250, 252; 332) mit einem Rand des ausgeschnittenen Abschnitts (30) in Eingriff kommt, um den Klappdeckel (14) in der geschlossenen Position zu verriegeln.
- 10
3. Klappdeckelbehälter nach Anspruch 2, wobei bei der Bewegung des Klappdeckels (14) von der geschlossenen Position in die offene Position die Deckelklappe (32; 250, 252; 332) aus dem Eingriff mit dem Rand des ausgeschnittenen Abschnitts (30; 230) gelöst wird.
- 15
4. Klappdeckelbehälter nach einem vorherigen Anspruch, wobei das Abstandshalterelement ein Abstandshalterpaneel (40) umfasst, das mit der vorderen Schachtelwand (16) entlang einer Klapplinie verbunden ist, die über einen Rand der vorderen Schachtelwand (16) verläuft.
- 20
5. Klappdeckelbehälter nach Anspruch 4, wobei das Abstandshalterpaneel (40) mit der Rahmenvorderwand (36) verbunden ist und wobei das Abstandshalterpaneel (40) und die Schachtelvorderwand (16) nur entlang der Klapplinie verbunden sind.
- 25
6. Klappdeckelbehälter nach Anspruch 4 oder 4, wobei das Abstandshalterpaneel (40) einen ausgeschnittenen Abschnitt (30; 230) aufweist und wobei der ausgeschnittene Abschnitt (30; 230) in dem Abstandshalterpaneel (40) im Wesentlichen mit dem ausgeschnittenen Abschnitt (30; 230) in der Schachtelvorderwand (16) zusammenfällt.
- 30
7. Klappdeckelbehälter nach einem vorherigen Anspruch, wobei die Deckelklappe einen ersten Deckelklappenabschnitt (250) und einen zweiten Deckelklappenabschnitt (252) umfasst, wobei der erste Deckelklappenabschnitt (250) über den zweiten Deckelklappenabschnitt (252) hinaus verläuft, so dass bei der Schwenkbewegung des Klappdeckels (14) in Richtung auf die geschlossene Position der erste Deckelklappenabschnitt (250) vor dem zweiten Deckelklappenabschnitt (252) in den ausgeschnittenen Abschnitt (30; 230) gleitet, um dadurch zwei aufeinander folgende Töne zu erzeugen.
- 35
8. Klappdeckelbehälter nach einem vorherigen Anspruch, wobei die Schachtelvorderwand (16) einen ersten ausgeschnittenen Abschnitt (230a) und einen von dem ersten ausgeschnittenen Abschnitt (230a) vertikal versetzten zweiten ausgeschnittenen Abschnitt (230b) umfasst und wobei der Klappdeckel (14) einen ersten Deckelklappenabschnitt (250) und einen zweiten Deckelklappenabschnitt (252) umfasst, wobei der erste Deckelklappenabschnitt (250) zu einem anderen Zeitpunkt in den ersten ausgeschnittenen Abschnitt (230a) gleitet als dem, zu dem der zweite Deckelklappenabschnitt (252) in den zweiten ausgeschnittenen Abschnitt (230b) gleitet, um dadurch zwei aufeinander folgende Töne zu erzeugen.
- 40
9. Klappdeckelbehälter nach Anspruch 8, wobei der erste Deckelklappenabschnitt (250) über den zweiten Deckelklappenabschnitt (252) hinaus verläuft und wobei der erste ausgeschnittene Abschnitt (230a) über dem zweiten ausgeschnittenen Abschnitt (230b) vorgesehen ist.
- 45
10. Klappdeckelbehälter nach einem vorherigen Anspruch, wobei in der geschlossenen Position des Klappdeckels (14) die Deckelklappe (32; 250, 252; 332) zwischen der Schachtelvorderwand (16) und der Rahmenvorderwand (36) liegt.
- 50
11. Klappdeckelbehälter nach einem vorherigen Anspruch, wobei die Deckelklappe (332) an der Innenfläche der Deckelvorderwand (16a) angebracht ist und wobei die Deckelklappe (332) eine Schnittlinie (310) aufweist, die eine Haltezunge (320) bildet, die mit der Deckelklappe (332) entlang einer Klapplinie verbunden ist und von der Deckelklappe (332) weg vorsteht, wobei bei der Schwenkbewegung des Klappdeckels (14) in Richtung auf die geschlossene Position die Haltezunge (320) entlang der Schachtelvorderwand (16) und in den ausgeschnittenen Abschnitt (30) in der Schachtelvorderwand (16) gleitet.
- 55
12. Klappdeckelbehälter nach einem vorherigen Anspruch, der mehrere Rauchartikel enthält.
13. Klappdeckelbehälter nach einem der vorherigen Ansprüche, wobei die Deckelklappe (32; 250, 252; 332) einen Ton erzeugt, wenn der Behälter (10) geschlossen wird, oder die Deckelklappe (32; 250, 252; 332) einen Ton erzeugt, wenn der Behälter (10) geöffnet wird, oder die Deckelklappe (32; 250, 252; 332) einen Ton erzeugt, wenn der Behälter (10) geschlossen wird.

sen und der Behälter (10) geöffnet wird.

14. Verfahren zum Erzeugen eines Tons mit einem Klappdeckelbehälter, das die folgenden Schritte beinhaltet:

Bereitstellen eines Klappdeckelbehälters, der einen Deckel mit einer Deckelklappe und einer Schachtelvorderwand mit einem Vorderwandausschnitt aufweist, wobei der Ausschnitt eine ausgeschnittene Bodenwand aufweist;  
Bereitstellen eines Abstandshalterpaneels zwischen dem Vorderwandausschnitt und der ausgeschnittenen Bodenwand; und  
Schließen des Behälters, so dass die Deckelklappe in den Ausschnitt gleitet, um so einen Ton zu erzeugen, wenn die Deckelklappe gegen die ausgeschnittene Bodenwand schlägt.

15. Verfahren nach Anspruch 14, das ferner den folgenden Schritt beinhaltet:

Öffnen des Behälters, so dass die Deckelklappe mit dem Rand des Vorderwandausschnitts in eine Verriegelungsposition kommt, bevor der Deckel völlig geöffnet ist, und wobei die Deckelklappe einen zweiten Ton erzeugt, wenn die Deckelklappe von der Verriegelungsposition gelöst wird, wenn der Deckel weiter geöffnet wird.

## Revendications

1. Contenant à couvercle articulé (10) de produits de consommation comprenant :

une boîte (12) comprenant une paroi frontale de boîte (16) ;  
une armature interne (34) montée à l'intérieur de la boîte (12) et comprenant une paroi frontale d'armature (36) ; et  
un couvercle articulé (14) raccordé à la boîte le long d'une ligne d'articulation et pouvant pivoter autour de la ligne d'articulation entre une position fermée et une position ouverte, dans lequel le couvercle articulé (14) comprend une paroi frontale de couvercle (16a) et un rabat de couvercle (32 ; 250, 252 ; 332) raccordé de manière articulée à la paroi frontale de couvercle (16a) et plié vers l'intérieur vers la surface interne de la paroi frontale de couvercle (16a) ;  
**caractérisé en ce que** la paroi frontale de boîte (16) présente une partie de découpe (30 ; 230) et une partie de la paroi frontale d'armature (36) est exposée à travers la partie de découpe (30 ; 230) dans la paroi frontale de boîte (16) ; le contenant à couvercle articulé (10) comprenant en outre un élément d'écartement agencé entre la

boîte (12) et l'armature interne (34) et assurant une séparation entre la paroi frontale de boîte (16) et la paroi frontale d'armature (36), dans lequel quand le couvercle articulé (14) est en position fermée, la paroi frontale de couvercle (16a) recouvre la partie de découpe (30 ; 230) dans la paroi frontale de boîte (16) et dans lequel durant un mouvement pivotant du couvercle articulé (14) de la position ouverte à la position fermée, au moins une partie du rabat de couvercle (32) coulisse le long de la paroi frontale de boîte (16) et s'engage dans la partie de découpe (30 ; 230) dans la paroi frontale de boîte (16).

2. Contenant à couvercle articulé selon la revendication 1, dans lequel dans la position fermée du couvercle articulé (14), au moins une partie du rabat de couvercle (32 ; 250, 252 ; 332) s'engage avec un bord de la partie de découpe (30) pour verrouiller le couvercle articulé (14) en position fermée.

3. Contenant à couvercle articulé selon la revendication 2, dans lequel quand le couvercle articulé (14) est déplacé de la position fermée à la position ouverte, le rabat de couvercle (32 ; 250, 252 ; 332) est désengagé d'avec le bord de la partie de découpe (30 ; 230).

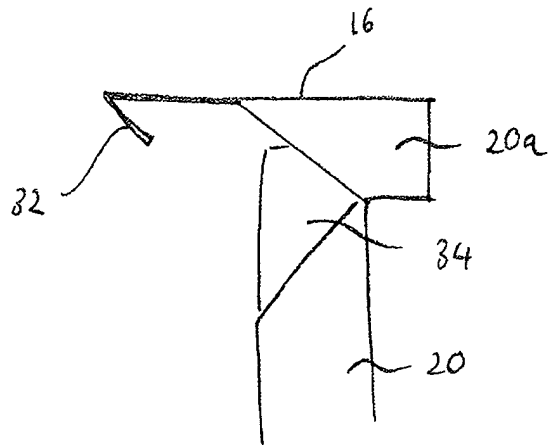
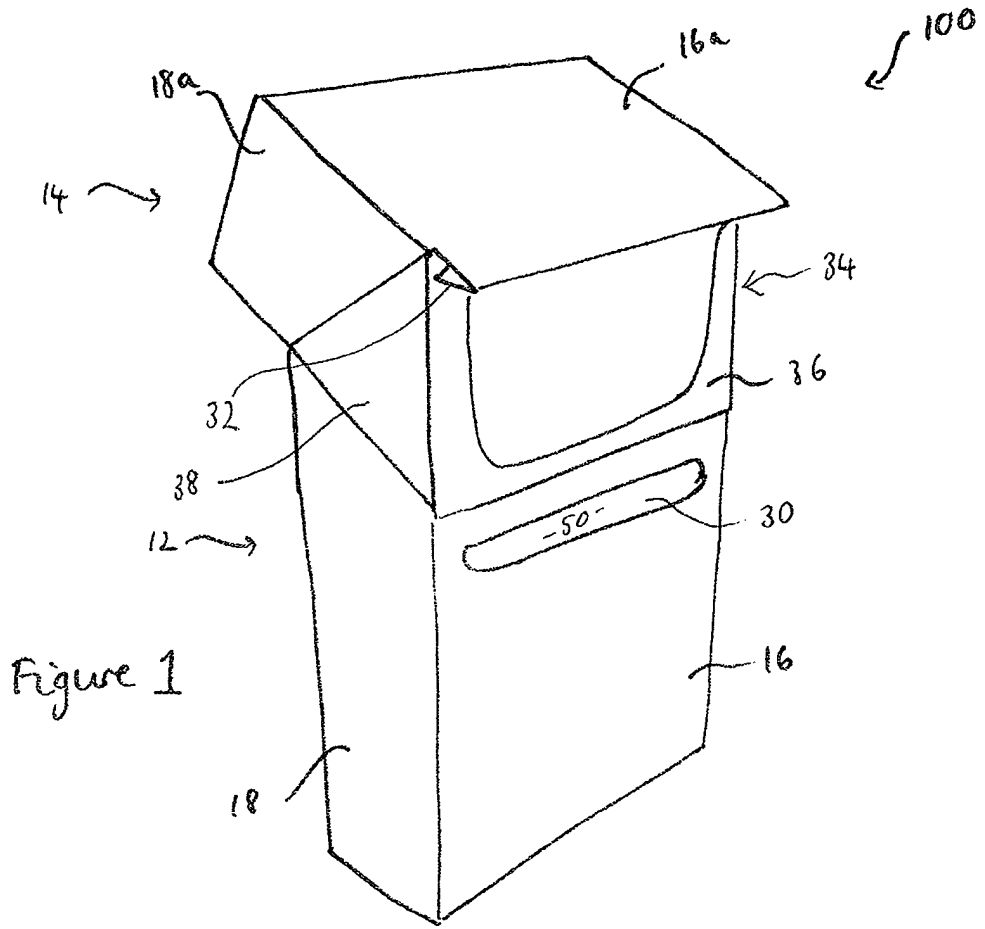
4. Contenant à couvercle articulé selon l'une quelconque des revendications précédentes, dans lequel l'élément d'écartement comprend un panneau d'écartement (40) raccordé à la paroi frontale de boîte (16) le long d'une ligne d'articulation s'étendant en travers d'un bord de la paroi frontale de boîte (16).

5. Contenant à couvercle articulé selon la revendication 4, dans lequel le panneau d'écartement (40) est raccordé à la paroi frontale d'armature (36) et dans lequel le panneau d'écartement (40) et la paroi frontale de boîte (16) sont raccordés le long de la ligne d'articulation uniquement.

6. Contenant à couvercle articulé selon la revendication 4 ou 5, dans lequel le panneau d'écartement (40) comprend une partie de découpe (30 ; 230) et dans lequel la partie de découpe (30 ; 230) dans le panneau d'écartement (40) coïncide sensiblement avec la partie de découpe (30 ; 230) dans la paroi frontale de boîte (16).

7. Contenant à couvercle articulé selon l'une quelconque des revendications précédentes, dans lequel le rabat de couvercle comprend une première partie de rabat de couvercle (250) et une seconde partie de rabat de couvercle (252), dans lequel la première partie de rabat de couvercle (250) s'étend au-delà de la seconde partie de rabat de couvercle (252) de

- telle sorte que durant le mouvement pivotant du couvercle articulé (14) vers la position fermée la première partie de rabat de couvercle (250) coulisse dans la partie de découpe (30 ; 230) avant la seconde partie de rabat de couvercle (252), générant ainsi deux sons successifs. 5
- 8.** Contenant à couvercle articulé selon l'une quelconque des revendications précédentes, dans lequel la paroi frontale de boîte (16) comprend une première partie de découpe (230a) et une seconde partie de découpe (230b) décalée verticalement de la première partie de découpe (230a) et dans lequel le couvercle articulé (14) comprend une première partie de rabat de couvercle (250) et une seconde partie de rabat de couvercle (252), dans lequel la première partie de rabat de couvercle (250) coulisse dans la première partie de découpe (230a) à un moment différent de celui auquel la seconde partie de rabat de couvercle (252) coulisse dans la seconde partie de découpe (230b), générant ainsi deux sons successifs. 10
- 9.** Contenant à couvercle articulé selon la revendication 8, dans lequel la première partie de rabat de couvercle (250) s'étend au-delà de la seconde partie de rabat de couvercle (252) et dans lequel la première partie de découpe (230a) est fournie au-dessus de la seconde partie de découpe (230b). 15
- 10.** Contenant à couvercle articulé selon l'une quelconque des revendications précédentes, dans lequel dans la position fermée du couvercle articulé (14), le rabat de couvercle (32 ; 250, 252 ; 332) repose entre la paroi frontale de boîte (16) et la paroi frontale d'armature (36). 20
- 11.** Contenant à couvercle articulé selon l'une quelconque des revendications précédentes, dans lequel le rabat de couvercle (332) est fixé à la surface interne de la paroi frontale de couvercle (16a) et dans lequel le rabat de couvercle (332) comprend une ligne de découpe (310) formant une languette de retenue (320) raccordée au rabat de couvercle (332) le long d'une ligne d'articulation et saillant hors du rabat de couvercle (332), dans lequel durant un mouvement pivotant du couvercle articulé (14) vers la position fermée la languette de retenue (320) coulisse le long de la paroi frontale de boîte (16) et s'engage dans la partie de découpe (30) dans la paroi frontale de boîte (16). 25
- 12.** Contenant à couvercle articulé selon l'une quelconque des revendications précédentes, contenant une pluralité d'articles à fumer. 30
- 13.** Contenant à couvercle articulé selon l'une quelconque des revendications précédentes, dans lequel le 35
- rabat de couvercle (32 ; 250, 252 ; 332) génère un son quand le contenant (10) est fermé ou le rabat de couvercle (32 ; 250, 252 ; 332) génère un son quand le contenant (10) est ouvert ou le rabat de couvercle (32 ; 250, 252 ; 332) génère un son quand le contenant (10) est fermé et quand le contenant (10) est ouvert. 40
- 14.** Procédé de création d'un son avec un contenant à couvercle articulé, comprenant les étapes consistant à 45
- fournir un contenant à couvercle articulé comprenant un couvercle doté d'un rabat de couvercle et une paroi frontale de boîte dotée d'une découpe de paroi frontale, dans lequel la découpe comprend une paroi inférieure de découpe ; 50
- fournir un panneau d'écartement entre la découpe de paroi frontale et la paroi inférieure de découpe ; et fermer le contenant de telle sorte que le rabat de couvercle coulisse dans la découpe, générant ainsi un son quand le rabat de couvercle frappe la paroi inférieure de découpe. 55
- 15.** Procédé selon la revendication 14, comprenant en outre l'étape consistant à
- ouvrir le contenant de telle sorte que le rabat de couvercle adopte une position d'interverrouillage avec le bord de la découpe de paroi frontale avant l'ouverture complète du couvercle et dans lequel le rabat de couvercle génère un second son quand le rabat de couvercle est désengagé de la position d'interverrouillage à la continuation de l'ouverture du couvercle.



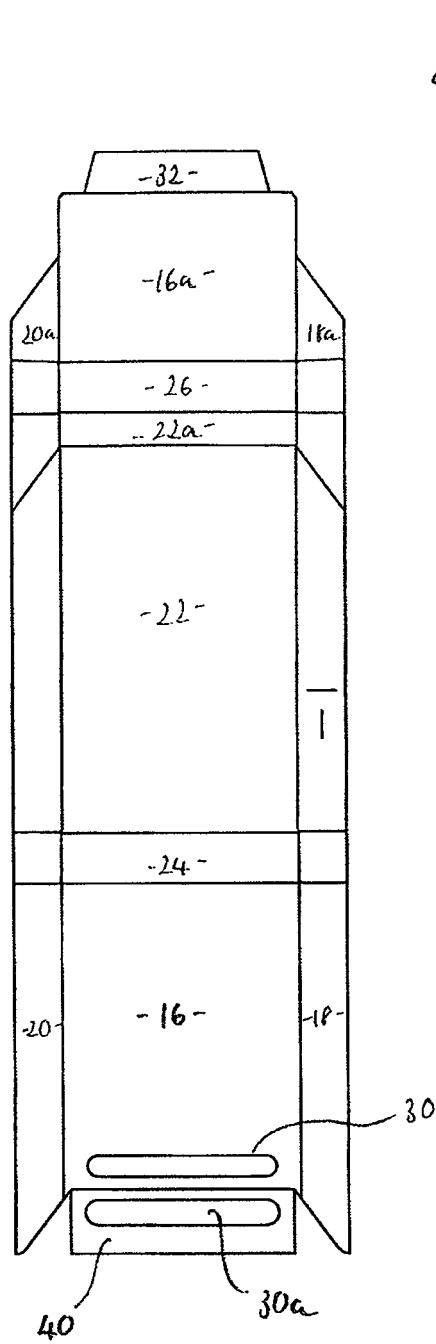


Figure 3

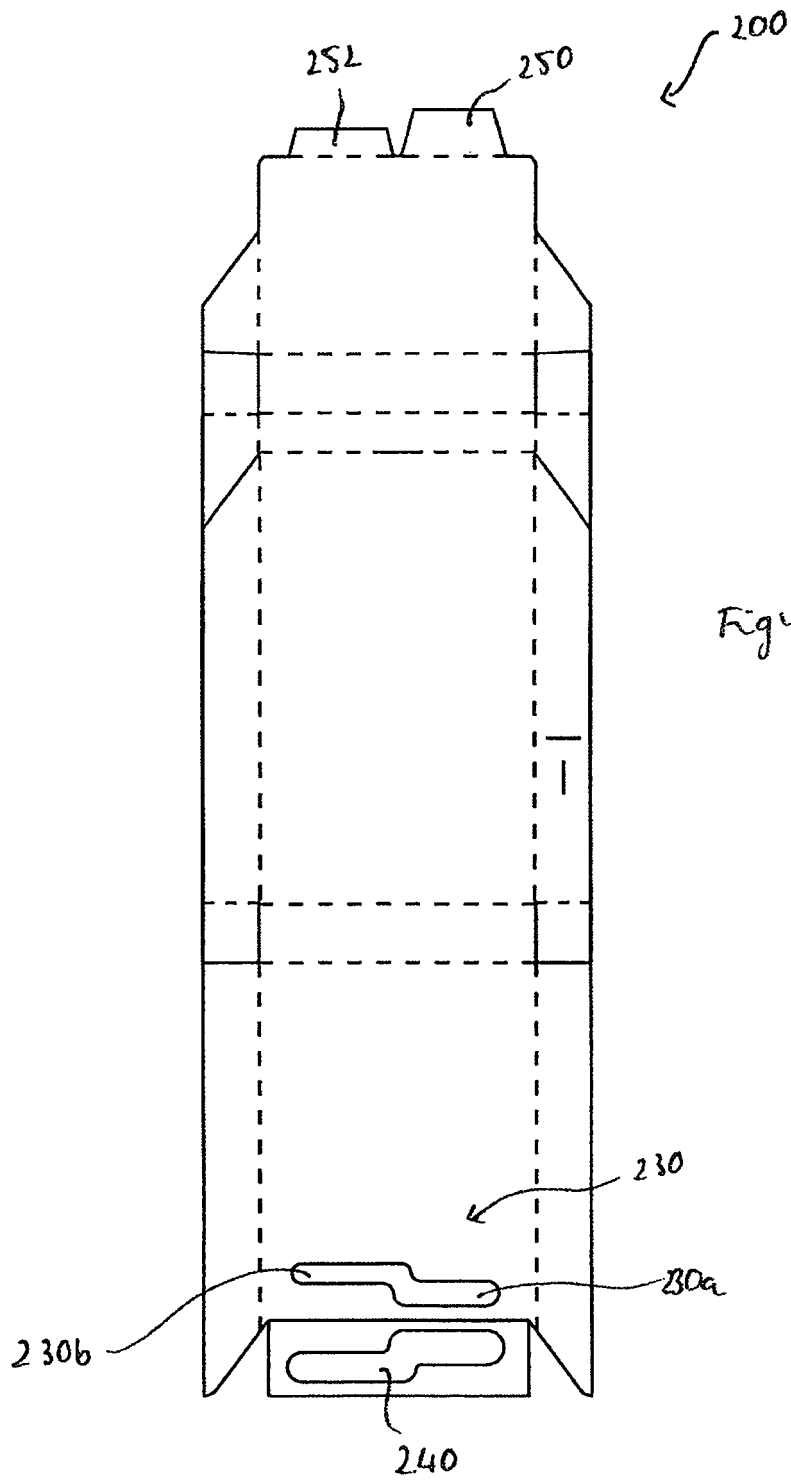


Figure 4

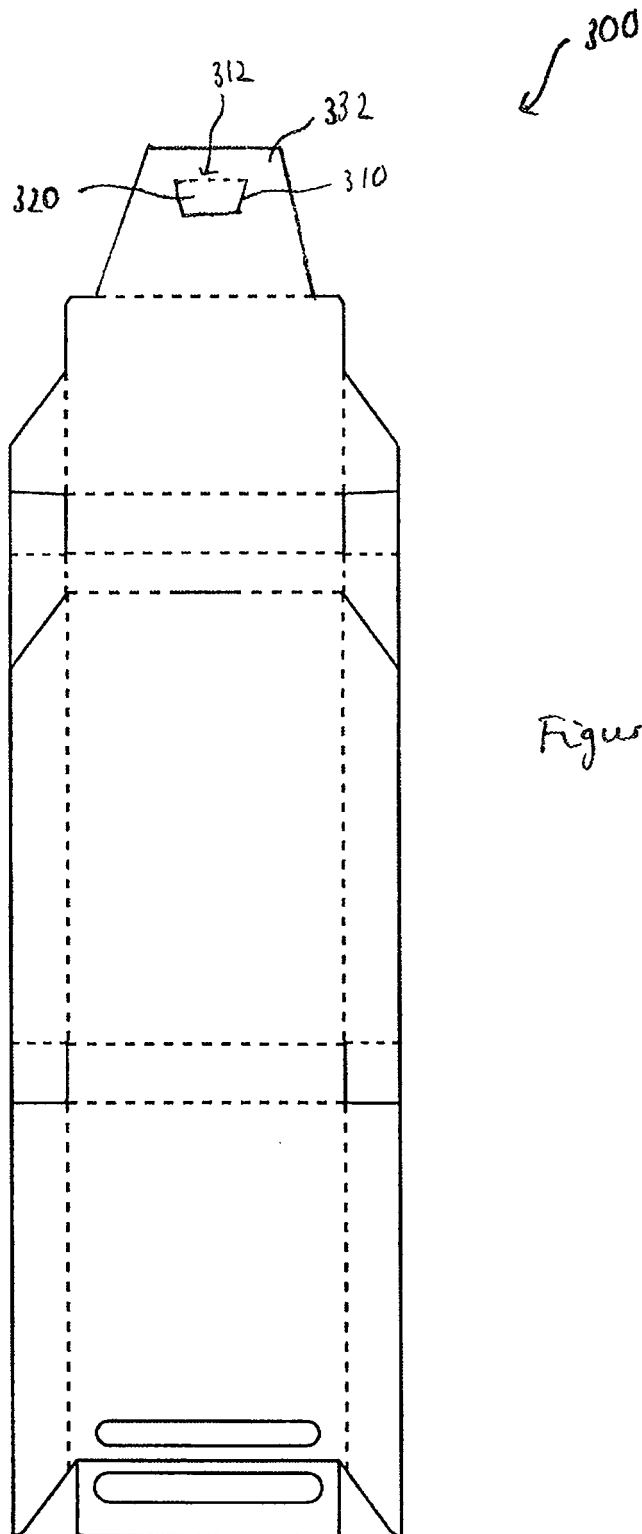


Figure 5



**REFERENCES CITED IN THE DESCRIPTION**

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**Patent documents cited in the description**

- EP 0894737 A [0004]
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