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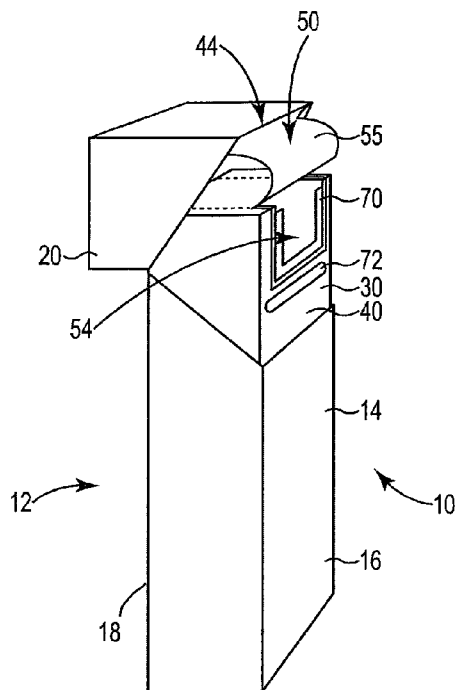


Fig. 1

(57) Abstract: A container includes an inner package disposed within a housing. The inner package includes a first layer having a line of weakness that defines a flap, and a second layer attached to an inner surface of the first layer. The second layer includes an access opening through which consumer goods can be removed, where the access opening is covered by the flap when the flap is in a closed position, and where the access opening is at least partially uncovered when the flap is in an open position.

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## A RESEALABLE INNER PACKAGE FOR A CONTAINER

The present invention relates to a container for consumer goods with a resealable inner package. The container finds particular application as a container for elongate smoking articles such as cigarettes.

Smoking articles such as cigarettes and cigars are commonly packaged in rigid hinge-lid containers having a box and a lid connected to the box about a hinge line extending across the rear wall of the container. Such hinge-lid containers are typically constructed from one-piece laminar cardboard blanks. In use, the lid is pivoted about the hinge line to open the container and so gain access to a bundle of smoking articles disposed within the box.

The bundle of smoking articles disposed within the box is typically wrapped in an inner liner of metalized paper, metal foil, or other flexible sheet material. To access the bundle of smoking articles within the inner liner, a consumer typically removes and discards a pre-perforated upper portion of the inner liner upon first opening the hinge-lid container.

However, to provide improved protection against the ingress and egress of, for example, air, moisture, flavors and odors, it is also known to enclose the bundle of smoking articles in a resealable substantially airtight wrapper.

For example, European Patent Application EP-A-0 944 539 discloses a hinge-lid pack of smoking articles in which the smoking articles are enclosed in a sealed enclosure of a layer of barrier material having an access aperture defined therein. The access aperture is covered by a cover layer with a permanently tacky surface, which can be engaged with the layer of barrier material to reseal the enclosure after first opening the aperture. To aid opening and reopening of the sealed enclosure, a non-adhesive tab is provided at the bottom edge of the cover layer.

International Patent Application WO-A-2008/142540 discloses a hinge-lid pack of smoking articles in which the smoking articles are enclosed in an inner package with an extraction opening closed by a cover flap that is fixed to the inner package using non-dry re-stick adhesive applied to the underside of the cover flap. The inner or outer surface of a bottom tab of the cover layer is glued permanently and non-removably to an inner surface of the lid of the hinge-lid pack so that opening and closing the lid simultaneously also opens and closes the cover flap.

When the cover layer or flap of known smoking article containers is closed, the pressure required to re-stick the cover layer may cause the inner package to deform and provide a less efficient seal between the cover and the inner package.

By way of further example, International Patent Application WO-A-2011/009520 discloses a pack for smoking articles that includes a sealed block as an inner pack and a

hinge-lid box as an outer pack. The sealed block includes an operating tab formed by an inner blank or an outer layer of the inner blank and an opening tab formed on the inside as an additional material. The opening tab is moved into an open position with the aid of the operating tab and in the process exposes a removal opening in the region of an inner layer.

5 In current seal constructions, the quality and functionality of the final pack depends on proper adhesion between the lid and the self-adhesive label, where the label has a complex construction or layout on both sides. In other words, a self-adhesive label that is attached to an outer surface of the inner package of the container is required to be releasably attached to the inner package.

10 One object of the invention is to provide a container for consumer goods that includes an inner package that is resealable. Other objects of the present invention will be evident to those of skill in the art upon reading and understanding the present disclosure, which includes the claims that follow and the accompanying drawings.

In one aspect of the present invention, a container for consumer goods is described.  
15 The container includes a housing including a box and a lid hingedly attached to the box, where the box includes a front wall and a rear wall. The container also includes an inner package disposed within the housing and at least partially defining an interior volume for housing consumer goods. The inner package includes a first layer including a line of weakness that defines a flap, and a second layer attached to an inner surface of the first  
20 layer. The second layer includes an access opening through which the consumer goods can be removed. The access opening is covered by the flap when the flap is in a closed position, and the access opening is at least partially uncovered when the flap is in an open position.

Various aspects of the present invention may have one or more advantages relative to currently-available or previously-described containers. Further, this two-layer construction  
25 can provide a more cost-effective manner in which to provide a sealed package that can be opened and closed to preserve the freshness of the package's contents. In addition, the two-layer construction requires fewer elements while providing improved sealing properties of the container.

In one or more embodiments, the flap can be attached to an inner surface of the lid  
30 such that upon opening the lid the flap is separated from the inner package along the line of weakness to reveal the access opening. For example, an inner package that includes a two-layer construction as described herein allows a user to unseal the package, access contents disposed within the package, and reseal the package.

These and other advantages of various aspects of the present invention will be  
35 evident to those of skill in the art upon reading and understanding the present disclosure.

The present invention is applicable to any suitable container for consumer goods that includes an inner package. It is known to package consumer goods such as, for example,

elongate smoking articles in containers formed from folded laminar blanks. For example, elongate smoking articles, such as cigarettes and cigars, are commonly sold in hinge lid packs having a box for housing the smoking articles and a lid connected to the box about a hinge line extending across the back wall of the container. The box may include a box front wall, a box left side wall, a box right side wall, a box back wall, and a box bottom wall. The lid may include a lid front wall, a lid left side wall, a lid right side wall, a lid back wall, and a lid top wall.

The consumer goods within the container may be wrapped in an inner liner. The inner liner and consumer goods together form an inner package. The container can also include an inner frame disposed either within the inner package or between the inner package and the box of the housing. Prior to first opening, the filled container may be wrapped in an outer wrapper.

The container may take any suitable form for housing consumer goods. For example, as already mentioned, the container may be a hinge-lid container having one or more hinged lids connected to a box housing the consumer goods. In one or more embodiments, the container may be a slide and shell container having an inner slide for housing the consumer goods mounted within an outer shell. Where the container is a slide and shell container, the outer shell or the inner slide may include one or more hinge lids. The container, inner frame, inner package, and outer wrapper may be formed from any suitable materials including, but not limited to, cardboard, paperboard, plastic, metal, or combinations thereof. The cardboard may have a weight of between about 100 grams per square meter and about 350 grams per square meter.

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 include 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 include, without limitation, one or more of the following features:

- one or two longitudinal rounded or bevelled edges on at least one of the front wall and the back wall;
- one or two transverse rounded or bevelled edges on at least one of the front wall and the back wall;
- one longitudinal rounded edge and one longitudinal bevelled edge on the front wall, or one transverse rounded edge and one transverse bevelled edge on the back wall;

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

Where the container includes one or more rounded edges, preferably the blanks forming the container include three, four, five, six, or seven scoring lines or creasing lines to form each rounded edge in the assembled container. The scoring lines or creasing lines may be either on the inside of the container or on the outside of the container. Preferably, the scoring lines or creasing lines are spaced from each other by between about 0.3 mm and 4 mm.

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

Where the container includes one or more bevelled edges, preferably the bevelled edge has a width of between about 1 mm and about 10 mm, preferably between about 2 mm and about 6 mm. In one or more embodiments, the container may include a double bevel formed by three parallel creasing or scoring lines that are spaced such that two distinct bevels are formed on the edge of the container. Where the container includes a bevelled edge, the bevel may be formed by two parallel creasing lines or scoring lines in the laminar blank from which the container is formed. The creasing lines or scoring lines may be arranged symmetrically to the edge between a first wall and a second wall. Alternatively, the creasing lines or scoring lines may be arranged asymmetrically to the edge between the first wall and the second wall, such that the bevel reaches further into the first wall of the container than into the second wall of the container.

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

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

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  
5 between ten and thirty smoking articles.

As well as housing a bundle of smoking articles, the container may further include other consumer goods, for example, matches, lighters, extinguishing means, breath-fresheners, or electronics. The other consumer goods may be attached to the outside of the container, contained within the container along with the smoking articles, in a separate  
10 compartment of the container, or combinations thereof.

The lid of the housing is hingedly attached to the box and is adapted to be manipulated between an open position and a closed position. In the open position, the consumer can access the consumer goods disposed within the housing. The lid can be hingedly attached to the box along a hinge line that extends across a rear wall of the  
15 container. The term "hinge line" refers to a line about which the lid may be pivoted 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 housing.

Disposed within the housing is an inner package that includes the consumer goods. The inner package at least partially defines an interior volume for housing consumer goods.  
20 Preferably, the inner package includes a first layer and a second layer attached to the first layer.

The first layer can include an inner surface and an outer surface. The first layer can also include a line of weakness formed in the first layer that defines a flap of the inner package. The line of weakness can take any suitable shape or combination of shapes.  
25 Preferably, the line of weakness defines a flap that has three sides that separate the flap from the first layer, and a fourth side that forms a hinge line between the flap and the first layer. In one or more embodiments, the flap can be attached to an inner surface of the lid of the box such that upon opening the lid the flap is separated from the inner package along the line of weakness. The flap can take any suitable shape or combination of shapes and  
30 have any suitable dimensions.

The line of weakness can be continuous or discontinuous (for example, perforated). Further, the line of weakness can be formed using any suitable technique or combination of techniques, for example, laser cutting or mechanical cutting (for example, die cutting or kiss cutting). The line of weakness can include any suitable depth in a direction transverse to the  
35 inner and outer surfaces of the first layer. Preferably, the line of weakness has a depth that is at least about 90 percent of a total thickness of the first layer. More preferably, the line of weakness has a depth that is about 100 percent of the total thickness of the first layer. Any

suitable percentage of material can remain along the line of weakness after the line has been formed. Preferably, between about 5 percent and about 25 percent of material of the first layer remains along the line of weakness after the line has been formed.

5 The inner package may be securely sealed along the line of weakness before the first opening of the container. This may increase the storage life of the consumer goods contained within the container.

10 The second layer can include an inner surface and an outer surface. The second layer can also include an access opening through which consumer goods can be removed. The access opening is covered by the flap formed in the first layer when the flap is in the closed position. Further, the access opening is at least partially uncovered when the flap of the first layer is in the open position. In one or more embodiments, the access opening is completely uncovered when the flap is in the open position.

15 The access opening can be disposed in any suitable location on the second layer. In one or more embodiments, the access opening can be disposed on the second layer such that it is located on a front wall of the inner package. In one or more embodiments, the access opening can be disposed on the second layer such that it is located on a top wall of the inner package. In one or more embodiments, the access opening can be disposed on the second layer such that it is located across a portion of the front wall and the top wall of the inner package.

20 The access opening can take any suitable shape or combination of shapes. Further, the access opening can be formed using any suitable technique or combination of techniques, for example, laser cutting or mechanical cutting (for example, die cutting).

25 The second layer can be attached to the inner surface of the first layer using any suitable technique or combination of techniques. Preferably, the second layer is attached to the inner surface of the first layer using an adhesive. Any suitable adhesive or combination of adhesives can be utilized. Preferably, the adhesive is a repositionable adhesive. Any suitable repositionable adhesive can be utilized, for example, a pressure sensitive adhesive.

30 The first and second layers can include any suitable material or combination of materials. The first layer can include the same material as the second layer or different material from the second layer. Preferably, at least one of the first and second layers is formed of metal foil or metalized paper. At least one of the first and second layers may be formed as a laminate of a metalized polyethylene film and a liner material. At least one of the first and second layers can have a thickness that is between about 10 microns and about 50 microns. In addition, the first and second layers may be provided with a print-receptive top coating.

35 The second layer can have any suitable dimensions in relation to the first layer. In one or more embodiments, the second layer is coextensive with the first layer. In other

words, the second layer extends to an outer perimeter of the first layer. In one or more embodiments, the second layer can have a surface area that is less than a surface area of the first layer. For example, the second layer can be an adhesive label attached to the first layer, where the second layer is not coextensive with the first layer.

5           At least a portion of the outer surface of the first layer can be permanently affixed to a corresponding portion of an inner surface of the rear wall of the box. Any suitable technique or combination of techniques can be utilized to affix this portion of the outer surface of the first layer to the rear wall of the box. Preferably, a permanent adhesive is utilized to attach the portion of the outer surface of the first layer to the rear wall of the box. Further, at least a  
10           portion of the outer surface of the first layer can be permanently affixed to a corresponding portion of an inner surface of the front wall of the box. Once again, any suitable technique or combination of techniques can be utilized to attach this portion of the outer surface of the first layer to the inner surface of the front wall of the box, for example, adhering the outer surface of the first layer to the inner surface of the front wall of the box with a permanent  
15           adhesive.

          In one or more embodiments, the flap of the first layer defined by the line of weakness can be attached to an inner surface of the lid of the housing of the container. Any suitable technique or combination of techniques can be utilized to attach the flap to the inner surface of the lid, for example, mechanical fasteners, adhesives, thermal or ultrasonic  
20           bonds, and combinations thereof. Preferably, the flap is attached to the inner surface of the lid using an adhesive. The adhesive can be any suitable adhesive or combination of adhesives. Preferably, the adhesive is a permanent adhesive. Any suitable portion of the flap can be attached to the inner surface of the lid. In one or more embodiments, a portion of the outer surface of the first layer that forms the flap is attached to the inner surface of the lid. In  
25           one or more embodiments, a portion of the inner surface of the first layer that forms the flap is attached to the lid.

          The flap is adapted to reattach to the second layer when the flap is in the closed position. The same adhesive used to attach the second layer to the first layer can be disposed between the flap and the second layer to reattach the flap to the second layer  
30           when the flap is in the closed position. In one or more embodiments, an alternative or additional adhesive or adhesives can be disposed along at least a portion of the second layer along a perimeter of the access opening disposed in the second layer such that the flap can be attached to the second layer when in the closed position. This portion of the second layer along the perimeter of the access opening defines a seal region of the second  
35           layer. The flap is adapted to overlap the access opening into the seal region such that the flap attaches to the second layer within the seal region when the flap is in the closed position. The adhesive disposed between the flap and the seal region allows for repeated

opening and closing of the flap so that the consumer goods disposed within the inner package can be accessed when the flap is in the open position, and so that the consumer goods remain sealed within the inner package when the flap is in the closed condition. Preferably, the adhesive disposed between the flap and the seal region provides sufficient  
5 adhesion for the flap to be reattached at least as many times as there are consumer goods within the inner package such that the consumer can open and reseal the inner package until the package is empty.

The alternative or additional adhesive can be disposed in any suitable location between the flap and the seal region. In one or more embodiments, this adhesive can be  
10 disposed on the flap. In such embodiments, the adhesive can be disposed on the inner surface of the first layer such that it covers the entire flap. In one or more embodiments, this adhesive can be disposed along at least a portion of a perimeter of the flap corresponding to the seal region when the flap is in the closed position. In one or more embodiments, the alternative or additional adhesive can be disposed on the second layer in the seal region.  
15 Further, in one or more embodiments, the alternative or additional adhesive can be disposed on the flap and the second layer.

Preferably the flap can have an area that is greater than an area of the access opening disposed in the second layer of the inner package so that the access opening is covered by the flap when the flap is in the closed position. The line of weakness that defines  
20 the flap exposes the seal region of the second layer. The seal region can have any suitable dimension or dimensions. For example, in one or more embodiments, the seal region can have a constant width that extends from a perimeter of the access opening to the line of weakness. In one or more embodiments, the seal region can have a width that varies along the perimeter of the access opening. Preferably, the average width of the seal region is 2-5  
25 mm. Preferably, a surface area of the seal region is between about 25 percent and about 300 percent of an area of the access opening. More preferably, the surface area of the seal region is between about 25 percent to about 65 percent of the area of the access opening.

The container can also include an inner frame disposed within the box. The inner frame can be disposed between the inner package and the front wall of the box or within the  
30 inner package. When disposed within the inner package, the inner frame is positioned such that a front wall of the inner package is between the inner frame and the front wall of the box. The inner frame includes a front wall and a pair of opposed sidewalls. Preferably, the inner frame is U-shaped. The term "U-shaped" is used herein to refer to a shape that includes three parts, wherein the first part and the third part are parallel to each other and extend in  
35 the same direction perpendicular to the second part.

Preferably, the front wall of the inner frame is disposed such that the front wall of the inner package is between the front wall of the inner frame and the front wall of the box.

Advantageously, an inner frame with a large surface area provided adjacent the front wall of the inner package increases the structural strength of the container. The increased structural strength provided by the inner frame allows the more secure closing of the flap. This is particularly advantageous for subsequent closing operations when the container is no longer full.

Preferably, the inner frame includes a cut-out at the top of the front wall. The cut-out preferably substantially corresponds to the access opening, and is provided such that the consumer goods within the inner package may be more easily accessed. Where the inner frame includes a cut-out, the height of the inner frame is defined as the distance from the bottom of the inner frame to the cut-out.

The inner frame may include one or more reinforcing elements. Preferably, the one or more reinforcing elements includes an adhesive such that the adhesive reinforces the inner frame and inner package. In one or more embodiments, the one or more reinforcing elements may include at least one layer of material, such as a similar cardboard to that utilized for manufacturing the inner frame, affixed to the inner frame. In such embodiment, the at least one further layer of material is permanently affixed to the inner frame. Preferably, the at least one further layer is elongate. Where the inner frame is U-shaped, the at least one further layer of material is preferably affixed to the outer surface of the front wall of the inner frame. Preferably, the at least one layer is affixed adjacent the top of the inner frame.

A carton that includes a lid and at least one sidewall can contain multiple containers as described herein.

The terms "front," "back," "upper," "lower," "side," "top," "bottom," and other terms used to describe relative positions of the components of containers refer to the container in an upright position with the lid at the top end and the consumer goods accessible from the upper end at the front. The terms "left" and "right" can be used with reference to side walls of the container when the container is viewed from the front in its upright position.

The term "inner surface" is used throughout the specification to refer to the surface of a component of the assembled container that is facing towards the interior of the container, for example towards the consumer goods, when the container is in the closed position.

The term "outer surface" is used throughout the specification to refer to the surface of a component of the container that is facing towards the exterior of the container. For example, in one or more embodiments, the container includes an inner frame that includes an outer surface that is facing the outer housing of the container and an inner surface that is facing the inner package of the container.

All scientific and technical terms used herein have meanings commonly used in the art unless otherwise specified. The definitions provided herein are to facilitate understanding of certain terms used frequently herein.

Referring now to the drawings, in which some aspects of the present invention are illustrated

FIG. 1 is a schematic perspective view of a container in an open position, where the container includes a housing and an inner package disposed within the housing.

5 FIG. 2 is a schematic cross-section view of the container of FIG. 1.

FIG. 3 is a schematic perspective view of the container of FIG. 1 in a closed position.

FIG. 4 is a schematic cross-section view of a portion of the inner package of FIG. 1.

FIG. 5 is a schematic plan view of a blank used to form an inner package.

FIG. 6 is a schematic plan view of an inner frame.

10 Referring to FIG. 1, a schematic perspective view of an embodiment of a container 10 for consumer goods is depicted. The container 10 includes a housing 12 that includes a box 14 and a lid 20 hingedly attached to the box via a hinge line (not shown). The hinge line extends across a back 18 of the box 14 of the container 10, and acts to allow the lid 20 to be moved from a closed position (FIG. 3) to an open position as shown in FIG. 1. An inner  
15 package 30 is disposed within the housing 12. The inner package 30 at least partially defines an interior volume for housing consumer goods. The inner package 30 is made from a barrier material or materials to hermetically seal the consumer goods before the container is opened for the first time. The barrier material may be a metal foil or a plastic and metal laminate.

20 The inner package 30 includes a front wall 32 and a back wall 34 (FIG. 2). The inner package 30 also includes a first layer 40 and a second layer 50 attached to an inner surface 46 of the first layer 40 (FIG. 4). The first layer 40 includes a line of weakness 42 that defines a flap 44. Further, the second layer 50 includes an access opening 54 through which the consumer goods (not shown) can be removed. The access opening 54 is covered by the flap  
25 44 when the flap is in the closed position (FIG. 3). Further, the access opening 54 is at least partially uncovered when the flap 44 is in the open position. The flap 44 is attached to the first layer 40 along a hinge line. In one or more embodiments, the flap 44 is also attached to an inner surface 22 (FIG. 2) of the lid 20 such that upon opening the lid the flap is separated from the inner package 30 along the line of weakness 42 to at least partially uncover the  
30 access opening 54.

The container 10 also includes an inner frame 70 disposed within the inner package 30. The inner frame 70 can include a reinforcing element 72 disposed between the inner frame and an inner surface of the inner package 30.

35 Referring to FIG. 2, a schematic cross-section view of the container 10 of FIG. 1 is depicted with the lid 20 and the flap 44 in the open position. The inner package 30 is shown disposed within the box 14 of housing 12, and the inner frame 70 is disposed within the inner package. The flap 44 is attached to the lid 20. In the open position, the flap 44 forms an S-

shape. The geometry of the container 10 is such that the flap 44 is automatically resealed to the inner package 30 when the flap (and the lid 20) is returned to the closed position.

At least a portion of an outer surface 48 of the first layer 40 of the inner package 30 is permanently affixed to a corresponding portion of an inner surface 19 of the rear wall 18 of the box 14, thereby affixing the inner package to the inner surface of the rear wall the box in a first region 24. Further, at least a portion of the outer surface 48 of the first layer 40 of the inner package 30 is permanently affixed to a corresponding portion of an inner surface 17 of the front wall 16 of the box 14, thereby affixing the inner package to the inner surface of the front wall of the box in a second region 26. By permanently affixing at least a portion of the inner package 30 to one or both of the front wall 16 and the rear wall 18 of the box 14, the structural resilience of the inner package may be further improved. The inner package 30 may be permanently affixed using, for example, hot melt adhesive, solvent based adhesive, water based adhesive, solvent-free adhesive, pressure-sensitive adhesive, conductive type sealing, and inductive type sealing. In a preferred embodiment, the inner package 30 is permanently attached to the box 14 using a hot melt adhesive.

Referring to FIG. 3, a schematic perspective view of the container 10 of FIG. 1 is depicted. The lid 20 of the container 10 and the flap 44 of the inner package 30 are in the closed position. The flap 44 is attached to the second layer 50 (FIG. 4) when the flap is in the closed position.

Referring to FIG. 4, a schematic cross-section view of a portion of the inner package 30 of FIG. 1 is depicted. The first layer 40 includes the line of weakness 42 that defines the flap 44. The second layer 50 is attached to the inner surface 44 of the first layer 40 with adhesive 60. The second layer 50 includes the access opening 54. As shown in FIG. 4, the access opening 54 is covered by the flap 44 when the flap is in the closed position. The flap 44 is adapted to be attached to the second layer 50 when the flap is in the closed position.

A seal region 62 is formed between the line of weakness 42 and a perimeter 55 of the access opening 54. The flap 44 is adapted to overlap the access opening 54 into the seal region 62 such that the flap attaches to the second layer 50 within the seal region when the flap is in the closed position. In one or more embodiments, the seal region 62 has a constant width along a perimeter of the access opening 54. In one or more embodiments, the seal region 62 has a width that varies along a perimeter of the access opening 54.

Referring to FIGS. 5 and 6, schematic plan views of a pre-assembled inner package 100 and an inner frame 120 are depicted. The pre-assembled inner package 100 shown in FIG. 5 includes a front wall panel 102 that forms a front wall (for example, front wall 32 of inner package 30 of FIG. 2) of the inner package when assembled, two wall panels 104 and 106 that form a back wall (for example, back wall 34 of inner package 30 of FIG. 2) of the inner package when assembled, a top wall panel 108, and a bottom wall panel 110. The pre-

assembled inner package 100 also includes a plurality of side wall panels 118. As can be seen in FIG. 5, the access opening 54 is disposed across a portion of the top wall panel 108 and the front wall panel 102. The preassembled inner package 100 can also include reinforcing elements 119. The reinforcing elements 119 can include any suitable reinforcing element described herein regarding the inner frame 70 of FIGS. 1-2.

FIG. 6 shows the pre-assembled inner frame 120. As described herein, the inner frame 120 includes a front wall 122 and two opposed side walls 124 and 126. The outer surface of the front wall 122 is provided with a reinforcing element 128. As described herein, a cut-out 130 is provided at the top of the front wall panel of the inner frame. The cut-out 130 is provided to allow the consumer goods housed within the container to be accessed more easily. The cut-out 130 is provided such that it aligns with the access opening 54 (FIG. 1) provided in the inner package 30.

The dashed lines in the above described figures indicate fold lines.

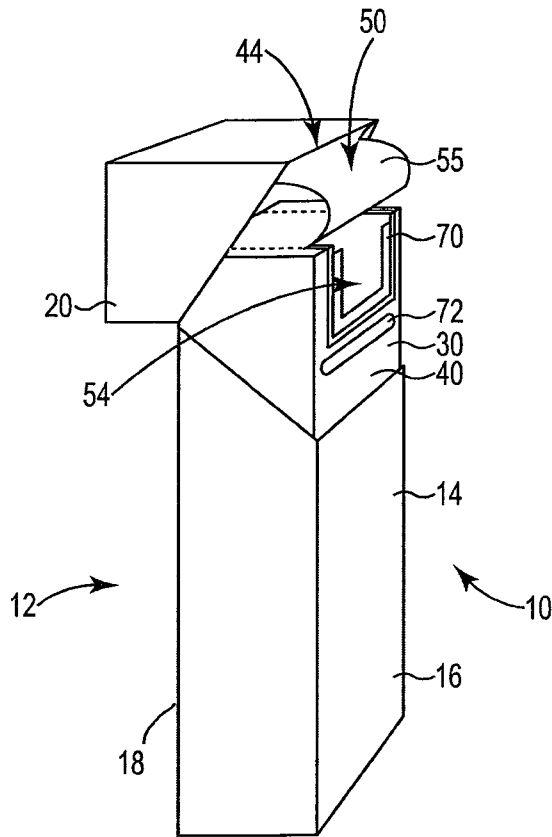
**CLAIMS**

1. A container for consumer goods, comprising:
- 5 a housing comprising a box and a lid hingedly attached to the box, wherein the box comprises a front wall and a rear wall;
- an inner package disposed within the housing and at least partially defining an interior volume for housing consumer goods, wherein the inner package comprises:
- 10 a first layer comprising a line of weakness that defines a flap; and
- a second layer attached to an inner surface of the first layer and comprising an access opening through which the consumer goods can be removed, wherein the access opening is covered by the flap when the flap is in a closed position, and wherein the access opening is at least partially uncovered when the flap is in an open position.
- 15
2. The container of claim 1, wherein the flap is attached to an inner surface of the lid such that upon opening the lid the flap is separated from the inner package along the line of weakness to at least partially uncover the access opening.
- 20
3. The container of claim 2, wherein the flap is attached to the inner surface of the lid by a permanent adhesive.
4. The container of any one of claims 1 to 3, wherein the second layer is coextensive with the first layer.
- 25
5. The container of any one of claims 1 to 4, wherein the second layer is attached to the first layer by a releasable adhesive.
6. The container of claim 5, wherein the releasable adhesive comprises a pressure-sensitive adhesive.
- 30
7. The container of any one of claims 1 to 6, wherein the flap is adapted to reattach to the second layer when the flap is in the closed position.
- 35
8. The container of any one of claims 1 to 7, wherein the second layer comprises a seal region disposed along at least a portion of a perimeter of the access opening, wherein the

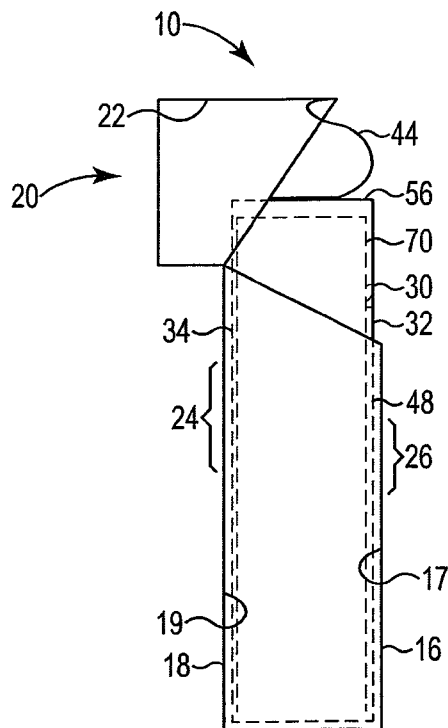
flap is adapted to overlap the access opening into the seal region such that the flap attaches to the second layer within the seal region when the flap is in the closed position.

9. The container of claim 8, further comprising an adhesive disposed between the flap  
5 and the seal region.
10. The container of any one of claims 1 to 9, wherein at least a portion of the outer  
surface of the first layer of the inner package is permanently affixed to a corresponding  
portion of an inner surface of the front wall of the box.  
10
11. The container of any one of claims 1 to 10, further comprising an inner frame  
disposed within the box, wherein the inner frame comprises a front wall and a pair of  
opposed side walls.
12. The container of claim 11, wherein the inner frame is disposed between the front wall  
15 of the box and the inner package.
13. The container of claim 11, wherein the inner frame is disposed within the inner  
package.  
20
14. An assembly comprising the container of any one of the preceding claims and the  
consumer goods, wherein the consumer goods are housed in the interior volume defined by  
the inner package.
15. The container of any one of claims 1 to 14, wherein the consumer goods are smoking  
25 articles.

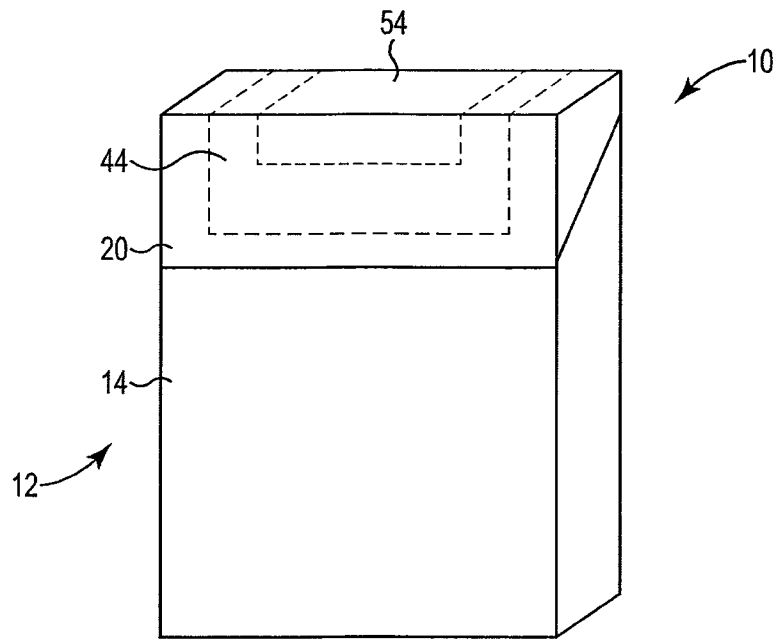
1/3



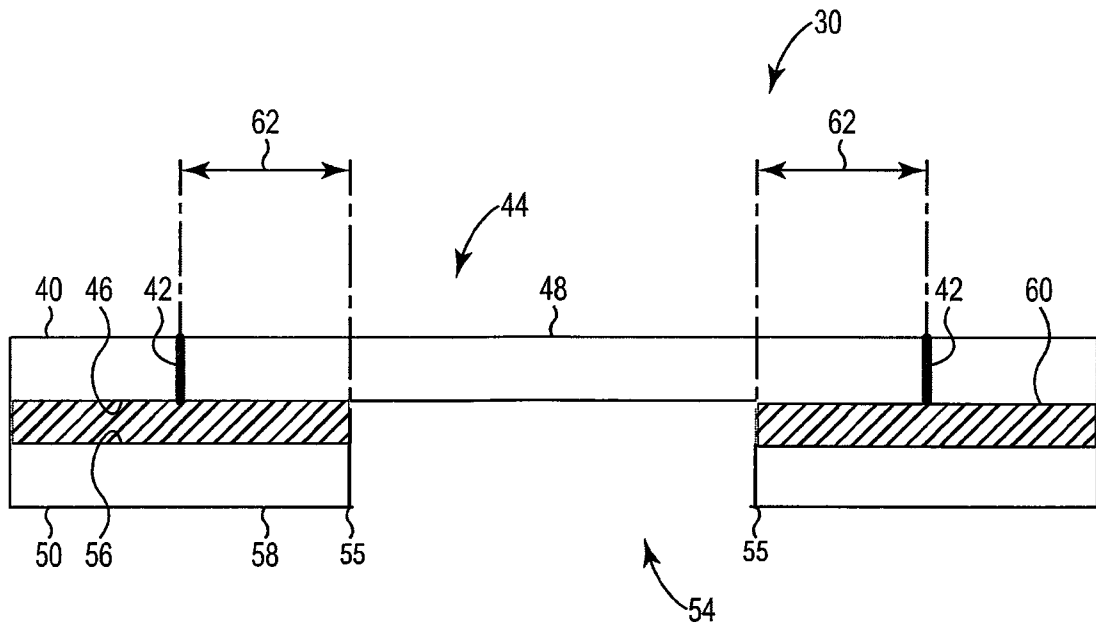
**Fig. 1**



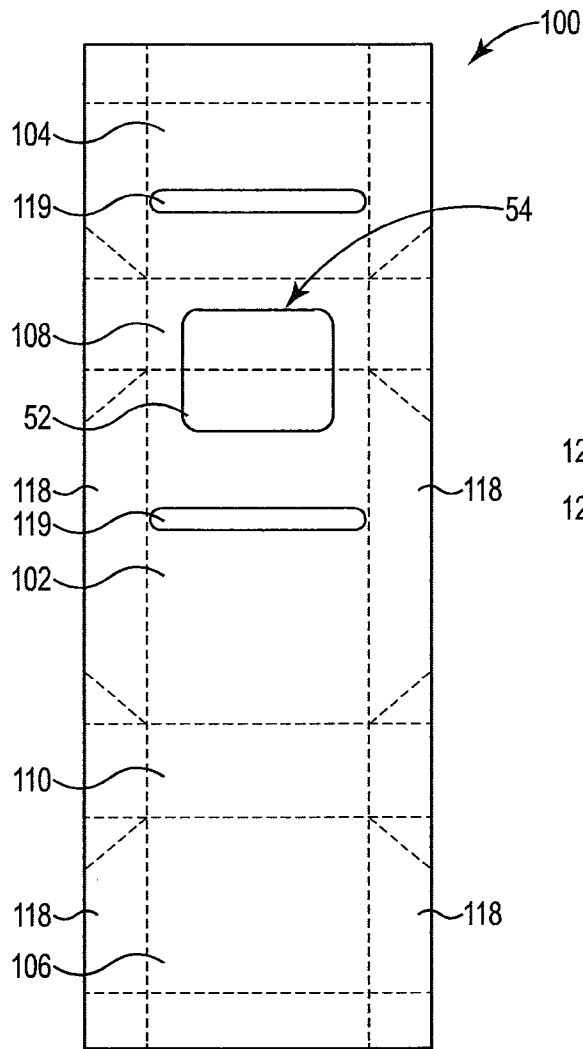
**Fig. 2**



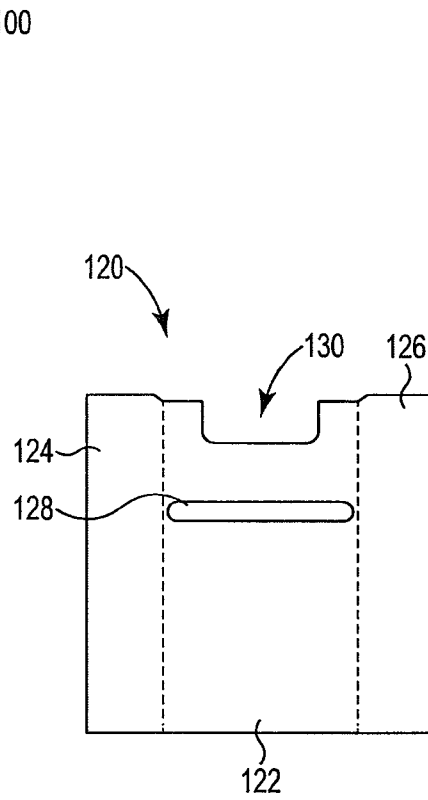
**Fig. 3**



**Fig. 4**



**Fig. 5**



**Fig. 6**

INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2016/053832

A. CLASSIFICATION OF SUBJECT MATTER  
INV. B65D75/58 B65D85/10  
ADD.  
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)  
B65D

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

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2013/098109 A1 (PHILIP MORRIS PROD [CH]) 4 July 2013 (2013-07-04)	1-3,5-15
Y	page 2, line 12 - line 30; figures 1,6,7	4
X	DE 10 2010 019867 A1 (FOCKE & CO [DE]) 15 September 2011 (2011-09-15)	1
Y	figures 1,2,14	1-15
Y	WO 2012/147073 A1 (GD SPA [IT]; BERTUZZI IVANOE [IT]; VITALI ANTONIO [IT]; BIONDI ANDREA) 1 November 2012 (2012-11-01)	1-15
A	EP 2 769 930 A1 (AMCOR FLEXIBLES [CH]) 27 August 2014 (2014-08-27)	1-15
	figure 2	
	-/--	

Further documents are listed in the continuation of Box C.

See patent family annex.

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Date of the actual completion of the international search

9 August 2016

Date of mailing of the international search report

18/08/2016

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Authorized officer

Wimmer, Martin

## INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2016/053832

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005/276525 A1 (HEBERT ROBERT C [US] ET AL) 15 December 2005 (2005-12-15) figures 5,6,7 -----	1-15
A	WO 2013/120915 A1 (PHILIP MORRIS PROD [CH]) 22 August 2013 (2013-08-22) figure 6 -----	1-15

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2016/053832

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
WO 2013098109	A1	04-07-2013	CN 104010943 A	27-08-2014
			EP 2797816 A1	05-11-2014
			JP 2015503492 A	02-02-2015
			KR 20140109373 A	15-09-2014
			RU 2014131475 A	20-02-2016
			SG 11201403627Q A	30-07-2014
			US 2014374290 A1	25-12-2014
			WO 2013098109 A1	04-07-2013
-----				
DE 102010019867	A1	15-09-2011	AR 080337 A1	28-03-2012
			CO 6612274 A2	01-02-2013
			DE 102010019867 A1	15-09-2011
			EP 2544958 A1	16-01-2013
			JP 2013521198 A	10-06-2013
			RU 2012142984 A	20-04-2014
			WO 2011110272 A1	15-09-2011
			ZA 201206665 B	29-05-2013
-----				
WO 2012147073	A1	01-11-2012	AU 2012247117 A1	23-05-2013
			CA 2816857 A1	01-11-2012
			CN 103228557 A	31-07-2013
			EP 2701994 A1	05-03-2014
			EP 2910492 A1	26-08-2015
			JP 2014514992 A	26-06-2014
			RU 2013152952 A	10-06-2015
			US 2014110286 A1	24-04-2014
			WO 2012147073 A1	01-11-2012
-----				
EP 2769930	A1	27-08-2014	EP 2769930 A1	27-08-2014
			EP 2958823 A1	30-12-2015
			JP 2016507439 A	10-03-2016
			US 2015375923 A1	31-12-2015
			WO 2014128037 A1	28-08-2014
-----				
US 2005276525	A1	15-12-2005	AR 049910 A1	13-09-2006
			AU 2005254459 A1	29-12-2005
			BR PI0510773 A	20-11-2007
			CA 2569646 A1	29-12-2005
			EP 1753670 A1	21-02-2007
			EP 2243716 A1	27-10-2010
			ES 2451624 T3	28-03-2014
			ES 2490218 T3	03-09-2014
			JP 4418495 B2	17-02-2010
			JP 2008502555 A	31-01-2008
			US 2005276525 A1	15-12-2005
			US 2010113241 A1	06-05-2010
			US 2011139363 A1	16-06-2011
			US 2012267386 A1	25-10-2012
			WO 2005123535 A1	29-12-2005
-----				
WO 2013120915	A1	22-08-2013	AU 2013220404 A1	25-09-2014
			CN 104114464 A	22-10-2014
			EP 2814763 A1	24-12-2014
			HK 1200791 A1	14-08-2015
			JP 2015511912 A	23-04-2015
			KR 20140124365 A	24-10-2014
			PH 12014501621 A1	13-10-2014
			RU 2014137115 A	10-04-2016

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2016/053832

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		SG 11201404546R A	28-08-2014
		US 2015034509 A1	05-02-2015
		WO 2013120915 A1	22-08-2013