

**PACKET FOR HOLDING SUBSTANTIALLY ELONGATED ARTICLES SUCH
AS CIGARETTES**

5 FIELD OF THE INVENTION

This invention relates generally to a packaging system. More particularly, the present invention relates to a packet for holding substantially elongated articles such as cigarettes and the like. This invention can be used for secure packing of cigarettes and the like
10 products.

BACKGROUND AND THE PRIOR ART

Cigarettes are traditionally packed and sold in flip top packs. In these flip top packs, to
15 access the cigarettes, the lid has to be held in opened condition. Consumer's on-the-go many a times find it cumbersome to engage both hands for holding it in opened condition for accessing the cigarettes.

A shell and slide type pack structure wherein an inner container can move with respect to the outer container is well known.

20 Some of the prior arts in the present field of invention are as follows:

EP2325093B1 provides a package for tobacco-related articles comprises an outer shell, a lid which is adapted to close the top side of the outer shell and can be swivelled about a hinge line, and an inner shell. The inner shell accommodates a plurality of tobacco-related articles and can be shifted in the outer shell from a retracted position, in which it is
25 housed inside the outer shell, to an advanced position, which enables access to the tobacco-related articles. A cutout in the outer shell exposes part of the inner shell and enables exerting a force onto the inner shell for moving the inner shell. A hinged connector pushes the lid into its opened state when the inner shell is moved into its advanced position and pulls the lid into its closed state when the inner shell is moved into
30 its retracted position.

EP2243722A1 provides cigarette package according to the present invention has a thin outer case and an inner tray inserted into the outer case in a manner allowing the inner

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tray to be pulled out, the inner tray having a head functioning as a grip to pull the inner tray out from the outer case and a plurality of grooves holding filter-tipped cigarettes along the direction that the inner tray is pulled out.

EP'722 provides a package that comprises a thin parallelepiped outer case and a rectangular shaped inner tray with product holding seats/grooves on its surface. However, in the invention the inner body is a substantially closed container with opening only at the top for product dispensing. The cross-section of the inner and outer container is not limited by a rectangular shape as claimed in the prior art. The other point of differentiation being the wave shaped preformed lid described in the prior art. The double layered folding lid as disclosed in the invention is not preformed and it can assume a lid with substantially rectangular cross-section when the pack is closed and a flat tab for pulling out the internal container when the lid is opened. Further, it doesn't need to have a wave shaped profile as claimed in the prior art.

WO2010014489A1 relates to modifications for cigarette packs. One such modification includes adding a lift function to lift the product out of the package as the lid opened. Another such modification is creating a one-movement opening design that as a sleeve is slipped down the lid is pulled back to reveal the product. Another such modification includes a top that slides to one side or another instead of using the traditional flip-top. Finally a unique closing mechanism has been added that allows the cigarettes to be held closed either using an eco-click design or strategic placement of magnets.

WO'489 provides the double layered folding lid that can assume a substantially rectangular cross-section when the pack is closed and a flat tab for pulling out the internal container when the lid is opened. However, the lid as described in the prior art does not have any such feature. Further, the lid as described in the prior art is having a V shaped lip which corresponds to lip on the sleeve, however there is no such mandate for the lid as described in the invention. The other key point of differentiation is the feature of secure lid closing and opening with a click as disclosed in the invention is not there in the prior art claims. This feature is achieved through creating integrated notches from the folding lid and corresponding slots on the outer container.

WO2009148036A1 provides a package comprises an inner case including a box body having an upper open end, and a lid connected to one side edge of the open end rotatably through a lid hinge, for opening and closing the open end, and an outer slider fitted

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slidably over the outer circumference of the inner case and having, at the upper edge of a sidewall on the side corresponding to the lid hinge, a contact flap extending toward the inside of the outer slider, wherein the inner case includes a strip which is linked, at the upper end thereof, with the lid and has at the lower end a folded flap that is engageable
5 with the contact flap of the outer slider, and, when the outer slider is slid downward with respect to the inner case, the folded flap engages with the contact flap; to impart an opening action to the lid.

US6474468B1 provides cuboid pack for smoking articles is a shell and slide structure. The slide has a lid hinged on one minor side. Upon movement of the slide to an exposed
10 position, hooks on the shell and slide inter engage to pull open the lid via a tongue which is formed in part of an outer layer of a double layer side seam of the slide.

US4049117A provides a package for cigarettes or other articles comprised of a receptacle for housing the cigarettes or other articles and defining an open top for removal of said articles and an integral slide actuated lid structure including a closure member operatively
15 connected to the receptacle and a slide member portion reciprocally movable vertically of the receptacle to open and close the package the slide portion including folding panels positioned between the receptacle and the slide portion permitting reciprocal movement of the slide portion.

US2006070896 provides a cigarette pack with a shell and slide, the range of movement of
20 the slide within the shell is limited, in particular by stops formed, on the one hand, on a stop tab and, on the other hand, by a recess in the shell. The stops help to define a closed position of the slide and an open position.

US'896 claims a shell and slide kind of packaging wherein the shell is opened at both ends and the slide forms a open tray for accepting the cigarettes whereas in the disclosed
25 invention the inner body and the outer body are substantially closed containers with opening only at the top for product dispensing and lid closing. The double layered folding lid disclosed in the invention, which can assume a substantially rectangular cross-section when the pack is closed and a flat tab for pulling out the internal container when the lid is opened, is novel and differentiated from the prior art. Further, the feature of secure lid
30 closing and opening with a click as disclosed in the invention is not there in the prior art claims.

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US6168073 (B1) provides a storage container having integrally formed inner and outer members is disclosed. The outer member includes opposing top and bottom walls, opposing side walls, a back wall and a front opening. The inner member includes a bottom panel, opposing side panel, a front panel and a fan extension portion. The inner member is slidably movable between a retracted position within the outer member and an extended position where the inner member extends from the front opening of the outer member.

US'073 provide the package that comprises of an outer member and a tray like inner member with a fan extension portion. However, in the disclosed invention the inner body is a substantially closed container with opening only at the top for product dispensing. There is no separate lid as such described in the prior art. The front wall of the inner member is used for pulling out the inner member. Thus, the double layered folding lid with a click closure mechanism disclosed in the invention, is completely differentiated in its formation and functionality from the prior art. The mechanism of restriction of movement for the inner member is achieved through a foldable connection in the prior art; however in the disclosed invention the movement restriction is achieved through a more efficient and cost effective method of engagement of opposing folded flaps.

WO2008054305 (A1) provides a controlled easy access package assembly for child resistant storage of products. The package assembly is suitable for storing cigarettes and other products which you want to protect from children gaining access to and/or which you want to protect from easily falling out of the package. The package assembly of the invention comprises a sleeve and an insert adapted to be inserted into and pulled out of said sleeve. The sleeve is provided with at least one first stop panel formed as an extension of one of said walls and folded into the sleeve, which first stop panel comprises a stop edge. The insert is provided with at least one locking flap comprising a locking edge. The locking edge of the locking flap is adapted to be in contact with the stop edge of the first stop panel when the insert is inserted in the sleeve, whereby the insert is hindered from being pulled or pushed out of the sleeve. The invention further relates to a blank for forming said insert.

WO'305 provide a method of restriction and release for movement of the internal container through interaction of folded locking tabs on the internal container and locking flap and release flap on the outer container. However, no such complex restrictions are

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built into the disclosed invention and neither intended to. This makes the disclosed invention distinctly different from the prior art in construction and functionality. The feature of secure lid closing and opening with a click as disclosed in the invention is not there in the prior art.

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Due to the associated disadvantages with the above cited prior arts, there is required a locking mechanism as well as simple articulation of different containers.

The present invention therefore provides a packet for holding substantially elongated articles such as cigarettes and the like. It provides a click lock feature of the double layered folding lid. It is achieved through creating integrated notches from the folding lid, which lock within the slots created on the outer container with a click, delivering a secure closing and opening experience. Other key benefit of the pack is availability of large uninterrupted surface for brand communication on outside and inside of the pack (when the inner container is taken out for product dispensing).

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OBJECTS OF THE INVENTION

A basic object of the present invention is to overcome the disadvantages/drawbacks of the known art.

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Another object of the present invention is to provide a packet for holding substantially elongated articles such as cigarettes and the like.

Another object of the present invention is to provide an inner container means formed by folding a laminar sheet defining a box with its top side having an opening spreading between the top and front panel of the inner container to provide access to said articles.

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Another object of the present invention is to provide a carrier means defining a plurality of panels whereby one of said panels folded to form a double layered closure means, said closure means hinged around a plurality of crease lines so as to form a folding lid means and said crease lines having a pair of cuts thereon so as to form a plurality of protrusions.

Another object of the present invention is to provide an outer container means defining a plurality of panels, said outer container is a box with its top side open to provide access to said inner container articulably secured therein and one of said panels glued back to back

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thereby creating a substantially 'V' notch and providing a plurality of slots adapted to interlock said protrusions with said slots thus facilitating lid locking.

Yet another object of the present invention is to provide a simple locking mechanism and articulation of inner and outer containers such that the inner container can move with respect to the outer container in a specified direction and travel a specified length.

These and other advantages of the present invention will become readily apparent from the following detailed description read in conjunction with the accompanying drawings.

SUMMARY OF THE INVENTION

The following presents a simplified summary of the invention in order to provide a basic understanding of some aspects of the invention. This summary is not an extensive overview of the present invention. It is not intended to identify the key/critical elements of the invention or to delineate the scope of the invention. Its sole purpose is to present some concept of the invention in a simplified form as a prelude to a more detailed description of the invention presented later.

There is provided a packet for holding substantially elongated articles such as cigarettes and the like.

According to one aspect of the present invention, there is provided packet for holding substantially elongated articles such as cigarettes and the like, said packet comprising an inner container means formed by folding a laminar sheet defining a box with its top side having an opening spreading between the top, front and back panel of the inner container to provide access to said articles; a carrier means defining a plurality of panels whereby one of said panels folded to form a double layered closure means, said closure means hinged around a plurality of crease lines so as to form a folding lid means and said crease lines having a pair of cuts thereon so as to form a plurality of protrusions; an outer container means defining a plurality of panels, said outer container is a box with its top side open to provide access to said inner container movably secured therein and one of said panels glued back to back thereby creating a substantially 'V' notch and providing a plurality of slots adapted to interlock said protrusions with said slots thus facilitating lid locking and another said panel is folded inward to provide a flap; wherein said carrier means attached to said inner container and together moving with respect to said outer container through a pre-defined distance keeping said carrier means there between; wherein said carrier means comprises reverse folded flap thereby interlocking itself with said inwardly folded flap of the outer container means thereby defining a stopper means thus restricting outward movement of the inner box to the pre-defined distance.

Other aspects, advantages, and salient features of the invention will become apparent to those skilled in the art from the following detailed description, which, taken in conjunction with the annexed drawings, discloses exemplary embodiments of the invention.

BRIEF DESCRIPTION OF THE ACCOMPANYING DRAWINGS

5 The following drawings are illustrative of particular examples for enabling methods of the present invention, are descriptive of some of the methods, and are not intended to limit the scope of the invention. The drawings are not to scale (unless so stated) and are intended for use in conjunction with the explanations in the following detailed description.

Reference is first invited to Fig 1 where the flat drawing of the internal container is illustrated.

10 Fig. 2 illustrates the formed internal container.

Fig. 3 illustrates the flat drawing of the carrier for internal container with integrated folding lid.

Fig. 4 illustrates the formed carrier of internal container with integrated folding lid.

Fig. 5 illustrates the flat drawing of the outer container.

Fig. 6 illustrates the formed outer container.

15 Fig. 7 illustrates the Pack in closed condition.

Fig. 8 illustrates the Pack with unfolded lid.

Fig. 9 illustrates the Pack in open condition.

The invented system is thus packet for holding substantially elongated articles such as cigarettes and the like.

20 Persons skilled in the art will appreciate that elements in the figures are illustrated for simplicity and clarity and may have not been drawn to scale. For example, the dimensions of some of the elements in the figure may be exaggerated relative to other elements to help to improve understanding of various exemplary embodiments of the present disclosure.

Throughout the drawings, it should be noted that like reference numbers are used to depict the same
25 or similar elements, features, and structures.

DETAILED DESCRIPTION OF THE INVENTION

The following description with reference to the accompanying drawings is provided to assist in a comprehensive understanding of exemplary embodiments of the invention as defined by the claims and their equivalents. It includes various specific details to assist in that understanding but these are to
30 be regarded as merely exemplary. Accordingly, those of ordinary skill in the art will recognize that various changes and modifications of the embodiments described herein can be made without

departing from the scope and spirit of the invention. In addition, descriptions of well-known functions and constructions are omitted for clarity and conciseness.

5 The terms and words used in the following description and claims are not limited to the bibliographical meanings, but, are merely used by the inventor to enable a clear and consistent understanding of the invention. Notably in the present invention the terms “articulable/articulably” is used interchangeably with “moving/movably” but intended to represent the same conceptual meaning to enable the clear understandings of the reader. Accordingly, it should be apparent to those skilled in the art that the following description of exemplary embodiments of the present invention are
10 provided for illustration purpose only and not for the purpose of limiting the invention as defined by the appended claims and their equivalents.

It is to be understood that the singular forms “a,” “an,” and “the” include plural referents unless the context clearly dictates otherwise.

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By the term “substantially” it is meant that the recited characteristic, parameter, or value need not be achieved exactly, but that deviations or variations, including for example, tolerances, measurement error, measurement accuracy limitations and other factors known to those of skill in the art, may occur in amounts that do not preclude the effect the characteristic was intended to provide.

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Accordingly the present invention provides a packet for holding substantially elongated articles such as cigarettes and the like. The packet comprises an inner container means formed by folding a laminar sheet defining a box with its top side having an opening spreading between the top and front panel of the inner container to provide access to said
25 articles. It further comprises a carrier means defining a plurality of panels whereby one of

said panels folded to form a double layered closure means, said closure means hinged around a plurality of crease lines so as to form a folding lid means and said crease lines having a pair of cuts thereon so as to form a plurality of protrusions.

There is provided an outer container means defining a plurality of panels, said outer
5 container is a box with its top side open to provide access to said inner container articulably secured therein and one of said panels glued back to back thereby creating a substantially 'V' notch and providing a plurality of slots adapted to interlock said protrusions with said slots thus facilitating lid locking.

The carrier means attached to said inner container and together articable with respect to
10 said outer container through a pre-defined distance keeping said carrier means there between. Also, the reverse folded flap of said carrier means interlocks itself with inwardly folded flap of the outer carton defining a stopper means thus restricting outward movement of the inner box to the pre-defined distance.

15 The inner container means, said carrier means and said outer container means made from substantially folded laminar blanks selected from metalized paper, foil, paperboard, plastics, metals and the like.

The outer and inner container is having substantially cuboidal cross-sections with the
20 edge/corner profiles such as rounded, bevelled and the like. Further, the lid means accessible through the 'V' notch. The double layered folding lid integrated with the inner box and adapted to snugly fit in with a click within the top opening of the outer container.

The present invention therefore provides a technologically superior method of accessing
25 the cigarettes through articulation of the inner box and snug capping for secure closing of cigarettes.

The invention comprises of an inner box with integrated folding lid, wherein cigarettes are packed and an outer box with opening only at the top. The arrangement of the two
30 boxes are such that inner box can be articulated with respect to the outer box through a specific distance. A double layered folding lid is integrated with the inner box which snugly fits in with a click within the top opening of the outer box. To access the

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cigarettes, the consumer has to open up the folding lid through right angle which flattens the lid and use the flattened lid to pull up the inner box which exposes the cigarettes through the access opening on the inner box. The outward movement of the inner box is restricted with a stopper arrangement which exposes just the cigarette access opening of
5 the inner box. To close, the inner box has to be articulated in reverse and lid folded back within the slot with a click.

This novel structure can be applied to any shape of outer and innerboxes with cuboidal cross-sections with various edge/corner profiles like rounded, bevelled etc. The boxes can
10 be created entirely with or combining different materials with suitable strength properties like paperboard, plastics, metals etc.

The containers are formed from folded laminar blanks. The laminar blanks may be made from any suitable sheet material, such as for example cardboard, metal or plastic.

15 The internal container means is formed from a laminar blank as shown in Fig. 1 & 2. Internal container means may contain elongated rod like products like cigarettes, which are accessible from an opening (21) which spreads between the top and front panel of the internal container.

20 The carrier for internal container as shown in fig. 3 & 4 is formed by pasting panel 4 onto back of panel 6. While folded, panel 1 becomes the inner layer and panel 2 becomes the outer layer of folding double layered top closure. Panel 1 and Panel 2 can simultaneously hinge around crease lines 10 and 24 respectively to create the folding lid. While the lid is in closed condition, the cuts (3) along the crease line 26 create protrusions which
25 interlocks with the slots (15) created on the outer container to achieve a secure closure. Panels 7 & 9 are glued to the side panels of the internal container so that the carrier and the internal container can move together. Panel 5 is folded 180 degree backwards along the crease line 11.

30 The outer container as shown in fig. 5 & 6 is formed by folding panel 12 and 18 in right angles to panel 19, where panel 19 becomes the base of the outer container. Panel 13 is glued back to back of front panel 12 creating a 'V' notch (14) and slots (15) for lid

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locking. Panel 17 is folded inwards along crease line 20. The side panels are overlapped and glued together to form the outer container.

Fig. 7 shows the pack in closed condition. Panel 2 creates the top of the closure lid.

- 5 Protrusions (3) are locked within the slots (15) created on the internal surface of the outer carton. The lid top crease (25) is accessible through the 'V' notch (14). Consumers can flip the lid open holding the lid around the 'V' notch.

Fig. 8 shows the pack with unfolded lid. The top of internal container with cigarettes
10 become visible at an inset as the lid is opened. Panel 1 and Panel 2 lay parallel to each other and consumer can hold them together for pulling out the internal container for cigarette dispensing.

- Fig. 9 shows the pack in fully opened condition. The reverse folded flap (5) of the internal
15 container along crease (11) interlocks itself with inwardly folded flap (17) of the outer carton and restricts the extent of movement of the internal carton. To close the pack, the carrier along with the internal container can be pushed back within the external container and lid flipped closed.

- 20 Although the embodiments herein are described with various specific embodiments, it will be obvious for a person skilled in the art to practice the embodiments herein with modifications. However, all such modifications are deemed to be within the scope of the invention.

- 25 It is also to be understood that the description is intended to cover all of the generic and specific features of the embodiments described herein and all the statements of the scope of the embodiments which as a matter of language might be said to fall there between.

CLAIMS

1. A packet for holding substantially elongated articles such as cigarettes and the like, said packet comprising:

an inner container means formed by folding a laminar sheet defining a box with its top side having an opening spreading between the top and front panel of the inner container to provide access to said articles;

a carrier means defining a plurality of panels whereby one of said panels folded to form a double layered closure means, said closure means hinged around a plurality of crease lines so as to form a folding lid means and said crease lines having a pair of cuts thereon so as to form a plurality of protrusions;

an outer container means defining a plurality of panels, said outer container is a box with its top side open to provide access to said inner container movably secured therein and one of said panels glued back to back thereby creating a substantially 'V' notch and providing a plurality of slots adapted to interlock said protrusions with said slots thus facilitating lid locking and another said panel is folded inward to provide a flap;

wherein said carrier means attached to said inner container and together moving with respect to said outer container through a pre-defined distance keeping said carrier means there between;

wherein said carrier means comprises reverse folded flap thereby interlocking itself with said inwardly folded flap of the outer container means thereby defining a stopper means thus restricting outward movement of the inner box to the pre-defined distance.

2. Packet for holding substantially elongated articles as claimed in claim 1 wherein said inner container means, said carrier means and said outer container means made from

substantially folded laminar blanks selected from metalized paper, foil, paperboard, plastics, metals and the like.

3. Packet for holding substantially elongated articles as claimed in claim 1 wherein said outer and inner container having substantially cuboidal cross-sections with the edge/corner profiles such as rounded, bevelled and the like.
4. Packet for holding substantially elongated articles as claimed in claim 1 wherein said lid means accessible through the 'V' notch.
5. Packet for holding substantially elongated articles as claimed in claim 1 wherein said double layered folding lid integrated with the inner box and adapted to snugly fit in with a click within the top opening of the outer container.