This invention relates generally to a packet for holding substantially elongated articles such as cigarettes and the like. This invention can be used for secure packing of cigarettes, candy and the like products. It provides a click lock feature of the double layered folding lid. It is achieved through creating integrated notches from the folding lid, which locks with the slots created on the outer container with a click, delivering a secure closing and opening experience.
PACKET FOR HOLDING SUBSTANTIALLY ELONGATED ARTICLES SUCH AS CIGARETTES

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 products.

BACKGROUND AND THE PRIOR ART

Cigarettes are traditionally packed and sold in flip top packs. In these flip top packs, to 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.

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 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.

EP2243722A1 provides a package according to the present invention having a thin outer case and an inner tray inserted into the outer case in a manner allowing the inner 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 parallellepiped 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 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 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 flaps; to impart an opening action to the lid.

US Pat. No. 6,474,468B1 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 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.

US Pat. No. 4,049,117A 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 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 petals 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 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.

U.S. ‘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 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 closing and opening with a click as disclosed in the invention is not there in the prior art claims.

[0015] U.S. Pat. No. 6,168,073 (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.

[0016] U.S. 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 putting 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 engaging of opposing folded flaps.

[0017] 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.

[0018] 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 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.

[0019] Due to the associated disadvantages of the above cited prior arts, there is required a locking mechanism as well as simple articulation of different containers.

[0020] 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 packet 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).

OBJECTS OF THE INVENTION

[0021] A basic object of the present invention is to overcome the disadvantages/drawbacks of the known art.

[0022] Another object of the present invention is to provide a packet for holding substantially elongated articles such as cigarettes and the like.

[0023] 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.

[0024] 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.

[0025] 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 thereby creating a substantially ‘V’ notch and providing a plurality of slots adapted to interlock said protrusions with said slots thus facilitating lid locking.

[0026] 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.

[0027] 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

[0028] 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.

[0029] There is provided a packet for holding substantially elongated articles such as cigarettes and the like.

[0030] 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
articulately 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; wherein said carrier means attached to said inner container and together articulable with respect to said outer container through a pre-defined distance keeping said carrier means there between; wherein said 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.

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

The following drawings are illustrative of particular examples for enabling methods of the present invention, are descriptive of some of the means, 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.

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.

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

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 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 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.

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. Accordingly, it should be apparent to those skilled in the art that the following description of exemplary embodiments of the present invention are 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.

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.

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 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 container is a box with its top side open to provide access to said inner container articulately 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 articulable with respect to 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.

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 cubic cross-sections with the 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 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
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 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 the inner box. To close, the inner box has to be articulated
in reverse and lid folded back within the slot with a click.

[0056] This novel structure can be applied to any shape of
outer and inner boxes with cuboid cross-sections with various
edge/corner profiles like rounded, bevelled etc. The boxes
can be created entirely with or combining different materials
with suitable strength properties like paperboard, plastics,
metals etc.

[0057] 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 plastc.

[0058] The internal container means is formed from a lami-
nar blank as shown in FIGS. 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.

[0059] The carrier for internal container as shown in FIGS.
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 interlocks with the slots (15) created on the
outer container to achieve a secure closure. Panels 7 & 9 are
folded back to back of 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.

[0060] The outer container as shown in FIGS. 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 locking. Panel 17 is folded inwards
along crease line 20. The side panels are overlapped and glued
together to form the outer container.

[0061] FIG. 7 shows the pack in closed condition. Panel 2
creates the top of the closure lid. 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.

[0062] FIG. 8 shows the pack with unfolded lid. The top of
internal container with cigarettes 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.

[0063] FIG. 9 shows the pack in fully opened condition.
The reverse folded flap (5) of the internal 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.

[0064] 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.

[0065] 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.

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 therein 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 articulably secured therein
     and one of said panels glued back to back whereby creating
     a substantially ‘V’ notch and providing a plurality
     of slots adapted to interlock said protrusions with said
     slots thus facilitating lid locking;
   - wherein said carrier means attached to said inner container
     and together articulable with respect to said outer con-
     tainer through a pre-defined distance keeping said car-
     rier means there between;
   - wherein said reverse folded flap of said carrier means inter-
     locks itself with inwardly folded flap of the outer carton
     defining a stopper means thus restricting outward move-
     ment 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.

6. A packet for holding substantially elongated articles
such as cigarettes and the like as herein described and illus-
trated with reference to accompanying drawings.