



- (51) International Patent Classification:
B65D 85/10 (2006.01)
- (21) International Application Number:
PCT/EP2016/064092
- (22) International Filing Date:
17 June 2016 (17.06.2016)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
15173024.9 19 June 2015 (19.06.2015) EP
- (71) Applicant: **PHILIP MORRIS PRODUCTS S.A.**
[CH/CH]; Quai Jeanrenaud 3, CH-2000 Neuchâtel (CH).
- (72) Inventor: **SLOOFF, Arjen Hamilcar**; Reumersweg 7,
3291 AH Rhenen (NL).
- (74) Agent: **MARLOW, Nicholas**; Reddie & Grose LLP, 16
Theobalds Road, London Greater London WC1X 8PL
(GB).
- (81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC,
SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

[Continued on next page]

- (54) Title: RESEALABLE PACK

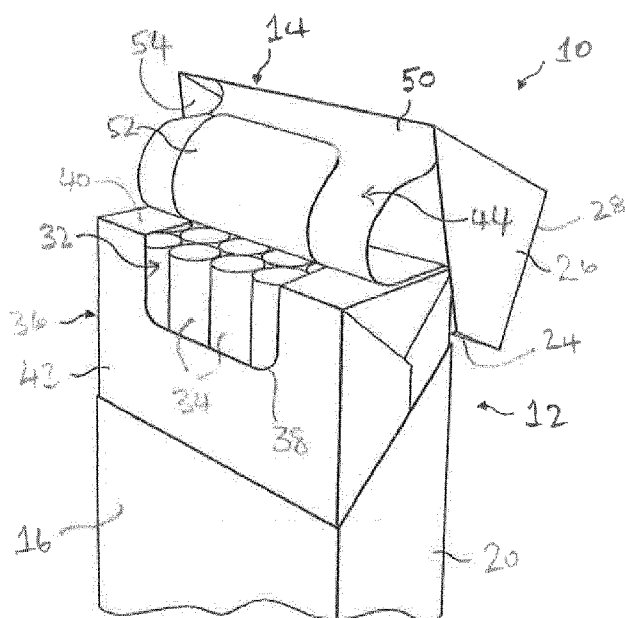


FIG. 1

(57) Abstract: A cigarette pack (10) comprises a box (12) and a lid (14) extending from the box along a hinge line (30), and a bundle (32) comprising cigarettes (34) in a wrapper (36), the wrapper (36) having an opening (38) to provide access to the cigarettes (34). A resealable flexible closure panel (44) extends over the opening (38) adhered to the outer surface of the wrapper (36) around the opening by resealable adhesive, the closure panel (44) being peelable from the underlying surface of the wrapper (36) to uncover the opening (38), and being attached to the lid (14) so that as the lid (14) is opened the closure panel (44) is peeled from the wrapper (36) to uncover the opening (38). The Young's modulus of the resealable flexible closure panel (44) is between 1.5 GPa and 3.5 GPa so that as the lid (14) is moved from the open position toward the closed position the resilience of the closure panel (44) causes the lid (14) to close onto the box (12) without application of further force.



-
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

RESEALABLE PACK

The present invention relates to a container including a bundle of consumer goods in a wrapper. The invention is useful as container of 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 along a hinge line extending across the back 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 housed in the box.

The bundle of smoking articles housed in the box is typically wrapped in an inner liner of metallised paper, metal foil or other flexible sheet material. The inner liner is typically a rectangular sheet of material folded around the smoking articles and then closed at the top and bottom ends to form a bundle. Each rectangular sheet for forming an inner liner is typically cut from a continuous roll of the sheet material. The inner liner may have an opening for removing smoking articles from the container; the opening can be closed by a resealable closure panel adhered to the inner liner around the opening, which is peeled off the inner liner from the front of the container toward the rear to the container to expose the opening, and placed back over the opening and adhered to the inner liner to reclose the opening.

International patent application WO 2008142540 describes a cigarette pack in which the front edge of a resealable closure panel is attached to the front edge of the container lid so that as the lid is opened, the panel is peeled off the inner liner to expose the opening and as the lid is closed, the panel is replaced over the opening and re-adheres thereto, avoiding the need for the user to peel off and replace the closure panel separately from opening and closing the lid.

It would be useful to provide a container for consumer goods such as cigarettes and other smoking articles in which the pack lid closed onto the pack box to emphasise the positive closure of the lid onto the box.

According to the invention there is provided a container of consumer goods comprising a housing and a bundle in the housing, the housing comprising a box and a lid extending from the box along a hinge line, the bundle comprising a wrapper wrapped around one or more consumer goods, the wrapper having an opening to provide access to the goods in the bundle, and a resealable flexible closure panel over the opening adhered to the outer surface of the wrapper around the opening by adhesive, the closure panel being peelable from the underlying surface of the wrapper to uncover the opening, the closure panel being attached to the lid so that when the lid is opened the closure panel is peeled from the wrapper to uncover the opening, the Young's modulus of the resealable flexible closure panel being between 1.5 GPa and 3.5 GPa so that as the lid is moved from the open position toward the closed position the resilience of the closure panel causes the lid to close onto the box without application of further force.

In some preferred embodiments of the container of the invention, the box comprises a front wall, a rear wall, side walls extending between the front and rear walls, a top wall and a bottom wall, the lid extends from the box along a hinge line extending across the back wall of the container and the lid comprises a front wall, a rear wall, side walls extending between the front and rear walls and a top wall.

In some preferred embodiments an edge portion of the resealable flexible closure panel is at or toward the front of the bundle and is attached to the front wall of the lid.

In some preferred embodiments the side walls of the lid overlie an upper portion of the side walls of the box and the side walls of the lid or the said upper portion of the side walls of the box or both have a low friction coating or are of a low friction material.

In some preferred embodiments, the resealable flexible closure panel is of polyethylene terephthalate.

In some preferred embodiments, when the lid is open, the closure panel adopts an S-shape configuration.

In some preferred embodiments the consumer goods are smoking articles such as cigarettes.

The container can be a hinge lid cigarette pack.

In containers according to the invention, the resealable flexible closure panel is attached to the lid so that it opens as the lid is opened and reseals as the lid closes. The resealable flexible closure panel has a Young's modulus between about 1.5 GPa and about 3.5 GPa. A closure panel of a material with a higher Young's modulus will close more quickly and one with a lower Young's modulus will close more slowly.

The resealable flexible closure panel can be of, for example, high density polyethylene (HDPE), low density polyethylene (LDPE) biaxially oriented polypropylene (BOPP), nylon, polystyrene, cellulosic films such as cellophane™ and cellulose acetate, polyvinylchloride (PVC), paper (for example, paper made from hemp fibre), polyethylene terephthalate (PET) and mixtures of the foregoing. A preferred material is PET, which can provide a panel having a Young's modulus of between about 2 GPa and about 3.2 GPa.

The material of the closure panel preferably has a low dead fold. Dead fold is the ability of a sheet of material to retain a folded shape and not to spring back to the original unfolded condition; the closure panel of the invention should have a tendency to spontaneously unfold when bent on itself. The term "dead fold property" as used herein is defined as a measure of the sheet materials ability to retain its shape or fold or crease permanently once it is folded or wrapped about an item and does not spring back to an unfolded state. Thus a measure of the degree of such dead fold behavior is the magnitude of the sheet materials force relaxation. To exhibit dead-fold behavior a sheet material should have a high force relaxation of 2 to 40 percent. So far as

the present invention is concerned, the dead fold property of the sheet material is measured as the angle that the sheet material springs back after being folded on itself. Specifically, the dead fold measurement involves the steps of

- preparing a 2.54 mm x 100 mm piece of sheet material;
- bending (without creasing) the piece of sheet material onto itself through 180 degrees;
- evenly placing a weight of 50 grams for 10 seconds on to the sheet material and the bend such that the two thirds of the weight rests on the sheet material such that a crease is formed;
- weighing down the sheet material for 10 seconds;
- removing the weight;
- leaving the sheet material to relax for 30 seconds
- measuring the opening angle of the fold of the sheet material to the closest 5 degrees;
- repeating with 10 samples and calculating the average of the opening angle.

The dead fold angle of a typical inner liner of 70 grams per square meter of paper that is used as an inner wrapper for smoking articles is about 60 degrees.

If the weight of 50 grams is not sufficient to create a crease in the sheet material, for example due to the stiffness of the sheet material, the measurement is repeated with an increase in weight in steps of 50 grams until a crease is formed. The weight is then recorded and the angle is measured. If a sheet material does not revert to its original shape after the step of bending (without creasing) the piece of sheet material onto itself through 180 degrees, the sheet material is considered to be a ductile material so far as the present invention is concerned.

In some embodiments the inner surfaces of the side walls of the lid or the outer surfaces of the said upper portion of the side walls of the box or both have a coating of material having a low coefficient of friction or are of a material having a low coefficient of friction. Preferably, the surfaces have a static coefficient of friction (measured by ISO 8295) of between about 0.05 and about 0.7, more preferably between about 0.05 and about 0.4, more preferably between about 0.1 and about 0.3.

The Young's modulus of the resealable closure panel ensures that as the lid is closed the final few degrees of closure of the lid are achieved without further force being applied. The lid snaps shut, giving the user of the pack confidence that the pack has shut securely.

According to the invention there is also provided a method of providing a container of consumer goods comprising a housing and a bundle in the housing, the housing comprising providing a box and a lid extending from the box along a hinge line, providing a bundle comprising a wrapper wrapped around one or more consumer goods, the wrapper having an opening to provide access to the goods in the bundle, providing a resealable flexible closure panel over the opening adhered to the outer surface of the wrapper around the opening by adhesive, the closure panel being peelable from the underlying surface of the wrapper to uncover the opening, the

closure panel being attached to the lid so that when the lid is opened the closure panel is peeled from the wrapper to uncover the opening, and the Young's modulus of the resealable flexible closure panel being between about 1.5 GPa and about 3.5 GPa so that, as the lid is moved from the open position toward the closed position, the resilience of the closure panel causes the lid to close onto the box without application of further force, and enclosing the bundle with the resealable flexible closure panel over the opening in the bundle in the box closed by the lid.

Preferred methods according to the invention may comprise attaching an edge portion of the resealable flexible closure panel at or toward the front of the bundle to the front wall of the lid.

In some methods according to the invention, the step of enclosing the bundle with the resealable flexible closure panel over the opening in the bundle in the box closed by the lid comprises enclosing the said bundle in a hinge lid pack.

In some methods according to the invention the inner faces of the side walls of the lid or the portions of the wrapper around the bundle that underlie the inner faces of the side walls of the lid when the bundle is in the box and lid and the lid is in the closed position or both have a static coefficient of friction of from about 0.05 to about 0.7, more preferably from about 0.05 to about 0.4, more preferably from 0.1 to 0.3.

In some preferred embodiments the closure panel is disposed so that when the lid is open the closure panel adopts an S-shaped configuration.

Description:

As used herein, the terms 'front', 'back', 'upper', 'lower', 'top', 'bottom' and 'side', refer to the relative positions of portions of containers according to the invention and components thereof when the container is in an upright position with the lid of the outer housing in the closed position and the hinge line, where present at the back of the container. When describing containers according to the present invention, these terms are used irrespective of the orientation of the container being described. The back wall of the container is the wall with the hinge line.

The term "longitudinal" refers to a direction from bottom to top or vice versa. The term "transverse" refers to a direction perpendicular to the longitudinal direction across the front (or back) wall of the container.

As used herein, the term "height" refers to the dimension in the longitudinal direction of the container. The term "width" refers to the dimension in the transverse direction when the adhesive label is affixed to the inner package.

The container is preferably a rectangular parallelepiped comprising two wider walls spaced apart by two narrower walls.

The term "hinge line" refers to a line about which the lid can be pivoted in order to open the container. A hinge line may be, for example, a fold line, a crease line or a score line in the panel forming the back wall of the container.

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

The bundle wrapper may be of a flexible sheet material, such as a sealable film material. Preferably, it is of polyethylene terephthalate (PET), biaxially oriented polypropylene (BOPP), polyethylene, cellulosic material such as paper or board, thin metal foil such as thin aluminium foil or metallised paper or a combination of any of these with each other or with other materials. The bundle wrapper material may be formed as a laminate of a metallised polyethylene film and a liner material. The liner material may be a supercalendered glassine paper. In addition, the inner package material may be provided with a print-receptive top coating.

As set out above, 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 have one or more rounded longitudinal edges, rounded transverse edges, beveled longitudinal edges or beveled transverse edges, or combinations thereof. For example, the container according to the invention may have, without limitation:

- one or two longitudinal rounded or beveled edges on the front wall, and/or one or two longitudinal rounded or beveled edges on the back wall;

- one or two transverse rounded or beveled edges on the front wall, and/or one or two transverse rounded or beveled edges on the back wall;

- one longitudinal rounded edge and one longitudinal beveled edge on the front wall, and/or one transverse rounded edge and one transverse beveled edge on the back wall;

- one or two transverse rounded or beveled edges on the front wall and one or two longitudinal rounded or beveled edges on the front wall;

- two longitudinal rounded or bevelled edges on a first side wall or two transverse rounded or beveled edges on the second side wall.

Where the container has a bevelled edge, the beveled edge preferably has a width of between about 1 mm and about 10 mm, preferably between about 2 mm and about 6 mm. Alternatively, the container may comprise a double bevel formed by three parallel creasing or scoring lines that are spaced such that two distinct bevels are formed on the edge of the container. Alternatively, the container may have a non-rectangular transversal cross section, for example polygonal such as triangular or hexagonal, semi-oval or semi-circular.

Containers according to the invention find particular application as packs for elongate smoking articles such as cigarettes, cigars or cigarillos. It will be appreciated that through appropriate choices of the dimensions of the containers, containers according to the invention

may be designed for different numbers of conventional size, king size, super-king size, slim or super-slim cigarettes. Alternatively, other consumer goods may be housed inside the container.

Through an appropriate choice of the dimensions of the containers, containers according to the invention may be designed to hold different total numbers of smoking articles, or different arrangements of smoking articles. For example, containers according to the invention may be designed to hold a total of between ten and thirty smoking articles.

Where the container comprises smoking articles, the container may further comprise waste-compartments (for example for ash or butts) or 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 compartment of the container or combinations thereof.

Once filled, containers according to the invention may be shrink wrapped or otherwise over wrapped with a transparent polymeric film of, for example, high or low density polyethylene, polypropylene, oriented polypropylene, polyvinylidene chloride, cellulose film, or combinations thereof in a conventional manner. Where containers according to the invention are over wrapped, the over wrapper may include one or more a tear tapes. In addition, the over wrapper may be printed with images, consumer information or other data.

The container may comprise an inner frame, inside the container, to increase the structural resilience of the package so that the closure panel may be more easily sealed to the package. Preferably, the inner frame is a U-shaped inner frame having a front wall and a pair of opposed side walls. The term "U-shaped" is used to refer to a shape that comprises three parts in which the first and the third part are parallel to each other and extend in the same direction perpendicular to the second part. Preferably, the front wall of the inner frame is provided adjacent the front wall of the container. Advantageously, an inner frame with a large surface area provided adjacent the front wall of the package increases the structural strength of the container. The increased structural strength provided by the inner frame allows more secure closing of the closure panel. This is particularly advantageous for subsequent closing operations when the container is no longer full.

Preferably, the inner frame has a cut-out at the top of the front wall. The cut-out preferably corresponds to the opening in the bundle wrapper so that the consumer goods within the package may be more easily accessed. Where the inner frame has 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.

In containers according to the invention, access to the contents of the container is given by an opening in the bundle wrapper. This opening is closed by the closure panel which extends over the opening and over margins of the wrapper around the opening. When closed, the closure panel is held to the wrapper by a resealable adhesive on the closure panel, the said margins of

the wrapper or on both. Resealable adhesives are adhesives which allow the adhered surfaces to be separated and sealed together again several times. In the containers of the invention, the closure panel is peeled away from the wrapper as the container lid is opened, as the panel is attached to the lid, and reapplied to the wrapper over the opening as the lid is closed.

When a container according to the invention is opened to allow access to the contents and then closed again, as the lid approaches the closed position, the closure panel springs back to the closed position and reseals to the wrapper over the opening, so that the lid is automatically closed over the last few degrees of closure. This automatic closure is enhanced if the closure panel adopt an S-shape when the lid is in the open. When the container is a hinge lid cigarette pack, this automatic closure takes place over at least the final 2 mm, preferably the final 4 mm, more preferably the final 6 mm, even more preferably the final 8 mm of movement of the front lower edge of the lid to the fully closed position.

The invention will now be further described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 shows a partial isometric view of a cigarette pack in accordance with an embodiment of the invention in a fully open condition;

Figure 2 shows a partial side elevation of the cigarette pack of Figure 1 in a fully open condition;

Figure 3 shows a partial side elevation of the cigarette pack of Figure 1 in an almost closed condition; and

Figure 4 shows a plan view of the closure panel of the cigarette pack of Figure 1;

The cigarette pack 10 of Figures 1, 2 and 3 comprises a housing having a box 12 and a lid 14. The box comprises a box front wall opposed to a box rear wall 18 connected to the front wall by opposed side walls 20 (only one of which is visible in the drawings) and a box bottom wall (not shown in the drawings) to make a cuboid box 12 having an open upper end. The lid closes the open upper end of the box 12 and includes a lid front wall 22 opposed to a lid rear wall 24 connected to the lid front wall by lid side walls 26, and a lid top wall 28. The lid rear wall 24 extends from the box rear wall 18 along hinge line 30 across the width of the rear of the pack. The lid 14 hinges along the hinge line 30 between a closed position and the open position shown in Figures 1 and 2.

The pack 10 of the drawings holds a bundle 32 of cigarettes 34 in a wrapper 36 of a flexible sheet material such as polyethylene terephthalate (PET). The wrapper 36 has an opening 38 extending over a front part of the upper face 40 of the bundle and the upper part of front face 42 of the bundle. The opening 38 does not extend as far as the top and front side edges of the faces

of the bundle 36. A closure panel 44 is securely attached by its front edge portion to the inside of the lower edge portion 46 of the lid front wall 22 by a line of adhesive 48. The closure panel 44 extends across substantially the entire width of the lid front wall 22. The rear edge portion of the closure panel 44 is securely attached to the rear edge portion (not visible in the drawings) of the upper face 40 of the bundle. The face of the closure panel 44 that overlies the bundle wrapper 36 has a layer 50 of resealable adhesive over that part of it that is in contact with the bundle wrapper 36 when the pack is closed. A generally central region 52 of the closure panel is free of adhesive; the central portion extends over the opening 38 in the bundle wrapper 36 and over a small part of the margins of the bundle wrapper around the opening.

The inner faces 54 of the side walls 26 of the lid 14 have a low friction coating, to make opening and closing of the lid easier.

Figure 4 shows the closure panel 44 in more detail. The face of the panel that overlies the bundle wrapper 36 is visible in Figure 4. The panel is a generally square sheet of PET of substantially the same side length as the width as the bundle, with curved corners. The front 56 and rear 58 margins of the panel have a relatively secure adhesive on them, to securely affix the margins to the lid 12 and to the rear top wall portion of the bundle wrapper 36, respectively. The central portion 52 of the panel has no adhesive on it; in the pack, the central portion overlies the opening 38 in the wrapper and a small margin around the opening. Elsewhere, the panel 44 has a layer 50 of resealable adhesive on it, for adhering the panel to the bundle wrapper to close the opening.

In use, when the lid 14 is in the closed position, the closure panel 44 overlies the opening 38 in the bundle wrapper 36 and is adhered by the resealable adhesive to the bundle wrapper. As the lid is opened by the user, the lower, front, edge of the closure panel 44 rises with the lid as it is attached to the lid, and is peeled off the bundle wrapper to reveal the opening 38 in the wrapper and so the cigarettes 34 in the box 12, as shown in Figures 1 and 2. The adhesive that attaches the front and rear edge portions of the closure panel 44 to the lid and the rear top wall portion of the bundle wrapper, respectively, is sufficiently secure that the seal effected by the resealable adhesive layer between the wrapper 36 and the closure panel 44 is broken while the panel remains adhered to the lid and to the rear top wall portion of the bundle wrapper.

As the lid 14 is closed by the user, the closure panel 44 is automatically replaced on the top 40 and front 42 faces of the bundle. As the lid approaches full closure, as shown in Figure 3, the closure panel 44 is curved tightly back on itself. The resilience of the closure panel causes the lid to close onto the box without application of further force. The closure panel spontaneously flattens out and so pulls the lid closed and closes the opening in the bundle wrapper. The lid thus snaps shut from the almost closed position. Preferably, this happens when the distance l between the lower front edge of the lid 14 and the upper front edge of the box 12 is about 8 mm. The low

friction coating on the inside faces 54 of the side walls 26 of the lid make it easier for the lid to shut so that the automatic closure takes place when the distance l is greater than would otherwise be the case.

As is apparent in Figures 1 and 2, when the lid 14 is open the closure panel 44 adopts an S-shape configuration (as viewed in Figures 1 and 2, the closure panel appears as a reversed S-shape). As the lid 14 is opened, some of the energy imparted by the user is stored in the closure panel 44 as it adopts the S-shape; as the lid is closed, that energy is released allowing the final part of the lid closure to occur automatically, without the user moving the lid.

A pack of cigarettes or other smoking articles of the type shown in Figures 1, 2 and 3 having a closure panel of the type shown in Figure 4 may be made as follows. A bundle 32 of cigarettes 34 is provided by withdrawing cigarettes from a hopper. The bundle may contain twenty cigarettes in three rows in a 7-6-7 format. The bundle is wrapped in a wrapper 36 of a flexible sheet material such as polyethylene terephthalate (PET). The wrapper 36 has an opening 38 in it. The wrapper is wrapped around the bundle in such a way that the opening extends over a front part of the upper face 40 of the bundle and the upper part of front face 42 of the bundle. A blank for a hinge lid pack of conventional design is wrapped around the bundle. As the lid of the hinge lid pack is closed during the manufacturing process, a closure panel 44 is attached by its front edge portion to the inside of the lower edge portion 46 of the lid front wall 22 by a line of adhesive 48. The lid is then fully closed and the pack is wrapped in a transparent overwrap.

CLAIMS

1. A container of consumer goods comprising a housing and a bundle in the housing, the housing comprising:
 - a box and a lid extending from the box along a hinge line,
 - the bundle comprising:
 - a wrapper wrapped around one or more consumer goods, the wrapper having an opening to provide access to the goods in the bundle; and
 - a resealable flexible closure panel over the opening adhered to the outer surface of the wrapper around the opening by adhesive, the closure panel being peelable from the underlying surface of the wrapper to uncover the opening, the closure panel being attached to the lid so that when the lid is opened the closure panel is peeled from the wrapper to uncover the opening,
 - the Young's modulus of the resealable flexible closure panel being between about 1.5 GPa and about 3.5 GPa so that as the lid is moved from the open position toward the closed position the resilience of the closure panel causes the lid to close onto the box without application of further force.
2. A container according to claim 1 in which:
 - the box comprises a front wall, a rear wall, side walls extending between the front and rear walls, a top wall and a bottom wall;
 - the lid extends from the box along a hinge line extending across the back wall of the container; and
 - the lid comprises a front wall, a rear wall, side walls extending between the front and rear walls and a top wall.
3. A container according to claim 2 in which an edge portion of the resealable flexible closure panel is at or toward the front of the bundle and is attached to the front wall of the lid.
4. A container according to claim 2 or 3 in which the side walls of the lid overlie an upper portion of the side walls of the box and in which the side walls of the lid or the said upper portion of the side walls of the box or both have a low friction coating or are of a low friction material.
5. A container according to any preceding claim in which the resealable flexible closure panel is of polyethylene terephthalate.
6. A container according to any preceding claim in which the inner faces of the side walls of the lid or the portions of the wrapper around the bundle that underlie the inner faces of the side walls of the lid when the lid is in the closed position or both have a static coefficient of friction of from about 0.05 to about 0.7, more preferably from about 0.05 to about 0.4, more preferably from about 0.1 to about 0.3.

7. A container according to any preceding claim in which when the lid is open, the closure panel adopts an S-shape configuration.
8. A container according to any preceding claim in which the consumer goods are smoking articles such as cigarettes.
9. A container according to claim 8 which is a hinge lid cigarette pack.
10. A method of providing a container of consumer goods comprising a housing and a bundle in the housing, the housing comprising:
 - providing a box and a lid extending from the box along a hinge line,
 - providing a bundle comprising a wrapper wrapped around one or more consumer goods, the wrapper having an opening to provide access to the goods in the bundle;
 - providing a resealable flexible closure panel over the opening adhered to the outer surface of the wrapper around the opening by adhesive, the closure panel being peelable from the underlying surface of the wrapper to uncover the opening, the closure panel being attached to the lid so that when the lid is opened the closure panel is peeled from the wrapper to uncover the opening, and the Young's modulus of the resealable flexible closure panel being between 1.5 GPa and 3.5 GPa so that, as the lid is moved from the open position toward the closed position, the resilience of the closure panel causes the lid to close onto the box without application of further force; and
 - enclosing the bundle with the resealable flexible closure panel over the opening in the bundle in the box closed by the lid.
11. A method according to claim 10 further comprising attaching an edge portion of the resealable flexible closure panel at or toward the front of the bundle to the front wall of the lid.
12. A method according to claim 10 or 11 in which the step of enclosing the bundle with the resealable flexible closure panel over the opening in the bundle in the box closed by the lid comprises enclosing the said bundle in a hinge lid pack.
13. A method according to claim 10, 11 or 12 in which the inner faces of the side walls of the lid or the portions of the wrapper around the bundle that underlie the inner faces of the side walls of the lid when the bundle is in the box and lid and the lid is in the closed position or both have a static coefficient of friction of from about 0.05 to about 0.7, more preferably from about 0.05 to about 0.4, more preferably from about 0.1 to about 0.3.
14. A method according to any of claims 9 to 13 in which the closure panel is disposed so that when the lid is open the closure panel adopts an S-shaped configuration.

15. A method according to any of claims 9 to 14 in which the consumer goods are smoking articles such as cigarettes.

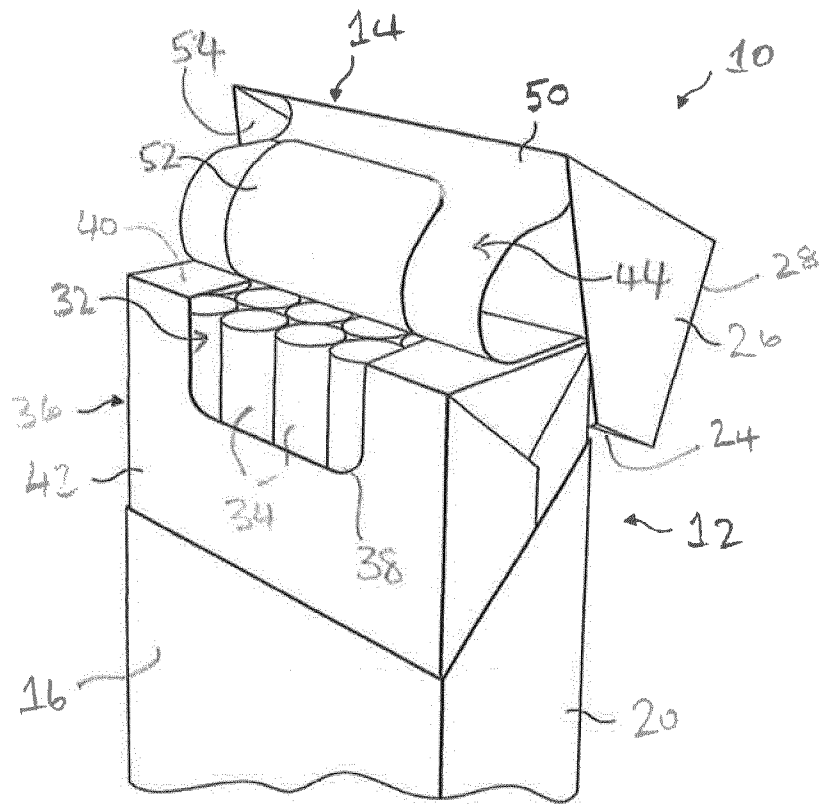


FIG. 1

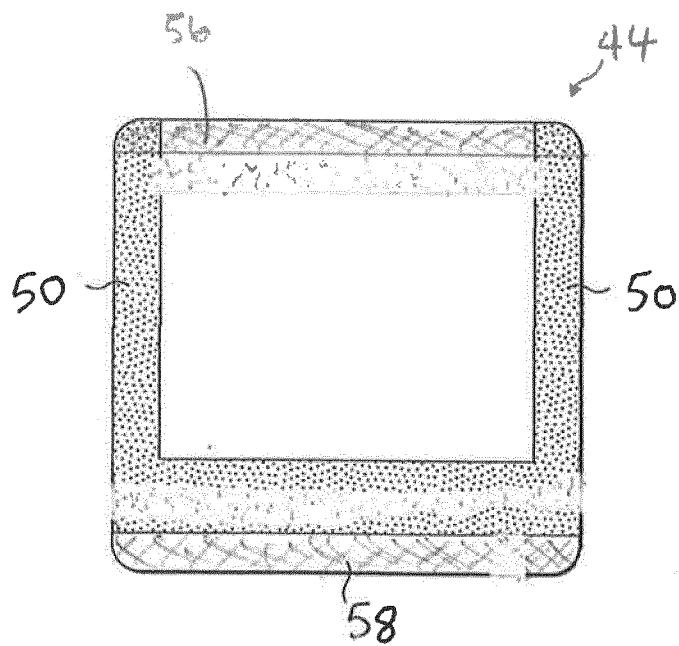


FIG. 4

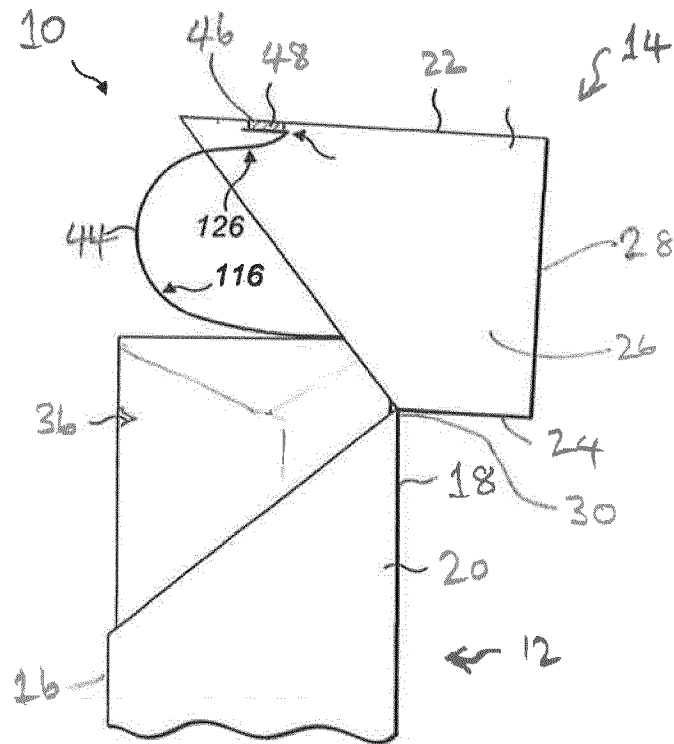


FIG. 2

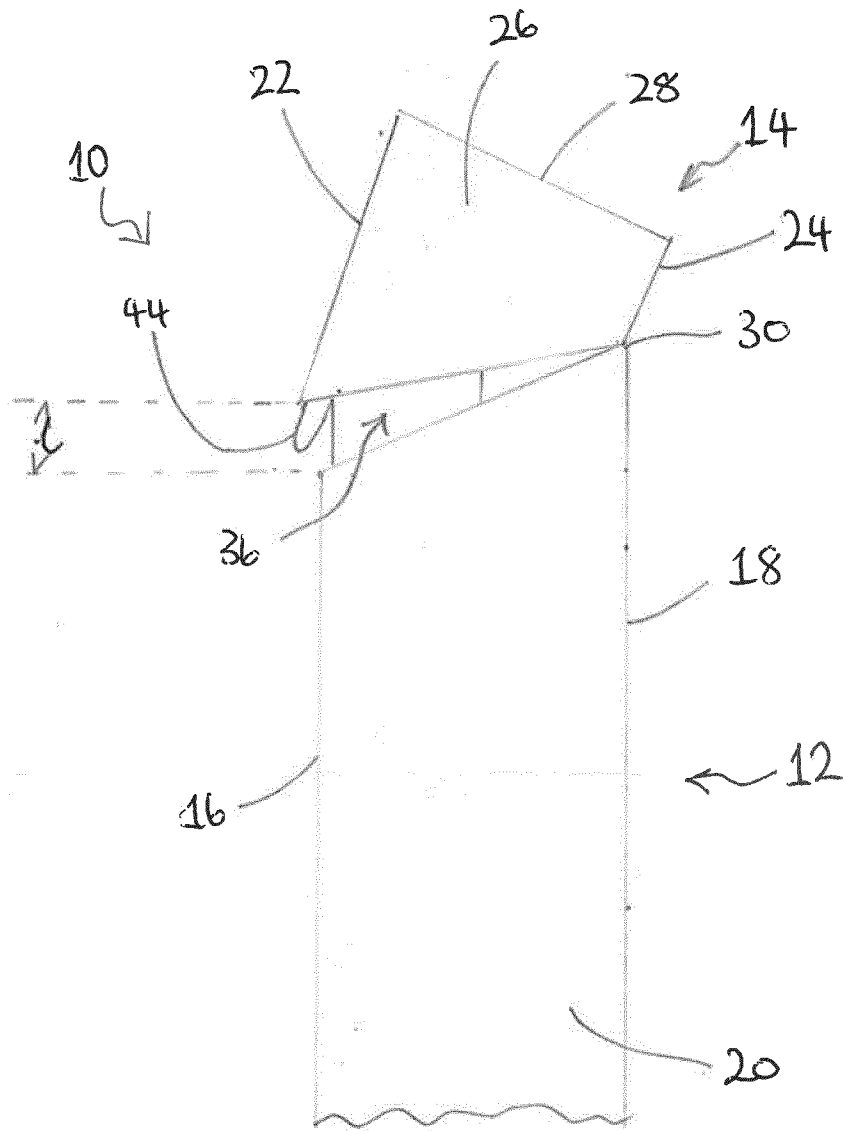


FIG. 3

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2016/064092

A. CLASSIFICATION OF SUBJECT MATTER

INV. 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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2013/120915 A1 (PHILIP MORRIS PROD [CH]) 22 August 2013 (2013-08-22)	1-6,
Y	page 5, line 16 - line 18	8-13,15
	page 9, line 13 - page 10, line 14; figure 1	7,14

Y	WO 2013/120913 A1 (PHILIP MORRIS PROD [CH]) 22 August 2013 (2013-08-22)	7,14
	page 11, line 33 - line 36; figure 2	



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 November 2016

Date of mailing of the international search report

30/11/2016

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Vesterholm, Mika

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2016/064092

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3, 5, 7-12, 14, 15

How to enable opening of a resealable flexible closure panel
simultaneously with a lid of a cigarette package

1.1. claims: 1-3, 5, 7, 10-12, 14

How to enable opening of a resealable flexible closure panel
simultaneously with a lid

1.2. claims: 8, 9, 15

How to enable smoking

2. claims: 4, 6, 13

How to define a closing and opening force of a lid

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2016/064092

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

WO 2013120913 A1	22-08-2013	AR 089985 A1	01-10-2014
		CN 104114465 A	22-10-2014
		EP 2814765 A1	24-12-2014
		JP 2015511911 A	23-04-2015
		KR 20140124757 A	27-10-2014
		RU 2014137113 A	10-04-2016
		SG 11201404564U A	28-08-2014
		US 2015021219 A1	22-01-2015
		WO 2013120913 A1	22-08-2013
