

**(12) STANDARD PATENT**

**(11) Application No. AU 2007324362 B2**

**(19) AUSTRALIAN PATENT OFFICE**

(54) Title  
**Packaging for smoking articles**

(51) International Patent Classification(s)  
**B65D 75/58** (2006.01)      **B65D 85/10** (2006.01)

(21) Application No: **2007324362**      (22) Date of Filing: **2007.11.09**

(87) WIPO No: **WO08/062159**

(30) Priority Data

(31) Number **0623385.2**      (32) Date **2006.11.23**      (33) Country **GB**

(43) Publication Date: **2008.05.29**

(44) Accepted Journal Date: **2011.07.07**

(71) Applicant(s)  
**British American Tobacco (Investments) Limited**

(72) Inventor(s)  
**Holford, Steven**

(74) Agent / Attorney  
**Shelston IP, Level 21 60 Margaret Street, Sydney, NSW, 2000**

(56) Related Art  
**WO 2002/066341 A1**  
**WO 2001/089962 A1**

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
29 May 2008 (29.05.2008)

PCT

(10) International Publication Number  
WO 2008/062159 A1

(51) International Patent Classification:  
*B65D 75/58* (2006.01)      *B65D 85/10* (2006.01)

(74) Agents: READ, Matthew, Charles et al.; Venner Shipley  
LLP, 20 Little Britain, London EC1A 7DH (GB).

(21) International Application Number:  
PCT/GB2007/004292

(22) International Filing Date:  
9 November 2007 (09.11.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0623385.2      23 November 2006 (23.11.2006) GB

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(71) Applicant (for all designated States except US): BRITISH AMERICAN TOBACCO (INVESTMENTS) LIMITED [GB/GB]; Globe House, 1 Water Street, London WC2R 3LA (GB).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CII, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

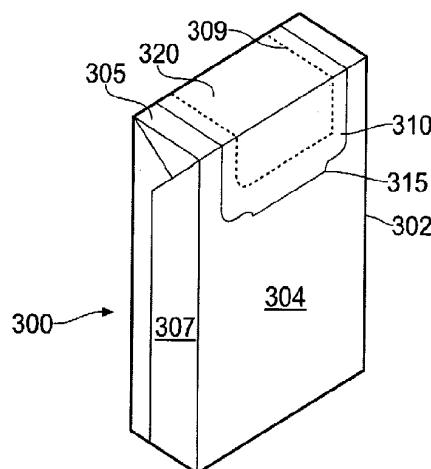
(72) Inventor; and

(75) Inventor/Applicant (for US only): HOLFORD, Steven [GB/GB]; British American Tobacco, R & D Centre, Regents Park Road, Millbrook, Southampton SO15 8TL (GB).

Published:

— with international search report

(54) Title: PACKAGING FOR SMOKING ARTICLES



(57) Abstract: One embodiment of the invention provides a smoking article package (300) comprising a sealed enclosure (302) of a layer of barrier material (303) around a charge of smoking articles, a smoking article access aperture defined in the barrier material, and a cover layer (310) extending over the access aperture and extending outwardly of the edges of the access aperture. The cover layer has on all its openable edges a permanently tacky surface overlapping the barrier material. The cover layer is configured such that at least a portion of the cover layer is completely removable from the package. The smoking article access aperture is defined in the barrier material by a line of cut or weakening (309). This line forms a closed figure and is interrupted by at least one uncut or unweakened tab region.

WO 2008/062159 A1

## Packaging for Smoking Articles

### **Field of the Invention**

5 The invention relates to packaging of smoking articles and other tobacco and smokable products such cigarettes, cigars, cigarillos and loose tobacco, for example. For convenience and brevity these will be referred to herein as smoking articles.

### **Background of the Invention**

10

Any discussion of the prior art throughout the specification should in no way be considered as an admission that such prior art is widely known or forms part of common general knowledge in the field.

15

The provision of barrier layers either as an inner wrap of a cigarette carton or an outer wrap or both is commonplace. Provision is more or less essential if cigarettes are to have any sort of commercial shelf life in zones having hostile climatic conditions, especially in high temperature, high humidity zones.

20

Previously described barrier layers have provided a resealable layer over the cigarette access aperture of the pack to offer protection to the product both prior to and after first opening of the pack and/or have warned a consumer when the pack may have been subject to illicit opening. WO98/22367 discloses a pack for smoking articles such as cigarettes having a sealed enclosure of barrier material, with a resealable access

25

aperture to the enclosure. A cover over the aperture has on all its openable edges a permanently tacky surface overlapping the barrier material. The label is provided with a tab which can be grasped and pulled by a user to reveal the access opening.

30

WO01/89962 describes a sealed enclosure of sheet barrier material comprising a cigarette removal access aperture and a cover layer, the cover layer serving to sealingly close the access aperture. The access aperture may be provided by cutting the barrier material and removing the cut portion from the aperture. Removal of the defined portion of barrier material may be provided by adhesively connecting the cover layer and the

barrier layer such that the peeling back of the cover layer removes the barrier layer portion from the aperture, thus providing access to the bundle of cigarettes. The cover layer provides evidence of illicit opening of the pack and for resealing the access aperture after first opening of the enclosure.

5

US 5333729 discloses a soft package containing cigarettes. The package includes a top closure tab which acts to re-close the package after the package has been opened. Adhesive can be applied to the tab to help reseal the package. The package may include an inner container surrounded by a sealing film. The top tab overlies the sealing film, 10 including a region of weakness in the sealing film. When the top tab is pulled away, the underlying portion of the sealing film is likewise removed to expose the cigarettes within the package.

Thus providing a cover layer to sealingly close and reclose the access aperture 15 can be burdensome on the consumer, as the cover layer must be peeled back and reapplied to the barrier layer each and every time a cigarette is withdrawn from the bundle.

### **Summary of the Invention**

20

Accordingly, in one aspect, the invention provides a smoking article package comprising a sealed enclosure of a layer of barrier material around a charge of smoking articles, a smoking article access aperture defined in the barrier material, and a cover layer extending over the access aperture and extending outwardly of the edges of the 25 access aperture, the cover layer having on all its openable edges a permanently tacky surface overlapping the barrier material, the cover layer being configured such that at least a portion of the cover layer is completely removable from the package, wherein the smoking article access aperture is defined in the barrier material by a line of cut or weakening, said line forming a closed figure and being interrupted by a plurality of 30 uncut or unweakened tab regions.

Unless the context clearly requires otherwise, throughout the description and the claims, the words "comprise", "comprising", and the like are to be construed in an

inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in the sense of "including, but not limited to".

Preferably the cover layer is engageable with that portion of the barrier material

- 5 defining the access aperture and is removable from the sealed enclosure together with that portion of the barrier layer defining the access aperture.

Preferably the entire cover layer is completely removable from the sealed enclosure. In this way, the initially sealed enclosure about the charge of smoking articles

- 10 may be provided with a permanent access aperture or, alternatively, the user may replace the removed cover layer and portion of the barrier material so as to reseal the enclosure.

Thus, it is at the discretion of the user of the smoking article package as to when the cover layer and the portion of the barrier layer defining the access aperture are

- 15 removed from the package. If the user so desires, the cover layer and barrier material are operable to provide a resealable closure, whereby, after a first opening of the access aperture, said enclosure can be resealed by re-engaging the permanently tacky surface of the cover layer with the barrier material layer adjacent to the edges of the access aperture. Alternatively, the user may choose to remove and discard the cover layer and
- 20 portion of the barrier material defining the access aperture.

Preferably the sealed enclosure about the charge of smoking articles may be an enclosure comprising two major (front and rear) faces, two side faces and two (top and bottom) end faces. A thus configured sealed enclosure may be contained in a smoking

- 25 article package outer body known in the art

as a hinge-lid pack for example. Preferably, the smoking article access aperture of the sealed enclosure so configured extends at the top end face into the front major face of the enclosure.

In an alternative arrangement of the present invention, the cover layer may comprise separable 5 portions, whereby a major portion of the cover layer is removable from the smoking article package in conjunction with the portion of the barrier material defining the access aperture.

Preferably the portions of the cover layer are separable along a line of cut or a line of weakening. Advantageously, the line of cut or weakening in the cover layer extends parallel to an edge of the 10 smoking article access aperture, that is the transverse edge of the aperture, across the full width of the cover layer.

Thus, the cover layer portions are separable along the line of cut or weakening so as to provide a removable cover layer portion and a secured cover layer portion. The secured portion of the cover layer 15 remains attached to the barrier material upon separation from the removable portion of the cover layer. Advantageously the secured cover layer portion is located on a rear major face of the previously sealed enclosure.

Advantageously, the line of cut or weakening in the cover layer is proximate the edge of the 20 sealed enclosure between the rear major face and the top end face thereof. Most preferably the line of cut or weakening in the cover layer is at the edge of the sealed enclosure between the rear major face and the top end face thereof. Alternatively, the line of cut or weakening in the cover layer is adjacent the rear major face of the sealed enclosure.

25 The secured portion of the cover layer may be attached to the barrier material by permanent adhesive. Alternatively, the secured portion of the cover layer may be attached to the barrier material by the same permanently tacky adhesive as is provided on the other overlapping surfaces of the cover layer,

provided that the line of cut or line of weakening severs sufficiently easily compared with the degree of adhesion between the secured cover layer and the underlying barrier material.

A further alternative to permanent adhesive is the provision of alternative permanent bonding  
5 means such as heat melt material to bond the secured cover layer portion to the barrier material or other means to provide a permanent weld between these two materials.

Preferably the portion of the barrier material defining the access aperture is completely removable from the sealed enclosure. Thus the portion of the barrier material defining the access  
10 aperture may be attached to the cover layer by a permanent adhesive. The portion of the barrier material defining the access aperture is therefore removable from the sealed enclosure together with the cover layer.

Preferably, the cover layer is provided with a pull tab which can be grasped and pulled by a user  
15 to reveal the access opening. The pull tab is advantageously not connected to the underlying barrier material. Thus the tab is free from adhesive and/or comprises a deadening agent which agent neutralizes the tacky properties of an adhesive applied to the tab.

In a preferred embodiment, the smoking article access aperture is configured to extend from a top  
20 end face of the sealed enclosure into the front major face of the sealed enclosure. The cover layer preferably extends from a rear major face over a top end face onto the front major face of the sealed enclosure. It also preferred that the cover layer extends onto the rear major face so as to provide a marginal overlapping region with the barrier material of the rear major face.

25 Preferably the marginal overlapping region extends from the edge of the sealed enclosure adjoining the top end face and the rear major wall to a lower edge of the cover layer by a distance in the range of 1mm to 12mm. The range may preferably be between 2mm and 8mm, and is optimally 5-7mm.

In the described ranges the lower limits of distance in the ranges may increase in increments of 1mm, for example, 1mm, 2mm, 3mm and so on, and/or the upper limits of distance in the ranges may decrease in increments of 1mm, for example 9mm, 8mm, 7mm and so on.

5 The portion of the barrier material defining the smoking article access aperture is provided by cutting the barrier material in a closed figure, a rectangle for example, and applying the cover layer to that portion of the barrier material. Thus, when the cover layer is peeled back, the aforesaid portion of the barrier material is removed from the aperture.

10 The portion of the barrier material defining the access aperture is defined by a line of cut or a line of weakening which is interrupted by the unweakened or uncut tab regions. In this way, the portion of the barrier material defining the smoking article access aperture is initially connected to the barrier material web by means of the tab regions.

15 The tab regions are dimensioned such that they are readily breakable when the cover layer is peeled back away from the barrier material layer. Thus, the tabs sever sufficiently easily compared with the degree of adhesion between the cover layer outwardly of the line of cut or weakening defining the access aperture and the underlying barrier material layer such that the portion of the barrier layer defining the access aperture and the cover layer secured thereto are removable from the sealed enclosure without  
20 causing damage, by way of tearing for example, of the barrier material layer of the sealed enclosure.

The portion of the barrier material defining the access aperture is attached to the barrier material web by a plurality of tabs spaced along the line of cut or weakening. It will be appreciated that the tab regions are distinct from any perforations in the line of weakening. Thus although the line of weakening  
25 may itself comprise perforations, such perforations are interrupted in the tab regions. Preferably there are between 2 and 12 tab regions, more specifically between 4 and 8 tab regions. However, other embodiments may have a different number of tab regions.

Preferably the tab regions have a substantially equal spacing around the circumference of the closed figure of the access aperture. This ensures a more reliable attachment of the portion of barrier material within the access aperture to the rest of the barrier material. However, other embodiments may 5 have a less regular spacing; this may help conform to the overall shape of the package (for example). In one embodiment, at least two tabs are located in the transverse line of cut or weakening defining the edge of the access aperture located in the top end face or the rear major face of the sealed enclosure; that is to say the rearmost edge of the access aperture in the sealed enclosure, closest to the rear major face thereof.

10 Preferably the tabs are bridges of barrier material less than 3mm in length (preferably less than 1mm) along the line of the cut or weakening. The dimensions of the tabs along the line of cut or weakening is small enough to prevent tearing of the barrier material outward of the access aperture upon removal of the cover layer and the portion of the barrier layer defining the access aperture. On the other hand, the tabs are sufficiently dimensioned so as to provide connection between the barrier material 15 outward of the access aperture and the portion of the barrier material defining the access aperture during the manufacture of the materials comprising the sealed enclosure and the formation thereof around a charge of smoking articles.

The line of cut or weakening comprising interruptions of limited dimensions and number, in 20 combination with the dimensions of the marginal region of the cover layer extending onto the rear major surface of the sealed enclosure, are such that the user may readily remove the cover layer and the portion of the barrier material defining the access aperture without damaging the remaining barrier material.

The preferred material of the barrier layer is a plastics/metal foil laminate or a metallised plastics 25 material, since both of these offer outstandingly good barrier properties. The barrier layer may be continuous over one minor end of the pack or charge, and have side seams along both minor sides of the pack and an envelope or similar fold over the opposite minor end. The barrier layer need not be applied

in the above manner – it can also be applied so as to be continuous over one minor side and sealed over both minor ends and one minor side.

The seams of the barrier layer may be formed using glue or heat-sealable strips which are added 5 to the barrier layer for example, by being printed on. This finds particular applicability when the barrier layer is a metal/paper laminate or metallised paper. However, one or more external faces of a plastics laminate or foil may be of heat-sealable material. The barrier material may be a paper laminate material.

Flavourant may be incorporated into an integer which is included within the smoking article 10 packaging, inside the barrier layer. The integer may comprise a porous substance, for example a pad, a paper sheet or may be the card inner frame of a semi-rigid pack. Alternatively the flavourant may be encapsulated or included in a sachet, the capsule or sachet being included within the packaging. This flavourant may permeate the cigarettes included within the packaging, so as to affect the taste or odour of smoke produced when smoking the cigarettes. A preferred such flavourant is menthol.

15

Flavourant may be added to the packaging in the form of so-called “scratch and sniff” panels. That is, the flavourant may be coated on the packaging in a form (for example microencapsulated) which allows release of the flavourant when abraded. Such scratch and sniff panels are well known, for example in magazine advertisements for perfume.

20

A flavourant-bearing integer can be included inside the barrier layer, for example a sachet, capsule or porous sheet. Alternatively the inner frame can be made of card on which is coated or in which is included a flavourant, e.g. menthol.

25

The smoking article package may be a hard pack or, alternatively, may be a soft-cup pack. Preferably the smoking article package comprises an outer body portion comprising a front wall, a top

wall, a rear wall, a bottom wall and at least two side walls. The outer body may provide a so-called hinge-lid pack as is well known in the art of smoking article packaging.

Preferably the walls of the outer body are configured to provide a parallelepiped pack. Most 5 preferably the walls are each rectangular in shape. The front and rear walls suitably have a height dimension greater than the width dimension thereof. The terms front wall, top wall, rear wall and bottom wall do not imply any particular orientation of the pack and can equally well be replaced by the terms first wall, second wall, third wall and fourth wall respectively, where each occurs. Preferably the major faces of the sealed enclosure around the charge of smoking articles lie adjacent the front and rear walls of 10 the outer body of the smoking article pack.

The smoking article package may have an inner slide and an outer shell (hereinafter referred to as slide-shell packs). Slide-shell packs for smoking articles, such as cigarettes, differ from conventional hinged lid packs in that the smoking articles are provided in an inner shell which the user slidably moves 15 relative to an outer shell to access the smoking articles. Some slide-shell packs have had a lid-opening mechanism that is activated by the movement of the slide within the shell.

Lid-opening mechanisms for slide-shell packs described in the prior art are mostly of the type having a connection between the outer shell and the lid of inner slide such that the lid is hinged open as 20 the inner slide moves relative to the shell. The connection may be permanent (in which case it typically comprises an adhesive) or may rely on mechanical engagement between respective parts on the outer shell and inner slide. We are here concerned with lid-opening mechanisms which rely on mechanical engagement.

25 The smoking article package may alternatively comprise a Laubé, or flat, box (also known as a shoulder pack). Such boxes are well known in the art and are generally rigid, being made of thick card or similar material, and hinged along a minor edge of a major face, or along a major midline or a minor face.

The smoking article package, the sealed enclosure and/or the outer body portion of the smoking article packages described herein are generally rectangular with four faces upstanding from a rectangular base. A pack may have two major faces upstanding from a base, the two faces meeting at two edges. In 5 the examples given, the edges are formed by faces at right angles. That is not essential to the invention; the smoking article package, the sealed enclosure and/or the outer body portion may have edges at least between the side walls and the front and rear walls which are rounded, bevelled or elliptical, or other edge shapes including those known in the art.

10 The cross-sectional shape of the base of the pack containing for example cigarettes may be a shape other than a rectangle, for example other quadrilateral shapes such as a square.

It will be understood that the smoking article packages herein described may be used to surround a charge of loose tobacco, referred to in the art for example as roll-your-own tobacco, or other tobacco or 15 otherwise smokable materials. The package may also be used to contain an oral tobacco-containing product, such as snus portions.

The smoking article package may further comprise an inner frame. The inner frame may be disposed within the sealed enclosure or, alternatively, may be disposed around the sealed enclosure.

20

In a preferred configuration, the frame has a major panel, two elongate side panels and a (bottom) end panel, and flap means comprising two flaps. The long edges of the side panels and the end panel are the major edges and a minor edge, respectively, of the major face. The flaps are at the top ends of the side panels. Thus, upon folding, the frame forms a major face, two long side faces and a bottom end face 25 of a cuboid, with the flaps forming two parts of an incomplete top end face.

It is preferable that the major face is not a complete rectangle, but has a recess in the top edge. When such a recess is present, it is further preferable that the end panel is shaped so that two blank, unfolded, frames placed end-to-end tessellate (i.e. can lie next to each other without overlaps or gaps) thus minimising the amount of material needed.

5

Of course, inner frames may have single folds between the panels (producing bevelled edges). Alternatively, the sides of the frame may be rounded, for example to be used in a so-called "oval" pack.

The present invention is not limited to single bundles of cigarettes. For example, multiple 10 bundles may be enclosed in the resealable barrier material and then inserted together into a single outer shell. Alternatively, multiple bundles, each within an inner frame, may be overwrapped together in a single pack-forming sheet, to form a semi-rigid pack containing multiple bundles.

#### **Brief Description of the Drawings**

15

In order that the present invention be clearly understood and readily carried into effect reference will now be made, by way of example, to the accompanying drawings in which: -

Figure 1 shows a plan view from above of a known barrier layer;

Figure 1A is an exploded section of the indicated portion of the barrier layer of Figure 1;

20 Figure 2 shows a plan view from above of a barrier layer according to one embodiment of the present invention;

Figures 2A and 2B show exploded sections of the indicated portions of the barrier layer of Figure 2;

Figure 3 shows a perspective view, from the front and above, of a sealed charge of smoking articles;

Figure 4 shows a perspective view, from the rear and below, of the charge of Figure 3;

25 Figure 5 shows a perspective view, from the front and above, of a sealed charge of smoking articles according to an alternative arrangement of the present invention;

Figure 6 shows a perspective view, from the rear and below, of the charge of Figure 5 showing an alternative arrangement of the cover layer; and

Figure 7 shows a perspective view, from the front and above, a smoking article package according to one embodiment of the invention with the sealed charge of smoking articles of Figures 3 and 5 within a hinge-lid outer body.

### Detailed Description

Figure 1 shows an embodiment of a layer of a known barrier material, generally depicted by the reference numeral 1. The barrier material 1 is unwound from a spool in the direction of arrow A to form a flat sheet of material. The barrier material 1, formable into the sealed enclosure, has a front major face 2 and a rear major face 4 joined along a common longitudinal axis by top end face 6. Depending from end margins of the front and rear major faces respectively are portions of bottom end face 8. Depending from opposing side margins of the front and rear major faces are side faces 10 and 12. A cover layer 14 is applied to the barrier material 1 in the region of a portion of the barrier material 16 defining the smoking article access aperture. The portion of the barrier layer 16 defining the smoking article access aperture is formed in the barrier material 1 by a line of cut or a line of weakening 18. The line of cut is suitably provided through the entire thickness of the barrier material 1. The line of weakening may be a line of perforations or a score line, for example.

20

The line of cut 18 has interruptions or uncut regions 20 spaced along its length. In the region of the line of cut 18 closest to the rear major face 4 of the barrier material 1 is a tab region 20a, dimensioned so as to resist separation of the portion of barrier material 16 defining the access aperture from the remaining barrier material. The interruptions or uncut regions 20 and the tab region 20a initially connect the portion of barrier material 16 defining the access aperture to the remainder of the barrier material during processing and formation of the sealed enclosure about a charge of smoking articles, thus preventing premature opening of the access aperture prior to opening by the consumer. In the absence of

the interruptions 20 and tab region 20a, the portion of the barrier material 16 defining the access aperture would fall away from the barrier material and/or allow the possibility of ingress and egress of moisture and air into the sealed enclosure thus affecting the quality of the enclosed charge of smoking articles.

5        The cover layer 14 further includes a pull tab or flap 22 which is free from adhesive or has a deadening agent applied thereto to neutralize the effects of the adhesive on the flap 22, thereby the flap 22 remains unconnected to the barrier material 1 so as to provide the consumer with a place to grasp the cover layer 14 and to peel same back from the barrier layer.

10       To facilitate separation of the portion of the barrier material 16 defining the access aperture from the barrier layer, the cover layer 14 is applied thereto. The cover layer 14 is usually in the form of a label, usually of a film of plastics material, of which the undersurface is coated with a permanent adhesive, that is to say a permanently tacky material so that it adheres to the barrier layer and can readhere to it. The cover layer 14 extends beyond all of the edges of the aperture delineated by the line of cut 18 and onto the rear major face 4 of the barrier material. The cover layer 14 overlaps and adheres to the barrier material in a region outward of the line of cut 18 and adheres to the portion of the barrier material 16 defining the access aperture. The force of adhesion to the portion of the barrier material 16 defining the access aperture is sufficient such that the portion of the barrier material 16 defining the access aperture is removed with the cover layer 14 as same is peeled away from the barrier material.

15

20       The marginal overlap of the cover layer 14 onto rear major face 4 and the tab portion 20a together retain the portion of the barrier material 16 defining the access aperture and cover layer 14 in connection with the barrier material in use and allow the consumer to open and reseal the access aperture upon each and every withdrawal of a smoking article from the sealed enclosure.

Figure 1A provides an exploded view of the line of cut 18 in the region of an uncut region 20. In order to remove the portion of the barrier material 16 defining the access aperture from the adjoining barrier material the uncut region 20 is severed by a shearing force.

5 Figure 2 shows a layer of barrier material according to one embodiment of the present invention, generally depicted by the reference numeral 100. The barrier material 100 has a front major face 112 and a rear major face 114 interconnected along a common longitudinal axis by top end face 106.

A cover layer 104 is applied to the barrier material 100 in the region of a portion of the barrier material 116 defining the smoking article access aperture. The portion of the barrier layer 116 defining the smoking article access aperture is formed in the barrier material 100 by a line of cut or a line of weakening 118. The line of cut 118 is suitably provided through the entire thickness of the barrier material 100 and provides a line of cut 118 in a closed figure, in this example a rectangle. The line of cut 118 may be a line of perforations or a score line for example. The line of cut 118 has interruptions or 10 uncut regions 120 spaced along its length. In the region of the line of cut 118 closest to the rear major face 114 of the barrier material 100 are tab regions 120a, dimensioned so as to allow separation of the portion of barrier material 116 defining the access aperture from the remaining barrier material. The interruptions or uncut regions 120 and the tab region 120a connect the portion of barrier material 116 defining the access aperture to the remainder of the barrier material during processing and formation of 15 the sealed enclosure about a charge of smoking articles, thus preventing premature opening of the access aperture prior to opening by the consumer. In the absence of the interruptions 120 and tab region 120a, the portion of the barrier material 116 defining the access aperture would fall away from the barrier material and/or allow the possibility of ingress and egress of moisture and air into the sealed enclosure 20 thus affecting the quality of the enclosed charge of smoking articles.

The tab regions 120a also assist in the application of the cover layer 104 and help avoid the need to remove the portion of the barrier material forming the access aperture 116. This facilitates the on-line production process and the simple addition of a cover layer.

5 To facilitate complete removal of the portion of the barrier material 116 defining the access aperture from the barrier layer, the cover layer 104 is applied over the portion of the barrier material 116 defining the access aperture so as to overlap all of the edges thereof. The cover layer 104 is usually in the form of a label, usually of a film of plastics material, of which the undersurface is coated with a permanent adhesive, that is to say a permanently tacky material so that it adheres to the barrier layer and 10 can readhere to it so a user so desires. The cover layer 104 extends beyond all of the edges of the aperture delineated by the line of cut 118 and onto the rear major face 114 of the barrier material. The cover layer 104 overlaps and adheres to the barrier material in a region outward of the line of cut 118 and adheres to the portion of the barrier material 116 defining the access aperture. The force of adhesion to the portion of the barrier material 116 defining the access aperture is sufficient such that the portion of the 15 barrier material 116 defining the access aperture is removed with the cover layer 104 as same is peeled away from the barrier material.

The dimensions of the tab regions 120a are insufficient to retain the portion of the barrier material 116 defining the access aperture in connection with the barrier material layer as the cover layer 20 is peeled away from the barrier material. In addition, the marginal overlap of the cover layer 104 onto rear major face 114 is reduced in dimension compared to the corresponding overlap in cover layer 14 depicted in Figure 1. The comparative reduction, which can be 8mm, in the length dimension of the marginal overlap of cover layer 104 onto rear major face 114 facilitates ready removal of the whole of the cover layer 104 from the barrier material layer and with it the portion of the barrier material 16 defining 25 the access aperture. If the marginal overlap of the cover layer 104 were to be the same as that provided in Figure 1 for cover layer 14, the adhesive force retaining the marginal overlap on the rear major face of the barrier material would be sufficient to cause visible damage to the barrier material layer as the user

attempted to remove the cover layer. The tab regions 120a in conjunction with the comparative reduction in the length dimension of the marginal overlap of cover layer 104 onto rear major face 114 provides for complete removal of the cover layer 104 whilst minimizing, or in fact negating the risk of tearing or otherwise damaging the barrier material layer.

5

Figure 2A provides an exploded view of the line of cut 118 in the region of an uncut region 120 wherein the line of cut is discontinued to provide a tab or pip of material which retains the portion 116 in connection with the front major face of the barrier material. In order to remove the portion of the barrier material 116 defining the access aperture from the adjoining barrier material the uncut region 120 is 10 severed by a shearing force.

Figure 2B depicts an exploded view of tab regions 120a in the line of cut 118. In the depicted embodiment, the line of cut 118 is situated in the rear major face of the barrier material proximate the fold line 124. In an alternative arrangement the line of cut 118 may be collinear with the fold line 124. 15 The tab regions 120a are smaller in linear dimension along the line of the cut 118 than the tab region 20a shown in Figure 1. In order that the portion of barrier material 116 defining the access aperture be completely removable with the cover layer 104, the tab regions 120a must be sufficiently small to allow for separation from the remaining barrier material without causing damage or tearing thereof. On the contrary, tab region 20a in Figure 1 is dimensioned so as to resist separation of the portion of the barrier 20 material 16 defining the access aperture from the barrier material. The larger dimension of the rear marginal overlap of the cover layer 14 in Figure 1 provides further resistance to the separation of the cover layer 14 from the barrier material. Separation of the cover layer 14 of Figure 1 from the barrier material would be a forced removal which would cause visible damage to the sealed enclosure.

25 The sealed charge of smoking articles shown in Figures 3 and 4 and generally designated by the reference numeral 300 comprises a block of cigarettes (not shown), optionally embraced by a frame (not shown) of card material, which block of cigarettes and optional frame are wrapped about and contained

within a sealed enclosure 302 of a layer of sheet barrier material 303. The sheet barrier material 303 may be, for example, a metal/plastics laminate or a vacuum metallised plastics material. Alternatively, a mono non-metallised plastics film of sufficiently high barrier characteristics may be used. Another possibility is to use a paper laminate material having sufficient barrier properties.

5

The sealed enclosure 302 is formed from a rectangular blank of the sheet barrier material as depicted in Figure 2. The rectangular blank of sheet barrier material is wrapped about the block of cigarettes within and about the frame (if present) so as to extend continuously, i.e. without a seam, from the front 304 of the charge 300, over the top 305 and onto the rear 306. Sealing seams are formed as is indicated in 10 Figures 3 and 4, at the sides of the charge 300 (reference numeral 307 designating one of the two sides) and at base 308 thereof.

The sealed enclosure 302 is provided with a cigarette access/removal aperture defined by a portion of barrier material 320 and bounded by a broken line 309 in Figure 3. The aperture defined by a 15 portion of barrier material 320 extends from the top 305 to the front 304 of the charge 300 and is defined, at line 309, by a line of cut or a line of weakening. The sealed enclosure 302 is further provided with a cover layer 310 which is adhesively applied at the rear, top and front of the enclosure 302 so as to overlie and to extend outwardly of all of the edges of the aperture defined by a portion of barrier material 320. The marginal overlap of the cover layer 310 onto the rear of the enclosure 302 is dimensioned so as to 20 provide no more resistance to the removal of the cover layer 310 from the enclosure 302 than is provided by the portions of the cover layer 310 overlying the barrier material 320 on the top and front of the enclosure 302.

Outwardly of the line 309 delineating the aperture defined by a portion of barrier material 320 is 25 a continuous zone of permanently tacky adhesive, which zone is bounded by the outermost edges of the cover layer 310, the line 309 and the upper edge or fold line of a pull tab 315 of the cover layer 310.

An adhesive serves to secure the cover layer 310 to that portion of the barrier material 320 defining the access aperture. This adhesive may be a permanent adhesive and facilitates the complete removal of the cover layer 310 together with the portion of the barrier material 320 defining the access aperture. In order that it may be readily gripped the pull tab 315 is not adhered to the underlying barrier 5 material 303.

Upon opening of the cigarette charge 300 by the consumer in order to gain access to the cigarettes therewithin, the consumer grips the pull tab 315 and pulls upwardly and then rearwardly. This action of the consumer causes the cover layer 310 to peel away from the barrier material 303. Because 10 the portion of the barrier material 320 defining the access aperture is adhered to the cover layer 310, the same action simultaneously causes that portion of the barrier material 320 defining the access aperture to separate, along line 309, from the barrier material 303 extending from and outwardly of the line 309.

Because line of cut 309 comprises tab regions (not shown) interspersed along the line of cut small 15 enough to initially maintain the portion of the barrier material 320 defining the access aperture in connection with the barrier material 303 extending from and outwardly of the line 309 but to allow severance thereof when the cover layer 310 is peeled away from the barrier material 303 the consumer may completely remove the cover layer and associated portion of the barrier material 320 defining the access aperture without damaging the remaining barrier material 303. Thereafter the consumer can 20 choose whether to re-apply the cover layer 310 to the sealed enclosure 302 or, alternatively, discard same without further use. Similarly the marginal overlap of the cover layer 310 with the rear of the sealed enclosure 302 is of a length dimension such that the underlying barrier material 303 remains intact upon removal of the cover layer 310.

25 In Figures 5 and 6 features in common with Figures 3 and 4 are depicted by like reference numerals. Figure 6 shows an alternative arrangement of the cover layer 310 in that same comprises a line of cut or a line of weakening 330. The line of cut 330 extends the full width of the cover layer 310

between the transverse edges thereof. The line of cut 330 is suitably parallel to the transverse edge of the cover layer 310 and the top edge of the rear face of enclosure 302.

Upon peeling back of the cover layer 310, the cover layer 310 is separated into two portions 5 310A and 310B along the line of cut 330. The portion 310B is irreversibly severed from the portion 310A and from the sealed enclosure 302. The portion 310A of the cover layer remains secured to the rear face of the sealed enclosure after removal of the portion 310B. In this way, the consumer can remove a major portion of the cover layer 310 and the entire associated portion of the barrier material 320 defining the access aperture from the sealed enclosure 302 whilst leaving only a portion of the cover layer 310A 10 associated with the rear surface of the enclosure 302.

Cigarette charge 300 may be employed as a smoking article package somewhat similar to a conventional soft cup package, although when an internal frame is present, cigarette charge 300 is likely to be significantly more rigid than a conventional soft cup pack.

15

An alternative mode of use of the cigarette charge 300 is for the cigarette charge 300 to be disposed, as a close fit, within an outer body portion, one closely resembling, for example, a so-called hinge-lid pack. Such a smoking article package is depicted in Figure 7 of the accompanying drawings. In this embodiment it will be arranged that the hinging back of the lid portion 400 of the outer body portion will give full access to the cover layer 310 of the cigarette charge 300, including, of course, the pull tab 315. In the example depicted in Figure 7, the lower edge of the cover layer 310 at the rear of the sealed enclosure 302 will be above the hinge line 402 of the outer body portion so as to allow for complete removal of the cover layer 310. Alternatively, when cover layer 310 comprises a line of cut 330 transversely thereacross, the line of cut 330 will be above the hinge line 402 of the outer body portion so 20 as to allow for complete removal of the cover layer 310. Thus the lower edge of the cover layer at the rear of the pack is preferably in line with the hinge or slightly above the hinge. Nevertheless, in other 25

embodiments, the cover layer may extend to some extent below the line of the hinge (but the cover layer is still removable).

Accordingly, it is an advantage of at least a preferred embodiment of the present  
5 invention to provide the consumer with the option to easily remove the resealable label  
from the pack or to reseal the pack, if desired.

It is a further advantage of at least a preferred embodiment of the present  
invention to provide a smoking article package having a resealable label which may be  
10 removed from the package without causing visible damage to the barrier material.

Thus the skilled person will be aware of many possible modifications and  
variations on the embodiments so far described. For example, although the present  
approach has been described generally in the context of packaging for cigarettes, it can  
15 be applied to a wider range of smoking articles, e.g. cigars, portions of snus, etc.  
Accordingly, the scope of the present invention is defined by the appended claims and  
their equivalents.

Claims

1. A smoking article package comprising a sealed enclosure of a layer of barrier material around a charge of smoking articles, a smoking article access aperture defined in the barrier material, and a cover layer extending over the access aperture and extending outwardly of the edges of the access aperture, the cover layer having on all its openable edges a permanently tacky surface overlapping the barrier material, the cover layer being configured such that at least a portion of the cover layer is completely removable from the package, wherein the smoking article access aperture is defined in the barrier material by a line of cut or weakening, said line forming a closed figure and being interrupted by a plurality of uncut or unweakened tab regions.
2. A smoking article package according to claim 1, wherein the cover layer is engageable with that portion of the barrier material defining the access aperture and is removable from the sealed enclosure together with that portion of the barrier layer defining the access aperture.
3. A smoking article package according to claim 1 or claim 2, wherein the entire cover layer is removable from the sealed enclosure.
4. A smoking article package according to any one of claims 1-3, wherein the sealed enclosure about the charge of smoking articles is an enclosure comprising two major faces, two side faces and two end faces.
5. A smoking article package according to claim 5, wherein the sealed enclosure is contained in an outer body portion.
6. A smoking article package according to claim 1, wherein the cover layer comprises separable portions, and a major portion of the cover layer is removable from the smoking article package in conjunction with the portion of the barrier material defining the access aperture.
7. A smoking article package according to claim 6, wherein the portions of the cover layer are separable along a line of cut or a line of weakening.

8. A smoking article package according to claim 7, wherein the line of cut or weakening in the cover layer extends parallel to an edge of the smoking article access aperture across the full width of the cover layer.
9. A smoking article package according to claim 8, wherein the edge of the smoking article access aperture is the transverse edge.
- 5 10. A smoking article package according to any one of claims 6-9, wherein the cover layer portions are separable to provide a removable cover layer portion and a secured cover layer portion.
11. A smoking article package according to claim 10, wherein the secured portion of the cover layer remains attached to the sealed enclosure upon separation from the removable portion of the cover layer.
- 10 12. A smoking article package according to claim 10 or claim 11, wherein the secured cover layer portion is located on a rear major face of the sealed enclosure.
13. A smoking article package according to any one of claims 7-12, wherein the line of cut or weakening in the cover layer is proximate the edge of the sealed enclosure between a rear major face and a top end face thereof.
- 15 14. A smoking article package according to claim 13, wherein the line of cut or weakening in the cover layer is at the edge of the sealed enclosure between the rear major face and the top end face thereof.
- 15 20 16. A smoking article package according to any one of claims 10-14, wherein the secured portion of the cover layer is attached to the barrier material of the sealed enclosure by permanent adhesive.
- 25 16. A smoking article package according to any one of claims 10-14, wherein the secured portion of the cover layer is attached to the barrier material of the sealed enclosure by the same permanently tacky adhesive as is provided on the other overlapping surfaces of the cover layer and the line of cut or line of weakening severs easily compared with the degree of adhesion between the secured cover layer and the underlying barrier material.

17. A smoking article package according to any one of the preceding claims, wherein the portion of the barrier material defining the access aperture is completely removable from the sealed enclosure.
18. A smoking article package according to any one of the preceding claims, wherein the cover layer is provided with a tab unconnected to the barrier material of the sealed enclosure.
19. A smoking article package according to claim 18, wherein the tab is free from adhesive.
20. A smoking article package according to claim 18, wherein the tab comprises a deadening agent which agent neutralizes the tacky properties of an adhesive applied to the tab.
21. A smoking article package according to any one of claims 4-20, wherein the smoking article access aperture is configured to extend from a top end face of the sealed enclosure into the front major face of the sealed enclosure.
22. A smoking article package according to claim 21, wherein the cover layer extends from a rear major face over a top end face onto the front major face of the sealed enclosure.
23. A smoking article package according to claim 21 or claim 22, wherein the cover layer extends onto the rear major face so as to provide a marginal overlapping region with the barrier material of the rear major face.
24. A smoking article package according to claim 23, wherein the marginal overlapping region extends from the edge of the sealed enclosure adjoining the top end face and the rear major face to a lower edge of the cover layer.
25. A smoking article package according to claim 23, wherein the marginal overlapping region extends from the edge of the sealed enclosure adjoining the top end face and the rear major face to a lower edge of the cover layer by a distance in the range of 1mm to 12mm.
26. A smoking article package according to claim 25, wherein the distance is in the range 2mm to 8mm.
27. A smoking article package according to claim 26, wherein the distance is in the range 5mm to 7mm.

28. A smoking article package according to any preceding claim, wherein the tab regions are less than 3mm in length along the line of cut or weakening.
29. A smoking article package according to claim 28, wherein the tab regions are less than 1mm in length along the line of cut or weakening.
- 5 30. A smoking article according to any preceding claim, wherein the tab regions are distributed approximately equally around the circumference of said closed figure.
31. A smoking article according to any preceding claim, wherein there are between 2 and 12 tab regions.
32. A smoking article according to claim 31, wherein there are between 4 and 8 tab regions.
- 10 33. A smoking article package substantially as hereinbefore described with reference to Figures 2 to 4 of the accompanying drawings.
34. A smoking article package substantially as hereinbefore described with reference to Figures 5 and 6 of the accompanying drawings.

1/4

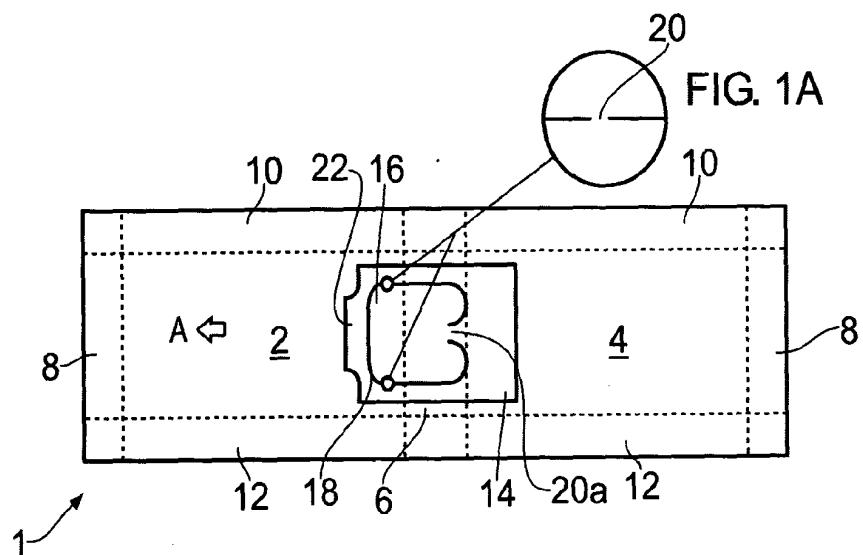


FIG. 1

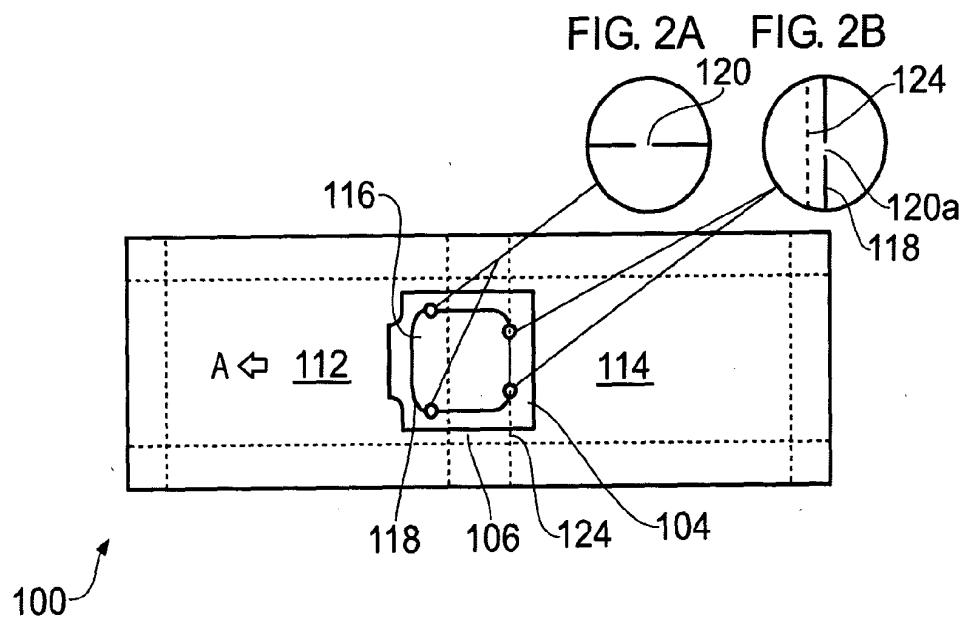


FIG. 2

2/4

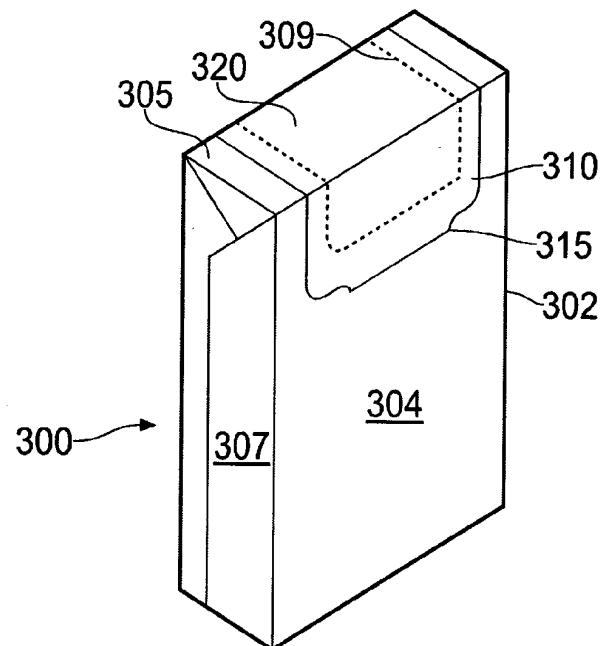


FIG. 3

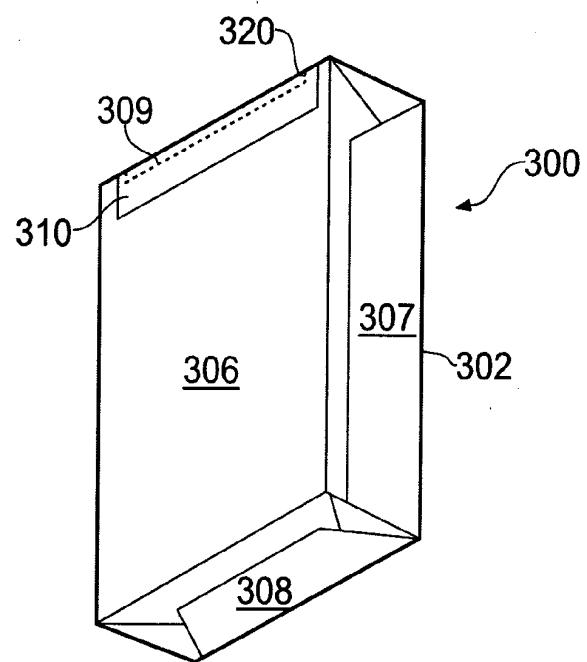


FIG. 4

3/4

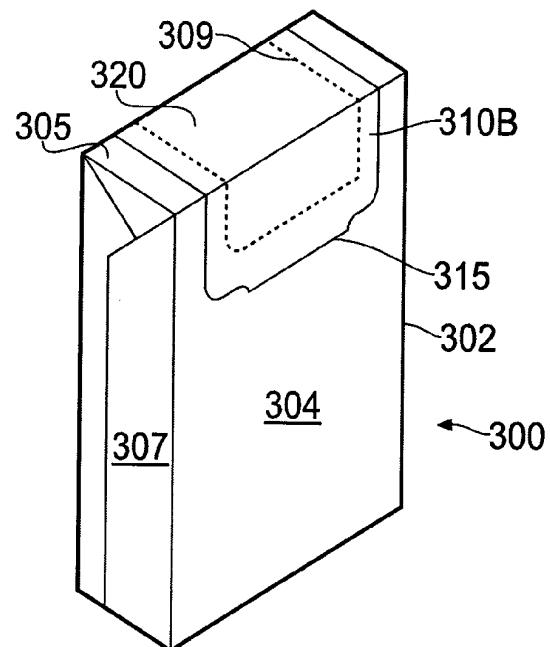


FIG. 5

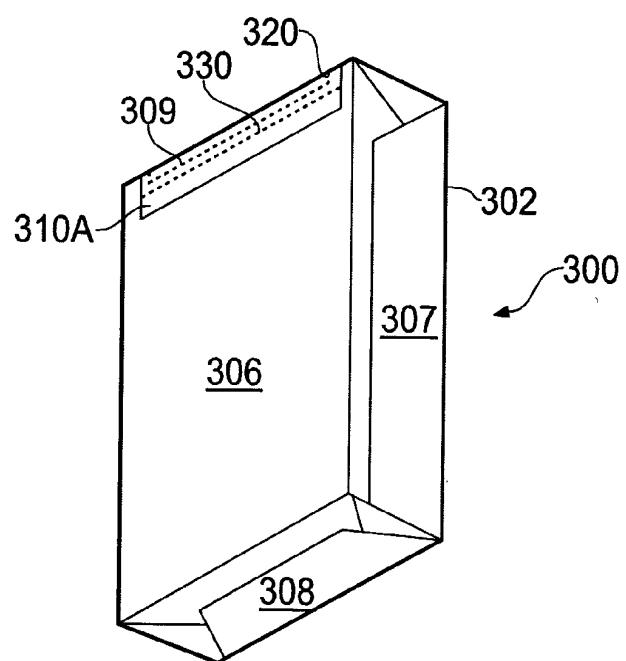


FIG. 6

4/4

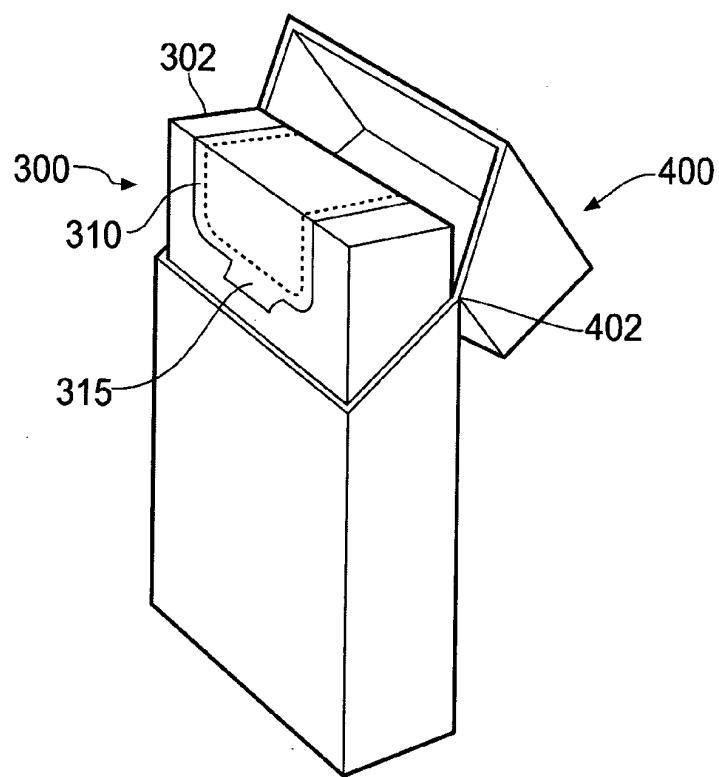


FIG. 7