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(54) WRAPPED PACKAGE WITH OPENING TAB

WICKELVERPACKUNG MIT ÖFFNUNGSLASCHE

EMBALLAGE ENVELOPPÉ DOTÉ D'UNE LANGUETTE D'OUVERTURE

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(56) References cited:
EP-A1- 0 602 656
EP-A2- 0 344 466
WO-A1-2008/065914
DE-U1-202008 007 616
EP-A1- 1 666 376
WO-A1-02/076247
DE-A1- 2 652 079

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Description

[0001] The present invention relates to a wrapped package of consumer goods, comprising an outer wrapper with an opening tab defined by an opening cut and to a method for producing such a wrapped package. The wrapped package finds particular application as a wrapped package of smoking articles.

[0002] It is known to package consumer goods in a variety of types of container. For example, certain consumer goods are packaged in containers formed from folded laminar blanks. For example, elongate smoking articles, such as cigarettes and cigars, are commonly sold in hinge lid packs having a box for housing the smoking articles and a lid connected to the box about a hinge line extending across the back wall of the container. Other types of consumer goods, in particular fragile or breakable goods, are packaged in rigid containers formed of a moulded plastic or metal material. In other cases, consumer goods may be packaged in a bag, pouch or 'soft' pack formed of a more flexible material, such as paper or cellophane.

[0003] Conventionally, filled containers of consumer goods such as smoking articles are often over wrapped in an outer wrapper of a transparent polymeric film which is provided with a tear tape, in order to facilitate removal of the outer wrapper from the underlying container. The removal of the tear tape separates the outer wrapper into two portions, which can then be individually removed from the container. However, since outer wrappers of this type are commonly shrink wrapped onto the container, the film material is tightly wrapped against the container. As a result, even after the removal of the tear tape, it can be difficult for the consumer to remove the remainder of the outer wrapper from the container in order to access the consumer goods.

[0004] EP 0 602 656 A1 discloses an outer wrapper for a VHS tape, that extends around the VHS tape to create an overlapping heat-sealed region. Other wrapped packages are disclosed in documents DE2652079, DE 20200800761641 and WO 2008/065914 A1.

[0005] The application of tear tapes to the outer wrapper of a filled container requires the implementation of additional process steps and apparatus in the process for the production of the wrapped containers. The tear tape is also typically formed of a different material to the outer wrapper, so that additional materials are required in the production of the packaging. Furthermore, additional imaging apparatus may also be required as part of the quality control process, in order to detect any defects in the tear tape which may prevent the effective opening of the outer wrapper.

[0006] It would be desirable to provide a novel means for the opening of an outer wrapper of a wrapped package of consumer goods, which facilitates removal of the outer wrapper by the consumer. It would be particularly desirable if such a means for opening could be incorporated into an outer wrapper without the need for additional or specialised apparatus or techniques.

[0007] According to the invention there is provided a wrapped package of consumer goods comprising: a filled package comprising a container filled with a bundle of smoking articles; and an outer wrapper, wrapped around the filled package such that first and second opposed edges of the outer wrapper overlap with each other along a longitudinal overlapping region extending across a first side of the package. The outer wrapper is provided with an opening cut extending transversely all of the way across the longitudinal overlapping region to define an opening tab in the outer wrapper. The outer wrapper is openable by pulling the opening tab.

[0008] The term 'longitudinal' refers to the direction along the length of the overlapping region of the outer wrapper. The term 'transverse' refers to the direction that is substantially perpendicular to the longitudinal direction of the overlapping region.

[0009] The wrapped package of the present invention incorporates a new arrangement of the outer wrapper which enables the outer wrapper to be readily removed from the wrapped package without the provision of a tear tape. As in a conventional outer wrapper, the first and second edges of the outer wrapper overlap along a longitudinal region extending across a face of the package. In wrapped packages according to the invention, an opening cut is provided across the region of overlap so that when the opening tab is pulled along the longitudinal region the opening cut propagates in the direction of the longitudinal overlapping region, along the edges of the longitudinal region. The edges of the longitudinal overlapping region therefore effectively provide predetermined breaking lines along which the outer wrapper will be torn when the opening tab is pulled in the longitudinal direction of the overlapping region.

[0010] The longitudinal portions of the wrapperforming the overlapping region are torn away from the remainder of the outer wrapper, so that a strip of the outer wrapper is removed from the wrapped package. In this way, the package is opened through the removal of a strip of the film material forming the outer wrapper, but without the need for an additional tear tape. The remaining portions of the outer wrapper around the package can then readily be removed in order to fully open the package.

[0011] Advantageously, the means for opening the wrapped packaged according to the invention can be formed without the incorporation of any additional materials or components to the film material forming the outer wrapper. Furthermore, since existing outer wrappers typically already include an overlapping region when folded around a package, the longitudinal overlapping region of wrapped packages according to the invention can advantageously be provided using conventional wrapping and sealing techniques and apparatus, without the need for additional steps or machinery. Preferably, the sheet material for forming the outer wrapper can be pre-cut with the opening cut, so that minimal adaptation of existing

wrapping apparatus is required. As the use of a tear tape is no longer necessary, the quality control apparatus for detecting defects in the application of the tear tape can be eliminated from the wrapping line. For all of these reasons, the wrapped package of the present invention can be produced in a more cost effective and efficient manner than conventional wrapped packaged incorporating a tear tape.

[0012] The opening cut defines an opening tab for separation of the longitudinal overlapping region from the remainder of the outer wrapper. Therefore the opening cut preferably extends through both layers of the outer wrapper in the overlapping region. The opening cut extends all of the way across the overlapping region. The opening cut may be provided entirely within the overlapping region, or a part of the opening cut may extend across an edge of the overlapping region into the region of the outer wrapper adjacent the overlapping region. Preferably, the opening cut extends across the entire width of the overlapping region, and a short distance into the adjacent portion of the wrapper on either side of the overlapping region. This arrangement facilitates the removal of the entire overlapping region.

[0013] The opening cut may be formed in any suitable shape to define an opening tab for effectively removing the overlapping region. Preferably, the opening cut is a substantially U-shaped cut, which may be curved or formed of three or more connected straight lines. The use of a U-shaped opening cut advantageously provides good resistance to forces during handling, so that the outer wrapper is not inadvertently torn before opening. Other suitable shapes for the opening cut include but are not limited to V-shaped and S-shaped.

[0014] In order for the opening cut to effectively propagate along the edges of the overlapping region, preferably at least one end of the opening cut is substantially aligned with the longitudinal direction of the overlapping region. For example, in the case of a U-shaped cut, preferably the opposed ends of the U-shaped cut are substantially parallel to the longitudinal direction of the overlapping strip.

[0015] The opening cut is preferably formed in the sheet material forming the outer wrapper before the outer wrapper is wrapped around the filled package. In certain embodiments, the entire shape of the opening cut may be provided at both the first and second edges of the outer wrapper, so that during the wrapping of the package the opening cuts at each edge must be aligned in order to accurately overlie each other. In alternative embodiments, a portion of the opening cut is formed at the first edge and a portion of the opening cut is formed at the second edge so that when the first and second edges are overlapped the entire opening cut is formed by the combination of the two separate portions of the opening cut. Preferably, in this case the alignment and overlapping of the portions of the opening cut can be facilitated by adapting the shape of the cut so that in the overlapping portion the cut is a substantially straight line.

[0016] Preferably, the outer wrapper is a substantially transparent material so that the underlying package is visible through the outer wrapper before opening. Suitable transparent polymeric films for forming the outer wrapper include, for example, high or low density polyethylene, polypropylene, oriented polypropylene, polyvinylidene chloride, cellulose film, or combinations thereof. Preferably, the outer wrapper is formed of polypropylene or oriented polypropylene, which can readily be torn along the edges of the longitudinal overlapping region.

[0017] Unlike a conventional tear tape, which is typically formed of an opaque material, the longitudinal overlapping region may be substantially transparent. This means that the overlapping region advantageously does not obscure any printed text or graphics on the outer surfaces of the underlying package. The position of the overlapping region with respect to the underlying surfaces is therefore more flexible than where a tear tape is included.

[0018] The outer wrapper of wrapped packages according to the invention may be printed over some or all of its surfaces. In certain preferred embodiments, the outer wrapper is advantageously printed in some way to indicate the position of the opening tab. In conventional outer wrappers which use a perforation line for easier access instead of a tear tape, such printing is not always possible proximate to the perforation line. When printing is applied over the perforations, the ink may leak through the outer wrapper and cause staining of the inner package. Since no such perforations are required in order to provide the overlapping region in the outer wrapper of packages according to the invention, printing can be provided along the overlapping region if desired. This enables the wrapped packages of the invention to be provided with a unique appearance.

[0019] Preferably, the outer wrapper further comprises two additional opposed cuts spaced apart from the ends of the opening cut forming the opening tab and forming a continuation of the opening cut. For example, where the opening cut is U-shaped, the two additional opposed cuts are continuations of the two ends of the U-shape. Preferably, the two additional opposed cuts are separated from the ends of the opening cut between about 1 mm and about 2 mm. The additional cuts further facilitate the removal of the longitudinal overlapping region when the opening tab is pulled in the longitudinal direction and ensure that the outer wrapper tears along the edges of the overlapping region.

[0020] Preferably, the two additional opposed cuts extend at an angle of between about 0 and about 45 degrees, more preferably between about 0 and about 30 degrees to the longitudinal direction of the overlapping region and the opposed cuts terminate at the opposed longitudinal edges of the overlapping region. Where the opposed cuts extend at an angle of about 0 degrees to the longitudinal direction of the overlapping region, the cuts are substantially parallel to the region. Where the opening tab is provided entirely within the longitudinal overlapping region, the opposed cuts may advanta-

geously be positioned in order to connect the ends of the opening cut to the edges of the overlapping region in order to facilitate removal of the entire region.

[0021] In addition or alternatively to the two additional, opposed cuts, the outer wrapper further comprises an additional transverse cut positioned to one side of the opening cut and the longitudinal overlapping region and extending in a direction substantially perpendicular to the longitudinal overlapping region. It has been found that the inclusion of the additional, transverse cut facilitates the removal of the remainder of the wrapper from the package once the longitudinal overlapping region has been removed.

[0022] The longitudinal overlapping region extends across at least one side of the wrapped package. The overlapping region may be provided on any side of the package but is preferably provided so that it extends across the front wall of the package, or the top wall. The overlapping region may extend in a horizontal direction across the package, or in a vertical direction, or at any other angle across a face of the package. In preferred embodiments of the invention in which the package is a container in the shape of a rectangular parallelepiped, the longitudinal overlapping region preferably extends in the longitudinal direction of the pack, which will typically also be the vertical direction.

[0023] The wrapper is preferably wrapped around the package and folded and sealed at two opposed ends. For example, the wrapper is preferably folded and sealed at two ends in an envelope type seal. In certain preferred embodiments, the opening cut is provided in the overlapping region at one of the sealed ends. In other embodiments, an opening cut is provided in the overlapping region at each of the sealed ends.

[0024] Preferably, the opening cut is positioned between about 5 percent and about 25 percent of the way along the length of the longitudinal overlapping region, from an edge of the package. Preferably, the opening cut is oriented so that the opening tab is adapted to be pulled towards the remaining about 75 percent to about 95 percent of the length of the overlapping strip. In this way, the outer wrapper is opened along at least about 75 percent of the length of the overlapping region, or at least about 75 percent of the length or width of the face of the, package across which the region extends. For example, where the opening cut is U-shaped, the opening cut is preferably positioned so that the open end of the U-shape is directed towards the remaining about 75 percent to about 95 percent of the length of the overlapping region.

[0025] The transverse width of the overlapping region may be varied as desired by is preferably between about 3 mm and about 10 mm, more preferably between about 4 mm and about 7 mm. This is significantly wider than the typically width of a tear tape, which further facilitates the removal of the outer wrapper of packages according to the invention.

[0026] Preferably, the opposed edges of the outer wrapper are sealed together along the longitudinal overlapping region in order to ensure that the outer wrapper is secured in place around the filled package and that the cuts in the first and second edges forming the opening cut remain correctly aligned.

[0027] The package containing the consumer goods in wrapped packaged according to the invention may take a wide variety of forms, including for example hinge lid containers comprising a box for housing the consumer goods and a lid, or slide and shell containers comprising an inner slide for housing the consumer goods and an outer shell for closing the container. The package may alternatively be in the form of a 'soft pack' in which the consumer goods are wrapped in a flexible inner liner with no rigid container. In this case, the outer wrapper is applied directly around the inner liner. Alternatively, the package may be a moulded plastic or metal box or container like those used to store compact disks (CD) or digital versatile disks (DVD), for example.

[0028] In certain embodiments of the present invention, the wrapped package may contain two or more packages of consumer goods, which are separate or separable from each other once the outer wrapper has been removed. For example, the wrapped package may be in the form of a multi-pack of consumer goods wherein a group of separately wrapped packages are wrapped together by the outer wrapper. At least one package contains a bundle of smoking articles.

[0029] In one preferred embodiment of the invention, the wrapped package contains two or more packages of consumer goods in contact with each other along an interface, wherein the longitudinal overlapping region overlies the interface between the consumer goods at an edge of the package. In this embodiment, preferably, the opening cut is provided across the interface so that the two or more packages of consumer goods are separable from each other upon opening of the outer wrapper by removing the longitudinal overlapping region. This arrangement facilitates the unpacking of a multi-pack of consumer goods, for example, by the vendor or consumer. Preferably, the wrapped package comprises 2 to 20 packages of consumer goods, more preferably, between about 5 and 10, most preferably, 10 packages of consumer goods.

[0030] The package of wrapped packages according to the invention may be formed from any suitable materials including, but not limited to, cardboard, paperboard, plastic, metal, or combinations thereof. Preferably, the package is 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.

[0031] Wrapped packages according to the invention may be in the shape of a rectangular parallelepiped, with right-angled longitudinal and right-angled transverse edges. Alternatively, the wrapped package may comprise one or more rounded longitudinal edges, rounded transverse edges, bevelled longitudinal edges or bevelled transverse edges, or combinations thereof. For ex-

ample, the wrapped package according to the invention may comprise, without limitation:

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

[0032] Where the package comprises one or more rounded edges and is made from one or more laminar blanks, preferably the blanks comprise three, four, five, six or seven scoring lines or creasing lines to form each rounded edge in the assembled package. The scoring lines or creasing lines may be either on the inside of the package or on the outside of the package. Preferably, the scoring lines or creasing lines are spaced from each other by between about 0.3 mm and 4 mm.

[0033] Preferably, the spacing of the creasing lines or scoring lines is a function of the thickness of the laminar blank. Preferably, the spacing between the creasing lines or scoring lines is between about 0.5 and about 4 times larger than the thickness of the laminar blank.

[0034] Where the package comprises one or more bevelled edge, preferably the bevelled edge has a width of between about 1 mm and about 10 mm, preferably between about 2 and about 6 mm. Alternatively, the package 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.

[0035] Where the package comprises a bevelled edge and is made from one or more laminar blanks, the bevel may be formed by two parallel creasing lines or scoring lines in the laminar blank. The creasing lines or scoring lines may be arranged symmetrically to the edge between a first wall and a second wall. Alternatively, the creasing lines or scoring lines may be arranged asymmetrically to the edge between the first wall and the second wall, such that the bevel reaches further into the first wall. of the package than into the second wali of the package.

[0036] Alternatively, the package may have a non-rectangular transversal cross section, for example polygonal such as triangular or hexagonal, or oval, semi-oval, circular or semi-circular.

[0037] Wrapped packages according to the invention may be used as packs for elongate smoking articles such as, for example, cigarettes, cigars or cigarillos. It will be appreciated that through appropriate choices of the dimensions thereof, packages according to the invention may be designed for different numbers of conventional size, king size, super-king size, slim or super-slim cigarettes.

[0038] Through an appropriate choice of the dimensions thereof, packages according to the invention may be designed to hold different total numbers of smoking articles, or different arrangements of smoking articles. For example, through an appropriate choice of the dimensions thereof, packages according to the invention may be designed to hold a total of between ten and thirty smoking articles. In other examples, packages according to the invention may be designed to hold multiple packages of smoking articles, each of which is designed to hold between ten and thirty smoking articles.

[0039] The smoking articles in the package may be arranged in different collations, depending on the total number of smoking articles. For example, the smoking articles may be arranged in a single row of six, seven, eight, nine or ten. Alternatively, the smoking articles may be arranged in two or more rows. The two or more rows may contain the same number of smoking articles. For example, the smoking articles may be arranged in: two rows of five, six, seven, eight, nine or ten; three rows of five or seven; or four rows of four, five or six. Alternatively, the two or more rows may include at least two rows containing different number of smoking articles to each other. For example, the smoking articles may be arranged in: a row of five and a row of six (5-6); a row of six and a row of seven (6-7); a row of seven and a row of eight (7-8); a middle row of five and two outer rows of six (6-5-6); a middle row of five and two outer rows of seven (7-5-7); a middle row of six and two outer rows of five (5-6-5); a middle row of six and two outer rows of seven (7-6-7); a middle row of seven and two outer rows of six (6-7-6); a middle row of nine and two outer rows of eight (8-9-8); or a middle row of six with one outer row of five and one outer row of seven (5-6-7).

[0040] Wrapped packages according to the present invention may hold smoking articles of the same type or brand, or of different types or brands. In addition, both filterless smoking articles and smoking articles with various filter tips may be contained, as well as smoking articles of differing length (for example, between about 40 mm and about 180 mm), diameter (for example, between about 4 mm and about 9 mm). In addition, the smoking articles may differ in strength of taste, resistance to draw and total particulate matter delivery. Preferably, the dimensions of the package are adapted to the length of the smoking articles, and the collation of the smoking articles. Typically, the outer dimensions of the package are between about 0.5 mm to about 5 mm larger than the dimensions of the bundle or bundles of smoking articles housed inside the container.

[0041] The length, width and depth of wrapped pack-

ages according to the invention may be such that, in the closed position, the resultant overall dimensions of the wrapped package are similar to the dimensions of a typical disposable hinge-lid pack of twenty cigarettes. In alternative embodiments, the length, width and depth of wrapped packages according to the invention may be such that, in the closed position, the resultant overall dimensions of the wrapped package are similar to the dimensions of a typical carton of ten hinge lid containers of twenty cigarettes.

[0042] Preferably, wrapped packages according to the invention have a height of between about 60 mm and about 150 mm, more preferably a height of between about 70 mm and about 125 mm, wherein the height is measured from the top wall to the bottom wall of the package.

[0043] Preferably, wrapped packages according to the invention have a width of between about 12 mm and about 150 mm, more preferably a width of between about 70 mm and about 125 mm, wherein the width is measured from one side wall to the other side wall of the wrapped package.

[0044] Preferably, wrapped packages according to the invention have a depth of between about 6 mm and about 100 mm, more preferably a depth of between about 12 mm and about 25 mm wherein the depth is measured from the front wall to the back wall of the wrapped package (comprising the hinge between box and lid).

[0045] Preferably, the ratio of the height of the container to the depth of the wrapped package is in between about 0.3 to 1 and about 10 to 1, more preferably between about 2 to 1 and about 8 to 1, most preferably between about 3 to 1 and 5 to 1

[0046] Preferably, the ratio of the width of the wrapped package to the depth of the container is in between about 0.3 to 1 and about 10 to 1, more preferably between about 2 to 1 and about 8 to 1, most preferably between about 2 to 1 and 3 to 1.

[0047] As well as housing a bundle of smoking articles, the wrapped package may further comprise 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 package, contained within the package along with the smoking articles, in a separate compartment of the package or combinations thereof.

[0048] Preferably, the outer wrapper is coated with a sealable polyolefin for example one or a combination of: polyethylene, polypropylene, polybutylene, an ethylene-propylene copolymer, a propylene-butylene copolymer, an ethylene-butylene copolymer, an ethylene-propylene-butylene terpolymer. Preferably, the coating material of the outer wrapper is different from any coating on the outside of the package, such that when sealing, the outer wrapper is not sealed to the package. This allows wrapping a bundle of individually overwrapped packages. Preferably, through the adequate choice of sealable material, the sealing temperature of the outer wrapper is below the sealing temperature of any wrapper that is used to wrap individual packages within the wrapped package. Preferably, the sealing temperature is between about 5 percent and about 25 percent lower for the outer wrapper in comparison to the sealing temperature of any individual package wrapper. Thus, it is possible to first individually seal the overwrap of packages around the each package at a first elevated temperature and then seal the outer wrapper of a bundle of individually overwrapped packages at a lower temperature.

[0049] The exterior surfaces of the packages according to the invention may be printed, embossed, debossed or otherwise embellished with manufacturer or brand logos, trade marks, slogans and other consumer information and indicia.

[0050] According to the invention there is also provided a method of producing a wrapped package according to the invention, as described above. The method comprises:

providing a filled package comprising a container filled with a bundle of smoking articles;
wrapping an outer wrapper in one direction around the package and overlapping first and second opposed edges of the outer wrapper to form a longitudinal overlapping region extending across a first side of the package;
sealing the ends of the outer wrapper; and
providing an opening cut in the outer wrapper which extends transversely all of the way across the longitudinal overlapping region to define an opening tab.

[0051] After the overlapping of the outer wrapper along the longitudinal overlapping region, the outer wrapper forms an open ended tube around the filled package. The opposed ends of the open ended tube of the outer wrapper are preferably folded and sealed in a conventional manner, using an envelope type fold. The wrapper may be sealed to itself using any suitable technique, such as for example heat sealing or through the application of a suitable adhesive. Such a wrapping process to form the longitudinal overlapping region and the opposed envelope seals would be well known to the skilled person.

[0052] The outer wrapper is preferably sealed along at least a part of the longitudinal overlapping region, for example using heat sealing as described above, or with a suitable adhesive.

[0053] Preferably, a first portion of the opening cut is formed at the first of the opposed edges of the outer wrapper, a second portion of the opening cut is formed at the second of the opposed edges of the outer wrapper and the opposed edges of the outer wrapper are overlapped with each other so that the first and second portions of the opening cut are registered together to form the complete opening cut, as described above.

[0054] Preferably, this is achieved by providing a plurality of spaced apart opening cuts on a continuous sheet of the sheet material for forming the outer wrapper,

wherein the continuous sheet is cut transversely through the midpoint of each of the opening cuts to form discrete outer wrappers.

[0055] Preferably, the opening cuts are formed using a knife having a cutting edge corresponding in shape to the desired shape of the opening cut. For example, where a U-shaped opening cut is desired, a U-shaped knife or blade is preferably used to form the opening cuts in the sheet material.

[0056] According to the invention there is also provided a method of removing the outer wrapper from a wrapped package according to the invention, as described above, comprising grasping the opening tab formed by the opening cut; pulling the opening tab in the direction of the longitudinal overlapping region to tear the longitudinal overlapping region away from the remainder of the outer wrapper; and removing the remainder of the outer wrapper from the package once the longitudinal overlapping region has been separated from the outer wrapper.

[0057] The invention will be further described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 shows a front, perspective view of a wrapped package of smoking articles according to the invention;

Figure 2 shows a plan view of the sheet material used to provide the outer wrapper of the wrapped package of Figure 1; and

Figure 3 shows an enlarged view of the opening cut of the outer wrapper of the wrapper package of Figure 1.

[0058] The package 10 shown in Figure 1 is a rectangular parallelepiped and comprises a carton 12 containing ten separate hinge lid containers of twenty smoking articles (not visible) and an outer wrapper 14 wrapped around the carton. The carton 12 and the hinge lid containers contained within the carton are of conventional design and construction, as would be well know to the skilled person.

[0059] The outer wrapper 14 is formed of a transparent film of polypropylene. The wrapper 14 has been wrapped around the carton 12 in a longitudinal direction so that first 16a and second 16b opposed edges of the outer wrapper 14 overlap to form a longitudinal overlapping region 18. The overlapping region 18 extends in a straight band, across the front wall 20 of the carton, towards one side of the front wall 20 and substantially parallel to the longitudinal edges of the carton. At the ends of the carton 12, the outer wrapper 14 is folded in the conventional manner and sealed in place.

[0060] At a position approximately 10% of the way along the longitudinal overlapping region from an edge of the front wall 20 of the carton, an opening cut 22 is provided which extends transversely across the entire width of the overlapping region 18 and terminates on either side of the overlapping region. The opening cut 22 is U-shaped, with the open end of the 'U' directed towards the remaining 90% of the length of the overlapping region 18. The ends of the U-shaped opening cut 22 are provided on either side of the overlapping region 18 and extend substantially parallel to the longitudinal direction of the overlapping region. The U-sloaped cut defines an opening tab 24.

[0061] As can be seen in the enlarged view of the opening cut in Figure 2, a number of additional cuts are also provided on the outer wrapper proximate the U-shaped cut 22. A pair of opposed, straight line cuts 26 are provided a short distance from the ends of the U-shaped opening cut 22 and form a continuation of the U-shape of the opening cut. The additional cuts 26 each extends substantially parallel to the adjacent edge of the longitudinal overlapping region 18. An additional, transverse cut 28 is provided between the U-shaped opening cut 22 and the closest longitudinal edge of the front wall 20. The transverse cut 28 is formed of a straight line cut extending away from the U-shaped opening cut 22, substantially perpendicular to the longitudinal direction of the overlapping region 18.

[0062] In order to open the wrapped package 10 of Figure 1, the consumer may grasp the opening tab 24 formed by the U-shaped cut 22 and pull it in the direction of the overlapping longitudinal region 18. The U-shaped cut 22 will propagate along the longitudinal edges of the overlapping region 18, so that the overlapping first 16a and second 16b edges are removed from the remainder of the outer wrapper 14. Once the overlapping region 18 has been removed, the remainder of the outer wrapper 14 can readily be torn away from the carton, facilitated by the transverse cut 28 in the outer wrapper 14.

[0063] The outer wrapper 14 of the package 10 shown in Figure 1 is formed from a continuous sheet 114 of transparent polypropylene material which has been cut to form discrete outer wrappers of an appropriate size for wrapping the carton 12 of smoking articles. Figure 3 shows a schematic view of the sheet material 114 for forming the outer wrapper 14, which includes a plurality of spaced apart U-shaped cuts 122. The U-shaped cuts 122 are spaced apart in the longitudinal direction of the continuous sheet, in the direction of travel, and the open end of each cut faces a side of the sheet material.

[0064] The sheet material 114 is cut into discrete outer wrappers along the dashed lines '101' shown in Figure 3, which extend transversely across the sheet material, in a direction perpendicular to the direction of travel of the sheet material. The position of the cutting of the sheet material is such that the continuous sheet is cut at approximately the midpoint of the U-shaped cuts 122, so that a half of the U-shaped cut is provided at the first edge 16a of the wrapper and the other half is provided at the opposed, second 16b edge of the wrapper.

[0065] The outer wrapper 14 is wrapped around the carton 12 in a longitudinal direction by first contacting the first edge 16a of the wrapper with the front wall of the carton 12, wrapping the outer wrapper once around the

carton 12, overlapping the second edge 16b of the outer wrapper over the first edge 16a so that the two halves of the U-shaped cut out are aligned and together form the complete U-shaped opening cut 22 in the outer wrapper 14. The ends of the outer wrapper 14 are folded in a conventional manner and glued or sealed in place.

[0066] It will be appreciated that a similar form of outer wrapper could be applied to a wide variety of packages of different shapes and sizes, by adapting the size and shape of the outer wrapper and the position of the opening cut.

Claims

1. A wrapped package (10) of consumer goods comprising:

   a filled package comprising a container (12) filled with a bundle of smoking articles ; and
   an outer wrapper (14), wrapped around the filled package such that first and second opposed edges (16a, 16b) of the outer wrapper (14) overlap with each other along a longitudinal overlapping region (18) extending across a first side of the package, wherein the outer wrapper (14) is provided with a opening cut (22) extending transversely all of the way across the longitudinal overlapping region (18) to define an opening tab (24) in the outer wrapper (14).

2. A wrapped package (10) according to claim 1 wherein the opening cut (22) is substantially U-shaped, substantially S-shaped, or substantially V-shaped.

3. A wrapped package (10) according to claim 1 or 2 wherein the outer wrapper (14) further comprises two additional opposed cuts (26) spaced apart from the ends of the opening cut (22) forming the opening tab (24) and forming a continuation of the opening cut (22).

4. A wrapped package (10) according to claim 3 wherein the two additional opposed cuts (26) extend at an angle of between 0 and 45 degrees to the longitudinal direction of the overlapping region (18) and wherein the opposed cuts (26) terminate at the opposed longitudinal edges (16a, 16b) of the overlapping region (18).

5. A wrapped package (10) according to any preceding claim wherein the outer wrapper (14) further comprises an additional transverse cut (28) positioned to one side of the opening cut (22) and the longitudinal overlapping region (18) and extending in a direction substantially perpendicular to the longitudinal overlapping region (18).

6. A wrapped package (10) according to any preceding claim wherein the opening cut (22) is positioned between 5% and 25% of the way along the length of the longitudinal overlapping region (18) from an edge of the package.

7. A wrapped package (10) according to any preceding claim wherein the transverse width of the overlapping region (18) is between 3 mm and 10 mm.

8. A wrapped package (10) according to any preceding claim wherein the opposed edges (16a, 16b) of the outer wrapper (14) are sealed together along the longitudinal overlapping region (18).

9. A wrapped package (10) according to any preceding claim wherein the longitudinal overlapping region (18) extends across a front wall of the package.

10. A wrapped package (10) according to any preceding claim containing two or more consumer goods in contact with each other along an interface, wherein the longitudinal overlapping region (18) overlies the interface between the consumer goods at an edge of the package and wherein the opening cut (22) is provided across the interface so that the two or more consumer goods are separable from each other upon opening of the outer wrapper (14) by removing the longitudinal overlapping region (18).

11. A method of producing a wrapped package (10) according to any preceding claim, the method comprising:

    providing a filled package comprising a container (12) filled with a bundle of smoking articles;
    wrapping an outer wrapper (14) in one direction around the package and overlapping first and second opposed edges (16a, 16b) of the outer wrapper (14) to form a longitudinal overlapping region (18) extending across a first side of the package;
    sealing the ends of the outer wrapper (14); and
    providing an opening cut (22) in the outer wrapper (14) which extends transversely all of the way across the longitudinal overlapping region (18) to define an opening tab (24).

12. A method according to claim 11 wherein a first portion of the opening cut (22) is formed at the first of the opposed edges (16a) of the outer wrapper (14), a second portion of the opening cut (22) is formed at the second of the opposed edges (16b) of the outer wrapper (14) and wherein the opposed edges (16a, 16b) of the outer wrapper (14) are overlapped with each other so that the first and second portions of the opening cut (22) are registered together to form the complete opening cut (22).

13. A method according to claim 11 wherein a plurality of spaced apart opening cuts (22) are provided on a continuous sheet of the sheet material for forming the outer wrapper (14) and wherein the continuous sheet is cut transversely through the midpoint of each of the opening cuts (22) to form discrete outer wrappers (14).

14. A method of removing the outer wrapper (14) from a wrapped package according to any preceding claim comprising grasping the opening tab (24) formed by the opening cut (22); pulling the opening tab (24) in the direction of the longitudinal overlapping region (18) to tear the longitudinal overlapping region (18) away from the remainder of the outer wrapper (14); and removing the remainder of the outer wrapper (14) from the package once the longitudinal overlapping region (18) has been separated from the outer wrapper (14).

Patentansprüche

1. Umhüllte Verpackung (10) von Konsumgütern, aufweisend:

   eine gefüllte Verpackung, die einen Behälter (12) aufweist, der mit einem Bündel von Raucherartikeln gefüllt ist; und
   eine äußere Umhüllung (14), die um die gefüllte Verpackung derart gehüllt ist, dass erste und zweite gegenüberliegende Kanten (16a, 16b) der äußeren Umhüllung (14) einander entlang einer längs überlappenden Region (18), die sich über eine erste Seite der Verpackung erstreckt, überlappen, wobei die äußere Umhüllung (14) mit einem Öffnungseinschnitt (22) versehen ist, der sich quer ganz über die längs überlappende Region (18) erstreckt, um einen Öffnungsansatz (24) in der äußeren Umhüllung (14) zu definieren.

2. Umhüllte Verpackung (10) nach Anspruch 1, wobei der Öffnungseinschnitt (22) im Wesentlichen U-Förmig, im Wesentlichen S-förmig oder im Wesentlichen V-förmig ist.

3. Umhüllte Verpackung (10) nach Anspruch 1 oder 2, wobei die äußere Umhüllung (14) weiter zwei zusätzliche gegenüberliegende Einschnitte (26) aufweist, die von den Enden des Öffnungseinschnitts (22) beabstandet sind, welche den Öffnungsansatz (24) und eine Fortsetzung des Öffnungseinschnitts (22) bilden.

4. Umhüllte Verpackung (10) nach Anspruch 3, wobei sich die zwei zusätzlichen gegenüberliegenden Einschnitte (26) mit einem Winkel zwischen 0 und 45 Grad zu der Längsrichtung der überlappenden Region (18) erstrecken, und wobei die gegenüberliegenden Einschnitte (26) an den gegenüberliegenden Längsrändern (16a, 16b) von der überlappenden Region (18) enden.

5. Umhüllte Verpackung (10) nach einem der vorstehenden Ansprüche, wobei die äußere Umhüllung (14) weiter einen zusätzlichen Quereinschnitt (28) aufweist, der zu einer Seite des Öffnungseinschnitts (22) und der längs überlappenden Region (18) positioniert ist und sich in einer Richtung, die im Wesentlichen zur längs überlappenden Region (18) senkrecht ist, erstreckt.

6. Umhüllte Verpackung (10) nach einem der vorstehenden Ansprüche, wobei der Öffnungseinschnitt (22) zwischen 5 % und 25 % des Weges entlang der längs überlappenden Region (18) von einer Kante der Verpackung positioniert ist.

7. Umhüllte Verpackung (10) nach einem der vorstehenden Ansprüche, wobei die quer laufende Breite der überlappenden Region (18) zwischen 3 mm und 10 mm beträgt.

8. Umhüllte Verpackung (10) nach einem der vorstehenden Ansprüche, wobei die gegenüberliegenden Kanten (16a, 16b) der äußeren Umhüllung (14) zusammen entlang der längs überlappenden Region (18) versiegelt sind.

9. Umhüllte Verpackung (10) nach einem der vorstehenden Ansprüche, wobei sich die längs überlappende Region (18) über eine Vorderwand der Verpackung erstreckt.

10. Umhüllte Verpackung (10) nach einem der vorstehenden Ansprüche, die zwei oder mehr Konsumgüter in Kontakt miteinander entlang einer Grenzfläche enthält, wobei die längs überlappende Region (18) über der Grenzfläche zwischen den Konsumgütern an einer Kante der Verpackung liegt, und wobei der Öffnungseinschnitt (22) über die Grenzfläche vorgesehen ist, sodass die zwei oder mehr Konsumgüter nach Öffnen der äußeren Umhüllung (14) durch Entfernen der längs überlappenden Region (18) voneinander trennbar sind.

11. Verfahren zum Herstellen einer umhüllten Verpackung (10) nach einem der vorstehenden Ansprüche, wobei das Verfahren aufweist:

    Bereitstellen einer gefüllten Verpackung, die einen Behälter (12) aufweist, der mit einem Bündel von Raucherartikeln gefüllt ist;
    Umhüllen einer äußeren Umhüllung (14) in einer Richtung um die Verpackung und Überlappen

erster und zweiter gegenüberliegender Kanten (16a, 16b) der äußeren Umhüllung (14), um eine längs überlappende Region (18) zu bilden, die sich über eine erste Seite der Verpackung erstreckt;
Versiegeln der Enden der äußeren Umhüllung (14); und
Bereitstellen eines Öffnungseinschnitts (22) in der äußeren Umhüllung (14), der sich quer ganz über die längs überlappende Region (18) erstreckt, um einen Öffnungsansatz (24) zu definieren.

12. Verfahren nach Anspruch 11, wobei ein erster Abschnitt des Öffnungseinschnitts (22) an der ersten von den gegenüberliegenden Kanten (16a) von der äußeren Umhüllung (14) gebildet wird, ein zweiter Abschnitt des Öffnungseinschnitts (22) an der zweiten der gegenüberliegenden Kanten (16b) von der äußeren Umhüllung (14) gebildet wird, und wobei die gegenüberliegenden Kanten (16a, 16b) der äußeren Umhüllung (14) einander überlappen, sodass sich die ersten und zweiten Abschnitte des Öffnungseinschnitts (22) decken, um den kompletten Öffnungseinschnitt (22) zu bilden.

13. Verfahren nach Anspruch 11, wobei mehrere voneinander beabstandete Öffnungseinschnitte (22) auf einem kontinuierlichen Flächengebilde des Flächengebildematerials bereitgestellt werden, um die äußere Umhüllung (14) zu bilden, und wobei das kontinuierliche Flächengebilde quer durch den Mittelpunkt von jedem der Öffnungseinschnitte (22) geschnitten wird, um diskrete äußere Umhüllungen (14) zu bilden.

14. Verfahren zum Entfernen der äußeren Umhüllung (14) von einer umhüllten Verpackung nach einem der vorstehenden Ansprüche, aufweisend das Greifen des Öffnungsansatzes (24), der durch den Öffnungseinschnitt (22) gebildet wird; Ziehen des Öffnungsansatzes (24) in der Richtung auf die längs überlappende Region (18), um die längs überlappende Region (18) von dem Rest der äußeren Umhüllung (14) wegzureißen; und Entfernen des Rests der äußeren Umhüllung (14) von der Verpackung, sobald die längs überlappende Region (18) von der äußeren Umhüllung (14) getrennt wurde.

Revendications

1. Paquet enveloppé (10) de biens de consommation comprenant

un paquet rempli comprenant un récipient (12) rempli d'un lot d'articles à fumer ; et
une enveloppe externe (14), enroulée autour du paquet rempli de telle sorte que les premier et second bords opposés (16a, 16b) de l'enveloppe externe (14) se chevauchent le long d'une zone de chevauchement longitudinale (18) s'étendant sur un premier côté du paquet, où l'enveloppe externe (14) est pourvue d'une découpe d'ouverture (22) s'étendant transversalement sur toute la zone de chevauchement longitudinale (18) pour définir une languette d'ouverture (24) dans l'enveloppe externe (14).

2. Paquet enveloppé (10) selon la revendication 1, dans lequel la découpe d'ouverture (22) est essentiellement en forme de U, essentiellement en forme de S ou essentiellement en forme de V.

3. Paquet enveloppé (10) selon la revendication 1 ou 2, dans lequel l'enveloppe externe (14) comprend en outre deux découpes opposées (26) supplémentaires espacées des extrémités de la découpe d'ouverture (22) formant la languette d'ouverture (24) et formant une continuation de la découpe d'ouverture (22).

4. Paquet enveloppé (10) selon la revendication 3, dans lequel les deux découpes opposées (26) supplémentaires s'étendent à un angle entre 0 et 45 degrés par rapport à la direction longitudinale de la zone de chevauchement (18) et dans lequel les découpes opposées (26) se terminent aux bords longitudinaux opposés (16a, 16b) de la zone de chevauchement (18).

5. Paquet enveloppé (10) selon une quelconque revendication précédente, dans lequel l'enveloppe externe (14) comprend en outre une découpe transversale (28) supplémentaire positionnée d'un côté de la découpe d'ouverture (22) et de la zone de chevauchement longitudinale (18) et s'étendant dans une direction essentiellement perpendiculaire par rapport à la zone de chevauchement longitudinale (18).

6. Paquet enveloppé (10) selon une quelconque revendication précédente, dans lequel la découpe d'ouverture (22) est positionnée entre 5 % et 25 % du chemin le long de la longueur de la zone de chevauchement longitudinale (18) à partir d'un bord du paquet.

7. Paquet enveloppé (10) selon une quelconque revendication précédente, dans lequel la largeur transversale de la zone de chevauchement (18) est entre 3 mm et 10 mm.

8. Paquet enveloppé (10) selon une quelconque revendication précédente, dans lequel les bords opposés (16a, 16b) de l'enveloppe externe (14) sont scellés

ensemble le long de la zone de chevauchement longitudinale (18).

9. Paquet enveloppé (10) selon une quelconque revendication précédente, dans lequel la zone de chevauchement longitudinale (18) s'étend sur une paroi avant du paquet.

10. Paquet enveloppé (10) selon une quelconque revendication précédente, contenant deux ou plusieurs biens de consommation en contact les uns avec les autres le long d'une interface, dans lequel la zone de chevauchement longitudinale (18) recouvre l'interface entre les biens de consommation au niveau d'un bord du paquet et dans lequel la découpe d'ouverture (22) est conçue sur l'interface de sorte que les deux ou plusieurs biens de consommation sont séparables les uns des autres lors de l'ouverture de l'enveloppe externe (14) en enlevant la zone de chevauchement longitudinale (18).

11. Procédé de production d'un paquet enveloppé (10) selon une quelconque revendication précédente, le procédé comprenant

la fourniture d'un paquet rempli comprenant un récipient (12) rempli d'un lot d'articles à fumer ;
l'enroulement d'une enveloppe externe (14) dans une direction autour du paquet et le chevauchement des premier et second bords opposés (16a, 16b) de l'enveloppe externe (14) pour former une zone de chevauchement longitudinale (18) s'étendant sur un premier côté du paquet ;
le scellement des extrémités de l'enveloppe externe (14) ; et
la mise en place d'une découpe d'ouverture (22) dans l'enveloppe externe (14) qui s'étend transversalement sur tout le chemin à travers la zone de chevauchement longitudinale (18) afin de définir une languette d'ouverture (24).

12. Procédé selon la revendication 11, dans lequel une première partie de la découpe d'ouverture (22) est formée sur le premier des bords opposés (16a) de l'enveloppe externe (14), une seconde partie de la découpe d'ouverture (22) est formée sur le second des bords opposés (16b) de l'enveloppe externe (14) et dans lequel les bords opposés (16a, 16b) de l'enveloppe externe (14) se chevauchent de telle sorte que les première et seconde parties de la découpe d'ouverture (22) sont alignées ensemble pour former la découpe d'ouverture (22) complète.

13. Procédé selon la revendication 11, dans lequel une pluralité de découpes d'ouverture (22) séparées espacées sont mises en place sur une feuille continue du matériau en feuille pour la formation de l'enveloppe externe (14) et dans lequel la feuille continue est découpée transversalement par le milieu de chacune des découpes d'ouverture (22) pour former des enveloppes externes (14) discrètes.

14. Procédé pour retirer l'enveloppe externe (14) d'un paquet enveloppé selon une quelconque revendication précédente, comprenant la prise en main de la languette d'ouverture (24) formée par la découpe d'ouverture (22) ; l'exercice d'une traction sur la languette d'ouverture (24) dans la direction de la zone de chevauchement longitudinale (18) pour arracher la zone de chevauchement longitudinale (18) du reste de l'enveloppe externe (14) ; et l'enlèvement du reste de l'enveloppe externe (14) du paquet une fois que la zone de chevauchement longitudinale (18) a été séparée de l'enveloppe externe (14).

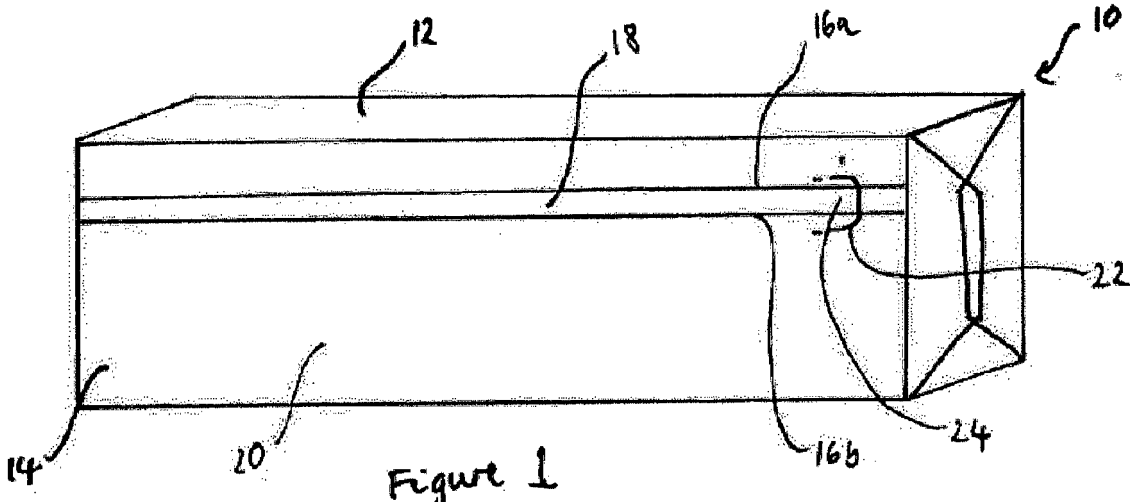

Figure 1

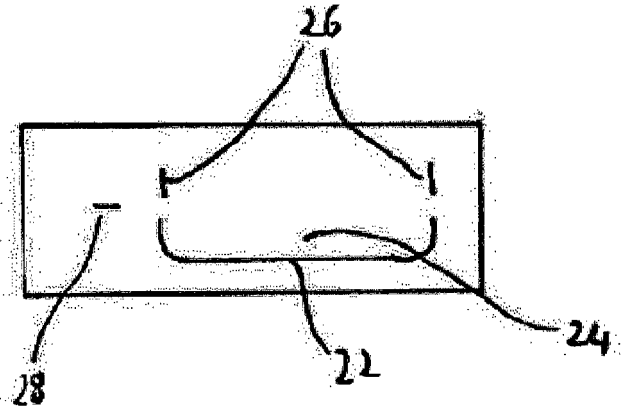

Figure 2

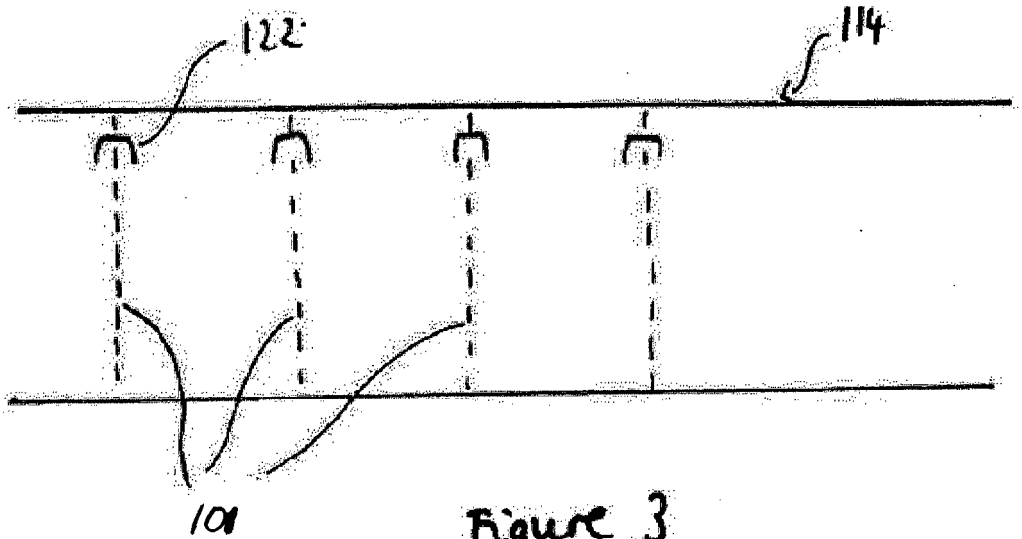

Figure 3

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- EP 0602656 A1 **[0004]**
- DE 2652079 **[0004]**
- DE 20200800761641 **[0004]**
- WO 2008065914 A1 **[0004]**