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(54) Container of individually wrapped consumer goods

(57) Containers of consumer goods include a housing having a wall that at least partially defines an interior of the housing and at least a first consumer good and a second consumer good disposed in the interior of the housing. A first overwrap is disposed around at least a portion of the first consumer good, and a second overwrap is disposed around at least a portion of the second consumer good. A first portion of the first overwrap is

secured to the wall of the housing, secured to the second overwrap, or secured to both the wall of the housing and the second overwrap, so that at least the first portion of the first overwrap remains within the interior of the housing when the first consumer good is removed from the container. By overwrapping the consumer goods, freshness or the perception of freshness of the consumer good can be maintained after initial opening of the container.

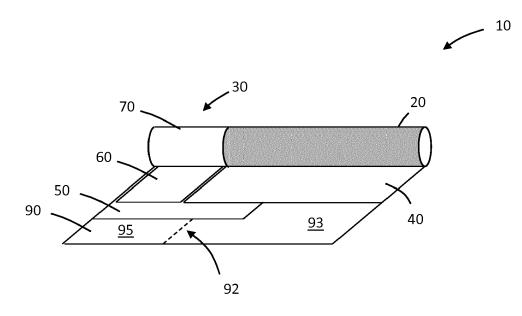


FIG. 1

EP 3 050 443 A1

Description

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[0001] This disclosure relates to consumer goods, such as smoking articles, that include an overwrap. At least a portion of the overwrap is removable to enhance freshness or the perception of freshness of the consumer good.

[0002] Multiple smoking articles are often placed in a single sealed housing, such as a package. Prior to smoking the first article, a consumer breaks the seal of the package. A number of days or weeks can pass before the consumer removes and smokes the last article remaining in the package. The last remaining article can become stale, or may be perceived by the consumer as being stale, due to the passage of time after breaking the seal on the package.

[0003] Other consumer goods, such as chewing gum or confectionary, can also be placed in sealed housings and can become stale or can be perceived as becoming stale due to passage of time after breaking a seal on the housing. [0004] One object of the present invention is to provide a consumer good, such as a smoking article, with an overwrap, at least a portion of which is removable, to enhance freshness or a perception of freshness of the consumer good. Another object is to provide a consumer good, such as a smoking article, having an overwrap and a container for housing the consumer good such that at least a portion of the overwrap is removed as the consumer good is removed from the container. Other objects of the present invention will be evident to those of skill in the art upon reading and understanding the present disclosure, which includes the claims that follow and the accompanying drawings.

[0005] In one aspect of the present invention, a container of consumer goods includes a housing, at least first and second consumer goods, a first overwrap, and a second overwrap. The housing has a wall that at least partially defines an interior of the housing. The first and second consumer goods are disposed in the interior of the housing. The first overwrap is disposed around at least a portion of the first consumer good. The second overwrap is disposed around at least a portion of the second consumer good. A first portion of the first overwrap is secured to the wall of the housing, secured to the second overwrap, or secured to both the wall of the housing and the second overwrap, so that at least the first portion of the first overwrap remains within the interior of the housing when the first consumer good is removed from the container.

[0006] Various aspects of the present invention may have one or more advantages to currently available or previously described containers of consumer goods. For example, the consumer goods can be maintained in a fresh state or can be perceived to be maintained in a fresh state due to the overwrap after the seal of the housing is broken. The consumer good includes an entire overwrap until a consumer removes the consumer good from the housing. Each individual consumer good can include an overwrap, at least a portion of which can be removed as the consumer good is withdrawn from the housing, to enhance the freshness or perception of freshness of each of the consumer goods in the container. These and other advantages of various aspects of the present invention will be evident to those of skill in the art upon reading and understanding the present disclosure.

[0007] The present invention is applicable to any suitable consumer good that can be disposed in a container for which freshness or the perception of freshness can be enhanced by an overwrap disposed about at least a portion of the consumer good. Preferably, the consumer good is an elongate consumer good. More preferably, the consumer good is an elongate cylindrical consumer good that can be employed with the teachings presented herein include chewing gum, confectionary, and smoking articles.

[0008] According to various aspects of the present invention, an overwrap is disposed around at least a portion of a consumer good. Any suitable overwrap can be employed. For example, the overwrap can include a polymeric material, metal, paper, metalized paper, or the like. In some preferred embodiments, the overwrap comprises paper. In preferred embodiments, the overwrap has a weight in a range from about 20 grams per square meter (gsm) to about 150 gsm; preferably from about 29 gms to about 130 gsm. In preferred embodiments, the overwrap has a thickness in a range from about 20 micrometers to about 250 micrometers; preferably from about 28 micrometers to about 215 micrometers. Preferably, the overwrap has a weight in a range from about 20 gsm to about 150 gms and a thickness in a range from about 20 micrometers to about 250 micrometers. More preferably, the overwrap has a weight in a range from about 29 gsm to about 130 gms and a thickness in a range from about 28 micrometers to about 215 micrometers. Regardless of the material from which the overwrap is made or the thickness or weight of the material, the overwrap preferably provides sufficient flexibility to be rolled, in the case of an overwrap for an elongate cylindrical consumer good, and is sufficiently rigid so as to maintain a cohesive structure. This can preserve the integrity of the consumer goods. This may also help to maintain the consumer goods in a particular position within the container.

[0009] In some preferred embodiments, the entire overwrap remains within the interior of the housing of the container in which the consumer goods are disposed when the consumer good is withdrawn from the interior of the housing.

[0010] In other preferred embodiments, the overwrap comprises a first line of weakness positioned between a first portion of the overwrap and a second portion of the overwrap. The first line of weakness is configured to separate the first portion of the overwrap from the second portion of the overwrap when the consumer good is removed from the container.

[0011] The overwrap can include any suitable line of weakness configured to separate the first portion of the overwrap from the second portion of the overwrap when the consumer good is removed from the container. Preferably, the line

of weakness comprises a row of perforations. The term "row of perforations" is used herein to mean a plurality of perforations that extend in a line around the overwrap. When wrapped around an elongate cylindrical consumer good, the row of perforations extends generally in the circumferential direction. If the overwrap is unwrapped, the row of perforations extends generally in a direction perpendicular to the longitudinal axis of the consumer good, or in a "transverse direction".

[0012] The line of weakness can have any suitable perforation strength. Preferably, the line of weakness has perforation strength of less than about 10 Netwtons per 150 millimeters as measured when the first consumer good is removed from the container. Preferably, the line or weakness will have a perforation strength of greater than about 0.5 Newtons per 150 millimeters.

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[0013] The force required to break a row of perforations can be defined as the perforation strength. The perforation strength for a given row of perforations corresponds to the shear force in the direction along the row of perforations that is required to break the perforations. Perforation strength can be measured by attaching a first clamp to a first edge of the overwrap on a first side of the row of perforations and attaching a second clamp to a second edge of the overwrap on a second side of the row of perforations. The spacing between each of the clamps and the row of perforations is no more than 2 millimetres, and the test is conducted at 22 degrees Celsius and 60 percent relative humidity. The first and second clamps are then pulled away from each other to apply a shear force along the row of perforations. The shear force is increased incrementally until the row of perforations breaks, at which point the shear force corresponds to the perforation strength. The perforation strength is expressed as the shear force in Newtons per 150 millimetres, where the 150 mm refers to the length of the row of perforations.

[0014] The perforation strength test is preferably conducted on a sample of overwrap material having a row of perforations that is 150 millimetres long and which has not been wrapped around a consumer good. However, the test can also be conducted on a sample overwrap that has been removed from a consumer good. In this case, the overwrap should be separated from the consumer good and the test conducted as above. Depending on the length of the row of perforations of the sample, the force required to break the row of perforations can be scaled to provide the perforation strength in Newtons per 150 millimetres. For example, a force of 2 Newtons required to break an overwrap having a row of perforations with a total length of 25 millimetres can be scaled to give a perforation strength of 12 Newtons per 150 millimetres for the row of perforations.

[0015] For samples of overwrap material that have not been wrapped about at least a portion of a consumer good, each row of perforations preferably has a perforation strength of less than about 20 Newtons per 150 millimetres. Additionally, or alternatively, samples of unprocessed overwrap material may have a perforation strength of at least about 1 Newton per 150 millimetres.

[0016] For overwrap samples that have been removed from a consumer good, each row of perforations preferably has a perforation strength of less than about 10 Newtons per 150 millimetres. Additionally, or alternatively, overwrap samples that have been removed from a consumer good may have a perforation strength of at least about 0.5 Newtons per 150 millimetres.

[0017] In some preferred embodiments, the row of perforations of the line of weakness comprises uncut segments of overwrap between consecutive perforations, and wherein the total length of the uncut segments defines a percentage of hold in a range from about 15 percent to about 40 percent. A "percentage of hold" for a row of perforations can be used as an indication of the strength of the row of perforations and is defined as:

$$percentage \ of \ hold = \frac{total \ length \ of \ uncut \ segments}{total \ length \ of \ uncut \ segments + \ total \ length \ of \ perforations} \times 100$$

wherein the length of each uncut segment is the shortest distance along the overwrap between adjacent perforations, and wherein the length of each perforation is the shortest distance between the two circumferential extremities of the perforation. In the case of a circular perforation, the length of the perforation is the diameter of the circle.

[0018] The percentage of hold for a given row of perforations can be determined using the equation above after measuring the length of each perforation and the length of each uncut segment. The measurements can be made by viewing or imaging the row of perforations microscopically. A skilled person can readily determine the lengths of the perforations and the lengths of the uncut segments for a broken row of perforations as the individual perforations are still discernible between the broken portions of the uncut segments.

[0019] Preferably, the percentage of hold of each row of perforations is large enough to prevent premature breaking of the row of perforations during manufacture in which the overwrap is wrapped about the consumer good or during transportation and storage of the consumer good within a housing of a container prior to use by a consumer, but small enough to facilitate breaking of the row of perforations by the consumer. Preferably, the row of perforations has a percentage of hold in a range from about 15 percent to about 30 percent, more preferably from about 18 percent to about 25 percent.

[0020] As an alternative to a row of perforations, the line of weakness of the overwrap can comprise a continuous cut that extends around a substantial portion of the consumer good. In such embodiments, the continuous cut preferably extends around at least about 50 percent of the circumference of the overwrap, more preferably at least about 75 percent of the circumference of the overwrap, most preferably at least about 85 percent of the circumference of the overwrap. Preferably, the continuous cut extends around less than about 95 percent of the circumference of the overwrap.

[0021] The line of weakness, whether formed by perforations or a continuous cut, can be formed using any suitable cutting method and can be formed using an offline or an online process. For example, the line of weakness can be formed in an online process using a mechanical cutter or a laser to form cuts in a continuous sheet of material as it is pulled from a roll to form overwraps. Alternatively, the line of weakness can be formed online after each overwrap has been wrapped around the consumer good, using a laser kiss-cutting technique, for example.

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[0022] In some preferred embodiments, the consumer good can be removed from a container in which the consumer good is placed such that a second portion of the overwrap on one side of a line of weakness remains with the consumer good as the consumer good is removed from the container, while a first portion of the overlap on the other side of the line of weakness remains in the container. The consumer good can be disposed in the container such that the consumer will grasp the second portion of the overwrap to remove the consumer good from the container, thereby maintaining the second portion of the overwrap about the consumer good. In addition, or alternatively, at least a portion of the second portion of the overwrap is secured relative to the consumer good such that the second portion of the overwrap remains with the consumer good as the consumer good is removed from the container.

[0023] If the second portion of the overwrap is not secured relative to the consumer good, the second portion of the overwrap can be readily removed from the consumer good after the consumer good is removed from the container by, for example, grasping a portion of the consumer good about which the first portion of the overwrap was previously wrapped and withdrawing the consumer good from the second portion of the overwrap.

[0024] In some embodiments, at least a portion of the second portion of the overwrap is adhered to the consumer good or a portion thereof. In some embodiment, all or substantially the entire second portion of the overwrap is adhered to the consumer good or a portion thereof. In some embodiments, the second portion of the overwrap forms a part of the consumer good.

[0025] In some embodiments, a portion of the second portion of the overwrap is removable from the consumer good. By way of example, the overwrap can have a second line of weakness, which can be a line of weakness as described above, spaced apart from the first line of weakness. In some embodiments, a non-removable portion of the second portion of the overwrap between the first and second lines of weakness is secured to the consumer good by, for example, adhesive. The second line of weakness preferably has a larger percent of hold, perforation strength, or percent of hold and perforation strength than the first line of weakness to prevent premature breaking of the second line of weakness when the consumer good is removed from the container. Following removal of the consumer good and second portion of the overwrap from the container, the removable portion of the second portion of the overwrap can be removed from the consumer good by applying a force to break the second line of weakness.

[0026] Two or more consumer goods, each having an overwrap as described above, can be placed in a container. The container includes a housing that has a wall that at least partially defines an interior of the housing. A first portion of an overwrap of a first consumer good is secured to the wall of the housing, to an overwrap of a second consumer good, or to the wall of the housing and the overwrap of the second consumer good. When the first consumer good is removed from the interior of the housing, at least the first portion of the overwrap of the first consumer good remains within the housing due to, for example, breakage of the overwrap along the first line of weakness as described above and being secured to the wall of the housing, to the overwrap of the second article and, optionally, to overwraps of one or more additional consumer goods, or to the wall of the housing and to the overwrap of the second article and, optionally, to the overwrap of the second consumer good has a first portion that is secured to the wall of the housing, to the overwrap of the first consumer good and, optionally, to the overwraps of one or more additional consumer goods, or to the wall of the housing and the overwrap of the first consumer goods.

[0027] The container of consumer goods can contain any suitable number of consumer goods in addition to the first and second consumer goods. Preferably, each of the consumer goods includes a respective overwrap, such as an overwrap as described above. The overwraps of each consumer good can be secured relative to overwraps of one or more adjacent consumer goods within the interior of the housing, a wall of the housing, or adjacent overwraps and the wall of the housing. As with the first and second consumer goods discussed above, removal of each subsequent consumer good from the interior of the housing can result in at least a first portion of the respective overwrap remaining in the housing. In some embodiments, the overwraps of the consumer goods are arranged in a lattice structure, such as a honeycomb-shaped structure, in the interior of the housing of the container. This can preserve the integrity of the consumer goods. This may also help to maintain the consumer goods in a particular position within the container. Where the consumer goods are smoking articles, this may also prevent strands of loose tobacco material escaping from an open distal end of the smoking article.

[0028] The overwraps can be secured relative to each other or to the wall of the housing in any suitable manner. In some preferred embodiments, the overwraps are secured relative to each other or the wall of the housing with an adhesive. Any suitable adhesive can be used to secure the overwraps to each other or to the wall. Examples of suitable adhesives include drying adhesives, pressure-sensitive adhesives, contact adhesives, hot adhesives, and the like. Preferably, the adhesive is a hot-melt adhesive. In some embodiments, a hot-melt adhesive includes polyvinyl acetate, a wax or a combination of polyvinyl acetate and a wax.

[0029] The adhesive can be applied to the overwraps or the wall of the housing in any suitable manner. In some embodiments, adhesive is applied to the first portions of one or more overwraps of the overwrapped consumer goods before the overwrapped consumer goods are placed in the interior of the housing. The overwrapped consumer goods, of which at least one or more have adhesive applied to the first portion of the overwrap, can be contacted such that adjacent first portions of two or more consumer goods adhere to one another. The overwrapped consumer goods with adhered overwraps can then be placed into the housing. In addition, or alternatively, if the adhesive has not cured prior to placing the overwrapped consumer goods in the interior of the housing, those overwraps that contact an inner surface of a wall of the housing can adhere to the wall.

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[0030] Preferably, the housing comprises a box portion connected to a lid portion, for example by depending along a hinge line from a top edge of the box portion, with the lid portion being movable between an open position and a closed position. Preferably the box portion comprises a box portion front wall, a box portion back wall, first and second box portion side walls, and a box portion bottom wall. Preferably, the lid portion comprises a lid portion front wall, a lid portion back wall, first and second lid portion side walls, and lid portion bottom wall. Preferably, the box portion and the lid portion are formed from one or more folded laminar blanks.

[0031] The box portion, the lid portion, or both the box portion and the lid portion may be formed from any suitable materials including, but not limited to, cardboard, paperboard, plastic, metal, or combinations thereof. As described above, the box portion and the lid portion are preferably formed from one or more folded laminar blanks. The laminar blanks are preferably formed from cardboard, most preferably cardboard having a basis weight of between about 100 grams per square metre and about 350 grams per square metre.

[0032] Where the housing comprises a box portion connected to a lid portion, the first portion of the first overwrap is preferably secured to a wall of the box portion. In some embodiments, the first portion of the first overwrap can be secured directly to a wall of the box portion. Alternatively, the housing may further comprise a bundle wrapper, or inner liner, within the box portion, with the consumer goods being bundled in the bundle wrapper. In some such embodiments, the bundle wrapper may define the wall of the housing to which the consumer goods are secured. For example, adhesive could be placed on the inner surface of the bundle wrapper for securing the bundle wrapper to the first portion of the first overwrap. In such embodiments, adhesive can also be placed on the outer surface of the bundle wrapper, for securing the bundle wrapper to one or more walls of the box portion. The bundle wrapper, or inner liner, may be formed of a laminar material such as metal foil or a laminate of metal foil and paper.

[0033] For purposes of example, the present invention will be described in more detail with regard to its application for containers of smoking articles. The present invention can be used with any suitable smoking article. The term "smoking article" includes cigarettes, cigars, cigarillos and other articles in which a smokable material, such as a tobacco, is lit and combusted to produce smoke. The term "smoking article" also includes articles in which smokable material is not combusted, such as but not limited to smoking articles that heat a smoking composition directly or indirectly, or smoking articles that use air flow or a chemical reaction, with or without a heat source, to deliver nicotine or other materials from the smokable material. As used herein, the term "smoke" is used to describe an aerosol produced by a smoking article. An aerosol produced by a smoking article may be, for example, smoke produced by combustible smoking articles, such as cigarettes, or aerosols produced by non-combustible smoking articles, such as heated smoking articles or non-heated smoking articles.

[0034] Preferably, the smoking article is a smoking article for which the freshness or perception of freshness of the smoking article can be enhanced in accordance with the present invention. Preferably, the smoking article includes tobacco as a smokable material.

[0035] The smokable material can comprise a rod of smokable material. In some embodiments, the rod of smokable material is circumscribed by a rod wrapper.

[0036] Smoking articles in accordance with aspects of the present invention can include a mouthpiece downstream of the smokable material. The term "downstream" refers to relative positions of elements of the smoking article described in relation to the direction of mainstream smoke as it is drawn from a smokable material and into a user's mouth. The mouthpiece can be in axial alignment with the smokable material, which can be in the form of a rod.

[0037] The mouthpiece can include a filter. Accordingly, the filter is positioned downstream of the smokable material and can remove or reduce the amount of one or more constituent from mainstream smoke prior to entering a user's mouth. Any suitable smoking article filter can be employed. Preferably, the filter, if present, is formed from polymeric material. Examples of polymeric materials that can be employed to form smoking article filters include polylactic acid, cellulose esters, and blends thereof. Examples of cellulose esters that can be used to form polymeric filter material

include cellulose acetates, cellulose propionates and cellulose butyrates with varying degrees of substitution, as well as mixed esters thereof. Examples of such mixed esters include cellulose acetate propionate, cellulose acetate butyrate, and cellulose acetate propionate butyrate. A cellulose ester can be a secondary cellulose ester or can be a cellulose ester. Preferably, the polymeric filter material comprises cellulose acetate.

[0038] The mouthpiece, in some embodiments, can additionally include a plug wrap disposed about the filter.

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[0039] The smoking article can include a tipping wrapper that secures the mouthpiece to a rod of smokable material. The tipping wrapper can circumscribe the mouthpiece and at least a portion of the rod or rod wrapper, if present. The tipping wrapper can be adhered to the mouthpiece and at least a portion of the rod or rod wrapper using, for example, an adhesive as described above. In some embodiments, a second portion of an overwrap as described above is the tipping paper. In some embodiments, the second portion of the overwrap is disposed over the tipping paper.

[0040] In some embodiments, at least a portion of the second portion of the overwrap is removable by the consumer. In such embodiments, the second portion of the overwrap can serve to increase the hygienic nature or can be perceived to increase the hygienic nature of handling the smoking article. Some consumers consider it undesirable to handle the mouth end of a smoking article when removing it from a container, such as a pack, and then inserting the mouth end into their mouth. Accordingly, some consumers will consider more hygienic a smoking article that has an overwrap in which at least a portion is removable to expose an underlying mouthpiece of portion thereof.

[0041] In some embodiments, an upstream portion of the second portion of the overwrap can be attached to a down-stream portion of the smokable material, or a wrapper circumscribing at least a portion of the smokable material, and an upstream portion of the mouthpiece. Accordingly, the upstream portion of the second portion of the overwrap can attach the mouthpiece and the smokable material to one another. The downstream portion of the second portion of the overwrap may not be directly attached to the underlying portion of the mouthpiece.

[0042] To provide sufficient strength to the mouthpiece and to provide a desired level of stiffness for the consumer after the downstream tipping wrapper portion has been removed, the mouthpiece preferably comprises a mouthpiece wrapper, which can be a plug wrap, circumscribing one or more mouthpiece segments, the mouthpiece wrapper having a basis weight of at least about 50 gsm, preferably at least about 70 gsm. The mouthpiece wrapper preferably has a basis weight of less than about 125 gsm. Suitable mouthpiece wrappers include high basis weight plug wraps, also known as 'stiff' plug wraps. Preferably, the mouthpiece wrapper comprises a coating provided on at least a portion of an outer surface of the mouthpiece wrapper facing the overwrap. The coating is preferably provided on at least a downstream portion of the outer surface underlying the downstream overwrap portion. The coated surface of the mouthpiece wrapper preferably provides a similar sensation against the consumer's lips as a tipping wrapper. Suitable coating materials include lacquers, such as lip-release lacquers that may be applied to conventional tipping wrappers.

[0043] In some embodiments, the downstream overwrap portion extends downstream of the downstream end of the mouthpiece to define a recess at the mouth end of the smoking article. Providing a recess at the mouth end may provide an additional surface of the downstream overwrap portion which the consumer can grasp to effect removal of the downstream overwrap portion from the smoking article. In some embodiments, the mouth end edge of the downstream overwrap portion is not perpendicular to the longitudinal direction of the smoking article. Additionally, or alternatively, the mouth end edge of the downstream overwrap portion may define a non-linear shape, such as a wave shape. For example, in some embodiments the mouth end edge of the downstream overwrap may be shaped to form a tab which the consumer can grasp to remove the downstream overwrap portion from the smoking article.

[0044] According to various aspects of the present inventions, a smoking article includes mouthpiece attached to, and downstream of, a rod of smokable material. In some embodiments, a first portion, which remains in an interior of a housing of a container when the smoking article is removed from the container, of an overwrap is disposed around the entire rod of smokable material. In addition or alternatively, a second portion of the overwrap is secured to the mouthpiece of the first smoking article, such that the second portion of the overwrap remains with the smoking article when the smoking article is removed from the container. In some preferred embodiments, the second portion of the overwrap attaches the mouthpiece of the smoking article to the rod of smokable material. In some preferred embodiments, at least part of the second portion of the first overwrap is configured to be removable from the mouthpiece of the smoking article. For example, the overwrap can further comprise a second line of weakness. The second line of weakness can be configured to separate the at least part of the second portion of the first overwrap from the mouthpiece of the smoking article.

[0045] Two or more overwrapped smoking articles can be placed in a container, such as a pack. The overwrapped smoking articles can be adhered to one another, adhered to a wall of a housing of the container, or adhered to both the wall of the housing of the container and one another, as described above. During packaging of smoking articles, such as cigarettes, the smoking articles may be placed in a pack to form a lattice structure, such as a honeycomb-shaped structure.

[0046] Any container suitable for housing smoking articles can be employed in accordance with the present invention. Preferably, the container comprises a flip-top box or other rigid pack format.

[0047] All scientific and technical terms used herein have meanings commonly used in the art unless otherwise spec-

ified. The definitions provided herein are to facilitate understanding of certain terms used frequently herein.

[0048] As used herein, the singular forms "a", "an", and "the" encompass embodiments having plural referents, unless the content clearly dictates otherwise.

[0049] As used herein, "or" is generally employed in its sense including "and/or" unless the content clearly dictates otherwise..

[0050] As used herein, "have", "having", "include", "including", "comprise", "comprising" or the like are used in their open ended sense, and generally mean "including, but not limited to". It will be understood that "consisting essentially of", "consisting of", and the like are subsumed in "comprising," and the like.

[0051] The words "preferred" and "preferably" refer to embodiments of the invention that may afford certain benefits, under certain circumstances. However, other embodiments may also be preferred, under the same or other circumstances. Furthermore, the recitation of one or more preferred embodiments does not imply that other embodiments are not useful, and is not intended to exclude other embodiments from the scope of the disclosure, including the claims.

[0052] Referring now to the drawings, in which some aspects of the present invention are illustrated. It will be understood that other aspects not depicted in the drawings fall within the scope and spirit of the present invention. The drawings are schematic drawings and are not necessarily to scale. Like numbers used in the figures refer to like components, steps and the like. However, it will be understood that the use of a number to refer to a component in a given figure is not intended to limit the component in another figure labelled with the same number. In addition, the use of different numbers to refer to components in different figures is not intended to indicate that the different numbered components cannot be the same or similar to other numbered components.

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FIGS. 1-2 are schematic perspective views of embodiments of partially unrolled overwrapped smoking articles.

FIG. 3 is a schematic perspective view of an embodiment of a bundle of overwrapped smoking articles in which a portion of the overwraps of adjacent smoking articles are adhered to one another.

FIG. 4 is a schematic perspective view of an embodiment of a container in which overwrapped smoking articles can be placed.

FIG. 5 is a schematic perspective view of an embodiment of a container of overwrapped smoking articles.

FIGS. 6-7 are schematic cross sectional views of embodiments of containers of smoking articles.

[0053] Referring now to FIG. 1, an embodiment of a partially unrolled overwrapped smoking article 10 is depicted. The smoking article includes a mouthpiece 30 and a rod of smokable material 20, such as a tobacco rod. The mouthpiece 30 in the depicted embodiment includes a filter 70 and a plug wrap 60 that circumscribes at least a portion of the filter. A rod wrapper 40 circumscribes at least a portion of the rod of smokable material 20. The smoking article further includes a tipping wrapper 50 that circumscribes at least a portion of the plug wrap 60 and at least a portion of the rod wrapper 40 and secures the mouthpiece 30 relative to the rod 20 as is generally known in the art.

[0054] An overwrap 90 circumscribes at least a portion of the smoking article. The overlap has a line of weakness 92 that circumferentially extends around the smoking article when the overwrap 90 is disposed about the smoking article. The overwrap 90 comprises a first portion 93 upstream of the line of weakness 92 and a second portion 95 downstream of the line of weakness.

[0055] The overwrap 90 can be secured to an underlying portion of the overwrap in an area where the overwrap overlaps with itself when wrapped around the smoking article. For example, the overwrap 90 can be adhered to itself in a region of overlap.

[0056] If the overwrapped smoking article 10 is placed in a container upstream end first and if the first portion 93 of the overwrap 90 is secured to an overwrap of an adjacent overwrapped smoking article or a wall of a housing of the container, the first portion 93 of the overwrap 90 will remain in the container due to breakage of the overwrap 90 along the line of weakness 92 when a consumer grasps the overwrapped smoking article 10 around the second portion 95 of the overwrap 90 and removes the article from container.

[0057] Referring now to FIG. 2, another embodiment of a partially unrolled overwrapped smoking article 10 is depicted. The smoking article includes a mouthpiece 30 and a rod of smokable material 20, such as a tobacco rod. The mouthpiece 30 in the depicted embodiment includes a filter 70 and a plug wrap 60 that circumscribes at least a portion of the filter. A rod wrapper 40 circumscribes at least a portion of the rod of smokable material 20.

[0058] An overwrap 90 circumscribes at least a portion of the smoking article. The overwrap has a line of weakness 92 that circumferentially extends around the smoking article when the overwrap 90 is disposed about the smoking article. The overwrap 90 comprises a first portion 93 upstream of the line of weakness 92 and a second portion 95 downstream of the line of weakness. In the depicted embodiment, an optional second line of weakness 94 is shown. The second line of weakness 94 circumferentially extends around the smoking article when the overwrap 90 is disposed about the smoking article. The second portion 95 of the overwrap 90 includes a portion 99 downstream of the optional second line of weakness 94 and a portion 97 upstream of the optional second line of weakness 94.

[0059] The second portion 95 of the overwrap 90, or an upstream portion 97 thereof, can serve as a tipping wrapper

following removal of the first portion **93** of the overwrap when the smoking article is removed from a container housing the article. The second portion **95** of the overwrap **90**, or an upstream portion **97** thereof, can serve to secure the mouthpiece **30** relative to the rod **20**. For example, the second portion **95** of the overwrap **90**, or an upstream portion **97** thereof, can be adhered to an underlying portion of the plug wrap **60** and rod wrapper **40**.

[0060] The second line of weakness 94, if present, can allow a consumer to remove the downstream portion 99 of the overwrap 90 to expose a portion of the plug wrap 60. The plug wrap 60, or a portion that is exposed following removal of the downstream portion 99 of the overwrap 90, can be treated as described above.

[0061] Referring now to FIG. 3, a schematic perspective view of an embodiment of a bundle of overwrapped smoking articles is depicted. The bundle of overwrapped smoking articles includes at least first 10 and second 10' overwrapped smoking articles. The bundle of overwrapped smoking articles can be present in a container of smoking articles or can be placed in a container of smoking articles. In the depicted embodiment, each smoking article of the bundle is overwrapped with an overwrap 90, 90'. Each overwrap 90, 90' includes a line of weakness 92, 92' and has a first portion 93 upstream of the line of weakness 92, 92' and a second portion 95 downstream of the line of weakness. Adjacent overwraps 90, 90' in the bundle can be secured to one another, such as by an adhesive applied to the first portion 93 of one or more of the overwraps 90, 90'.

[0062] Referring now to FIG. 4, a schematic perspective view of an embodiment of a container 100 into which two or more overwrapped smoking articles can be place is depicted. The depicted container 100 includes a housing 110 having a wall 115 that at least partially defines an interior of the housing 110 into which the two or more overwrapped smoking articles can be placed. The depicted container 100 also includes a hinged lid 120 operably coupled to the housing 110. When closed, the hinged lid 120 prevents access to the interior of the housing 110. An optional sealing member 130, which can be a polymer film or the like, can be disposed about at least a portion of the housing 110 to seal the housing 110 prior to the lid 120 being opened by a consumer for a first time. The sealing member 130 can thus provide freshness or the perception of freshness of smoking articles disposed in the interior of the housing until the seal is broken. Thereafter, the overwraps of each individual smoking article disposed in the housing (such as an overwrapped smoking article 10, 10' depicted in FIG. 3) serves to keep the smoking articles fresh or serves to enhance the perception of freshness of the smoking articles.

[0063] Referring now to FIG. 5, an embodiment of a container of overwrapped smoking articles 200 is shown. In the depicted embodiment, a lid of the container is removed for purposes of illustration. The container of smoking articles 200 includes at least first 10 and second 10' overwrapped smoking articles disposed within an interior of a housing 110. As discussed above the overwraps of the smoking articles can be secured relative to one or more adjacent overwraps, to a wall of the housing 110, or to one or more adjacent overwraps and a wall of the housing.

[0064] Referring now to FIG. 6 and FIG. 7, schematic cross sectional views of embodiments of containers of smoking articles 200 are shown. The container of smoking articles 200 includes at least first 10 and second 10' overwrapped smoking articles and a wall 115 defining an interior of a housing, which can be a bundle wrapper, or inner liner, in some embodiments. The overwraps of adjacent smoking articles can be secured relative to one another, secured relative to the wall 115 of the housing, or secured relative to both the wall 115 of the housing and one another. In the embodiment depicted in FIG. 6, the overwraps of overwrapped smoking articles in the interior of the bundle are secured relative to overwraps of adjacent overwraps. Overwrapped smoking articles at the periphery of the bundle can be secured relative to adjacent overwraps, secured relative to an interior surface of the wall 115 of the housing, or secured relative to both the wall of the housing 115 and adjacent overwraps. In the embodiment depicted in FIG. 7, all of the overwrapped smoking articles have a portion at the periphery of the bundle and are in contact with or close proximity to a wall 115 of the housing. In this embodiment, adjacent overwraps need not, but can, be secured relative to one another because each overwrap can be secured relative to a wall 115.

[0065] Thus, methods, systems, devices, compounds and compositions for CONTAINER OF INDIVIDUALLY WRAPPED CONSUMER GOODS are described. Various modifications and variations of the invention will be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the described modes for carrying out the invention which are apparent to those skilled in cigarette manufacturing and packaging or related fields are intended to be within the scope of the following claims.

Claims

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1. A container of consumer goods, comprising:

a housing having a wall that at least partially defines an interior of the housing; at least a first consumer good and a second consumer good disposed in the interior of the housing; and

a first overwrap disposed around at least a portion of the first consumer good, and a second overwrap disposed around at least a portion of the second consumer good, wherein a first portion of the first overwrap is secured to the wall of the housing, secured to the second overwrap, or secured to both the wall of the housing and the second overwrap, so that at least the first portion of the first overwrap remains within the interior of the housing when the first consumer good is removed from the container.

- **2.** A container according to claim 1, wherein all of the first overwrap remains within the interior of the housing when the first consumer good is removed from the container.
- 3. A container according to claim 1, wherein the first overwrap comprises a first line of weakness positioned between the first portion of the overwrap and a second portion of the overwrap, and wherein the first line of weakness is configured to separate the first portion of the overwrap from the second portion of the overwrap when the first consumer good is removed from the container.
- 4. A container according to claim 3, wherein the first line of weakness comprises a row of perforations.

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- **5.** A container according to claim 4, wherein the first line of weakness has a perforation strength of less than about 10 Newtons per 150 millimeters as measured when the first consumer good is removed from the container.
- 6. A container according to claim 4 or claim 5, wherein the row or perforations of the first line of weakness comprise uncut segments of overwrap between consecutive perforations, and wherein the total length of the uncut segments defines a percentage of hold in a range from about 15 percent to about 40 percent.
 - 7. A container according to any preceding claim, wherein the consumer goods are smoking articles and each smoking article comprises a mouthpiece attached to a rod of smokable material, the rod of smokable material comprising smokable material circumscribed by a rod wrapper.
 - **8.** A container according to claim 7, wherein the first portion of the first overwrap is disposed around the entire rod of smokable material of the first smoking article.
 - **9.** A container according to claim 7 or claim 8, wherein the second portion of the first overwrap is secured to the mouthpiece of the first smoking article, such that the second portion of the overwrap remains with the first smoking article when the first smoking article is removed from the container.
- **10.** A container according to claim 9, wherein the second portion of the first overwrap attaches the mouthpiece of the first smoking article to the rod of smokable material of the first smoking article.
 - **11.** A container according to claim 9, wherein at least part of the second portion of the first overwrap is configured to be removable from the mouthpiece of the first smoking article.
 - **12.** A container according to claim 11, wherein the first overwrap further comprises a second line of weakness, the second line of weakness being configured to separate the at least part of the second portion of the first overwrap from the mouthpiece of the first smoking article.
- 45 **13.** A container according to any preceding claim, wherein the second overwrap comprises a first portion that is secured to the wall of the housing, secured to the first overwrap, or secured to both the wall of the housing and the first overwrap, so that at least the first portion of the second overwrap remains within the interior of the housing when the second consumer good is removed from the container.
- 14. A container according to any preceding claim, wherein the container further comprises one or more additional overwraps and one or more additional consumer goods, with each additional overwrap being disposed around a respective additional consumer good.
 - **15.** A container according to claim 14, wherein the overwraps are arranged in a lattice structure in the interior of the housing of the container.

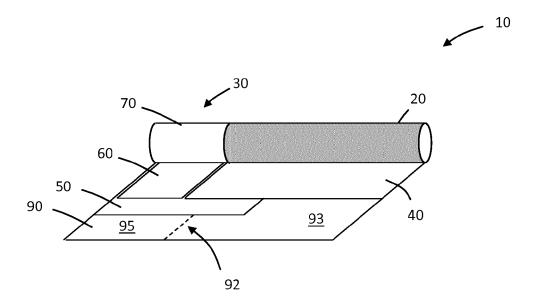


FIG. 1

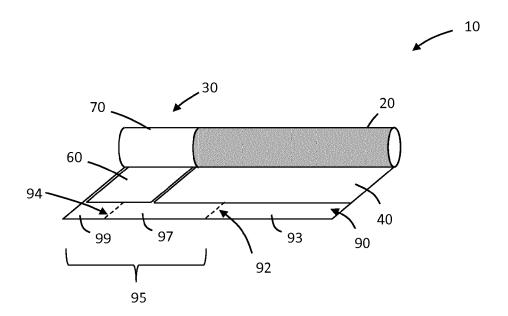


FIG. 2

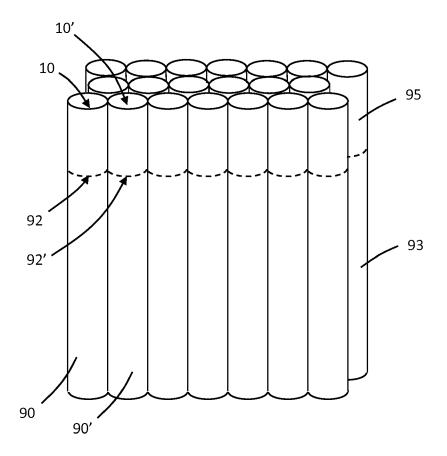
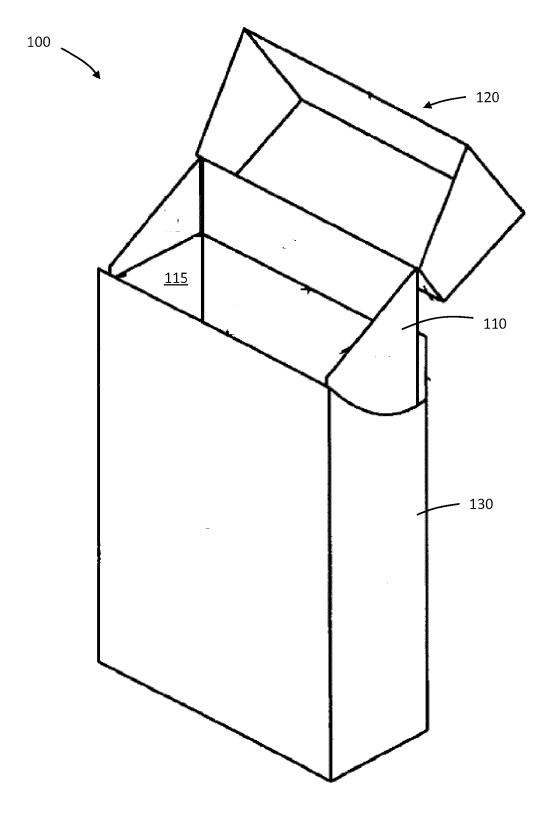


FIG. 3



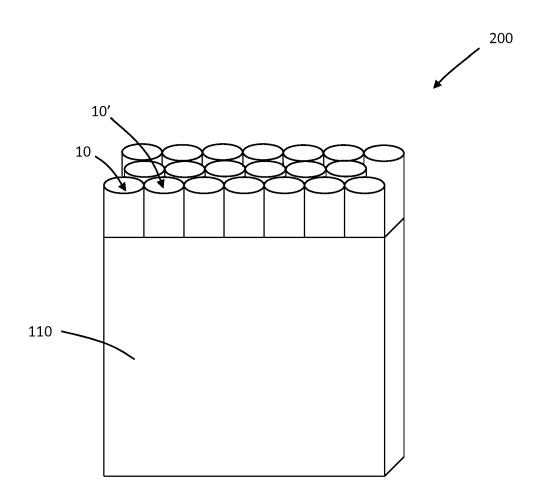


FIG. 5

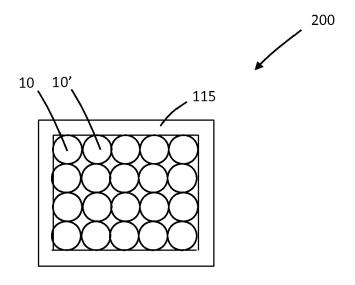


FIG. 6

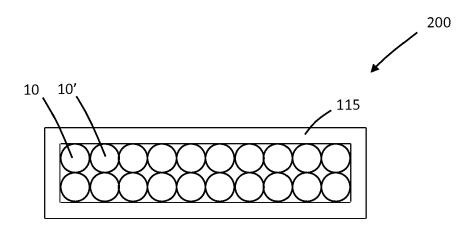


FIG. 7



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Application Number

EP 15 15 3347

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