



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

(21) International Application Number:
PCT/EP2017/078953

(22) International Filing Date:
10 November 2017 (10.11.2017)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
16198726.8 14 November 2016 (14.11.2016) EP

(71) Applicant: **PHILIP MORRIS PRODUCTS S.A.**
[CH/CH]; Quai Jeanrenaud 3, 2000 Neuchâtel (CH).

(72) Inventors: **BOURGOIN, Philippe**; Chemin du Crépon
12B, 1040 Echallens (CH). **DRAGHETTI, Fiorenzo**; Via
S. Donino 506, 40059 Medicina (IT).

(74) Agent: **CIVERA, Andrea**; Reddie & Grose LLP, The
White Chapel Building, 10 Whitechapel High Street, Lon-
don Greater London E1 8QS (GB).

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

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,

(54) Title: REINFORCED RESEALABLE CONTAINER FOR CONSUMER ARTICLES, METHOD

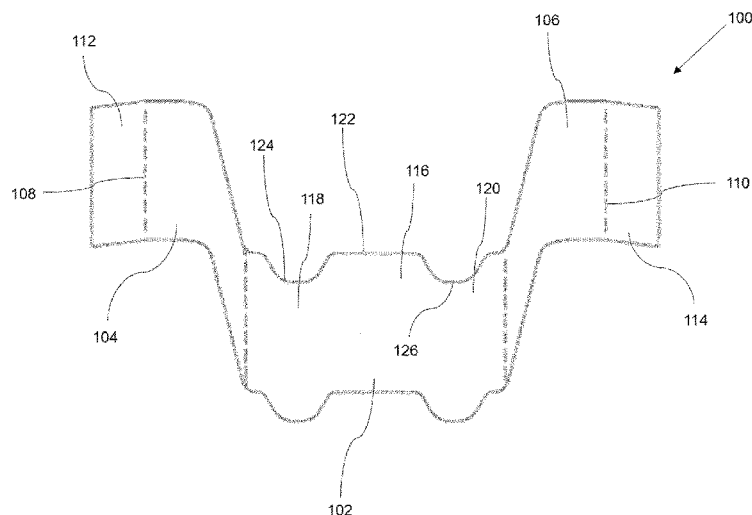


Fig. 1

(57) Abstract: A container for consumer goods comprises a resealable package of consumer goods, wherein the resealable package is formed from folding a blank to form a tubular wrapping about a group of consumer goods, side ends of the tubular wrapping being brought together and sealed to form side fin seals. Further, the container comprises a reinforcing member lying against an outer surface of at least a wall of the package. The reinforcing member comprises a pair of reinforcing member side walls and at least one reinforcing member back wall depending from a respective side wall.



MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

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

REINFORCED RESEALABLE CONTAINER FOR CONSUMER ARTICLES, METHOD

The present invention relates to a container for consumer goods comprising a sealing reclosable cover member. Containers in accordance with the present invention find particular application as containers for elongate consumer good items, such as smoking articles.

Smoking articles are typically packaged in rigid hinge-lid containers comprising a box and a lid hinged to the box along a hinge line extending across a back wall of the container. The bundle of smoking articles housed in the box is commonly wrapped in an inner liner, or package, of metallised paper, metal foil or other flexible sheet material.

Containers are known, for example from international patent application WO-A-2008/142540, wherein the smoking articles are enclosed in an inner package with an extraction opening removably closed by a cover label that is releasably affixed to the inner. Such packages may be received in a hinge-lid container, the cover label being glued permanently and non-removably to an inner surface of the front wall of the lid so that opening and closing of the lid simultaneously opens and closes the cover label, thus revealing the extraction opening.

Typically, a sealed inner package is formed with a transverse fin seal running across the front, bottom or back wall of the package. With regard to the sides, typically two side seals are formed along the side walls of the package. These may be envelope seals or fin seals, with fin seals being preferred in view of their generally better sealing performance. The two fin side seals can be folded towards the package front wall or towards the package back wall. Further, the two fin side seals can be folded onto the package side walls, and in some instances alternatively or additionally onto the package front wall or alternatively onto the package back wall. By way of example, this may be the case where a side fin seal is formed substantially at the edge between the package front wall and a package side wall.

The lid of a hinge lid container housing one or more of such an inner package may not close well if the lid interlocks with one or both of the side fin seals. In addition, the side fin seals may impair the appearance of the container, particularly when visible at the package top when the container is open.

Thus, it would be desirable to provide a novel and improved container for consumer goods comprising a reclosable adhesive label that addresses the drawbacks described above. In particular, it would be desirable to provide such a container for consumer goods that can easily be manufactured without requiring major modifications to existing equipment. Further, it would be desirable to provide a method for manufacturing such an improved container for consumer goods.

According to an aspect of the present invention, there is provided a container for consumer goods comprising a resealable package of consumer goods. The resealable package comprises a group of consumer goods and is formed from folding a blank to form a tubular wrapping about

a group of consumer goods, side ends of the tubular wrapping being brought together and sealed to form side fin seals. Further, the container comprises a reinforcing member lying against an outer surface of at least a wall of the package. The reinforcing member comprises at least a pair of reinforcing member side panels and at least one reinforcing member back panel depending from a respective reinforcing member side panel, the reinforcing member back panel being substantially parallel to a back wall of the package.

According to another aspect of the present invention, there is provided a method of manufacturing a container of consumer articles comprising: providing a group of consumer articles; forming a resealable package by folding a blank, wherein folding the blank comprises forming a tubular wrapping about the group of consumer goods, bringing together side ends of the tubular wrapping so that they overlie and sealing the overlying side ends to form side fin seals of the resealable package; providing a reinforcing member lying against an outer surface of at least a wall of the package, the reinforcing member comprising a pair of reinforcing member side panels and at least one reinforcing member back wall depending from a respective reinforcing member side panel; folding the reinforcing member side panels so that the reinforcing member back panel is substantially parallel to a back wall of the package and such that the side fin seals of the resealable package are folded towards a front or back of the resealable package and are held against the side walls of the resealable package.

It will be appreciated that any features described with reference to one aspect of the present invention are equally applicable to any other aspect of the invention.

As used herein, the terms "front", "back", "upper", "lower", "top", "bottom" and "side", refer to the relative positions of portions of containers according to the invention and components thereof when the container is in an upright position an access opening of the container at the top of the container. When describing containers according to the present invention, these terms are used irrespective of the orientation of the container being described. It will be understood that components of the container described by a same one of such terms are substantially parallel to one another. In particular, a panel of the reinforcing member will be parallel to a corresponding package wall. By way of example a reinforcing member side panel is parallel to a package side wall. The back wall of the outer hinge-lid housing is the wall comprising the hinge line.

When describing a container in accordance with the present invention, the term "longitudinal" refers to a direction from bottom to top or vice versa, whereas the term "transverse" refers to a direction perpendicular to the longitudinal direction. For example, a "longitudinal axis of the container" is an axis extending from bottom to top or vice versa.

The term "width" is used to describe the dimension of an element, such as a panel of a blank or a wall of a container as measured in the transverse direction. The term "panel" is used throughout this specification to refer to a portion of the blank that is used to form a wall in the assembled container. A panel may depend along one or more fold lines from one or more other

panels. The term “fold line” refers to a fold between two adjacent panels. When forming the container, adjacent panels are folded along their common fold line, which may come to define an edge of the container or of a portion of the container. In the assembled container a “wall” may be formed of one or of several overlying panels. Where there are several overlying panels, these may be attached to each other, for example by means of an adhesive. Further, a wall may be formed from two or more abutting or overlapping panels.

The term “height” is used to describe the dimension of one such element as measured in a direction perpendicular to the width of the element. When describing an element of the blank, reference is generally made to the element in the flat state of the blank.

The term “inner surface” is used throughout the specification to refer to the surface of a component of the assembled container that is facing towards the interior of the container, for example towards the consumer goods, when the container is in the closed position. The term “outer surface” is used throughout the specification to refer to the surface of a component of the container that is facing towards the exterior of the container. For example, the front wall of the container has an inner surface that is facing the inside of the container and the consumer goods, and an outer surface facing away from the consumer goods. It should be noted that the inside or outside surface is not necessarily equivalent to a certain side of a blank used in the assembly of the container. Depending on how the blank is folded around the consumer goods, areas that are on the same side of the blank can either face towards the inside or the towards the outside of the container.

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

The term “depending” is used herein to describe a physical connection between two elements of a container in accordance with the invention. In more detail, the term “depending” is used to indicate that there is a material continuity between two elements, such as two walls or panels of a container or blank. This encompasses both cases wherein a wall or panel depends directly from an adjacent wall or panel as well as cases wherein an intermediate wall or panel effectively connects two walls or panels. By way of example, the reinforcement member back panel lies in a plane substantially parallel to a plane defined by a back wall of the package. This is regardless of whether the reinforcement member back panel depends directly from a reinforcement member side panel or the reinforcement member comprises an intermediate panel connecting the reinforcement member back panel and the reinforcement member side panel.

By way of example, a side wall or panel may depend directly from an adjacent front wall or panel. In such case, the wall or panel typically depends along a fold line from the adjacent wall. As an alternative, especially in containers having curved or bevelled edges, a side wall or panel may depend indirectly from a front wall or panel. In such case a curved or bevelled edge wall or

panel connects the side wall or panel and the front wall or panel. In the case of a bevelled edge, both side wall or panel and front wall or panel may depend from the connecting bevelled edge wall or panel along respective fold lines. This also applies to component of a container in accordance with the invention, for example to a reinforcing member provided in the form of an inner frame.

The term "lines of weakness" is used herein to describe a portion of a surface of the package (or the blank from which the package is formed) wherein the structural strength of the material, from which the package (or blank) is formed has been weakened by any suitable technique, for example with respect to bending, folding or tearing along the line of weakness. For example, a line of weakness may be formed as a scoring line, a creasing line, an ablation line, or a perforation line. Lines of weakness can be created by removal of material, by displacement of material, by compression of material, by locally reducing the forces that hold the material together, such as by breaking fibres in a fibrous material, as well as by combinations of all the above. A line of weakness may be straight, curved, segmented or continuous or a combination thereof. In many instances, a line of weakness is used to assist in positioning a fold line in a blank. A line of weakness can also be used to strengthen the material in a direction perpendicular to the line of weakness, for example by compression. Further, a line of weakness can be used for decorative purpose.

The term "scoring line" is used to describe a line formed by partially cutting into the material of the blank. A scoring line may be formed by removing material from the blank (in which case the scoring line forms a groove or trough in the blank). As an alternative, a scoring line may be formed without removing any material from the blank, typically involving a partial sideways displacement and compression of material, caused by a knife with a non-zero thickness penetrating the material. The depth of the scoring line will be less than the thickness of the blank.

The term "creasing line" is used to describe a line formed by displacing a portion of the material vertical to the plane of the blank, forming a groove or trough in the blank. The displacement may involve compression and typically involves the use of a compression tool, such as a roller. Alternatively, or in addition, the material in the creasing line may be displaced so as to at least partially protrude from the opposite side of the blank. Generally, no material is removed when a creasing line is formed.

The term "ablation line" is used to describe a line formed by removing material from a surface of the blank to a predetermined depth by way of ablation (for example, by way of a laser beam or a blade).

The term "perforated line" is used to describe a line or sequence of discrete holes or slots in the blank. The holes may be formed by pushing an object through the blank. This may result in material being removed from the blank, for example by punching. Alternatively, the holes could be created without removing material, and instead simply using the object to push the material

outwardly from the centre of the hole. As another alternative, the holes may be formed by way of a laser beam.

The term "fold line" is used to describe any line of a blank about which the blank is folded. The fold line may be defined by a line of weakness to assist with the folding action. Alternatively, a fold can be formed without the presence of a weakening line, depending for example on the pliability of the blank material and other material characteristics.

A container for consumer goods in accordance with the present invention comprises a resealable package of consumer goods and a reinforcing member lying against an outer surface of at least a wall of the package. Reinforcing members of this type are also commonly referred to as inner frames. In more detail, the reinforcing member of a container in accordance with the invention comprises at least a pair of side panels and at least one back panel depending from a respective side panel. More complex structures are, however, possible for one such reinforcing member. For example, the reinforcing member may additionally comprise a front panel, top panel, a bottom panel or combinations thereof. In embodiments where the reinforcing member comprises one or more of a top panel, front panel or a bottom panel, the side panels may also depend from the top panel, front panel or the bottom panel.

In containers in accordance with the present invention, the reinforcing member side walls are advantageously used to hold the package side fin seals folded against the package side walls. Because of the reinforcing member a structural connection exists between the side and the back of the package, which advantageously counters the spring back force of fin seals. The side fin seals may be folded against the corresponding package side walls towards the package front wall or the package back wall.

Accordingly, it is particularly easy for a container in accordance with the invention to be received in a hinge lid housing, or for a hinge lid housing to be formed around one such container, because the occurrence of jams due to the presence of the side fin seals is advantageously significantly reduced.

Further, in those embodiments where one such container is received in a hinge lid housing, the hinge lid housing can be closed easily and reliably, because undesirable interferences between the lid and the side fin seals are also advantageously prevented. In addition, the side fin seals can be effectively hidden from the consumer's sight. In some preferred embodiments the reinforcing member side walls extend longitudinally all the way to the package top wall. This may be desirable, in that it may provide a container with an improved appearance.

Finally, containers according to the invention are easy to manufacture and do not require any extensive modification of existing packaging machinery.

The resealable package of a container in accordance with the present invention is formed by folding a blank of a web material around of group of consumer articles and sealing, for example

heat sealing, overlapping portions of the folded blank. The resealable package is preferably a rectangular parallelepiped comprising two wider walls spaced apart by two narrower walls.

Preferably, the web material of the resealable package comprises metal foil or metallised paper. The web material may be formed as a laminate of a metallised polyethylene film, and a
5 liner material. In a preferred embodiment, the web material is a laminate comprising a layer of aluminium sandwiched between two layers comprising oriented polypropylene. The aluminium layer provides desirable barrier properties to the resealable package and, as such, helps maintain the required moisture content within the resealable package. In this respect, it has been found that one such three-layer laminate web material displays improved barrier properties than
10 conventional metallised films. The web material may also be a supercalendered glassine paper. In addition, the web material may be provided with a print-receptive top coating.

In more detail, the blank is typically folded around the group of consumer articles, such as to define a first, short flap resting entirely against a first wall (for example, the front wall) of the group, and a second, long flap projecting from a second wall (for example, the back wall) of the
15 group opposite the first wall. The second flap is then folded over the first wall of the group to substantially form a tubular wrapping about the group. Side ends of such tubular wrapping are brought together so that they overlies and sealed to form side fin seals. The first and second flaps of the blank folded over the first (front) wall of the group are also sealed to form a transverse seal. This transverse seal may typically be formed before sealing the side ends of the tubular wrapping
20 to form the side fin seals. However, the opposite is also possible, and so in some methods the side fin seals may be formed before a transverse seal is formed over the first wall of the group.

Preferably, the resealable package has an access opening through which consumer goods can be removed and comprises a sealing reclosable cover member occluding the access opening, such that the cover member is movable from a closed position, wherein the cover member
25 overlies at least the access opening, and an open position, wherein the cover member is lifted off the outer surface of the package.

In some embodiments, the sealing cover member may be provided as a reclosable adhesive label extending beyond the periphery of the access opening of the package. In more detail, the reclosable adhesive label is permanently affixed to the package by a permanent
30 adhesive provided on a back hinge area of the inner surface of the reclosable adhesive label. Further, the reclosable adhesive label is at least partly releasably affixed to the package by a resealable adhesive provided on a second area of the inner surface of the reclosable adhesive label extending at least about a front edge of the access opening. The access opening in the package may be defined by a cut-out. As an alternative, lines of weakness – such as creased,
35 scored, ablated, perforated, pre-cut lines – may be formed in the package to delimit a package portion of the sealing cover member such that the package portion of the sealing cover member is partly separable from the remainder of the package to effectively form the access opening. In

such case, the reclosable adhesive label is permanently affixed to the package portion of the sealing cover member by permanent adhesive provided on a first area of the inner surface of the reclosable adhesive label extending over at least part of the package portion of the sealing cover member.

5 In other embodiments, the sealing cover member may comprise a reclosable adhesive label comprising at least a bottom layer and a top layer of label material. The bottom layer comprises a cut-out portion at least partly aligned with the access opening of the package, and is affixed to the package by means of a first, permanent adhesive provided on a first area of the inner surface of the bottom layer extending about the periphery of the access opening. The top layer is partly
10 permanently affixed to the bottom layer by means of a permanent adhesive provided on a back hinge area of the inner surface of the top layer. Further, the top layer is at least partly releasably affixed to the bottom layer by means of a second adhesive provided on a peeling area of the inner surface of the top layer extending distal from the hinge area, such that the top layer is movable from a closed position, wherein the top layer overlies at least the access opening, and an open
15 position, wherein the top layer is lifted off the bottom layer to reveal the cut-out portion.

In alternative embodiments, the package may be formed from a multi-layer laminate material and the sealing cover member may be formed in the outermost layer of the laminate material. In more detail, one such laminate comprises at least an outer layer and an inner layer. In order for the cover member to be separable from the remainder of the package upon opening
20 the lid for the first time, lines of weakness are formed in all the layers of the laminate structure. The lines of weakness in the outer layer delimit an outer panel of the cover flap and the lines of weakness in the inner layer delimit an inner panel of the cover flap, the outer panel of the cover flap directly overlying and being affixed to the inner panel of the cover flap. The lines of weakness in the outer layer and the inner layer are arranged such that the outer panel of the cover flap
25 extends beyond a periphery of the inner panel of the cover flap. Accordingly, an access opening defined in the inner layer when the cover flap is moved into the open position has a smaller surface area than an access opening defined in the outer layer when the cover flap is moved into the open position. In addition, a peripheral portion of the outer panel of the cover flap extends around the access opening defined in the inner layer when the cover flap is moved into the open position.
30 This is advantageous in that it helps provide a better closure of the package, such that it is easier to prevent the ingress of dust or other material into the package, as well as to prevent the loss of any content from the package. In addition, such embodiments have the advantage that there is no need for a further adhesive element overlying the package, which may simplify the manufacturing process.

35 In a preferred embodiment, the reinforcing member further comprises a reinforcing member front panel, the reinforcing member side panels depending from the reinforcing member front panel; the reinforcing member further comprising a pair of reinforcing member back panels

defining a reinforcing member back surface, each reinforcing member back panel depending from a respective reinforcing member side panel. This is advantageous in that one such reinforcing member may at least partly enclose a bundle of consumer articles wrapped in a parallelepiped package on all four sides, and can thus provide improved strength to the container. In addition, because of the continuity of the blank material from the front to the back of the package, with one such reinforcing member it is particularly easy to hold side fin seals of the package in place with good stability.

By way of example, the reinforcing member side panels may depend directly from the reinforcing member front panel along respective longitudinal fold lines. As an alternative, the reinforcing member may comprise connecting edge portions extending between the front panel and the side panels, such that the reinforcing member side panels may depend indirectly from the reinforcing member front panel. The reinforcing member back panel may depend directly from a respective side panel along a respective longitudinal fold line. As an alternative, the reinforcing member may comprise a connecting edge portion extending between the reinforcing member back panel and the reinforcing member side panel.

More preferably, the reinforcing member back panels are affixed to a back wall of the resealable package by attachment means provided on an inner surface of the at least one reinforcing member back panel or on an outer surface of the package back wall or on both. This is advantageous in that it further increases the stability and strength of the container and ensures that the side fin seals are firmly held into place in their folded arrangement. By way of example, the attachment means may comprise permanent adhesive provided on an inner surface of the back panels or on the outer surface of the package back wall or on both. Other suitable attachment means heat-sealable materials, or heat activated materials, including varnish, coatings, adhesives. .

In another embodiment, the reinforcing member comprises a reinforcing member front panel, a reinforcing member back panel and a reinforcing member bottom panel extending between the reinforcing member front panel and the reinforcing member back panel, the reinforcing member side panels depending from any one of the reinforcing member front panel, reinforcing member back panel and reinforcing member bottom panel. Such arrangement also further increases the stability and strength of the container whilst holding the side fin seals in place.

In another alternative embodiment the reinforcing member is formed only of a reinforcing member back panel and a couple of reinforcing member side panel, each reinforcing member side panel depending on a respective side from the reinforcing member back panel. The reinforcing member side panels may be affixed to the resealable package side walls. In this embodiment, the reinforcing member essentially embraces the resealable package at the back and the sides only, whilst still ensuring that the side fin seals are folded against the side walls of

the resealable package. Preferably, in those embodiments wherein the reinforcing member comprises a front panel, the reinforcing member front panel comprises an reinforcing member central front panel portion and reinforcing member side front panel portions extending transversely from the reinforcing member central front panel portion, a top edge of the reinforcing member central front panel portion being below top edges of the reinforcing member side front panel portions. This is advantageous in that the reinforcing member front panel portion covers less of the surface of the resealable package front wall, which may be used to increase the size of the access opening for easier removal of the consumer goods. Additionally, for embodiments of the container that comprise an insert located between the resealable package and the reinforcing member at the front of the container, the visible surface of the insert can be advantageously increased. This can facilitate removal of the insert by the consumer. Further, it can facilitate the handling and placement of the insert during production of the pack.

In another embodiment, the reinforcing member side walls depend, along respective longitudinal first fold lines, from the reinforcing member back panel.

In containers according to the present invention, the reinforcing member has a back width defined by the combined width of each one of the at least one reinforcing member back panel. By way of example, in those embodiments where the reinforcing member back panel extends all the way from one reinforcing member side wall to the other, the back width of the reinforcing member substantially corresponds to the width of such single reinforcing member back panel. In other embodiments, where the reinforcing member comprises a pair of back panels, each of which depends from a respective reinforcing member side panel and extends transversely to an intermediate location between the reinforcing member side panels, the back width of the reinforcing member substantially corresponds to the sum of the width of the two back panels.

Preferably, a back width of the reinforcing member back panel is at least 15 percent of a width of a back wall of the package. More preferably, a back width of the reinforcing member back panel is at least 20 percent of a width of a back wall of the package. In addition, or as an alternative, a back width of the reinforcement back panel is preferably less than about 30 percent of a back wall of the package. More preferably, a back width of the reinforcement back panel is less than about 25 percent of a back wall of the package. In particularly preferred embodiments, a back width of the reinforcement back panel is from about 20 percent to about 25 percent of a back wall of the package. This advantageously ensures that the benefit of preventing jams due to the side fin seals is achieved without excessively increasing the amount of material used for manufacturing the container. This is desirable in terms of cost efficiency. In addition, reinforcement members having a back width within such are easier to form and handle during manufacturing.

Preferably, a width of the reinforcing member back panel is at least 5 millimetres. More preferably, a width of the reinforcing member back panel is at least about 10 millimetres. In

addition, or as an alternative, a width of the reinforcing member back panel is less than about 20 millimetres. More preferably, a width of the reinforcing member back panel is less than about 15 millimetres. In particularly preferred embodiments, a width of the reinforcing member back panel is from about 10 millimetres to about 15 millimetres.

5 In some embodiments, a width of the reinforcing member back panel is substantially equal to the width of a back wall of the package.

A reinforced package as described above may be received within an outer housing comprising a box portion and a lid portion, wherein the lid portion is hinged to the box portion along a hinge line extending across a back wall of the outer housing. Thus a hinge lid container
10 is obtained.

The reclosable cover member of the resealable package is preferably permanently affixed to an inner surface of the lid portion, such that upon opening the lid portion the reclosable cover member is moved from the closed position towards the open position to at least partly reveal the access opening. In containers of this type it is particularly advantageous to provide a
15 reinforcement for the package whilst, at the same time, ensuring that the reinforcing member does not interfere with the reclosable adhesive label and, in particular, that any interference between the portion of the label affixed to the lid and the reinforcing member is prevented. Further, it is particularly important that the lid can be reclosed properly to improve the re-sealing of the package. Thus, it is highly advantageous to ensure that the side fin seals do not interfere with
20 the lid at any time during opening and closing of the container.

The outer housing is preferably a rectangular parallelepiped comprising two wider walls spaced apart by two narrower walls, and may be formed from a laminar blank of any suitable material or combination of materials, including, but not limited to, cardboard, paperboard, plastic, metal, or combinations thereof. Preferably, the blank is a laminar cardboard blank having a weight
25 of between about 100 grams per square metre and about 350 grams per square metre.

Preferably, the reinforcing member comprises a reinforcing member front panel and a top edge of the reinforcing member front panel is at least partly above a top edge of the box portion front wall. Even more preferably, the top edge of the reinforcing member front panel is also partly below the top edge of the box portion front wall.

30 Thus, the reinforcing member front panel provides a surface against which the lid portion front wall may lie in the closed position. This is advantageous in that it is easy for the lid front wall to be in alignment with the box portion front wall, such that the hinge lid outer housing presents a substantially flat front surface to the consumer. Additionally, such embodiments increase the available consumer communication space.

35 In alternative embodiments, the reinforcing member comprises a reinforcing member front panel and a top edge of the reinforcing member front panel is substantially entirely below a top

edge of the box portion front wall. This may advantageously facilitate the gluing operation by which the reclosable cover member is affixed to a surface of the lid during manufacturing.

Preferably, the reinforcing member side panels extend longitudinally above top edges of box portion side walls. More preferably, at least a portion of each reinforcing member side panel extends longitudinally up to a top wall of the sealed package. Thus, the reinforcing member side panels advantageously cover a top portion of the package side fin seals, such that the side fin seals are not visible for the consumer. This improves the appearance of the container.

In a preferred embodiment, the reinforcing member comprises a reinforcing member front panel; a pair of reinforcing member side panels depending from the reinforcing member front panel; and a pair of reinforcing member back panels each depending from a respective reinforcing member side panel; wherein the reinforcing member back panels extend longitudinally above a top edge of a back wall of the box portion.

The hinge-lid container may optionally comprise an outer wrapper, which is preferably a transparent polymeric film of, for example, high or low density polyethylene, polypropylene, oriented polypropylene, polyvinylidene chloride, cellulose film, or combinations thereof and the outer wrapper is applied in a conventional manner. The outer wrapper may include a tear tape. In addition, the outer wrapper may be printed with images, consumer information or other data.

Containers according to the invention find particular application as containers for elongate smoking articles such as, for example, cigarettes, cigars, cigarillos or other aerosol generators that rely on heating rather than burning tobacco, for example through an electrical heat source or carbon heat source. It will be appreciated that through appropriate choices of the dimensions thereof, containers according to the invention may be designed for different numbers of conventional size, king size, super-king size, slim or super-slim cigarettes. Alternatively, other consumer goods may be housed inside the container.

Through an appropriate choice of the dimensions, containers 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, containers according to the invention may be designed to hold a total of between ten and thirty smoking articles. The smoking articles may be arranged in different collations, depending on the total number of smoking articles.

A container of consumer articles in accordance with the present invention may be manufactured by a method comprising the steps of: providing a group of consumer articles; forming a resealable package by folding a blank, wherein folding the blank comprises forming a tubular wrapping about the group of consumer goods, bringing together side ends of the tubular wrapping so that they overlie and sealing the overlying side ends to form side fin seals of the resealable package; providing a reinforcing member lying against an outer surface of at least a wall of the package, the reinforcing member comprising a pair of reinforcing member side panels

and a reinforcing member back panel depending from at least one of the reinforcing member side panels; folding the reinforcing member side panels so that the side fin seals are folded towards a front or back of the resealable package and are held against the side walls of the resealable package.

5 The step of forming a tubular wrapping about the group of consumer goods preferably comprises a step of forming a transverse seal across a front wall of the group of consumer articles. As an alternative, the transverse seal may also be formed across the top wall of the group of consumer articles or the bottom wall of the group of consumer articles. In some embodiments, the transverse seal may also be formed at the edge between the bottom wall and the front wall of
10 the group of consumer articles.

In some preferred embodiments of the method, the side ends of the tubular wrapping are sealed to form side fin seals after forming the transverse seal. As an alternative, the side ends of the tubular wrapping may however be sealed to form side fin seals before forming the transverse seal.

15 Preferably, the method further comprises a step of affixing an inner surface to the reinforcing member to an outer surface of a back wall of the resealable package.

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

Figure 1 is a schematic top view of a blank for forming the reinforcing member of a container
20 in accordance with the present invention;

Figure 2 is a schematic perspective view of a container in accordance with the present invention; and

Figure 3 is a schematic partial perspective view of a hinge lid container comprising the container of Figure 2 received in the box portion of an outer housing.

25 A reinforcing member for a container according to the present invention may be formed from the laminar blank 100 shown in Figure 1. In more detail, the laminar blank 100 of Figure 1 is for forming a reinforcing member for at least partly enclosing a group of consumer articles, such as a bundle of smoking articles, wrapped in a liner to form a parallelepiped package. An example of one such arrangement is illustrated in Figure 2, which shows a container 300 according to the present invention. The container 300 comprises a reinforcing member 302 formed from folding
30 the blank 100 and a sealed package of consumer articles 304.

The laminar blank 100 comprises a front panel 102 for forming a reinforcing member front panel and side panels 104, 106 for forming reinforcing member side panels. The side panels 104, 106 depend, along respective longitudinal fold lines 108, 110 from the front panel 102.
35 Further, the laminar blank 100 comprises a pair of back panels 112, 114 for forming reinforcing member back panels.

Thus, in the assembled container 300, the reinforcing member 302 at least partly encloses the package 304 of consumer articles on all four sides. The side panels of the reinforcing member 302 advantageously hold in place the side fin seals of the package 304, such that they lie folded against the side walls of the package.

5 The front panel 102 comprises a central front panel portion 116 and side front panel portions 118, 120 extending transversely from the central front panel portion 116. A top edge 122 of the central front panel portion 116 is above top edges 124, 126 of the side front panel portions 118, 120.

10 The back wall of the package 304 has a width of about 60 millimetres and each back panel 112, 114 has a width of about 9 millimetres. Thus, a back width of each reinforcing member back panel 302 is about 15 percent of the width of the back wall of the package.

Further, the package 304 has an access opening through which consumer goods can be removed and comprises a reclosable sealing cover member 306 occluding the access opening. In more detail, the cover member 306 is movable from a closed position, wherein the cover member 306 overlies at least the access opening, and an open position, wherein the cover member 306 is lifted off the outer surface of the package.

15 The open position is illustrated in Figure 3, which shows a detail of a hinge lid container 400 comprising an outer housing 402 comprising a box portion 404, a lid portion 406, and the container 300 received within the box portion. The lid portion 406 is hinged to the box portion 404 along a hinge line extending across a back wall of the outer housing. The reclosable cover member 306 is permanently affixed to an inner surface of the lid portion 406, such that upon opening the lid portion 406 the reclosable cover member 306 is moved from the closed position towards the open position to at least partly reveal the access opening 308.

20 The reinforcing member side panels extend longitudinally above top edges of side walls of the box portion 404. In more detail, at least a portion of each reinforcing member side panel extends longitudinally up to a top wall of the sealed package 304. Further, Figure 3 illustrates how the reinforcing member back panel 312 extends across part of the back wall of the package 304. Because the reinforcing member effectively encloses the package 304 at the front, at the back and on the side, the risk of interference between the side fin seal underlying the reinforcing member and the cover member 306 and the lid portion 406 is advantageously greatly reduced.

25

30

CLAIMS

1. A container for consumer goods comprising:
a resealable package comprising a group of consumer goods, wherein the resealable
package is formed from folding a blank to form a tubular wrapping about the group of
consumer goods, side ends of the tubular wrapping being sealed to form side fin seals;
a reinforcing member lying against an outer surface of at least a wall of the package;
wherein the reinforcing member comprises a pair of reinforcing member side panels and
at least one reinforcing member back panel depending from a respective reinforcing
member side panel, the reinforcing member back panel being substantially parallel to a
back wall of the package.
2. A container according to claim 1, wherein the resealable package has an access opening
through which consumer goods can be removed and comprises a reclosable sealing cover
member occluding the access opening, such that the cover member is movable from a closed
position, wherein the cover member overlies at least the access opening, and an open position,
wherein the cover member is lifted off the outer surface of the package.
3. A container according to claim 1 or 2, wherein the reinforcing member further comprises
a reinforcing member front panel, the reinforcing member side panels depending from the front
wall; the reinforcing member further comprising at least one reinforcing member back panel
defining a reinforcing member back surface, the reinforcing member back panel depending from
a respective reinforcing member side panel.
4. A container according to claim 3, wherein the at least one reinforcing member back panel
is affixed to a back wall of the resealable package by attachment means provided on an inner
surface of the at least one reinforcing member back panel or on an outer surface of the package
back wall or on both.
5. A container according to claim 1 or 2, wherein the reinforcing member comprises a
reinforcing member front panel, a reinforcing member back panel and a reinforcing member
bottom panel extending between the reinforcing member front panel and the reinforcing member
back panel, the reinforcing member side panels depending from any one of the reinforcing
member front panel, reinforcing member back panel and reinforcing member bottom panel.
6. A container according to any one of claims 3 to 5, wherein the reinforcing member front
panel comprises a central front panel portion and side front panel portions extending transversely

from the central front panel portion, a top edge of the central front panel portion being above top edges of the side front panel portions.

7. A container according to claim 1, wherein the reinforcing member side panels depend from the reinforcing member back panel.

8. A container according to any one of claims 1 to 7, wherein a back width of the reinforcing member back panel is at least 15 percent of a width of a back wall of the package.

9. A container according to any one of claims 1 to 8, wherein a width of the reinforcing member back panel is at least 5 millimetres.

10. A hinge lid container for consumer articles comprising an outer housing comprising: a box portion;

a lid portion, the lid portion being hinged to the box portion along a hinge line extending across a back wall of the outer housing; and

a container according to any one of claims 2 to 9, wherein the reclosable cover member is permanently affixed to an inner surface of the lid portion, such that upon opening the lid portion the reclosable cover member is moved from the closed position towards the open position to at least partly reveal the access opening.

11. A hinge lid container according to claim 10, wherein the reinforcing member comprises a reinforcing member front panel and a top edge of the reinforcing member front panel is at least partly above a top edge of a front wall of the outer housing.

12. A hinge lid container according to claim 11, wherein the reinforcing member side panels extend longitudinally above top edges of side walls of the box portion.

13. A hinge lid container according to claim 12, wherein at least a portion of each reinforcing member side wall extends longitudinally up to a top wall of the sealed package.

14. A hinge lid container according to any one of claims 10 to 13, wherein the reinforcing member comprises a reinforcing member front panel; a pair of reinforcing member side panels depending from the reinforcing member front panel; and a pair of reinforcing member back panels each depending from a respective reinforcing member side wall; wherein the reinforcing member back walls extend longitudinally above a top edge of a back wall of the box portion.

15. A method of manufacturing a container of consumer articles comprising:
- providing a group of consumer articles;
- forming a resealable package by folding a blank, wherein folding the blank comprises
- 5 forming a tubular wrapping about the group of consumer goods, bringing together side
- ends of the tubular wrapping so that they overlie and sealing the overlying side ends to
- form side fin seals of the resealable package;
- providing a reinforcing member lying against an outer surface of at least a wall of the
- package, the reinforcing member comprising a pair of reinforcing member side panels and
- 10 at least one reinforcement back panel depending from at least one of the reinforcing
- member side panels;
- folding the reinforcing member side panels so that the reinforcing member back panel is
- substantially parallel to a back wall of the package and such that the side fin seals of the
- resealable package are folded towards a front or back of the resealable package and are
- held against the side walls of the resealable package.

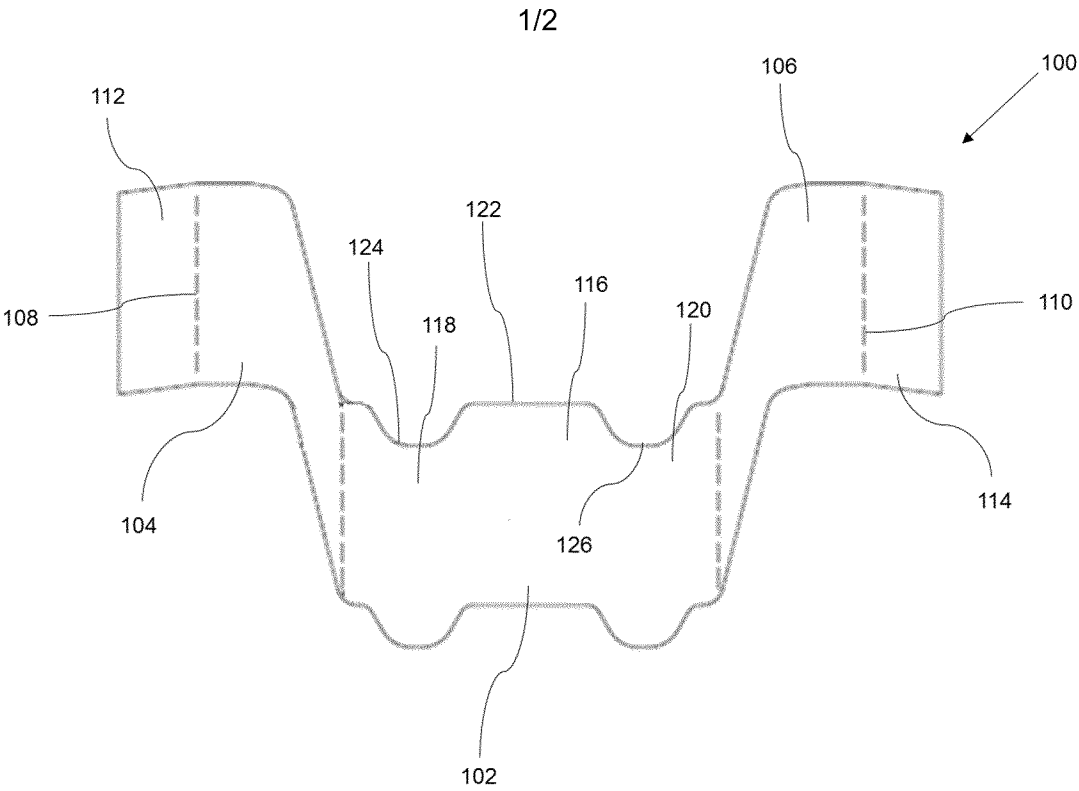


Fig. 1

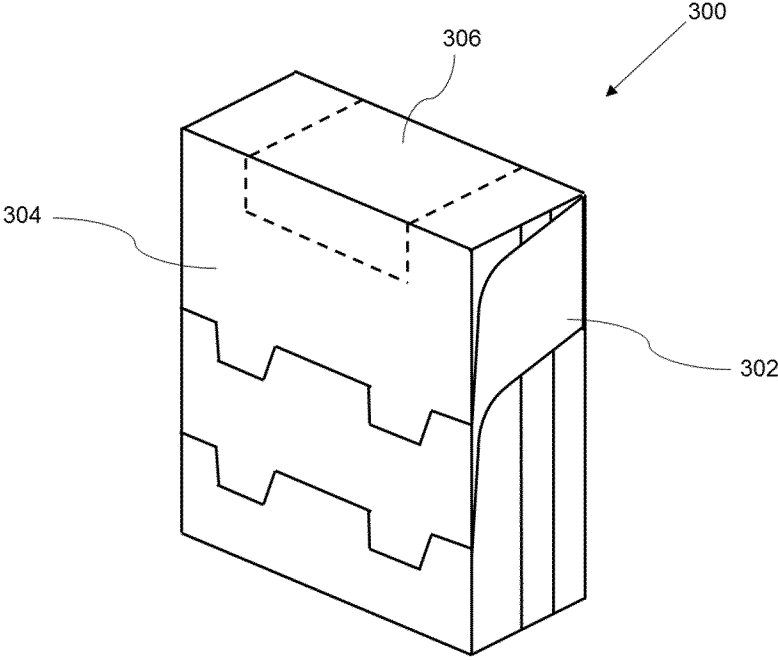


Fig. 2

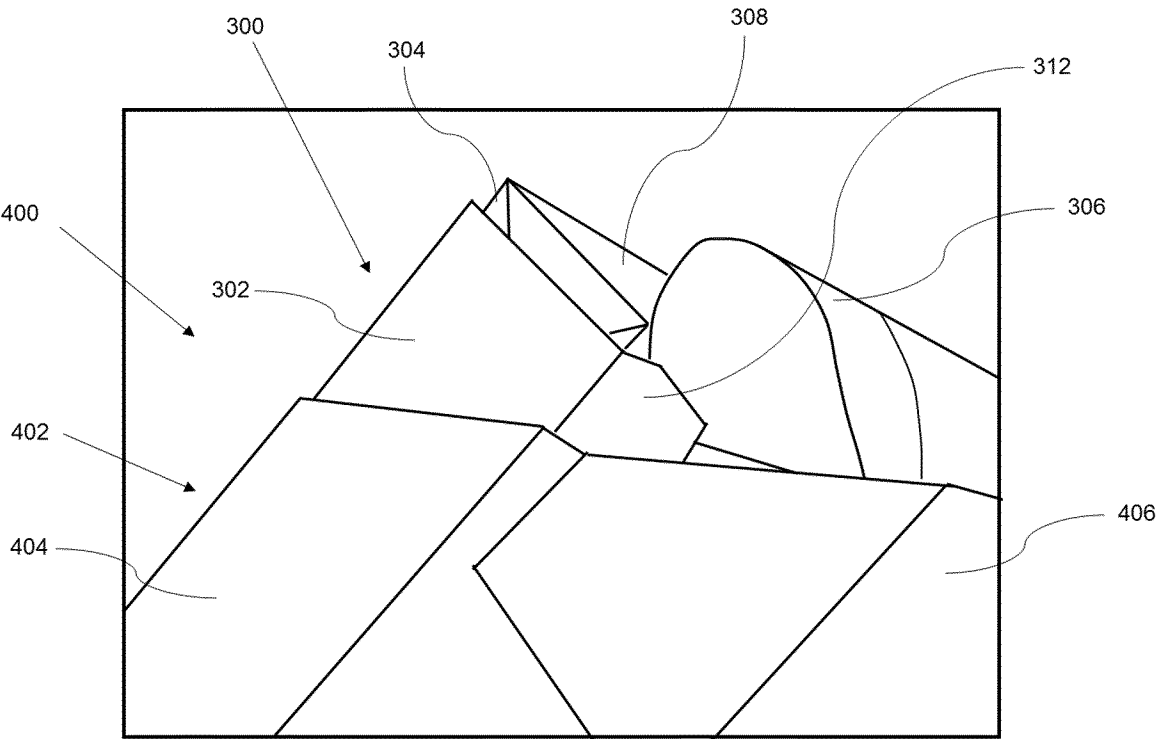


Fig. 3

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2017/078953

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65D85/10

ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2014/195008 A2 (FOCKE & CO [DE]) 11 December 2014 (2014-12-11) page 11, line 28 - page 12, line 21; figures 20-22 -----	1-15
X	DE 10 2009 034705 A1 (FOCKE & CO [DE]) 27 January 2011 (2011-01-27) paragraph [0030] - paragraph [0050]; figures 11,16 -----	1-15
X A	DE 10 2014 011396 A1 (FOCKE & CO [DE]) 11 February 2016 (2016-02-11) paragraph [0022] - paragraph [0041]; figures 1-6 -----	1-5, 7-13,15 6,14
X	DE 10 2014 116784 A1 (FOCKE & CO [DE]) 17 December 2015 (2015-12-17) paragraph [0103] - paragraph [0116]; figure 20 -----	1-15



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

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

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

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

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

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

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

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

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

"&" document member of the same patent family

Date of the actual completion of the international search

15 December 2017

Date of mailing of the international search report

22/01/2018

Name and mailing address of the ISA/

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

Authorized officer

Lämme1, Gunnar

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2017/078953

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2014195008 A2	11-12-2014	DE 102013009470 A1 EP 3003884 A2 WO 2014195008 A2	11-12-2014 13-04-2016 11-12-2014
DE 102009034705 A1	27-01-2011	DE 102009034705 A1 EP 2456685 A1 EP 2993143 A1 WO 2011009520 A1	27-01-2011 30-05-2012 09-03-2016 27-01-2011
DE 102014011396 A1	11-02-2016	CN 106573720 A DE 102014011396 A1 EP 3177547 A1 JP 2017526586 A US 2017203910 A1 WO 2016020032 A1	19-04-2017 11-02-2016 14-06-2017 14-09-2017 20-07-2017 11-02-2016
DE 102014116784 A1	17-12-2015	DE 102014116784 A1 EP 3154862 A1 JP 2017522238 A SG 11201610380U A US 2017107047 A1 WO 2015192925 A1	17-12-2015 19-04-2017 10-08-2017 27-01-2017 20-04-2017 23-12-2015