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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 April 2023 (20.04.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/062040 A1

(51) International Patent Classification:
B65D 63/10 (2006.01) *B65D 71/00* (2006.01)

(21) International Application Number:
PCT/EP2022/078310

(22) International Filing Date:
11 October 2022 (11.10.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
21202021.8 11 October 2021 (11.10.2021) EP

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

(72) Inventor: **VILAIN, Antoine**; Quai Jeanrenaud 3, 2000 Neuchâtel (CH).

(74) Agent: **NEVETT, Duncan**; The White Chapel Building, 10 Whitechapel High Street, London 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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

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

(54) Title: BUNDLE OF CONTAINERS

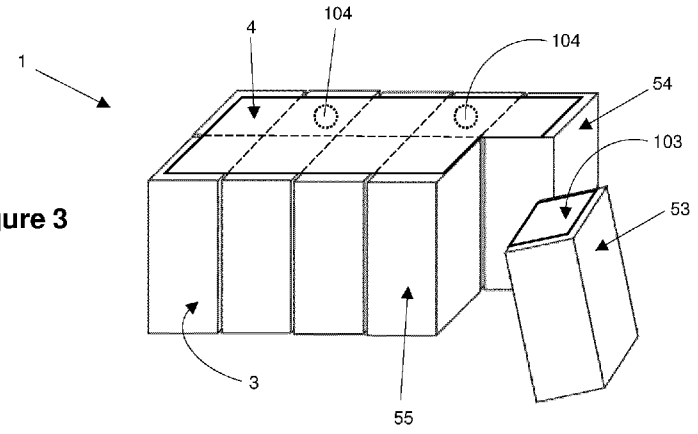


Figure 3

(57) **Abstract:** A bundle (1) of containers for consumer goods, the bundle (1) comprising: a group of containers (50) for consumer goods, each container comprising a first container wall (51), the group of containers being arranged such that the first container walls (51) collectively form a first face (4) of the bundle; and a strip (10) extending across at least the first face (4) of the bundle, the strip (10) being affixed to each of the first container walls (51) to thereby secure the group of containers together. The strip (10) comprises a plurality of lines of weakness (101, 102) each extending across the first face of the bundle. The lines of weakness (101, 102) are arranged such that each container in the group (50) of containers is separable from the group (50) of containers by tearing the strip along one or more respective lines of weakness (101, 102).

WO 2023/062040 A1

BUNDLE OF CONTAINERS

The present invention relates to a bundle for consumer goods and a wrapper thereof. Bundles according to the invention find particular application as bundles of a plurality of containers of consumer goods such as aerosol-generating articles.

It is generally known to package and sell aerosol-generating articles and other consumer goods in rigid box shaped containers. It is also known to display and sell containers for aerosol-generating articles and other consumer goods in multipacks or bundles containing a plurality of containers. The plurality of containers can be arranged in an array of rows and columns and may be wrapped in a transparent film wrapper to form a bundle of containers. Said wrappers are typically provided for one or both of storage and transport purposes. Alternatively or additionally, the plurality of containers may be placed in a display carton to form a bundle. The display carton may typically be made from a folded cardboard laminar blank, which forms a box in which the containers reside. The display carton may be used in addition to or in place of a transparent film wrapper, which is wrapped around the plurality of containers. This typically involves wrapping the transparent film wrapper around the entire bundle of containers and fully covering all six sides of the bundle.

In some known bundles, a wrapper surrounding the containers is provided with a tear strip or perforations to facilitate opening of the bundle. For example, a user of the bundle can tear along the strip or perforations such that a portion of the bundle wrapper can be lifted away or removed from the bundle to expose the containers within the wrapper.

Furthermore, in some conventional bundles, it can be necessary to first remove the plurality of containers from a surrounding display carton housing, and then subsequently remove a surrounding wrapper from the plurality of containers, before any of the containers can be fully accessed. In addition, or as an alternative, a surrounding display carton housing may itself be wrapped by a transparent wrapper, which must first be removed before the display carton housing can be accessed. Such arrangements may therefore be undesirably burdensome for those using or handling the bundle. Furthermore, such arrangements can involve the use of multiple different components, potentially formed of differing material. This may be undesirable for one or both of environmental and costs reasons.

It would therefore be desirable to provide a bundle of containers of consumer goods with a means for securely retain the plurality of containers together in a bundle, whilst also permitting easy access to the containers when desired, without suffering from one or more of the abovementioned drawbacks.

The present invention relates to a bundle of containers for consumer goods. The bundle may comprise a group of containers for consumer goods. Each container may

comprise a first container wall. The group of containers may be arranged such that the first container walls collectively form a first face of the bundle. The bundle may comprise a strip. The strip may extend across at least the first face of the bundle. The strip may be affixed to each of the first container walls to secure the group of containers together. The strip may comprise a plurality of lines of weakness. Each line of weakness may extend across the first face of the bundle. The plurality of lines of weakness may be arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more respective lines of weakness.

According to one aspect of the invention there is provided a bundle of containers for consumer goods comprising a group of containers for consumer goods, each container comprises a first container wall, the group of containers being arranged such that the first container walls collectively form a first face of the bundle; and a strip extending across at least the first face of the bundle, the strip being affixed to each of the first container walls to thereby secure the group of containers together, wherein the strip comprises a plurality of lines of weakness each extending across the first face of the bundle, the lines of weakness being arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more respective lines of weakness. The plurality of lines of weakness of the strip may be a plurality of interconnected lines of weakness each extending across the first face of the bundle.

In some embodiments, there is provided a bundle of containers for consumer goods comprising a group of containers for consumer goods, each container comprising: a first container wall; a housing for consumer goods; and an outer wrapper wrapped around the housing, the group of containers being arranged such that the first container walls collectively form a first face of the bundle; and a strip extending across at least the first face of the bundle, the strip being affixed to each of the first container walls to thereby secure the group of containers together, wherein the strip comprises a plurality of lines of weakness each extending across the first face of the bundle, the lines of weakness being arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more respective lines of weakness. The plurality of lines of weakness of the strip may be a plurality of interconnected lines of weakness each extending across the first face of the bundle. The outer wrapper of each container is formed of substantially the same material as the strip.

As described briefly above, the present invention relates to a bundle of containers of consumer goods. The bundle has a strip which can allow the containers to be held together in the bundle, yet also separated from one another by way of separation along the lines of weakness of the strip. The strip of the invention therefore provides a reliable means for

securely retaining the plurality of containers together in a bundle, whilst also permitting easy access to the containers when desired. The strip may help to securely retain the plurality of containers together in a bundle, whilst using less material than conventional means for such purposes. For example, the strip may use less material than a conventional transparent wrapper which fully surrounds the plurality of containers. The strip may also negate or reduce the need for a display carton housing for the bundle. The strip may therefore improve one or both of the environmental and cost credentials of the bundle.

By affixing the strip to each of the first container walls to thereby secure the group of containers together, whilst also providing the strip with the plurality of lines of weakness, it is possible to securely hold the containers together in the bundle, yet also allow the containers to be separated from one another. This can provide a convenient means for transporting and storing the containers, whilst also offering a convenient means for a user of the bundle to access each container when desired. By arranging for the lines of weakness to be interconnected with one another it is possible to offer improved flexibility to the user in respect of which container they wish to remove from the bundle. In particular, the interconnected nature of the lines of weakness may allow a user of the bundle to choose between several containers in the bundle which can be removed without first requiring removal of another container in the bundle. This may improve the flexibility of choice the consumer has in respect of the order in which they remove containers from a bundle.

The group of containers may be arranged in at least two rows, each row containing a plurality of containers. Each row may comprise at least two containers, more preferably at least four containers. Each row may consist of no more than ten containers. The group of containers may be arranged in no more than four rows, no more than three rows, or no more than two rows. In some embodiments, the group of containers is arranged in two rows, each row consisting of five containers. The containers may therefore be provided in a grid arrangement.

The group of containers may be grouped together such that each container abuts at least one other container of the group of containers. The group of containers may be grouped together such that a front, back or side wall of each container abuts with a corresponding front, back or side wall of at least one other container. The group of containers may be grouped together such that each container abuts at least two other containers of the group of containers.

As used herein, the terms “side”, “top”, “bottom”, “front”, “back” and other terms used to describe relative positions of the components of bundles according to the invention refer to the bundle in an upright position with the access openings of the plurality of containers of the bundle at the top. When describing bundles according to the present invention, these terms

are used irrespective of the orientation of the bundle being described. The “bottom” of the bundle refers to the side of the bundle opposite the “top” of the bundle.

The terms “face” and “wall” refers more generally to a facet of the bundle or a container of consumer goods. A face and a wall may be formed from a single panel or component of the bundle, or may be formed from two or more overlapping panels or components of the bundle. For example, where a container comprises a housing and a wrapper wrapped around the housing, a face or wall of the container may be formed by a wall of the housing and a portion of the wrapper overlapping said wall. By way of a further example, a face of the bundle may be formed by a wall of at least one container and a portion of the strip overlapping said wall or walls.

By way of example, a side wall or face may extend directly from an adjacent front wall or face. In such case, the wall or face typically depends along a fold line from the adjacent wall or face. As an alternative, especially in bundles having curved or bevelled edges, a side wall or ace may depend indirectly from a front wall or face. In such case a curved or bevelled edge connects the side wall or face and the front wall or face. In the case of a bevelled edge, both side wall or face and front wall or face may depend from the connecting bevelled edge wall or face along respective fold lines.

The term “line of weakness” is used herein to describe a portion of a surface of the bundle (or the blank from which the bundle is formed) wherein the structural strength of the material, from which the bundle (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. A line of weakness may be straight, curved, segmented or continuous or a combination thereof. 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. For example, a line of weakness may be formed as a scoring line, a creasing line, an ablation line, or a perforation line.

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, that is, by forming a groove or trough in the blank. As an alternative, a scoring line may be formed without removing any material from the blank. This would typically involve a partial sideways displacement and compression of material.

The term “creasing line” typically refers to a line formed by displacing a portion of the material substantially perpendicular to the plane of the blank, which results in the formation of a groove or trough in the blank. The displacement may involve compression and is typically achieved by means 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 instead to describe a line formed by removing material from a surface of the blank to a predetermined depth by way of ablation, such as by means of a laser beam or a blade.

The term “perforated line” describes a line or sequence of discrete holes or slots formed in the blank. The holes may be formed by pushing an object through the blank, which may result in material being removed from the blank, for example by punching. Alternatively, the holes may be created without effectively removing material, the object being used to push material outwardly from a centre of the hole.

As used herein, the term “susceptor element” refers to a material that can convert electromagnetic energy into heat. When located within a fluctuating electromagnetic field, eddy currents induced in the susceptor element cause heating of the susceptor element.

Each container of the bundle may comprise one or more of: a container top wall, a container bottom wall, a container front wall, a container back wall and first and second container side walls. In some embodiments, each container of the bundle comprises a container top wall, a container bottom wall, a container front wall, a container back wall and first and second container side walls.

The first container wall may be a container top wall. The first container wall may be a container bottom wall.

The bundle may comprise one or more of: a top face, a bottom face, a front face, a back face and first and second side faces. In some embodiments, the bundle comprises a top face, a bottom face, a front face, a back face and first and second side faces.

The first face of the bundle may be a top face of the bundle. The first face of the bundle may be a bottom face of the bundle bottom wall.

The bundle may be in the shape of a rectangular parallelepiped. The rectangular parallelepiped may comprise right-angled longitudinal and right-angled transverse edges. The bundle may comprise one or more rounded longitudinal edges, rounded transverse edges, bevelled longitudinal edges or bevelled transverse edges, or combinations thereof. The rectangular parallelepiped may comprise two wider faces or walls, such as a front and back face or wall, spaced apart by two narrower side faces or walls.

The strip may be individually affixed to each of the first container walls by means of an adhesive. That is, an adhesive may be provided between a portion of the strip and a corresponding portion of the first wall of a container in the group of containers to affix the strip to said container. Suitable adhesives include cyanoacrylate adhesives, UV curable adhesives,

methyl methacrylate adhesives, and epoxy adhesives. The adhesives may be water-based. The adhesives may be solvent-based.

The strip may be individually affixed to each of the first container walls by means of a weld. That is, a weld may be formed between a portion of the strip and a corresponding portion of the first wall of a container in the group of containers to affix the strip to said container. The weld may be formed by way of applying heat to the portion of the strip and the corresponding portion of the first wall of the container.

The strip may be individually affixed to the first container walls at one or more predefined locations. The plurality of lines of weakness may be spaced apart from said one or more predefined locations. In this way, it is possible to minimise or entirely avoid unintended interference between the lines of weakness and the means for affixing the strip to the first container walls. This may be particularly beneficial in embodiments where the group of containers are grouped together such that each container abuts at least one other container of the group of containers and where each line of weakness of the strip is positioned at a point at which two containers in the group of containers abut one another.

The strip may extend across only a portion of the first face of the bundle. The portion of the strip extending across the first face of the bundle may be spaced from at least one edge of the first face of the bundle. This may help to minimise or entirely avoid unintended interference between one or more edges of the strip and one or more edges of the bundle. This may also help to facilitate manufacture of the bundle, since it may allow for a greater tolerance between alignment of the strip with the plurality of containers.

The portion of the strip extending across the first face of the bundle may be spaced from at least a front edge of the first face of the bundle. The portion of the strip extending across the first face of the bundle may be spaced from at least a front edge of the first face of the bundle by a distance of at least 2 millimetres, by a distance of at least 5 millimetres, or by a distance of at least 10 millimetres.

The portion of the strip extending across the first face of the bundle may be spaced from at least a back edge of the first face of the bundle. The portion of the strip extending across the first face of the bundle may be spaced from at least a back edge of the first face of the bundle by a distance of at least 5 millimetres, more preferably by a distance of at least 10 millimetres.

The portion of the strip extending across the first face of the bundle may be spaced from at least a first side edge of the first face of the bundle. The portion of the strip extending across the first face of the bundle may be spaced from at least a first side edge of the first face of the bundle by a distance of at least 5 millimetres, more preferably by a distance of at least 10 millimetres.

The portion of the strip extending across the first face of the bundle may have a width which is less than the width of the first face of the bundle. The portion of the strip extending across the first face of the bundle may have a width which is at least 10 millimetres less than the width of the first face of the bundle. The portion of the strip extending across the first face of the bundle may have a width which is at least 20 millimetres less than the width of the first face of the bundle. The portion of the strip extending across the first face of the bundle may have a width which is at least 30 millimetres less than the width of the first face of the bundle.

The plurality of lines of weakness extending across the first face of the bundle may comprise a first group of lines of weakness extending in a first direction across the first face of the bundle and a second group of lines of weakness extending in a second direction across the first face of the bundle. The first direction may be substantially perpendicular to the second direction. The plurality of lines of weakness may be distributed in a grid or mesh arrangement. This may allow the lines of weakness to follow the pattern defined by the boundaries between the containers in the bundle.

Each line of weakness of the strip may comprise one or more of: an embossed line, a debossed line, a crease line, and a perforation line. Each line of weakness of the strip may comprise a perforation line.

Each line of weakness of the strip may be positioned substantially at a boundary between two containers in the group of containers. Each line of weakness of the strip may be positioned at a boundary between two containers in the group of containers. The boundary between two containers in the group of containers may be the point at which two containers in the group of containers abut one another.

Each line of weakness of the strip may be positioned no more than 5 millimetres away from a boundary between two containers in the group of containers. Each line of weakness of the strip may be positioned no more than 2 millimetres away from a boundary between two containers in the group of containers. Preferably, each line of weakness of the strip may be positioned to overlie a boundary between two containers in the group of containers.

Each container in the group of containers may further comprise a second container wall opposed to the first container wall. In such embodiments, the group of containers may be arranged such that the second container walls collectively form a second face of the bundle. In such embodiments, the strip may further extend across the second face of the bundle and be individually affixed to each of the second container walls to thereby secure the group of containers together. Accordingly, in such embodiments, the strip may secure the group of containers together across two faces of the bundle. This may help the containers to be better held together in a group, when compared to arrangements in which the group of containers are only secured together across a single face of the bundle.

The strip may further comprise a plurality of lines of weakness extending across the second face of the bundle. The plurality of lines of weakness extending across the second face of the bundle may be arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more of the lines of weakness extending across the second face of the bundle.

The plurality of lines of weakness extending across the second face of the bundle may be a plurality of interconnected lines of weakness each extending across the second face of the bundle. The plurality of lines of weakness extending across the second face of the bundle may comprise a first group of lines of weakness extending in a first direction across the second face of the bundle and a second group of lines of weakness extending in a second direction across the second face of the bundle. The first direction may be substantially perpendicular to the second direction.

Where the strip extends across a second face of the bundle, the strip may further extends across a third face of the bundle. The third face of the bundle may be positioned between the first face of the bundle and the second face of the bundle. That is, the third face of the bundle may connect the first face of the bundle to the second face of the bundle. The third face of the bundle may therefore be considered to extend from first face of the bundle to the second face of the bundle. The third face of the bundle may be substantially perpendicular to one or both of the first face of the bundle and the second face of the bundle.

Where the strip extends across a third face of the bundle, preferably, the strip is not affixed to the third face of the bundle. The portion of the strip extending across the third face of the bundle may comprise a label. The portion of the strip extending across the third face of the bundle may comprise one or more indicia. The one or more indicia may carry branding or other information, such as information related to any consumer goods contained in the containers of the group of containers. The portion of the strip extending across the third face of the bundle may be absent of any lines of weakness.

The third face of the bundle may be a first side face of the bundle. The third face of the bundle may be a face of the bundle defined by one or more container walls, which carry product information. The product information may be represented by one or more barcodes, such as a two-dimensional barcode. For example, if the containers are arranged in the bundle, such that one face of the bundle contains a barcode or barcodes, said face may be the third face of the bundle. Arranging for the strip to extend across this face of the bundle may be particularly advantageous as the strip may help to obscure the barcode or barcodes being carried by the walls defining said face. The strip may therefore help to prevent any inadvertent scanning of the barcode or barcodes of the individual containers when the containers are held together in the bundle. This may advantageously prevent inadvertent product identification,

which could lead to one or both of inadvertent handling and inadvertent transaction of the bundle.

The strip may only extend across the first face, second face and third face of the bundle. The strip may have a substantially C-shaped profile, when positioned on the bundle. This may provide a desirable balance between helping to secure the group of containers together, whilst also minimising the amount of material needed for the strip. This may facilitate one or more aspects of manufacture, for example, in comparison to bundles having two or more strips.

The strip may extend over no more than three faces of the bundle, the strip may extend over no more than two faces of the bundle or the strip may extend over no more than one face of the bundle.

In some embodiments, the strip extending across the first face of the bundle is a first strip of the bundle. Each container may further comprise a second container wall opposed to the first container wall, with the group of containers arranged such that the second container walls collectively form a second face of the bundle. In such embodiments, the bundle may further comprise a second strip, the second strip extending across the second face of the bundle and being individually affixed to each of the second container walls to thereby secure the group of containers together.

Accordingly, in some embodiments the bundle comprises two discrete strips, each extending across opposed faces of the bundle. Each strip may therefore be configured to secure the group of containers together across one face of the bundle. By arranging for the strips to be disposed on opposing sides of the bundle the strips can be particularly effective at securing the group of containers together.

Where the bundle comprises two discrete strips, the plurality of lines of weakness of the first strip may be referred to as a first set of lines of weakness, and the second strip may comprises a second set of lines of weakness. The second set of lines of weakness may extend across the second face of the bundle and be arranged such that each container in the group of containers is separable from the group of containers by tearing the second strip along one or more lines of weakness in said second set of lines of weakness. Each strip may therefore comprise its own set of lines of weakness. Removal of a first container from the bundle of containers may therefore be achieved by tearing each of the first and second strips along lines of weakness corresponding to the first container.

The second set of lines of weakness may be substantially aligned with the first set of lines of weakness. For example, each line of weakness in the second set of lines of weakness may have a corresponding line of weakness in the first set of lines of weakness. The correspondence between the lines of weakness may help to ensure each container is easily

removable from the bundle by separation of the first and second strips along said corresponding lines of weakness. Correspondence between a line of weakness in the first set with a line of weakness in the second set may be achieved by arranging for said lines to have substantially the same longitudinal and transverse positions on the bundle.

The second set of lines of weakness extending across the second face of the bundle may comprise a first group of lines of weakness extending in a first direction across the second face of the bundle and a second group of lines of weakness extending in a second direction across the second face of the bundle. The first direction may be substantially perpendicular to the second direction.

The first face of the bundle may be opposed to the second face of the bundle. The first face of the bundle may be a top face of the bundle and the second face of the bundle may be a bottom face of the bundle. The first face of the bundle may be a bottom face of the bundle and the second face of the bundle may be a top face of the bundle.

At least the portion of the strip extending across the first face of the bundle may be substantially transparent. Preferably, the entirety of the strip is substantially transparent.

The strip may comprises a polymeric film. The strip may be a polymeric film. The polymeric film may comprise polypropylene, such as bi-oriented polypropylene.

The strip may define an outer surface of the bundle of containers. That is, the strip may be an outermost component of the bundle.

The strip may extend over no more than three faces of the bundle, the strip may extend over no more than two faces of the bundle or the strip may extend over no more than one face of the bundle.

The strip may be a sheet of paper or paperboard. In some preferred embodiments, the strip may be a multi-layer sheet. The multi-layer sheet may comprise a cellulose base layer and a polymeric layer. The polymeric layer may be provided on one or both of the inner side of the cellulose base layer and the outer side of the cellulose base layer. Preferably, the polymeric layer is provided on the inner side (i.e. the side facing the contained containers) of the cellulose base layer. The polymeric layer may provide the strip with one or both of a moisture barrier and a heat sealable layer. The strip may have a thickness of between about 70 micrometres and about 110 micrometres. Such a strip may be preferable over other materials of strip for ease of manufacturing as it can be folded to form a bundle, without necessarily requiring any additional process steps, such as shrink wrapping. A paper strip may also enable the user to more easily separate a container from the bundle when desired. A paper strip may also be suitable for printing.

The bundle may comprise any suitable container for consumer goods. Each container in the group of containers may comprise a housing for consumer goods. Each container in the

group of containers may further comprise an outer wrapper wrapped around the housing. The outer wrapper of each container may entirely surround its respective housing. The housing may be formed from one or more folded laminar blanks. The one or more laminar blanks may be one or more cardboard laminar blanks.

The housing may have a first housing wall. The first housing wall may form the first container wall. Accordingly, the strip may be directly affixed to the first housing wall of each container.

Where each container comprises an outer wrapper wrapped around the housing, the first container wall may be formed by the first housing wall and a portion of the outer wrapper wrapped around the first housing wall. Put another way, the first housing wall and the portion of the wrapper wrapped around the first housing wall may collectively form the first container wall. In this way, the strip is individually affixed to a portion of the outer wrapper of each container.

The outer wrapper of each container may be substantially transparent. The outer wrapper of each container may comprise a polymeric film. The outer wrapper of each container may be a polymeric film. The polymeric film may comprise polypropylene, such as bi-oriented polypropylene. The outer wrapper of each container may be formed of substantially the same material as the strip. Such a configuration may advantageously reduce the visual impact of the strip on the bundle.

The housing of each container may comprise a box for housing the consumer goods. The box may comprise an opening for accessing the consumer goods, and one or more of: a box front wall, a box back wall, a box bottom wall, and first and second opposed box side walls.

The housing of each container may further comprise a lid hingedly connected to the box by a hinge line extending across the box back wall. The lid may be pivotable about the hinge line between a closed position in which the lid covers the opening of the box and an open position in which consumer goods can be removed from the box. The lid may comprise a lid front wall, a lid back wall, a lid top wall, and first and second opposed lid side walls.

The housing of each container may be in the shape of a rectangular parallelepiped. The rectangular parallelepiped may comprise right-angled longitudinal and right-angled transverse edges. The housing of each container may comprise one or more rounded longitudinal edges, rounded transverse edges, bevelled longitudinal edges or bevelled transverse edges, or combinations thereof. The rectangular parallelepiped may comprise two wider walls, such as a front and back wall, spaced apart by two narrower side walls.

Each container of the bundle may further comprise a plurality of consumer goods housed within each container. The plurality of consumer goods may be plurality of aerosol-generating articles.

Each aerosol-generating article may comprise an aerosol-generating substrate, which may comprise a nicotine-containing material, such as a tobacco material. Each aerosol-generating article may comprise a susceptor element. The aerosol-generating substrate may comprise the susceptor element.

The aerosol-generating articles may be filter cigarettes or other smoking articles in which an aerosol-generating substrate comprises a tobacco material that is combusted to form smoke. The aerosol-generating articles may be articles in which an aerosol-generating substrate, for example a tobacco material, is heated to form an aerosol, rather than combusted. The aerosol-generating articles may be articles in which a nicotine-containing aerosol is generated from a tobacco material, tobacco extract, or other nicotine source, without combustion, and in some cases without heating, for example through a chemical reaction.

The plurality of consumer goods may comprise a plurality of elongate articles, such as elongate aerosol-generating articles. Each elongate article may be substantially cylindrical.

Features described in relation to one example or embodiment may also be applicable to other examples and embodiments.

Below, there is provided a non-exhaustive list of non-limiting examples. Any one or more of the features of these examples may be combined with any one or more feature of another example, or embodiment described herein.

EX1. A bundle of containers for consumer goods, the bundle comprising: a group of containers for consumer goods, each container comprising a first container wall, the group of containers being arranged such that the first container walls collectively form a first face of the bundle; and a strip extending across at least the first face of the bundle, the strip being affixed to each of the first container walls to thereby secure the group of containers together, and wherein the strip comprises a plurality of lines of weakness each extending across the first face of the bundle, the lines of weakness being arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more respective lines of weakness.

EX2. A bundle of containers according to EX1, wherein the plurality of lines of weakness of the strip are a plurality of interconnected lines of weakness each extending across the first face of the bundle.

EX3. A bundle of containers according to EX1 or EX2, wherein the plurality of lines of weakness extending across the first face of the bundle comprise a first group of lines of

weakness extending in a first direction across the first face of the bundle and a second group of lines of weakness extending in a second direction across the first face of the bundle.

EX4. A bundle of containers according to EX3, wherein the first direction is substantially perpendicular to the second direction.

EX5. A bundle of containers according to any of EX1 to EX4, wherein the group of containers are arranged in at least two rows, each row containing a plurality of containers.

EX6. A bundle of containers according to EX3, wherein the group of containers are arranged in no more than four rows, no more than three rows, or no more than two rows.

EX7. A bundle of containers according to any of EX1 to EX6, wherein the first container wall is a container top wall or a container bottom wall.

EX8. A bundle of containers according to any of EX1 to EX7, wherein each container comprises a container top wall, a container bottom wall, a container front wall, a container back wall and first and second container side walls.

EX9. A bundle of containers according to any of EX1 to EX8, wherein the first face of the bundle is a top face of the bundle or a bottom face of the bundle.

EX10. A bundle of containers according to any of EX1 to EX9, wherein the bundle comprises a top face, a bottom face, a front face, a back face and first and second side faces.

EX11. A bundle of containers according to any of EX1 to EX10, wherein the strip is individually affixed to each of the first container walls by means of an adhesive.

EX12. A bundle of containers according to any of EX1 to EX11, wherein the strip is individually affixed to each of the first container walls by means of a weld.

EX13. A bundle of containers according to any of EX1 to EX12, wherein the strip is individually affixed to the first container walls at one or more predefined locations, and wherein the plurality of lines of weakness are spaced apart from said one or more predefined locations.

EX14. A bundle of containers according to any of EX1 to EX13, wherein the strip extends across only a portion of the first face of the bundle.

EX15. A bundle of containers according to any of EX1 to EX14, wherein the portion of the strip extending across the first face of the bundle is spaced from at least one edge of the first face of the bundle.

EX16. A bundle of containers according to EX15, wherein the portion of the strip extending across the first face of the bundle is spaced from at least a front edge of the first face of the bundle.

EX17. A bundle of containers according to EX15 or EX16, wherein the portion of the strip extending across the first face of the bundle is spaced from at least a back edge of the first face of the bundle.

EX18. A bundle of containers according to EX15 to EX17, wherein the portion of the strip extending across the first face of the bundle is spaced from at least a first side edge of the first face of the bundle.

EX19. A bundle of containers according to any of EX1 to EX18, wherein the portion of the strip extending across the first face of the bundle has a width which is less than the width of the first face of the bundle.

EX20. A bundle of containers according to any of EX1 to EX19, wherein each line of weakness comprises one or more of: an embossed line, a debossed line, a crease line, and a lines of perforation holes.

EX21. A bundle of containers according to any of EX1 to EX20, wherein each line of weakness comprises a lines of perforation holes.

EX22. A bundle of containers according to any of EX1 to EX21, wherein each line of weakness is positioned at or substantially at a boundary between two containers in the group of containers, and optionally wherein the boundary between two containers in the group of containers is the point at which two containers in the group of containers abut one another.

EX23. A bundle of containers according to any of EX1 to EX22, wherein each line of weakness is positioned no more than 5 millimetres away from a boundary between two containers in the group of containers, or no more than 2 millimetres away from a boundary between two containers in the group of containers.

EX24. A bundle of containers according to any of EX1 to EX23, wherein each container further comprises a second container wall opposed to the first container wall, wherein the group of containers are arranged such that the second container walls collectively form a second face of the bundle, and wherein the strip further extends across the second face of the bundle and is individually affixed to each of the second container walls to thereby secure the group of containers together.

EX25. A bundle of containers according to EX24, wherein the strip further comprises a plurality of lines of weakness extending across the second face of the bundle, and wherein the plurality of lines of weakness extending across the second face of the bundle are arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more of the lines of weakness extending across the second face of the bundle.

EX26. A bundle of containers according to EX25, wherein the plurality of lines of weakness extending across the second face of the bundle are a plurality of interconnected lines of weakness each extending across the second face of the bundle.

EX27. A bundle of containers according to EX25 or EX26, wherein the plurality of lines of weakness extending across the second face of the bundle comprise a first group of lines of

weakness extending in a first direction across the second face of the bundle and a second group of lines of weakness extending in a second direction across the second face of the bundle.

EX28. A bundle of containers according to EX27, wherein the first direction is substantially perpendicular to the second direction.

EX29. A bundle of containers according to any of EX24 to EX28, wherein the strip further extends across a third face of the bundle, the third face of the bundle extending from the first face of the bundle to the second face of the bundle.

EX30. A bundle of containers according to EX29, wherein the strip is not affixed to the third face of the bundle.

EX31. A bundle of containers according to EX29 or EX30, wherein the portion of the strip extending across the third face of the bundle comprises a label.

EX32. A bundle of containers according to any of EX24 to EX31, wherein the strip has a C-shaped profile.

EX33. A bundle of containers according to any of EX1 to EX23, wherein the strip extending across the first face of the bundle is a first strip of the bundle, wherein each container further comprises a second container wall opposed to the first container wall, wherein the group of containers are arranged such that the second container walls collectively form a second face of the bundle, and wherein the bundle further comprises a second strip, the second strip extending across the second face of the bundle and being individually affixed to each of the second container walls to thereby secure the group of containers together.

EX34. A bundle of containers according to EX33, wherein the plurality of lines of weakness of the first strip are a first set of lines of weakness, and wherein the second strip comprises a second set of lines of weakness, the second set of lines of weakness extending across the second face of the bundle and being arranged such that each container in the group of containers is separable from the group of containers by tearing the second strip along one or more lines of weakness in said second set of lines of weakness.

EX35. A bundle of containers according to EX33 or EX34, wherein the second set of lines of weakness extending across the second face of the bundle comprise a first group of lines of weakness extending in a first direction across the second face of the bundle and a second group of lines of weakness extending in a second direction across the second face of the bundle.

EX36. A bundle of containers according to any of EX24 to EX35, wherein: the first face of the bundle is a top face of the bundle and the second face of the bundle is a bottom face of the bundle; or the first face of the bundle is a bottom face of the bundle and the second face of the bundle is a top face of the bundle.

EX37. A bundle of containers according to any of EX1 to EX36, wherein at least the portion of the strip extending across the first face of the bundle is substantially transparent.

EX38. A bundle of containers according to any of EX1 to EX37, wherein the strip comprises a polymeric film.

EX39. A bundle of containers according to EX38, wherein the polymeric film comprises polypropylene, such as bi-oriented polypropylene.

EX40. A bundle of containers according to any of EX1 to EX39, wherein the strip defines an outer surface of the bundle of containers.

EX41. A bundle of containers according to any of EX1 to EX40, wherein: the strip extends over no more than three faces of the bundle; or the strip extends over no more than two faces of the bundle; or the strip extends over no more than one face of the bundle.

EX42. A bundle of containers according to any of EX1 to EX41, wherein each container in the group of containers comprises a housing for consumer goods.

EX43. A bundle of containers according to EX42, wherein each container in the group of containers further comprises an outer wrapper wrapped around the housing.

EX44. A bundle of containers according to EX43, wherein the housing has a first housing wall and the first container wall is formed by the first housing wall and a portion of the outer wrapper wrapped around the first housing wall, such that the strip is individually affixed to said portion of the outer wrapper of each container.

EX45. A bundle of containers according to EX43 or EX44, wherein the outer wrapper of each container is substantially transparent.

EX46. A bundle of containers according to any of EX43 to EX45, wherein the outer wrapper of each container comprises a polymeric film.

EX47. A bundle of containers according to any of EX43 to EX46, wherein the outer wrapper of each container is formed of substantially the same material as the strip.

EX48. A bundle of containers according to any of EX43 to EX47, wherein the outer wrapper of each container entirely surrounds its respective housing.

EX49. A bundle of containers according to any of EX42 to EX48, wherein the housing of each container comprises a box for housing the consumer goods, the box comprising an opening for accessing the consumer goods, a box front wall, a box back wall, a box bottom wall, and first and second opposed box side walls.

EX50. A bundle of containers according to EX49, wherein the housing of each container further comprises a lid hingedly connected to the box by a hinge line extending across the box back wall, the lid being pivotable about the hinge line between a closed position in which the lid covers the opening of the box and an open position in which consumer goods can be removed from the box.

EX51. A bundle of containers according to EX50, wherein the lid comprises a lid front wall, a lid back wall, a lid top wall, and first and second opposed lid side walls.

EX52. A bundle of containers according to any of EX1 to EX51, further comprising a plurality of consumer goods housed within each container.

EX53. A bundle of containers according to EX52, wherein the plurality of consumer goods are a plurality of aerosol-generating articles.

EX54. A bundle of containers according to any of EX1 to EX53, wherein the group of containers are grouped together such that each container abuts at least one other container of the group of containers.

EX55. A bundle of containers according to any of EX1 to EX54, wherein the group of containers are grouped together such that each container abuts at least one other container of the group of containers and where each line of weakness of the strip is positioned at a point at which two containers in the group of containers abut one another.

EX56. A kit of parts for forming a bundle of containers, the kit of parts comprising: a plurality of containers each comprising a first container wall, the plurality of containers being configured to be grouped together such that the first container walls collectively form a first face of the bundle; and a strip configured to extend across at least the first face of the bundle, the strip being configured to affix to each of the first container walls to thereby secure the group of containers together, and wherein the strip comprises a plurality of lines of weakness each extending across the strip, the lines of weakness being arranged such that, when the strip is affixed to the group of containers, each container in the group of containers is separable from the group of containers by tearing the strip along one or more respective lines of weakness.

EX57. A kit of parts for forming a bundle of containers according to any of EX1 to EX55.

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

Figure 1 shows a perspective view of a group of containers and a strip for forming a bundle of containers of consumer goods according to a first embodiment of the invention;

Figure 2 shows a perspective view of the bundle of containers of the first embodiment of the invention;

Figure 3 shows a perspective view of the bundle of containers of Figure 2 with one container having been removed from the bundle;

Figure 4 shows a perspective view of a group of containers and a strip for forming a bundle of containers of consumer goods according to a second embodiment of the invention;

Figure 5 shows a perspective view of the bundle of containers of the second embodiment of the invention;

Figure 6 shows a perspective view of a group of containers and two strips for forming a bundle of containers of consumer goods according to a third embodiment of the invention;

Figure 7 shows a perspective view of the bundle of containers of the third embodiment of the invention; and

Figure 8 shows a container suitable for use in the bundle of the first, second or third embodiments.

Figure 1 shows a group of containers 50 and a strip 10 for forming a bundle 1 of containers of consumer goods according to a first embodiment of the invention. Each container in the group 50 is in the shape of a rectangular parallelepiped having a container front wall, container back wall, container top wall 51, container bottom wall and first and second container side walls. For simplicity of illustration, certain details and features of the containers 50 (such as a lid) are not shown in any of Figures 1 to 7. However, further details of an exemplary container can be seen in Figure 8. The containers 50 are grouped together such that a front, back or side wall of each container abuts with a corresponding front, back or side wall of at least one other container. The containers are shown in an upright orientation. The containers are grouped into two rows, each row containing five containers.

When grouped together in the manner shown in Figures 1 and 2, the top walls 51 of the containers collectively form a top face 4 of the bundle 1. The bundle 1 also has a front face 3, a first side face 5, a back face, a bottom face, and a second side face. The bundle 1 therefore generally has the shape of a rectangular parallelepiped. The back face, bottom face, and second side face of the bundle 1 are not visible in the perspective view of Figures 1 and 2.

Figures 1 and 2 also shows a strip 10, which is used for forming the bundle 1 of the first embodiment. The strip 10 has a generally rectangular shape and is configured to overlie the top wall 51 of each container. This can be best appreciated from Figure 2.

As best seen from Figure 3, the strip 10 is individually affixed to the first container wall 51 of each container at a predefined location 104. The predefined location 104 is generally centrally located on each first container wall 51, and spaced apart from the plurality of lines of weakness. That is, each line of weakness does not overlie a location where the strip is affixed to a first container wall 51.

The strip 10 can be affixed to each first container wall 51 by way of one or both of a weld and an adhesive between the strip 10 and the first container wall 51 of each container. For ease of illustration, the location 104 at which the strip is affixed to each container is only shown in respect of two containers in the group of containers 50 of Figures 1 to 3. However, it will be appreciate that corresponding locations are present for the remaining eight containers in the group of containers 50 of Figures 1 to 3.

The strip 10 comprises a plurality of lines of weakness extending across the strip 10. Each line of weakness may be formed by a line of perforation holes in the strip 10. The plurality of lines of weakness are interconnected with one another, and form an interconnected network of lines of weakness. In the specific embodiment of Figures 1 to 3, the plurality of lines of weakness are distributed in a grid or mesh arrangement.

The plurality of lines of weakness of the strip 10 comprise a first group of lines of weakness 101 extending in a first direction across the top face 4 of the bundle 1 and a second group of lines of weakness 102 extending in a second direction across the second face of the bundle. The first direction is substantially perpendicular to the second direction. The first direction generally corresponds to the direction between the front face 3 and back face of the bundle 1. The second direction generally corresponds to the direction between the first side face 5 and the second side face of the bundle 1.

As best appreciated from Figures 2 and 3, the strip 10 is secured to the containers 50 such that each line of weakness of the strip 10 is positioned at a boundary between two containers in the group of containers 50. As best appreciated from Figure 3, the manner in which the strip 10 is affixed to the containers 50 and the arrangement of the lines of weakness 101, 102 is such that each container in the group of containers 50 is separable from the group of containers 50 by tearing the strip 10 along one or more respective lines of weakness. In particular, Figure 3 shows the bundle 1 in a configuration where a first container 53 has been removed from the bundle 1. The first container 53 has been removed from the bundle 1 by tearing the strip 10 along lines of weakness 105, 106 corresponding to the first container 53. These lines of weakness 105, 106 are each positioned at a boundary where the first container 53 abuts an adjacent container. Namely, line of weakness 105 resides at the boundary between the first container 53 and a second container 54, whilst line of weakness 106 resides at the boundary between the first container 53 and a third container 55. As the strip is individually affixed to the first container 53, when such separation occurs, a portion of the strip 103 is removed from the bundle 1 along with the first container 53.

After the first container 53 has been removed from the bundle 1, the remaining containers of the bundle 1 remain intact and securely held together by the strip 10. A user of the bundle 1 can then choose a further container to remove from the bundle 1 by tearing the strip 10 along lines of weakness corresponding to said further container. Due to the configuration of the lines of weakness, the user is able to choose any of the remaining containers in the bundle 1.

Figure 4 shows a perspective view of a group of containers 50 and a strip 20 for forming a bundle 21 of containers of consumer goods according to a second embodiment of the invention. The group of containers of Figure 4 are substantially the same as those of Figures

1 to 3. The strip 20 of Figure 4 comprises a first portion 100, which is substantially the same as the strip 10 of Figures 1 to 3. That is, the first portion 100 of the strip 20 is configured to overlie the top face 4 of the bundle 21 in the same manner as shown in Figures 1 to 3 with respect to strip 10. However, strip 20 also further comprises a second portion 200, which is configured to overlie the bottom face of the bundle and be individually affixed to each container bottom wall (see Figure 5). The second portion 200 of the strip 20 may therefore also help to securely hold the group of containers 50 together.

The strip 20 also comprises a third portion 300, which connects the first portion 100 to the second portion 200. As best seen from Figure 5, the third portion 300 of the strip 20 is configured to overlie the first side face 5 of the bundle 21. The third portion 300 is not affixed to the containers of the bundle forming the first side face 5 of the bundle 21. The third portion 300 carries an indicia 305, which may convey branding or other information, such as information related to any consumer goods contained in the containers of the bundle 21.

In the strip 20 of Figures 4 and 5, the plurality of lines of weakness 101, 102 of the first portion 100 can be referred to as a first set of lines of weakness. Similarly, it can be seen that the second portion 200 also carries a plurality of lines of weakness 201, 202 and these lines of weakness 201, 202 can be referred to as a second set of lines of weakness.

As best seen from Figure 5, in the assembled bundle 21 of the second embodiment, the second set of lines of weakness 201, 202 extend across the bottom face of the bundle 21 and are arranged such that each container in the group of containers 50 is separable from the group of containers by tearing the strip 20 along one or more lines of weakness in said second set of lines of weakness 201, 202. In particular, in the second embodiment of Figures 4 and 5, the strip 20 needs to be torn along both the first portion 100 and the second portion 200 in order for a container to be removed from the bundle 21.

As also seen from Figure 5, in the assembled bundle 21 the second set of lines of weakness 201, 202 are substantially aligned with the first set of lines of weakness 101, 102. Furthermore, each line of weakness 201, 202 of the second portion 200 of the strip 20 is positioned at a boundary between two containers in the group of containers 50.

Figure 6 shows a perspective view of a group of containers 50 and two strips 10, 30 for forming a bundle 31 of containers of consumer goods according to a third embodiment of the invention. The group of containers of Figure 6 are substantially the same as those of Figures 1 to 5. The strips 10, 30 of Figure 6 may be considered equivalent to the strip 20 of Figure 4, in which the third portion 300 of the strip 20 has been removed. Put another way, in Figure 6, there is a first strip 10 identical to the strip 10 of Figures 1 to 3, and a second discrete strip 30, which is equivalent to the second portion 200 of the strip 20 of Figures 4 and 5.

The second strip 30 is therefore configured to overlie the bottom face of the bundle 31 and be individually affixed to each container bottom wall (see Figure 7). The second strip 30 may therefore also help to securely hold the group of containers 50 together.

The strips 10, 30 of Figures 6 and 7 therefore function in a similar manner to the strips 10, 20 previously described in respect of the embodiments of Figures 1 to 5, details of which will be readily understood by one of skill in the art.

Figure 8 shows a container 800 suitable for use in the bundle of the first, second or third embodiments. The container is a hinged-lid container of the type known to one of skill in the art of packaging for aerosol-generating articles. The container 800 contains a wrapped bundle of consumer goods 70, such as a bundle of cigarettes or aerosol-generating articles in which an aerosol-generating substrate, for example a tobacco material, is heated to form an aerosol, rather than combusted. The container is formed from a folded laminar blank and has a lid portion 40 and a box portion 60. The lid portion has a first lid side wall 41, a second lid side wall 42, and a lid top wall 46. The lid portion also has a lid front wall 45 and a lid back wall (not shown in Figure 8). The box portion 60 has a box front wall 65, and a first box side wall 61. The box portion 20 also has a box bottom wall, a box back wall and a second box side wall (not shown in Figure 8). The lid 40 depends along a hinge line (not shown in Figure 8) from a top edge of the box back wall, and is movable about the hinge line between an open position (as shown in Figure 8) and a closed position. An inner frame 68 is attached to the inside of the box 20 and includes a first inner frame side wall 69, a second inner frame side wall (not shown in Figure 8), and an inner frame front wall. When used in the bundle of the first, second or third embodiments, the lid top wall 46 of the container of Figure 8 provides the first container wall 51, and thus defines part of the top face of the bundle.

CLAIMS

1. A bundle of containers for consumer goods, the bundle comprising:

a group of containers for consumer goods, each container comprising: a first container wall; a housing for consumer goods; and an outer wrapper wrapped around the housing, the group of containers being arranged such that the first container walls collectively form a first face of the bundle; and

a strip extending across at least the first face of the bundle, the strip being affixed to each of the first container walls to thereby secure the group of containers together, and

wherein the strip comprises a plurality of interconnected lines of weakness each extending across the first face of the bundle, the interconnected lines of weakness being arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more respective lines of weakness, and wherein the outer wrapper of each container is formed of substantially the same material as the strip.

2. A bundle of containers according to any preceding claim, wherein the first face of the bundle is a top face of the bundle or a bottom face of the bundle.

3. A bundle of containers according to any preceding claim, wherein the strip is individually affixed to each of the first container walls by means of one or both of an adhesive and a weld.

4. A bundle of containers according to any preceding claim, wherein the strip is individually affixed to the first container walls at one or more predefined locations, and wherein the plurality of lines of weakness are spaced apart from said one or more predefined locations.

5. A bundle of containers according to any preceding claim, wherein the portion of the strip extending across the first face of the bundle is spaced from at least one edge of the first face of the bundle.

6. A bundle of containers according to any preceding claim, wherein the portion of the strip extending across the first face of the bundle has a width which is less than the width of the first face of the bundle.

7. A bundle of containers according to any preceding claim,

wherein each container further comprises a second container wall opposed to the first container wall,

wherein the group of containers are arranged such that the second container walls collectively form a second face of the bundle, and

wherein the strip further extends across the second face of the bundle and is individually affixed to each of the second container walls to thereby secure the group of containers together.

8. A bundle of containers according to claim 7, wherein the strip further comprises a plurality of lines of weakness extending across the second face of the bundle, and

wherein the plurality of lines of weakness extending across the second face of the bundle are arranged such that each container in the group of containers is separable from the group of containers by tearing the strip along one or more of the lines of weakness extending across the second face of the bundle.

9. A bundle of containers according to claim 7 or claim 8, wherein the strip further extends across a third face of the bundle, the third face of the bundle extending from the first face of the bundle to the second face of the bundle.

10. A bundle of containers according to claim 9, wherein the strip is not affixed to the third face of the bundle.

11. A bundle of containers according to any of claims 1 to 6,

wherein the strip extending across the first face of the bundle is a first strip of the bundle,

wherein each container further comprises a second container wall opposed to the first container wall,

wherein the group of containers are arranged such that the second container walls collectively form a second face of the bundle, and

wherein the bundle further comprises a second strip, the second strip extending across the second face of the bundle and being individually affixed to each of the second container walls to thereby secure the group of containers together.

12. A bundle of containers according to claim 11, wherein the plurality of lines of weakness of the first strip are a first set of lines of weakness, and wherein the second strip comprises a

second set of lines of weakness, the second set of lines of weakness extending across the second face of the bundle and being arranged such that each container in the group of containers is separable from the group of containers by tearing the second strip along one or more lines of weakness in said second set of lines of weakness.

13. A bundle of containers according to any preceding claim, wherein the strip comprises a polymeric film.

14. A bundle of containers according to any preceding claim, wherein:

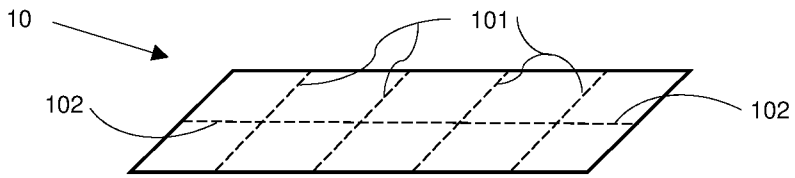
the strip extends over no more than three faces of the bundle; or

the strip extends over no more than two faces of the bundle; or

the strip extends over no more than one face of the bundle.

15. A bundle of containers according to any preceding claim,

wherein the housing of each container in the group of containers has a first housing wall and the first container wall is formed by the first housing wall and a portion of the outer wrapper wrapped around the first housing wall, such that the strip is individually affixed to said portion of the outer wrapper of each container.



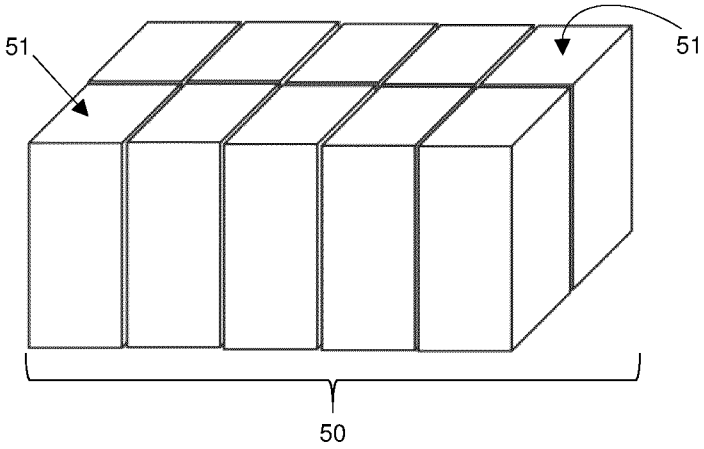


Figure 1

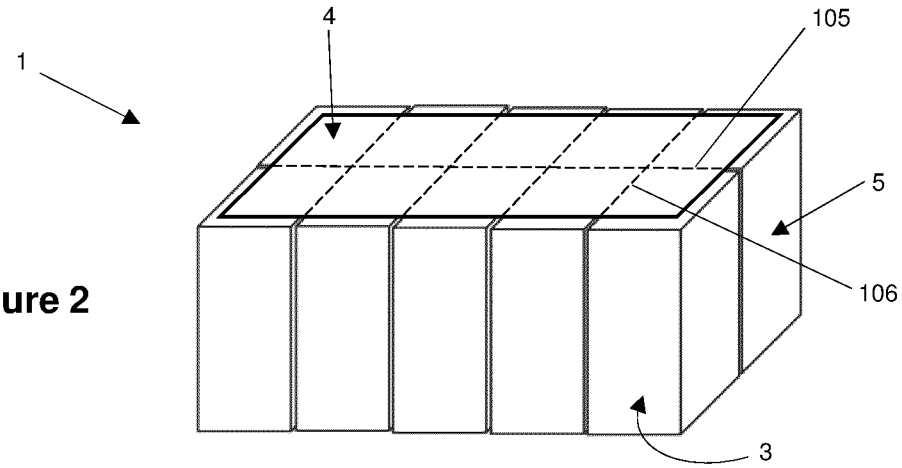


Figure 2

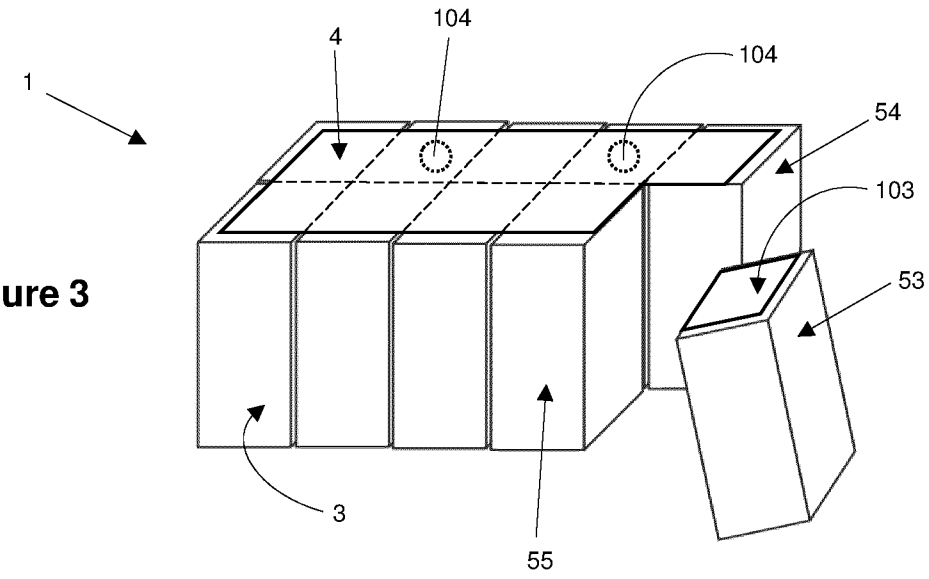


Figure 3

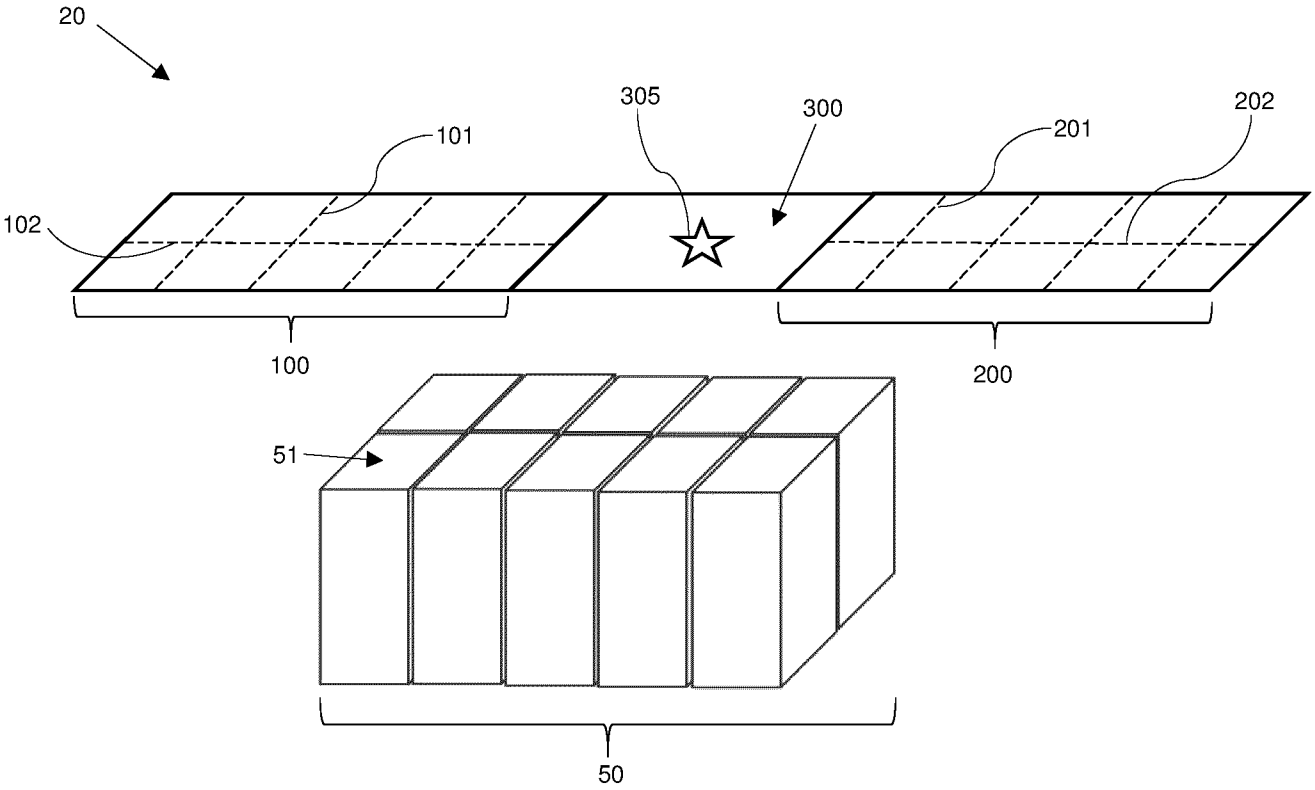


Figure 4

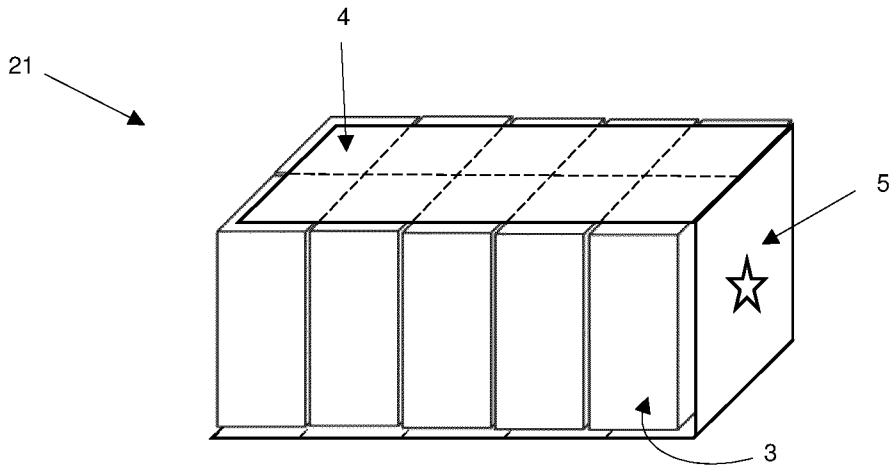


Figure 5

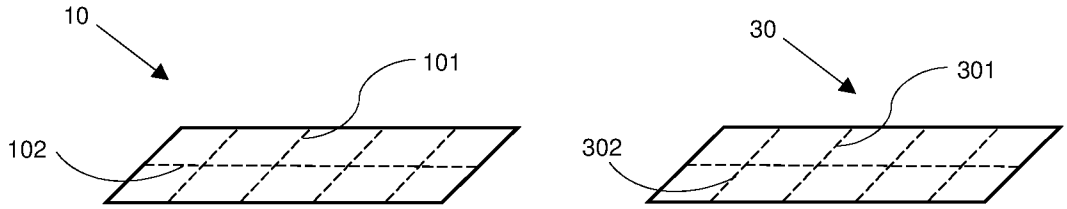


Figure 6

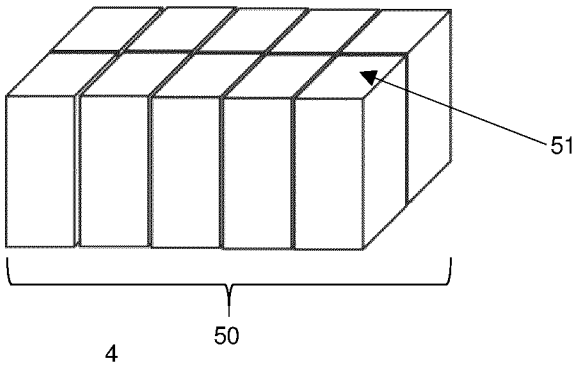


Figure 7

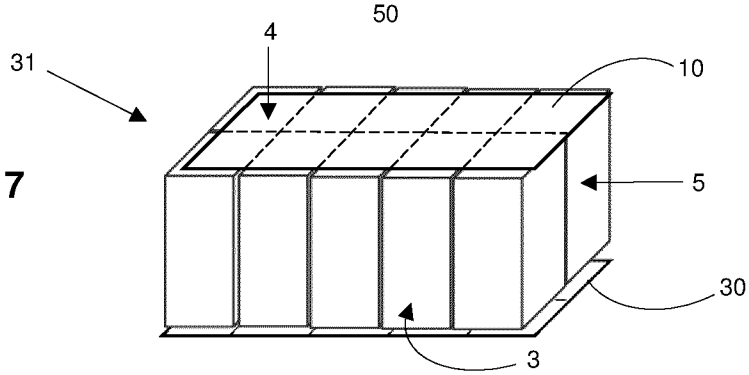
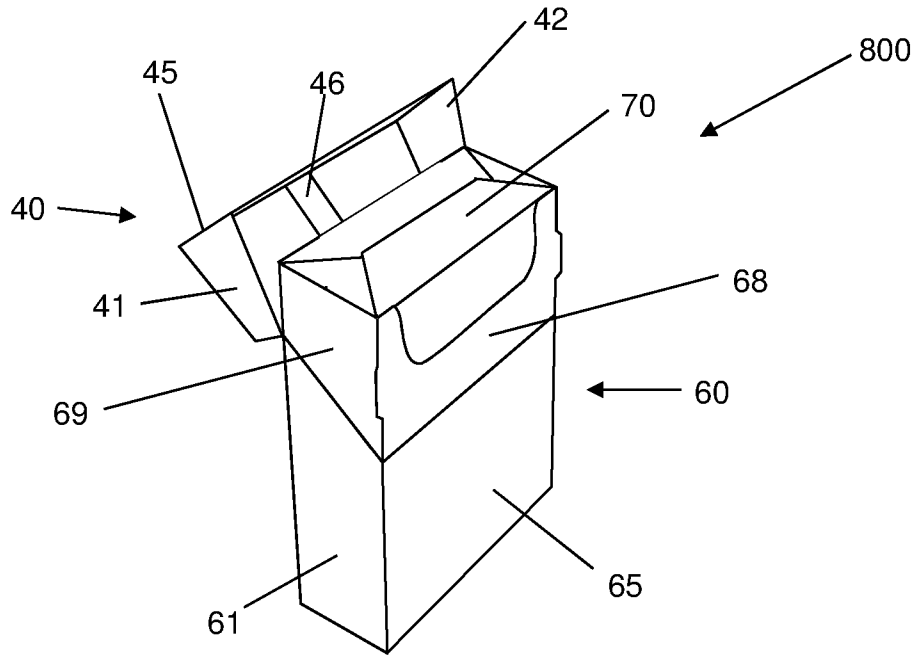


Figure 8



INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2022/078310

A. CLASSIFICATION OF SUBJECT MATTER
INV. B65D63/10 B65D71/00
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	US 1 723 021 A (FAGAN JOHN T) 6 August 1929 (1929-08-06) pages 1, 2 figures 1-6	1-3,5,6, 11,12, 14,15
X	DE 77 27 444 U1 (KLAUS KLAGES GMBH [DE]) 27 July 1978 (1978-07-27) pages 2, 3 figure 1	1-3, 5-10,14, 15
X	GB 702 617 A (BRITISH THOMSON HOUSTON CO LTD) 20 January 1954 (1954-01-20) page 1, line 1 - page 2, line 45 figures 1-3	1-6, 10-12, 14,15

-/--

[X] Further documents are listed in the continuation of Box C.

[X] 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	Date of mailing of the international search report
23 December 2022	12/01/2023

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Duc, Emmanuel

1

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2022/078310

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2021/094738 A1 (BRITISH AMERICAN TOBACCO INVESTMENTS LTD [GB]) 20 May 2021 (2021-05-20) pages 1-10 figures 1-4	1-15
A	US 10 421 602 B2 (PHILIP MORRIS PRODUCTS SA [CH]) 24 September 2019 (2019-09-24) column 1, line 4 - column 12, line 22 figures 1-6	1-15
A	US 5 657 870 A (SCHOETTLE KLAUS [FR] ET AL) 19 August 1997 (1997-08-19) column 1, line 4 - column 4, line 27 figures 1a1-5c	1-15

1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2022/078310

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 1723021 A	06-08-1929	NONE	
DE 7727444 U1	27-07-1978	NONE	
GB 702617 A	20-01-1954	NONE	
WO 2021094738 A1	20-05-2021	BR 112022009206 A2	26-07-2022
		EP 4058378 A1	21-09-2022
		US 2022396416 A1	15-12-2022
		WO 2021094738 A1	20-05-2021
US 10421602 B2	24-09-2019	CN 107709188 A	16-02-2018
		EP 3313754 A1	02-05-2018
		ES 2744611 T3	25-02-2020
		JP 6724048 B2	15-07-2020
		JP 2018519220 A	19-07-2018
		KR 20180019533 A	26-02-2018
		PL 3313754 T3	31-01-2020
		RU 2017134629 A	04-04-2019
		US 2018215530 A1	02-08-2018
		WO 2016207310 A1	29-12-2016
US 5657870 A	19-08-1997	CN 1131114 A	18-09-1996
		DE 9413462 U1	10-11-1994
		DE 29512594 U1	28-09-1995
		FR 2723722 A1	23-02-1996
		GB 2292363 A	21-02-1996
		JP H08175566 A	09-07-1996
		US 5657870 A	19-08-1997