The invention relates to a container for consumer goods wherein the container comprises a first opening (22) in a first container wall (11), and a display element (26) rotatably arranged behind the first opening, such that a first portion of the display element (26) is visible through the first opening. The display element (26) is rotatable such that after the rotation at least a second portion of the display element is visible through the first opening, wherein the display element (26) is arranged substantially parallel to the plane of the container wall. The container comprises a flap (23) depending from the first container wall and extending through an opening (24) in the display element, wherein the first container wall is an outer wall of the container, and wherein the flap (23) forms a rotational mounting piece for the display element. The invention further relates to a blank for a container and a method for providing consumer information.
Container with Rotatable Display Element

The present invention relates to a container for consumer goods, in particular smoking articles, with a movable display element being arranged behind a first opening in a container wall. The invention further relates to a blank for a container, and a method for providing consumer information on a container for consumer goods, in particular smoking articles.

In the prior art, it is known to provide containers for smoking articles that comprise designs, such as a specific shapes, graphic elements, text, and combinations thereof, to represent the smoking articles comprised therein according to market requirements and consumer expectations. Furthermore, it is known to deliver specific messages to consumers for a better understanding of the respective consumer goods, in particular regarding their features and new functionalities. Currently, there are different ways known in the art to deliver these messages to consumers. In particular, inserts, onserts and outsells, which are usually additional labels or cards added to a container, or specially shaped containers with additional flaps or prints on the containers are provided for this purpose.

US 2,016,445 discloses a card-shaped paper product, which comprises a rotatable disc, which is mounted on two strips cut in a flap section of a stiff paper. The stiff paper further comprises a base section and a cover section with openings. When the stiff paper is folded to form the card-shaped paper product by arranging the base, flap and cover sections parallel and adjacent to each other, a portion of the rotatable disc is visible through the openings in the cover section. However, several sections are required to enclose and mount the rotatable disc, making the card-shaped paper product difficult to manufacture.

It is also known to provide packages with a rotatable disc for selective display of information through an opening in a package wall, wherein the disc is mounted on a disc-shaped hub, which is fixed to the package wall. Such arrangements are shown in US 4,234,079 and US 6,053,319. Alternatively, it is known to provide packages with a disc being mounted between adjacent panels of the package.

However, such packages can be complicated to manufacture or may not provide a stable configuration.
Thus, it would be desirable to provide a container with an alternative and improved solution for arranging a display element in the container. It would also be desirable to provide a container with a display element that is simple to manufacture.

It would further be desirable to improve the stability of the arrangement of a display element in the container.

Accordingly, the invention provides a container for consumer goods wherein the container comprises a first opening in a first container wall, and a display element rotatably arranged behind the first opening. A first portion of the display element is visible through the first opening. The display element is rotatable such that after the rotation at least a second portion of the display element is visible through the first opening. The display element is arranged substantially parallel to the plane of the container wall. The container comprises a flap depending from the first container wall and extending through an opening in the display element and forms a rotational mounting piece for the display element. The first container wall is an outer wall of the container. In particular, the first container wall is a wall which faces the outside of the container, such that is visible to the consumer, when the container is in a closed state. In some embodiments, the back side of the outer wall may face the inside of the container, while in between the inner volume of the container and the first container wall a further inner wall, in particular in the form of a further panel, or an inner liner may be provided. Some containers may be overwrapped, such that an over wrapper covers the outer walls of the container. Nevertheless, as the over wrapper is preferably transparent or may be removed, the outer wall is still visible to the consumer, at least after removing the outer wrapper. The provision of the first opening in the first container wall and of the flap depending from the first container wall enables that only one wall of the container has to be modified, namely the first container wall, which facilitates the manufacturing process.

The term "behind" as used herein refers to an orientation towards the inside of the container. The definition that walls or panels "depend from each other" is in particular directed to a foldable connection in between these walls or panels. The foldable connection is preferably enabled by a folding line in a blank, such as a prefolded line or a line of reduced thickness.

The flap may be provided by a cutting line in the first container wall, such that an opening is created in the first container wall in the region of the flap, when the rotatable display element is mounted on the flap. To lower the visibility of this opening, the display element and the first wall may have the same color in the region of this opening.
Preferably, the display element extends parallel to and is adjacent to the first container wall. The preferably parallel arrangement of the display element and the first container wall provides the advantage that the display occupies a minimal volume of the container. Thus, the space provided for consumer goods remains substantially the same in comparison to the same type of container without such a display feature, allowing for an efficient packing. Further, no separate hub as a mounting piece is required, which facilitates the manufacture of the container.

The first opening is preferably a cut-out portion of the container wall. The opening may comprise a transparent cover, such as a transparent film, which has the advantage of protecting the display element from damage, for example when being stored and handled. The opening may be a die-cut in the container wall.

The term "transparent" is used to describe a material which allows at least a significant proportion of incident light to pass through, so that it is possible to see through the material. In the present invention, the transparent section allows sufficient light to pass through it such that the display element is visible. The transparent section may be completely transparent. Alternatively, the transparent section may have a lower level of transparency while still transmitting sufficient light such that the display element is visible from the outside of the container. Preferably, "transparent" denotes a total percentage light transmission of 40% or more, more preferably 50% or more, even more preferably 60% or more, most preferably 70% or more, as measured using a standard light transmission spectrophotometer in accordance with ISO 13468-1:1996.

Preferably, the display element is larger than the first opening in the container wall. For instance, the first opening may have a surface area less than half the size of the area occupied by the display element. This ensures that the display element cannot be removed through the first opening by mistake. Furthermore, this provides that large portions of the display element and the information thereon are covered by the container wall and are only visible after rotation of the display element.

Preferably, the display element is flat. More preferably it is formed from a blank.

Whilst reference is made to a first opening, it may be desirable to provide more than one such opening on the container, wherein the same or different information may be displayed through each of the openings.

In one aspect, a single display element may be visible through several openings. Alternatively, a plurality of display elements may be visible through several openings.
The consumer goods are typically longitudinally extending consumer goods, such as longitudinally extending cylindrical consumer goods, such as smoking articles.

The display element is rotatably arranged behind the first opening, such that rotation of the display element enables that the visible portion of the display element as seen through the first opening is changed. In particular, the rotation axis of the display element is in a distance to the first opening. The rotation axis is preferably substantially normal to the first container wall. The benefit of a rotatable display element is that it requires little space in its movement. The rotation axis is defined by the flap, forming the mounting piece.

The flap engages the opening in the display element and provides a rotation axis for the display element. Thus, the display element is rotatably mounted on the flap. The flap enables that the position of the display element in the container is defined, and a stable rotation axis is provided.

The flap preferably depends from a first folding line in the first container wall. Thus, the flap may be integrally formed from the same blank as the first container wall. The folding line may be provided in an inner portion of the first container wall. The folding line may be arranged in between the ends of a cutting line defining the flap.

The flap preferably extends substantially parallel to the first container wall, wherein the folding angle around the folding line is either slightly above 0 degrees, preferably in between 0 and 15 degrees, or slightly below 180 degrees, preferably in between 165 and 180 degrees, to enable insertion of the flap into the opening of the display element. The folding angle of slightly above 0 degrees has the benefit that the flap remains substantially in its original position, which facilitates the manufacture. The folding angle of slightly below 180 degrees has the benefit that the display element may arranged in between the flap and a portion of the first container wall, even if the flap is provided by means of a cutting line in the first container wall.

If the flap is provided by a separate blank with respect to the first container wall, the folding line may be provided in between a connection portion being attached to the first container wall and the flap, which depends from the connection portion via the folding line. The connection portion is preferably attached by means of adhesive to the first container wall.

The flap forming the mounting piece may be provided in the form a lug, which is defined by a cutting line in the wall of the container. The lug is thus formed from the same
material as the first container wall. The lug is inserted into the opening of the display element.

Preferably, the flap forming the mounting piece is in the form of a lug extending substantially parallel to the first container wall. The lug may be slightly inclined with respect to the first container wall, such that it is arranged slightly behind the first container wall and can be inserted into the opening of the display element. However, in some embodiments, the lug may comprise a first portion which is substantially perpendicular to the first container wall at the side where it is connected to the first container wall, and a second portion that extends substantially parallel to the first container wall.

In another aspect, the container may comprise more than one flap forming the mounting piece, the flaps being defined by at least two intersecting cutting lines in the first container wall, wherein the flaps are folded into the interior of the container.

Preferably the flaps are inserted into the opening in the display element, and are further folded such that they may engage with the back side of the display element. For instance, two intersecting cutting lines may be provided, which define four flaps. The design of intersecting cutting lines and corresponding flaps has the advantage that the display element cannot be seen in the region of the opening in the first container wall formed by the folded flaps. The opening created by folding the flaps out of the plane of the container wall is accordingly smaller than the opening in the display element.

In one aspect, the at least one flap is folded around the folding line at angle of about 180 degrees, such that it extends substantially parallel to the first container wall.

Further, the display element may be folded during rotation, such that parts of the display element project protrude from the container. For instance, the parts of the display element may project through the first opening. This may be enabled by fixing a portion of the display element to the container, such that the relative movement of another portion of the display element folds up at least part of the display element. In order to facilitate protrusion of the parts of the display element, folding lines may be provided in the display element.

In one aspect, the container comprises an engagement opening, through which at least a portion of the display element is engageable by a consumer for rotation of the display element. Thus, the engagement opening allows a rotation of the display element, and the engagement by the consumer, such as with a finger, of the display element does not hide information provided on the display element behind the first opening.
This provides the benefit that the consumer can rotate the display element, while studying the different sets of information provided on the display element behind the first opening. In particular, where the first opening comprises a transparent window, the engagement opening is provided for engaging and rotating the display element by the consumer.

If no engagement portion is provided, the display element may be engaged through the first opening in the form of an opening.

Preferably the engagement opening is arranged at an edge of the first container wall. This makes engagement of the display element simple for the consumer, as an engagement portion of the display element is arranged at the edge of the container in the engagement opening.

Preferably, the engagement portion of the display element protrudes through the engagement opening. Thus, the protruding engagement portion can be easily accessed by the consumer. This improves the comfort of engaging the engagement portion. Furthermore, such a protruding part attracts the attention of the consumer, thus improves the likelihood, that he will operate the display element.

Preferably, the display element is a substantially disc-shaped element. Thus, this geometric feature of the display element reduces the space requirements of the display element, and thus allows a very compact design of the container. The display element is preferably formed from a blank.

The opening of the display element is arranged substantially centrally in the display element. The opening may be a cut-out, preferably provided by a die-cut.

In one aspect, the container is formed from a blank, and the display element is arranged behind a first container wall formed by a first panel of the blank.

Preferably, a second panel of the blank depends from the first panel and is folded behind the display element, such that the display element is arranged in between the first and the second panel. The first and the second panel may be fixed to each other, preferably by adhesive, and preferably in the region, where the display element is not provided. The second panel allows that the display element is stably arranged in the container, as it is arranged in between the two panels. In one aspect, the second panel is connected to the at least one flap, in particular by adhesive.

Alternatively, a separate second panel may be provided, which is connected to the first panel, in particular by means of adhesive, such that the second panel covers at least partially the back side of the display element.
The second panel may preferably be connected to the mounting piece, in particular by means of adhesive. Thus, the mounting piece and the mount of the display element are further stabilized.

The display element preferably comprises at least one protrusion, which is adapted to engage with the container in a predefined position of the display element, such that a dead stop for the rotation of the display element is provided. Two protrusions may be provided on the display element, to enable a dead stop in both rotation directions of the display element. The defined end of the rotation of the display element enables in particular an alignment of the information of the display element with the first opening at end positions of the rotation of the display element.

 Preferably, the container comprises a body portion and a lid portion, the lid portion being hingedly attached to the body portion. In one aspect, the display element is arranged in the lid portion of a container. In other aspects, the display element may also be arranged in the body portion of a container.

The container may be a slide and shell container, wherein a movable inner slide is arranged in a outer shell. In yet further aspects, the container may be a soft pack for smoking articles, which is typically opened by being torn open. Other types of containers are also possible.

The invention further provides a blank for a container, comprising a first panel which is designated to form an outer container wall, with a first opening, and at least one cutting line in the first panel defining a mounting structure in the form of a flap depending from the first panel and adapted to extend through an opening of a display element such that it forms a rotational mounting piece for the display element.

The display element may be rotatably mounted on the mounting piece, such that the portion of the display element, which is visible through the first opening can be changed. The first opening may comprise a transparent section or a window overlaying the opening.

The first opening may be a cut-out in the blank. The blank may be formed from paper, cardboard or polymer film. The mounting piece of the display element can provide either a purely rotational mounting, or a combination of a rotational mounting and a slidable mounting.

Usually, the mounting piece provides a hinge for the display element, such that the display element is rotatably mounted on the mounting piece.
In one aspect, the blank comprises an engagement opening near or at a folding line, the folding line defining the edge between the first panel and a second panel of the blank. This enables, that in the assembled container, the display element may easily be engaged by the consumer. In particular, the display element may protrude through the first opening of the blank.

In particular, the blank may be folded to form a container.

Furthermore, the invention provides a method of providing consumer information on a container for consumer goods, the container comprises a first container wall and a rotatable display element extending parallel to the first container wall and located behind a first opening in the first container wall, the display element comprising a first consumer information on a first portion of the display element and a second consumer information on a second portion of the display element, the method comprising the steps of providing the first consumer information in a position such that it is visible through the first opening, and engaging the display element from the outside of the container, such that display element rotates with respect to the first opening around a flap depending from the first container wall and extending through an opening of the display element such that the second consumer information is visible through the first opening. The first container wall is an outer container wall.

Preferably, the display element is only rotatable. However, in one aspect, the display element may be both rotatable and slidable.

The invention further relates to a method of manufacturing a container for consumer goods, wherein a first panel of a blank is cut, such that a portion forming a flap can be folded out of the plane of the first panel, and subsequently a display element is arranged on the folded portion of the first panel, such that a first portion of the first opening is visible through a first opening in a first container wall formed by the first panel, wherein the display element is adapted to be rotatable around the flap, such that after rotation of the display element, a second portion of the display element is visible through the first opening.

The terms "front", "back", "upper", "lower", "side", "top", "bottom" and other terms used to describe relative positions of the components of containers according to the invention refer to the container in an upright position with the lid at the top end and the hinge on the back. The terms "left" and "right" are used with reference to side walls of the container when the container is viewed from the front in its upright position. When the container in the upright position is open, the consumer articles contained in the box may
be removed from the upper end of the container. The term "longitudinal" refers to a direction from bottom to top or vice versa. The term "transverse" refers to a direction perpendicular to the longitudinal direction across the front wall, the back wall or one of the side walls.

The term "hinge line" refers to a line about which the lid may be pivoted in order to open the container. A hinge line may be, for example, a fold line or a score line in the back wall of the container. Alternatively, a hinge line may be a fold line or a score line in a piece of material bridging the lower edge of the back wall of the lid and the upper edge of the back wall of the box. Such a piece of material may be, for example, a label that is permanently or removably attached to the back wall of the lid and the back wall of the box. Preferably, the hinge line is positioned along the back wall of the container at a level below the upper edge thereof.

Preferably, the container further comprises an inner frame mounted within the box, wherein the inner frame extends above the upper edges of at least the front wall of the box of the container. The inner frame is therefore visible to the consumer when the lid is opened. The front wall of the inner frame may be printed with indicia which may be the same as, or different to the indicia printed on the front wall of the box. Alternatively, or in addition, the front wall of the inner frame may be cut into a distinctive shape, for example, to reflect the branding of the consumer goods. If required, the inner frame may also comprise a line of weakness to facilitate flattening of the container.

Preferably, the front wall of the inner frame is provided with a cut out portion at the upper edge thereof. This enables more convenient access to the consumer goods within the container, without significantly reducing the surface area of the front wall of the inner frame.

Alternatively, or in addition to an inner frame, the consumer goods within the container may be wrapped with an inner liner, which is visible above the upper edge of the front wall of the box and the front wall of the inner frame (if present) when the container is open.

Containers according to the invention may be in the shape of a rectangular parallelepiped, with right-angled longitudinal and right-angled transverse edges. Alternatively, the container may comprise one or more rounded longitudinal edges, rounded transverse edges, beveled longitudinal edges or beveled transverse edges, or combinations thereof. For example, the container according to the invention may comprise, without limitation:
- One or two longitudinal rounded or beveled edges on the front wall, and/or
- One or two longitudinal rounded or beveled edges on the back wall.
- One or two transverse rounded or beveled edges on the front wall, and/or
- One or two transverse rounded or beveled edges on the back wall.
- One longitudinal rounded edge and one longitudinal beveled edge on the front wall, and/or
- One transverse rounded edge and one transverse beveled edge on the back wall.
- One or two transverse rounded or beveled edges on the front wall and one or two longitudinal rounded or beveled edges on the front wall.
- Two longitudinal rounded or beveled edges on a first side wall or two transverse rounded or beveled edges on the second side wall.

Where the container comprises one or more rounded edges and is made from a laminar blank, preferably the blank comprises three, four, five, six or seven scoring lines or creasing lines to form the rounded edge in the assembled container. The scoring lines or creasing lines may be either on the inside of the container or on the outside of the container. Preferably, the scoring lines or creasing lines are spaced apart from each other by between about 0.3 mm and 4 mm. Preferably, the spacing of the creasing lines or scoring lines is in function of the thickness of the laminar blank. Preferably, the spacing between the creasing lines or scoring lines is between about 0.5 and about 4 times larger than the thickness of the laminar blank.

Where the container comprises one or more beveled edges, preferably the beveled one or more edges have a width of between about 1 mm and about 10 mm, preferably between about 2 and about 6 mm. Alternatively, the container may comprise a double bevel formed by three parallel creasing lines or scoring lines that are spaced apart such that two distinct bevels form on the edge of the container.

Alternatively to a container with a rectangular transverse cross section, the container may have a for example a polygonal cross section such as triangular, quadrangular or hexagonal, or a cross section which is oval, semi-oval, circular or semi-circular.

Where the container comprises a beveled edge and is made from a laminar blank, the bevel may be formed by two parallel creasing lines or scoring lines in the laminar blank. The creasing lines or scoring lines may be arranged symmetrically to the edge
between a first wall and a second wall. Alternatively, the creasing lines or scoring lines
may be arranged asymmetrically to the edge between the first wall and the second wall,
such that the bevel extends further into the first wall of the container than into the second
wall of the container.

The container may be formed from any suitable materials including, but not limited
to, cardboard, paperboard, plastic, metal, or combinations thereof. Preferably, the
cardboard has a weight of between about 100 grams per square metre and about 350
grams per square metre.

Containers according to the invention may be used as packages for a variety of
consumer goods. In particularly preferred embodiments, containers according to the
invention are used to package smoking articles. Containers according to the invention
may be advantageously used to package smoking articles including, but not limited to,
known lit-end cigarettes, cigars or cigarillos, heated smoking articles comprising a
combustible fuel element or heat source and an aerosol-generating substrate (for example
cigarettes of the type disclosed in US-A-4,714,082) and smoking articles for use with
electrical smoking systems (for example cigarettes of the type disclosed in US-A-
5,692,525).

Through an appropriate choice of the dimensions thereof, 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 thereof, containers according to the invention may be designed to hold a
total of between ten and thirty smoking articles.

Containers according to the invention may hold one, two, three four or five
separate bundles of consumer goods. The separate bundles may be arranged
substantially parallel to the front wall and to the back wall or substantially perpendicular to
the front wall and to the back wall.

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

Containers according to the present invention may hold smoking articles of the same type or brand, or of different types or brands. In addition, both filterless smoking articles and smoking articles with various filter tips may be contained, as well as smoking articles of differing length (for example, between about 40 mm and about 180 mm), diameter (for example, between about 4 mm and about 9 mm). In addition, the smoking articles may differ in strength of taste, resistance to draw and total particulate matter delivery. Wherein the container comprises more than one bundle, each bundle within the same container may hold the same or different types of smoking articles as listed above.

Preferably, the dimensions of the container are adapted to the length of the smoking articles, and the collation of the smoking articles. Typically, the outer dimensions of the container are between about 0.5 mm to about 5 mm larger than the dimensions of the bundle of smoking articles housed inside the container.

Preferably, containers according to the invention have a height of between about 60 mm and about 150 mm, more preferably a height of between about 70 mm and about 125 mm, wherein the height is measured from the top wall to the bottom wall of the container.

Preferably, containers according to the invention have a width of between about 12 mm and about 150 mm, more preferably a width of between about 70 mm and about 125 mm, wherein the width is measured from the first side wall to the second side wall of the container.

Preferably, containers according to the invention have a depth of between about 6 mm and about 100 mm, more preferably a depth of between about 12 mm and about 25 mm wherein the depth is measured from the front wall to the back wall of the container (comprising the hinge between box and lid).
Preferably, the ratio of the height of the container to the depth of the container is in between about 0.3 to 1 and about 10 to 1, more preferably between about 2 to 1 and about 8 to 1, most preferably between about 3 to 1 and 5 to 1.

Preferably, the ratio of the width of the container to the depth of the container is in between about 1 to 1 and about 10 to 1, more preferably between about 2 to 1 and about 8 to 1, most preferably between about 2 to 1 and 3 to 1.

Preferably, the ratio of the height of the lid back wall to the height of the box back wall is between about 0 to 1 (hinge located at the top edge of the container) to about 1 to 1, more preferably, between about 1 to 5 and about 1 to 10, most preferably, between about 1 to 6 to about 1 to 8.

Preferably, the ratio of the height of the lid front wall to the height of the box front wall is between about 1 to 0 (lid covering the entire front wall) to about 1 to 10, more preferably, between about 1 to 1 and about 1 to 5, most preferably, between about 1 to 2 and about 1 to 3.

The exterior surfaces of containers according to the invention may be printed, embossed, debossed or otherwise embellished with manufacturer or brand logos, trade marks, slogans and other consumer information and indicia. Alternatively, or in addition, the exterior surfaces of containers according to the invention may be at least partially covered with lacquer, metallisation, holograms, luminescent material, or any other materials that alter the feel, odour or appearance of the container.

Where the inner housing of a container according to the present invention contains one or more bundles of smoking articles, the smoking articles are preferably wrapped in an inner liner of, for example, metal foil or metallised paper.

Where the container comprises smoking articles, the container may further comprise waste-compartments (for example for ash or butts) or other consumer goods, for example matches, lighters, extinguishing means, breath-fresheners or electronics. The other consumer goods may be attached to the outside of the container, contained within the container along with the smoking articles, in a separate compartment of the container or combinations thereof.

Once filled, containers according to the invention may be shrink wrapped or otherwise over wrapped with a transparent polymeric film of, for example, high or low density polyethylene, polypropylene, oriented polypropylene, polyvinylidene chloride, cellulose film, or combinations thereof in a conventional manner. Where containers according to the invention are over wrapped, the over wrapper may include a tear tape.
The tear tape is preferably positioned around the container below the lower edge of the front wall of the lid, such that once the tear tape has been removed, the lid is free to be rotated about the first hinge line. Alternatively or in addition, there may be a second tear tape positioned around the container above the hatch, such that once the tear tape has been removed, the hatch is free to be rotated about the second hinge line. Alternatively, the tear tape may be provided lengthways around the container.

The invention will now be explained with reference to exemplary embodiments as shown in the following figures.

Figure 1 shows a plan view of a blank for a container according to a first embodiment of the invention.

Figure 2 shows a partial perspective view of a container according to a first embodiment of the invention.

Figure 3 shows a partial perspective view of the container according to the first embodiment of the invention.

Figure 4 shows a plan view of display element as provided in the container according the first embodiment of the invention.

Figure 5 shows a plan view of display element for a further embodiment of a container according to the invention.

Figure 6 shows a partial plan view of a blank for a container according to a second embodiment of the invention in magnification.

Figure 7 shows a partial perspective view of a container according to the second embodiment of the invention.

In Figure 1 a blank 1 for a container according to a first embodiment of the invention is shown in plan view. Dashed lines indicate folding lines, while full lines indicate cutting lines.

The blank 1 comprises panels forming a box bottom wall 2, a box front wall 3 and a box back wall 4, and panels 5, 6 which form the box left wall when folded on each other, and panels 7, 8 which form the box right wall when folded on each other.

Further panels forming the lid of the container are depending via a hinge line 9 from the box back wall 4. These panels comprise in particular a lid top wall 10, a lid front wall 11 and a lid back wall 12. Further, the panels 13, 14 form the lid left wall when folded on each other, and panels 15, 16 form the lid right wall when folded on each other. The panel forming the lid front wall 11 is designated as first panel.
Furthermore, tabs 17, 18, 19, 20 are provided which are folded towards the inside of the container on respective inner sides of adjacent panels, and may at least partially be fixed with adhesive to the adjacent panels.

A second panel 21 is depending via a folding line from the first panel forming the lid front wall 11 and is adapted to be fixed by means of adhesive to the back of the first panel.

In particular, the blank 1 is adaptable to be folded around a bundle of smoking articles comprised in an inner liner, to form a smoking article container. The fixation of the blank in the container form is in particular obtained by fixing the side panels 5, 6, side panels 7, 8, side panels 13, 14 and side panels 15, 16 to each other by means of adhesive.

In the lid front wall 11 a first opening 22 in the form of a cut-out is provided. The first opening 22 has in particular the shape of the outer line of a half ellipse. In some embodiments, the first opening 22 has the shape of the outer line of a circle segment, in particular a half circle.

Furthermore, a parabolic cutting line defines a flap in the form of a lug 23. The lug 23 provides in particular a mount for a display element, which will be described in the following. The lug 23 is arranged slightly inclined but substantially parallel to the respective wall 11 of the container, in which it is arranged. This is in the present embodiment in particular the lid front wall 11. The wall in which the lug 23 is arranged is generally indicated as a first container wall.

Furthermore, an engagement opening 24 is provided at the edge of the first container wall, which is in the present embodiment the lid front wall 11. In particular, the engagement opening 24 is provided at the edge in between the lid front wall 11 and the box left side wall panel 13. A container 25 is created by folding the blank 1 after arranging a display element 26 on the blank 1, in particular on the lug 23. Thus, the display element 26 enables the same efficient packing routine as for any other corresponding blank known in the art without such an additional feature.

In Figure 2, the upper part of a container 25 folded from the blank 1 of Figure 1 is shown.

The display element 26 is arranged parallel to and behind the first container wall, namely the front wall 11 of the container lid. As can be seen in Figure 2, an engagement portion of the display element 26 protrudes through the engagement opening 24, and a first portion 27 is visible through the first opening 22. Further, the display element 26 is
arranged in between the lug 23 and the first container wall 11, such that the lug 23 mainly extends behind the display element 26, and provides a mount for the display element 26. The lug 23 may be fixed to the second panel 21 which is folded on the back side of the lid front wall panel 11. Further, the second panel 21 is folded and connected to the back of the front wall panel 11, such that the display element 26 is arranged in between the first panel 11 and the second panel 21.

The engagement portion protrudes through the engagement opening 24, such that the consumer can easily rotate the display element 26 by sliding his finger along the edge in between the lid front wall 11 and the lid side wall 13. After the rotation of the display element 26, different information can be seen through the first opening 22.

In Figure 3 a second portion 28 of the display element is visible through the first opening. Thus, in between the status shown in Figure 2 and in Figure 3, the display element 26 has been rotated in the counterclockwise direction.

In Figure 4, the display element 26 is shown, which has a substantially round form and comprises a round central opening 29. The opening 29 is adapted such that the lug 23 can be inserted therein to provide a mount for the display element 26. A second portion 28 is arranged in a distance to the first portion 27. In particular, the second portion 28 comprises a text, while the first portion 27 does not comprise any specific information. However, both the first and second portions 27, 28 may comprise text, images, or any other type of information.

In Figure 5 another embodiment of a display element 26 is shown, wherein the display element 26 comprises two protrusions 30, 31, which are arranged in a distance with respect to each other, wherein the protrusions 30, 31 are adapted to engage with the container 25, to provide a dead stop for the rotation of the display element 26. In particular, the protrusions are adapted to engage with a container wall bordering to the first container wall 11. Preferably, the protrusions 30, 31 are adapted to engage with the inner panel 14 of the lid side wall 13, 14, in particular in the region of the edge in between the lid front wall 11 and the lid side wall 13, 14. Again, first and second portions 27, 28 are provided on the display element 26, which are visible through the first opening 22.

In Figure 6 a partial view of the blank in the region of the lid front wall is shown. As in the first embodiment of the blank as shown in Figure 1, an engagement opening 24 is arranged in between the lid front wall 11 and the lid side wall panel 13. Furthermore, a first opening 22 in the form of an opening is arranged in the lid front wall panel 11. However, instead of only one flap in the form of the lug as in the previous embodiment, four flaps 32,
33, 34, 35 are provided by means of two intersecting cutting lines in the front wall panel 11. The cutting lines are in particular arranged perpendicular to each other and intersect substantially at their respective middles. The ends of the cutting lines are connected by folding lines, around which the flaps 32, 33, 34, 35 are folded around by 180 degrees, after the display element 26 has been arranged with its opening over the flaps and behind the front wall 11. In Figure 6, the dashed lines indicate folding lines, while the solid lines indicate cutting lines.

In Figure 7 a partial perspective view of a container formed from a blank as partially shown in Figure 6 is shown, wherein a display element 26 is arranged behind the lid front wall 11. The flaps 32, 33, 34, 35 extend through a central opening 29 in the display element and are folded towards the back of the display element 26. The flaps 32, 33, 34, 35 each have a triangular form.

The flaps 32, 33, 34, 35 are folded, such that the display element 26 cannot be seen in the opening in the first container wall 11 created by folding the flaps 32, 33, 34, 35, as the opening 29 is arranged in this region. However through the opening created by folding the flaps 32, 33, 34, 35, the second panel 21 may be seen, which may be printed to enable a continuous design.

The second panel 21 may be folded behind the display element 26 and may be fixed to the front wall 11, or to the flaps 32, 33, 34, 35 or to both. Thus, the flaps 32, 33, 34, 35 enable a secure rotatable mounting of the display element 26. The display element 26 can be engaged at an engagement portion which protrudes through the engagement opening 24 and can be rotated around the mount provided by the flaps 32, 33, 34, 35. Thus, different portions of the display element 26 are visible behind the first opening 22.
CLAIMS

1. A container for consumer goods wherein the container comprises a first opening in a first container wall, and a display element rotatably arranged behind the first opening, such that a first portion of the display element is visible through the first opening, wherein the display element is rotatable such that after the rotation at least a second portion of the display element is visible through the first opening, wherein the display element is arranged substantially parallel to the plane of the container wall, and wherein the container comprises a flap depending from the first container wall and extending through an opening in the display element, wherein the first container wall is an outer wall of the container, and wherein the flap forms a rotational mounting piece for the display element.

2. A container according to claim 1, wherein the flap depends from a folding line in the first container wall.

3. A container according to claim 2, wherein the flap is integrally formed from the same blank as the first container wall.

4. A container according to claim 3, wherein the flap is in the form of a lug extending substantially parallel to the first container wall.

5. A container according to claim 3, wherein the container comprises more than one flap forming the mounting piece, the flaps being defined by at least two intersecting cutting lines in the first container wall, wherein the flaps are folded into the interior of the container.

6. A container according to any one of the claims 2 to 5, wherein the at least one flap is folded around the folding line at an angle of about 180 degrees, such that it extends generally parallel to the first container wall.

7. A container according to any one of the previous claims, wherein the container comprises an engagement opening, through which at least a portion of the display element is engageable by a consumer for rotation of the display element.
8. A container according to claim 7, wherein the engagement opening is arranged at an edge of the first container wall.

9. A container according to any one of the previous claims, wherein the display element is a substantially disc-shaped element.

10. A container according to any one of the previous claims, wherein the container is formed from a blank, and the display element is arranged behind a first container wall formed by a first panel of the blank.

11. A container according to any one of the previous claims, wherein the display element comprises at least one protrusion, which is adapted to engage with the container in a predefined position of the display element, such that a dead stop for the rotation of the display element is provided.

12. A blank for a container, comprising a first panel which is designated to form an outer container wall, with

   a first opening, and

   at least one cutting line in the first panel defining a mounting structure in the form of a flap depending from the first panel and adapted to extend through an opening of a display element such that it forms a rotational mounting piece for the display element.

13. A blank according to claim 12 further comprising an engagement opening near or at a folding, the folding line defining the edge between the first panel and a second panel of the blank.

14. A method of providing consumer information on a container for consumer goods, the container comprises a first container wall and a rotatable display element extending parallel to the first container wall and located behind a first opening in the first container wall, the display element comprising a first consumer information on a first portion of the display element and a second consumer information on a second portion of the display element,
the method comprising the steps of providing the first consumer information in a position such that it is visible through the first opening, and

engaging the display element from the outside of the container, such that display element rotates with respect to the first opening around a flap depending from the first container wall, which is an outer container wall, and extending through an opening of the display element such that the second consumer information is visible through the first opening.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65D85/10 B65D5/42 G09F11/04 G09F11/23 B65D73/00

ADD.

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B65D G09F

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

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<td>US 2 016 445 A (MASSEY EDWARD T) 8 October 1935 (1935-10-08) page 1, col umn 1, paragraph 44-57 ; figures 1, 2</td>
<td>1-14</td>
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Further documents are listed in the continuation of Box C.

Date of the actual completion of the international search

8 August 2013

Name and mailing address of the ISA

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Date of mailing of the international search report

02/09/2013

Authorized officer

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