(11) EP 2 848 546 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

18.03.2015 Bulletin 2015/12

(51) Int Cl.:

B65D 5/50 (2006.01)

B65D 5/496 (2006.01)

(21) Application number: 14184212.0

(22) Date of filing: 10.09.2014

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA ME

(30) Priority: 11.09.2013 NL 2011426

30.10.2013 NL 2011702

(71) Applicants:

Odiflolau Holding B.V.
7361 CT BeekBergen (NL)

• Van der Weele, Laurie 1075 SL Amsterdam (NL)

(72) Inventors:

 Van der Weele, Laurie 1075 SL Amsterdam (NL)

 Van der Weele, Michiel 7361 CT Beekbergen (NL)

(74) Representative: Algemeen Octrooi- en

Merkenbureau B.V.

P.O. Box 645

5600 AP Eindhoven (NL)

(54) Package for a beverage bottle and blank for such a package

(57)The invention relates to a package (100) for packaging a beverage bottle (70), comprising, at least in the folded condition, a rear wall surface (1), a left-hand (2) and a right-hand side wall surface (4) and a front wall surface (3), which wall surfaces define an elongate receiving space (21) for the beverage bottle, wherein the rear wall surface comprises a neck anchoring flap (5) provided with a hole (7), which can be folded about a first fold line (81) extending in the rear wall surface, from a non-folded position toward the front wall surface to a neck anchoring position, in which the hole provided in the neck anchoring flap surrounds the neck of the bottle in the neck anchoring position, wherein the package is provided with a locking element (6) for preventing movement of the neck anchoring flap from the neck anchoring position toward the non-folded position. The invention also relates to a blank for such a package.

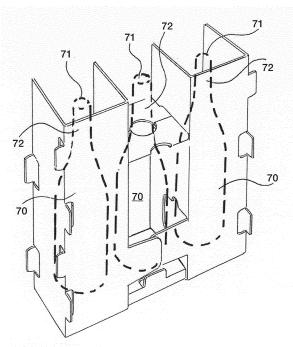


Fig. 4

EP 2 848 546 A2

Description

10

20

30

35

40

45

50

55

[0001] The present invention relates to a package for packaging a beverage bottle.

[0002] The present invention also relates to a blank for forming such a package.

[0003] A known package for packaging a beverage bottle, such as a wine bottle, concerns an inner part having a rear wall, two opposing side walls and a front wall which, together, define an elongate receiving space in which the wine bottle can be placed from an open upper side of the package. The aforesaid walls are made of a piece of cardboard which is folded along three respective fold lines. In an outer box in which the package can be placed, the bottom is first closed, for which a separate piece of cardboard may or may not be used as a bottom part, whereupon the above-described package is placed in the outer box in a height direction. Subsequently, a wine bottle can be placed upright in the package from the upper side, which is still open, with the bottom of the wine bottle being supported on the aforesaid bottom part or on the bottom of the outer box. Then the outer box is closed, for which a separate cover plate of cardboard may or may not be used. Because the wine bottle is thus provided with a layer of cardboard on all six sides inside the outer box, it is to a greater extent protected against breakage during transport.

[0004] A drawback of the above-described known package is that it is only universally usable to a limited extent, as it is highly tailored to the length of a particular bottle type so as provide a sound package for the bottle. That is, relatively long beverage bottles do not by definition fit a package of a particular size, whilst relatively short bottles fit a package of a particular size with a great deal of clearance in longitudinal direction, so that it can slide forward and backward in the height direction or, in other words, the longitudinal direction of the beverage bottle during transport, which entails a greater risk of breakage. The result of this is that several package sizes are needed for packaging a variety of types of beverage bottles, which is undesirable.

[0005] Accordingly it is the object of the present invention to provide a package for a beverage bottle that is highly universally usable.

[0006] According to the invention, in order to achieve that object, there is provided a package for packaging a beverage bottle, such as a wine bottle, which is designed to be placed as an inner part in an outer box and which is at least substantially formed from a folded blank, comprising, at least in the folded condition, a rear wall surface, a left-hand side wall surface extending transversely to the rear wall surface, an opposite right-hand side wall surface extending transversely to the rear wall surface, and a front wall surface disposed opposite the rear wall surface, extending parallel thereto, which wall surfaces define an elongate receiving space for the beverage bottle, which receiving space has a height direction parallel to the longitudinal direction of the beverage bottle, at least when a beverage bottle is present in the package, wherein the rear wall surface comprises a neck anchoring flap provided with a hole, which can be folded about a first fold line extending transversely to the height direction in the rear wall surface, from a non-folded position toward the front wall surface to a neck anchoring position, wherein the hole provided in the neck anchoring flap is designed to surround the neck of the bottle in the receiving space in the neck anchoring position, wherein the package is provided with a locking element for preventing movement of the neck anchoring flap from the neck anchoring position toward the non-folded position.

[0007] The invention is based on the inventive insight that a large variety of beverage bottles, among which wine bottles having a capacity of 0.75 or 1 litre and a variety of shapes, and beer bottles, for example half litre beer bottles, have a neck that has a length between the mouth of the bottle and a position along the neck where the diameter of the neck is roughly 3.5 cm of less than about 9 cm. The remaining lower part of the bottle has a length roughly between 20 and 25 cm. By surrounding the neck with the neck anchoring flap according to the invention at a position spaced from the mouth of the bottle, the possibility of relatively short bottles moving inside the package is limited to a significant extent, whilst relatively long bottles still fit in the same package. In addition, the aforesaid neck anchoring flap keeps the neck of the bottle centrally positioned in the package, so that the risk of breakage during transport of the bottle is reduced as well.

[0008] In the case of packages of the type folded from a blank made of cardboard, for example, two things are important, viz. that the package consists of as few parts as possible, that is, as few separate blank parts as possible, and that the area defined by the largest dimensions of the blank is as small as possible. With the package according to the invention, in which the neck anchoring flap is connected to the rear wall surface via a fold line, it becomes possible to have said neck anchoring flap form part of the area of the rear wall surface, at least in the non-folded position, so that no additional cardboard is needed for this. The inventor has inventively realised in this regard that by folding out the neck anchoring flap from the rear wall surface, the open space thus formed in the rear wall surface need not be filled, because, precisely by keeping the neck of the beverage bottle centrally positioned in the receiving space, the presence spaced therefrom of a wall surface of the package is no longer of relevance, as, seen in a direction transversely to the height direction, the neck and the bottle mouth are still spaced from the wall surfaces of the package by a fixed distance determined by the hole.

[0009] It is conceivable that the invention also relates to a package for packaging a beverage bottle, such as a wine bottle, which is designed to be placed as an inner part in an outer box and which is at least substantially formed from a

folded blank, comprising, at least in the folded condition, a rear wall surface, a left-hand side wall surface extending transversely to the rear wall surface, an opposite right-hand side wall surface extending transversely to the rear wall surface, and a front wall surface disposed opposite the rear wall surface, extending parallel thereto, which wall surfaces define an elongate receiving space for the beverage bottle, which receiving space has a height direction parallel to the longitudinal direction of the beverage bottle, at least when a beverage bottle is present in the package, wherein the package comprises a neck anchoring flap provided with a hole, wherein the hole provided in the neck anchoring flap is designed to surround the neck of the bottle in the receiving space in a neck anchoring position of the neck anchoring flap in the neck anchoring position.

[0010] The preferred embodiments to be described hereinafter can be used with the abovementioned packages according to the invention.

[0011] Quite preferably, the neck anchoring flap is provided in such a manner that when a beverage bottle is present in the receiving space, it can be folded from the non-folded position to the neck anchoring position, with the hole moving around the bottle mouth in the direction of the neck of the beverage bottle during folding.

[0012] Preferably, the neck anchoring flap is folded out from the rear wall surface, preferably from an upper part thereof, that is, the neck anchoring flap forms part of the rear wall of the package in the non-folded position.

[0013] The first fold line is preferably spaced from an upper side of the package by a distance ranging between 5 and 15 cm, preferably between 8 and 10 cm, seen in the height direction of the package. In other words, the part of the receiving space on an upper side of the neck anchoring flap, in the neck anchoring position, in which part the neck of the bottle and the bottle mouth may be, has a height, seen in height direction, of the aforementioned ranges. Measured from a bottom or the bottom side of the package, the remaining part of the receiving space, under the neck anchoring flap, has a height up to the neck anchoring flap of between 20 and 30 cm, preferably between 24 and 26 cm.

20

30

35

40

45

50

55

[0014] In the neck anchoring position, the neck anchoring flap is preferably provided in such a height position in the package that it divides the receiving space into a first part having a height which is 2 to 3 times smaller, preferably about 2.5 times smaller, than a height of a second part of the receiving space on the other side of the neck anchoring flap.

[0015] In one embodiment, the locking element is made up of a locking flap provided on one of the front wall surface, the left-hand wall surface and the right-hand wall surface, which locking flap can be folded about a second fold line extending in the height direction and which is provided in such a height position in the package that a lower boundary edge of the locking flap is positioned just above the neck anchoring flap in the neck anchoring position thereof, at least in a locking position of the locking flap. Preferably, the locking flap can be folded from one of the aforesaid surfaces, with the second fold line being provided in the surface in question. As a result, no additional blank material is needed for the locking flap, analogous to the aforesaid neck anchoring flap.

[0016] In an advantageous preferred embodiment, the package comprises a further locking element for locking the neck anchoring flap in place in the non-folded position. Because of this, the package can also be used very advantageously for packaging a beverage bottle that is already packaged in a tube or the like, for example, which would render it impossible to place the neck anchoring flap around the bottle neck. The locking flap is preferably provided in such a manner that it extends transversely to the rear wall surface, at least in the locking position. The further locking element is preferably provided as a lip on a free edge of the locking flap which faces the rear wall surface, at least in the locking position, and which, at least in the non-folded position of the neck anchoring flap, engages in a hole adapted to fit the lip in the neck anchoring flap.

[0017] Preferably, the hole in the neck anchoring flap is a slotted hole having a longitudinal direction in the height direction, at least in the non-folded position. Quite preferably, the hole is formed so that a short end boundary edge of the hole contributes toward keeping the neck of the beverage bottle centrally positioned in the receiving space in the neck anchoring position. In one embodiment, the hole to that end terminates with the first short end boundary edge facing the first fold line at substantially one third of the depth dimension of the neck anchoring flap in the neck anchoring position, seen from the first fold line.

[0018] Preferably, a bottom side of the package is closed, or at least substantially so, by a bottom part. Quite preferably, the bottom part is made up of a bottom flap that can fold about a fold line in the rear wall, in the transverse direction of the rear wall, parallel to the first fold line. Preferably, the aforesaid fold line is spaced from the first fold line by a distance ranging between 20 and 30 cm, preferably about 25 cm.

[0019] it is further advantageous in this regard if the neck anchoring flap has a free edge opposite the first fold line and, between the first fold line and the free edge, a third fold line extending parallel to the first fold line, which third fold line is located in the immediate vicinity of the front wall surface in the neck anchoring position, or, in other words, the neck anchoring flap extends from the rear wall surface to the front wall surface in the neck anchoring position, wherein a back folding part of the neck anchoring flap that is located between the third fold line and the free edge can be folded in such a manner that it extends substantially parallel to a base part of the neck anchoring flap that is located between the first fold line and the third fold line. The back folding part thus forms an additional strengthening of the neck anchoring flap. In addition, this achieves that by folding back the back folding part, the hole can be reduced to an opening for the

neck of the beverage bottle that is centrally positioned in the receiving space. An inscribed circle of said opening preferably has a diameter of between 3 and 4 cm, preferably about 3.5 cm. It is advantageous if the aforesaid free edge of the back folding part comprises a part-circular notch in line with the slotted hole, such that an at least more or less circular opening is formed by the folding back.

[0020] It is further advantageous if the slotted hole terminates between the third fold line and the free edge of the neck anchoring flap with an edge located opposite the aforesaid short end boundary edge. Because of the presence of the slotted hole, the neck anchoring flap can still be folded over the bottle mouth once a bottle is placed in the receiving space.

[0021] It is moreover advantageous if at least one of the left-hand side wall surface and the right-hand side wall surface is connected to a longitudinal side of the rear wall surface via a fourth fold line that extends in height direction, wherein the front wall surface is connected to one of the left-hand side wall surface and the right-hand side will surface via a fifth fold line that extends in height direction.

[0022] Preferably, one of the left-hand side wall surface and the right-hand side wall surface is connected to the rear wall surface via the fourth fold line, wherein the front wall surface is connected to one of the left-hand side wall surface and the right-hand side wall surface via the fifth fold line and wherein the other of the left-hand side wall surface and the right-hand side wall surface is connected to the front wall surface via a sixth fold line.

[0023] It is very advantageous if the second fold line is co-axial with the sixth fold line. Preferably, the locking flap is folded from the left-hand or the right-hand side wall surface in that case.

[0024] Preferably, the neck anchoring flap has a width, seen in the direction transversely to the height direction, which substantially equals a width of the rear wall.

[0025] It is further advantageous if at least one upper side is open, so as to make it possible to place a beverage bottle in the receiving space via the upper side, down along the neck anchoring flap, at least when the neck anchoring flap is in the non-folded position.

20

30

35

45

50

[0026] Quite preferably, the package is designed to hold three beverage bottles side by side in the three respective receiving spaces, wherein the rear wall surface is common for the three receiving spaces, wherein a first one of the three receiving spaces is defined by a first left-hand side wall surface which is connected to a left-hand longitudinal side of the rear wall surface via a fourth fold line, wherein a first front wall surface is connected to the first left-hand side wall surface via a sixth fold line, and wherein a first right-hand side wall surface is connected to the first front wall surface via a sixth fold line, wherein a second one of the three receiving spaces is defined by a second right-hand side wall surface which is connected to a right-hand longitudinal side opposite the left-hand longitudinal side of the rear wall surface via a fourth fold line, wherein a second front wall surface is connected to the second right-hand side wall surface via a sixth fold line, and wherein a second left-hand side wall surface is connected to the second front wall surface via a sixth fold line, and wherein a third one of the three receiving spaces is defined by the rear wall surface, the first right-hand side wall surface and the second left-hand side wall surface.

[0027] The neck anchoring flap is in that case a common neck anchoring flap for the three receiving spaces, or, in other words, it is made in one piece, comprising three holes which are provided in such a manner that they are centrally located in the respective receiving spaces, at least in the neck anchoring position.

[0028] Preferably, at least one of the first and the second front wall surface, preferably both, is/are provided with a lip that extends in the direction of the other of the first and the second front wall surface, which lip functions as a front wall surface for the third receiving space and which is provided in the package in such a manner that, in use, it forms a boundary of the third receiving space, near a bottom side of the beverage bottle.

[0029] In a preferred embodiment, a front wall surface of the third receiving space is formed by a multitude of lips distributed over the height of the third receiving space, which lips extend from the second left-hand side wall surface and/or the first right-hand side wall surface. Preferably, between three and ten lips are distributed, preferably evenly, over the height.

[0030] It is advantageous in this regard if the multitude of lips comprises a first number of lips, preferably two to five lips, which extend from the left-hand side wall surface of the third receiving space in the direction of the right-hand side wall surface of the third receiving space, and a second number of lips, preferably two to five lips, which extend from the right-hand side wall surface of the third receiving space in the direction of the left-hand side wall surface of the third receiving space.

[0031] It is further advantageous if lips of the first number of lips are free from contact with lips of the second number of lips, at least seen in front view transversely to the front wall surface of the third receiving space.

[0032] It is further advantageous if, seen in height direction, lips of one of the first number of lips and the second number of lips are located between the lips of the other of the first number of lips and the second number of lips.

[0033] It is advantageous if the lip is formed by a cutout in the side wall surface that is connected to the front wall surface in question via a sixth fold line, which cutout extends from the sixth fold line, through the material of the side wall surface in question and back again to the sixth fold line.

[0034] It is further advantageous if the package comprises a further lip which is connected to the side wall surface in question via a seventh fold line, transversely to the height direction, at a bottom edge of said side wall surface, which

further lip can be folded about the seventh fold line in such a manner that it extends substantially parallel to the side wall surface in question, in the direction of the neck anchoring flap. This achieves that a double layer of blank material will be present between the receiving spaces, at least in places where a beverage bottle present in the receiving space can touch the side wall surface in question.

[0035] The aforesaid multitude of lips forming a front wall surface of the third receiving space can also be used advantageously in beverage bottle packages that do not comprise the above-described neck anchoring flap. Accordingly it is a further object of the invention to provide a cost-advantageous package for packaging three beverage bottles which can be folded from a blank of limited dimension and that in a simple manner.

10

15

20

30

35

40

45

50

55

[0036] The aforesaid further object is achieved with the further package according to the invention for packaging at least three beverage bottles, such as wine bottles, which is designed to be placed as an inner part in an outer box and which is at least substantially formed from a folded blank, comprising, at least in the folded condition, three side-by-side, mutually parallel elongated receiving spaces for one beverage bottle each, each having a height direction which extends parallel to a longitudinal direction of the beverage bottle, at least when a beverage bottle is present in the receiving space in question, wherein a first and a second of the three receiving spaces each comprise a rear wall surface, a left-hand side wall surface extending transversely to the rear wall surface, an opposite right-hand side wall surface extending transversely to the rear wall surface, and a front wall surface disposed opposite the rear wall surface, which extends parallel thereto, wherein a third receiving space of the three receiving spaces is disposed between the first and the second receiving space, which third receiving space comprises a rear wall surface, a left-hand side wall surface extending transversely to the rear wall surface and an opposite right-hand side wall surface, which extends transversely to the rear wall surface, wherein a front wall surface of the third receiving space is formed by a multitude of lips distributed over the height of the third receiving space, which lips extend from the left-hand and/or the right-hand side wall surface of the third receiving space.

[0037] By using the aforesaid lips as a front wall surface of the third receiving space, a considerable saving on blank material can be realised. This makes it possible to provide a cost-advantageous package from a blank of limited dimensions.

[0038] Preferably, the multitude of lips comprises a first number of lips which extend from the left-hand side wall surface of the third receiving space in the direction of the right-hand side wall surface of the third receiving space, and a second number of lips which extend from the right-hand side wall surface of the third receiving space in the direction of the left-hand side wall surface of the third receiving space.

[0039] In order to facilitate folding of the package, lips of the first number of lips, preferably all the lips of the first number of lips, are free from contact with lips of the second number of lips, at least seen in front view transversely to the front wall surface of the third receiving space. As a result, the largest possible area is furthermore covered by the multitude of lips, in particular centrally in the front wall surface of the third receiving space.

[0040] It is further advantageous if the lips are free from the side wall surface in the direction to which they extend.

[0041] It is advantageous in this regard if the lips of the first and the second number of lips are provided alternately in height direction, or, in other words, if the lips of one of the first number and the second number are located between lips of the other of the first number and the second number, seen in height direction. Preferably, lips of the first and the second number of lips extend in part to beside each other, seen in transverse direction, or, in other words, in the direction in which the lips extend, i.e. material of both the first and the second number of lips is in that case present in a central area of the front wall surface, seen in height direction, which has a positive effect towards achieving an effective protection of a bottle present in the third receiving space.

[0042] Preferably, the front wall surface of the first, the second and the third receiving space all lie in substantially the same imaginary plane.

[0043] It is further advantageous if the right-hand side wall surface of the first receiving space is common with, or, in other words, concerns the same blank portion as, the left-hand side wall surface of the third receiving space, and wherein the left-hand side wall surface of the second receiving space is common with, or, in other words, concerns the same blank portion as, the right-hand side wall surface of the third receiving space.

[0044] It is advantageous in this regard if the front wall surface of the first receiving space is connected to the right-hand side wall surface of the first receiving space via a fold line, wherein the first number of lips extend from said fold line, or at least an extension thereof, forming an integral continuation of the front wall surface of the first receiving space, wherein said fold line is interrupted at the location of the first number of lips.

[0045] Analogously thereto, it is advantageous if the front wall surface of the second receiving space is connected to the left-hand side wall surface of the second receiving space via a fold line, wherein the second number of lips extend from said fold line, or at least an extension thereof, forming an integral continuation of the front wall surface of the second receiving space, wherein said fold line is interrupted at the location of the second number of lips.

[0046] In a very advantageous preferred embodiment, the lips of said multitude of lips are folded from the side wall surface of the first or the second receiving space adjacent to the third receiving space, respectively, because a cut is present in the blank in the side wall surface in question.

[0047] It is further advantageous if an open space is provided in the blank portion from which the lips have been cut, at the location of at least part of the cut of the lip in question. This reduces the risk that a lip will not readily come loose from the blank portion from which it has been cut upon folding of the package from the blank.

[0048] In an advantageous embodiment of the package, the rear wall surface of each of the three receiving spaces is one integral surface of the blank, wherein the left-hand side wall surface of the first receiving space is connected to a left-hand longitudinal side of the rear wall surface via a first fold line, the front wall surface is connected to the left-hand side wall surface via a second fold line, and the right-hand side wall surface is connected to the front wall surface via a third fold line, wherein the right-hand side wall surface of the second receiving space is connected to a right-hand longitudinal side of the rear wall surface via a first fold line, the front wall surface is connected to the right-hand side wall surface via a second fold line, and the left-hand side wall surface is connected to the front wall surface via a third fold line, wherein furthermore the right-hand side wall surface of the first receiving space also functions as the left-hand side wall surface of the third receiving space and the left-hand side wall surface of the second receiving space also functions as the right-hand side wall surface of the third receiving space. It is advantageous in this regard if lips are formed by a cut in the right-hand side wall surface of the first receiving space and/or a cut in the left-hand side wall surface of the second receiving space, from a third fold line through the material of the side wall surface in question and back again to said third fold line. Such a package can be folded from the blank in a very simple and intuitive manner.

[0049] It is further advantageous if the right-hand side wall surface of the first receiving space and the left-hand side wall surface of the second receiving space are both connected to a respective additional flap via a fourth fold line, parallel to the third fold line, which flap, in the folded position, is folded about the fourth fold line in such a manner that it abuts against the right-hand or left-hand side wall surface in question in the third receiving space and thus forms an additional left-hand or right-hand side wall surface layer, respectively, wherein preferably the additional flaps at least substantially entirely overlap the associated right-hand or left-hand side wall surface, respectively.

[0050] It is moreover advantageous if the package according to the invention is provided with spacer lips extending from a rear wall surface, and/or a side wall surface located on an outer side of the package and/or from a front wall surface, substantially perpendicular to the wall surface in question, for keeping at least the wall surface in question of the package spaced from an outer box. Said spacer lips preferably extend over a distance of, preferably, 5 mm to 1.5 cm. **[0051]** The invention also relates to a blank for forming the above-described packages according to the invention therefrom.

[0052] Preferably, the blank comprises a one-piece rectangular rear wall surface having a height direction, which, on a left-hand side thereof, is connected, via a fourth fold line parallel to the height direction, to a first left-hand side wall surface which is connected, on a side remote from the rear wall surface, via a fifth fold line parallel to the height direction, to a first front wall surface which is connected, on a side remote from the rear wall surface, via a sixth fold line parallel to the height direction, to a first right-hand side wall surface, and which, on a right-hand side thereof, is connected, via a fourth fold line parallel to the height direction, to a second right-hand side wall surface which is connected, on a side remote from the rear wall surface, via a fifth fold line parallel to the height direction, to a second left-hand side wall surface, wherein preferably the rear wall surface is furthermore connected to a neck anchoring flap on an upper side, via a first fold line extending transversely to the height direction, which neck anchoring flap extends over the width of the rear wall surface, transversely to the height direction, which bottom flap extends over the width of the rear wall surface, transversely to the height direction, which bottom flap extends over the width of the rear wall surface, transversely to the height direction, which bottom flap extends over the width of the rear wall surface, transversely to the height direction, which bottom flap extends over the width of the rear wall surface, transversely to the height direction, which bottom flap extends over the width of the rear wall surface, transversely to the height direction, which bottom flap extends over the width of the rear wall surface, transversely to the height direction.

[0053] The present invention will now be explained in more detail by means of a description of two preferred embodiments of packages according to the invention, in which reference is made to the following schematic figures, in which:

Figure 1 is a three-dimensional view from the rear side of a first preferred embodiment of a package according to the invention;

Figure 2 is a three-dimensional view from the front side of the package of figure 1;

Figure 3 is a three-dimensional view from the front side of the package of figure 1 in another position;

Figure 4 is a view of the package according to figure 2, including three beverage bottles present therein;

Figure 5 is a sectional view along the line V-V in figure 1;

10

20

30

35

40

45

50

55

Figure 6 is a view of the blank of the preferred embodiment of the package as shown in figures 1-5;

Figure 7a is a three-dimensional view from the front side of a second preferred embodiment of a package according to the invention; and

Figure 7b is a view of the blank of the preferred embodiment of the package as shown in figure 7a.

[0054] The package 100 according to figure 1 can be folded from the bank shown in figure 6. The material of the package 100 is corrugated board, but alternatively another sheet material may be used, such as a different type of cardboard, paper or plastic. The package 100 is suitable for holding three beverage bottles, such as wine bottles, for

example. The package 100 is further intended for being placed in an outer box (not shown), which outer box just fits around the greatest height, width and depth dimensions of the package 100. A height direction 31 of the package 100 extends parallel to a longitudinal direction of the beverage bottles 70 to be placed in the package 100. Although the package 100 shown in the figures is suitable for holding three beverage bottles, a package according to the invention suitable for holding a different number of beverage bottles, in particular one or two beverage bottles, is also possible within the framework of the invention.

[0055] The package 100 has three side-by-side receiving spaces 21, 22 and 23 for accommodating one beverage bottle in each of the receiving spaces. The package 100 has a rear wall surface 1, which is common for the three receiving spaces 21-23. On a left-hand longitudinal side, at least seen in the front view of figure 2, the rear wall surface 1 is connected, via a fourth fold line 84 that extends in the height direction 31, to a left-hand side wall surface 2 which extends perpendicular to the rear wall surface 1 in the folded position and which has a depth dimension (seen in the depth direction 32) which substantially corresponds to the diameter of a beverage bottle that only just fits in the first receiving space 21. In the example shown in the figures, the aforesaid depth dimension is about 9 cm. On the side remote from the rear wall surface 1, the left-hand side wall surface 2 is connected, via a fifth fold line 85 that extends parallel to the fourth fold line 84, to a front wall surface 3 which, seen in the transverse direction 33, has a width dimension which likewise substantially corresponds to the diameter of a beverage bottle that only just fits in the receiving space 21. In folded position, the front wall surface 3 extends perpendicular to the left-hand side wall surface 2 and is connected, on a side remote from the left-hand side wall surface 2, via a sixth fold line 86, to a right-hand side wall surface 4 of the first receiving space 21.

10

20

30

35

40

45

50

55

[0056] A dimension in the height direction 31 of the left-hand side wall surface 2, the front wall surface 3 and the right-hand side wall surface 4 is the same in all three cases, being about 35 cm. Because of the aforesaid dimensions of the wall surfaces 2-4 transversely to the height direction, the receiving space 21 is substantially square, seen in cross-sectional view

[0057] A first fold line 81 extending transversely to the height direction is provided in the rear wall surface 1 at a height of about 9 cm below the upper side of the package 100, wherein the part of the first rear wall surface 1 that extends above the first fold line 81 is cut from a free upper edge of the rear wall surface 1 at the location of the aforesaid fourth fold line 84 and a fourth fold line 84' (yet to be described in more detail), so that a foldable flap is realised on the upper side of the rear wall surface 1, which flap functions as a neck anchoring flap 5.

[0058] The neck anchoring flap 5 can be folded from a non-folded position, in which it lies in the plane of the rear wall surface 1, in the direction of the front wall surface 3, as is shown clearly in particular in figure 1, with the neck anchoring flap 5 extending substantially perpendicular to the rear wall surface 1, thereby defining a so-called neck anchoring position. A third fold line 83 is provided in the neck anchoring flap 5, spaced from the left-hand side wall surface 2 and the right-hand side wall surface 4 by a distance substantially equal to the depth dimension, which fold line forms a connection between a base part 8, between the first and the third fold line, and a back folding part 9, between the third fold line and a free edge 11 of the neck anchoring flap 5.

[0059] As shown in particular in figure 1, the back folding part 9 is folded back through about 180 degrees about the third fold line 83 in the direction of the first fold line 81. As shown in figure 1, a depth dimension of the back folding part 9 is about half the depth, seen in the depth direction 32, of the base part 8 of the neck anchoring flap 5, whose depth dimension substantially corresponds to the depth dimension of the wall surfaces 2 and 4. As shown in figure 6, a slotted hole 7 is provided in the neck anchoring flap 5 for each receiving space 21-23, which slotted hole starts at a central point in the receiving space 21-23, at least in the neck anchoring position of the neck anchoring flap 5 shown in figure 1, and which extends in the direction of the third fold line 83, or, in other words, toward the back folding part 9, with the slotted hole 7 terminating at a position slightly beyond the third fold line 83.

[0060] Starting from a non-folded condition, a beverage bottle 70 can be placed in one or more of the receiving spaces 21-23 by being lowered, with the bottom facing down, into the receiving space in question from the upper side, along the neck anchoring flap 5, which is in the upright position at that stage, onto a bottom 30 provided at the bottom side of the package 100, which bottom can be folded about an eighth fold line 88 which extends in transverse direction, parallel to the first fold line 81, in the rear wall surface 1. Subsequently, the neck anchoring flap 5 can be folded over the bottle mouth until the hole 7 surrounds the neck, after which the back folding part 9 is folded back so as to thus provide a substantially round hole 7, as shown in figure 1, in the neck anchoring position, due to the presence of the illustrated, substantially semicircular recesses 12 at the location of the free boundary edge 11. The back folding part 9 forms an additional strengthening of the neck anchoring flap 5.

[0061] At a height identical to the height position, seen in the height direction, of the neck anchoring flap 5, the right-hand side wall surface 4 is provided with a horizontal cut which extends transversely to the height direction from the second fold line 82, which is co-axial with and forms the extension of the sixth fold line 86, up to a free boundary edge thereof, such that the part of the right-hand side wall surface 4 forms a locking flap 6 which, in a non-folded position, lies in the plane of the front wall surface 3, so that the neck anchoring flap 5 can be freely folded up and down from and to the neck anchoring position. By subsequently folding the locking flap 6 to a folded position perpendicular to the front

wall surface 3 over the neck anchoring flap 5, causing a bottom edge 25 to be positioned just above the neck anchoring flap 5, the neck anchoring flap 5 is effectively prevented from folding back to the non-folded position thereof.

[0062] At a free edge of the locking flap 6, which extends parallel to the second fold line 82, the locking flap 6 has a lip 13 that extends transversely to the height direction 31 from the locking flap 6, which lip 13 falls into a local recess 14 adapted thereto in the neck anchoring flap 5 in the aforesaid folded position, at least when the neck anchoring flap is in the non-folded position. As a result, the locking flap 6, in the folded position thereof, and the neck anchoring flap 5, in the non-folded position thereof, will effectively remain positioned with respect to each other.

[0063] The locking flap 6 may further comprise a fold line parallel to the second fold line 82, approximately in the centre of the locking flap 6, which is useful when, once the neck anchoring flap 5 has been folded downward over a bottle mouth to the neck anchoring position, the locking flap can still be folded from its non-folded position to its folded position, along the part of the bottle neck 72 and the bottle mouth 71 that extends above the neck anchoring position in that position, by temporarily folding the locking flap 6 about the aforesaid further fold line.

10

20

30

35

40

45

50

55

[0064] As described in the foregoing, the package 100 is designed to hold three wine bottles in three respective receiving spaces 21-23 therein. For the receiving space 22, the same applies as described above for the receiving space 21, albeit in mirror image, with corresponding numerals being provided with an apostrophe, in which regard it is noted that the rear wall surface 1 is connected, via a first fold line 84, to a right-hand (in this case) side wall surface 4', which is connected, via a fifth fold line 85', to a front wall surface 3', which is connected, via a sixth fold line 86', to a left-hand (in this case) side wall surface 2'. In other words, the construction of the various wall surfaces is symmetrical and arranged in mirror image.

[0065] As a result, a third receiving space 23 having substantially the same cross-sectional dimensions, albeit not comprising a continuous front wall surface comparable to the front wall surfaces 3 and 3', is created centrally between the first and the second receiving 21 and 22, respectively. In order to provide greater protection in a direction transversely to the height direction 31 for a bottle 70 present in the receiving space 23 in question, near the bottom thereof, a cutout has been made in the right-hand side wall surface 4 and in the left-hand side wall surface 2', respectively, starting from the sixth fold line 86, 86' through the material of the aforesaid side wall surfaces 4 and 2' and back again to the sixth fold line. The sixth fold line 86, 86' does not continue at the location of the lips 15, 15' thus formed, so that the lips 15, 15' will remain in the same plane as the front wall surfaces 3 and 3', respectively, when the right-hand side wall surface 4 and the left-hand side wall surface 2' are folded about the sixth fold line 86, slightly overlapping with the free ends thereof, as shown in figure 2, so that a double layer of cardboard is formed in the centre, at least seen in the transverse direction 33 of the package 100, of the third receiving space 23 so as to provide a very effective protection of the beverage bottle 70 present in the third receiving space at the location of a lower part thereof.

[0066] The cutting out of the lips 15, 15' from the aforesaid side wall surfaces 4 and 2', respectively, has created holes in the aforesaid side wall surfaces 4 and 2', respectively. On a bottom side of the side wall surfaces 4 and 2', respectively, a further lip 16, 16' is provided via a seventh fold line 87, 87' that extends transversely to the height direction 31, in the depth direction 32, which further lip 16, 16', as a result of being folded through 180 degrees, extends upward into the receiving space 23, substantially covering the holes created by the cutting out of the lips 15, 15' and/or forming a double wall at places where no holes are present, as shown in figures 2 and 3.

[0067] The package 100 further comprises spacer lips 17, 17' and 19, 19', which are formed at the location of the fourth and fifth fold lines 84, 84' and 85, 85', analogously to the above-described lips 15, 15'. The lips project over a distance of about 1 cm in the transverse direction 33 from the side wall surfaces 2, 4', at least in the case of the lips 17, 17', or in the depth direction 32 from the front wall surfaces 3, 3', at least in the case of the lips 19, 19', thus keeping the package 100 spaced at a corresponding distance apart from the outer box, at least in the situation in which the package 100 is placed in the outer box. The right-hand side wall surface 4 and the left-hand side wall surface 2' are provided with lips 20 at a free edge that extends in the height direction 31, which lips extend through suitably configured recesses in the rear wall surface 1 in the folded condition of the package 100. Furthermore, a few lips are provided at the location of the first fold line 81 and the eighth fold line 88. As shown in figure 2, the lips 17, 17' are located at the same level as the lips 19, 19', seen in the height direction 31 of the package 100. This has the advantage that when two specimens of the package 100 are placed one after the other (seen in the depth direction) in an outer box for six (in that case) beverage bottles, the lips 19, 19' will abut against the lips 17, 17', as a result of which the two package is 100 will be held spaced apart. The lips 20 and the aforesaid lips at the fold lines 81 and 88 are located within the outer circumference of the package at the rear side, as shown, whilst the lips 19, 19' are located on the outer circumference of the package at the front side. This achieves that when two or more packages of this kind must be placed one after the other, or, in other words, "front side against rear side", in an outer box, they cannot be erroneously placed other way round, or in other words, "front side against front side", in the outer box, as the lips 20, for example, of a first of two adjacent packages will come into conflict with lips 20 of a second of the two adjacent packages.

[0068] From the blank shown in figure 7b, the package 200 shown in figure 7a can be folded. The material of the package 200 is corrugated board, but alternatively another sheet material may be used, such as a different type of cardboard, paper or plastic. The package 200 is suitable for holding three beverage bottles, such as wine bottles, for

example. The package 200 is further intended for being placed in an outer box (not shown in the figures), which outer box only just fits around the greatest height, width and depth dimensions of the package 200. A height direction 131 of the package 200 extends parallel to a longitudinal direction of the beverage bottles to be held in the package 200, analogously to the manner in which bottles 70 are held in the package described in the foregoing.

[0069] The package 200 comprises three side-by-side receiving spaces 121, 122 and 123 for holding one beverage bottle in each of the receiving spaces. The package 200 is comparable to the package 100 as regards the general configuration and likewise comprises a rear wall surface 101 that is common for the three receiving spaces 121-123. On a left-hand longitudinal side, at least seen in the front view of figure 7a, the rear wall surface 101 is connected, via a first fold line 181 extending in the height direction 131, to a left-hand side wall surface 102, which side wall surface 102 extends perpendicular to the rear wall surface 101 in the folded position and which has a depth dimension (in the depth direction 132) which substantially corresponds to the diameter of a beverage bottle that only just fits in the first receiving space 121. In the example shown in the figures, said depth direction is about 9 cm. On the side remote from the rear wall surface 101, the left-hand side wall surface 102 is connected, via a second fold line 182 that extends parallel to the first fold line 181, to a front wall surface 103 which has a width dimension, seen in the transverse direction 133, which likewise substantially corresponds to the diameter of a beverage bottle that only just fit in the receiving space 121. In the folded position, the front wall surface 103 extends perpendicular to the left-hand side wall surface 102 and is connected, on the side remote from the left-hand side wall surface 102, via a third fold line 183, to a right-hand side wall surface 104 of the first receiving space 121.

10

30

35

45

50

55

[0070] Seen in the height direction 131, the left-hand side wall surface 102, the front wall surface 103 and the right-hand side wall surface 104 have the same dimension, viz. about 35 cm. Because of the aforesaid dimensions of the wall surfaces 102-104 transversely to the height direction, the receiving space 121 is substantially square, seen in cross-sectional view.

[0071] As described in the foregoing, the package 200 is designed to hold three wine bottles in three respective receiving spaces 121-123. For the receiving space 122, the same applies as described above for the receiving space 121, albeit in mirror image, with corresponding numerals being provided with an apostrophe, in which regard it is noted that the rear wall surface 101 is connected, via a first fold line 181', to a right-hand (in this case) side wall surface 104', which is connected, via a second fold line 182', to a front wall surface 103', which is connected, via a third fold line 183', to a left-hand (in this case) side wall surface 102'. In other words, the construction of the various wall surface is symmetric and arranged in mirror image.

[0072] As a result, a third receiving space 123 having substantially the same cross-sectional dimensions, albeit not comprising a continuous front wall surface comparable to the front wall surfaces 103 and 103', is created centrally between the first and the second receiving 121 and 122, respectively. The third receiving space has a left-hand side wall surface 104 and a right-hand side wall surface 102', which wall surfaces are the same surfaces as the right-hand side wall surface of the first receiving space and the left-hand side wall surface of the second receiving space. In order to provide greater protection in a direction transversely to the height direction 131 for a bottle present in the receiving space 123 in question, three cutouts 115 and two cutouts 115', respectively, extending from the third fold line 183, 183' through the material of the aforesaid side wall surfaces 104 and 102', respectively, and back again to the third fold line, are made in the side wall surface 104 and in the side wall surface 102', respectively. The third fold line 183, 183' does not continue at the location of the lips 115, 115' thus formed, so that the lips 115, 115' will remain in the same plane as the front wall surfaces 103 and 103', respectively, when the side wall surface 104 and the side wall surface 102' are folded about the third fold line 183, 183', with the free ends thereof just passing along one another, as shown in figure 7a, so that a highly continuous, seen in height direction, layer of cardboard is formed in the centre, at least seen in the transverse direction 133 of the package 200, of the third receiving space 123 so as to provide a very effective protection of the beverage bottle present in the third receiving space. In other words, the lips 115 and 115' are provided in alternating relationship, forming a front wall surface of the third receiving space 123.

[0073] The cutting out of the lips 115, 115' from the aforesaid side wall surfaces 104 and 102', respectively, has created holes in the aforesaid side wall surfaces 104 and 102', respectively. On a side of the respective side wall surfaces 104 and 102' remote from the third fold lines 183, 183', an additional flap 116, 116' is provided via a fourth fold line 184, 184' that extends parallel to the height direction 131 (see in particular figure 7b), which flap, as a result of being folded back through 180 degrees, extends forward along the adjacent side wall surface 104 or 102' into the receiving space 123, substantially covering the aforesaid holes created by the cutting out of the lips 115, 115' and/or forming a double side wall at places where the holes are not present.

[0074] The package 100 further comprises spacer lips 117, 117' and 119, 119', which are formed at the location of the first and second fold lines 181, 181' and 182, 182', analogously to the above-described lips 115, 115'. Said lips are analogous to the aforesaid lips 17, 17' and 19, 19'. Lips 120, 120' have been cut from the additional flaps 116, 116', extending from the fourth fold line 184, in a manner analogous to the lips 115, 115'. In the folded condition of the package 200, the lips 120 and 120' pass through suitably configured recesses 121 and 121', respectively, in the rear wall surface 101, whilst the additional flaps 116, 116', on the other hand, fold back just before the rear wall 101.

List of reference numerals

[0075]

5	Package	100, 200
	Rear wall surface	1, 101
	Left-hand side wall surface	2, 2', 102, 102'
	Front wall surface	3, 3', 103, 103'
	Right-hand side wall surface	4, 4', 104, 104'
10	Neck anchoring flap	5
	Locking element, Locking flap	6, 6'
	Hole	7
	Back folding part	8
	Base part	9
15	Free edge	11
	Recess	12
	Receiving space	21, 22, 23, 121, 122, 123
	Lip	13
	Hole	14
20	Lip	15, 15', 115, 115'
	Lip	16, 16', 116, 116'
	Lip	17, 17', 19, 19', 20
	Bottom edge	25
	Bottom	30
25	Height direction	31, 131
	Depth direction	32, 132
	Transverse direction	33, 133
	Beverage bottle	70
	Bottle mouth	71
30	Bottle neck	72
	First fold line	81, 181, 181'
	Second fold line	82, 82', 182, 182'
	Third fold line	83, 183, 183'
	Fourth fold line	84, 84', 184, 184'
35	Fifth fold line	85, 85'
	Sixth fold line	86, 86'
	Seventh fold line	87, 87'
	Eighth fold line	88

Claims

40

45

50

- 1. A package (100) for packaging a beverage bottle (70), such as a wine bottle, which is designed to be placed as an inner part in an outer box and which is at least substantially formed from a folded blank, comprising, at least in the folded condition, a rear wall surface (1), a left-hand side wall surface (2) extending transversely to the rear wall surface, an opposite right-hand side wall surface (4) extending transversely to the rear wall surface, and a front wall surface (3) disposed opposite the rear wall surface, extending parallel thereto, which wall surfaces (1-4) define an elongate receiving space (21) for the beverage bottle, which receiving space has a height direction (31) parallel to the longitudinal direction of the beverage bottle, at least when a beverage bottle is present in the package, wherein the rear wall surface (1) comprises a neck anchoring flap (5) provided with a hole (7), which can be folded about a first fold line (81) extending transversely to the height direction in the rear wall surface, from a non-folded position toward the front wall surface (3) to a neck anchoring position, wherein the hole (7) provided in the neck anchoring flap (5) is designed to surround the neck (72) of the bottle in the receiving space (21) in the neck anchoring position,
- wherein the package is provided with a locking element (6) for preventing movement of the neck anchoring flap (5) from the neck anchoring position toward the non-folded position.
 - 2. A package (100) according to claim 1, wherein the locking element is made up of a locking flap (6) provided on one

of the front wall surface (3), the left-hand wall surface (2) and the right-hand wall surface (4), which locking flap can be folded about a second fold line (82) extending in the height direction and which is provided in such a height position in the package (100) that a lower boundary edge (25) of the locking flap (6) is positioned just above the neck anchoring flap (5) in the neck anchoring position thereof, at least in a locking position of the locking flap.

5

3. A package according to claim 1 or 2, wherein the hole (7) in the neck anchoring flap (5) is a slotted hole having a longitudinal direction in the height direction, at least in the non-folded position.

10

4. A package according to claim 3, wherein the neck anchoring flap (5) has a free edge (11) opposite the first fold line (81) and, between the first fold line (81) and the free edge (11), a third fold line (83) extending parallel to the first fold line (81), which third fold line is located in the immediate vicinity of the front wall surface (3) in the neck anchoring position, wherein a back folding part (9) of the neck anchoring flap (5) that is located between the third fold line (83) and the free edge (11) can be folded in such a manner that it extends substantially parallel to a base part (8) of the neck anchoring flap that is located between the first fold line (81) and the third fold line (83).

15

5. A package according to claim 3 and 4, wherein the slotted hole (7) terminates between the third fold line (83) and the free edge (11) of the neck anchoring flap (5).

20

6. A package according to one of the preceding claims, designed to hold three beverage bottles (70, 70", 70") side by side in the three respective receiving spaces (21-23), wherein the rear wall surface (1) is common for the three receiving spaces,

wherein a first one (21) of the three receiving spaces is defined by a first left-hand side wall surface (2) which is connected to a left-hand longitudinal side of the rear wall surface (1) via a fourth fold line (84), wherein a first front wall surface (3) is connected to the first left-hand side wall surface (2) via a fifth fold line (85), and wherein a first

right-hand side wall surface (4) is connected to the first front wall surface via a sixth fold line (86),

wherein a second one (22) of the three receiving spaces is defined by a second right-hand side wall surface (4') which is connected to a right-hand longitudinal side opposite the left-hand longitudinal side of the rear wall surface (1) via a fourth fold line (84'), wherein a second front wall surface (3') is connected to the second right-hand side wall surface (4') via a fifth fold line (85'), and wherein a second left-hand side wall surface (2') is connected to the second front wall surface (3') via a sixth fold line (86'), and

wherein a third one (23) of the three receiving spaces is defined by the rear wall surface (1), the first right-hand side wall surface (4) and the second left-hand side wall surface (2').

30

35

25

7. A package according to claim 6, wherein the rear wall surface (1) comprises a neck anchoring flap (5) which is common for the three receiving spaces (21-23), which neck anchoring flap comprises three holes (7) which are provided in such a manner that they are centrally located in the respective receiving spaces, at least in the neck anchoring position.

40

8. A package according to claim 6 or 7, wherein at least one of the first (3) and the second (3') front wall surface is provided with a lip (15, 15') that extends in the direction of the other of the first and the second front wall surface, which lip functions as a front wall surface for the third receiving space (23)and which is provided in the package in such a manner that, in use, it forms a boundary of the third receiving space, near a bottom side of the beverage bottle.

45

9. A package according to claim 8, wherein the lip (15, 15') or the number of lips is/are formed by a cutout in the side wall surface (4, 2') that is connected to the front wall surface (3, 3') in question via a sixth fold line (86, 86'), which cutout extends from the sixth fold line (86, 86'), through the material of the side wall surface in question and back again to the sixth fold line.

50

10. A package according to claim 9, comprising a further lip (16) which is connected to the side wall surface in question via a seventh fold line (87, 87'), transversely to the height direction (31), at a bottom edge of said side wall surface (4, 2'), which further lip can be folded about the seventh fold line in such a manner that it extends substantially parallel to the side wall surface in question, in the direction of the neck anchoring flap (5).

55

11. A package according to claim 2 or a claim dependent thereon, comprising a further locking element for locking the neck anchoring flap in place in the non-folded position.

12. A package according to claim 11, wherein the locking flap is provided in such a manner that it extends, preferably transversely, to the rear wall surface, at least in the locking position, wherein the further locking element is provided

as a lip on a free edge of the locking flap which faces the rear wall surface, and which, at least in the locking position engages in a hole adapted to fit the lip in the neck anchoring flap, at least in the non-folded position of the neck anchoring flap.

- 5 13. A package (200) for packaging three beverage bottles, such as wine bottles, which is designed to be placed as an inner part in an outer box and which is at least substantially formed from a folded blank, comprising, at least in the folded condition, three side-by-side, mutually parallel elongated receiving spaces for one beverage bottle each, each having a height direction which extends parallel to a longitudinal direction of the beverage bottle, at least when a beverage bottle is present in the receiving space in question, wherein a first and a second of the three receiving 10 spaces each comprise a rear wall surface, a left-hand side wall surface extending transversely to the rear wall surface, an opposite right-hand side wall surface extending transversely to the rear wall surface, and a front wall surface disposed opposite the rear wall surface, which extends parallel thereto, wherein a third receiving space of the three receiving spaces is disposed between the first and the second receiving space and a rear wall surface, which third receiving space comprises a left-hand side wall surface extending transversely to the rear wall surface 15 and an opposite right-hand side wall surface, which extends transversely to the rear wall surface, wherein a front wall surface of the third receiving space is formed by a multitude of lips distributed over the height of the third receiving space, which lips extend from the left-hand and/or the right-hand side wall surface of the third receiving space.
- 20 14. A blank for forming the package according to any one of the preceding claims therefrom.

25

30

35

40

45

50

55

15. A blank according to claim 14, comprising a one-piece rectangular rear wall surface having a height direction, which, on a left-hand side thereof, is connected, via a fourth fold line parallel to the height direction, to a first left-hand side wall surface which is connected, on a side remote from the rear wall surface, via a fifth fold line parallel to the height direction, to a first front wall surface which is connected, on a side remote from the rear wall surface, via a sixth fold line parallel to the height direction, to a first right-hand side wall surface, and which, on a right-hand side thereof, is connected, via a fourth fold line parallel to the height direction, to a second right-hand side wall surface which is connected, on a side remote from the rear wall surface, via a fifth fold line parallel to the height direction, to a second front wall surface which is connected, on a side remote from the rear wall surface, via a sixth fold line parallel to the height direction, to a second left-hand side wall surface, wherein the rear wall surface is furthermore connected to a neck anchoring flap on an upper side, via a first fold line extending transversely to the height direction, which neck anchoring flap extends over the width of the rear wall surface, transversely to the height direction, which bottom flap extends over the width of the rear wall surface, transversely to the height direction.

12

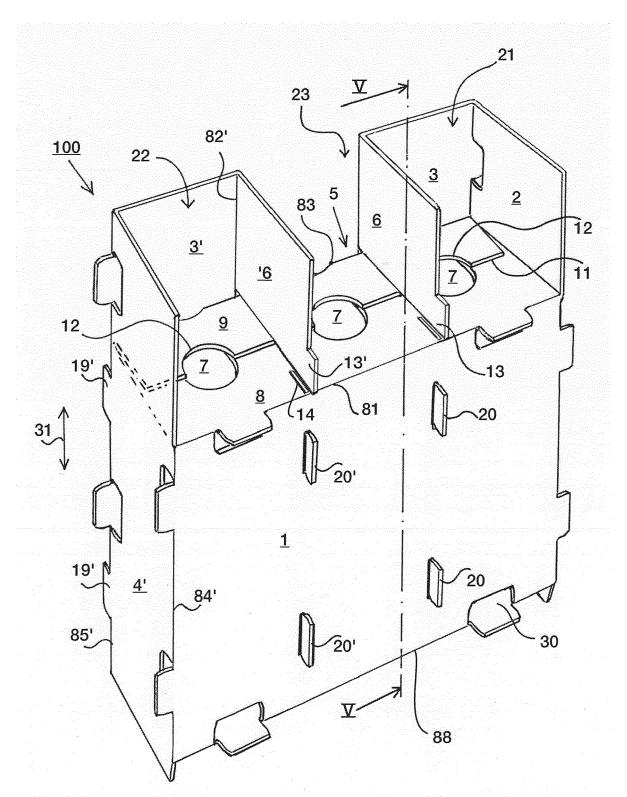


Fig. 1

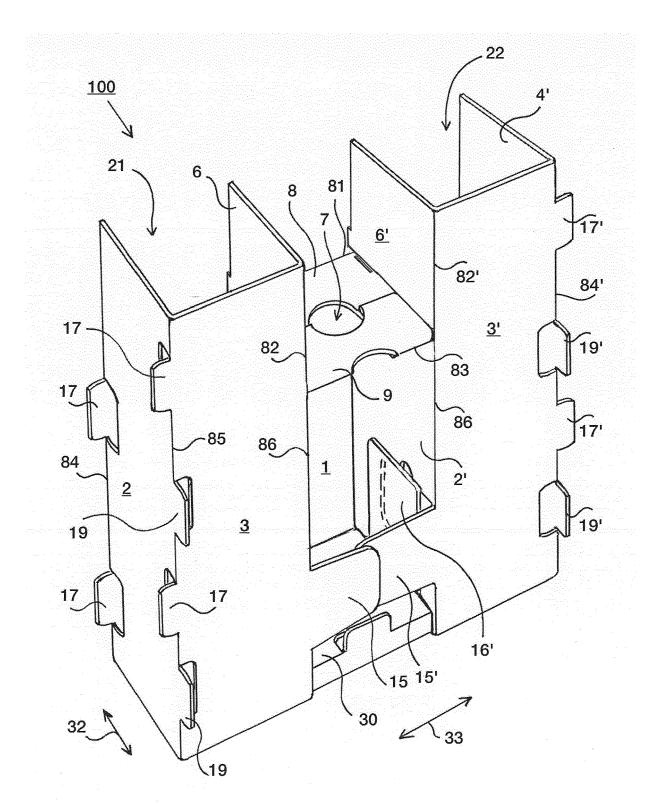


Fig. 2

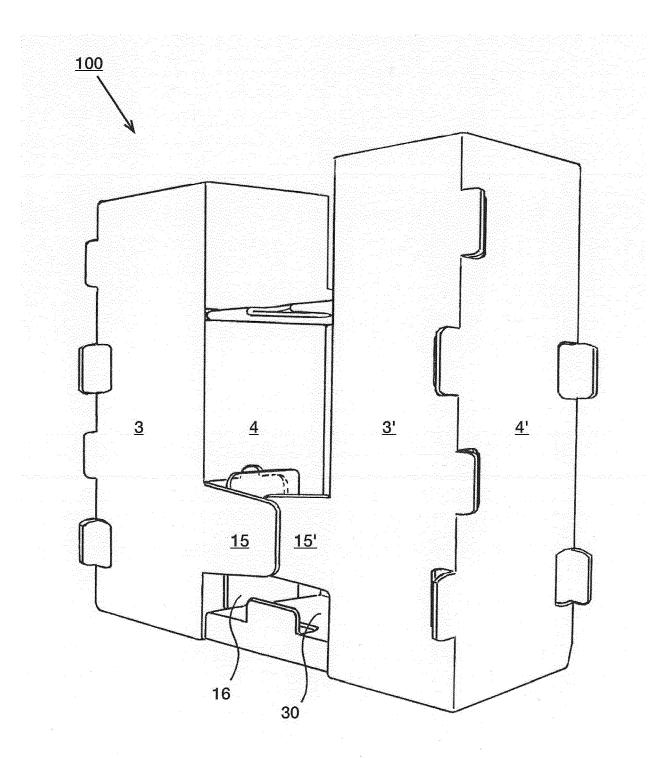
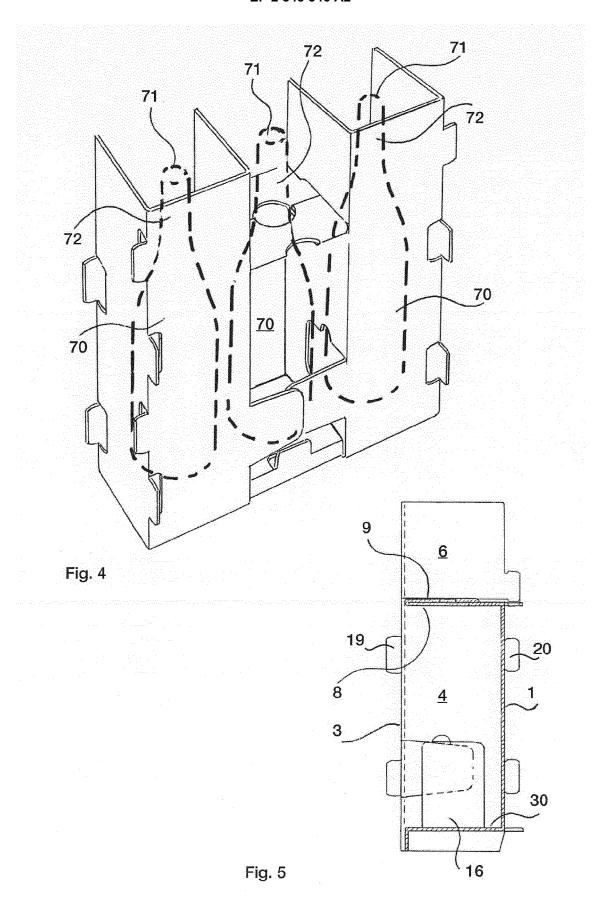


Fig. 3



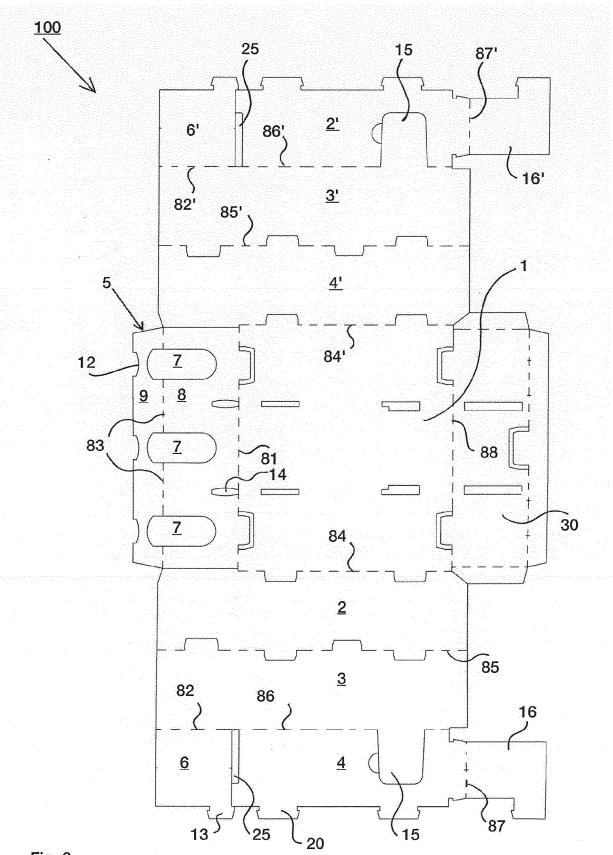


Fig. 6

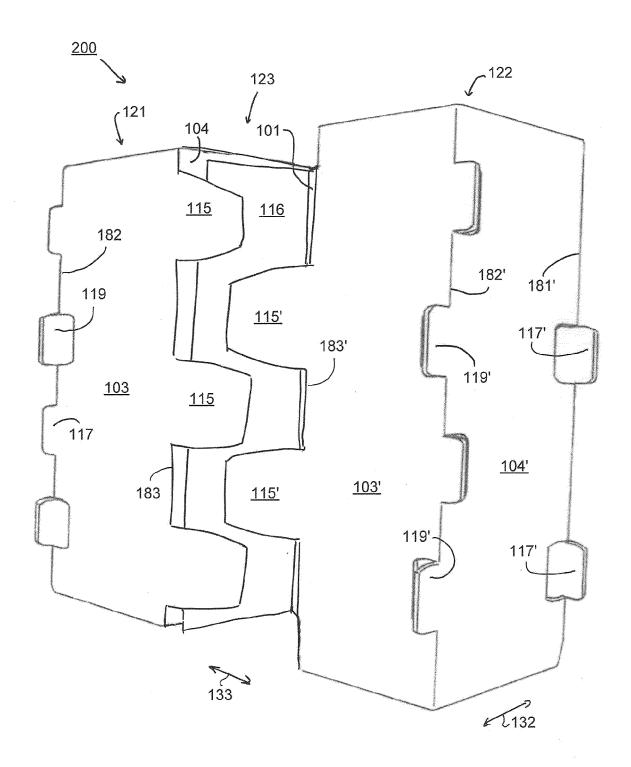


Fig. 7a

