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(72) Inventors:
• **GHINI, Marco**
40050 Monte S. Pietro (BO) (IT)
• **PARADISO, Luca**
40053 Valsamoggia (BO) (IT)
• **BIONDI, Andrea**
40124 Bologna (IT)

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(74) Representative: **Botti & Ferrari S.p.A.**
Via Cappellini, 11
20124 Milano (IT)

(71) Applicant: **Azionaria Costruzioni Macchine Automatiche**
A.C.M.A. S.p.A.
40131 Bologna (IT)

(54) **CONTAINER AND RELATED METHOD OF FORMING FROM A BLANK**

(57) A container (100; 200) of folded blank (101; 201; 301; 401). The container (100; 200) comprises a front panel (3); a rear panel (4); and a plurality of lateral panels (5, 5c), which are configured to join the front panel (3) and the rear panel (4) on two sides, thereby constituting a perimeter of the container (100; 200). The container (100; 200) comprises a bottom wall (6), closing the container (100; 200) at the bottom. The container (100; 200) comprises a lid (2) hinged on the rear panel (4) and clos-

able at the top on the container (100; 200). The container (100; 200) comprises an upper panel (7) that closes the container (100; 200) at the top below the lid (2). The upper panel (7) is connected at the top to the front panel (3) and has an access element (8) to the container (100; 200).

A related method of forming a container (100; 200) and a related blank (101; 201; 301; 401).

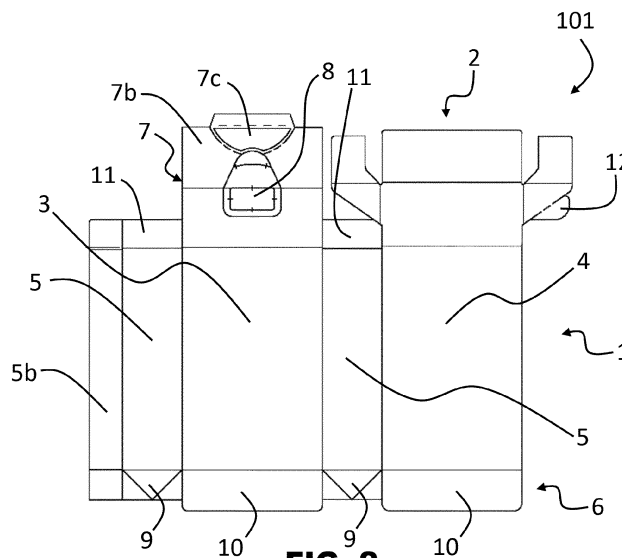


FIG. 2

Description

[0001] The present invention relates to a container of folded blank. The present invention also relates to a method of forming a container from a blank. The present invention also relates to a blank for a container.

[0002] In general, the present invention may be applied in the field of containers for the storage or the transport of items or materials. In particular, the present invention relates to rigid or semirigid containers, having polygonal section, for example boxes, formed by folding or erecting one or more blanks made of paper.

[0003] In a preferred application, the present invention relates to a container for confectionery products such as candies, chewing gums, and the like.

[0004] Containers and boxes, formed from suitably folded blanks made of paper, are known. These containers may be used for confectionery products such as candies, chewing gums, and the like.

[0005] The containers are used for transporting and protecting the content; in the case of containers formed from blanks made of paper, the capability of protecting the content is lower compared to containers completely made of plastic, such as small cans.

[0006] For this reason, containers made of paper are sometimes overwrapped with a plastic film, in particular made of polypropylene, to further protect the content during the shelf life.

[0007] The Applicant observed then that the known containers are not fully effective in protecting the content during shelf life.

[0008] For example, the Applicant noticed that, when a container is provided from a blank made of paper, the additional coating made of an external plastic film is required, to suitably protect the content.

[0009] However, the Applicant evaluated that the presence of said plastic film outside of the container is a complication.

[0010] For example, the external plastic film must be removed by the user upon the first opening, and it is therefore an immediately available waste. When the user opens a container protected by an external plastic film, (s)he must go to a waste basket into which (s)he has to dispose of the plastic film, once it has been removed. Moreover, a correct waste sorting requires that said plastic film is disposed of in plastic-waste container, which is not always present in many contexts.

[0011] The document WO2021002797A1 relates to a packaging container made of cardboard, having a bottom and/or top formed by a bottom and/or upper curled edge, by folding or rolling the bottom end/upper end of the wall of the container's body toward the inside, thereby avoiding the need for plastic components that make the recycling of the packaging container more difficult.

[0012] The Applicant evaluated that the containers obtained from a blank made of paper or of paperboard do not effectively protect the content during shelf life.

[0013] The Applicant observed indeed that a container

made of paper may entail, in an - all things considered - short time, the deterioration of the organoleptic characteristics and of the characteristics of freshness of the content.

[0014] These problems are particularly felt when the container is intended for the protection of a content which is for food consumption, such as for example in the case of confectionery products as candies, chewing gums, and the like.

[0015] The Applicant thus understood that the known configurations of the containers obtained from a blank made of paper or of paperboard can be improved, thereby solving some of their drawbacks.

[0016] In the following description, the following expressions are used, whose meaning is defined below (unless otherwise stated).

[0017] The terminology "container obtained from a blank" means a container made of folded paper or paperboard, obtained from one or more flat sheets that are suitably cut and folded to obtain the desired final shape; additional processing may also be provided, such as embossing, gluing, welding, printing, etc.

[0018] The terminology "paper or paperboard" means a material in sheets, of suitable grammage, composed of raw materials, especially vegetable materials, joined by felting and dried; said material may comprise further materials, for example plastic materials, typically laminated or also dispersed in the material.

[0019] The terminology "grammage" means the weight of a material referred to a square meter of product containing the material.

[0020] The terminology "barrier paperboard" means a paper sheet covered with a foil or coating of plastic material, typically of polyethylene (PE). Frequently, barrier paperboards are allowed in paper recycling.

[0021] The terminology "seal" or "sealing" means flaps that are at least partially airtight adjoined, being it understood that full airtight or liquid-tight sealing may be achieved in particular embodiments.

[0022] Thus, in light of the drawbacks pointed out above with reference to the mentioned prior art, the Applicant felt the need to improve the capabilities of protection of a content during the whole shelf life, by a container formed from a blank made of paper.

[0023] In the research activity brought about to meet said need, the Applicant perceived that it would be possible to improve forming of a container, by folding or erecting one or more blank(s) made of paper, thereby making it more effective.

[0024] In particular, the Applicant found a solution of container that allows a consumer to transport a content and access it in an immediate and pleasant manner.

[0025] Advantageously, the Applicant found that a container formed from a blank made of paper allows to reduce a use of plastic materials, promoting materials that have a lower environmental impact and/or that are easier to recycle.

[0026] Therefore, in its first aspect, the invention is di-

rected to a container of folded blank.

[0027] In particular, the container comprises a front panel, a rear panel, a plurality of lateral panels and a bottom wall.

[0028] In particular, the lateral panels are configured to join the front panel and the rear panel on two sides, constituting a perimeter of the container.

[0029] In particular, the bottom wall closes the container at the bottom.

[0030] In particular, the container comprises a lid hinged on the rear panel and closable at the top on the container.

[0031] In particular, the container comprises an upper panel, closing the container at the top below the lid.

[0032] In particular, the upper panel is connected at the top to the front panel and has an access element to the container.

[0033] Thanks to these features, the container allows to protect more effectively its content during the shelf life.

[0034] Advantageously, the lid and the access element allow the consumer to access the content in an immediate and pleasant manner, thereby preserving its freshness over time.

[0035] Advantageously, the container protects more effectively its content, in particular by providing a package made of paperboard with barrier layers that protect the product on the inside and that are heat-sealing to make sealings that enable elimination of plastic films on the outside of the container.

[0036] Advantageously, the container according to the present invention achieves a sealed box-shaped body, thereby obtaining a sift-proof box.

[0037] In its second aspect, the invention is directed to a forming method of a container.

[0038] In particular, the forming method provides for folding a blank comprising a front panel, a rear panel and a plurality of lateral panels.

[0039] In particular, the forming method provides for folding a bottom wall of the blank, for closing the container at the bottom.

[0040] In particular, the forming method provides for folding an upper panel of the blank. In particular, the upper panel is connected at the top to the front panel so as to close said container at the top. In particular, the upper panel has an access element to the container.

[0041] In particular, the forming method provides for folding a lid of the blank. In particular, the lid is hinged on the rear panel so as to be above the upper panel. In particular, the lid is closable on the container.

[0042] It is worth making clear that folding a bottom wall of the blank for closing the container at the bottom may indifferently occur before or after the upper panel and the lid have been formed and closed. The actions corresponding to the forming method are thus to be understood not necessarily carried out in the described order, as long as they are adapted to obtain the final configuration of the container.

[0043] In the manufacturing according to the forming

method of a container, techniques of welding and gluing are preferably used, even if, in principle, it is also possible to use only gluing to close the container.

[0044] In its third aspect, the invention is directed to a blank.

[0045] In particular, the blank is adapted to be folded for providing a container according to the present invention.

[0046] In particular, the blank comprises one or more sheets of paperboard, preferably barrier paperboard.

[0047] In particular, the blank is foldable according to a forming method according to the present invention.

[0048] Moreover, in at least one of the abovementioned aspects, the present invention may have one or more of the following preferred features.

[0049] Preferably, the upper panel further comprises a closing flap, adjoined to the lid. In this way, the upper panel is adapted to close the container at the top in an effective manner, thereby preserving the freshness of the content.

[0050] Preferably, the closing flap further comprises a tear-off closing fastener, which is adjoined to the upper panel.

[0051] Preferably, the lid comprises shaped flaps that define perimeter walls of the lid.

[0052] Preferably, the tear-off closing fastener is adapted to be torn off in an initial opening of the container, and the shaped flaps of the lid are configured to cooperate with the tear-off closing fastener, thereby engaging the lid. In this way, it is possible to effectively close the container after the first opening, thereby preserving the freshness of the content.

[0053] Preferably, the upper panel has an extension exceeding a distance between the front panel and the rear panel, so that, when the blank is folded, it is possible to provide an upper panel adapted to close the container at the top in an effective manner.

[0054] Preferably, the access element comprises an openable portion of the upper panel to access a content of the container. In this way, it is possible to preserve the freshness of the content in the best possible way, before the initial opening of the container.

[0055] Preferably, the access element is closable at least partially by the lid. In this way, it is possible to preserve the freshness of the content in the best possible way even after the initial opening of the container.

[0056] Preferably, the bottom wall comprises a plurality of bottom panels that are contiguous and continuous with respect to each other. Preferably, the bottom panels comprise first panels that are folded on themselves in an angled manner and collapsed, and further second panels that are folded and overlapping said first panels and further overlapping each other. In this way, it is possible to build a well-sealed bottom wall, according to a preferred embodiment. In other possible variants, the bottom panels may be cut without spaces to form a glued bottom. In any case, the bottom wall so sealed contributes to preserve the freshness of the content in the best possible

way, both before and after the initial opening of the container.

[0057] Preferably, the container further comprises a plurality of closing upper tabs, connected at the top to the plurality of lateral panels and adjoined to the upper panel. In this way, the plurality of upper tabs closes the container at the top and contributes to preserve the freshness of the content in the best possible way.

[0058] The description will be further explained below, with reference to the appended drawings provided only by way of example and thus not of limitation, in which:

- Figure 1 shows a perspective view of a first embodiment of a container according to the present invention.
- Figure 2 shows a blank of the container of Figure 1, in a flat configuration.
- Figure 3 shows a first step of partial folding of the blank of Figure 2.
- Figure 4 shows a second step of partial folding of the blank of Figure 2.
- Figure 5 shows a third step of partial folding of the blank of Figure 2, and a related gluing.
- Figure 6 shows a perspective view of the container of Figure 1, after its opening.
- Figure 7 shows a perspective view of a second embodiment of a container according to the present invention.
- Figure 8 shows a blank of the container of Figure 7, in a flat configuration.
- Figure 9 shows a first step of folding of the blank of Figure 8.
- Figure 10 shows a second step of partial folding of the blank of Figure 8.
- Figure 11 shows a blank in a flat configuration of a third embodiment of a container according to the present invention.
- Figure 12 shows a blank in a flat configuration of a fourth embodiment of a container according to the present invention.

[0059] In the different figures, analogous elements will be identified by analogous reference numerals.

Detailed description

[0060] When the present description refers to relative

terms such as "front", "rear", "upper", "lower", "lateral", etc., it is to understand that said indications are given with respect to a conventional position of the container, in particular a position of habitual use of the same, i.e. with opening on top and facing the user. The appended figures help to determine the reference position of the container, without that the use of said terms is construed as excluding a container having the same geometry and features, that is only rotated in space into a position other than the conventional one.

[0061] With reference to Figure 1, a container 100 is shown. The container 100 comprises a box-shaped body 1 and a hinged lid 2, openable and closable on the box-shaped body 1, which will be further described. In this embodiment, the container 100 has the shape of a parallelepiped with very flattened rectangular base and rectilinear edges.

[0062] As will be further described, the hinged lid 2 is of the flip-top type, preferably with integrated gluing and fastening flaps, although alternative structures are possible.

[0063] In general, to form the container, one starts from a blank, namely a sheet, precut and prescored with creases and partial and through cuts of paperboard.

[0064] Preferably, said blank made of paper or of paperboard comprises at least one inner layer of a substance acting as a barrier to the inlet of oxygen and steam and at least one inner layer. More preferably, an outer layer of heat-sealing material (for example PLA or PE) is also provided.

[0065] The final shape of the container determines the drawing of the starting blank, that may be then pre-glued if the structure will allow it (so, with the only presence of linear edges and a development that is divisible into two equal parts) or processed in its spread form and closed in a machine onto three-dimensional shapes if there will be edges with curved lines that do not allow to flatten it after the initial gluing.

[0066] Preferably, the container has a structure obtained from a single-piece die-cut object, but it is possible to make it also from a die-cut object made of two or more pieces assembled together.

[0067] With reference to Figure 2, a blank 101 is shown, here depicted in flat configuration and which is adapted to be folded to form the container 100.

[0068] The blank 101, from which the container 100 is formed, comprises a front panel 3, a rear panel 4 and a plurality of lateral panels 5, which are configured to join the front panel 3 and the rear panel 4 on two sides, so as to constitute a perimeter of the container 100 in the box-shaped body 1. In this embodiment, the container 100 has only two lateral panels 5, since the box-shaped body 1 has a rectangular section; if the box-shaped body had a different section, such as hexagonal, octagonal, etc., a higher number of lateral panels would be possible.

[0069] The plurality of lateral panels 5 further comprises a perimeter closing flap 5b, which is adjoined, in particular glued or welded depending on the applications, to

close the box-shaped body 1 of the container 100.

[0070] The blank 101 comprises further panels adapted to make a bottom wall 6, which closes the container 100 at the bottom.

[0071] The blank 101 further comprises panels adapted to make the lid 2, closable at the top on the container 100. Said lid 2 is contiguous and hinged on the rear panel 4, in particular at an upper side thereof.

[0072] The blank 101 further comprises an upper panel 7, which, once the container 100 has formed, is adapted to close the container at the top, thereby creating a volume contained in the box-shaped body 1 below the lid 2. In particular, the upper panel 7 is connected at the top to the front panel 3.

[0073] The upper panel 7 further comprises an access element 8. In a preferred embodiment, the access element 8 comprises an openable portion, preferably openable by tearing off, of the upper panel 7. In a variant that is less preferred but still possible, the access element is directly a hole or an aperture, possibly coverable by means of a removable label.

[0074] The access element 8 thus allows to access a content of the container, to pull out for example a candy, or a chewing gum, or other small confectionery products.

[0075] The blank 101 comprises a plurality of closing upper tabs 11, connected at the top to the lateral panels 5 and in particular adjoined to the upper panel 7.

[0076] The blank 101 further comprises a plurality of bottom panels 9 and 10.

[0077] The bottom panels 9 and 10, in the preferred embodiment shown herein, are contiguous and continuous with respect to each other, in the sense that they do not have cuts separating their continuity, but they are connected with each other by the continuity of the material. In particular, said bottom panels comprise first panels 9 that are folded on themselves in an angled manner so as to collapse on themselves. In particular, the bottom panels comprise second panels 10, that are folded and overlapping the first panels 9 and further overlapping each other, having an extension in height slightly higher than half the thickness of the container 100. In this way, the panels 9 and 10 constitute a sealed bottom wall. In particular, the panels 9 and 10 are connected with each other to form a continuous perimeter, which is then folded to form the bottom wall, similarly to what happens in the gable-top brick-shaped cartons typically used to contain beverages.

[0078] In a not shown but still preferred alternative, the bottom panels might have cuts without spaces separating their continuity, and might be folded and glued to form a bottom wall, similarly to what happens in the sift-proof cartons.

[0079] In particular, the bottom panels are preferably folded and welded, inserting a punch inside the partially folded blank and pressing from the outside with a suitable heated mold.

[0080] With reference to Figure 3, a first step of partial folding of the blank 101 to form the container 100 is

shown.

[0081] The blank 101 is folded to constitute the box-shaped body 1, comprising the front panel 3, the rear panel 4 (not visible in the figure), a plurality of lateral panels 5. In particular, the perimeter closing flap 5b (not visible) is adjoined to constitute a closed perimeter of the box-shaped body 1.

[0082] The bottom wall 6 (not visible) is folded, before or after the lid 2 and the upper panel 7 whose folding and forming will be further described.

[0083] Once the bottom wall 6 has been closed and sealed, it becomes possible to fill the container with its content, by filling it from above.

[0084] In a variant that is still envisaged, the bottom wall 6 is closed after closing the lid 2 and the upper panel 7; in this case, it is possible to fill the container with its content, by turning it upside down and filling it from the bottom wall, still open, which will then be the lower part of the container.

[0085] The invention also provides folding a plurality of closing upper tabs 11, which are connected at the top to the plurality of lateral panels 5. The upper panel 7, which is connected at the top to the front panel 3, is further visible in the figure.

[0086] With reference to Figure 4, a second step of partial folding of the blank 101 is shown.

[0087] The upper panel 7 of the blank 101 is folded, so as to close the container 100 at the top. The upper panel 7 has also the previously described access element 8 (not shown in this figure).

[0088] The closing upper tabs 11, which were previously folded, are adjoined to the upper panel 7, so as to close the container 100 at the top in an effective manner. In particular, the closing between the closing upper tabs 11 and the upper panel 7 is made so as to make a substantially closed, sealed, surface. Advantageously, this is obtained through a suitable gluing of the closing upper tabs 11, such as to close up to the corners to make adjoined surfaces that are continuous, without residual passages.

[0089] The upper panel 7, in particular, further comprises a closing flap 7b. Said closing flap 7b is adjoined to the lid 2 through welding or gluing, according to the ways that will be described below, to close the box-shaped body 1 of the container 100 at the top.

[0090] As shown in the figure, a portion of the upper panel 7 corresponding to the closing flap 7b is folded upward. Thus, the upper panel 7 has an extension exceeding a distance between the front panel 3 and the upper panel 4 (not visible), i.e. an extension exceeding the width of the lateral panel 5. In particular, the extension of the upper panel 7 is such to bridge an upper gap of the box-shaped body 1 of the container 100, so as to close it at the top in an effective manner.

[0091] With reference to Figure 5, a third step of partial folding of the blank 101 and a related gluing are shown.

[0092] The closing flap 7b is welded or glued to the lid 2, once lifted, so as to close the container 100 at the top.

To this end, a first area 70 of gluing or welding between the closing flap 7b and the lid 2 is provided, for locally adjoining the upper panel 7 and the corresponding portion of lid 2 to each other.

[0093] The closing flap 7b further comprises a tear-off closing fastener 7c, which is folded again and adjoined to the upper panel 7. To this end, a second area 71 of gluing between the tear-off closing fastener 7c and the respective portion of upper panel is provided.

[0094] Moreover, the lid 2 comprises shaped flaps 2b and 2c, that define perimeter walls of the lid 2 once they will be suitably folded and glued, as described below.

[0095] Moreover, the lid 2 further comprises a tamper evidence 12, which is adapted to indicate an initial opening of the container 100. In a variant, instead of the tamper evidence, additional labels, which also indicate tampering, might be used.

[0096] With reference to Figure 6, the container 100 is shown after its opening.

[0097] The lid 2 of the blank 101 is indeed hinged on the rear panel 4 (not visible, on the back of the figure). In this way, the lid 2 is adapted to be above the upper panel 7, thereby making an effective closing. Moreover, the lid 2 is closable on the container, as it will be further described.

[0098] The previously described tear-off closing flap 7c is adapted to be torn off in an initial opening of the container 100, so as to stay at the upper wall defined by the upper panel 7, such as for example shown in the figure.

[0099] The shaped flaps 2b and 2c of the lid 2 are configured to be folded and adjoined to each other, to constitute the structure of said lid 2 by defining its perimeter walls.

[0100] The lid 2 is adapted to cooperate with the tear-off closing fastener 7c that detached from the closing flap 7b upon the first opening of the container. Thanks to the cooperation between the lid 2 and the tear-off closing fastener 7c, it becomes thus possible to close the container 100 many times during its use.

[0101] The already described access element 8 is thus closable at least partially by the lid 2, thereby providing an effective protection of the content of the container 100.

[0102] In particular, the tamper evidence 12 provided on the lid 2 in the configuration shown in the figure is torn off, thereby indicating that the initial opening has already happened.

[0103] Returning to the access element 8, an openable portion is provided, for example openable by tearing off or removable, even re-attachable if desired. Said openable portion allows the access to a content of the container 100, for example to take out a confectionery product such as a candy or a chewing gum. In a preferred embodiment, the openable portion has an opening pre-score to let the product out, which may or may not integrate a repositionable self-adhesive label for an improved protection or more precise handling.

[0104] The openable portion of the access element 8

is closable at least partially by the lid 2, once it has been folded downward using the hinge connection, and in particular by engaging with the tear-off closing fastener 7c.

[0105] With reference to Figure 7, a container 200 is shown. In this embodiment, the container 200 is pyramidal with curved edges, to improve stability or appearance.

[0106] With reference to Figure 8, a blank 201 of the container 200 is shown in a flat configuration.

[0107] Compared to the embodiment of the blank 101, besides different proportions and specific conformations of some elements, for example of the closing upper tabs 11, it is pointed out in particular the presence of a plurality of lateral panels 5 and 5c, which are configured to join the front panel 3 and the rear panel 4, so as to constitute a perimeter of the container 200 in the box-shaped body 1. In this case, the lateral panels 5 and 5c are in a higher number, to constitute a container 200 having a substantially octagonal section with curved edges.

[0108] The elements, in particular the panels, of this embodiment are substantially analogous to what has already been described, even if with a different geometry, and are thus indicated by reference numbers that are analogous to what was previously described.

[0109] With reference to Figure 9, a first step of folding of the blank 201 is shown, whereas with reference to Figure 10, a second step of partial folding of the blank 201, with the bottom wall 6 still open, is shown.

[0110] In general, a blank according to the present invention is adapted to be folded for providing a container according to the present invention.

[0111] The blank preferably comprises one or more sheets of paperboard, in particular barrier paperboard. Moreover, the blank is folded according to a forming method according to the present invention.

[0112] With reference to Figure 11, a blank 301 in a flat configuration of a third embodiment of a container is shown. In this embodiment, the container is pyramidal with rectilinear edges.

[0113] The elements, in particular the panels, of this embodiment are substantially analogous to what has already been described, even if with a different geometry, and are indicated by reference numbers that are analogous to what was previously described.

[0114] With reference to Figure 12, a blank 401 in a flat configuration of a fourth embodiment of a container is shown.

[0115] In this embodiment, the container has the shape of a parallelepiped with almost square base and rectilinear edges.

[0116] The elements, in particular the panels, of this embodiment are substantially analogous to what has already been described, even if with a different geometry, and are indicated by reference numbers that are analogous to what was previously described.

[0117] In general, it is appreciated that the present invention can be applied to containers and blanks defining box-shaped bodies of various shape and with varying

number of walls and proportions.

[0118] Therefore, containers having the shape of a parallelepiped, a pyramid, a hexagonal prism, etc. can be made depending on the desired final effect and on the volume to be obtained.

Claims

1. **Container** (100; 200) of folded blank (101; 201; 301; 401), said container (100; 200) comprising:
 - a front panel (3);
 - a rear panel (4);
 - a plurality of lateral panels (5, 5c) configured to join said front panel (3) and said rear panel (4) on two sides, constituting a perimeter of said container (100; 200);
 - a bottom wall (6), closing said container (100; 200) at the bottom;
 - a lid (2) hinged on said rear panel (4) and closable at the top on said container (100; 200);
 - an upper panel (7), closing said container (100; 200) at the top below said lid (2), said upper panel (7) being connected at the top to said front panel (3) and having an access element (8) to said container (100; 200).
2. Container according to claim 1, wherein said upper panel (7) further comprises a closing flap (7b), adjoined to said lid (2), to close said container (100; 200) at the top.
3. Container according to claim 2, wherein said closing flap (7b) further comprises a tear-off closing fastener (7c), adjoined to said upper panel (7) and adapted to be torn off in an initial opening of said container (100; 200).
4. Container according to claim 3, wherein said lid (2) comprises shaped flaps (2b, 2c) defining perimeter walls of said lid (2), said shaped flaps (2b, 2c) being configured to cooperate with said tear-off closing fastener (7c) of said closing flap (7b), so as to engage said lid (2) and close said container (100; 200).
5. Container according to any one of claims 1 to 4, wherein said upper panel (7) has an extension exceeding a distance between said front panel (3) and said rear panel (4).
6. Container according to any one of claims 1 to 5, wherein said access element (8) comprises an openable portion of said upper panel (7) to access a content of said container (100; 200).
7. Container according to any one of claims 1 to 6, wherein said access element (8) is closable at least partially by said lid (2).
8. Container according to any one of claims 1 to 7, wherein said bottom wall (6) comprises a plurality of bottom panels (9, 10) that are contiguous and continuous with respect to each other, said bottom panels (9, 10) comprising first panels (9) that are folded on themselves in an angled manner and collapsed, and further second panels (10) that are folded and overlapping said first panels (9) and further overlapping each other, so as to constitute a sealed bottom wall (6).
9. Container according to any one of claims 1 to 8, further comprising a plurality of closing upper tabs (11), connected at the top to said plurality of lateral panels (5) and adjoined to said upper panel (7).
10. **Forming method of a container** (100; 200), comprising:
 - folding a blank (101; 201; 301; 401) comprising a front panel (3), a rear panel (4) and a plurality of lateral panels (5, 5c);
 - folding a bottom wall (6) of said blank (101; 201; 301; 401), for closing said container (100; 200) at the bottom;
 - folding an upper panel (7) of said blank (101; 201; 301; 401), connected at the top to said front panel (3) so as to close said container (100; 200) at the top, said upper panel (7) having an access element (8) to said container (100; 200);
 - folding a lid (2) of said blank (101; 201; 301; 401), said lid (2) being hinged on said rear panel (4) so as to be above said upper panel (7), said lid (2) being closable on said container (100; 200).
11. Forming method according to claim 10, further comprising: folding and adjoining a closing flap (7b) of said upper panel (7) to said lid (2), for closing said container (100; 200) at the top.
12. Forming method according to claim 11, further comprising: adjoining a tear-off closing fastener (7c) of said closing flap (7b) to said upper panel (7), said tear-off closing fastener (7c) being adapted to be torn off in an initial opening of said container (100; 200).
13. Forming method according to any one of claims 10 to 12, further comprising: folding shaped flaps (2b, 2c) of said lid (2), to define perimeter walls of said lid (2).
14. Forming method according to any one of claims 10 to 13, further comprising: providing an openable portion in said access element (8) to access a content of said container, in particular said openable portion

being closable at least partially by said lid (2).

15. Forming method according to any one of claims 10 to 14, further comprising: folding a plurality of closing upper tabs (11) connected at the top to said plurality of lateral panels (5), and adjoining said plurality of closing upper tabs (11) to said upper panel (7) closing said container (100; 200) at the top. 5
16. **Blank** (101; 201; 301; 401), adapted to be folded for providing a container (100; 200) according to any one of claims 1 to 9. 10

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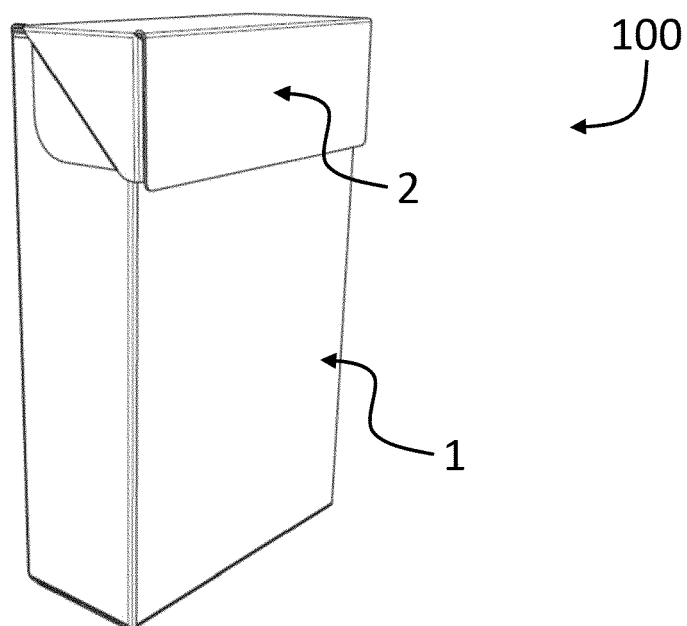
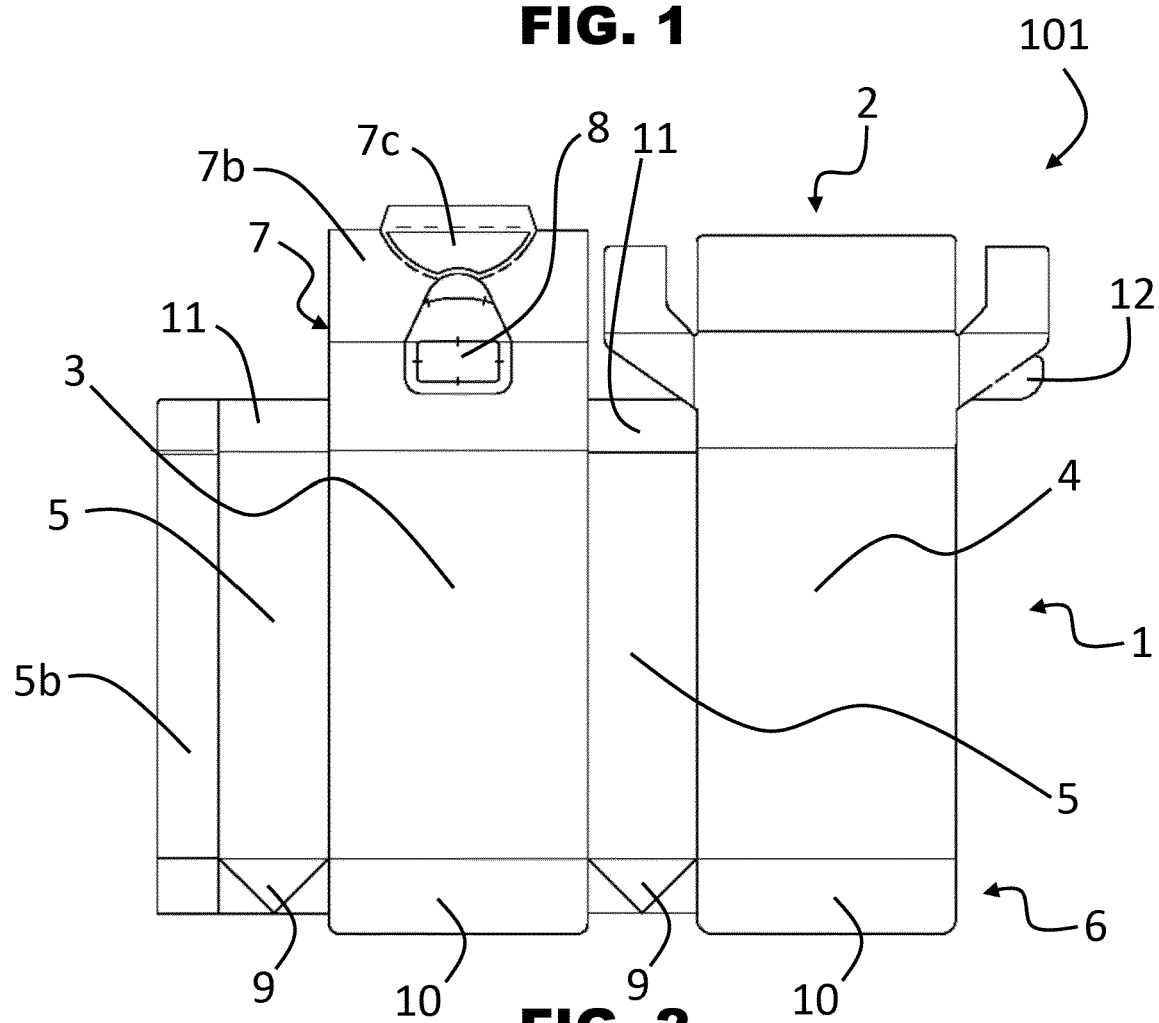
**FIG. 1**

FIG. 2

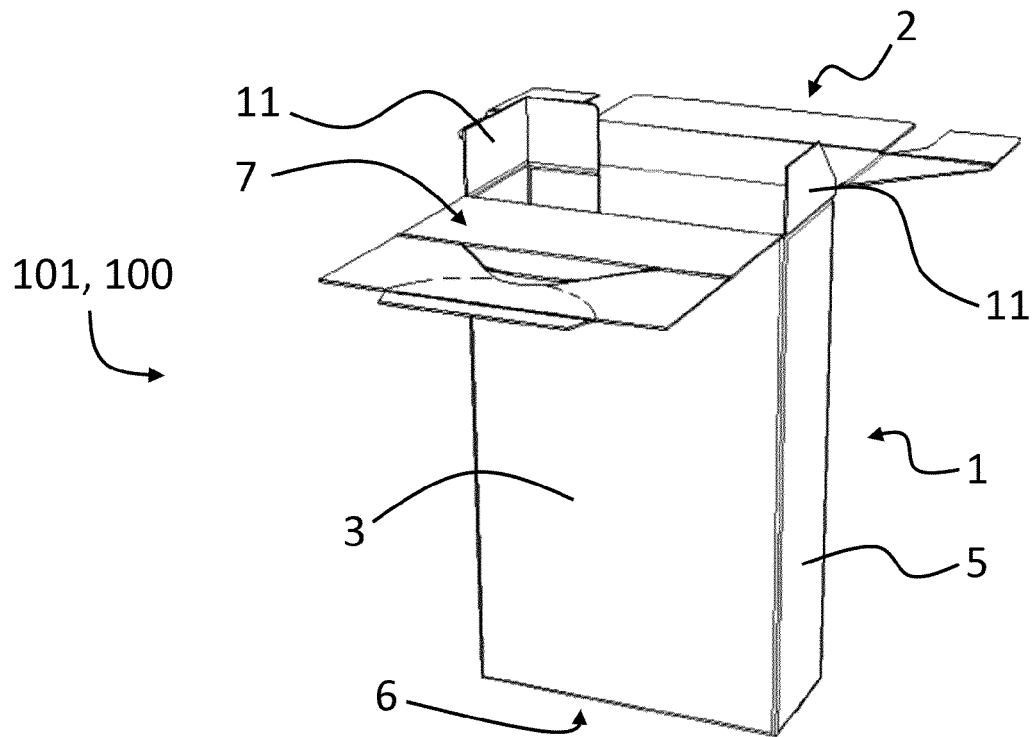


FIG. 3

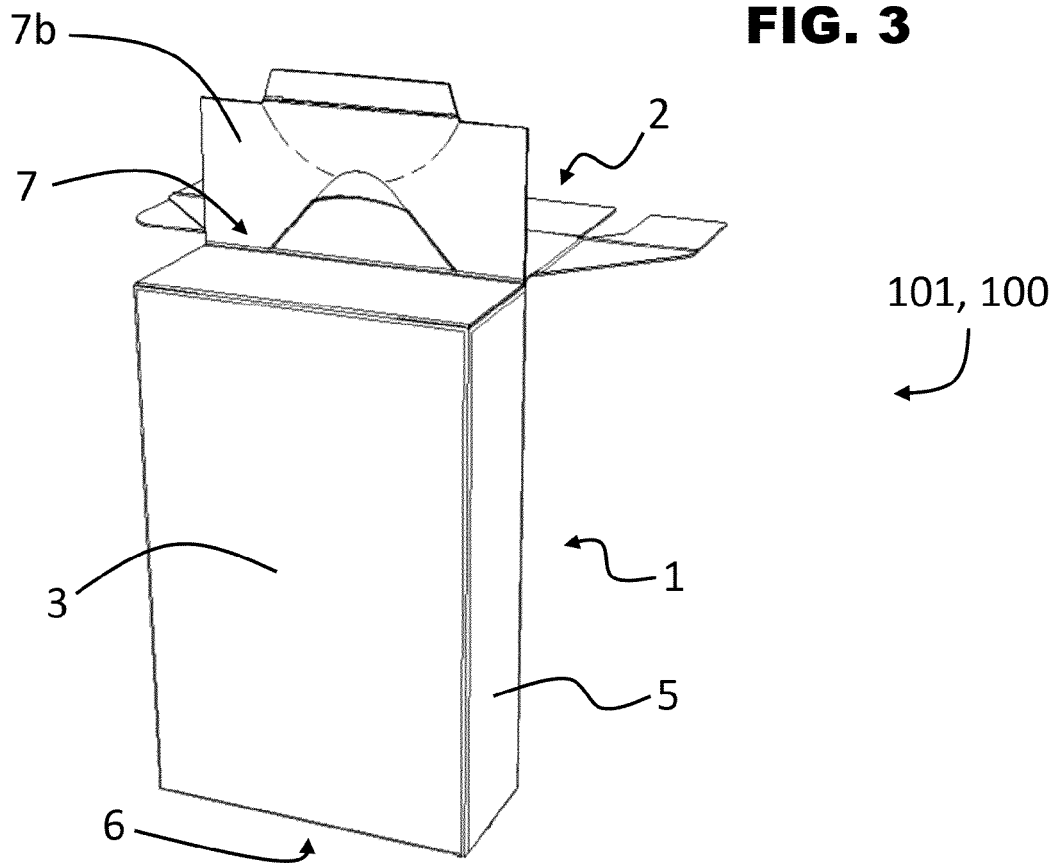


FIG. 4

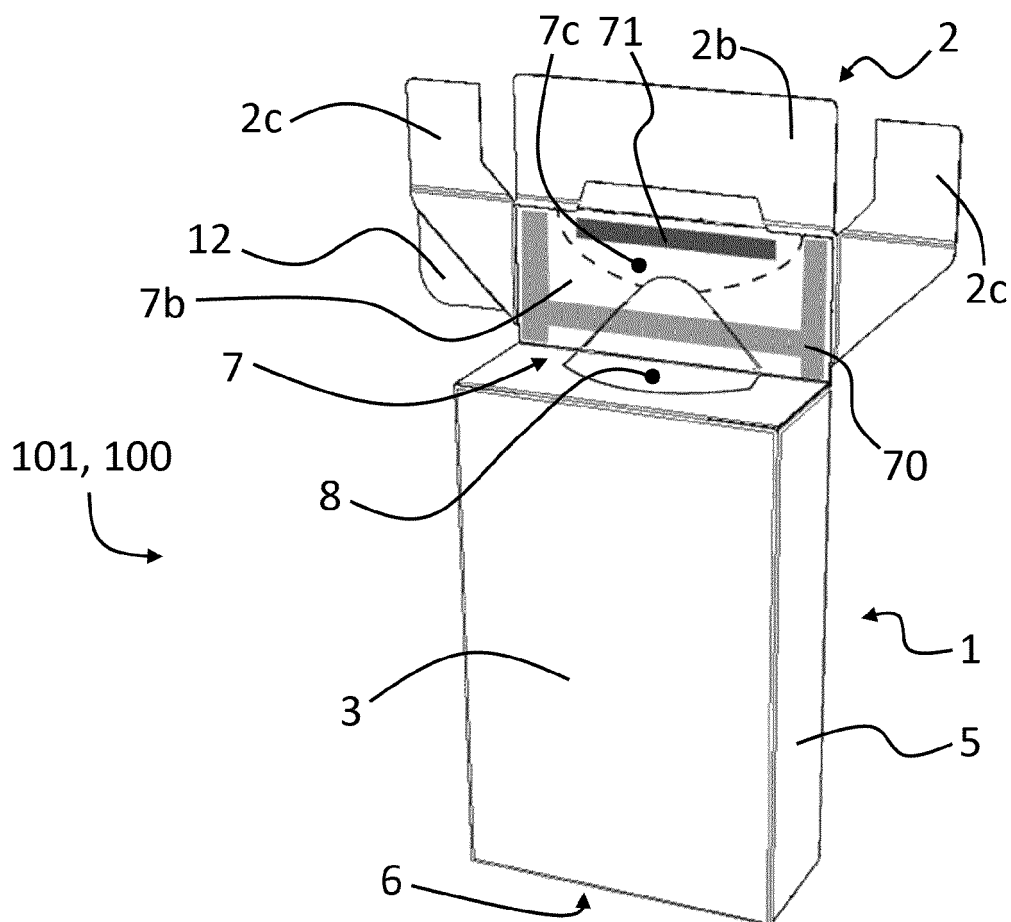


FIG. 5

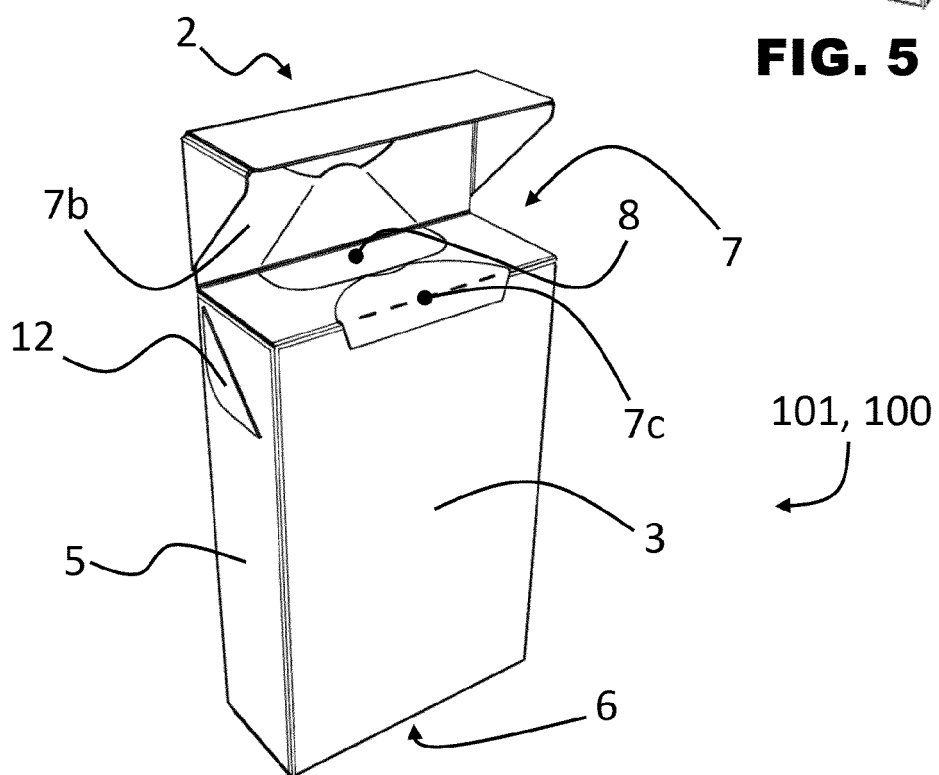


FIG. 6

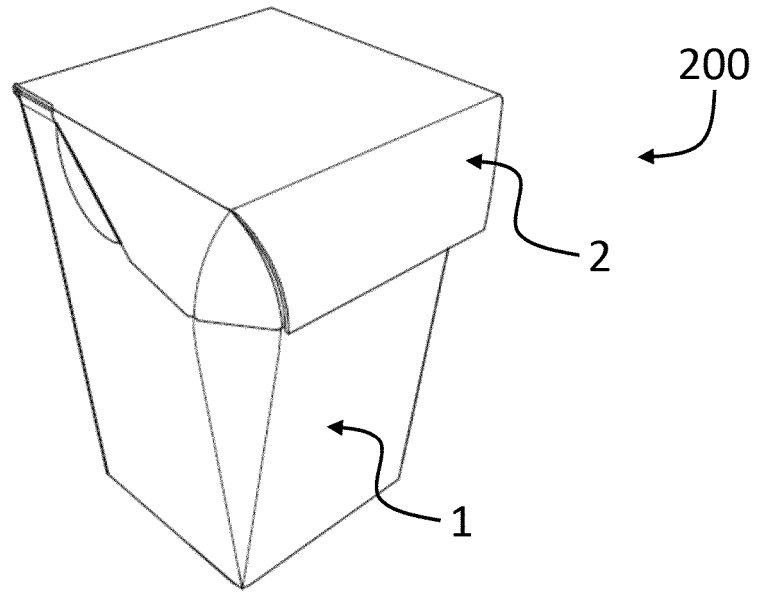


FIG. 7

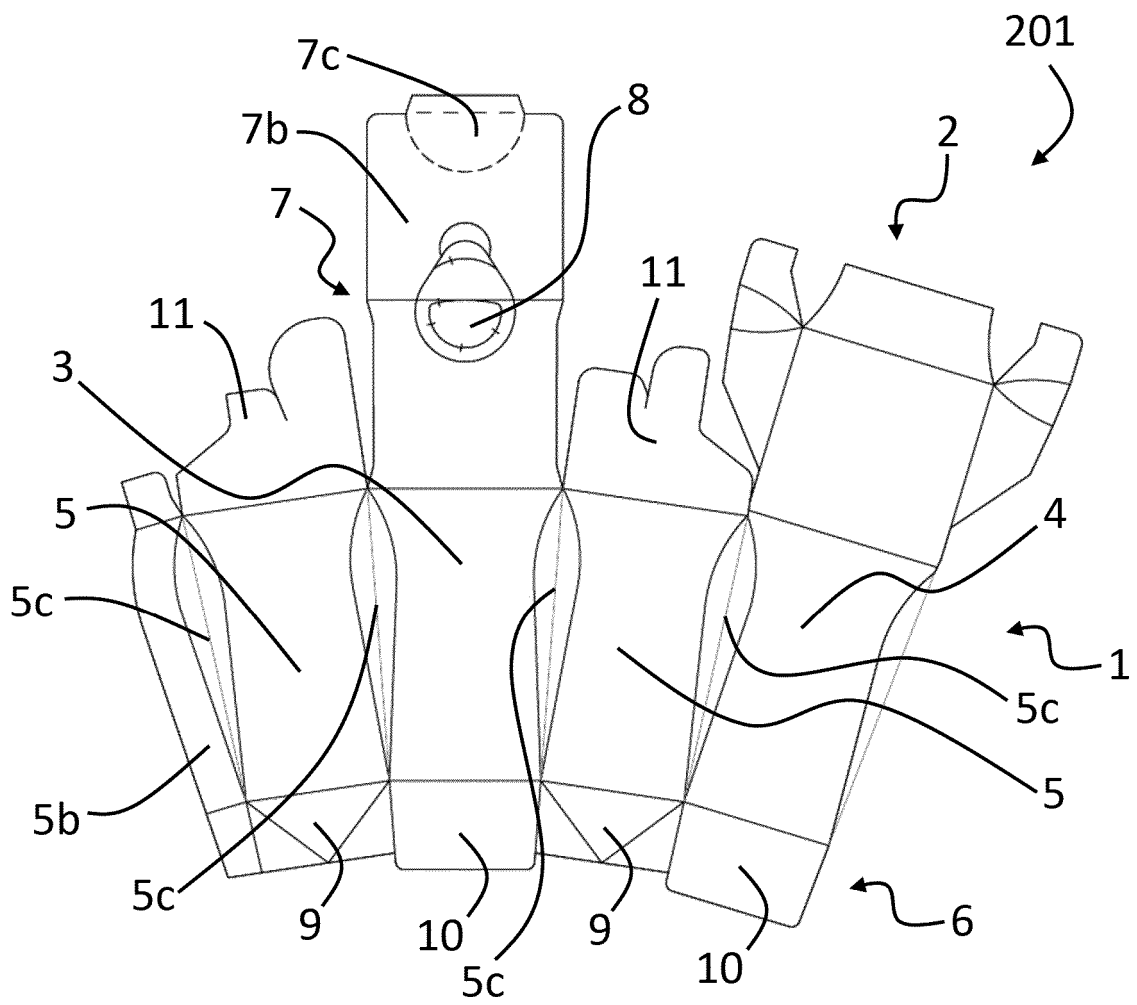
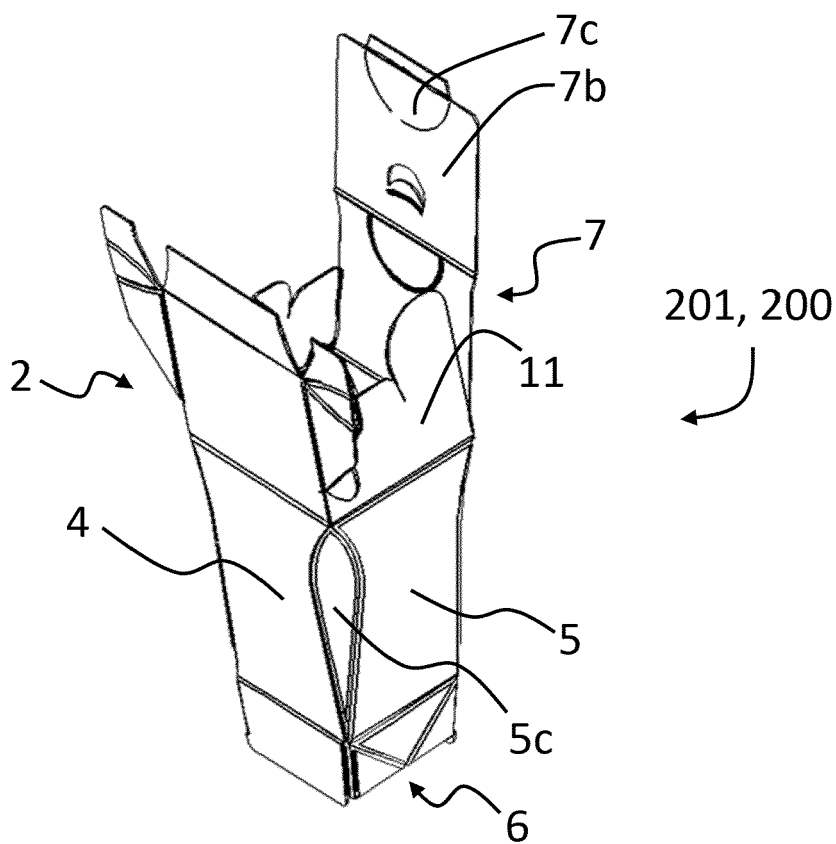
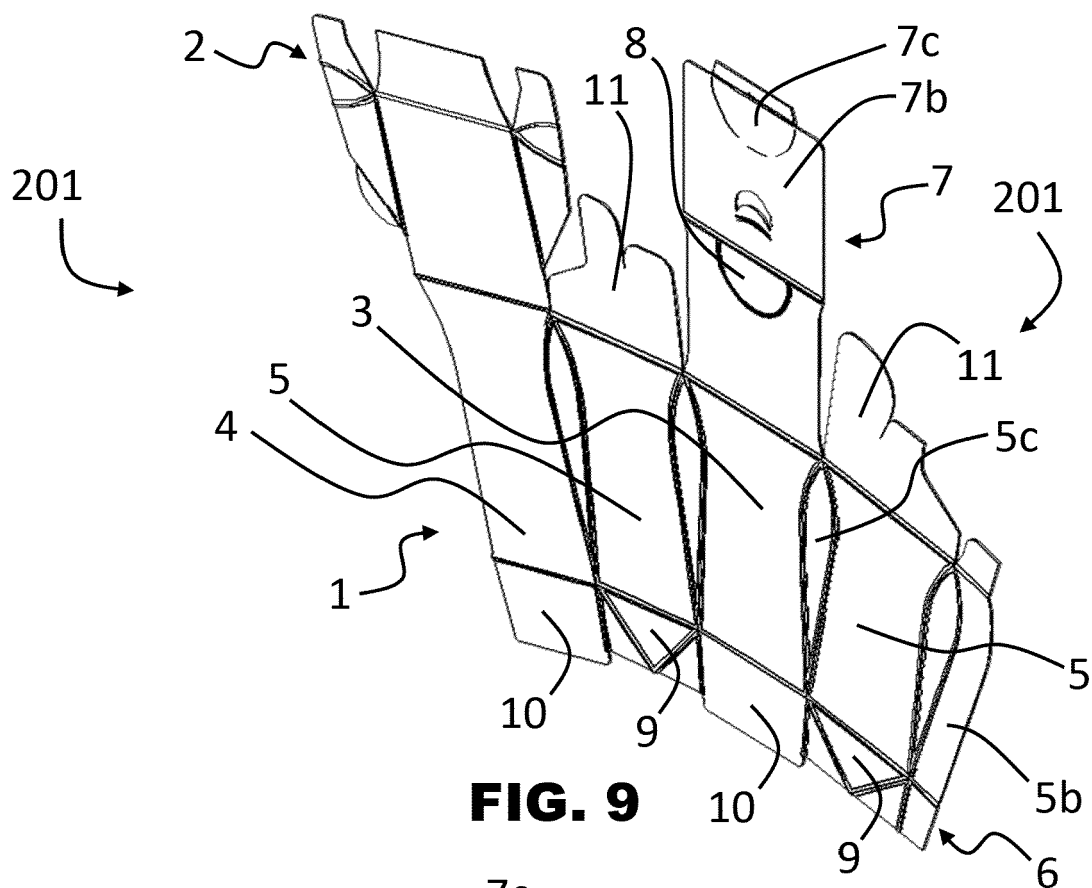
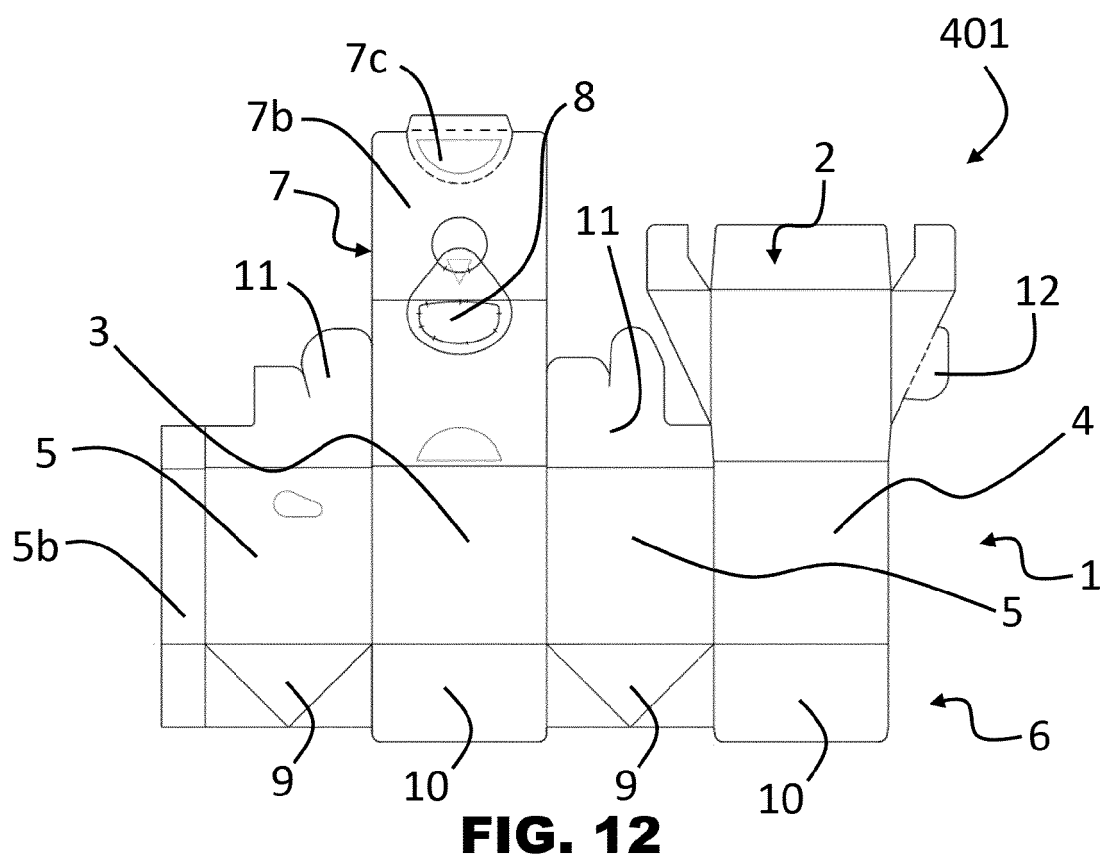
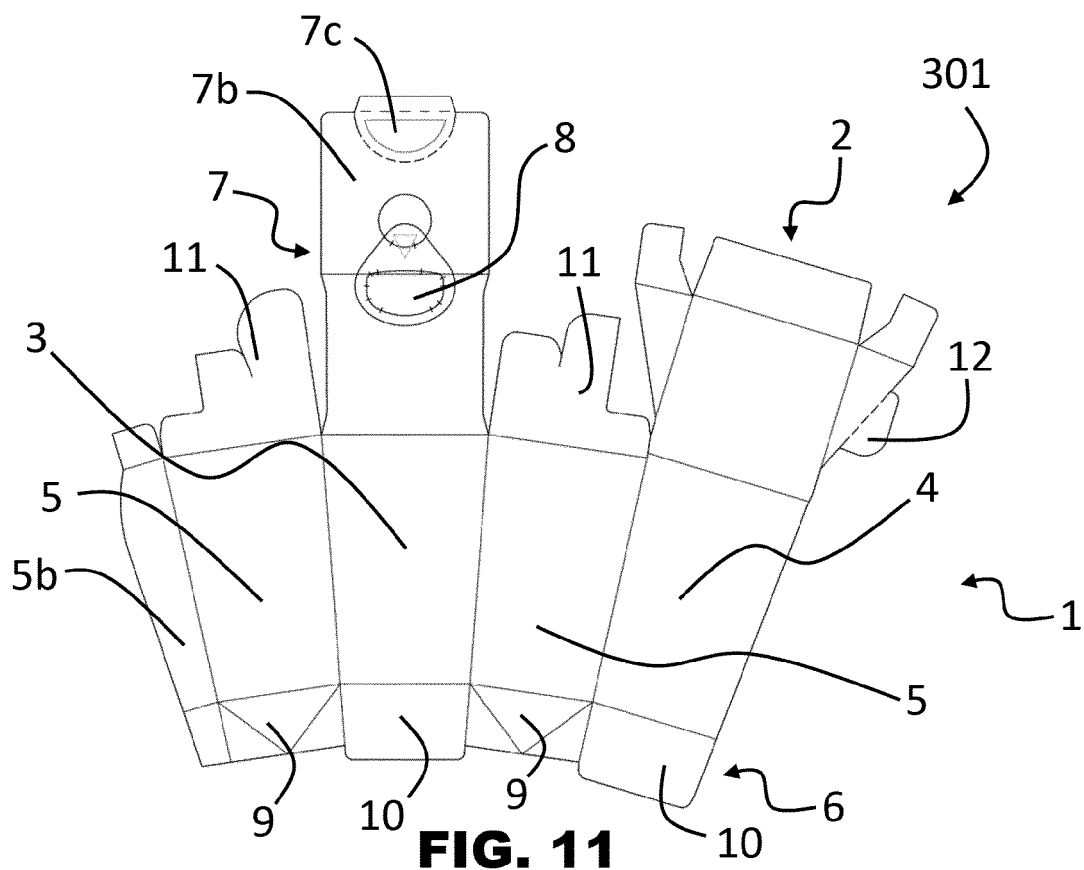


FIG. 8







EUROPEAN SEARCH REPORT

Application Number

EP 23 20 0569

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EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2 543 084 A (WILLIAMSON MARSHALL I ET AL) 27 February 1951 (1951-02-27)	1,10,16	INV.
A	* column 7, line 45 - line 69; figures 1-10 *	2-9, 11-15	B65D5/66 B65D85/60

X	CH 688 087 A5 (EDELMANN CARL GMBH [DE]) 15 May 1997 (1997-05-15)	1,10,16	
A	* column 1, line 57 - column 2, line 32; figures 1-2 *	2-9, 11-15	

A	JP H03 17029 U (JAPAN) 20 February 1991 (1991-02-20) * figures 1-8 *	1-16	

			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 14 February 2024	Examiner Derrien, Yannick
CATEGORY OF CITED DOCUMENTS			
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ON EUROPEAN PATENT APPLICATION NO.

EP 23 20 0569

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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14-02-2024

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2543084 A	27-02-1951	NONE	
CH 688087 A5	15-05-1997	CH 688087 A5 DE 9403624 U1	15-05-1997 27-10-1994
JP H0317029 U	20-02-1991	NONE	

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- WO 2021002797 A1 [0011]