(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 3 736 222 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
11.11.2020 Bulletin 2020/46

(51) Int Cl.:
B65D 5/70 *(2006.01)*

(21) Application number: **20173123.9**

(22) Date of filing: **06.05.2020**

(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
Designated Validation States:
KH MA MD TN

(30) Priority: **09.05.2019 IT 201900006675**

(71) Applicant: **Arti Grafiche Reggiani S.r.l.**
40064 Ozzano dell'Emilia (Bologna) (IT)

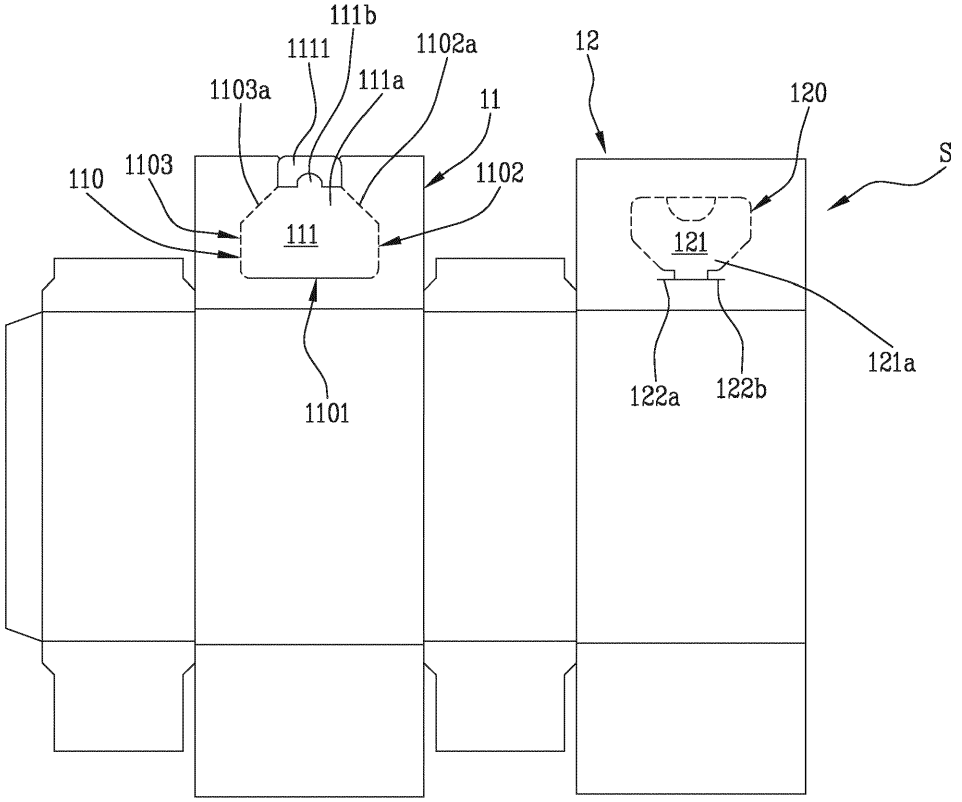
(72) Inventor: **FABBIANI, Fabrizio**
40064 Ozzano dell'Emilia (Bologna) (IT)

(74) Representative: **Conti, Marco**
Bugnion S.p.A.
Via di Corticella, 87
40128 Bologna (IT)

(54) **CONTAINER WITH OPEN AND CLOSE FUNCTION**

(57) This invention relates to a container (1) for food products and to a blank (S) for making the container, combined to provide a convenient closing system (110, 111, 120, 121) for closing the container (1)which allows the container to have an open and close function and to have a tamper evident function in connection with any movement of the closing system.

Fig.1



EP 3 736 222 A1

Description

[0001] This invention relates to a container, a blank and a method for making the container.

[0002] This invention addresses the field of containers made of paper or cardboard with an openable and reclosable portion. Presently known in the prior art are cardboard containers for containing at least one food product and comprising a structure obtained from a blank, which defines an internal space in the container in which the at least one food product is situated. These containers have one or more tearable lines of weakness that delimit an opening through which a user can easily access the internal space and/or extract the product contained therein; there may also be a system allowing the container to be reclosed after opening. Examples of such containers are described in the following patent documents: US3971506A, US5259552A, GB1353079A.

[0003] The prior art containers have several disadvantages. First of all, during transportation, the line of weakness may accidentally get torn, causing the product to come out. The line of weakness may also be torn as a result of tampering, causing the product to come out in this case, too. With these containers, tampering is a particularly tricky problem because a container that has been tampered with, being reclosable, is not easy for the end user to notice.

[0004] Further, even before being torn, a tearable line of weakness may form an air passage allowing communication between the internal space and the outside environment; the air passage may cause the product inside the container to spoil in advance and is therefore particularly undesirable, especially if the container is used for food products.

[0005] Also known are containers that include a closing element (that is, a cap) made of a material - plastic, for example - different from the material the container is made of. The closing element defines a window that communicates with the opening and/or coincides with at least part of the opening. The window is initially sealed with a film. When the film is removed, the window defines an outlet section through which the at least one product can pass from the internal space to the environment on the outside of the container. It should be noted that these cardboard containers, including a closing element of plastic material, are also difficult to recycle and therefore have a high environmental impact.

[0006] The aim of this disclosure is to provide a container, and a method for opening it, to overcome the above mentioned disadvantages of the prior art. This aim is fully achieved by the container, and the method for opening it, according to this disclosure as characterized in the appended claims. More specifically, one aim of this disclosure is to provide a container for containing at least one food product, comprising a closing system which allows the container to have an open and close function and to have a tamper evident function in connection with any movement of the closing system.

[0007] Another aim of this disclosure is to provide a container for containing at least one food product, comprising a closing system which allows the container to have an open and close function and which, being less complex and easier to make, can be made in less time than containers having the open and close function known at the present time.

[0008] Another aim of this disclosure is to provide a blank with which it is possible to make a container that achieves the above mentioned aims.

[0009] With regard to the blank, these aims are achieved by a blank having the features set out in any one of the appended claims intended to protect the blank or in any combination of one or more of these claims intended to protect the blank.

[0010] With regard to the container, these aims are achieved by a container having the features set out in any one of the appended claims intended to protect the container or in any combination of one or more of these claims intended to protect the container.

[0011] The container of this invention is suitable for containing food products, beverages, animal feeds, gardening products, detergents and home and personal hygiene products.

[0012] Preferably, the container is made of paper or cardboard; it should be noted that the container may include a layer of paper or cardboard and one or more layers of oxygen barrier materials such as plastic films and/or compostable films. In an embodiment, the container includes a first layer of paperboard and a second (covering) layer of paper, joined to the first layer. Thus, in this embodiment, each panel of the container includes the first layer and the second layer; the first layer faces towards an internal space inside the container, while the second layer faces towards the outside. Furthermore, as mentioned above, there may be a further layer of oxygen barrier material, which may be interposed between the first and the second layer or which may be joined to the first layer on an inside face of the container.

[0013] The container comprises a first panel and a second panel which are mutually superposed to define a wall of the container. The first panel faces towards the outside of the container and the second panel faces towards an internal space inside the container.

[0014] The first panel includes a first band, a remaining part and a first line of weakness which at least partly delimits the first band (relative to the remaining part). The second panel includes a second band, a remaining part and a second line of weakness which at least partly delimits the second band (relative to the remaining part). It should be noted that by "band" is meant a region of the panel (that is, a sub-panel) that may have any geometrical shape. By "line of weakness" is meant a (part of the) perimeter line of the band, which is weakened. Weakening may be done by scoring (to make an uninterrupted cut along the line of weakness, where the uninterrupted cut does not pass through the material) or by a broken line that passes through the material (that is to say, a line

of perforations). The container, after being made and before being opened, is in a sealed configuration.

[0015] In an (initial) sealed configuration, the first band is joined to the remaining part of the first panel along the first line of weakness and the second band is joined to the remaining part of the second panel along the second line of weakness.

[0016] The first line of weakness and the second line of weakness are tearable to open the container - that is, to bring it to an open configuration. In the open configuration, the first band is (at least partly) separated from the remaining part of the first panel along the first line of weakness to define a first window in the first panel, and the second band is (at least partly) separated from the remaining part of the second panel along the second line of weakness to define a second window in the second panel. The first window faces the second window to form a through section allowing the product to pass from the internal space to the outside of the container.

[0017] Preferably, when the container is in the open configuration, the first band can be tilted (about a fold line) between a raised position, where it is raised relative to the remaining part of the first panel to allow the product to pass through the through section, and a lowered position, where it covers the second window (and/or the first window) to prevent the product from passing through the through section. Thus, the container can be reclosed after being opened.

[0018] Preferably, in the sealed configuration, the first band is superposed on, but not attached to, the second band; in other words, the first band is juxtaposed with the second band, without connections that bind the first band to the second band. Thus, the first line of weakness is tearable independently of the second line of weakness (to pass from the sealed configuration to the open configuration). The container can therefore be positioned in an intermediate configuration, where the first line of weakness is torn and the second line of weakness is not torn; in the intermediate configuration, the first band is already at least partly separated from the remaining part of the first panel along the first line of weakness and the second band is still joined to the remaining part of the second panel along the second line of weakness. The intermediate configuration is intermediate between the sealed configuration and the open configuration; in other words, to open a container that is in the sealed configuration, a user must first bring it to the intermediate configuration and then to the open configuration. The purpose of the intermediate configuration is to ensure that the container reaches the end user whole, with the product inside it uncontaminated; in effect, even if the first line of weakness were torn and the first window opened during transportation, the second panel would still prevent the product from coming out. The intermediate configuration also has a tamper-evident function; in effect, even if the first window were to be opened and reclosed (by moving the first band back to the lowered position), the consumer would see whether the second window is open or not, hence whether the product has been tampered with or not. Further, thanks to the fact that the first line of weakness is tearable independently of the second line of weakness, the size of the first window (that is, of the first band) may be different from, and independent of, the size of the second window (that is, of the second band); in effect, there are no connections between the first band and the second band and opening one does not necessarily involve opening the other. Preferably, the first window (that is, the first band) is larger in area than the second window (that is, the second band): that way, the first band is easy to grip, while the size of the second band is such as to allow controlled delivery of the product.

[0019] Preferably, the first panel is glued to the second panel in a gluing area situated in the remaining part of the first panel on the outside (externally) of the first band and in the remaining part of the second panel on the outside (externally) of the second band.

[0020] The first panel includes a first face and a second face, opposite to the first face. In the sealed configuration, the first panel has a first cut on the first face and a second cut on the second face. The first cut and the second cut each have a depth that is smaller than the thickness of the first panel. The first cut and the second cut define the first line of weakness. Preferably, the first cut is offset relative to the second cut in a plane parallel to the first panel. Thus, the first line of weakness is a weakened zone defined between the first cut and the second cut.

[0021] It should be noted that if the first panel includes two or more layers (for example, a first layer of paperboard and a second layer of paper), the thickness of the first panel is defined as the sum of the thicknesses of the layers making up the first panel; thus, the first cut may be made in the first layer and the second cut in the second layer; the first cut may go right through the first layer but not the second layer, and the second cut may go right through the second layer but not the first layer.

[0022] Preferably, the first band includes a tab that is foldable relative to the remaining part of the first band along a fold line and the second panel includes a slit, into which the tab can be inserted and held in place by the second panel when the first band is at the lowered position. This allows the first band to be held at the lowered position to prevent accidental reopening when the container is reclosed after being opened for the first time.

[0023] It should be noted that the first band is stably connected to the remaining part of the first panel at a fold line. The first band is tiltable about the fold line. More specifically, in the open configuration of the container, the first band is tiltable about the fold line between the raised position and the lowered position.

[0024] It should be noted that the first band has (inside it) a further cut, which extends into the tab. The further cut has a first and a second end, positioned on the fold line of the tab. This cut thus defines a further tab (surrounded at least partly by the tab). The further tab is foldable along the fold line of the tab independently of the tab. Preferably, when the first band is at the closed po-

sition and the tab is held in the slit, the further tab protrudes from the slit (that is, it is not held in the slit) and can be gripped by a user. Thus, a user can grip the further tab to pull the first band upwards to the raised position. Preferably, the fold line is situated on a first side of the first band; the first line of weakness includes a first portion and a second portion, situated on a second side and on a third side of the first band, opposite to each other and connected to the first side; the tab is situated on a fourth side of the first band, opposite to the first side and connected to the second and third sides. Preferably, the fold line of the first band is parallel to the fold line of the tab (and spaced therefrom). Preferably, the first portion and the second portion of the first line of weakness are convergent towards the tab (or include respective portions that converge towards the tab); thus, the first band has a shape that is tapered (towards the tab).

[0025] This disclosure also provides a blank made of paper or cardboard, configured to make a container according to one or more aspects of this disclosure. It should be noted that the blank may include a plurality of layers; for example, the blank may include a first layer of paperboard and a second, covering layer of paper. The blank includes at least a first pane to form the first panel and a second pane to form the second panel.

[0026] This disclosure also provides a method for opening a container; the container is a container according to one or more aspects of this disclosure. The method comprises a step of tearing the first line of weakness; preferably, tearing the first band occurs by lifting the first band relative to the remaining part of the first panel, so as to open a first window in the first panel.

[0027] The method comprises a step of tearing the second line of weakness to open a second window in the second panel. Preferably, the step of tearing the second line of weakness follows the step of tearing the first line of weakness. More specifically, the first window gives a user access to the second band (that is, to the second panel) and tears the second line of weakness.

[0028] In an embodiment, the method comprises a step of reclosing the container. The step, of reclosing includes moving the first band from the raised position relative to the remaining part of the first panel, to a lowered position, where it covers the second window to prevent the product from passing through the through section. The step, of reclosing includes inserting the tab into the slit to hold the first band in the lowered position. It should be noted that the further tab, if provided, is not inserted in the slit but remains outside of it, so it can be gripped by a user.

[0029] Preferably, before the first line of weakness is torn, the first panel has a first cut on a first face and a second cut on a second face, opposite to the first face. The first cut and the second cut define the first line of weakness. The first cut and the second cut each have a depth that is smaller than the thickness of the first panel. Tearing the first line of weakness starts from the first cut and the second cut.

[0030] Preferably, the first band is stably connected to the remaining part of the first panel at a fold line; raising the first band involves rotating it about the fold line.

[0031] This disclosure also provides a method for making a container. The container is a container according to one or more aspects of this disclosure. The method for making the container includes the following steps: preparing a blank which includes at least a first panel and a second panel; folding the blank to bring the first and the second panel to superpose each other to define a wall of the container. The first and second panels are panels according to one or more aspects of this disclosure.

[0032] The features of a blank according to this disclosure will become clearer from the following detailed description of example embodiments of the blank and container provided by way of example only and without limiting the concepts claimed.

[0033] The following detailed description refers to the accompanying drawings, in which:

- Figure 1 is a plan view of a possible embodiment of a blank according to this disclosure, in a starting condition;
- Figure 2 is a perspective view of a possible embodiment of a container according to this disclosure, in a condition where the container is fully sealed and where the container is made from the blank of Figure 1;
- Figures 2a-2d are perspective views of a part of the container of Figure 2, showing different steps in the use of the container;
- Figures 3 and 4 are plan views of two respective parts of the blank of Figure 1;
- Figures 5 and 6 are local transverse cross sections of a zone of the blank of Figure 1, according to two possible embodiments, respectively.

[0034] In Figure 2, the numeral 1 denotes a possible embodiment of a container according to this disclosure. The container 1 may be used, for example, to contain at least one food product.

[0035] The container 1 may be made using and/or starting from a blank according to this disclosure.

[0036] A blank according to this disclosure is configured to adopt an operating condition in which the blank forms the container 1. A blank according to this disclosure is configured to pass from a non-operating condition to this operating condition through one or more steps of folding this blank.

[0037] In Figure 1, the letter S denotes a possible embodiment of a blank according to this disclosure. In Figure 1, the blank S adopts this non-operating condition.

[0038] The blank S is configured to adopt an operating condition of this blank S. When the blank S adopts the operating condition, the blank S forms the container 1. The blank S of Figure 1 adopts the operating condition in Figure 2 and in Figures 2a-2d.

[0039] A container 1 according to this disclosure is configured to allow a user to take the at least one food product

out of the container 1. Taking the product out means causing the at least one food product to pass or move through an outlet section SU of the internal space V of the container to the exterior of the container 1. The outlet section SU and the space V are labelled only in Figure 2b.

[0040] The container 1 comprises a first panel 11 and a second panel 12. The first panel 11 and the second panel 12 form part of the blank S. Thus, the blank S comprises the first panel 11 and the second panel 12.

[0041] The first panel 11 and the second panel 12 of the container 1 are in a mutually superposed condition, so as to define at least one wall P of the container 1. The wall P is labelled only in Figures 2 and 2d.

[0042] In the container 1, the first panel 11 may be considered as a first layer of the wall P, and the second panel 12, as a second layer of the wall P. The first panel 11 and the second panel 12 may, in the operating condition, be at least partly attached to each other. In the container 1, the first panel 11 and the second panel 12 may be at least partly attached to each other by gluing. Figure 3 shows the first panel 11 in a plan view. The reference labels G1 and G2 in Figure 3 denote a first gluing area and a second gluing area for attaching the first panel 11 to the second panel 12, which is shown in detail in Figure 4. The reference labels G3 and G4 in Figure 4 denote gluing areas on which the glue for gluing to the first panel 11 can be placed. The gluing areas G3 and G4 are on the opposite side of the second panel 12 with respect to the view point of Figure 4.

[0043] The first panel 11 defines an outside face L1 of the wall P of the container 1. The outside face L1 is directed towards the above mentioned exterior of the container 1.

[0044] The second panel 12 defines an inside face L2 of the wall P. The inside face L2 is directed towards the internal space V of the container 1. The internal face L2 is directed towards the opposite side of the wall P with respect to the outside face L1.

[0045] At least one first line of weakness 110 is situated on the first panel 11. The first panel 11 comprises the first line of weakness 110. Viewed in plan, the first line of weakness 110 defines or delimits at least a first window. The first panel 11 comprises a first band 111, disposed on the first window. The first panel 11 is configured in such a way that the first band 111 is disposed on the first window so as to define a sealed condition of the first window. The sealed condition of the first window is caused by the first band 111. When the first window is in the sealed condition, the first line of weakness 110 coincides with at least one part of the outer edge B1 of the first band 111 or coincides entirely with the outer edge B1 of the first band 111.

[0046] The sealed condition of the first window is shown in Figures 1, 2 and 3. Viewed in plan, the first panel 11 is delimited by an outer edge B of the first panel 11. The outer edge B of the first panel 11 is shown in Figure 3.

[0047] The perimeter of the first band 111 is defined by the outer edge B1 of the first band 111. The outer edge B1 of the first band is shown in Figure 3. When the first window is in the sealed condition, the perimeter of the first band 111 coincides with the perimeter of the first window. Viewed in plan, the first band 111 is delimited by the perimeter or outer edge B1 of the first band 111. Viewed in plan, the first window is delimited by the perimeter of the first window.

[0048] At least one second line of weakness 120 is situated on the second panel 12. The second panel 12 comprises the second line of weakness 120. The second line of weakness 120 defines at least one second window. The second panel 12 comprises a second band 121, disposed on the second window. The second panel 12 is configured in such a way that the second band 121 is disposed on the second window so as to define a sealed condition of the second window. The sealed condition of the second window is caused by the second band 121. When the second window is in the sealed condition, the second line of weakness 120 coincides with at least one part of the outer edge B2 of the second band 121 or coincides entirely with the outer edge B2 of the second band 121.

[0049] The sealed condition of the second window is shown in Figures 1, 2a and 4.

[0050] The perimeter of the second band 121 is defined by the outer edge B2 of the second band 121. The outer edge B2 of the second band 121 is shown in Figure 4. When the second window is in the sealed condition, the perimeter of the second band 121 coincides with the perimeter of the second window. Viewed in plan, the second band 121 is delimited by the perimeter or outer edge B2 of the first band 121. Viewed in plan, the second window is delimited by the perimeter of the second window.

[0051] The first window may pass from the sealed condition of the first window to an open condition of the first window by at least partly separating the first band 111 from the remaining part of the first panel 11. Separating the first band 111 is accomplished by at least partly breaking the first line of weakness 110.

[0052] The open condition of the first window is shown, for example, in Figures 2a and 2b.

[0053] In the sealed condition of the first window, the first line of weakness 110, viewed in plan, delimits the first band 111, so as to coincide with the perimeter or outer edge B1 of the first band 111. The first panel 11 is configured to allow a user to cause the at least partial separation of the first band 111 from the remaining part of the first panel 11 using specific gripping means defined by the first panel 11. The gripping means defined by the first panel 11 may form part of the first band 111. The gripping means might comprise a gripping portion 1104 of the outer edge B1 of the first band 111. When the first window is in the sealed condition, the gripping portion 1104 of the outer edge B1 of the first band 111 coincides with a part of a front sector A of the outer edge B of the first panel 11. When the first window is in the sealed condition, the first band 111 extends to the front sector A of

the outer edge B of the first panel 11 so that the gripping portion 1104 of the outer edge B1 of the first band 111 coincides with that part of the front sector A of the outer edge B of the first panel 11. The portion 1104 of the outer edge B1 of the first band 111 may be easily pulled by a user to cause the at least partial separation of the first band 111. The first line of weakness 110 may comprise a first sector 1101 of the first line of weakness 110, a second sector 1102 of the first line of weakness 110 and a third sector 1103 of the first line of weakness 110. When the first window is in the sealed condition, these sectors of the first line of weakness 110 coincide with respective sectors of the outer edge B1 of the first band 111. The aforementioned portion 1104 of the outer edge of the first band 111, with which a user can cause the at least partial separation of the first band 111 might be considered, in the sealed condition of the first window, a fourth sector 1104 of the outer edge of the first band 111.

[0054] Thus, when the first window is in the sealed condition, the first band 111 extends to the front sector A of the outer edge B of the first panel 11 so that the fourth sector 1104 of the outer edge B1 of the first band 111 coincides with the at least one part of the front sector A of the outer edge B of the first panel 11.

[0055] The first panel 11 may be configured in such a way that the separation of the first band 111 from the remaining part of the first panel 11 is accomplished by totally breaking the second sector 1102 and the third sector 1103 of the first line of weakness 110. In this case, the second sector 1102 and the third sector 1103 are respective fracture lines. The separation of the first band 111 from the remaining part of the first panel 11 is accomplished by tearing the second sector 1102 and the third sector 1103 of the first line of weakness 110.

[0056] In the example of the container 1 of the accompanying drawings, the container 1 is configured in such a way that the first band 111 is only partly separated, in that the first band 111, when the first window is in the open condition, remains connected to the first panel 11 by the first sector 1101 of the first line of weakness 110.

[0057] The second window may pass from the sealed condition of the second window to an open condition of the second window by at least partly separating the second band 121 from the remaining part of the second panel 12. Separating the second band 121 is accomplished by at least partly breaking the second line of weakness 120.

[0058] The second panel 12 is configured to allow a user to cause the at least partial separation of the second band 121 from the remaining part of the second panel 12 using specific gripping means defined by the second panel 12. The gripping means defined by the second panel 12 may form part of the second band 121.

[0059] The second panel 12 may be configured in such a way that the separation of the second band 121 from the remaining part of the second panel 12 is a total separation of the second band 121 from the remaining part of the second panel 12. In this case, the separation of the second band 121 is accomplished by totally breaking the second line of weakness 120. In this case, the second line of weakness 120 is a fracture line. The separation of the second band 121 from the remaining part of the second panel 12 is thus accomplished by tearing the second line of weakness 120.

[0060] The open condition of the second window is shown in Figure 2b.

[0061] In the sealed condition of the second window, the second line of weakness 120, viewed in plan, delimits the second band 121, so as to coincide with the perimeter or outer edge B2 of the second band 121. In the example of the container 1 of the accompanying drawings, the container 1 is configured in such a way that the separation of the second band 121 is a total separation or removal of the second band 121 from the remaining part of the second panel 12.

[0062] The second panel 12 is configured to allow a user to cause the removal of the second band 121 using specific gripping means defined by the second panel 12.

[0063] The user wishing to take out the at least one food product must first make the first window pass from the sealed condition to the open condition, so that the container 1 after the first window has passed from the sealed condition to the open condition, is in the condition shown in Figure 2a.

[0064] In Figure 2a, the first window is in the open condition, since the first band 111 has been at least partly separated from the remaining part of the first panel 11. In Figure 2a, the second window, which is covered by the second band 121, is still in the sealed condition.

[0065] The user wishing to take out the at least one food product must then make the second window pass from the sealed condition to the open condition, so that the container 1 after the second window has passed from the sealed condition to the open condition, is in the condition shown in Figure 2b.

[0066] In Figure 2b, the first window is in the open condition. In Figure 2b, the second window is also in the open condition, since the second band 121 has also been separated from the remaining part of the second panel 12. When the first window and the second window are still in the respective sealed conditions, and the blank S adopts the operating condition, as in Figure 2, for example, the first band 111 and the second band 121 are mutually opposite, so that the passage of the first window from the sealed condition to the open condition of the first window, by at least partly separating the first band 111 from the remaining part of the first panel 11, allows a user to access the second band 121. That way, by separating the second band 121, the user can cause the second window to also pass from its sealed condition to its open condition. The presence of the second panel 12, together with the second band 121, means that the wall P of the container 1, besides having the open and close and tamper-evident functions, described in more detail below, can also prevent the at least one product from accidentally coming out when the first window is still in the sealed condition. The container 1 is configured so

that, when the first window and second window are in the respective open conditions, the second window, viewed in plan, defines or delimits the above mentioned outlet section SU. In Figure 2b the second window defines and/or corresponds to the outlet section SU.

[0067] The container 1 is configured so that, when the first window and second window are in the respective open conditions, the first band 111 may be subject to a movement between a first position and a second position. The first position and the second position are considered relative to the outlet section SU or relative to the remaining part of the first panel 11. The movement of the first band 111 between first position and the second position may be considered relative to the remaining part of the first panel 11 or relative to the outlet section SU.

[0068] The container 1 is configured so that when the first band 111 adopts the first position, the first band 111 allows the abovementioned passage of the at least one product through the outlet section SU.

[0069] The first position of the first band 111 may therefore be considered as an open position of the outlet section SU.

[0070] The container 1 is configured so that when the first band 111 adopts the second position, the first band 111 prevents the abovementioned passage of the at least one product through the outlet section SU.

[0071] The second position of the first band 111 may therefore be considered as a closed position of the outlet section SU.

[0072] In Figure 2a or in Figure 2b, the first band 111 is in the first position, which corresponds to the open position of the outlet section SU. It should be noted, however, that in the situation of Figure 2a, the outlet section SU is not yet defined because the second band 121 must still be removed from the remaining part of the second panel 12, while in the situation of Figure 2b, the second band 121 has been removed and the second window thus defines the outlet section SU.

[0073] In Figure 2d, the first band 111 is in the second position, which corresponds to the closed position of the outlet section SU, since the first band 111, in the position of Figure 2d, prevents the abovementioned passage of the at least one product through the outlet section SU.

[0074] The outlet section SU might also be considered as being defined by both the first and the second window acting in conjunction with each other. In effect, when the first window and the second window are in the respective open conditions and the first band 111 is in the abovementioned first position or open position of the outlet section SU, the first window and the second window are in communication with each other to allow the passage of the at least one product through the outlet section SU. The outlet section SU may be considered situated on and/or through the wall P.

[0075] During the abovementioned movement of the first band 111 between the first position or open position of the outlet section SU and the second position or closed position of the outlet section SU, the first band 111 might adopt a plurality of intermediate positions, including the one shown in Figure 2c.

[0076] Generally speaking, if the abovementioned passage of the at least one product through the outlet section SU and from the internal space V to the outside is allowed in any of the intermediate positions, that intermediate position may also be considered as an open position of the outlet section SU. Although the first band 111 in Figure 2c is in a position that may also be considered as an open position because the abovementioned passage of the at least one product is allowed even in the situation of Figure 2c, the outlet section SU is not shown in Figure 2c because it is not visible from the angle of view represented in that drawing.

[0077] Although the outlet section SU is closed in Figure 2d on account of the position adopted by the first band 111, the second window is in the open condition also in Figure 2d in that the second band 121 has been at least partly separated (in the case shown in the drawings, removed) from the remaining part of the second panel 12. Thus, besides Figure 2c and Figure 2b, the second window defines and/or corresponds to the outlet section SU in Figure 2d, too. The outlet section SU is not shown in Figure 2 in that it is hidden from view on account of the position of the first band 111 which, in Figure 2d, closes the outlet section SU.

[0078] The container 1 is configured so that when the first band 111 adopts the closed position of the outlet section SU, the first band 111 can adopt a retained condition. The container 1 is configured so that when the first band 111 adopts the retained condition, the first band 111 is held in the second position or closed position of the outlet section SU. The container 1 is configured so that when the first band 111 adopts the retained condition, the first band 111 is held in the closed position or second position by the second panel 12, in the sense that the second panel 12 holds the first band 111 in the closed position or second position.

[0079] After a part of the at least one food product has been made to come out of the container 1 by passing through the outlet section SU, the container 1 allows the user to bring or easily return the first band 111 to the closed position of the outlet section SU, as shown, for example in Figure 2d. When the first band 111 adopts the closed position of the outlet section SU, the first band 111, as mentioned above, prevents the abovementioned passage of the at least one food product through the outlet section SU, even though the second window is in the open condition.

[0080] When the user wishes to take out another part of the at least one food product from the container 1, the user has only to bring the first band 111 back to the open position of the outlet section SU, as shown, for example in Figure 2b, and take out the other part of the at least one product by the abovementioned passage through the outlet section SU. Next, the user can bring the first band 111 back to the closed position of the outlet section SU. The container 1 thus allows the user to bring the first

band 111 back to the closed position of the outlet section SU as many times as necessary, and the first band 111 remains stably held in the closed position when the at least one food product does not need to be taken out of the container 1. To define the retained condition of the first band 111, the container comprises a retaining system.

[0081] The second panel 12 comprises at least one slit 122a. The first band 111 comprises at least one foldable tab 1111, which is foldable relative to the remaining part of the first band 111. The first band 111 comprises a fold line 1111a. The foldable tab 1111 is foldable relative to the remaining part of the first band 111 around the fold line 1111a.

[0082] The abovementioned retaining system comprises the at least one slit 122a and the at least one foldable tab 1111. The at least one slit 122a is also present in the sealed condition of the second window. When the first window is in the sealed condition, the first panel 11 covers the at least one slit 122a. The term slit may be used to denote a slot. The at least one slit may be at least one slot.

[0083] The at least one slit 122a is suitable for receiving the at least one foldable tab 1111 so as to define the retained condition of the first band 111. The container 1 is configured so that the retained condition of the first band 111 is obtained by at least one retaining action applied by the at least one slit 122a on the at least one foldable tab 1111, while the at least one foldable tab 1111 is folded relative to the remaining part of the first band 111 about the fold line 1111a and is inserted through the at least one slit 122a.

[0084] The second panel 12 is configured so that, when the second window adopts the open condition, hence when the second band 121 is at least partly separated (in the case shown in the drawings, removed) from the remaining part of the second panel 12, the at least one slit 122a is in communication with the second window.

[0085] That way, the retaining system makes it easier for the user to obtain the retained condition, since the position of the at least one slit 122a situated on the second panel 12 is in communication with the second window, thanks also to the fact that the second window is also situated on the second panel 12 and defines the outlet section SU, so that the user, in order to obtain the retained condition of the first band 111 in a closed position of the outlet section SU, does not need to exercise excessive care and/or attention on inserting the foldable tab 1111 into the at least one slit 122a. Furthermore, the presence of the at least one slit 122a also in the sealed condition of the second window means that the at least one slit 122a is not affected or is little affected by the passage of the second window from the sealed condition to the open condition. This avoids damage to the at least one slit which might result from at least partly removing the second band 121 from the remaining part of the second panel 12 and which might negatively affect the operation of the retaining system.

[0086] In practice, the at least one slit is present also in the sealed condition, so as not to define the shape of the second window in any way, thereby obtaining the abovementioned effect.

[0087] This also has the effect of making the at least one slit 122a independent of the shape of the second window, hence of the shape of the second band 121 and of the shape of the second line of weakness 120.

[0088] The slit 122a may be considered as a first slit 122a.

[0089] The second panel 12 of the container 1 of the accompanying drawing comprises a second slit 122b, having the same functions as the first slit 122a. The second slit 122b, too, may be in communication with the second window.

[0090] The second slit 122b may have one or more of the features of the first slit 122a.

[0091] The abovementioned first sector 1101 of the first line of weakness 110 may be a fold line or hinge line of the first band 111. The first panel 11 is configured so that the movement of the first band 111 between the open position and the closed position of the outlet section SU is a rotation about the hinge line 1101.

[0092] The first band 111 comprises a front portion 111a. The front portion 111a of the first band 111 is tapered towards the foldable tab 1111. That means the transverse cross section of the front portion 111a, the cross section being obtained by cutting the first panel 11 at right angles to the thickness of the first panel 11, becomes smaller as it approaches the foldable tab 1111. The tapered portion 111a therefore narrows as it approaches the foldable tab 1111.

[0093] The tapered portion 111a of the first band 111 is tapered when viewed in plan.

[0094] The tapered portion 111a of the first band 111 is situated between the hinge line 1101 and the foldable tab 1111.

[0095] In the sealed condition of the first window, the front portion 111a, which is tapered towards the foldable tab 1111, is defined and/or delimited on one side, when viewed in plan, by a first part 1103a of the third sector 1103 of the first line of weakness 110 and, on the opposite side, by a first part 1102a of the second sector 1102 of the first line of weakness 110.

[0096] The second sector 1102 and the third sector 1103 of the first line of weakness 110 are opposite to each other.

[0097] The first part 1103a of the third sector 1103 of the first line of weakness 110 and the first part 1102a of the second sector 1102 of the first line of weakness 110 are opposite to each other and convergent towards the foldable tab 1111.

[0098] The foldable tab 1111 defines the abovementioned part of the front sector A of the outer edge B of the first panel 11, which in turn coincides with the gripping portion 1104 of the outer edge B1 of the first band 111.

[0099] The abovementioned gripping means defined by the first panel 11 comprise the foldable tab 111.

[0100] The first part 1102a of the second sector 1102 is connected to a first end e1 of the fold line 1111a about which the foldable tab 1111 can be folded. The first part 1103a of the third sector 1103 is connected to a second end e2 of the fold line 1111a about which the foldable tab 1111 can be folded. The first end e1 and the second end e2 are opposite to each other.

[0101] Since the perimeter B1 of the first band 111 coincides with the perimeter of the first window when the first window is in the sealed condition, the first window comprises a corresponding front tapered portion which, in the sealed condition of the first window, is covered by the tapered portion 111a of the first band 111.

[0102] The second band 121 also comprises a front portion 121a. The front portion 121a of the second band 121 is tapered towards a front sector A2 of the outer edge B2 of the second band 121. That means the transverse cross section of the front portion 121a of the second band 121, the cross section being obtained by cutting the first panel 11 at right angles to the thickness of the first panel 11, becomes smaller as it approaches the front sector A2 of the outer edge B2 of the second band 121. The tapered portion 121a of the second band 121 thus becomes narrower as it approaches the front sector A2 of the outer edge B2 of the second band 121.

[0103] The tapered portion 121a of the second band 121 is tapered when viewed in plan.

[0104] The first slit 122a extends from a first end e3 of the front sector A2 of the outer edge B2 of the second band 121.

[0105] The second slit 122b, if provided, extends from a second end e4 of the front sector A2 of the outer edge B2 of the second band 121. The first end e3 and the second end e4 of the front sector A2 of the outer edge B2 of the second band 121 are opposite to each other.

[0106] The taper of the tapered portion 111a of the first band 111, hence also that of the tapered portion of the first window, makes it possible to provide the first panel 11 with a larger total area for gluing the first panel 11 and the second panel 12 to each other.

[0107] This is evident looking at the extension of the gluing areas G1 and G2 of Figure 3.

[0108] The taper of the tapered portion 121a of the second band 121, hence also that of the tapered portion of the second window, makes it possible to provide the second panel 12 with a larger total area for gluing the first panel 11 and the second panel 12 to each other.

[0109] This is evident looking at the extension of the gluing areas G3 and G4 of Figure 4.

[0110] More specifically, the gluing areas G1 and G2 on the first panel 11 and the gluing areas G3 and G4 on the second panel 12 are extended.

[0111] Figure 5 shows a partial transverse cross section of a first variant of the first panel 11, where a first fracture line, corresponding to the second sector 1102 of the first line of weakness 110, and a second fracture line, corresponding to the third sector 1103 of the first line of weakness 110, are made according to a first method.

[0112] According to the first method, the first fracture line 1102 and the second fracture line 1103 are each made, for each point on its extension, by at least two cuts and thus each comprise the at least two cuts. The at least two cuts comprise a first cut T, made on a first face F1 of the first panel 11, and a second cut T2, made on a second face F2 of the first panel 11 and offset relative to the first cut T. The second face F2 is on the side of the first panel 11 opposite the first face F1. This totally prevents communication between the environment on the outside the container 1 and the internal space V inside the container 1 until the first window passes from the sealed condition to the open condition. The first cut T and the second cut T2 each have a depth that is smaller than the thickness of the first panel 11.

[0113] Figure 6 shows a partial transverse cross section of a second variant of the first panel 11, where the first fracture line, corresponding to the second sector 1102 of the first line of weakness 110, and the second fracture line, corresponding to the third sector 1103 of the first line of weakness 110, are made according to a second method. In the second method, a single cut T is made right through the thickness of the first panel 11.

[0114] The first panel 11 and the second panel 12 might be glued to each other in a first gluing area G1 and a second gluing area G2 situated, respectively, on the first panel 11 and, respectively, at the sides of the tapered portion 111a of the first band 111, and in a third gluing area G3 and a fourth gluing area G4 situated, respectively, on the second panel 12 and at the sides of the tapered portion 121a of the second band 121.

[0115] Each of the respective extensions of the first area G1 and second area G2 is made available at least partly by the taper of the tapered portion 111a of the first band 111. That means the extension of the first area G1 and/or the extension of the second area G2 may be made longer thanks to the taper of the tapered portion 111a of the first band 111.

[0116] Each of the respective extensions of the third area G3 and fourth area G4 is made available at least partly by the taper of the tapered portion 121a of the second band 121. That means the extension of the third area G3 and/or the extension of the fourth area G4 may be made longer thanks to the taper of the tapered portion 121a of the second band 121. The abovementioned features and/or functions of the container 1 may be considered as referred to the blank S when the blank S adopts the abovementioned operating condition, since the blank S, when it adopts the operating condition, forms the container 1.

[0117] The blank may be made from at least one sheet. The sheet, in this case, comprises the first panel 11 and the second panel 12. The sheet may be, for example, a sheet made of at least one material comprising cellulose, such as cardboard or paperboard.

[0118] In a container 1 according to this disclosure, the blank S from which the container 1 is made defines the

structure of the container 1 and the structure defines the internal space V of the container 1. The blank S also defines the closing system of the container 1. The closing system comprises the first band 111, the second band 121, the first line of weakness 110 and the second line of weakness 120.

[0119] Through this closing system, a container 1 according to this disclosure allows obtaining the open and close function of the container 1 and the tamper evident function with regard to any operating movement of the closing system itself.

[0120] Through this closing system, a container 1 according to this disclosure allows obtaining the open and close function of the container 1 and can be made in less time and/or at a lower cost compared to presently known containers 1 with open and close function.

[0121] Through this closing system, a container 1 according to this disclosure allows obtaining the open and close function of the container 1, the tamper evident function with regard to any operating movement of the closing system itself and, while offering these functions, can nevertheless be made in less time and/or at a lower cost compared to presently known containers 1 with open and close function.

[0122] The closing system may be considered as means for opening and closing the container 1 and the operating movement may be considered as any action taken on the opening and closing means.

[0123] It should be noted that the first band includes a further tab 111b, which is partly surrounded by the tab 1111. The further tab 111b forms part of the opening and closing means.

[0124] The following paragraphs, listed in alphanumeric order for reference, are non-limiting example modes of describing this invention.

A. A container (1) for containing at least one food product, the container (1) comprising at least a first panel (11) and a second panel (12) which are in a mutually superposed condition in such a way as to define at least one wall (P) of the container (1), wherein:

- the first panel (11) defines an outer face (L1) of the wall (P), the outer face (L1) facing towards an environment on the outside of the container (1);
- the second panel (12) defines an inner face (L2) of the wall (P), the inner face (L2) facing towards an internal space (V) inside the container (1);
- on the first panel (11) is situated at least a first line of weakness (110) which defines a first window, the first panel (11) comprising a first band (111) located on the first window in such a way as to define a sealed condition of the first window;
- on the second panel (12) is situated at least a second line of weakness (120) which defines a second window, the second panel (120) comprising a second band (121) located on the second window in such a way as to define a sealed condition of the second window;
- the first window may pass from the sealed condition to an open condition by at least partly separating the first band (111) from the remaining part of the first panel (11), the separation of the first band (111) being accomplished by at least partly breaking the first line of weakness (110);
- the second window may pass from the sealed condition to an open condition by an at least partial separation of the second band (121) from the remaining part of the second panel (12), the separation of the second band (121) being able to occur by at least partial breaking of the second line of weakness (120);
- the container (1) being configured so that, when the first window and second window are in the respective open conditions:
- the second window defines an outlet section (SU) of the container (1) through which the at least one food product can pass from the inner space (V) to the outside environment;
- the first band (111) can be subjected to a movement between an open position of the outlet section (SU), in which the first band (111) allows the passage, and a closed position of the outlet section (SU), in which the first band (111) prevents the passage;
- the first band (111) can adopt a retained condition in which the first band (121) is held by the second panel (12) in the closed position of the outlet section (SU);
- wherein the second panel (12) comprises at least a first slit (122a) and the first band (111) comprises a tab (1111) that is foldable relative to the remaining part of the first band (111), the first slit (122a) being designed to receive the foldable tab (1111) in such a way as to define the retained condition of the first band (111);
- the container is configured so that a user can make the first window pass from the sealed condition to the open condition using gripping means of the first band (111), the gripping means being defined by the first panel (11) and belonging to the first band (111), the gripping means comprising the foldable tab (1111);

wherein the first band (111), in the sealed condition of the first window, extends up to a front sector (A) of the outer edge (B) of the first panel (11), in such a way that the gripping means defined by the first panel (11) comprise a part of the front sector (A), the part of the front sector (A) being defined by the foldable tab (1111);

wherein the first band (111) comprises a front portion (111a) which is tapered towards the part of the front

sector (A) and therefore towards the foldable tab (1111), the transverse cross section of the tapered portion, at right angles to the thickness of the panel (11), becoming smaller towards the foldable tab (1111), so that the tapered portion (111a) narrows towards the foldable tab (1111);
wherein the first window comprises a corresponding tapered portion which, in the sealed condition of the first window, is covered by the tapered portion (111a) of the first band (111).

A1. The container according to paragraph A, wherein the first line of weakness (110) comprises a first sector (1101), a second sector (1102) and a third sector (1103), the second sector (1102) and third sector (1103) being respective fracture lines, in such a way that the container (1) is configured so that the separation of the first band (111) occurs by total breakage of the second sector (1102) and the third sector (1103), the second sector (1102) and third sector (1103) being mutually facing; wherein, in the sealed condition of the first window, the tapered portion (111a) of the first band (111) is delimited in plan, on one side, by a first part (1103a) of the third sector (1103) and, on the opposite side, by a first part (1102a) of the second sector (1102), the first part (1103a) of the third sector (1103) and first part (1102a) of the second sector (1102) being mutually facing and converging towards the foldable tab (1111);
wherein the taper of the tapered portion (111a) is defined by the fracture lines.

A1.1. The container according to paragraph A1, wherein:

- the foldable tab (1111) is foldable relative to the remaining part of the first band (111) around a fold line (1111a);
- the first part (1102a) of the second sector (1102) and first part (1103a) of the third sector (1103) are connected to mutually opposite ends (e1, e2) of the fold line (1111a).

A1.1.1. The container according to paragraph A1.1, wherein the first panel (11) and the second panel (12) are glued to each other in a first gluing area (G1) and a second gluing area (G2) situated, respectively, on the first panel (11) and at the sides of the tapered portion (111a) of the first band (111), and in a third gluing area (G3) and a fourth gluing area (G4) situated, respectively, on the second panel (12) and at the sides of the tapered portion (121a) of the second band (121),
wherein each of the respective extensions of the first area (G1) and second area (G2) is made available at least partly by the taper of the tapered portion (111a) of the first band (111);
wherein each of the respective extensions of the third area (G3) and fourth area (G4) is made available at least partly by the taper of the tapered portion (121a) of the second band (121).

A2. The container according to any one of paragraphs from A to A1.1.1, wherein:

- the container (1) is configured so that, when the first window is in the sealed condition, the first line of weakness (110) coincides with an outer edge (B1) or perimeter of the first band (111) and the perimeter of the first window coincides with the outer edge (B1) of the first band (111), the first band (111) being delimited in plan by the edge (B1) of the first band (111);
- the container (1) is configured so that, when the second window is in the sealed condition, the second line of weakness (120) coincides with an outer edge (B2) or perimeter of the second band (121) and the perimeter of the second window coincides with the perimeter or outer edge (B2) of the second band (121), the second band (121) being delimited in plan by the edge (B2) of the second band (121).

A2.1. The container according to paragraph A2, wherein:

- the second band (121) comprises a front portion (121a) which is tapered towards a front sector (A2) of the edge (B2) of the second band (121), the transverse cross-section of the tapered portion (121a) of the second band (121), at right angles to the thickness of the panel (11), narrowing towards the front sector (A2) of the edge (B2) of the second band (121);
- the second window comprises a corresponding tapered portion which, in the sealed condition of the second window, is covered by the tapered portion (121a) of the second band (121);
- the first slit (122a) extends from a first end (e3) of the front sector (A2) of the edge (B2) of the second band (121).

A2.1.1. The container (1) according to paragraph A2.1 wherein each of the fracture lines is made, in a transverse cross section, by at least a first cut (T) made starting from a first face (F1) of the first panel (11) and a second cut (T2) made starting from a second face (F2) of the second panel (12), the first face (F1) facing the opposite side of the first panel (11) with respect to the second face (F2) of the first panel (11) and the first cut (T) and the second cut (T2) having a depth less than the thickness of the first panel (11), each of the cuts (T, T2) being shifted or offset with respect to the other of the first cut (T) and second cut (T2).

A3. The container (1) according to one or more of paragraphs A to A2.1, wherein the first band (111) and the second band (121) are mutually opposite, in

such a way that the passage of the first window from the sealed condition to the open condition of the first window, by the separation of the first band (111), allows a user to access the second band (121) so as to cause, by separation of the second band (121), the passage also of the second window from the sealed condition to the open condition.

A4. The container (1) according to one or more of paragraphs A to A3, wherein the second panel (12) is configured so that, when the second window adopts the open condition, the at least one slit (122a) is in communication with the second window.

A5. The container (1) according to one or more of paragraphs A to A4, wherein the first sector (1101) of the first line of weakness (110) is a hinge line, so that the blank (1) is configured in such a way that the movement of the first band (111) is a rotation around the first sector (1101).

A6. The container (1) according to one or more of paragraphs A to A5, wherein the second line of weakness (120) is a fracture line, so that the blank is configured in such a way that the separation of the second band (121) is a total separation of the second band (121) relative to the remaining part of the second panel (12) and occurs by total breaking of the second line of weakness (120).

A7. A blank (S) for making a container (1) according to one or more of paragraphs A to A6, wherein the blank (S) comprises the first panel (11) and the second panel (12) according to any one of the preceding claims and is configured for making a container (1) according to any one of the preceding paragraphs by folding the blank (S).

B. A container (1) for containing a product, comprising a first panel (11) and a second panel (12) which are mutually superposed to define a wall (P) of the container (1), wherein the first panel (11) faces towards an environment on the outside of the container (1) and the second panel (12) faces towards an internal space (V) inside the container (1),

the first panel (11) including a first band (111) and a first line of weakness (110) which at least partly delimits the first band (110), the second panel (12) including a second band (121) and a second line of weakness (120) which at least partly delimits the second band (121),

wherein the first line of weakness (110) and the second line of weakness (120) are tearable to bring the container from a sealed configuration, where the first band (111) is joined to a remaining part of the first panel (11) along the first line of weakness (110) and the second band (121) is joined to a remaining part of the second panel (12) along the second line of weakness (120), to an open configuration, where the first band (111) is separated from the remaining part of the first panel (11) along the first line of weakness (110) to define a first window in the first panel (11), and the second band (121) is separated from the remaining part of the second panel (12) along the second line of weakness (120) to define a second window in the second panel (12), wherein the first window faces the second window to form a through section (SU) allowing the product to pass from the internal space (V) to the outside environment,

wherein, when the container (1) is in the open configuration, the first band (111) can be tilted between a raised position, where it is raised relative to the remaining part of the first panel (11) to allow the product to pass through the through section (SU), and a lowered position, where it covers the second window to prevent the product from passing through the through section (SU).

B1. The container according to paragraph B, wherein, in the sealed configuration, the first line of weakness (110) is tearable independently of the second line of weakness (120).

B1.1. The container according to paragraph B1, the container (1) being positionable in an intermediate configuration, wherein the first line of weakness (110) is torn and the second line of weakness (120) is not torn, so the first band (111) is at least partly separated from the remaining part of the first panel (11) along the first line of weakness (110) and the second band (121) is joined to the remaining part of the second panel (12) along the second line of weakness.

B2. The container according to any one of paragraphs from B to B1.1, wherein the first panel (11) includes a first face (F1) and a second face (F2), opposite to the first face (F1), wherein, in the sealed configuration, the first panel (11) has a first cut (T) on the first face (F1) and a second cut (T2) on the second face (F2), wherein the first cut (T) and the second cut (T2) each have a depth that is smaller than the thickness of the first panel (11), and wherein the first cut (T) and the second cut (T2) define the first line of weakness (110).

B2.1. The container according to paragraph B2, wherein the first cut (T) is offset relative to the second cut (T2) in a plane parallel to the first panel.

Claims

1. A container (1) for containing a product, comprising a first panel (11) and a second panel (12) which are mutually superposed to define a wall (P) of the container (1), wherein the first panel (11) faces towards an environment on the outside of the container (1) and the second panel (12) faces towards an internal space (V) inside the container (1),

the first panel (11) including a first band (111) and a first line of weakness (110) which at least partly delimits the first band (110), the second panel (12) including a second band (121) and a second line of weakness (120) which at least partly delimits the sec-

ond band (121), wherein the first band (111) and the second band (121) are mutually superposed,
wherein the first line of weakness (110) and the second line of weakness (120) are tearable to bring the container from a sealed configuration, where the first band (111) is joined to a remaining part of the first panel (11) along the first line of weakness (110) and the second band (121) is joined to a remaining part of the second panel (12) along the second line of weakness (120), to an open configuration, where the first band (111) is separated from the remaining part of the first panel (11) along the first line of weakness (110) to define a first window in the first panel (11), and the second band (121) is separated from the remaining part of the second panel (12) along the second line of weakness (120) to define a second window in the second panel (12), wherein the first window faces the second window to form a through section (SU) allowing the product to pass from the internal space (V) to the outside environment,
wherein, when the container (1) is in the open configuration, the first band (111) can be tilted between a raised position, where it is raised relative to the remaining part of the first panel (11) to allow the product to pass through the through section (SU), and a lowered position, where it covers the second window to prevent the product from passing through the through section (SU),
characterized in that, in the sealed configuration, the first line of weakness (110) is tearable independently of the second line of weakness (120).

2. The container (1) according to claim 1, the container (1) being positionable in an intermediate configuration, where the first line of weakness (110) is torn and the second line of weakness (120) is not torn, so that the first band (111) is at least partly separated from the remaining part of the first panel (11) along the first line of weakness (110) and the second band (121) is joined to the remaining part of the second panel (12) along the second line of weakness (120).

3. The container (1) according to claim 2, wherein the first panel (11) is glued to the second panel (12) in a gluing area (G1) situated in the remaining part of the first panel (11) on the outside of the first band (111) and in the remaining part of the second panel (12) on the outside of the second band (121).

4. The container (1) according to any one of the preceding claims, wherein the first panel (11) includes a first face (F1) and a second face (F2), opposite to the first face (F1), wherein, in the sealed configuration, the first panel (11) has a first cut (T) on the first face (F1) and a second cut (T2) on the second face (F2), wherein the first cut (T) and the second cut (T2) each have a depth that is smaller than the thickness of the first panel (11), and wherein the first cut (T) and the second cut (T2) define the first line of weakness (110).

5. The container (1) according to claim 4, wherein the first cut (T) is offset relative to the second cut (T2) in a plane parallel to the first panel (11).

6. The container (1) according to any one of the preceding claims, wherein the first band (111) includes a tab (1111) that is foldable relative to the remaining part of the first band (111) along a fold line (111a) and the second panel (12) includes a slit (122a), the tab (1111) being insertable into the slit (122a) and held in place by the second panel (12) when the first band (111) is at the lowered position.

7. The container (1) according to any one of the preceding claims, wherein first band (111) is stably connected to the remaining part of the first panel (11) at a fold line (1101) so that in the open configuration of the container (1), the first band (111) is tiltable about the fold line (1101) between the raised position and the lowered position.

8. The container (1) according to claim 7, wherein the first band (111) has a further cut, which extends into the tab (111a), wherein the further cut has a first and a second end, positioned on the fold line (111a) of the tab (1111), so that said cut defines a further tab (111b), also foldable along the fold line (111a) of the tab (1111) independently of the tab (1111), wherein, in the closed position of the first band (111), where the tab (1111) is held in the slit (122a), the further tab (111b) protrudes from the slit (122a) and can be gripped by a user.

9. The container (1) according to claim 8, wherein the fold line (1101) is situated on a first side of the first band (111) and wherein the first line of weakness (110) includes a first portion (1102) and a second portion (1103), situated on a second side and on a third side of the first band (111), opposite to each other and connected to the first side, and wherein the tab (1111) is situated on a fourth side of the first band (111), opposite to the first side and connected to the second and third sides.

10. The container (1) according to claim 9, wherein the first portion (1102) and the second portion (1103) of the first line of weakness (110) are convergent towards the tab (1111) so the first band (111) has a tapered shape.

11. A blank (S) of paper or cardboard for making container (1) according to any one of the preceding claims, wherein the blank (S) includes at least a first pane to form the first panel (11) and a second pane to form the second panel (12).

12. A method for opening a container (1), wherein the container (1) comprises a first panel (11) and a second panel (12) which are mutually superposed to define a wall (P) of the container (1), wherein the first panel (11) faces towards an environment on the outside of the container (1) and the second panel (12) faces towards an internal space (V) inside the container,
the first panel (11) including a first band (111) and a first line of weakness (110) which at least partly delimits the first band (110), the second panel (12) including a second band (121) and a second line of weakness (120) which at least partly delimits the second band (121), wherein the first band (111) includes a tab (1111) that is foldable relative to the remaining part of the first band (111), and the second panel (12) includes a slit (122a), wherein the method comprises a step of tearing the first line of weakness (110) by raising the first band (111) relative to the remaining part of the first panel (11), so as to open a first window in the first panel (11),
the method being **characterized in that** it comprises, after the step of tearing the first line of weakness (110), a step of accessing the second band (121) through the first window and tearing the second line of weakness (120), so as to open a second window in the second panel (12).

13. The method according to claim 12, wherein the first band (111) includes a tab (1111) that is foldable relative to the remaining part of the first band (111) along a fold line (111a) and the second panel (12) includes a slit (122a), wherein the method comprises a step of reclosing the container (1), including moving the first band (111) from the raised position relative to the remaining part of the first panel (11), to a lowered position, where it covers the second window to prevent the product from passing through the through section, and inserting the tab (1111) into the slit (122a) to hold the first band (111) in the lowered position.

14. The method according to claim 12 or 13, wherein, prior to tearing the first line of weakness (110), the first panel (11) has a first cut (T) on a first face (F1) and a second cut (T2) on the second face (F2), opposite to the first face, wherein the first cut (T) and the second cut (T2) each have a depth that is smaller than the thickness of the first panel (11), and wherein the step of tearing the first line of weakness (110) starts from the first cut (T) and the second cut (T2).

15. The method according to any one of claims 12 to 14, wherein first band (111) is stably connected to the remaining part of the first panel (11) at a fold line (1101) so that raising the first band (111) causes it to rotate about the fold line (1101).

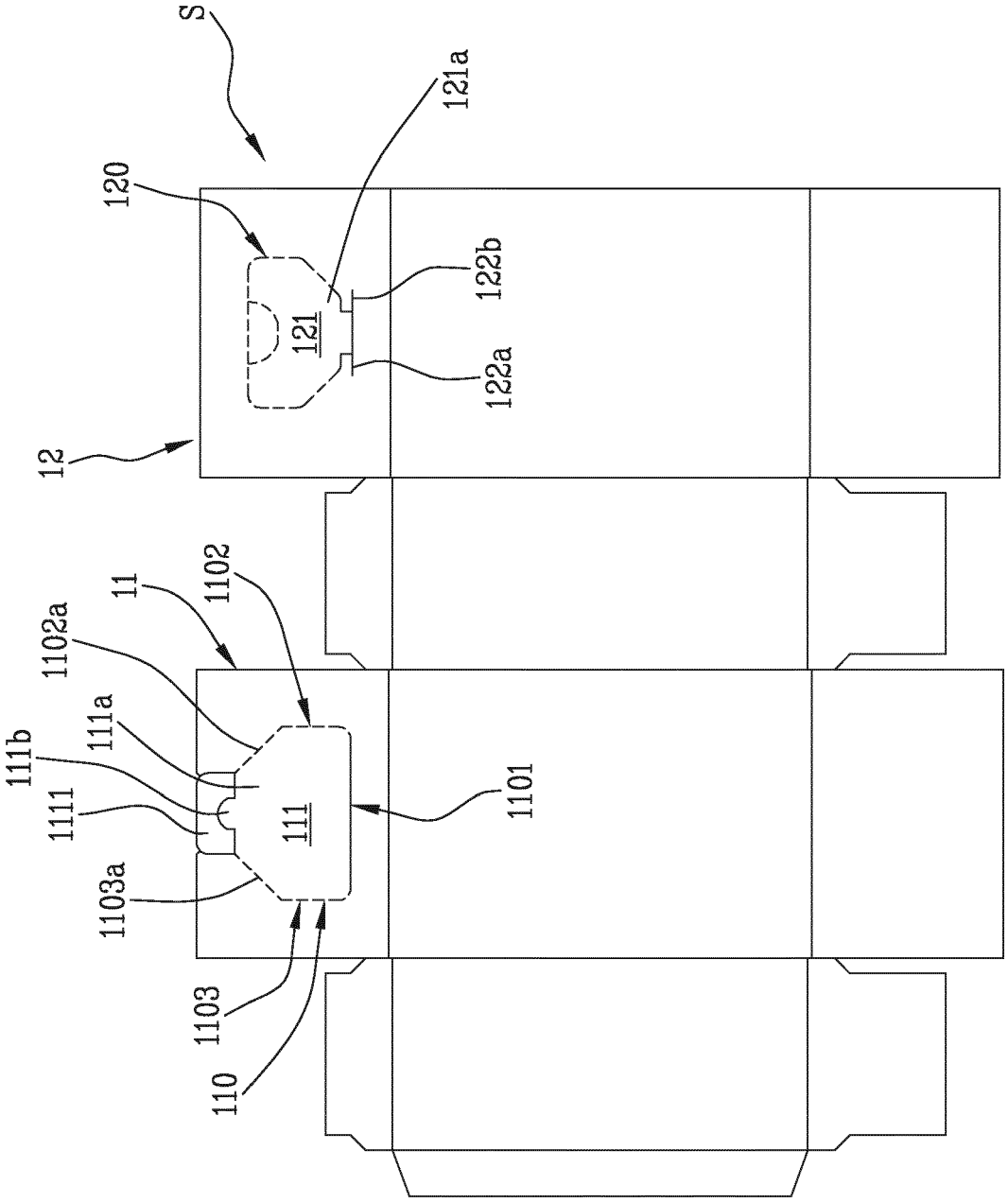

S
121a
120
122b
121
122a
12
11
1102
1102a
111a
111b
1111
111
1101
1103a
1103
110

Fig.1

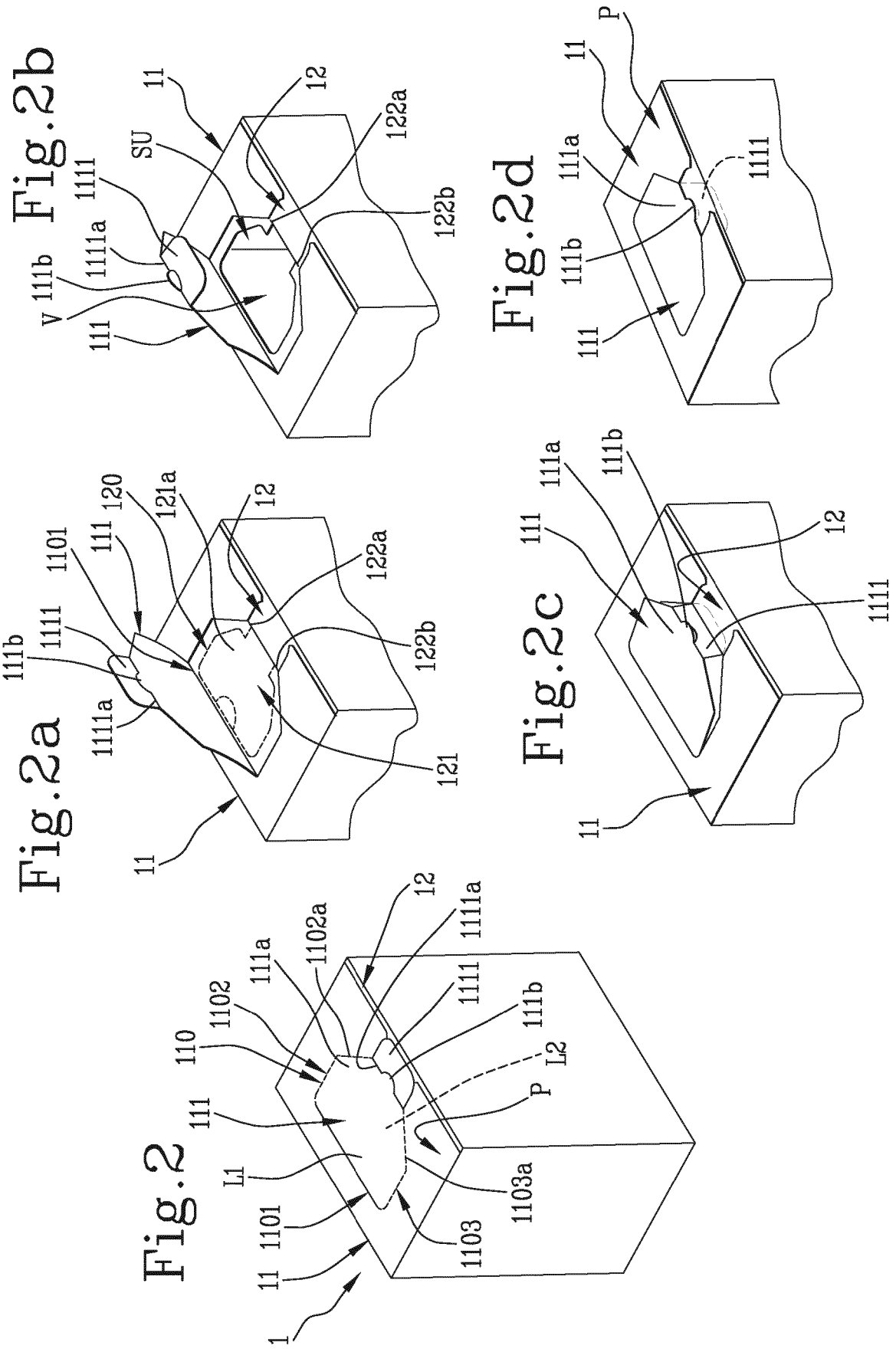


Fig.2
1
11
1101
1103
1103a
L1
111
110
1102
1102a
111a
1111a
12
1111
111b
P
L2
Fig.2a
11
121
1111a
1111
111b
1101
111
120
121a
12
122a
122b
Fig.2b
11
SU
12
122a
122b
1111
1111a
111b
V
111
Fig.2c
111
111a
111b
12
1111
11
Fig.2d
P
11
111a
111b
111
1111

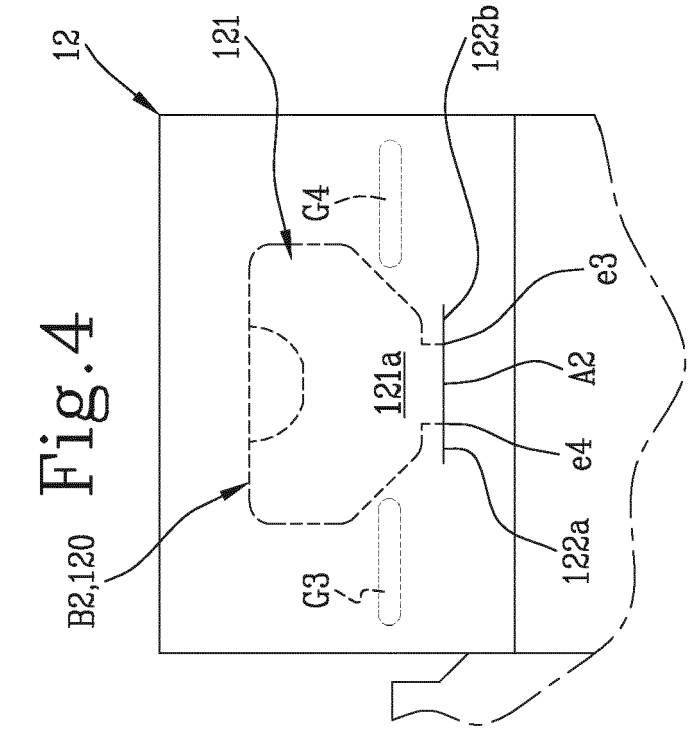


Fig.4

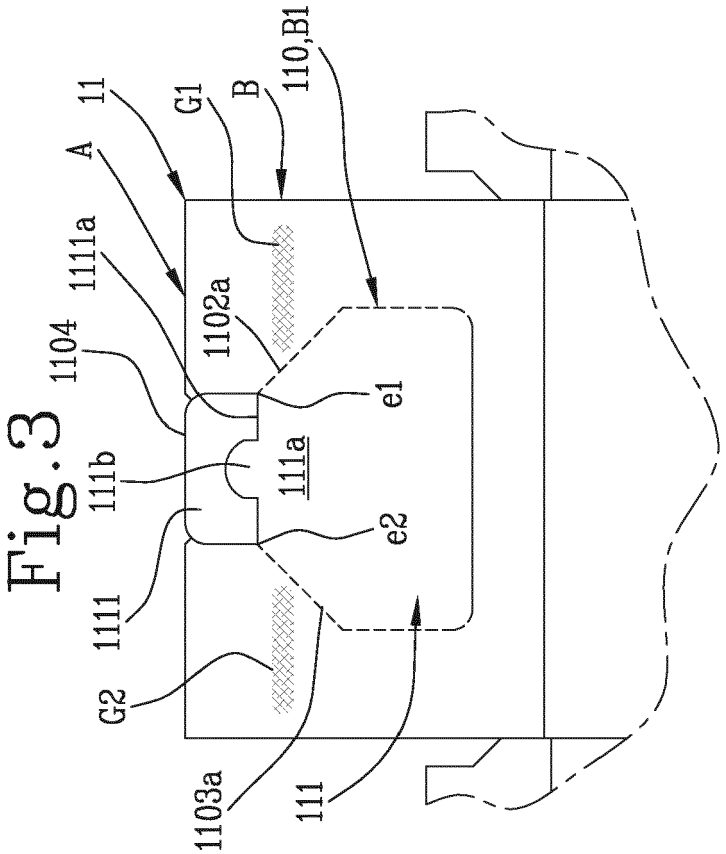


Fig.3

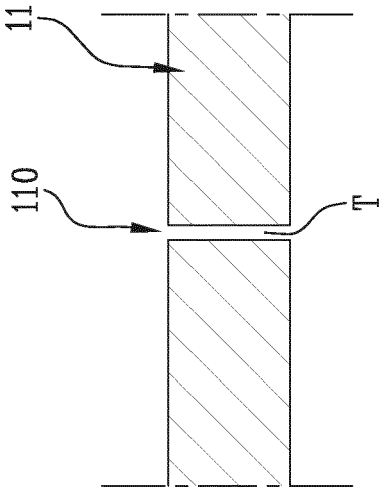


Fig.6

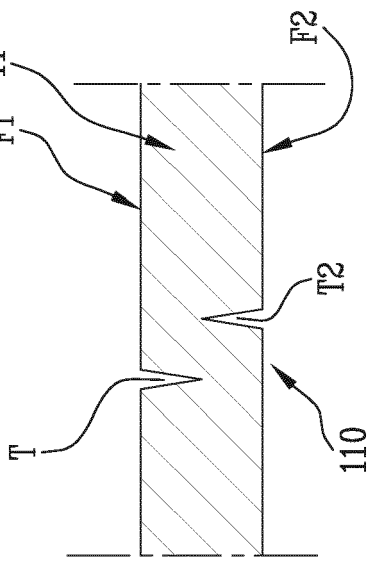


Fig.5

Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 20 17 3123

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 A	US 3 181 767 A (STARKEY GEORGE W) 4 May 1965 (1965-05-04) * column 1, line 61 - column 2, line 25 * * column 2, line 54 - column 4, line 18; claims 1-3; figures 1-5 * -----	1-3,7, 10-12, 14,15 4-6,8,9, 13	INV. B65D5/70
X A	US 3 426 955 A (OLSON JEROME F) 11 February 1969 (1969-02-11) * the whole document * -----	1-3,6,7, 11-13,15 4,5, 8-10,14	
X A	WO 2004/110881 A1 (BINGLE THOMAS JOHANNES [ZA]) 23 December 2004 (2004-12-23) * page 7, line 10 - page 15, line 6; claims 1-9; figures 1-23 * -----	1-3,9-11 4-8, 12-15	
X	US 4 982 846 A (FRIEDMAN HERBERT [US]) 8 January 1991 (1991-01-08) * column 5, line 30 - column 12, line 3; claims 1-39; figures 1-13 * -----	1-3,6,7, 9-13	

TECHNICAL FIELDS SEARCHED (IPC)

B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	12 August 2020	Janosch, Joachim

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 20 17 3123

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-08-2020

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3181767 A	04-05-1965	NONE	
US 3426955 A	11-02-1969	NONE	
WO 2004110881 A1	23-12-2004	NONE	
US 4982846 A	08-01-1991	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- US 3971506 A **[0002]**
- US 5259552 A **[0002]**
- GB 1353079 A **[0002]**