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(54) **PACKAGE FOR LIQUID FOODSTUFFS**

(57) The present invention relates to a package (1) for liquid foodstuffs. The package (1) comprises: flexible walls (2) defining a chamber configured to house the liquid foodstuffs; a tab (4) formed by the flexible walls (2), wherein the tab (4) is separable from the package (1) for opening thereof and configured to remain connected to the package (1) after opening thereof; and wherein the tab (4), when separated from the package (1), is attachable to the package (1) in a deflected position.

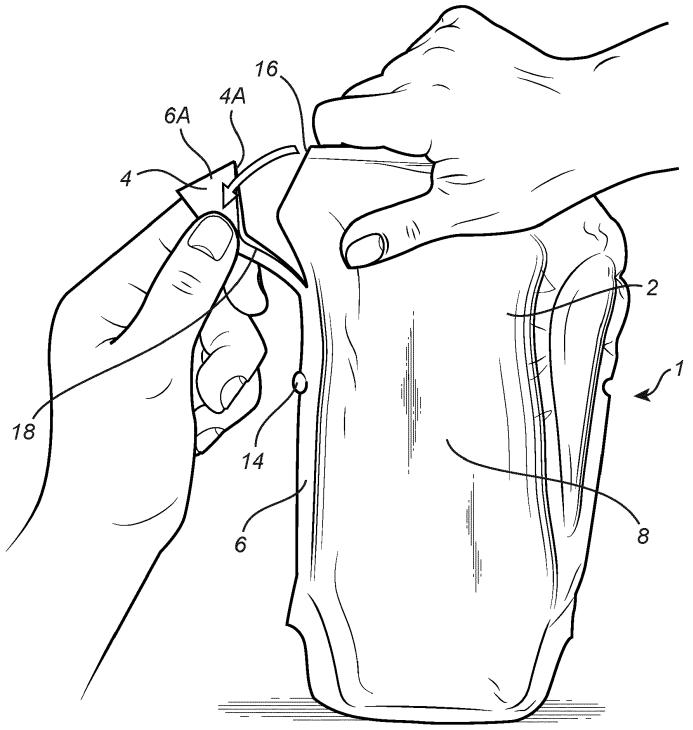

Fig. 2

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Description

Field fo the invention

[0001] The present invention relates to packages for liquid foodstuffs, specifically to such packages comprising a tab that is separable from the package for opening thereof.

Background art

[0002] In order to reduce production complexity, and therefore cost, packages for liquid foodstuffs may be provided without a cap, such as a screw-cap. This also provides for easier recycling, since the cap is often made of a different material than the package. Such a package may e.g. instead be provided with a tab formed by the package, which tab is configured to be cut off, or torn off.

[0003] An example of a pouch-type package for liquid foodstuffs comprising such a tab is disclosed in EP 3 162 731 B1.

[0004] Even though a practical solution is provided, one drawback is the generation of extra waste: the cut-off or torn-off tab needs to be handled separatly when disposing the package, which is more impractical for a user, and may lead to littering.

[0005] A solution is to provide a tab that remains connected to the package after opening thereof. However, since the tab is obstructing the opening, dispensing the contents of the package may as a consequence be more impractical, and could lead to soiling of the tab.

Summary of the invention

[0006] In view of the above, an object of the present invention is to provide a package for liquid foodstuffs that reduces littering, while at the same time being hygienic and easy to use.

[0007] To achieve at least this object and also other objects that will be evident from the following description, a device having the features defined in claim 1 is provided according to the present invention. Preferred embodiments will be evident from the dependent claims.

[0008] Any benefit or technical effect discussed in relation any aspect of the present invention, and any embodiments thereof, may be applicable to any other aspect of the present invention.

[0009] According to a first aspect of the present invention, a package for liquid foodstuffs is provided, the package comprising: flexible walls defining a chamber configured to house the liquid foodstuffs; a tab formed by the flexible walls, wherein the tab is separable from the package for opening thereof and configured to remain connected to the package after opening thereof; and wherein the tab, when separated from the package, is attachable to the package in a deflected position.

[0010] A deflected position of the tab is to be understood as a position in which the tab is removed from an opening created by the separation of the tab from the package.

[0011] Hereby, the tab not only remains connected to the package such that less litter is produced, but is also, when attached to the package in the deflected position, not obstructing the opening. Thus, liquid dispensed from the package will not be perturbed by the tab, such that the package is more user friendly. Furthermore, the tab will consequently become less soiled, providing a more hygienic solution.

[0012] The package may comprise any material, or combination of materials, that is suitable in the field of the invention. The term *"Flexible"* is to be understood in the context of the present application as not being rigid. As such, the flexible walls may e.g. be made of a flexible polymeric material, a flexible cellulose material, or a flexible metal material, or any combination thereof. In at least some exemplary embodiments, the flexible walls may be made of a multilayered polymeric film material.

[0013] The package may have any form or shape. The package may be of pouch type, such as pillow pouch type. In at least some exemplary embodiments, the package may be of stand-up pouch type. Hereby, the package comprises a bottom surface such that the package is configured to be arrangeable in a standing position.

[0014] The tab may be attachable to the package in a variety of ways. For example, the tab may be provided with an adhesive such that the tab may be attachable to the package in a deflected position. The adhesive may e.g. be provided in the form of a dot or a strip arranged on a surface of the tab. The adhesive may comprise multiple layers. For example, the adhesive may be provided with a removable protective layer, wherein removal of the protective layer exposes an adherent layer. Hereby, a user may remove the cover layer after the opening of the package, such that the lifetime of the adhsive is increased. Furthermore, the risk that the package is unwantedly adhered to any other object is reduced.

[0015] Alternatively, the tab may be provided with a pin configured to penetrate at least an outer surface of a flexible wall of the package and remain embedded in the flexible wall, such that the tab is attached to the package.

[0016] In at least some exemplary embodiments, the package may comprise means for receiving the tab in a deflected position so as to attach the tab to the package.

[0017] Hereby, a user is instructed where the tab can be attached to the package. Thus, a more user friendly package is provided.

[0018] The means for receiving the tab may be arranged anywhere on the package, depending on the shape and dimensions thereof. For example, the means for receiving the tab may be arrange on an outer wall surface of the package, or an edge portion of the package. Furthermore, the package may be provided with more than one means for receiving the tab, such that a user may choose where to attach the tab to the package.

[0019] In at least some exemplary embodiments, the means for receiving the tab is a securing tab configured

to engage a side edge of the tab.

[0020] The securing tab may e.g. be provided on an edge portion of the package. For example, the securing tab may be provided as a protrusion protruding from an edge portion of the package, wherein the protrusion comprises a slit for receiving the side edge of the tab.

[0021] The means for receiving the tab may alternatively be a fold configured for receiving the tab. The fold may e.g. be open-ended, such that the tab may be arranged through the fold. To this end, the tab may be provided with a tip portion configured for engaging the fold when the tab is arranged through the fold. The tip portion may to this end be curved or hook-shaped. Alternatively, the tab may be provided with a folding line along which the tab is foldable. Hereby, the tab may, when arranged through the fold, be folded so as to engage the fold.

[0022] Alternatively, the means for receiving the tab may be a snap fastener, such that the package may be provided with a stud and the tab may provided with a socket for receiving the stud, or vice versa. Hereby, the tab is easily attached to the package. Furthermore, due to the sound and feel of the snap fastening, the user is provided with clear feedback that the tab is attached to the package.

[0023] The tab may be arranged anywhere on the package, or formed by any feature of the package. For example, the tab may be provided as a film configured to be separable from the package by tearing. Such a film may e.g. be arranged on a flexible wall of the package.

[0024] Alternatively, the tab may be formed by a flexible wall of the package.

[0025] In at least some exemplary embodiments, two opposite flexible walls may form an edge portion, and wherein the tab may be formed by a corner portion of the edge portion. Hereby, the placement of the tab, and consequently the opening, allows for simple dispension of the contents of the package, and a more user friendly package is provided.

[0026] An edge portion may be formed by joining of two opposite flexible walls. The walls may e.g. be joined by plastic welding of overlapping portions of two flexible walls, so as to form an edge portion extending from a center portion of the package. Hence, the dimensions of an edge portion may be varied. An edge portion may e.g. extend 0.2 cm, or 0.3 cm, or 0.5 cm, or 1 cm, or 1.5 cm from a center portion of the package.

[0027] In at least some exemplary embodiments, the means for receiving the tab may be a slit arranged in the edge portion.

[0028] As for the examples wherein the package is provided with a fold configured for receiving the tab, the tab may, for the examples wherein the means for receiving the tab is a slit, correspondingly be provided with a tip portion configured for engaging the edge portion when the tab is arranged in the slit. The tip portion may to this end be curved or hook-shaped. Alternatively, the tab may be provided with a folding line along which the tab is foldable. Hereby, the tab may, when arranged in the slit, be folded so as to engage the edge portion.

[0029] The tab may e.g. be separated from the package by cutting or tearing.

[0030] In order to simplify opening of the package, the package may be provided with an opening initiation along which the tab is to be separated for opening of the package.

[0031] An opening initiation may e.g. be a marking providing an indication to a user for cutting or tearing the package.

[0032] The opening initiation may comprise a recess in the package. Hereby, a user is provided with a starting position for tearing or cutting the flexible walls.

[0033] In at least some exemplary embodiments, the opening initiation is provided as a tear line.

[0034] Hereby, a user is not only provided with an indication of where to separate the tabe from the package, but the separation is also made easier. The tear line is e.g. formed as a weakening in the flexible walls. For example, the tear line may be provided as a perforation. Alternatively, the weakening may be provided as a continuous line along which the associated flexible wall is thinner.

[0035] In at least some exemplary embodiments, the package may further comprise a strip separable from the package and configured to connect the tab to the package after opening thereof.

[0036] The strip allows for further distancing of the tab and the opening created by the separation thereof from the package, while not further increasing the dimensions of the opening. Since the tab consequently may be attached to the package further from the opening, the risk for soiling of the tab is further reduced.

[0037] The strip may be provided on a flexible wall. Preferably, the strip may be formed by an edge portion of the package.

[0038] In at least some exemplary embodiments, the strip is separable from the package along the tear line.

[0039] Hereby, the tab and the strip may be separated from the package simultaneously, i.e. in one cut or one tear. As such, a more practical and user-friendly package is provided.

[0040] Generally, all terms used in the claims are to be interpreted according to their ordinary meaning in the technical field, unless explicitly defined otherwise herein. All references to "a/an/the [element, device, component, means, step, etc]" are to be interpreted openly as referring to at least one instance of said element, device, component, means, step, etc., unless explicitly stated otherwise.

Brief description of the drawings

[0041] These and other embodiments of the present invention will now be described in more detail, with reference to the appended drawings showing exemplary embodiments of the present invention, wherein:

Fig. 1 is a schematic view of a package according to the first aspect of the present invention, when the tab is not separated from the package.

Fig. 2 is a schematic view of the package in Fig. 1, displaying separation of the tab from the package.

Fig. 3 is a schematic view of the package in Fig. 1 and Fig. 2, wherein the tab is attached to the package in a deflected position.

Fig. 4 is a schematic view displaying an alternate way of attaching the tab to the package, wherein the tab is arranged in a slit provided in an edge portion of the package.

Description of embodiments

[0042] In the following detailed description, some embodiments of the present invention will be described. However, it is to be understood that features of the different embodiments are exchangeable between the embodiments and may be combined in different ways, unless anything is specifically indicated. Even though in the following description, numerous details are set forth to provide a more thorough understanding of the present invention, it will be apparent to one skilled in the art that the present invention may be practiced without these details. In other instances, well known constructions or functions are not described in detail, so as not to obscure the present invention.

[0043] In Fig. 1, a package 1 for liquid foodstuffs according to the first aspect of the present invention is shown. The package 1 comprises flexible walls 2 defining a chamber configured to house the liquid foodstuffs. Here, the package 1 comprises two opposite flexible walls 2. The package 1 may be made of any material, or combination of materials, that is suitable in the field of the invention. As such, the flexible walls 2 may e.g. be made of a flexible polymeric material, a flexible cellulose material, or a flexible metal material, or any combination thereof. For example, the film material can comprise layers of plastic, such as PE, PP, PET, EVOH, and/or aluminium foil. Layers of plastic such as PE or PP can also comprise a filler, such as a mineral material. Moreover, the flexible walls 2 may be made of a single-layered or a multilayered polymeric film material.

[0044] In Fig. 1, the package 1 is of stand-up pouch type. However, the package 1 may be of any other pouch type. Furthermore, the package 1 may have any form or shape.

[0045] A tab 4 is formed by the flexible walls 2. The tab 4 is separable from the package 1 for opening thereof. Here, the two opposite flexible walls 2 form an edge portion 6, and the tab 4 is formed by a corner portion 6A of the edge portion 6. The edge portion 6 may e.g. be formed by joining two opposite flexible walls 2. The walls 2 may e.g. be joined by plastic welding of overlapping portions of two flexible walls 2. The edge portion 6 extends from a center portion 8 of the package 1. For example, edge portion 6 may extend 0.2 cm, or 0.3 cm, or 0.5 cm, or 1 cm, or 1.5 cm from the center portion 8 of the package 1. Furthermore, the edge portion 6 is in Fig. 1 arranged along the periphery of the package 1.

[0046] Alternatively, the tab 4 may be arranged anywhere on the package 1, or formed by any feature of the package 1. For example, the tab 4 may be provided as a film configured to be separable from the package 1 by tearing. Such a film may e.g. be arranged on a flexible wall 2 of the package 1.

[0047] The tab 4 is configured to be separated from the package 1. The tab 4 may e.g. be separated from the package 1 by cutting or tearing. In order to simplify opening of the package 1, the package 1 may be provided with an opening initiation 10 along which the tab 4 is to be separated for opening of the package 1. Here, the opening initiation 10 is provided as a tear line. The tear line 10 is formed as a weakening in the flexible walls 2. In Fig. 1, the weakening is provided as a perforation 12.

[0048] Alternatively, an opening initiation 10 may e.g. be a marking providing an indication to a user for cutting or tearing the package 1. The opening initiation 10 may e.g. comprise a recess in the package 1, such as a recess in the edge portion 6.

[0049] The tab 4 is further configured to remain connected to the package 1 after opening thereof. The tab 4, when separated from the package 1, is further attachable to the package 1 in a deflected position. To this end, the package 1 is provided with means 14 for receiving the tab 4. In Fig. 1, the means 14 for receiving the tab is a securing tab configured to engage the tab 4. For example, the securing tab 14 may be configured to engage a side edge 4A of the tab 4. The securing tab 14 is provided on the edge portion 6. However, the means 14 for receiving the tab 4 may be arranged anywhere on the package 1, depending on the shape and dimensions thereof. For example, the means 14 for receiving the tab 4 may be arrange on the package 1, or an edge portion 6 of the package 1. Furthermore, the package 1 may be provided with more than one means 14 for receiving the tab, such that a user may choose where to attach the tab 4 to the package 1.

[0050] Means 14 for receiving the tab 4 and the attaching of the tab 4 to the package 1 in a deflected position is further illustrated in and discussed with regards to Fig. 2, 3 and 4.

[0051] Fig. 2 shows separation of the tab 4 from the package 1. Here, the tab 4 has been seperated from the package 1 by tearing along the tear line 10, thereby opening the package 1, such that an opening 16 is created. The package 1 further comprises a strip 18 separable from the package 1 and configured to connect the tab 4 to the package 1 after opening thereof. The strip 18 allows for further distancing of the tab 4 and the opening created by the separation thereof from the package 1, while not further increasing the dimensions of the opening 16. Here, the strip 18 is formed by the edge portion 6. Preferably, as is shown in Fig. 2, the strip is separated from the package 1 along the the tear line 10.

[0052] In Fig. 3, the engagement of the securing tab 14 with the tab 4, such that the tab 4 is attached to the package 1 in a deflected position, is shown. Here, the securing tab 14 engages the side edge 4A of the tab 4, such that the tab 4 is attached to the package 1.

[0053] The means 14 for receiving the tab may alternatively be a fold configured for receiving the tab 4. The fold may e.g. be open-ended, such that the tab 4 may be arranged through the fold. To this end, the tab 4 may be provided with a tip portion 4B configured for engaging the fold when the tab 4 is arranged through the fold. The tip portion 4B may alternatively be curved or hook-shaped. Alternatively, the tab 4 may be provided with a folding line along which the tab 4 is foldable. Hereby, the tab 4 may, when arranged through the fold, be folded so as to engage the fold.

[0054] Alternatively, the means 14 for receiving the tab 4 may be a snap fastener, such that the package 1 may be provided with a stud and the tab 4 may provided with a socket for receiving the stud, or vice versa.

[0055] The tab 4 may further be attachable to the package 1 in alternative ways. For example, the tab 4 may be provided with an adhesive such that the tab 4 may be attachable to the package 1 in a deflected position. The adhesive may e.g. be provided in the form of a dot or a strip arranged on a surface of the tab 4. The adhesive may comprise multiple layers. For example, the adhesive may be provided with a removable protective layer, wherein removal of the protective layer exposes an adherent layer. Alternatively, the tab 4 may be provided with a pin configured to penetrate at least an outer surface of a flexible wall of the package 1 and remain embedded in the flexible wall, such that the tab is attached to the package 1.

[0056] In Fig. 4, the means 14 for receiving the tab 4 is a slit arranged in the edge portion 6. The tab 4 is here shown as being Correspondingly, the tab 4 is provided with a tip portion 4B configured for engaging the edge portion 6 when the tab 4 is arranged in the slit. The tip portion 4B may alternatively be curved or hook-shaped.

[0057] It will be appreciated that the present invention is not limited to the embodiments shown. Several modifications and variations are thus conceivable within the scope of the invention which thus is exclusively defined by the appended claims.

Claims

1. Package (1) for liquid foodstuffs comprising:

flexible walls (2) defining a chamber configured to house the liquid foodstuffs;
a tab (4) formed by the flexible walls (2), wherein the tab (4) is separable from the package (1) for opening thereof and configured to remain connected to the package (1) after opening thereof; and
wherein the tab (4), when separated from the package (1), is attachable to the package (1) in a deflected position.

2. The package (1) according to claim 1, wherein two opposite flexible walls (2) form an edge portion (6), and wherein the tab (4) is formed by a corner portion (6A) of the edge portion (6).

3. The package (1) according to claim 1 or 2, wherein the package (1) is provided with an opening initiation (10) along which the tab (4) is to be separated for opening of the package (1).

4. The package (1) according to claim 3, wherein the opening initiation (10) is provided as a tear line.

5. The package (1) according to claim 4, wherein the tear line (10) is formed as a perforation (12) in the flexible walls (2).

6. The package (1) according to any preceding claim, further comprising a strip (18) separable from the package (1) and configured to connect the tab (4) to the package (1) after opening thereof.

7. The package (1) according to claim 6 when dependent on claim 5 or claim 4, wherein the strip (18) is separable from the package (1) along the tear line (10).

8. The package (1) according to claim 6 or claim 7, when dependent on at least claim 2, wherein the strip (18) is formed by the edge portion (6).

9. The package (1) according to any one of claims 1-8, wherein the tab (4) is provided with an adhesive such that the tab (4) is attachable to the package (1) in a deflected position.

10. The package (1) according to any one of claims 1-8, wherein the package (1) comprises means (14) for receiving the tab in a deflected position so as to attach the tab (4) to the package (1).

11. The package (1) according to claim 10, wherein the means (14) for receiving the tab (4) is a securing tab configured to engage a side edge (4A) of the tab (4).

12. The package (1) according to claim 10 when dependent on at least claim 2, wherein the means (14) for receiving the tab (4) is a slit arranged in the edge portion (6).

13. The package (1) according to any preceding claim, wherein the flexible walls (2) are made of a multilayered polymeric film material.

14. The package (1) according to any preceding claim, wherein the package (1) is of stand-up pouch type.

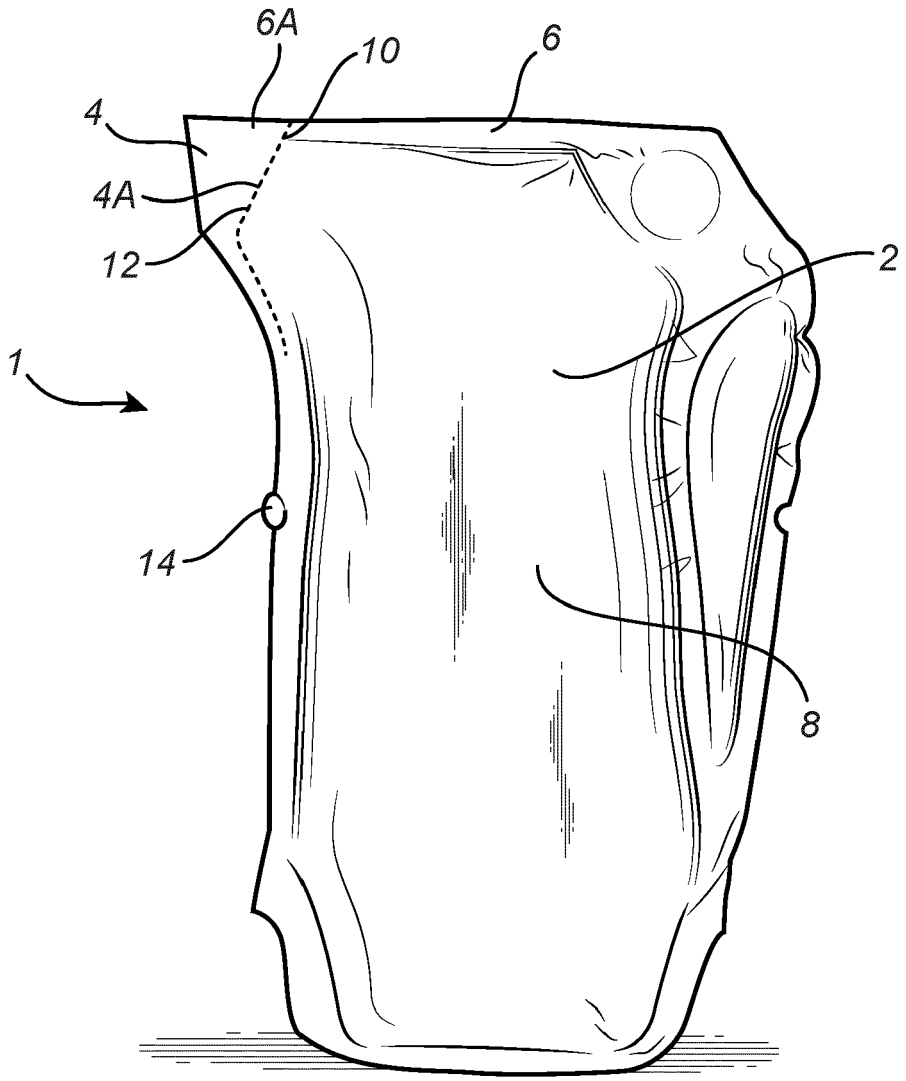

Fig. 1

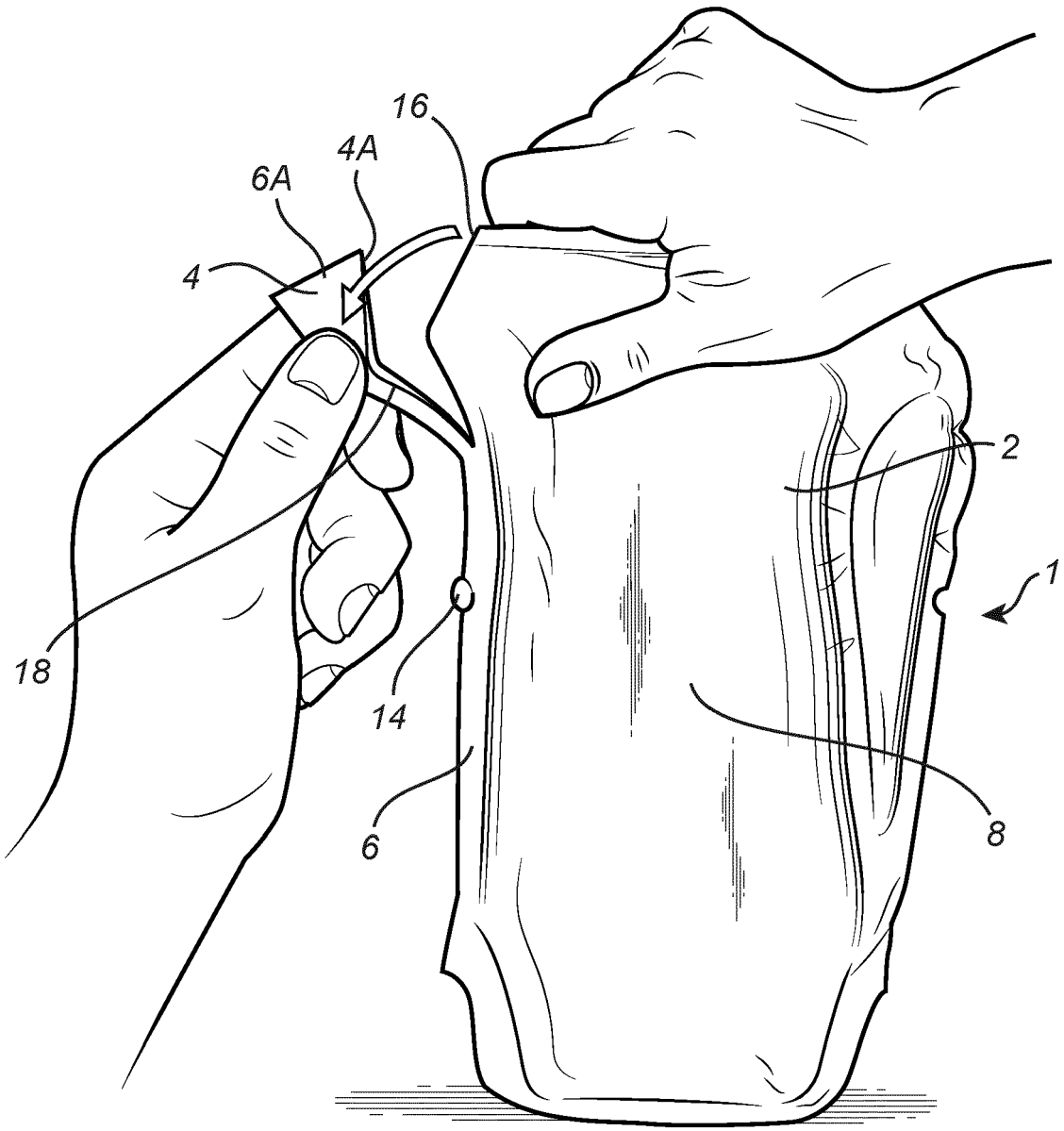

Fig. 2

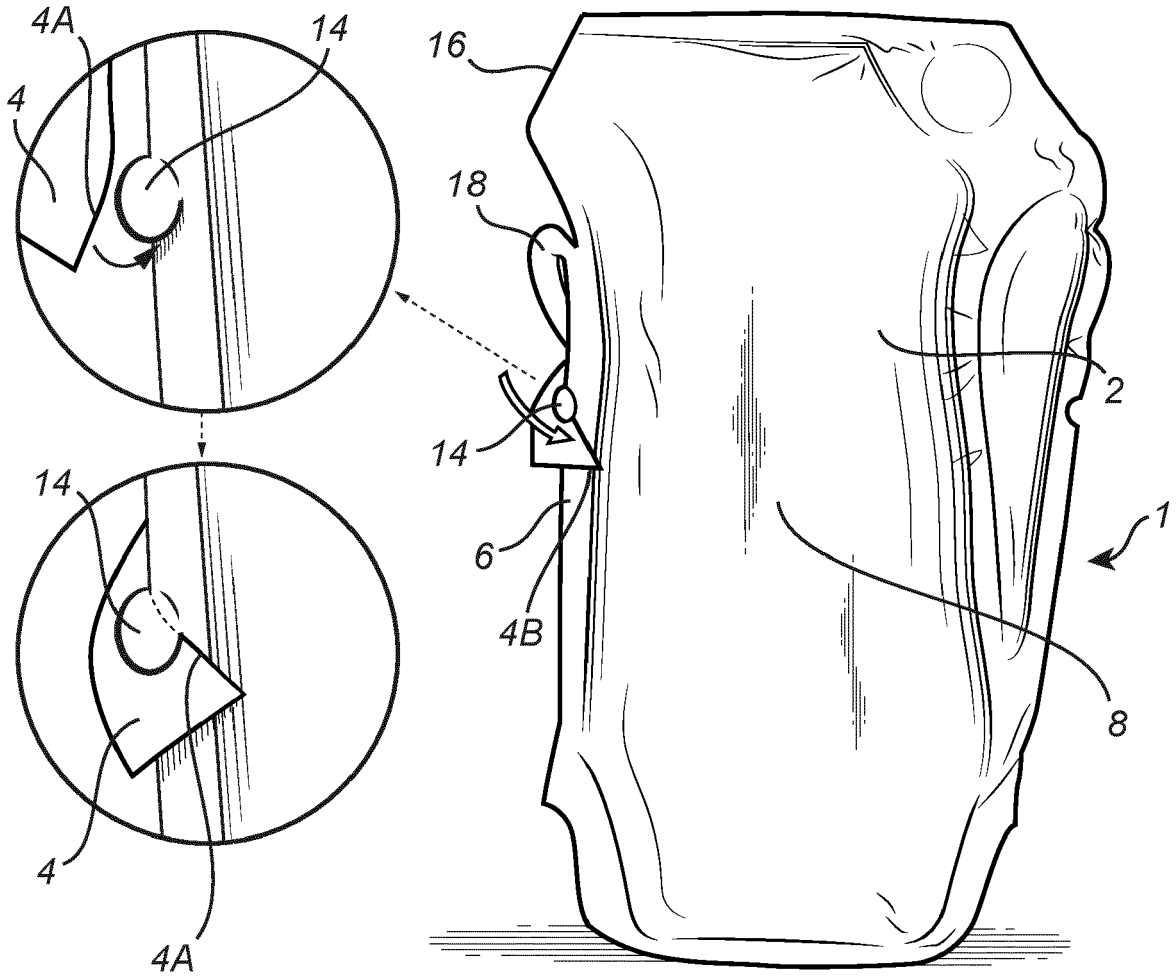

Fig. 3

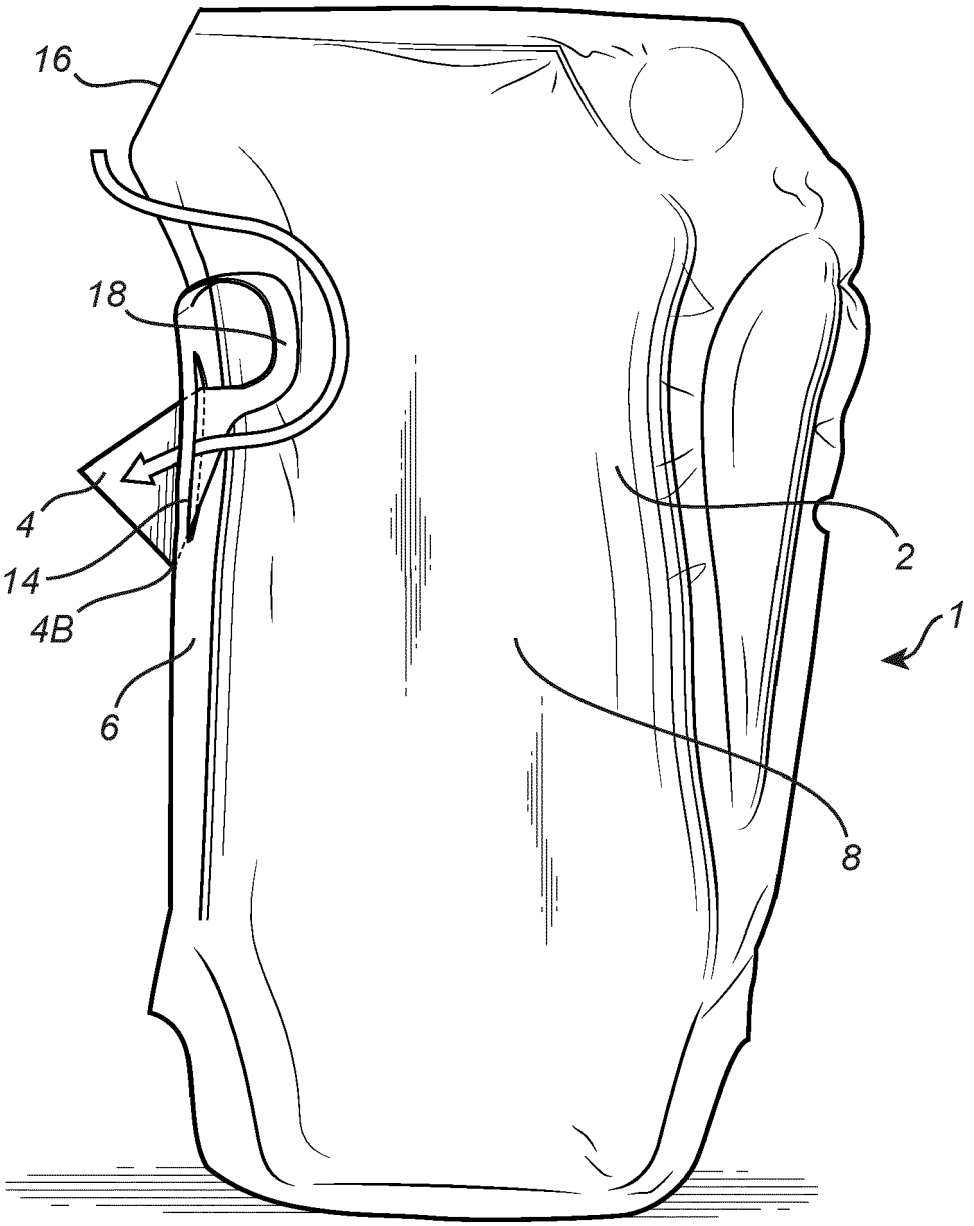

Fig. 4

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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	27 January 2023	Gabrich, Katharina

CATEGORY OF CITED DOCUMENTS

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