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

(11) **EP 2 906 477 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
10.01.2018 Bulletin 2018/02

(21) Application number: **13774197.1**

(22) Date of filing: **10.10.2013**

(51) Int Cl.:
B65D 43/02 *(2006.01)*

(86) International application number:
PCT/EP2013/071136

(87) International publication number:
WO 2014/057023 (17.04.2014 Gazette 2014/16)

(54) CONTAINER, PARTICULARLY SUITABLE FOR CONTAINING WATER-BASED LIQUIDS AND THE LIKE

BEHÄLTER, INSBESONDERE FÜR WÄSSRIGE FLÜSSIGKEITEN UND DERGLEICHEN

RÉCIPIENT PARTICULIÈREMENT ADAPTÉ À CONTENIR DES LIQUIDES À BASE D'EAU ET SIMILAIRE(S)

(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

(30) Priority: **12.10.2012 IT MI20121721**

(43) Date of publication of application:
19.08.2015 Bulletin 2015/34

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Description

[0001] The present invention relates to a container, particularly suitable for containing water-based liquids and the like.

[0002] As is known, pots, particularly pots intended to contain paints and the like, are constituted by a main body that is generally cylindrical with a circular base, is made of plastic material and has a metallic ring that delimits the mouth for access to said container.

[0003] This metallic ring, which is generally clinched to the internal wall of the body of the container and is made of a ferrous material, is adapted to accommodate a press-on closure so as to form a hermetic seal.

[0004] These containers of a known type are not free from drawbacks, which include the fact that since the substances contained therein are water-based, the metallic ring and the closure, if made of ferrous materials, are subject to oxidation, which leads to the forming of rust.

[0005] Another drawback of containers of the known type resides in that they normally cannot be stacked one inside the other, since their flat bottom allows mutual sliding, with consequent collapse of the stack of containers.

[0006] A further drawback of containers of the known type resides in the fact that the metallic ring generally protrudes inward with respect to the walls of the body of the container, and this characteristic does not allow complete and correct emptying of said container, since a point of accumulation of the contained substance is formed. WO 1997 41403, upon which the preamble of claim 1 is based, discloses a container having a body with a ring, a closure with a plastic-coated part. The aim of the present invention is to provide a container, particularly suitable for containing water-based liquids and the like, that is not subject to oxidation of its parts, so as to have a longer life than containers of the known type and not to alter the physical-chemical properties of the contained substance and to provide a container that can be stacked easily.

[0007] Another object of the present invention is to provide a container, particularly suitable for water-based liquids and the like, that is highly reliable, relatively simple to provide and has competitive costs in comparison to the background art.

[0008] This aim and these and other objects that will become more apparent hereinafter are achieved by a container, particularly suitable for containing water-based liquids and the like, comprising a containment body which has an upper mouth delimited by a metallic ring that is associated with said containment body and can be engaged by pressing with a closure, said metallic ring being provided partly by a sealed band that is plastic-coated at least at the region of said metallic ring that is adapted to face the inside of said containment body to prevent direct contact of the water-based liquid substance contained in said containment body with said metallic ring, wherein said closure is disk-shaped and comprises an internal rim that protrudes in an axial direction, axially extending towards the inside of the containment body and adapted to be inserted in said upper mouth and such as to form an outer abutment ring, said metallic ring being clinched to said upper mouth so as to be flush with the internal part of said containment body and so as to form a circular groove that is radially internal to said internal wall at the lower base of said containment body, a circular edge being provided at the lower base of said containment body, wherein said circular edge protrudes axially from said lower base and is complementary to said circular groove for the stable stacking of said container with another underlying container. Further characteristics and advantages of the invention will become more apparent from the description of a preferred but not exclusive embodiment of a container, particularly suitable for containing water-based liquids and the like, according to the invention, illustrated by way of nonlimiting example in the accompanying drawings, wherein:

Figure 1 is an exploded perspective view of an embodiment of the container according to the invention;
Figure 2 is an enlarged-scale view, along an axial sectional plane, of a detail of the container according to the invention;
Figure 3 is a longitudinal sectional view of two stacked containers according to the invention;
Figure 3 a is a longitudinal sectional view of two stacked containers according to a variation of the invention;
Figure 4 is a longitudinal sectional view of the two containers shown in Figure 3 and mutually spaced.

[0009] With reference to the figures, the container particularly suitable for containing water-based liquids and the like, generally designated by the reference numeral 1, comprises a containment body 2 made of plastic material, such as for example polypropylene, that has a cylindrical shape with a circular base and is provided with an upper mouth 3 delimited by a metallic ring 4 that is made for example of a ferrous material and is associated with the containment body 2 and can be engaged by pressing with a closure 5.

[0010] According to the invention, the metallic ring 4 is provided partly by a sealed band 8a that is plastic-coated at least at the region of the metallic ring 4 that is adapted to face the inside of the containment body 2 to prevent direct contact of the water-based liquid substance contained in the containment body 2 with the metallic ring 4.

[0011] Advantageously, the closure 5 has a disk-like shape and comprises an inner edge 6 that protrudes in an axial direction, is adapted to be inserted in the upper mouth 3 and is such as to form an outer abutment ring 7.

[0012] More precisely, the closure 5 can be also made of a ferrous material. In this case, it is covered by a plastic-coated layer 8b that is formed at least at the region of the closure 5 that is adapted to face the inside of the containment body 2 to prevent direct contact of the water-based liquid substance contained in the containment

body 2 with the plug 5.

[0013] As regards the metallic ring 4, it is clinched to the upper mouth 3 so as to be flush with the inner wall 9 of the containment body 2 and so as to form a circular groove 10 that is radially internal to the internal wall 9.

[0014] Furthermore, at the lower base 11 of the containment body 2 there is a circular rim 12 that protrudes axially from the lower base 11 and is complementary to the circular groove 10 for the stable stacking of two containers 1, as shown in Figures 1 and 2.

[0015] Advantageously, the body of the container 1 can taper slightly and in this case, as shown in Figure 3a, the circular edge 12 is an extension of the container body and rests against the circular groove 10 of said underlying container, when two containers are stacked.

[0016] In practice it has been found that the container according to the invention achieves fully the intended aim and objects, since it prevents direct contact between the aqueous substance contained therein and parts thereof that are subject to rusting.

[0017] Another advantage of the container according to the invention resides in the fact that it can be stacked easily in a stable manner.

[0018] The container, particularly adapted for containing water-based liquids and the like, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

[0019] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A container (1), particularly suitable for containing water-based liquids and the like, comprising a containment body (2) which has an upper mouth (3) delimited by a metallic ring (4) that is associated with said containment body (2) and can be engaged by pressing with a closure (5), said metallic ring (4) being provided partly by a sealed band (8a) that is plastic-coated at least at the region of said metallic ring (4) that is adapted to face the inside of said containment body (2) to prevent direct contact of the water-based liquid substance contained in said containment body (2) with said metallic ring (4), **characterized in that** said closure (5) is disk-shaped and comprises an internal rim (6) that protrudes in an axial direction, axially extending towards the inside of the containment body (2) and adapted to be inserted in said upper mouth (3) and such as to form an outer abutment ring (7), said metallic ring (4) being clinched to said upper mouth (3) so as to be flush with the internal part of said containment body (2) and so as to form a circular groove (10) that is radially internal to said internal wall (9), a circular edge (12) being provided at the lower base (11) of said containment body (2), wherein said circular edge (12) protrudes axially from said lower base (11) and is complementary to said circular groove (10) for the stable stacking of said container (1) with another underlying container (1).

2. The container (1) according to claim 1, **characterized in that** said containment body (2) is made of plastic material.

3. The container (1) according to claim 1, **characterized in that** said closure (5) is made of metal and is coated with a plastic layer (8b) that is formed at least at the region of said closure (5) that is adapted to face the inside of said containment body (2) to prevent direct contact of the water-based liquid substance contained in said containment body (2) with said closure (5).

4. The container (1) according to claim 1, **characterized in that** said containment body (2) is conical and said circular edge (12) constitutes an extension of the side wall of said containment body (2).

Patentansprüche

1. Ein Behälter (1), insbesondere für wässrige Flüssigkeiten und dergleichen, der einen Behälterkörper (2) umfasst, welcher eine obere Öffnung (3) hat, die durch einen Metallring (4) begrenzt ist, der mit dem Behälterkörper (2) verbunden ist und durch Pressen mit einem Verschluss (5) in Eingriff gebracht werden kann, wobei der Metallring (4) teilweise von einem abgedichteten Band (8a) gebildet wird, das zumindest in dem Bereich des Metallrings (4) kunststoffbeschichtet ist, der ausgebildet ist, um der Innenseite des Behälterkörpers (2) zugewandt zu sein, um direkten Kontakt der wässrigen Flüssigkeit, die in dem Behälterkörper (2) enthalten ist, mit dem Metallring (4) zu verhindern, **dadurch gekennzeichnet, dass** der Verschluss (5) scheibenförmig ist und einen inneren Rand (6) umfasst, der in eine axiale Richtung herausragt, wobei er sich axial zur Innenseite des Behälterkörpers (2) erstreckt und ausgebildet ist, um in die obere Öffnung (3) eingeführt zu werden, und so, dass er einen äußeren Widerlagerring (7) bildet, wobei der Metallring (4) so an der oberen Öffnung (3) festgepresst ist, dass er mit dem inneren Teil des Behälterkörpers (2) bündig ist und eine Ringnut (10) bildet, die radial innerhalb der inneren Wand (9) liegt, wobei ein ringförmiger Rand (12) an der unteren Basis (11) des Behälterkörpers (2) angebracht ist, wobei der ringförmige Rand (12) axial aus der unteren Basis (11) herausragt und zum

Zwecke des stabilen Stapelns des Behälters (1) auf einen anderen, darunter liegenden Behälter (1) komplementär mit der Ringnut (10) ist.

2. Der Behälter (1) gemäß Anspruch 1, **dadurch gekennzeichnet, dass** der Behälterkörper (2) aus Kunststoffmaterial besteht.

3. Der Behälter (1) gemäß Anspruch 1, **dadurch gekennzeichnet, dass** der Verschluss (5) aus Metall besteht und mit einer Kunststoffschicht (8b) beschichtet ist, die mindestens in dem Bereich des Verschlusses (5) geformt ist, der ausgebildet ist, um der Innenseite des Behälterkörpers (2) zugewandt zu sein, um direkten Kontakt der wässrigen Flüssigkeit, die in dem Behälterkörper (2) enthalten ist, mit dem Verschluss (5) zu verhindern.

4. Der Behälter (1) gemäß Anspruch 1, **dadurch gekennzeichnet, dass** der Behälterkörper (2) kegelförmig ist und der ringförmige Rand (12) eine Erweiterung der Seitenwand des Behälterkörpers (2) darstellt.

Revendications

1. Récipient (1), particulièrement adapté pour contenir des liquides à base d'eau et similaires, comprenant un corps de confinement (2) qui a une bouche supérieure (3) délimitée par un anneau métallique (4) qui est associé audit corps de confinement (2) et peut être mis en prise par pression avec une fermeture (5), ledit anneau métallique (4) étant partiellement fourni par une bande étanche (8a) qui est recouverte de plastique au moins au niveau de la région dudit anneau métallique (4), qui est adaptée pour faire face à l'intérieur dudit corps de confinement (2) pour empêcher le contact direct de la substance liquide à base d'eau contenue dans ledit corps de confinement (2) avec ledit anneau métallique (4), **caractérisé en ce que** ladite fermeture (5) est en forme de disque et comprend un bord interne (6) qui fait saillie dans une direction axiale, s'étendant axialement vers l'intérieur du corps de confinement (2) et adapté pour être inséré dans ladite bouche supérieure (3) et afin de former un anneau de butée externe (7), ledit anneau métallique (4) étant rivé sur ladite bouche supérieure (3) afin d'être de niveau avec la partie interne dudit corps de confinement (2) et afin de former une gorge circulaire (10) qui est radialement interne par rapport à ladite paroi interne (9), un bord circulaire (12) étant prévu au niveau de la base inférieure (11) dudit corps de confinement (2), dans lequel ledit bord circulaire (12) fait saillie de manière axiale de ladite base inférieure (11) et est complémentaire par rapport à ladite gorge circulaire (10) pour l'empilement stable dudit récipient (1) avec un autre récipient (1) sous-jacent.

2. Récipient (1) selon la revendication 1, **caractérisé en ce que** ledit corps de confinement (2) est réalisé à partir de matière plastique.

3. Récipient (1) selon la revendication 1, **caractérisé en ce que** ladite fermeture (5) est réalisée à partir de métal et est recouverte avec une couche de plastique (8b) qui est formée au moins au niveau de la région de ladite fermeture (5) qui est adaptée pour faire face à l'intérieur dudit corps de confinement (2) pour empêcher le contact direct de la substance liquide à base d'eau contenue dans ledit corps de confinement (2) avec ladite fermeture (5),

4. Récipient (1) selon la revendication 1, **caractérisé en ce que** ledit corps de confinement (2) est conique et ledit bord circulaire (12) constitue une extension de la paroi latérale dudit corps de confinement (2).

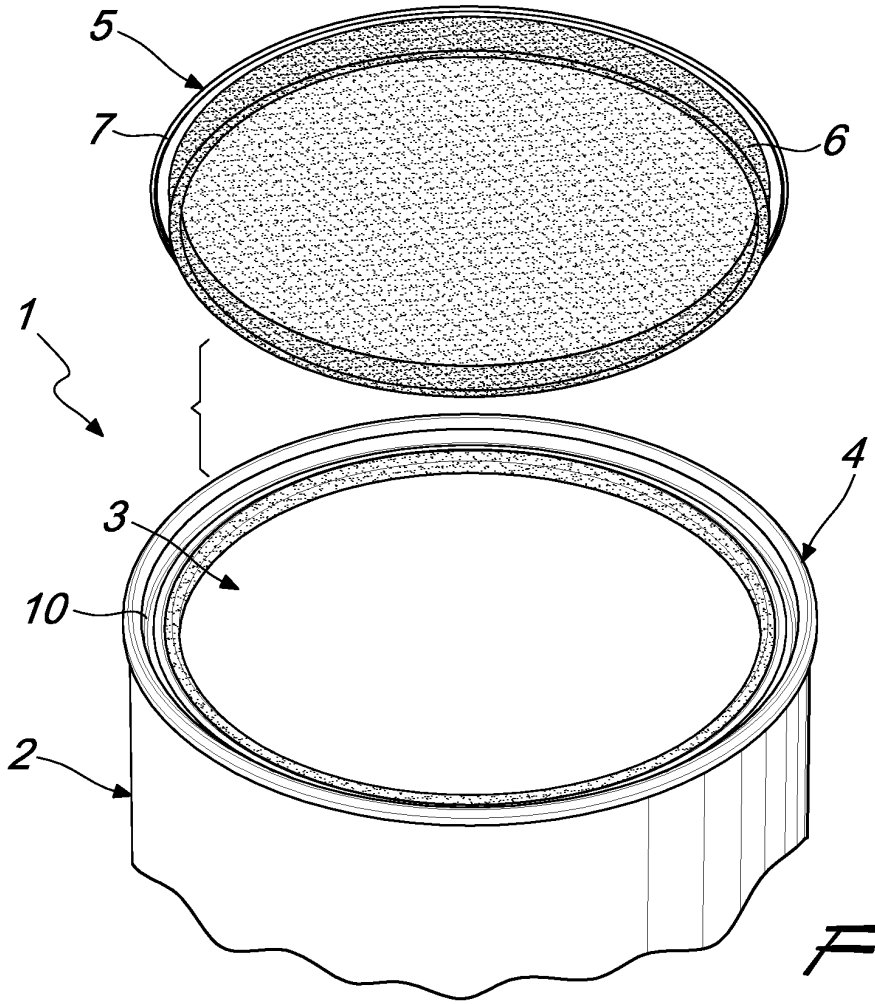


Fig. 1

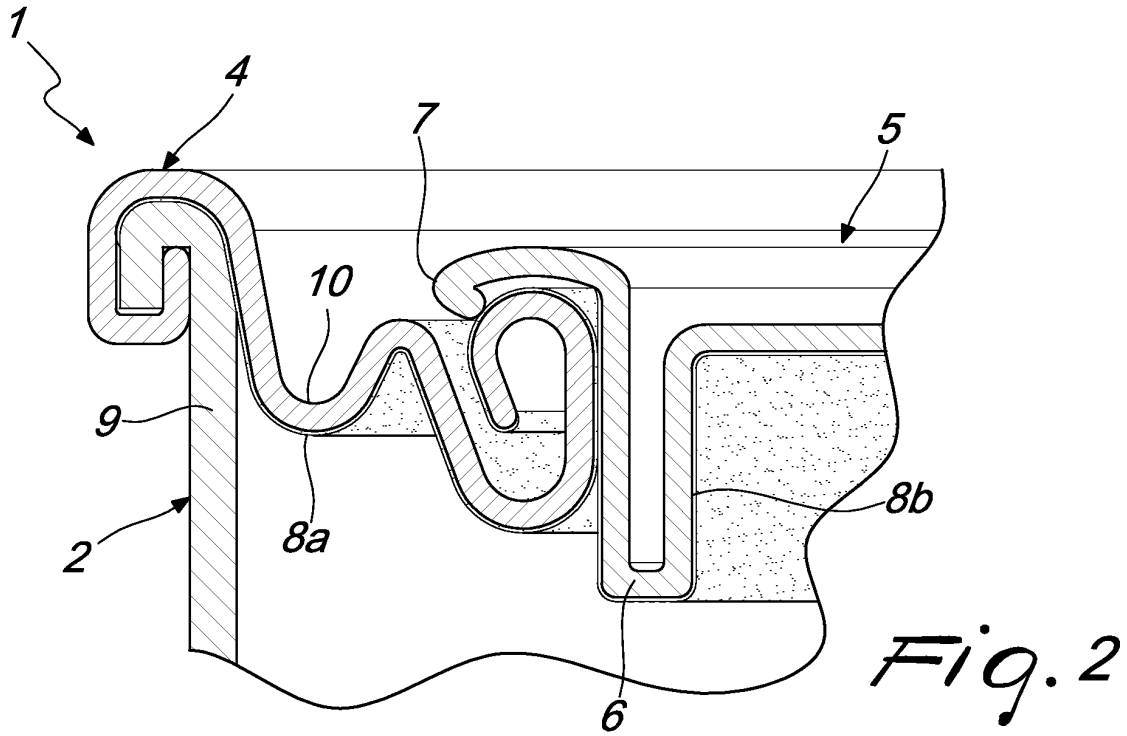


Fig. 2

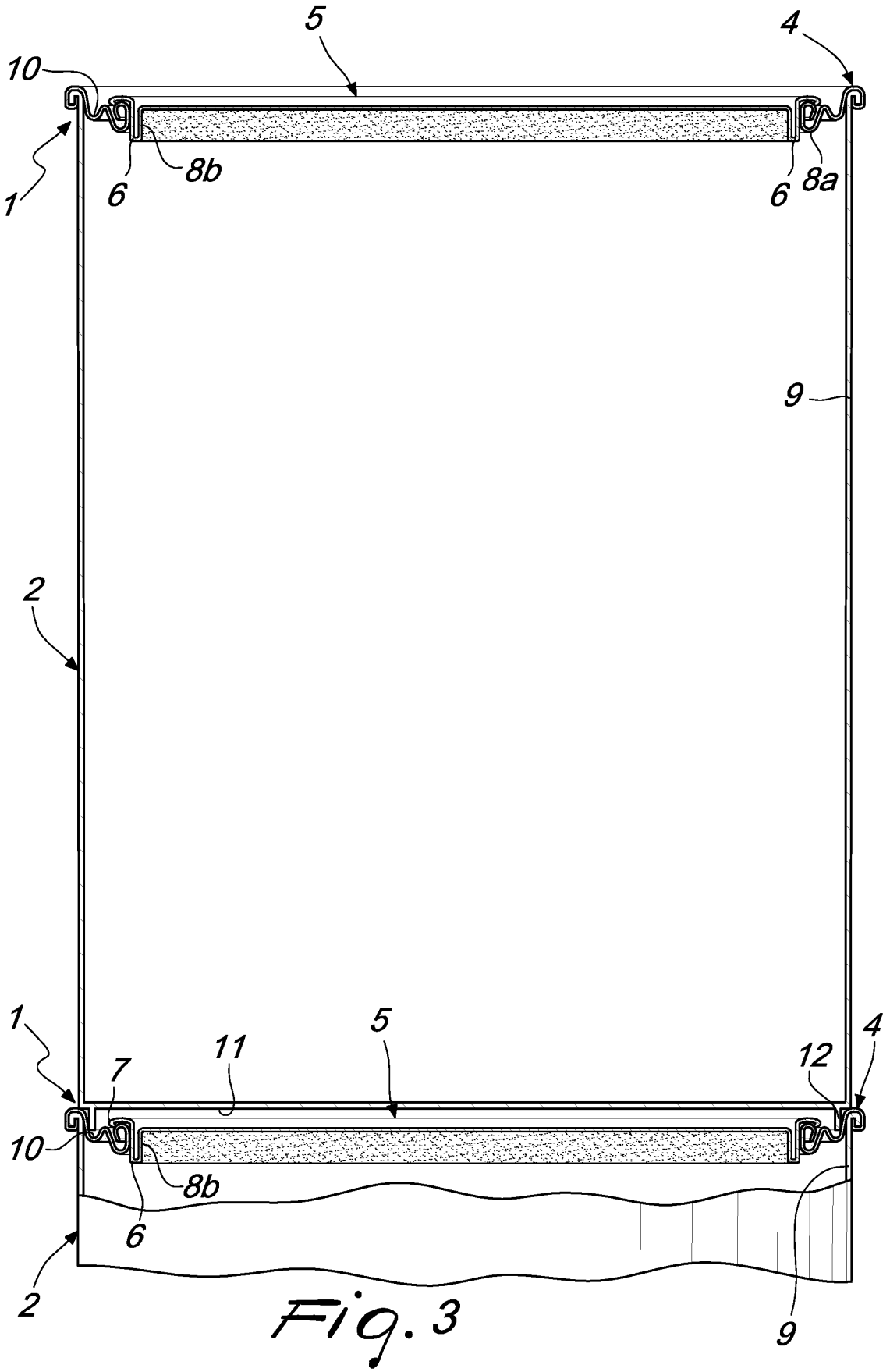


Fig. 3

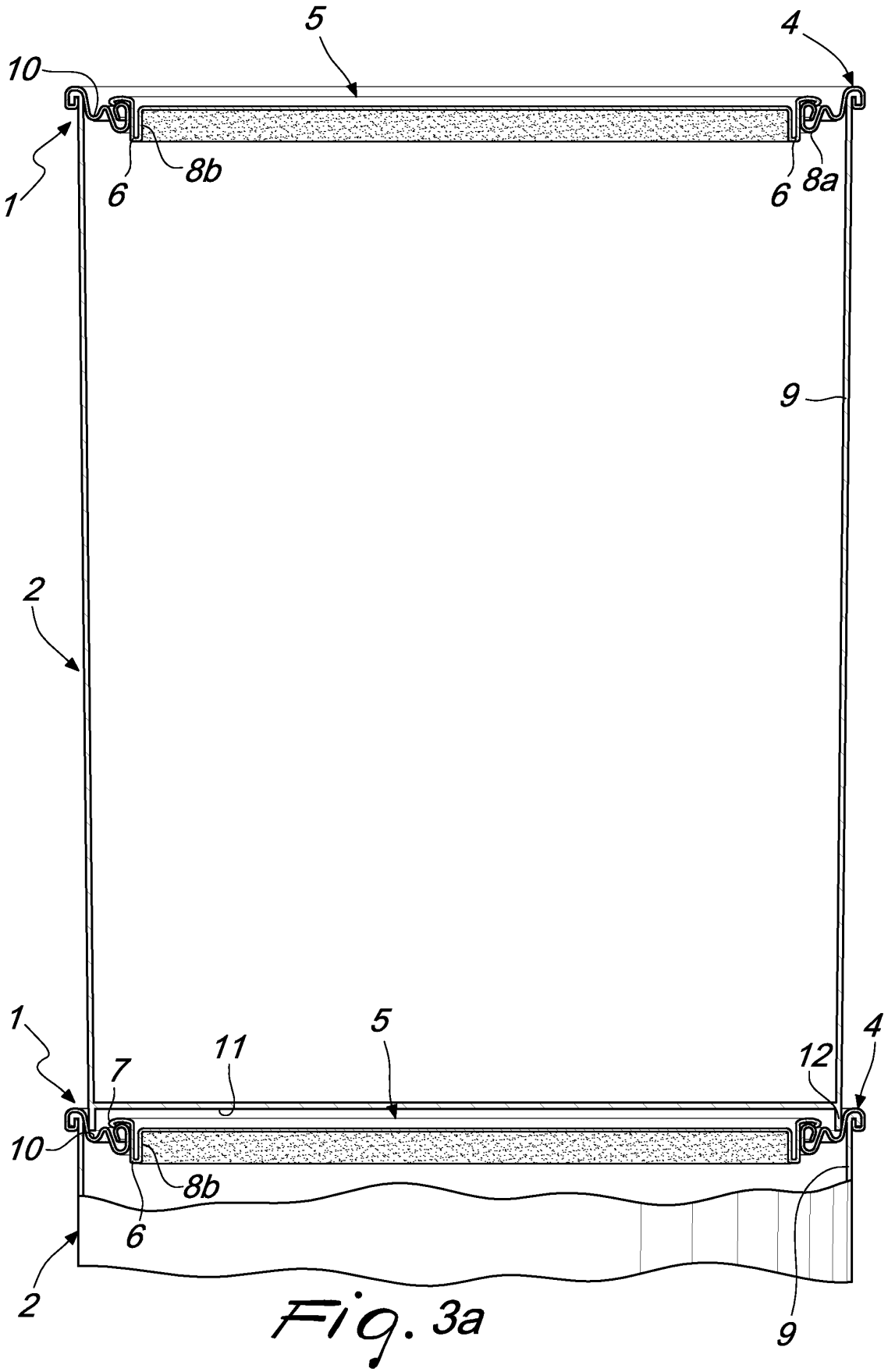


Fig. 3a

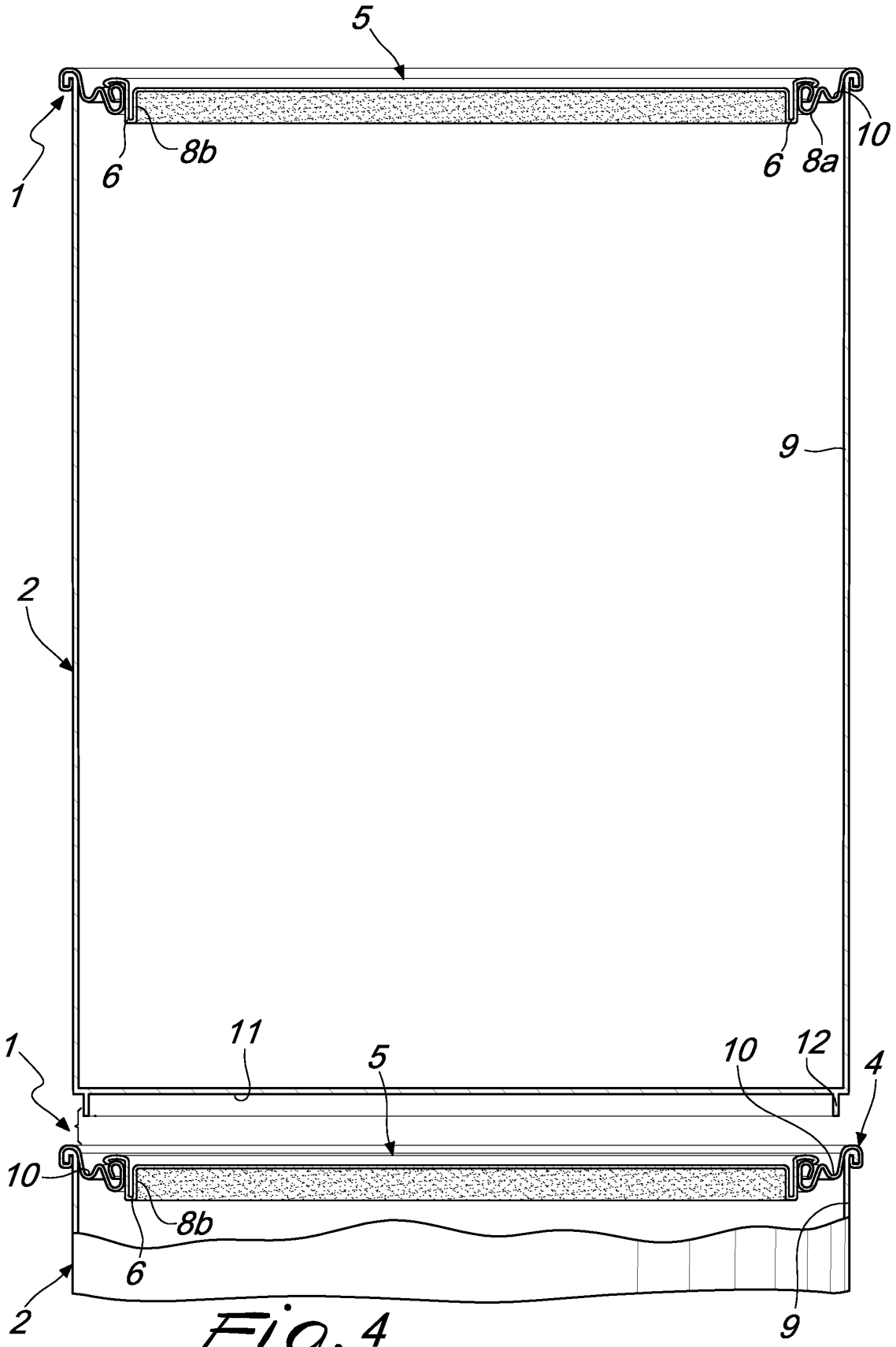


Fig. 4

REFERENCES CITED IN THE DESCRIPTION

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