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(54) **PACKAGE**

(57) A package comprising:  
- a support (2) comprising at least one first concavity (20) and an entrance mouth (21) in said first concavity (20);  
- one layer (3) comprising at least one first opening (30) overlapping the first concavity (20);  
- said layer (3) comprising at least one edge (40) delimiting or contributing to delimiting said first opening (30); at least a section (41) of said edge (40) partially blocks the mouth (21) and defines means (4) for retaining a fragrance or cosmetic article container intended to be at least partially housed in the first concavity (20).

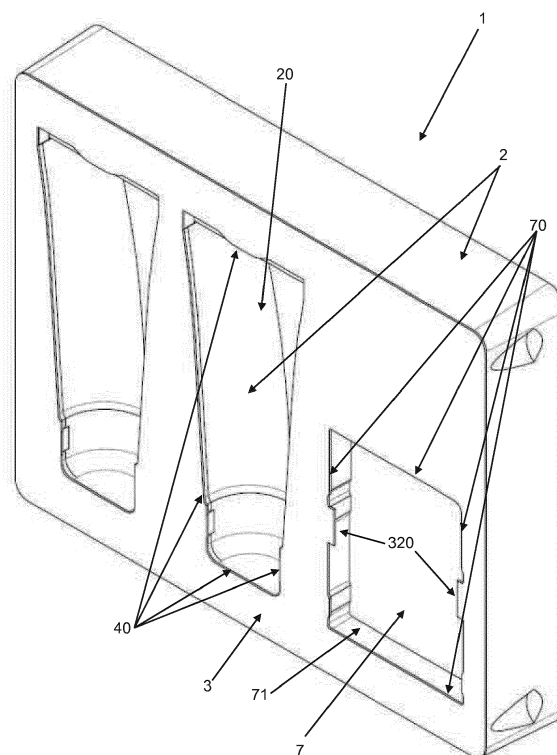


Fig. 1

## Description

**[0001]** The present invention relates to a package, typically used for one or more articles of perfumery or cosmetics.

**[0002]** A package for articles is known for articles of perfumery or cosmetics comprising a box internally of which a thermoformed plastic tray is located, comprising one or more concavities for at least partially housing bottles of perfume or tubes of cream.

**[0003]** The thermoformed tray comprises a plurality of convexities/projections made of deformable plastic material. They are located at the entrance to the concavity or the inside of the concavity and when the container to be housed is inserted these projections compress or embrace it and thus retain it. The distribution of these projections is specially researched to enable achieving the desired result. In fact, the projections serve to prevent the fragrance or cosmetic products disengage from the concavity at the moment at which the container is positioned vertically (for example in shop windows or display cabinets), or during transport.

**[0004]** In recent times the need has emerged to make the packages as recyclable as possible, and this suggests the possibility of replacing the thermoformed plastic tray with a cardboard/natural fibre material support. This however complicates the retaining action on the articles inserted in the housings. In fact cardboard, by its nature, is much less elastic and deformable and mouldable with respect to plastic.

**[0005]** In this context, the technical task underpinning the present invention is to provide a package enabling retaining of products located in the package, at the same time realising an elegant and pleasant article that is completely recyclable.

**[0006]** The stated technical task and specified objects are substantially achieved by a package comprising the technical characteristics disclosed in one or more of the appended claims.

**[0007]** Further characteristics and advantages of the present invention will become more apparent from the following indicative, and hence nonlimiting, description of a preferred, but not exclusive, embodiment of a package as illustrated in the appended drawings, in which:

- figure 1 shows a perspective view of a packaging according to the present invention;
- figure 2 is a plan view of the package of figure 1;
- figure 3 is a section view of the package of figures 1 or 2;
- figure 4 is an exploded view of a detail of figure 3;
- figure 5 shows a view by way of example of a package intended to contain what is illustrated in figure 1.

**[0008]** In the appended figures, reference number 1 denotes a package. The package is typically used for packaging of at least a container of fragrance or cosmetic products (for example small tubes of cream, varnish,

make-up containers, compact mirrors for make-up, etc.).

**[0009]** The package 1 comprises a support 2. The support 2 appropriately comprises at least a first concavity 20. The first concavity 20 is intended to at least partially house the container. The support 2 therefore performs the supporting action of the container. The container preferably rests in the first concavity 20 and also protrudes externally. The support 2 further comprises an entrance mouth 21 into the first concavity 20. The container then crosses the entrance mouth 21, projecting externally of the support 2. The support frame 2 is appropriately made of natural fibre, in particular vegetable fibre. In particular, it could be made of bagasse. It is advantageously made of a solid material comprising a paste of paper and/or cardboard.

**[0010]** The package 1 comprises a layer 3 comprising at least a first opening 30 which overlaps the first concavity 20. The layer 3 is appropriately applied to said support 2. In particular the layer 3 is glued to the support 2. Alternatively (not a preferred solution) the layer 3 might be hooked to the support 2. The layer 3 overlaps at least a part of the support 2. In the preferred embodiment, the layer 3 has a thickness of less than 2 millimetres. It thus has a sheet profile (provided with one or more holes).

**[0011]** The layer 3 comprises at least an edge 40 which delimits or contributes to delimiting the first opening 30. The edge 40 typically entirely surrounds the first opening 30. At least a section 41 of the edge 40 partly obstructs the mouth 21. The edge 40 delimits the crossing section of the first opening 30 afforded in the layer 3, while the mouth 21 is defined by the support 2 and defines the entrance into the support 2 (not the layer 3). This is visible in particular in figure 4 which shows an exploded view in which the layer 3 and the support 2 are distanced. The section 41 defines means for retaining 4 a fragrance or cosmetic article container intended to be at least partially housed in the first concavity 20. In fact this section 41 partially obstructs/narrows the entrance into said first concavity 20 through the mouth 21.

**[0012]** The layer 3 is appropriately made of natural fibre. It is advantageously made of a solid material comprising a paste of paper and/or cardboard.

**[0013]** The support 2 comprises a face 22 from which the first concavity 20 extends. The layer 3 comprises a first portion 31 which surmounts said face 22 of the support 2 without overlapping with the entrance mouth 21. The layer 3 further comprises a second portion 32 which surmounts said entrance mouth 21 (see figure 3). The extension of the second portion 32 is much more limited than the extension of the first portion 31. Let us define an imaginary interface line 33 between said first portion 31 and at least a part of the second portion 32. Appropriately no discontinuity is visibly apparent along the imaginary interface line 33. The second portion 32 projects internally of said first opening 30 away from said imaginary interface line 33 (perpendicularly to the perimeter of the first opening 30) by a distance of greater than 0.4 millimetres. It can however protrude in this direction for

a distance of less than 3 millimetres. This enables a correct compromise between the need to exert a retaining action on the containers (thus preventing any undesired tipping over) while at the same time enabling an easy insertion/extraction into and out of the container from the first concavity 20.

**[0014]** The edge 40 advantageously comprises at least two sections that obstruct the entrance to said first concavity 20 and extend over opposite sides of a perimeter of said first opening 30. In this way they exert a retaining action on two opposite flanks of the container, facilitating retaining thereof.

**[0015]** The layer 3 advantageously comprises a first surface 34 facing the face 22 of said support 2 and a second surface 35 opposite the first comprising a surface decoration. This enables making the package 1 more appealing while making it particularly suitable for containing fragrance or cosmetic products. In particular the material of which the layer 2 is constituted (natural fibres, in particular vegetable fibres) constitutes a good substrate which facilitates surface decoration.

**[0016]** In a particular constructional solution the support 2 also comprises a second concavity 7. The layer 3 comprises an additional edge 70 which surrounds a second opening 71 which overlaps the second concavity 7. In this case too the additional edge 70 can define means for retaining a container. What has been described with reference to the first concavity 20 and the interaction thereof with the edge 40 can thus be repeated with the second concavity 7 and the interaction thereof with said additional edge 70.

**[0017]** The additional edge 70 can comprise one or more cantilevering flaps 320. The cantilevering flaps 320 have a geometry that facilitates flexibility thus defining valid retaining means 4. The one or more flaps 320 appropriately extend along the perimeter of the edge 70 by a length comprised between 5 and 30 millimetres.

**[0018]** This can advantageously be repeated for the first concavity 20 (though it is not illustrated). The second portion 32 appropriately comprises one or more cantilevering flaps. In this case too the cantilevering flaps have a geometry which facilitates flexibility, thus defining valid retaining means 4. The one or more flaps appropriately extend along the perimeter of the edge 40 by a length comprised between 5 and 30 millimetres.

**[0019]** In the preferred solution the package 1 comprises a casing 5 in turn comprising a bottom 51 and a side wall 52 which, in turn, in combination, define a housing 53 for the positioning of said support 2. The casing 5 is advantageously made of vegetable fibre.

**[0020]** The package 1 advantageously comprises a closing cover 6 of the casing 5. The layer 3 is interposed between the support 2 and the cover 6. In this way the package constitutes a box.

**[0021]** In an alternative solution (not illustrated), the support 2 is slidably extractable from a wrapping that surrounds it. In the technical sector this is known as a slider pack.

**[0022]** The object of the present invention is also a system comprising:

- a package 1 having one or more of the characteristics described above;
- a fragrance or cosmetic product container placed at least partially internally of the first concavity 20.

**[0023]** The means 4 for retaining the layer 3 of the package 1 constrain said container by interference.

**[0024]** The present invention offers important advantages.

**[0025]** Primarily it enables a solution which by optimising the components enables an easy retaining of cosmetic products or fragrance containers. In this way the products or containers do not tip over even if the package is placed "standing up" for show in shop windows or display cabinets.

**[0026]** The above-indicated advantage can be combined with the need to realise the support 2 in a material that is more recyclable than plastic, with which many thermoformed product supports in the prior art are realised. This material can therefore be paper or cardboard or, more generally, natural or vegetable fibres.

**[0027]** The invention as it is conceived is susceptible to numerous modifications and variants, all falling within the scope of the inventive concept characterising it. Further, all the details can be replaced with other technically-equivalent elements. In practice, all the materials used, as well as the dimensions, can be any according to requirements.

## Claims

### 1. A package comprising:

- a support (2) comprising at least one first concavity (20) and an entrance mouth (21) in said first concavity (20);
- one layer (3) comprising at least one first opening (30) overlapping the first concavity (20);

said layer (3) comprising at least one edge (40) delimiting or contributing to delimiting said first opening (30); at least a section (41) of said edge (40) partially blocks said mouth (21) and defines means for retaining a fragrance or cosmetic article container intended to be at least partially housed in the first concavity (20).

### 2. A package according to claim 1, characterised in that the support (2) comprises a face (22) from which the first concavity (20) extends; the layer (3) comprising a first portion (31) which surmounts said face (22) of the support (2) without overlapping with the entrance mouth (21) and a second portion (32) that surmounts said mouth (21); an imaginary interface

line (33) is defined between said first portion (31) and at least a part of the second portion (32); said second portion (32) protruding toward the inside of the first opening (30) away from the imaginary interface line (33) for a distance comprised between 0.4 to 3 millimetres. 5

3. A package according to claim 2, **characterised in that** said second portion (32) comprises one or more cantilevering flaps. 10
4. A package according to claim 2 or 3, **characterised in that** said layer (3) comprises a first surface (34) facing the face (22) of said support (2) and a second surface (35) opposite the first comprising a surface decoration. 15
5. A package according to any one of the preceding claims, **characterised by** the fact that the edge (40) comprises at least two sections that obstruct the entrance to said first concavity (20) and extend over opposite parts of a perimeter of said first opening (30). 20
6. A package according to any of the preceding claims, **characterised in that** said layer (3) is a sheet of thickness less than 2 millimetres. 25
7. A package according to any one of the preceding claims, **characterised in that** said support (2) and/or said layer (3) are/is made of vegetable fibre and are/is made with a solid material comprising a paste of paper and/or cardboard. 30
8. A package according to any one of the preceding claims, **characterised in that** it comprises a casing (5) comprising a bottom (51) and a side wall (52) which, in turn, in combination, define a housing (53) for the positioning of said support (2). 35  
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9. A package according to claim 8, **characterised in that** it comprises a cover (6) for closing the casing (5), said layer (3) being interposed between the support (2) and the cover (6). 45
10. A system comprising: 45
  - a package (1) according to any one of claims 1 to 9;
  - a fragrance or cosmetic product container 50  
placed at least partially internal to the first concavity (20); retaining means (4) of the layer (3) of the package (1) restraining said container by means of interference. 55

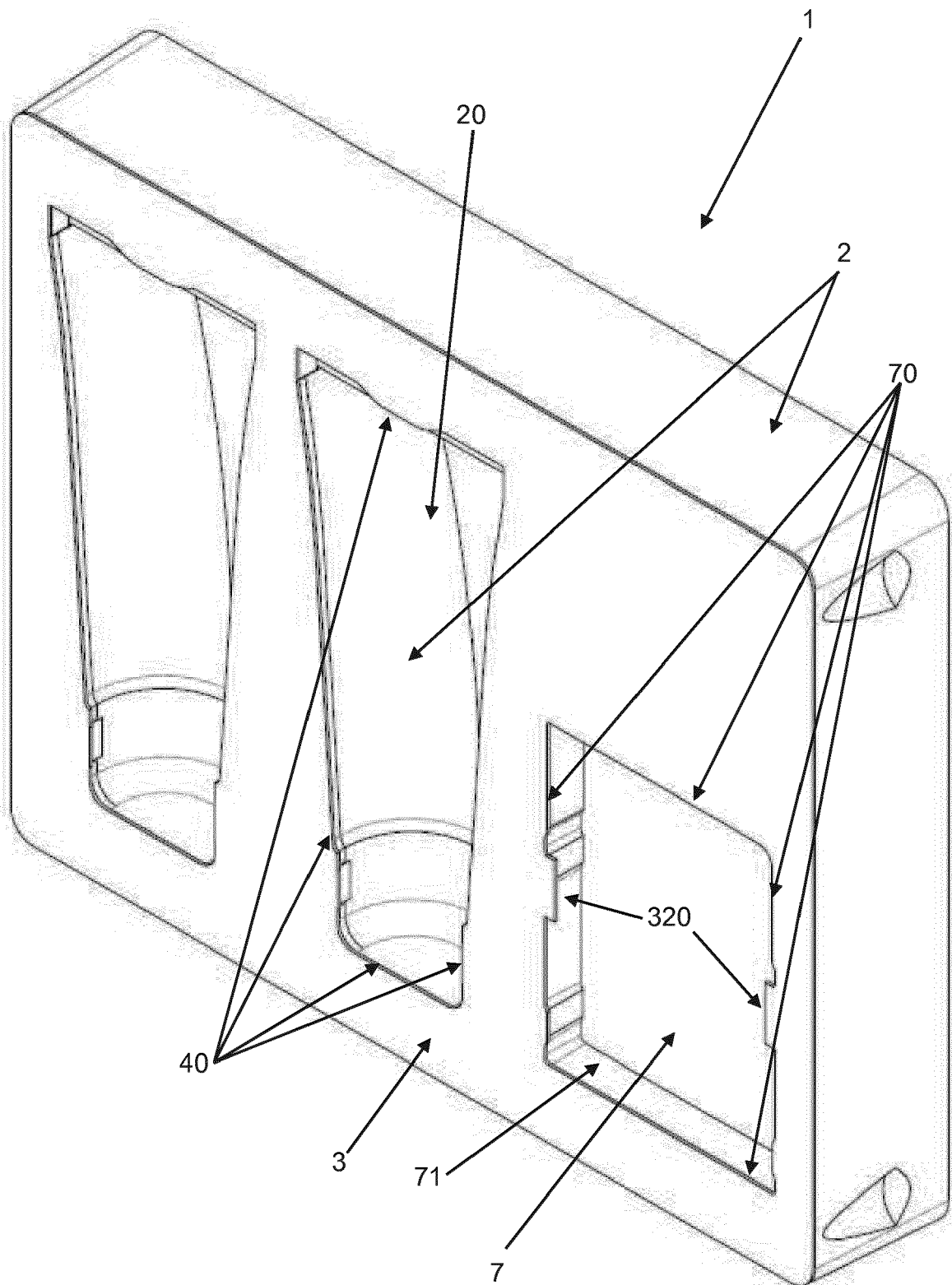


Fig. 1

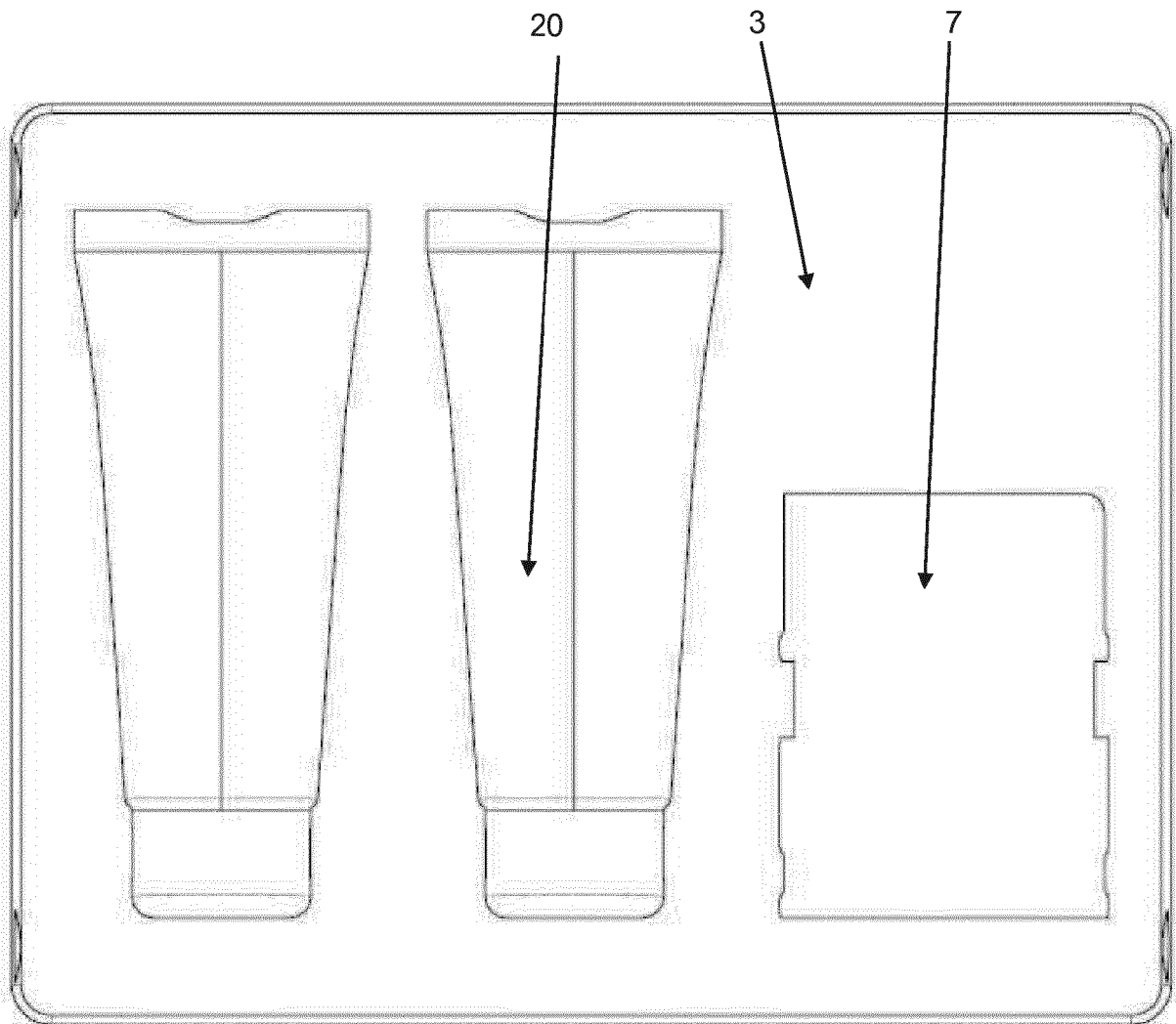


Fig. 2

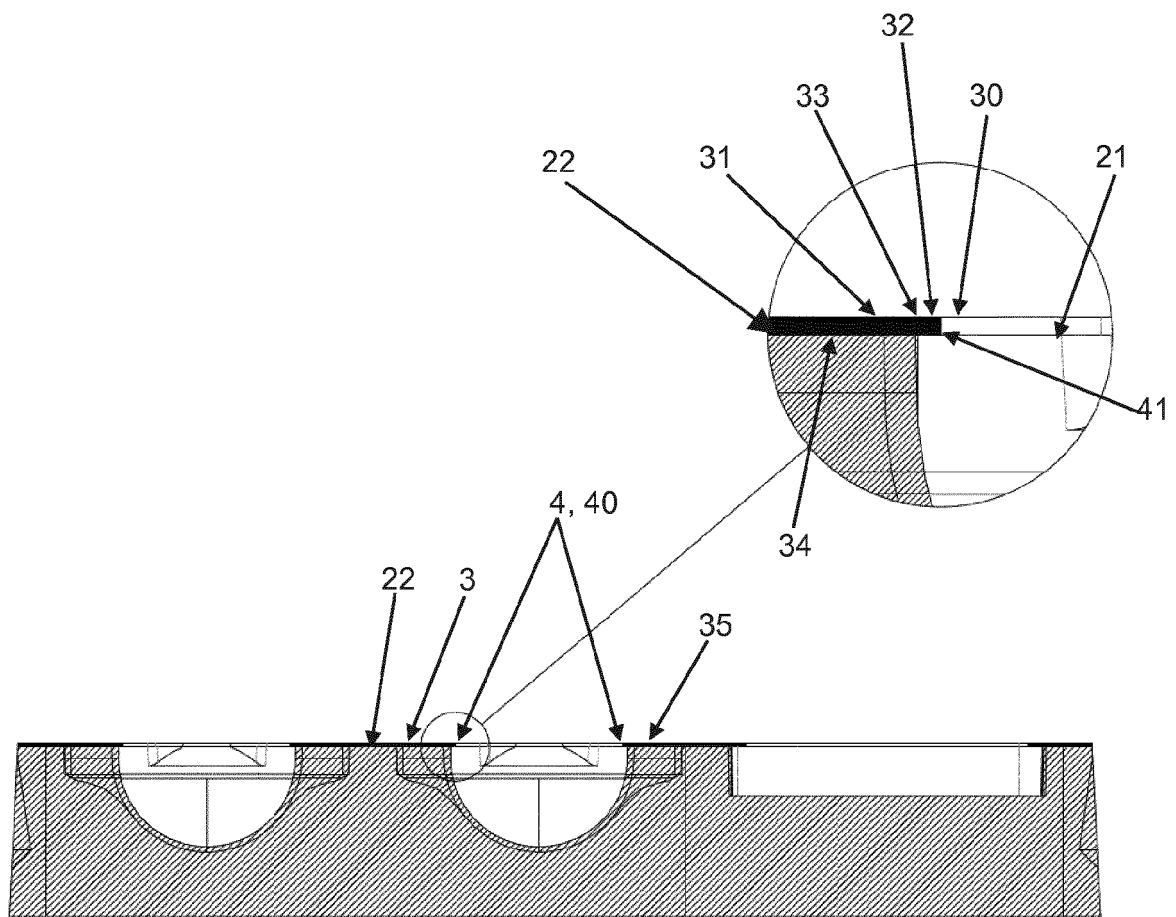


Fig. 3

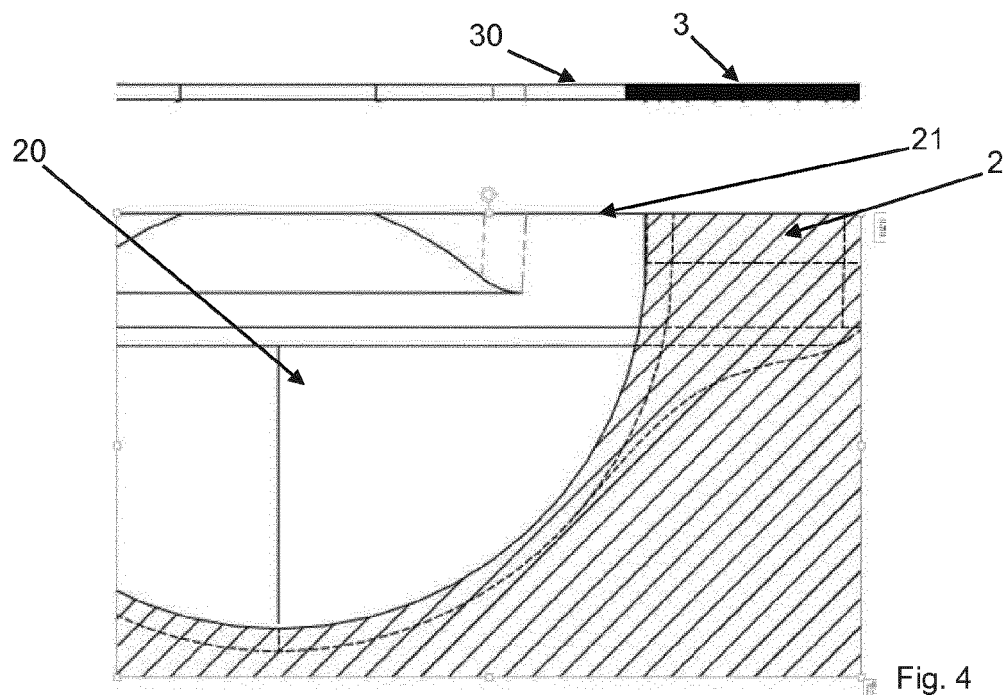
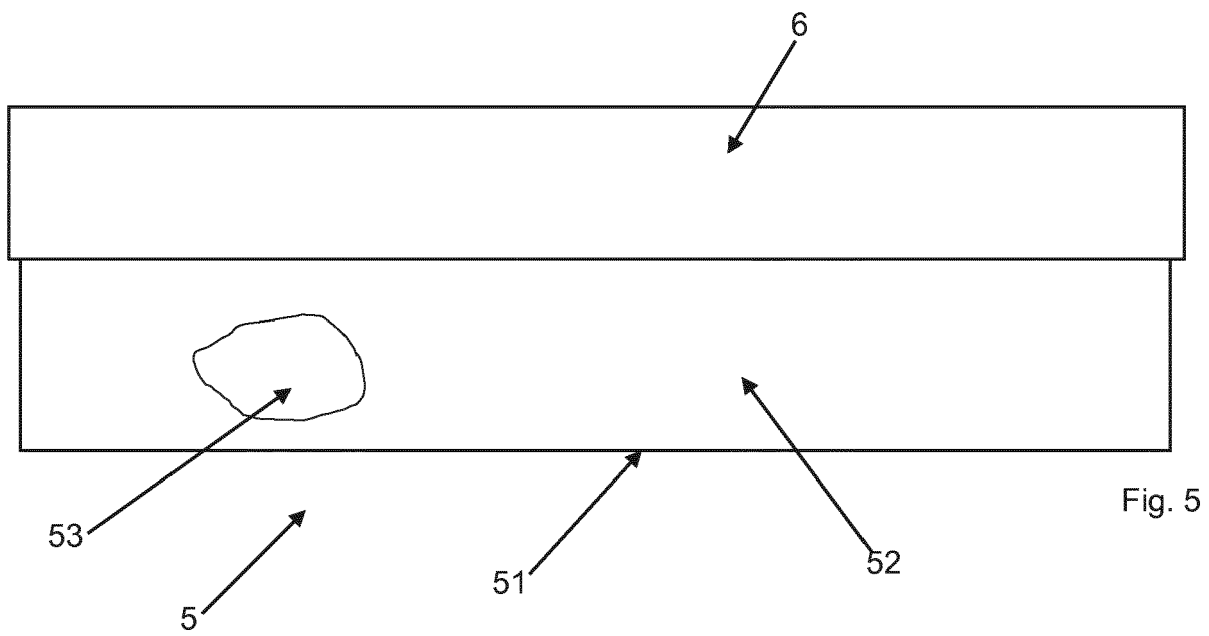


Fig. 4







## EUROPEAN SEARCH REPORT

Application Number  
EP 18 18 6256

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	GB 2 535 319 A (PUSTERIA 1880 S P A [IT]) 17 August 2016 (2016-08-17) * Figures; page 9, line 16 to page 13, line 30 *	1-10	INV. B65D5/50 B65D5/52
A	US 5 816 409 A (BAKER ROGER J [US] ET AL) 6 October 1998 (1998-10-06) * For instance embodiments of figures 17-19 specifically for cosmetic articles. *	1-10	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>17 September 2018</b>	Examiner <b>Ngo Si Xuyen, G</b>
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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 18 18 6256

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2535319	A	17-08-2016	CH 710719 A2	15-08-2016
			FR 3032186 A1	05-08-2016
			GB 2535319 A	17-08-2016
			WO 2016120838 A1	04-08-2016
-----				
US 5816409	A	06-10-1998	AT 180733 T	15-06-1999
			CA 2141784 A1	17-02-1994
			DE 69325175 D1	08-07-1999
			DE 69325175 T2	23-09-1999
			EP 0654001 A1	24-05-1995
			JP 3335175 B2	15-10-2002
			JP H08500072 A	09-01-1996
			US 5335770 A	09-08-1994
			US 5816409 A	06-10-1998
			WO 9403377 A1	17-02-1994
-----				