



(43) International Publication Date
15 October 2015 (15.10.2015)

- (51) International Patent Classification:
A45D 33/00 (2006.01)
- (21) International Application Number:
PCT/EP2015/057601
- (22) International Filing Date:
8 April 2015 (08.04.2015)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
14 53196 10 April 2014 (10.04.2014) FR
- (71) Applicant: L'OREAL [FR/FR]; 14, rue Royale, F-75008 Paris (FR).
- (72) Inventor: DELBOVE, William; 5 cité Héron, F-75010 Paris (FR).
- (74) Agents: DOMENEGO, Bertrand et al.; Lavoix, 2, place d'Estienne d'Orves, F-75009 Paris (FR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: PACKAGING DEVICE FOR AT LEAST ONE COSMETIC PRODUCT AND ASSOCIATED PACKAGING METHOD

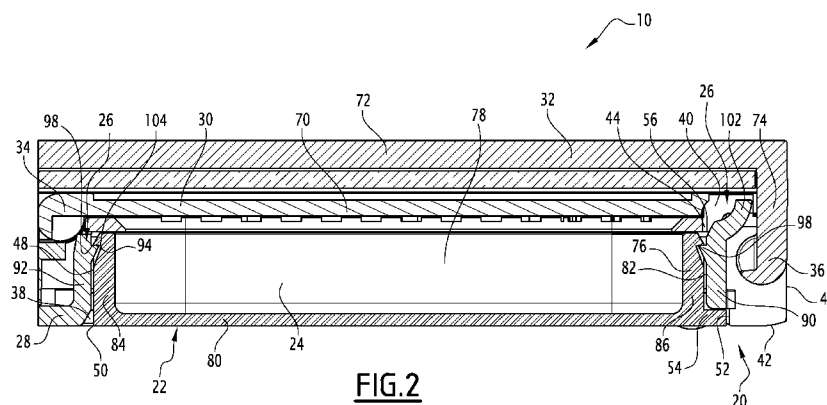


FIG. 2

(57) Abstract: Packaging device for at least one cosmetic product and associated packaging method The device (10; 210) for packaging at least one cosmetic product (24) comprises: - a base (28) defining a housing (38) extending between a lower bearing surface (42) and an upper surface (44); - a refill (22) defining a cosmetic product (24) storage container (78), suitable for removable insertion into the housing (38) from the lower bearing surface (42); - a system (26) for locking/unlocking the refill (22) in the housing (38) having at least one movable locking member (90) from a locking configuration to a release configuration; - at least one lid (30, 32) movably mounted relative to the base (28) between an open access position and a closed sealing position of the storage container (78). It is characterized in that the movable locking member (90) is suitable for being maneuvered from the upper surface (44) of the base (28) into the open access position.

Packaging device for at least one cosmetic product and associated packaging method

The present invention relates to a device for packaging at least one cosmetic product, comprising:

5 - a base defining an interior volume, the interior volume defining a housing extending between a lower bearing surface and an upper surface, the housing opening into the lower bearing surface;

 - a refill defining a cosmetic product storage container, the refill being suitable for removable insertion into the housing from the lower bearing surface;

10 - a system for locking/unlocking the refill in the housing, the locking/unlocking system having at least one movable locking member from a locking configuration to a configuration for releasing the refill into the housing;

 - at least one lid movably mounted relative to the base between an open access position and a closed sealing position in respect of the storage container.

15 "Cosmetic product" means in particular, in the sense of this invention, a product such as defined in Regulation (EC) no. 1223/2009 of the European Parliament and of the Council of November 30, 2009 relating to cosmetic products.

 Such a device is for example a housing suitable for transporting and confining a cosmetic product in a housing. It is intended to receive refills of cosmetic product which
20 may be replaced when the cosmetic product contained therein has been used up or when the user wishes to change cosmetic product.

 The cosmetic product is advantageously a solid, such as a compact or cast powder block. Alternatively, the cosmetic product is a viscous fluid, or a cream.

25 The product is for example a makeup or care product for a body surface of the user.

 Conventionally, a packaging device comprises a quality housing, that is easy to use, and a consumable, single-use cosmetic product refill. The housing must thus be disposed of with the refill when the product has been used up. This is not economical, and is a factor in increasing the amount of waste produced.

30 To remedy this problem, FR 2 943 511 describes a device for packaging a cosmetic product in a housing having a removable refill inserted into a housing via an external bearing surface onto a support. The device has a system for locking the refill, accessible from the external bearing surface.

 Such a system makes it possible to retain the housing, even when the cosmetic
35 product contained in the refill has been used up, by merely replacing the refill.

However, such a device is not entirely satisfactory. The system for locking and releasing the refill is hidden from the user's direct field of vision. The user thus needs to turn the device over to release the refill, which is not convenient, particularly if other accessories are contained in the housing.

5 Furthermore, the mechanism for locking and releasing the refill must be operated with one of the user's nails, which may break in some cases.

One aim of the invention is thus that of enhancing the ease of use of such a housing, particularly when inserting and releasing a refill into a housing.

10 For this purpose, the invention relates to a device of the type mentioned above, characterized in that the movable locking member is suitable for being maneuvered from the upper surface of the base into the open access position.

The device according to the invention can include one or more of the following features, considered alone or in any combination that is technically possible:

15 - the movable locking member is inaccessible for the user in the closed position of the lid;

- in the closed position of the lid, the refill is suitable for moving from a position situated away from the base to a position inserted in the housing, the movable locking member locking the refill in the housing;

20 - the movable locking member is borne by a first member among the base and the refill;

- the movable locking member comprises a locking projection, the locking/unlocking system defining at least one groove for locking the locking projection formed in a second member among the base and the refill;

25 - the movable locking member comprises an elastically deformable strip from the locking configuration to the release configuration, the strip having an operating lug arranged in the interior volume at least when the refill is arranged in the housing;

- the base comprises a peripheral wall defining the housing, the movable member being formed by a movable region of the peripheral wall defined by two lateral slots;

30 - the locking/unlocking system comprises a secondary locking member arranged opposite the movable member relative to the housing;

- the secondary locking member is borne by a first member among the base and the refill, the secondary locking member comprising a locking projection, the locking/unlocking system defining a groove for locking the locking projection formed in a second member among the base and the refill;

- the refill comprises a base plate defining a shoulder, the housing of the base having a peripheral space accessible from the lower bearing surface, the peripheral space being suitable for receiving the shoulder when the refill is received into the housing;

- the housing is a through housing opening via an upper opening into the upper surface;

- the housing is blind, the blind housing being defined internally by a sealing wall extending on the level of the upper surface, and the movable member being housed in a notch formed in the sealing wall.

The invention also relates to a method for packaging a cosmetic product comprising the following steps:

- providing a device wherein the refill is arranged in the housing, the movable locking member being in the locking configuration;

- arranging the lid in the open position to release access to the movable locking member;

- operating the movable locking member from the upper surface of the base to insert the member into the configuration for releasing the refill into the housing;

- removing the refill from the housing via the lower bearing surface.

The method according to the invention can include one or more of the following features, considered alone or in any technically possible combination:

- providing a replacement refill;

- inserting a replacement refill into the housing from the lower bearing surface to the upper surface;

- locking the replacement refill in the housing with the movable locking member in the locking configuration.

The invention will be easier to understand in view of the following description, provided solely as an example and with reference to the appended drawings, wherein:

- figure 1 is an overall perspective view of a first device for packaging a cosmetic product according to the invention, comprising a housing and a removable refill,

- figure 2 is a sectional profile view of the packaging device in figure 1,

- figure 3 is a detailed section view of the system for locking and releasing the refill in the device in figure 1;

- figure 4 is a perspective view of a second device according to the invention.

A first device 10 for packaging a cosmetic product according to the invention is represented in figures 1 to 3.

The device 10 comprises a housing 20, a refill 22 removably mounted in the housing 20, the refill 22 receiving a cosmetic product 24, and a system 26 for locking/unlocking the refill 22 in the housing 20.

5 The cosmetic product 24 is advantageously a solid such as a powder or a liquid, particularly a viscous liquid, or a cream.

The housing 20 comprises a base 28, and at least one lid 30, 32. In this example, the housing 20 comprises a first and second lid 30, 32 for sealing the base 28.

10 Each lid 30, 32 is movably mounted relative to the base 28 between an open position for access to the base 28 and a closed position for sealing the base 28 via a respective hinge mechanism 34, 36, situated on each side of the base 28.

The base 28 has a substantially flat shape and has a substantially polygonal contour, namely rectangular in this example. Alternatively, the base 28 has a rounded contour, such as circular or elliptical, or another shape.

15 In the example represented in figure 3, the base 28 defines internally a through housing 38 for receiving the refill 22 and an interior volume 40 for receiving the first lid 30 in a closed position and for accessing the locking/unlocking system 26 in an open position.

20 The base 28 comprises a lower bearing surface 42, facing outward and intended to be placed on a support or carried by one of the user's hands, and an upper surface 44 intended to support the first lid 30 in a closed sealing position.

The base 28 comprises a peripheral wall 46 having an external peripheral surface joining the lower bearing surface 42 and the upper surface 44 along the periphery of the base 28.

25 Furthermore, the peripheral wall 46 has an internal peripheral surface 48 defining the interior volume 40 and the through housing 38 between the lower bearing surface 42 and the upper surface 44.

The lower bearing surface 42 is herein substantially plane.

30 It defines a lower opening 50 for inserting the refill 22 into the through housing 38. The contour of the insertion opening 50 has a similar contour to the outer contour of the refill 22, as seen hereinafter.

The lower bearing surface 42 also defines a peripheral space 52 extending in the through housing 38, from the lower bearing surface 42 to the upper surface 44. The peripheral space 52 is suitable for concealing a shoulder 54 of the refill 22, as seen in more detail hereinafter.

The upper surface 44 extends substantially parallel with the lower bearing surface 42 of the base 28. It defines an upper opening 56 for accessing the through housing 38 and the interior volume 40.

The peripheral wall 46 comprises a rear region 58 and a front region 60 each respectively receiving a hinge mechanism 34, 36. It comprises two lateral regions 62, extending transversally relative to the hinge mechanisms 34, 36, and intended to grip the base 28.

The rear region 58 bears the first hinge mechanism 34 projecting above the upper surface 44, to create a pivot connection between the base 28 and the first lid 30 along a first axis 64 of the first lid 30.

It defines a notch 65 for inserting a part of the locking/unlocking system 26.

The rear region 58 has a rear hollow 66. It bears the second hinge mechanism 36 projecting above the upper surface 44 and the lower bearing surface 42 to create a pivot connection between the base 28 and the second lid 32 along a second axis 68 of the second lid 32.

The rear hollow 66 in the rear region 58 extends from the upper surface 44 to the second rotational axis 68.

The base 28 is made of one part or an assembly of a plurality of parts rigidly connected to each other.

Each lid 30, 32 is hinged on the base 28 between the closed position and the open position respectively via the first and second hinge mechanisms 34, 36.

The first lid 30 comprises herein a plate 70 hinged along the first axis 64. In the closed position, the plate 70 extends from the rear region 58 to the front region 60 by sealing the upper opening 44 of the through opening 38 of the base 28.

In the closed position, the first lid 30 extends from one lateral region 62 to the other, parallel with the lower bearing surface 42 of the base 28

The second lid 32 comprises a shell 72 covering the first lid 30 in the closed position.

The shell 72 also extends from the rear region 58 to the second front region 60, and transversally from one lateral region 62 to the other.

The second lid 32 further comprises a stub 74 connecting the shell 72 perpendicularly to the second hinge mechanism 36.

The stub 74 of the second lid 32 is housed in the rear hollow 66 in the closed position. It seals the rear hollow 66 to the rear and prevents access to the locking/unlocking mechanism 26.

In the closed position, the first lid 30 is lowered on the upper surface 44 of the base 28 and the second lid 32 is lowered on the first lid 30.

The arrangement of the two lids 30, 32, on each other, above the base 28 prevents access to the cosmetic product 24, and operation of the locking/unlocking system 26. The cosmetic product 24 is then confined in the interior volume 40.

In the open position, the first and second lids 30, 32 have been pivoted about the hinge axes 64 and 68 respectively, with an angular displacement of 90°, for example between 90° and 180°. They free access to the contents of the refill 22 held in the through housing 38 of the base 28 and to the locking/unlocking system 26.

In the embodiment illustrated in figure 2, the angular clearance of the first lid 30 is advantageously between 0° and 175° and the angular clearance of the second lid 32 is advantageously between 0° and 180°.

In the open position, the stub 74 of the second lid 32 is removed from the rear hollow 66.

The refill 22 has a substantially flat shape and has a contour substantially combined with the insertion opening 50 of the base 28.

The refill 22 comprises a contour wall 76 internally defining a container 78 for storing the cosmetic product 24. The container 78 is accessible from the upper opening 56 when the refill 22 is arranged in the through housing 38.

The refill 22 comprises a base plate 80 defining the shoulder 54 received in the peripheral space 52 when the refill 22 is inserted in the through housing 38.

In one embodiment, the cosmetic product is packaged in a dish, which is arranged in the container 78 while being for example secured to the bottom of the container 78.

Alternatively, the cosmetic product is introduced directly into the container 78 in contact with the contour wall 76.

The contour wall 76 projects from the base plate 80. It has an external peripheral surface 82 of a combined shape with the contour of the through housing 38 of the base 28.

The external peripheral surface 82 of the refill 22 has a rear face 84 and a front face 86 arranged respectively facing the respective front and rear regions 58, 60 of the base 28. The external peripheral surface 82 comprises two lateral faces 88 arranged facing the two respective lateral regions 62 of the base 28.

The refill 22 is reversibly removable relative to the base 28 between an inserted position in the through housing 38 of the base 28 and a released position away from the base 28.

The refill 22 is moved between the released position and the inserted position herein by inserting the refill 22 from the outside inward into the through housing 38 (from bottom to top in figure 1) via the lower opening 50 formed in the lower bearing surface 42.

According to the invention, the locking/unlocking system 26 comprises a movable member 90 for locking the refill 22, intended to be operated by a user and a secondary locking member 92, the members 90, 92 being borne by a first member among the base 28 and the refill 22.

The locking/unlocking system 26 further comprises respective grooves 94 for receiving the movable member 90 and the secondary member 92, formed in a second member among the base 28 and the refill 22.

In this example, the grooves 94 are respectively formed in the two rear and front faces 84, 86 of the refill 22.

In this example, the movable member 90 and the secondary member 92 are borne by the base 28. In this example, they are borne by the same part of the base 28.

The movable member 90 is formed by a flexible strip arranged in the notch 65. It is advantageously formed by a region of the peripheral wall 46 of the base 28, defined by two slots 96.

The movable member 90 comprises a projection 98 suitable for being inserted into a groove 94 of the rear face 84 of the refill 22 and a lug 102 for operating the movable member 90 intended to be operated by a user's finger in order to switch the movable member 90 between a configuration for locking the refill 22 into the through housing 38 and a configuration for releasing the refill 22.

The lug 102 projects to the end of the flexible strip inside the through housing 38 relative to the upper surface 44. The lug 102 preferentially has a concave bearing surface, suitable for the contour of a finger.

The movable member 90 is deformable by bending between the configuration for locking the refill 22, representing an idle configuration, and the deformed configuration for releasing the refill 22.

In the locking configuration, the movable member 90 and the projection 98 are moved forward in the through housing 38. The projection 98 is inserted into the groove 94 when the refill 22 occupies the inserted position, so as to lock the refill 22 by engaging between the projection 98 and the edges of the groove 94.

In the release configuration, the movable member 90 is moved back away from the through housing 38, advantageously by being pushed outward by actuating the lug 102.

The projection 98 is arranged outside the groove 94 to enable the release of the refill 22.

The secondary member 92 is arranged opposite the movable member 90 relative to the through housing 38. It comprises an additional projection 104 projecting into the through housing 38 from the front region 60. The additional projection 104 is suitable for being inserted into the groove 94 of the front face 86, facing the refill 22.

5 The use of a device 10 for packaging a cosmetic product 24, according to the invention, will now be described.

Initially, a device 10 comprising the housing 20 and the refill 22 filled with cosmetic product 24 is furnished to the user. The refill 22 occupies the position inserted in the through housing 38. It is held in position by engagement between each projection 98, 104
10 of a locking member 90, 92 and the surface defining the groove 94 receiving the projection 98, 104.

In the closed position of each lid 30, 32, the user is incapable of accessing the locking/unlocking system 26 which is housed in the interior volume 40 of the base 28. The refill 22 is thus secured in the housing.

15 To use the cosmetic product 24, the user successively switches the lid 32 and the lid 30 into the open position thereof.

After the cosmetic product 24 has been used up, or if the user wishes to change cosmetic product 24, the user changes the refill 22 of the housing 20.

For this purpose, the user removes the refill 22.

20 It then opens the lids 30, 32 giving access to the lug 102 situated at the end of the movable member 90 of the locking/unlocking system 26.

This lug 102 is only accessible from the upper surface 44 of the base 28. By actuating the lug 102 by means of outward tactile pressure, the deformable strip of the movable member 90 pivots toward the release configuration and releases the projection
25 98 of the movable member 90 inserted into the groove 94.

The refill 22 pivots in the through housing 38 and comes out of the through housing 38 in the direction from the upper opening 56 to the insertion opening 50, advantageously under the effect of the weight thereof.

30 Once the refill 22 has been removed from the through housing 38 of the base 28, a new refill 22 containing a new quantity of cosmetic product 24 is introduced.

The movable member 90 then returns to the idle configuration thereof.

Regardless of whether the position of the lids 30, 32 is open or closed, the user introduces the refill 22 via the insertion opening 50 into the through housing 38. The refill 22 enters the through housing 38 until the shoulder 54 of the refill 22 abuts against a
35 lower edge of the peripheral wall 46, in the peripheral space 52 of the through housing 38.

During this movement, the movable member 90 bends to the release configuration, to enable the insertion of each projection 98, 104 into a groove 94.

The refill 22 is again held in the through housing 38 by the flexible locking/unlocking system 26 having inserted the projections 98, 104 into the grooves 94 formed in the rear and front faces 84, 86 of the refill 22.

The device 10 ensures the packaging and transportation of the cosmetic product 24 in a manner confined by at least one lid 30, 32 hinged on the base 28 and by a system for locking/unlocking 26 the refill 22 in the through housing 38 of the housing 20, only accessible from the interior volume 40 of the base 28, i.e. when each lid 30, 32 of the housing 20 is in the open position.

The device 10 ensures easy use due to the presence of the lug 102 of the movable member 90 of the locking/unlocking system 26 in the interior volume 40. The lug 102 is only accessible via the upper surface 44 which is located directly in the user's field of vision, facilitating the operation of the device 10, particularly when replacing the refill 22 in the through housing 38. It is thus not necessary to turn the housing 20 over to release the refill 22.

Alternatively, each lid 30, 32 of the device 10 is suitable for receiving a cosmetic article such as a mirror, a foam applicator, etc.

Also alternatively, the device 10 comprises a single lid.

In one alternative embodiment, the housing 20 is furnished separately from the refill 22 prior to the first use thereof, the refill 22 being introduced into the housing 20 during the first use.

In one alternative embodiment illustrated in figure 4, the device 210 is a case for packaging a refill 22 and optionally a cosmetic accessory housed in a specific lateral space 212 defined by an intermediate wall 214.

The device 210 is intended for example for packaging a refill 22 suitable for being introduced into a device 10 acting as a housing, as illustrated in figures 1 to 3.

Unlike the device 10, the housing 38 of the device 210 is blind. It opens into the lower bearing surface 42.

The housing 38 is sealed internally by a sealing wall 222 extending on the level of the upper surface 44 and is only accessible from the lower bearing surface 42 toward the inside of the housing 38.

The locking/unlocking system 26 having the movable member 90 is arranged in a notch 220.

Unlike the device 10, the device 210 has a single lid 224. The locking/unlocking system 26 is only accessible when the lid 224 is in the open position.

Furthermore, the locking/unlocking system 26 advantageously comprises a button 226 for actuating the movable locking member 90, formed on the lower bearing surface 42. The button 226 is formed by a portion of the bottom wall of the base 28 defined by a curved through indentation.

5 In the release configuration, the button 226 is pushed from the inside of the lower bearing surface 42 outward. This pivots the movable locking member 90 away from the housing and releases the refill 22.

Advantageously, the cosmetic accessory is a sponge.

CLAIMS

1.- Device (10; 210) for packaging at least one cosmetic product (24), comprising:

- a base (28) defining an interior volume (40), the interior volume (40) defining a housing (38) extending between a lower bearing surface (42) and an upper surface (44), the housing (38) opening into the lower bearing surface (42);

- a refill (22) defining a cosmetic product (24) storage container (78), the refill (22) being suitable for removable insertion into the housing (38) from the lower bearing surface (42);

- a system (26) for locking/unlocking the refill (22) in the housing (38), the locking/unlocking system (26) having at least one movable locking member (90) from a locking configuration to a configuration for releasing the refill (22) into the housing (38);

- at least one lid (30, 32) movably mounted relative to the base (28) between an open access position and a closed sealing position in respect of the storage container (78).

characterized in that the movable locking member (90) is suitable for being maneuvered from the upper surface (44) of the base (28) into the open access position.

2.- Device (10, 210) according to claim 1, characterized in that the movable locking member (90) is inaccessible for the user in the closed position of the lid (30, 32).

3.- Device (10, 210) according to any of claims 1 or 2, characterized in that in the closed position of the lid, the refill (22) is suitable for moving from a position situated away from the base (28) to a position inserted in the housing (38), the movable locking member (90) locking the refill (22) in the housing (38).

4.- Device (10, 210) according to any of the above claims characterized in that the movable locking member (90) is borne by a first member among the base (28) and the refill (22).

5.- Device (10, 210) according to claim 4, characterized in that the movable locking member (90) comprises a locking projection (98), the locking/unlocking system (26) defining at least one groove (94) for locking the locking projection (98) formed in a second member among the base (28) and the refill (22).

6.- Device (10, 210) according to any of the above claims, characterized in that the movable locking member (90) comprises an elastically deformable strip from the locking configuration to the release configuration, the strip having an operating lug (102) arranged in the interior volume (40) at least when the refill (22) is arranged in the housing (38).

7.- Device (10, 210) according to any of the above claims, characterized in that the base (28) comprises a peripheral wall (46) defining the housing (38), the movable member

(90) being formed by a movable region of the peripheral wall (46) defined by two lateral slots (96).

8.- Device (10, 210) according to any of the above claims, characterized in that the locking/unlocking system (26) comprises a secondary locking member (92) arranged
5 opposite the movable member (90) relative to the housing (38).

9.- Device (10, 210) according to claim 8, characterized in that the secondary locking member (92) is borne by a first member among the base (28) and the refill (22), the secondary member (92) comprising a locking projection (98), the locking/unlocking system (26) defining a groove (94) for locking the locking projection (98) formed in a
10 second member among the base (28) and the refill (22).

10.- Device (10, 210) according to any of the above claims, characterized in that the refill (22) comprises a base plate (80) defining a shoulder (54), the housing (38) of the base (28) having a peripheral space (52) accessible from the lower bearing surface (42), the peripheral space (52) being suitable for receiving the shoulder (54) when the refill (22)
15 is received into the housing (38).

11.- Device (10) according to any of the above claims, characterized in that the housing (38) is a through housing opening via an upper opening (56) into the upper surface (44).

12.- Device (210) according to claims 1 to 10, characterized in that the housing
20 (38) is blind, the blind housing being defined internally by a sealing wall (222) extending on the level of the upper surface (44), and the movable member (90) being housed in a notch (220) formed in the sealing wall (222).

13.- Method for packaging a cosmetic product (24), comprising the following steps:

- providing a device (10, 210) according to any of the above claims, the refill (22)
25 being arranged in the housing (38), the movable locking member (90) occupying the locking configuration;

- arranging the lid (30, 32) in the open position to release access to the movable locking member (90);

- operating the movable locking member (90) from the upper surface (44) of the
30 base (28) to insert the member into the configuration for releasing the refill (22) into the housing (38);

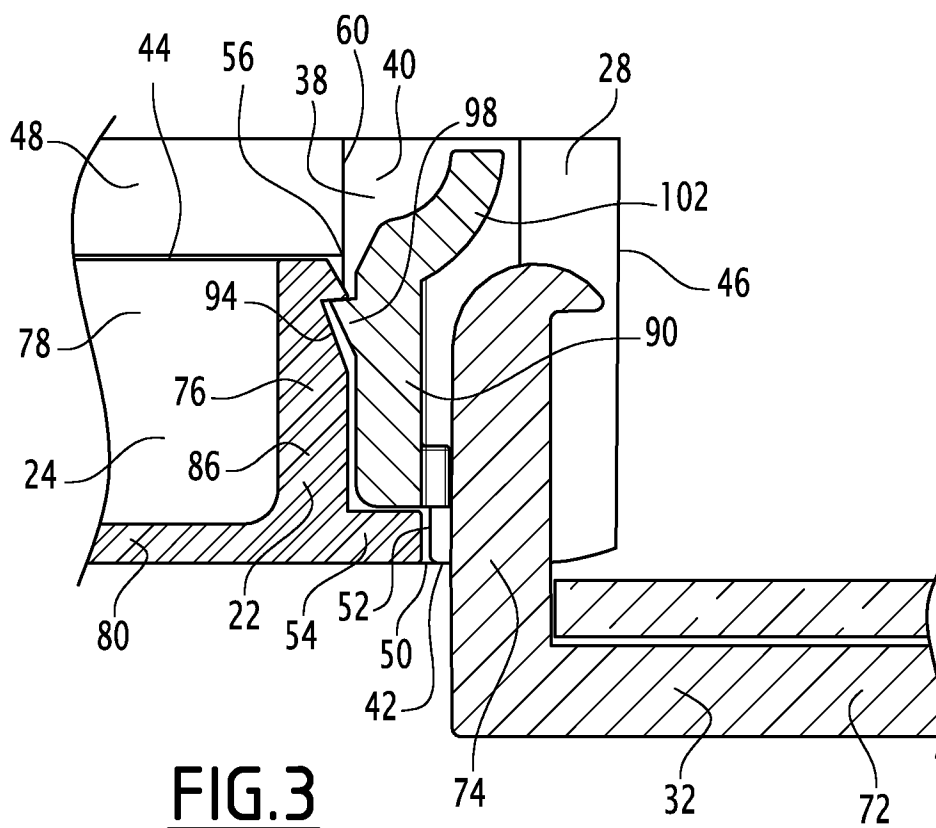
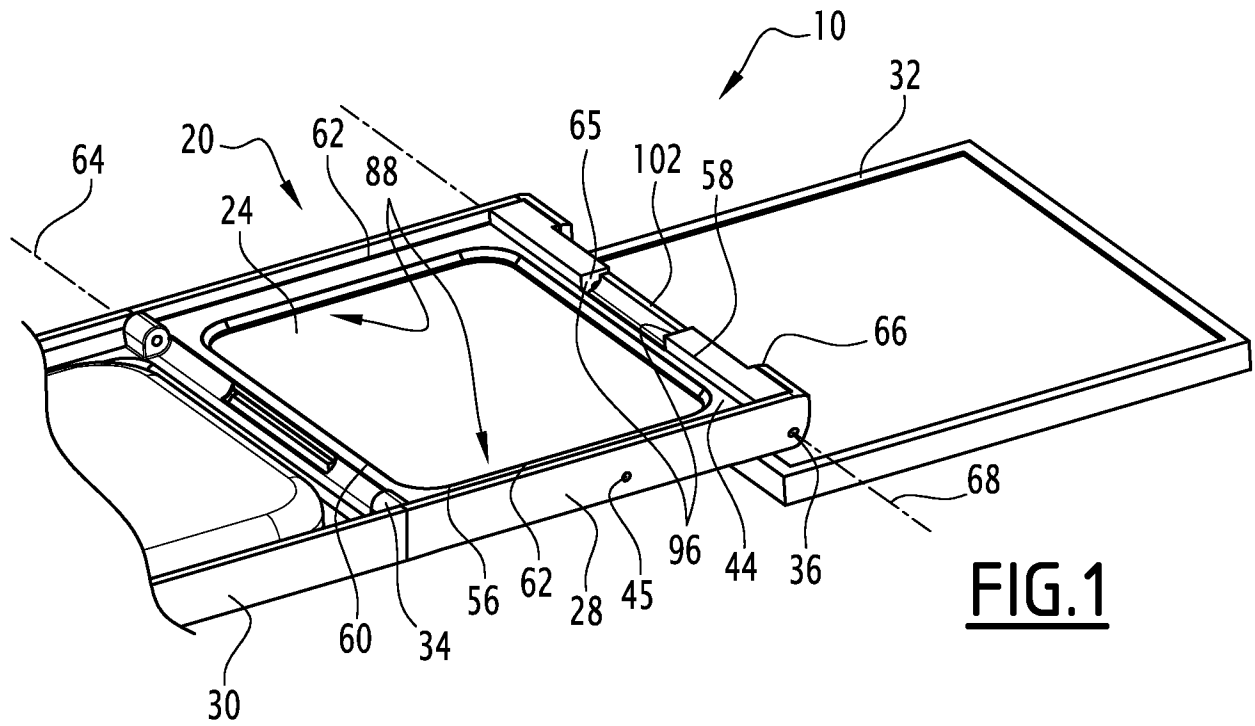
- removing the refill (22) from the housing (38) via the lower bearing surface (42).

14. Method according to claim 13, characterized in that it comprises the following steps:

- providing a replacement refill (22);
35

- inserting a replacement refill (22) into the housing (38) from the lower bearing surface (42) to the upper surface (44);
- locking the replacement refill (22) in the housing with the movable locking member (90) in the locking configuration.

1/3



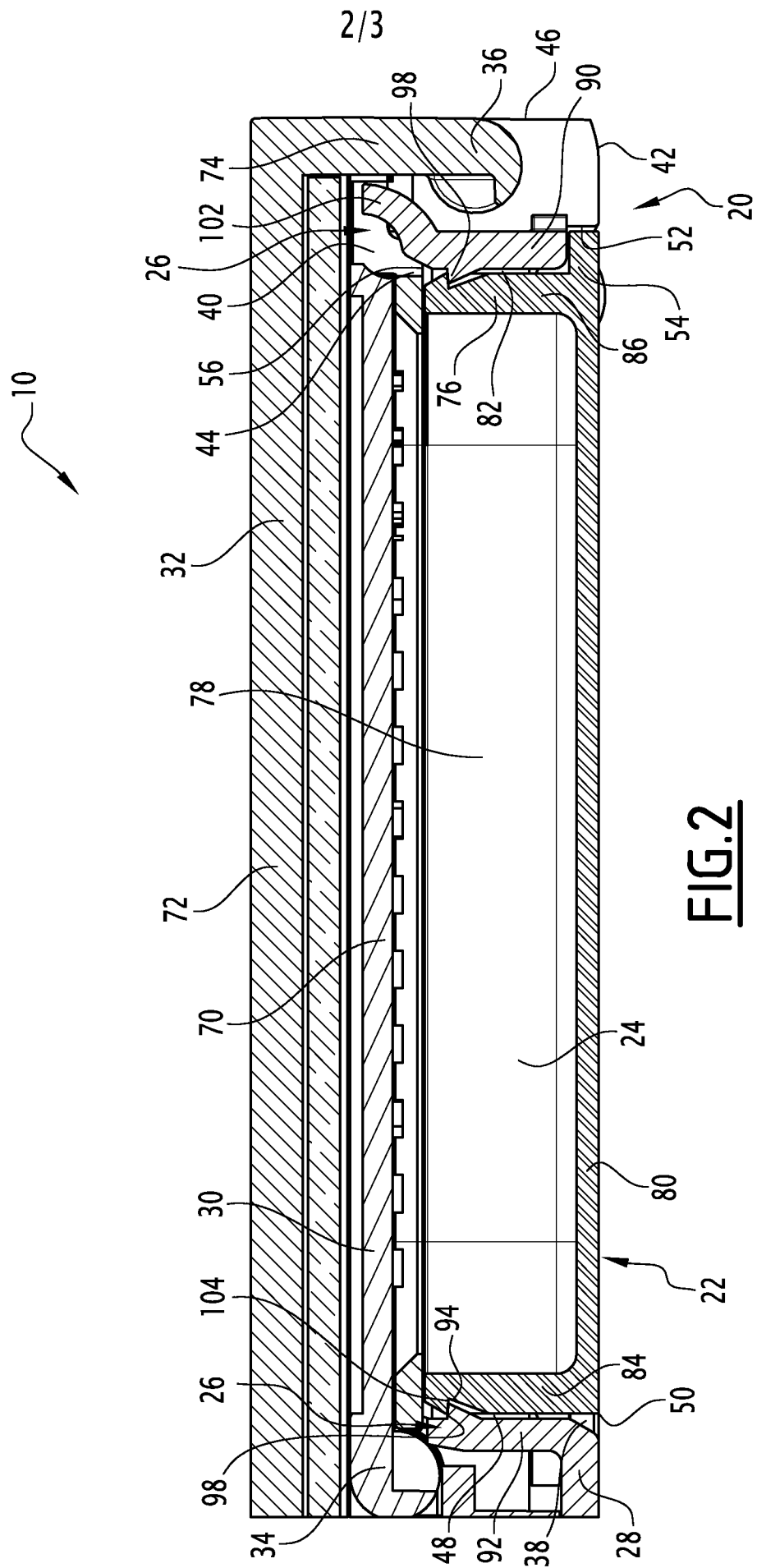
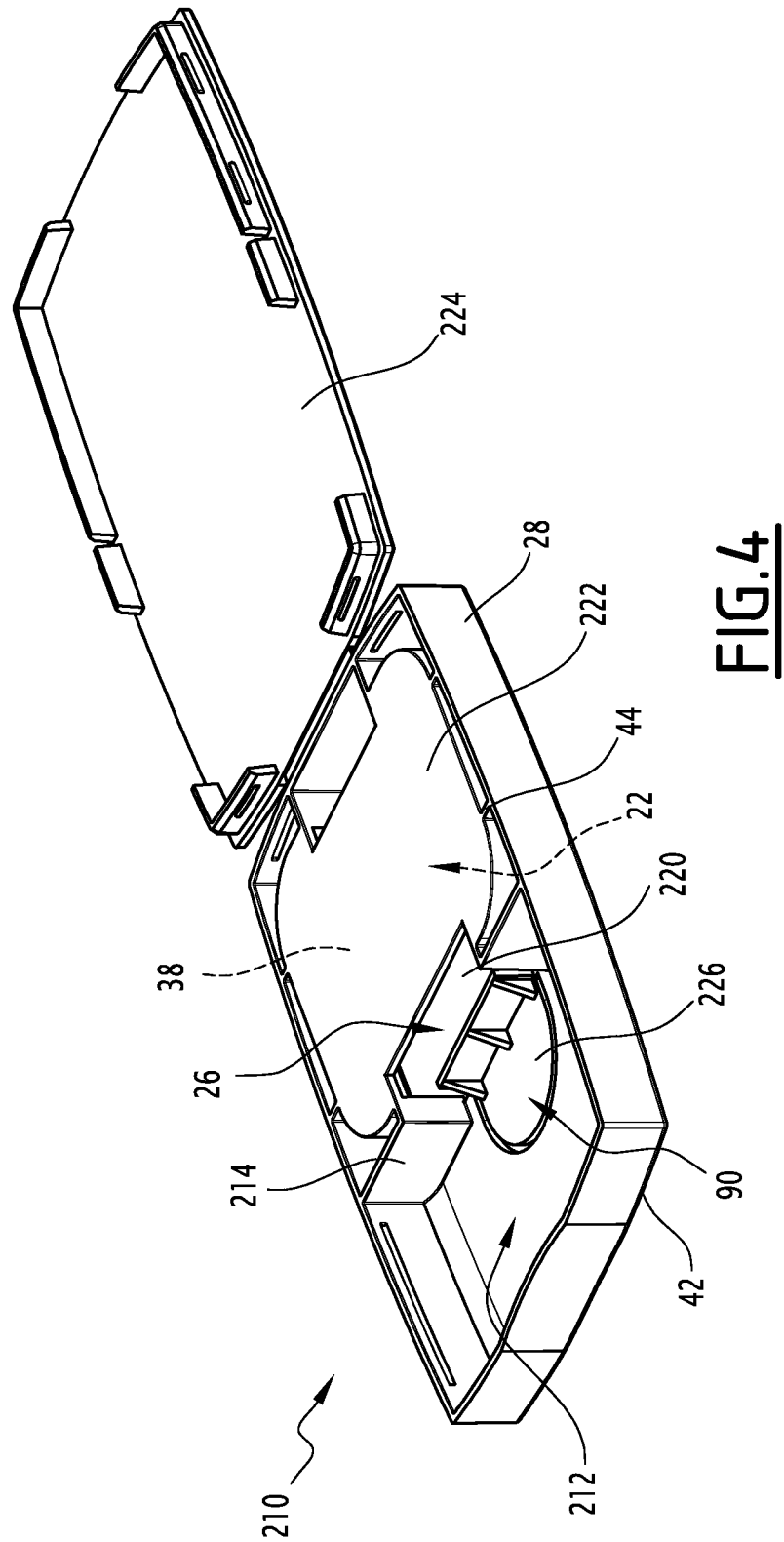


FIG. 2



INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2015/057601

A. CLASSIFICATION OF SUBJECT MATTER
INV. A45D33/00
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A45D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 876 256 A1 (OREAL) 14 April 2006 (2006-04-14)	1,2,4-6, 8-10, 12-14
A	page 8, line 28 - page 17, line 2 figures 1-6	3,7,11
A	----- WO 2007/045061 A1 (NATURACOSMETICOS S A) 26 April 2007 (2007-04-26) the whole document -----	1-14



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

3 June 2015

Date of mailing of the international search report

11/06/2015

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Witkowska-Piela, A

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2015/057601

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2876256	A1	14-04-2006	NONE

WO 2007045061	A1	26-04-2007	BR PI0504830 A 23-10-2007
		CA 2624982 A1	26-04-2007
		EP 1947977 A1	30-07-2008
		US 2008230436 A1	25-09-2008
		WO 2007045061 A1	26-04-2007
