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(54) **A METHOD FOR MAKING A COMPOSITE ITEM INCLUDING A POURED COSMETIC PRODUCT AND A DECORATIVE ELEMENT**

VERFAHREN ZUR HERSTELLUNG EINES VERBUNDARTIKELS MIT EINEM GIESSBAREN KOSMETIKPRODUKT UND EINEM ZIEROBJEKT

PROCÉDÉ DE FABRICATION D'UN ARTICLE COMPOSITE COMPORTANT UN PRODUIT COSMÉTIQUE COULÉ ET UN ÉLÉMENT DÉCORATIF

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EP 2 001 322 B1

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to a method for making a composite item comprising at least one cast (i.e. poured) cosmetic product and at least one solid decorative element such as a stone, crystal, or gem.

PRIOR ART

[0002] It is known in the art to decorate the visible surfaces of a cosmetic product with foreign materials that are not noxious to the end user, such as inks having cosmetically acceptable pigments and/or colorants, or foreign cosmetic products in order to make the cosmetic product more appealing to the customer.

[0003] For example, the French patent FR 2.759.941, in the name of CHRISTIAN DIOR, describes a method for ink-jet printing decorative patterns on the surface of a solid cosmetic product. Particularly, the ink used comprises cosmetically acceptable pigments and/or colorants and the cosmetic product can be a lipstick.

[0004] This method by DIOR, though being rather effective in the flexibility of use, however, results in the decorative patterns being provided on the cosmetic product only on the surface thereof. Consequently, after a few uses of the cosmetic products these patterns will fade, and furthermore the surface on which this print is carried out is required to be substantially flat, or at least smooth.

[0005] The decorated cosmetic products known in the art can also be in the form of composite items in which a different decorative cosmetic product is associated with a base cosmetic product by means of mechanical or chemical bonds (such as gluing).

[0006] The Spanish patent application ES 2.027.585 in the name of AVON relates to a method for incorporating suitably shaped decorative cosmetic products within a base cosmetic product, such as cast in a mould and then solidified. In this case, the method by AVON provides that the decorative product, though being of a different colour from the base cosmetic product, has the same composition of the latter and is previously cast, within a suitable removable mask, within the mould intended for the casting of the base cosmetic product. After this decorative cosmetic product has solidified, the latter adheres to the inner walls of the mould, and at this stage, according to the AVON method, the mask can be removed and the base cosmetic product can be cast within the mould, such that the decorative cosmetic product is incorporated within the base product.

[0007] While the method in the patent application ES 2.027.585 allows obtaining suitably shaped decorations within a cast cosmetic product, it however imposes considerable restrictions to the type of decorative material to be used.

[0008] In fact, the method by AVON assumes that the decorative cosmetic product has the same composition

as the base cosmetic product and that this decorative cosmetic product can adhere, after it has solidified, to the inner walls of the mould for the base cosmetic product. With the method by AVON, when the decorative cosmetic product does not sufficiently adhere to the mould of the base cosmetic product, obviously, the achievement of the decoration in the finished product can be compromised.

[0009] Furthermore, the method by AVON teaches to make decorations that are always substantially flush with the outer surface of the base cosmetic product, without providing for these decorations to be made in relief relative to the latter.

[0010] In the Registered Community Design No. RCD 000120316, the Applicant has finally suggested to couple, such as by means of gluing, solid decorative elements, such as for example objects of glass, crystal or stones, either semiprecious or precious, with a base cosmetic product, of the type preferably obtained by pressing cosmetic powders or by means of extrusion and solidification of an initial cosmetic slurry.

[0011] These composite items, illustrated in the document RCD 000120316, do not contemplate the coupling of solid decorative elements to cast (i.e. poured) cosmetic products, such as for example lipsticks or glosses, since in this case problems may arise concerning the stability of the bond between the solid decorative element and the cast cosmetic product.

[0012] EP-A-1285858 to L'OREAL refers to a device for mounting a decorative item that can be associated with a container containing a cosmetic or a care product. EP-A-1285858 is silent about directly associating a decorative item to a cosmetic product.

[0013] WO-A-2007-072149 to GAMMA CROMA, filed before the present Patent, but published thereafter, relates to a composite item comprising a cosmetic product and a decorative element.

[0014] It is thus an object of the present invention to propose a method for making a composite item comprising a cast base cosmetic product and a solid decorative element that does not suffer from the drawback of the prior art, and thus allows a firm coupling of a solid decorative element to a cast cosmetic product, even when the materials of the decorative element and cosmetic product are essentially different from each other.

[0015] Another object of the present invention is to provide a method for making a composite item comprising a cast cosmetic product and a solid decorative element, which is simple to implement, allows the solid decorative element to possibly protrude from the cosmetic product surface and ensures a firm coupling of this cosmetic product and decorative element, even when the latter is an object made of glass, crystal, stone, plastics or any other non-cosmetic material.

[0016] Yet another object of the present invention is to provide an equipment for implementing the method claimed herein to provide a composite item of the type described above.

Summary of the Invention

[0017] These and other objects are achieved by means of the method according to the first independent claim and the subsequent claims depending thereon, and by the equipment for implementing the same according to the fourteenth independent claim, and the subsequent claims depending thereon.

[0018] The method for making a composite item comprising at least one cast (i.e. poured) cosmetic product within a filling volume defined by the inner walls of a mould, and subsequently solidified, and at least one solid decorative element, according to the present invention, comprises the steps of:

- a. holding, due to suitable holding means, the solid decorative element at a portion of an inner wall of the mould for the cast cosmetic product such that the solid decorative element projects at least partially within said filling volume;
- b. then pouring the cast cosmetic product, substantially in the liquid state, within the mould until when this filling volume is reached;
- c. solidifying the cosmetic product;
- d. removing the solidified cosmetic product from the mould after said step of holding the solid decorative element has been completed.

[0019] The use of the method according to the present invention, as will be understood from the description below of a particular embodiment thereof, thanks to the holding, preferably mechanically or fluidically, of the decorative element to the mould for the cast cosmetic product allows a solid decorative element to be easily incorporated to a cast (i.e. poured) cosmetic product by means of shape-coupling, without requiring the decorative element material to be the same as that of the cast product, or the decorative element to be flush with the outer surface of the cosmetic product.

[0020] It should be observed that, herein and below, by the term "solid decorative element", it is meant any solid element, such as a stone or crystal or an object made of plastic or glass, substantially different from the cast cosmetic product with which it is associated, and which is in the solid state also and mainly during the casting of this cosmetic product. This solid decorative element can thus be held to, such as mechanically or preferably by means of suction, a portion of the inner surface of mould for said cast cosmetic product, and it is not substantially subjected to deformations or breakage upon casting (pouring) of the latter.

[0021] According to a preferred aspect of the present invention, the method provides that the solid decorative element is first bonded, and usually fixed, to a support made of plastics provided with a portion shaped to be anchored to the cosmetic product, when the latter, after it has solidified, completely wraps this anchorage portion. Due to the plastic support, that is for instance thermo-

formed, it is obtained both a firmer anchorage between the solid decorative element and the finished cosmetic product, and, also as a function of the shape of this support, a possible simplification of the mechanical, magnetic or fluid hold of the solid decorative element at a wall of the mould for the cosmetic product, when the latter is being cast.

[0022] According to another aspect of the present invention, the method provides that the solid decorative element is held at an inner surface portion of the mould for the cosmetic product, due to fluid suction holding means, which provide that at least one through hole is formed within the inner surface of the mould.

[0023] The above-cited assembly of the fluid suction holding means and of the complementary mould for casting the cosmetic product are a particular embodiment of the equipment claimed herein.

BRIEF DESCRIPTION OF THE DRAWINGS

[0024] A preferred embodiment of the method according to the present invention, and an equipment therefor will be now described by way of non-limiting example, with the aid of the annexed figures, in which:

- Fig. 1a-1f schematically illustrate a preferred embodiment of the method for making a composite item according to the present invention;
- Fig. 2 illustrates a composite item obtained by means of the method of the present invention; and
- Fig. 3 show a side sectional view of a particular support for the solid decorative element that can be also used in the method in Fig. 1a-1f.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT OF THE PRESENT INVENTION

[0025] With general reference to Fig. 1a-1f, the method of the present invention for making a composite item comprising a cast cosmetic product 10 for make up, such as a lipstick, gloss, or a cosmetic composition for the eye contour area, etc., and a solid decorative element 1, in brief, provides the steps of:

- a) opening the mould 3a, 3b for the cast cosmetic product 10, or however gain access to the inner walls 5a, 5b of at least one half-mould 3a, in order to place said solid decorative element 1 in a predetermined portion of these inner walls 5a, 5b;
- b) holding (Fig. 1) by means of suitable holding means 4, a solid decorative element 1, at a portion of at least one inner wall 5a of a mould 3a, 3b for the cast cosmetic product 10; then
- c) closing (Fig. 1 d, 1 e) the mould 3a, 3b such that a filling volume 6 is defined within the latter for the cosmetic product 10; then
- d) casting the cosmetic product 10, in the liquid state, within the filling volume 6, while holding the decora-

tive element 10 (Fig. 1e); and finally
 e) leaving the cosmetic product 10 to solidify, releasing the hold of the solid decorative element 1, reopening the mould 3a, 3b and removing the cosmetic product 10 to insert the latter within a suitable container, or base, 9 (Fig. 1f).

[0026] With reference to the preferred embodiment of the method according to the present invention, illustrated in Fig. 1a-1f, this embodiment provides a first step (Fig. 1a and 1b) of placing and bonding a solid decorative element 1, such as a crystal, glass or stone, either precious or semiprecious, or any other object desired to be incorporated within the finished item, to a respective support 2, preferably made of a thermo-formed plastic material.

[0027] The bond between the decorative element 1 and the support 2, which bond preferably causes the two entities 1 and 2 to be integral to each other, can be obtained by gluing the latter, or as shown in Fig. 3, by means of a shape-coupling between a duly shaped rest portion 8 of the support 2 and a corresponding engaging portion of the decorative element 1.

[0028] In particular, when the support 2 is used, as shown in Fig. 3, this support 2 comprises a rest portion 8, having a substantially cylindrical development with a circular base, provided with an inner seat having at least one elastically-deformable edge, which allows the snap-fitting and subsequent integral mechanical hold of a complementary outer surface portion of the decorative element 1, such as to substantially mount the latter within the rest portion 8.

[0029] As may be seen in Fig. 3, the rest portion 8 of the support 2 allows the decorative element 1 to partially project in a protruding manner from the upper surface of the support 2.

[0030] The support 2 also comprises an anchorage portion 7, which is intended to be incorporated within the cosmetic product 10 during the casting and subsequent solidification of the latter, and as in the embodiment in Fig. 3, it can consist of a sort of circular flange placed at the base of said rest portion 8.

[0031] Finally, the support 2, according to a preferred aspect of the present invention can be preferably made by thermoforming a plastic material, or alternatively, by means of any other suitable method and material (such as by forging a metallic material) which allows the bond between the decorative element 1 and the support 2 and between the latter and the cosmetic product 10.

[0032] It should be observed that, while a support 2 has been described above which is provided with a rest portion 8 shaped such as to allow the mechanical hold of the decorative element 1, any other shape of this rest portion 8 which allows bonding, also by gluing, this decorative element 1 to the support 2 can be alternatively used.

[0033] Similarly, the support 2 can provide any other shape of the anchorage portion 7, such as for example the provision of wings or bent portions or the like, which

allows the support 2 to be firmly bonded to the cosmetic product 10, once the latter, after casting (i.e. pouring), has solidified about this anchoring portion 7.

[0034] Naturally, in the absence of the support 2 provided with anchorage portion 7, the decorative element 1 can be shaped such as to have an anchorage portion relative to the cosmetic product 1, such as projecting parts intended to be coated by the cosmetic product 1 after it has been cast and solidified.

[0035] In the particular embodiment of the method of the present invention as illustrated in Fig. 1a-1f, once the solid decorative element 1 has been integrally bonded to the support 2, the latter is placed (Fig. 1c) on a portion of an inner wall 5a of a half-mould 3a, which portion is duly provided with mechanical, magnetic (in the case of support 2 or decorative element 1 made of metallic material) and/or fluid holding means 4, such as to allow a subsequent step of holding the decorative element 1, and support 2 thereof, to this inner wall 5a of the half-mould 3a.

[0036] Particularly, the half-mould 3a, which, with the complementary half-mould 3b, defines an inner volume 6 to be filled with the cosmetic product 10 in the substantially liquid state (also with high viscosity), is provided with holding means for the decorative element 1 comprising, in the particular embodiment shown herein, a through hole 4 connecting the inner volume 9 of the mould 3a, 3b, when assembled, to the external environment. The through hole 4 can be connected to, at an outlet section 11b thereof, a suitable machine for generating a suction fluid flow (not shown), such a way that the decorative element 1, by resting at the opposite inlet section 11a of the hole 4, allows this decorative element 1 to be held to the inner wall 5a of the half-mould 3a by suction.

[0037] The assembly of the mould 3a, 3b provided with mechanic and/or preferably fluid suction 4 holding means on at least part of an inner wall 5a thereof, constitutes the equipment for making a composite item of the type described herein, according to the method of the present invention.

[0038] This equipment, as stated above, preferably comprises a through hole 4 that is formed within a portion of an inner wall 5a of the mould 3a, 3b, which is fluidically fastened, at a section 11b thereof, to a machine (not shown) for generating a suction fluid (air) flow and has a fluid flow inlet section 11a that is shaped such as to hold said decorative element 1 substantially in a sealed manner in correspondence to at least one surface portion thereof.

[0039] Thereby, the suction intended to hold the decorative element 1 in the desired position within the filling volume 6, does not interfere with the casting of the cosmetic product 10 within the volume 6.

[0040] It should be noted that mechanical means (not shown), such as staples or clips can be alternatively used, this being however a more complicated use, which are shaped to hold the solid decorative element 1, or the support 2 thereof, to the wall 5a of the half-mould 3a

during the casting and solidification of the cosmetic product 10.

[0041] As may be seen in Fig. 1d, the decorative element 1 is substantially fixed to the surface 5a of the half-mould 3a at the part thereof which is desired to be viewed in the finished composite item and is also placed to project only partially within the filling volume 6 of the mould 3a, 3b. In this case, the anchorage portion 7 of the support 2 for the decorative element 1 completely projects within the filling volume 6, such as to be completely surrounded by the cosmetic product 10 during the casting and subsequent solidification of the latter.

[0042] After the two half-moulds 3a, 3b have been closed to form said inner filling volume 6 (Fig. 1e) and holding the solid decorative element 1 locked, with the support 2 thereof, at the inlet section 11a of the through hole 4 on the wall 5a of the half-mould 3a, the method described herein provides a step of casting the cosmetic product 10 in the liquid state, within the inner volume 6.

[0043] Therefore, after the inner volume 6 has been completely filled with the cosmetic product 10 in the liquid state, thereby at least partially wrapping the decorative element 1, and on the other hand completely wrapping the anchorage portion 7 of the support 2 for the decorative element 1, the inflow of the cosmetic product 1 is interrupted and the latter is then left to solidify.

[0044] As may be seen in Fig. 1f, which illustrates a sectional side view of the finished composite item, after the solidification has been completed, also due to the shape and spatial arrangement of the support 2 and thus of the decorative element 1, the support 2 is almost completely drowned within the cosmetic product 10, such that the anchorage portion 7 thereof results to be held within the product 10 and counteracts any thrust which is intended to detach the decorative element 1 from the cosmetic product 10. In the meanwhile, at least one surface portion of the decorative element 1 projects from the outer side surface of the cosmetic product 10, such as to be well visible from the outside.

[0045] Finally, as shown also in Fig. 1f and 2, the finished composite item, a lipstick in the present case, is removed from the mould 3a, 3b after the hold by suction of the decorative element 1 has been released, and then it is inserted within a suitable container, or a base of the lift mechanism 9, intended for the end user. The container, or base 9, can be duly shaped to allow the decorative element 1 to be viewed by the end user, also upon use of the cosmetic products 10.

[0046] It should be observed that in the particular embodiment of the method according to the present invention illustrated herein in Fig. 1a-1f, it is not required to use any glue to hold the solid decorative element 1 on a part of the outer side surface of the cosmetic product 10, because, also due to the particular shape of the support 2, this decorative element 1 is mechanically fastened by shape-coupling to the rest portion 8 of the support 2 and the latter, due to the anchorage portion thereof is, in turn, firmly fastened to the product 10, when it has solidified.

[0047] Thereby, in addition to the fact that the composite item described herein does not provide the use of potentially dangerous foreign materials, such as glues, the decorative element 1 can be quite easily removed from its housing within the cosmetic product 10, for example by means of simple thrust mechanical actions by the end user, who can thus hold the decorative element 1 even when he/she has finished using the cosmetic product 10.

Claims

1. A method for making a composite item comprising at least one cast cosmetic product (10) within a filling volume (6) defined by the inner walls (5a, 5b) of a mould (3a, 3b), and subsequently solidified, and at least one solid decorative element (1), *said at least one solid decorative element (1) comprising a portion thereof that is shaped for anchorage to said cast cosmetic product (10) or said at least one solid decorative element (1) being preliminary fastened to a corresponding support (2) that has at least one shaped portion (7) to anchoring said support (2) within said at least one cast cosmetic product after it has solidified*, the method comprising the steps of:

- a. holding said at least one solid decorative element (1) at a portion of an inner wall (5a) of the mould for said cast cosmetic product, said at least one solid decorative element at least partially projecting within said filling volume (6);
- b. pouring said at least one cast cosmetic product (10) within the mould until when said filling volume has been filled;
- c. solidifying said at least one cosmetic product;
- d. removing said at least one solidified cosmetic product from said mould, after said step of holding said at least one solid decorative element (1) has been completed.

2. The method according to claim 1, **characterized in that** prior to said step of holding said at least one solid decorative element, a step is provided of fastening said at least one solid decorative element (1) to a corresponding support (2).

3. The method according to claim 2, **characterized in that** said support comprises at least one shaped portion (7) to anchoring said support within said at least one cast cosmetic product, after it has solidified.

4. The method according to claim 3, **characterized in that** during said step of holding said at least one solid decorative element, said anchorage portion (7) projects within said filling volume.

5. The method according to any claim 2, 3 or 4, wherein

said support comprises at least one rest portion (8) for fastening said at least one solid decorative element.

6. The method according to claim 5, wherein said at least one rest portion is shaped to allow the mechanical hold of said at least one solid decorative element. 5
7. The method according to claim 1, wherein said at least one solid decorative element (1) comprises a portion thereof that is shaped for anchorage to said cast cosmetic product (10). 10
8. The method according to any preceding claim, wherein said step of holding said at least one solid decorative element at a portion of the inner surface of said mould is provided by means of mechanical and/or magnetic and/or fluid suction holding means. 15
9. The method according to any preceding claim, wherein said at least one solid decorative element is held at a portion of the inner walls of said mould such as to only partially project within said filling volume. 20
10. The method according to any preceding claim, **characterized in that** it comprises a subsequent step of inserting said at least one cosmetic product within a respective container or base. 25
11. The method according to any preceding claim, wherein said at least one solid decorative element is selected from semiprecious stones, precious stones, glass, crystal, objects made of plastic or metallic material. 30
12. The method according to any preceding claim, wherein said at least one cast cosmetic product is a product for make-up. 35
13. The method according to any preceding claim, wherein said at least one support is made of plastics. 40
14. An equipment for making a composite item comprising at least one cast cosmetic product (10) and at least one solid decorative element (1), *said at least one solid decorative element (1) comprising a portion thereof that is shaped for anchorage to said cast cosmetic product (10) or said at least one solid decorative element (1) being preliminary fastened to a corresponding support (2) that has at least one shaped portion (7) to anchoring said support (2) within said at least one cast cosmetic product after it has solidified*, the equipment being provided with a mould (3a, 3b), of which the inner walls (5a, 5b) define at least one filling volume (6) therein for said cosmetic product (10), said equipment being **characterized in that** it comprises means for the me- 45

chanical and/or magnetic and/or fluid holding of said at least one solid decorative element (1) in correspondence to at least one portion of an inner wall (5a) of said mould (3a, 3b).

15. The equipment according to claim 14, **characterized in that** said holding means are fluid suction means. 5
16. The equipment according to claim 15, wherein said fluid aspiration means comprise at least one through hole (4) formed within a portion of an inner wall (5a) of said mould (3a, 3b), said through hole being fluidically connected to a machine for generating a suction fluid flow. 10
17. The equipment according to claim 16, wherein said at least one through hole (4) has an inlet section for the sucked fluid flow that is shaped such as to hold at least one surface portion of said at least one decorative element (1) in a substantially sealed manner. 15
18. A support (2) for a solid decorative element (1) intended to provide a composite item with at least one cast cosmetic product (10), according to the method of any claim 1 to 13, said support comprising at least one rest portion (8) for said solid decorative element (1) and at least one anchorage portion (7) within said cosmetic product (10), **characterized in that** said at least one rest portion is shaped to mechanically hold, by means of shape-coupling, said solid decorative element (1). 20
19. The support according to claim 18, wherein at least said rest portion (8) comprises a seat for a portion of said decorative element (1), said seat having at least one elastically deformable edge. 25
20. The support according to claim 18 or 19, **characterized in that** it is made of a plastic material for thermoforming. 30

Patentansprüche

1. Verfahren zur Herstellung eines Verbundartikels, umfassend zumindest ein gegossenes Kosmetikprodukt (10) innerhalb eines Füllvolumens (6), das durch die Innenwände (5a, 5b) einer Form (3a, 3b) definiert wird, das anschließend verfestigt wurde, und wenigstens ein festes Zierelement (1), wobei das wenigstens eine feste Zierelement (1) einen Teil umfasst, der zur Verankerung an dem gegossenen Kosmetikprodukt (10) geformt ist, oder das wenigstens eine feste Zierelement (1) vorausgehend an einem entsprechenden Träger (2) befestigt wurde, der wenigstens einen geformten Teil (7) hat, um den Träger (2) in dem wenigstens einen gegossenen 45

Kosmetikprodukt zu verankern, nachdem es sich verfestigt hatte, und wobei das Verfahren die folgenden Schritte umfasst:

- a. Halten des zumindest einen festen Zierelements (1) an einem Teil einer Innenwand (5a) der Form für das gegossene Kosmetikprodukt, wobei das wenigstens eine feste Zierelement wenigstens teilweise in das Füllvolumen (6) vorsteht; 5
 - b. Gießen des wenigstens einen gegossenen Kosmetikprodukts (10) in die Form, bis das Füllvolumen gefüllt ist; 10
 - c. Verfestigen des wenigstens einen Kosmetikprodukts; 15
 - d. Entfernen des wenigstens einen verfestigten Kosmetikprodukts aus der Form, nachdem der Schritt des Haltens des wenigstens einen festen Zierelements (10) beendet wurde. 20
2. Verfahren gemäß Anspruch 1, **dadurch gekennzeichnet, dass** vor dem Schritt des Haltens des wenigstens einen festen Zierelements ein Schritt des Befestigens des wenigstens einen festen Zierelements (1) an einem entsprechenden Träger (2) bereitgestellt wird. 25
 3. Verfahren gemäß Anspruch 2, **dadurch gekennzeichnet, dass** der Träger wenigstens einen geformten Teil (7) umfasst, um den Träger in dem wenigstens einen gegossenen Kosmetikprodukt zu verankern, nachdem es sich verfestigt hat. 30
 4. Verfahren gemäß Anspruch 3, **dadurch gekennzeichnet, dass** während des Schritts des Haltens des wenigstens einen festen Zierelements der Verankerungsteil (7) in das Füllvolumen vorsteht. 35
 5. Verfahren gemäß einem der Ansprüche 2, 3 oder 4, wobei der Träger wenigstens einen Auflageteil (8) zum Befestigen des wenigstens einen festen Zierelements umfasst. 40
 6. Verfahren gemäß Anspruch 5, wobei der wenigstens eine Auflageteil das mechanische Halten des wenigstens einen festen Zierelements erlaubt. 45
 7. Verfahren gemäß Anspruch 1, wobei das wenigstens eine feste Zierelement (1) einen Teil umfasst, der zur Verankerung an das gegossene Kosmetikprodukt (10) geformt ist. 50
 8. Verfahren gemäß einem vorangehenden Anspruch, wobei der Schritt des Haltens des wenigstens einen Zierelements an einem Teil der Innenseite der Form mit Hilfe eines mechanischen und/oder magnetischen und/oder Fluidsaughaltemittels erreicht wird. 55
 9. Verfahren gemäß einem vorangehenden Anspruch, wobei das wenigstens eine feste Zierelement an einem Teil der Innenwände der Form so gehalten wird, dass es nur teilweise in das Füllvolumen vorsteht.
 10. Verfahren gemäß einem vorangehenden Anspruch, **dadurch gekennzeichnet, dass** es einen nachfolgenden Schritt des Einsetzens des wenigstens einen Kosmetikprodukts in einen entsprechenden Behälter oder eine entsprechende Basis umfasst.
 11. Verfahren gemäß einem vorangehenden Anspruch, wobei das wenigstens eine feste Zierelement aus Halbedelsteinen, Edelsteinen, Glas, Kristall, Gegenständen, die aus Kunststoff- oder Metallmaterial hergestellt sind, ausgewählt wird.
 12. Verfahren gemäß einem vorangehenden Anspruch, wobei das wenigstens eine gegossene Kosmetikprodukt ein Produkt für Make-up ist.
 13. Verfahren gemäß einem vorangehenden Anspruch, wobei der wenigstens eine Träger aus Kunststoff besteht.
 14. Vorrichtung zur Herstellung eines Verbundartikels, umfassend wenigstens ein gegossenes Kosmetikprodukt (10) und wenigstens ein festes Zierelement (1), wobei das wenigstens eine feste Zierelement (1) einen Teil umfasst, der zur Verankerung in dem gegossenen Kosmetikprodukt (10) geformt ist, oder das wenigstens eine feste Zierelement (1) vorher an einem entsprechenden Träger (2) befestigt wird, der wenigstens einen geformten Teil (7) hat, um den Träger (2) in dem wenigstens einen gegossenen Kosmetikprodukt zu verankern, nachdem es sich verfestigt hat, wobei die Vorrichtung mit einer Form (3a, 3b) versehen ist, deren Innenwände (5a, 5b) wenigstens ein Füllvolumen (6) darin für das Kosmetikprodukt (10) definieren, wobei die Vorrichtung **dadurch gekennzeichnet ist, dass** sie Mittel für das mechanische und/oder magnetische und/oder Fluidhalten des wenigstens einen festen Zierelements (1) in Übereinstimmung mit wenigstens einem Teil einer Innenwand (5a) der Form (3a, 3b) umfasst.
 15. Vorrichtung gemäß Anspruch 14, **dadurch gekennzeichnet, dass** die Haltemittel Fluidsaugmittel sind.
 16. Vorrichtung gemäß Anspruch 15, wobei das Fluidabsaugmittel wenigstens ein Durchgangsloch (4) umfasst, das in einem Teil einer Innenwand (5a) der Form (3a, 3b) ausgebildet ist, wobei das Durchgangsloch in Fluidverbindung mit einer Maschine zur Erzeugung eines Saugfluidstroms ist.
 17. Vorrichtung gemäß Anspruch 16, wobei das wenigstens eine Durchgangsloch (4) einen Einlassab-

schnitt für den angesaugten Fluidstrom hat, das so geformt ist, dass es wenigstens einen Oberflächen-
teil des wenigstens einen Zierelements (1) in einer im Wesentlichen abgedichteten Art hält.

18. Träger (2) für ein festes Zierelement (1), der dazu bestimmt ist, einen Verbundartikel mit wenigstens einem gegossenen Kosmetikprodukt (10) gemäß dem Verfahren gemäß einem der Ansprüche 1 bis 13 bereitzustellen, wobei der Träger wenigstens einen Auflageteil (8) für das feste Zierelement (1) und wenigstens einen Verankerungsteil (7) in dem Kosmetikprodukt (10) umfasst, **dadurch gekennzeichnet, dass** der wenigstens eine Auflageteil so geformt ist, dass er mittels Formverbindung das feste Zierelement (1) hält.
19. Träger gemäß Anspruch 18, wobei wenigstens der Auflageteil (8) einen Sitz für einen Teil des Zierelements (1) umfasst, wobei der Sitz wenigstens einen elastisch verformbaren Rand hat.
20. Träger gemäß Anspruch 18 oder 19, **dadurch gekennzeichnet, dass** er aus einem Kunststoffmaterial zur Wärmeformung hergestellt ist.

Revendications

1. Procédé pour préparer un article composite comprenant au moins un produit cosmétique coulé (10) à l'intérieur d'un volume de remplissage (6) défini par les parois intérieures (5a, 5b) d'un moule (3a, 3b) et ensuite solidifié, et au moins un élément décoratif solide (1), ledit au moins un élément décoratif solide (1) comprenant une partie de celui-ci qui est mise sous une forme permettant l'ancrage audit produit cosmétique coulé (10), ou bien ledit au moins un élément décoratif solide (1) ayant été au préalable fixé à un support correspondant (2) qui a au moins une partie (7) mise sous une forme permettant l'ancrage dudit support (2) à l'intérieur dudit au moins un produit cosmétique coulé après sa solidification, le procédé comprenant les étapes consistant à :
 - a. maintenir ledit au moins un élément décoratif solide (1) au niveau d'une partie d'une paroi intérieure (5a) du moule pour ledit produit cosmétique coulé, ledit au moins un élément décoratif solide faisant saillie au moins partiellement à l'intérieur dudit volume de remplissage (6) ;
 - b. verser ledit au moins un produit cosmétique coulé (10) à l'intérieur du moule jusqu'à ce que ledit volume de remplissage ait été rempli ;
 - c. solidifier ledit au moins un produit cosmétique ;
 - d. retirer ledit au moins un produit cosmétique solidifié hors du moule après que ladite étape

de maintien dudit au moins un élément décoratif solide (1) a été achevée.

2. Procédé selon la revendication 1, **caractérisé en ce qu'**avant ladite étape de maintien dudit au moins un élément décoratif solide, est prévue une étape consistant à fixer ledit au moins un élément décoratif solide (1) à un support (2) correspondant.
3. Procédé selon la revendication 2, **caractérisé en ce que** ledit support comprend au moins une partie (7) mise sous une forme permettant l'ancrage dudit support à l'intérieur dudit au moins un produit cosmétique coulé, après sa solidification.
4. Procédé selon la revendication 3, **caractérisé en ce que**, durant ladite étape de maintien dudit au moins un élément décoratif solide, ladite partie d'ancrage (7) fait saillie à l'intérieur dudit volume de remplissage.
5. Procédé selon l'une quelconque des revendications 2, 3 et 4, dans lequel ledit support comprend au moins une partie d'appui (8) pour la fixation dudit au moins un élément décoratif solide.
6. Procédé selon la revendication 5, dans lequel ladite au moins une partie d'appui est mise sous une forme permettant le maintien mécanique dudit au moins un élément décoratif solide.
7. Procédé selon la revendication 1, dans lequel ledit au moins un élément décoratif solide (1) comprend une partie de celui-ci qui est mise sous une forme permettant un ancrage audit produit cosmétique coulé (10).
8. Procédé selon l'une quelconque des revendications précédentes, dans lequel ladite étape de maintien dudit au moins un élément décoratif solide au niveau d'une partie de la surface intérieure dudit moule est réalisée au moyen d'un moyen de maintien mécanique et/ou magnétique et/ou par aspiration de fluide.
9. Procédé selon l'une quelconque des revendications précédentes, dans lequel ledit au moins un élément décoratif solide est maintenu au niveau d'une partie des parois intérieures dudit moule de façon à ne faire saillie que partiellement à l'intérieur dudit volume de remplissage.
10. Procédé selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'**il comprend une étape subséquente consistant à insérer ledit au moins un produit cosmétique à l'intérieur d'un récipient ou base respectif.
11. Procédé selon l'une quelconque des revendications

précédentes, dans lequel ledit au moins un élément décoratif solide est choisi parmi les pierres semi-précieuses, les pierres précieuses, le verre, le cristal, les objets faits en matière plastique ou en métal.

12. Procédé selon l'une quelconque des revendications précédentes, dans lequel ledit au moins un produit cosmétique coulé est un produit de maquillage.

13. Procédé selon l'une quelconque des revendications précédentes, dans lequel ledit au moins un support est fait en matière plastique.

14. Equipement pour préparer un article composite comprenant au moins un produit cosmétique coulé (10) et au moins un élément décoratif solide (1), ledit au moins un élément décoratif solide (1) comprenant une partie de celui-ci qui est mise sous une forme permettant l'ancrage audit produit cosmétique coulé (10), ou bien ledit au moins un élément décoratif solide (1) ayant été au préalable fixé à un support correspondant (2) qui a au moins une partie (7) mise sous une forme permettant l'ancrage dudit support (2) à l'intérieur dudit au moins un produit cosmétique coulé après sa solidification, l'équipement étant pourvu d'un moule (3a, 3b) dont les parois intérieures (5a, 5b) définissent au moins un volume de remplissage (6) dans celui-ci pour ledit produit cosmétique (10), ledit équipement étant **caractérisé en ce qu'il** comprend des moyens pour le maintien mécanique et/ou magnétique et/ou fluide dudit au moins un élément décoratif solide (1) en correspondance avec au moins une partie d'une paroi intérieure (5a) dudit moule (3a, 3b).

15. Equipement selon la revendication 14, **caractérisé en ce que** lesdits moyens de maintien sont des moyens d'aspiration de fluide.

16. Equipement selon la revendication 15, dans lequel lesdits moyens d'aspiration de fluide comprennent au moins un trou traversant (4) formé à l'intérieur d'une partie d'une paroi intérieure (5a) dudit moule (3a, 3b), ledit trou traversant étant en connexion de fluide avec une machine pour générer un courant de fluide d'aspiration.

17. Equipement selon la revendication 16, dans lequel ledit au moins un trou traversant (4) a une section d'entrée pour le courant de fluide aspiré qui est mis sous une forme lui permettant de maintenir au moins une partie de surface dudit au moins un élément décoratif (1) d'une manière sensiblement étanche.

18. Support (2) pour un élément décoratif solide (1) destiné à former un article composite avec au moins un produit cosmétique coulé (10), conformément au procédé de l'une quelconque des revendications 1

à 13, ledit support comprenant au moins une partie d'appui (8) pour ledit élément décoratif solide (1) et au moins une partie d'ancrage (7) à l'intérieur dudit produit cosmétique (10), **caractérisé en ce que** ladite au moins une partie d'appui est mise sous une forme permettant le maintien mécanique, au moyen d'un couplage de formes, dudit élément décoratif solide (1).

19. Support selon la revendication 18, dans lequel au moins ladite partie d'appui (8) comprend un siège pour une partie dudit élément décoratif (1), ledit siège ayant au moins un bord élastiquement déformable.

20. Support selon la revendication 18 ou 19, **caractérisé en ce qu'il** est fait en une matière plastique pour thermoformage.

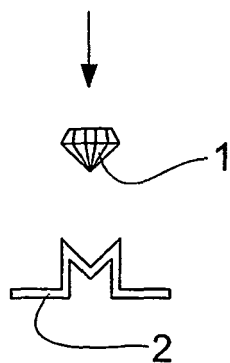


Fig. 1a

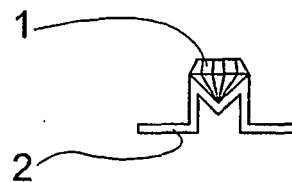


Fig. 1b

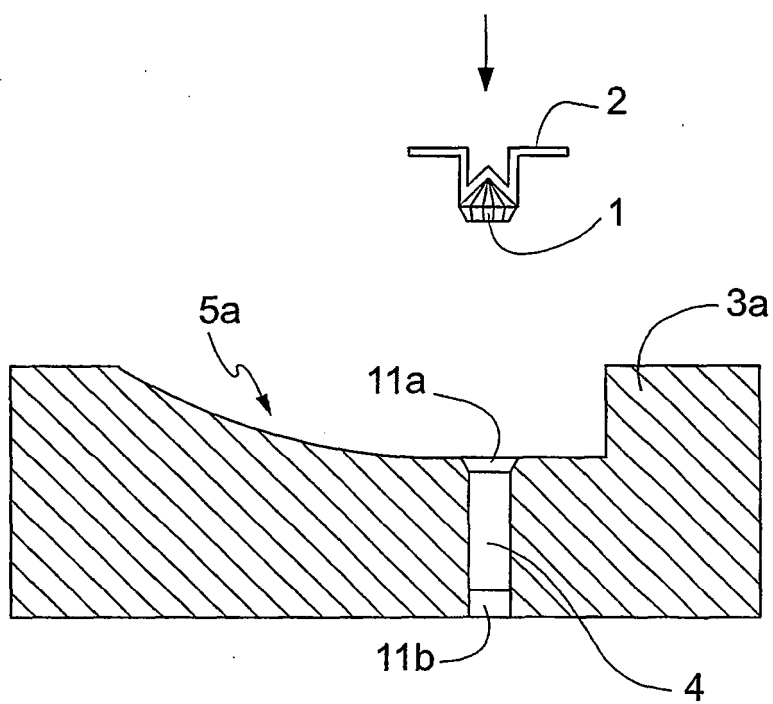


Fig. 1c

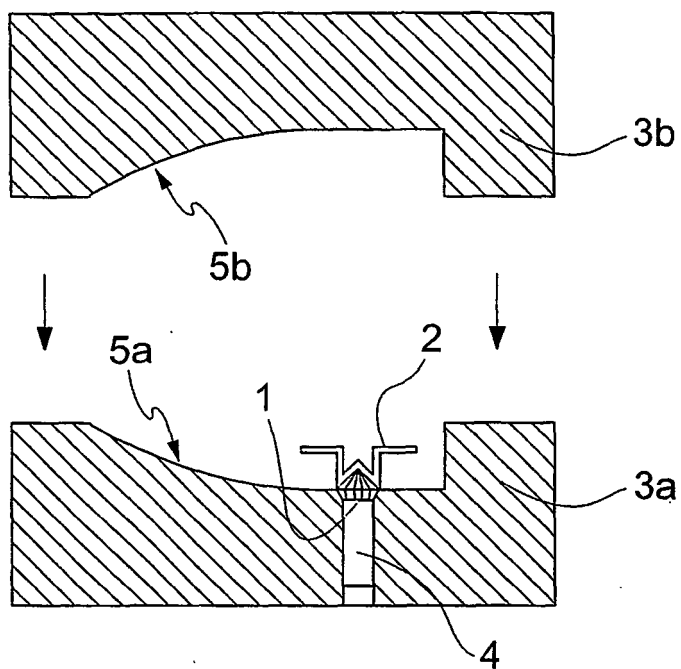


Fig. 1d

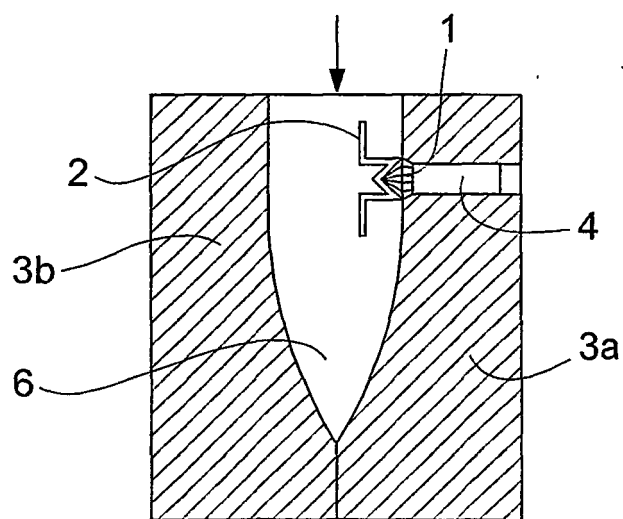


Fig. 1e

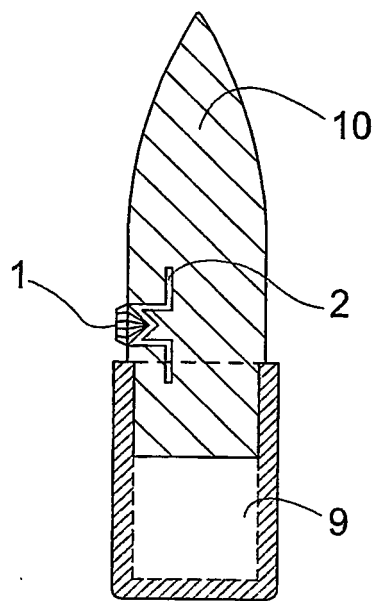


Fig. 1f

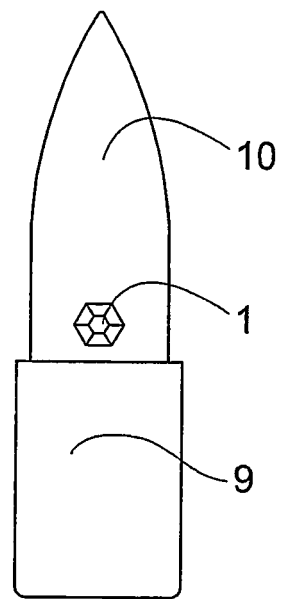


Fig. 2

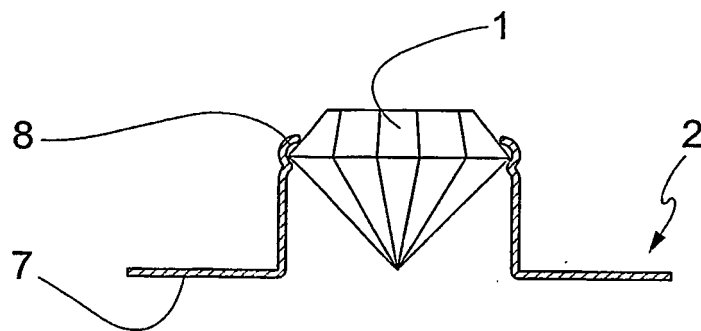


Fig. 3

REFERENCES CITED IN THE DESCRIPTION

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