

METHOD, DEVICE AND KIT PARTICULARLY FOR APPLYING A COSMETIC PRODUCT

Technical Field

The present invention relates to a method for applying any cosmetic
5 substance, to a device for performing the method, and to a kit that comprises the device and the cosmetic substance.

Background Art

Recent progress in the field of the production of cosmetic products
allows to obtain products that are capable of meeting the most specific
10 requirements. However, greater functionalization should be able to find its completion in the possibility to apply the cosmetic product in a site-specific manner, so as to allow the product to perform fully its aesthetic activity in the region of interest.

Nonetheless, improvements in terms of formulation and selectivity so
15 far have not been matched by a parallel development of methods for applying cosmetic products. Manual spreading, the use of perforated containers from which the contents flow out by pressure, or the resort to pencil-like applicators are in fact often still the only solutions used. Because of this situation, in many cases an inappropriate or inadequate application
20 method or device entail an inevitable reduction, or even a complete loss, of the improved functional and formulation qualities of a cosmetic product.

For example, the conventional application of cosmetic products for
makeup can suffer several drawbacks, including limited precision in
application in the case of rigid applicators for eyeliner or breakage of the
25 pasty mass in the case of lipsticks. As regards more specific products, such as anti-wrinkle creams, the inadequacy of conventional application methods is even more conspicuous. The crucial aspect of uniformity of application in terms of both the quantity of product applied and the application site, is in fact usually entrusted to the end-user, who proceeds in a fully empirical
30 manner, applying an amount that in each instance is variable by taking it

manually from the container of the preparation.

In view of this, it is therefore evident that it would be advantageous to be able to apply cosmetic products precisely, accurately, constantly and uniformly both in terms of quantity of applied substance and in terms of
5 application site.

Optimization of the application of a cosmetic product would lead for example to a saving of applied product, to a simplification of the application method, to an overall improvement of the final visual result, which is the ultimate function of any functional or makeup cosmetic product.

10 The aim of the present invention is therefore to provide a method for applying a cosmetic product that overcomes the drawbacks of the background art.

Within this aim, one of the objects is to provide a method that allows to apply any cosmetic product in a repeatable and reproducible manner.

15 Another object is to provide a method as above that allows to apply any cosmetic product in a site-specific manner, in a constant and determinable quantity.

Another object is to provide a method as above that allows to apply any cosmetic product accurately, simply and quickly, achieving an improved
20 final visual effect.

Other objects are to provide a device for performing the method as above and a kit that comprises said device and any cosmetic product for combined application.

Summary of the Invention

25 This aim and these and other objects are achieved by a method for applying a cosmetic product, said method comprising the steps of:

- providing a syringe, which comprises a barrel 1 and a plunger 8;
- providing a hollow needle for external application with a blunt tip;
- providing at least one cosmetic product;
- 30 – applying said at least one cosmetic product on a region of interest

selected among the external surfaces of the human body by using said syringe connected to said needle for external application.

The aim and objects of the invention are also achieved by the use of a syringe that comprises a barrel 1 and a plunger 8 in combination with a
5 hollow needle for external application with a blunt tip, to apply a cosmetic product on a region of interest selected among the external surfaces of the human body.

The aim and objects of the invention are also achieved by a kit for applying a cosmetic product on a region of interest selected among the
10 external surfaces of the human body, said kit comprising: at least one syringe, which comprises a barrel 1 and a plunger 8, at least one hollow needle for external application with a blunt tip, and at least one cosmetic product to be applied.

Detailed Description of the Invention

15 The characteristics of the invention mentioned explicitly only in relation to the method, to the use or to the kit are to be considered valid also with regard to the remaining aspects, although they are not repeated explicitly, if they are applicable thereto.

The expression "hollow needle for external application with blunt tip"
20 is used to designate an element that in practice is also known by the terms cannula, nozzle and application tip, where the choice of the most correct term depends exclusively on the custom of calling said element a needle if it is made of metal, a nozzle or application tip if it is made of plastics, and a cannula if no reference to the material is made, but reference is made only to
25 its shape. Since the needle according to the invention can be made of metal, plastics or combinations thereof, said terms can be used equivalently.

The expression "cosmetic product" is used to reference any substance or composition of substances other than medications, lacking any therapeutic purpose, which is meant to be applied exclusively to the external
30 surfaces of the human body for the main or exclusive purpose of cleansing

them, fragrancng them, changing their appearance, correcting body odors, protecting them or keeping them in good condition.

The expression "external surfaces of the human body" is used to designate the skin, the piliferous system, the scalp, hair, nails, lips, external genitalia, and oral mucosae; preferably, the skin, the piliferous system, the scalp and hair, nails, and lips; even more preferably, the skin and particularly wrinkles.

The invention is by its very definition intended for exclusive application to the external parts of the human body, as clearly indicated by the definition of cosmetic product given earlier. Moreover, the hollow needle for external application with blunt tip does not allow to pierce or penetrate any of the external surfaces of the body on which the cosmetic product is to be applied.

The cosmetic products that are preferably applied in combination with a syringe and a needle such as for example the ones described here are selected from the group that comprises creams, emulsions, pastes, ointments, lotions, gels and oils for the skin (skin of hands, feet, face, scalp and body), beauty masks, eye makeup and makeup removal products, products intended to be applied to the contour of the eyes, products intended to be applied to the lips and to the contour of the lips, products for cleansing and treating the skin of the face, anti-wrinkle products, dental and oral hygiene products, products for nail hygiene and nail varnishes, products for external personal hygiene, sun care products, products for tanning without sun, products for lightening the color of the skin, anti-cellulite products, anti-stretch mark products, products for body skin treatment in general, fragrances, eau de toilette and eau de cologne, preparations for baths and showers (such as for example foams, oils, gels, et cetera), hair removal products, deodorants and antiperspirants, hair treatment products, scalp treatment products, shaving products (such as for example soaps, foams, lotions, et cetera), foundations (as liquids, pastes and powders), make up

powder, after-bath talcum and talcum for body hygiene in general, and mixtures thereof. Even more preferably, the cosmetic products are selected from the group that consists of creams, emulsions, pastes, ointments, lotions, gels and oils for the skin (skin of hands, feet, face, scalp and body), eye makeup and makeup removal products, products intended to be applied to the contour of the eyes, products intended to be applied to the lips and to the contour of the lips, anti-wrinkle products, products for nail hygiene and nail varnishes, products for tanning without the sun, products for lightening the color of the skin, anti-stretch mark products, hair removal products, hair treatment products, scalp treatment products, shaving products (such as for example soaps, foams, lotions, et cetera), foundations (as liquids, pastes and powders), and mixtures thereof. Anti-wrinkle products are particularly preferred cosmetic products.

The present invention is described with reference to the accompanying figures, wherein:

Figures 1 and 4 are exploded views of two embodiments of the plunger and the barrel;

Figures 2, 3, 5 and 6 are perspective views of two embodiments of a syringe, shown complete with the main structural elements, which are respectively constituted by the barrel, the plunger and the needle, wherein the plunger is shown already inserted in the barrel and the needle is already connected to the barrel;

Figures 7 to 11 are perspective views of different embodiments of hollow application needles with a blunt tip;

Figure 12 is a view of a cap to be applied to the needles, which is adapted to preserve their efficiency and cleanliness between applications.

The present invention is based on a new and innovative method for applying cosmetic products of any kind, both functional products and makeup products, preferably anti-wrinkle products, the application occurring by means of the combination of a syringe device provided with

appropriate hollow needles for external application having a blunt tip. The combination of needles, syringes and cosmetic product allows to obtain precision of application in the areas to be subjected to cosmetic treatment. Since the invention relates to the field of cosmetic products, the application to the human body is an external application, preferably on the skin, having no therapeutic effects. The precision and accuracy achieved with the method according to the invention allow, differently from known methods, the considerable advantage of being able to apply with maximum precision for example anti-wrinkle cosmetic products directly on the furrow of the wrinkles.

In a highly preferred embodiment, the invention relates to the combination of the following elements thus defined:

1. A syringe, which comprises a barrel and plunger (Figures 1 and 4), wherein said barrel has substantially a perforated end that is designed to receive the plunger and an end that lies opposite said perforated end and is provided with means suitable for connection to a hollow needle for external application having a blunt tip;

2. A hollow needle for external application having a blunt tip (Figures 7 to 11), preferably made of metal, plastics or combinations of metal and plastics, adapted to be connected to the syringe. After the application of the cosmetic product, said needle can be disconnected, optionally cleaned, and reused for a new application;

3. Any cosmetic product or mixture of cosmetic products, each independently having a solid, liquid or semisolid consistency.

In a first embodiment of the invention, the cosmetic product is contained initially outside the syringe, for example in a container from which it is drawn by the user in the selected amount, and at the chosen time, by means of the syringe. Advantageously, said syringe initially is not provided with the needle, so that the cosmetic product is drawn through an opening provided at the level of the connection to the needle. Said needle is

then connected after filling. In a different embodiment, the cosmetic product is drawn when the needle is already connected to the syringe.

As an alternative, the syringe is provided to the end-user already filled with cosmetic product and advantageously already connected to a hollow needle for external application having a blunt tip, such as for
5 example the needles described herein. Pre-filling of the syringe by the manufacturer allows to perform this operation even more precisely and accurately and in improved hygienic conditions with respect to the case in which the operation is entrusted to the end-user. Accordingly, this
10 embodiment is preferred in the case of cosmetic products that are more sensitive to contamination by microorganisms or other contaminants, or in the case of substances the subsequent drawing whereof would be complicated, for example due to their consistency.

In a different embodiment, the syringe pre-filled with cosmetic
15 product is provided without being connected to a hollow needle for external application having a blunt tip. In this embodiment, it is advantageous for the syringe to be provided with a protective and closure element, such as advantageously a protective film or a suitable cap, arranged at the end that is intended to accommodate the needle, so as to prevent the outflow of the
20 cosmetic product and the contact of said product with the outside. In the case of a film, it is then easily pierced by the insertion of the needle.

The inventive idea on which the present application is based substantially consists of the combination of a syringe, a needle and a cosmetic product, preferably such as the ones described here, for external
25 and localized application of the cosmetic product. The combination can be used conveniently for local skin applications of cosmetic products in general, combining easy and quick application with great precision of the application area. This precision, both in terms of application site and in terms of applied quantity, is particularly advantageous in the case of
30 functional cosmetics products, such as anti-wrinkle creams, which need to

be applied specifically over the furrow of the wrinkle or in the vicinity of the eye, in order to treat for example the blemish conventionally known as crow's feet. These advantages are in any case very useful also in the case of applications of cosmetic correctors on small spots of the skin or on any points where there is a need for precise and accurate application, such as in the case of cosmetic products for makeup, such as for example cosmetic eye liners, lip contour lipstick, and any other cosmetic product.

An important aspect of the invention also resides in the new and inventive use of a syringe that comprises a barrel 1, a plunger 8 and a hollow needle for external application having a blunt tip, preferably such as the ones described here, to apply externally to the body, preferably on the skin, any cosmetic substance.

In another aspect, the present invention relates to a kit that comprises the combination of at least one syringe preferably as defined up here, at least one hollow needle for external application having a blunt tip preferably as defined here, and any cosmetic product, wherein said needle can be already connected to the syringe or still to be connected thereto, and wherein said cosmetic product can be already present inside said syringe or can be contained outside it. If the cosmetic product is supplied externally to the syringe, the kit also comprises the container from which the user can draw said cosmetic product.

Other characteristics and advantages of the present invention will become better apparent from the description of the following preferred embodiments, intended exclusively by way of non-limiting example.

A particularly preferred syringe substantially comprises the following elements:

a) a barrel 1, advantageously made of plastics, metal, glass or combinations thereof, in which one of the two ends 2 is provided with a variously shaped receptacle 3 that has a blunt tip for interlocking, for example with a screw coupling by means of an appropriate thread 4, or with

a bayonet coupling, of the needle. At the opposite end 5, the barrel is provided with a wider region 6 for comfortable grip of the syringe by the user; said wider region 6 can have any shape, for example circular, oval, hexagonal, octagonal or any other shape.

5 It is optionally possible to print on the barrel with any technique, such as for example screen printing, labeling, hot incision, optionally in color, one or more of the following elements:

- a graduation, i.e., a graduated scale 7 indicating to the user the quantity of cosmetic product to be applied or already applied, or
10 the amount drawn if the cosmetic product is initially external to the syringe,
- the name of the manufacturer,
- the name of the cosmetic product.

The presence of the graduated scale is optional and preferable.

15 Advantageously, all the elements listed above are printed.

The internal cross-section of the barrel is preferably identical along its entire length. Said cross-section may have various dimensions, preferably comprised between 1 mm and 100 mm;

b) a plunger 8, preferably made of plastics, glass, metal or
20 combinations thereof. The plunger has an initial part 9 that is advantageously made of rubber, preferably silicone rubber, or other material that acts as a hermetic seal between the plunger and the internal part of the barrel and is adapted to be inserted at one end 5 of said barrel. Said initial part may be cylindrical, cylindrical with a conical terminal region, or
25 pointed. In a preferred embodiment, it is possible to obtain a highly precise dosage of the cosmetic product by providing the initial part of the plunger with a special solid cylinder, advantageously made of silicone rubber, which is provided with two circular bands which, by the rotation of said solid cylinder cause it to advance with measured graduality, i.e., with precision.
30 The solid cylinder must be provided with a screw-type thread in order to

allow its advancement.

The plunger can have any cross-section, for example cylindrical, with wings, star-shaped, or otherwise shaped.

The length of the plunger is such that the initial part 9 of the plunger enters up to the end part of the barrel, where the needle receptacle is arranged, so as to allow complete expulsion of the cosmetic product contained in the syringe.

The plunger, on the opposite side 11 with respect to the rubber side, protrudes by a variable length from the barrel and is provided with an element 12 that is wider than the uniform cross section of the portion to be inserted in the barrel and is adapted to allow the manual sliding of the plunger within the barrel. Said wider portion may have any shape, for example circular, elliptical, triangular, round, oval, regardless of the cross-section of the plunger.

For good operation of the syringe, it is important that the plunger, and particularly the silicone rubber arranged in the initial part of said plunger, perfectly adheres on the internal part of the barrel, so as to obtain precise drawing and dosage of the cosmetic product to be applied.

As mentioned, one of the ends of the syringe comprises on the barrel connecting means for a hollow needle having a blunt tip. In a particular embodiment, said means comprise a first thread 4 provided on the barrel and a second thread 13 that is complementary to the first thread but is provided on the needle. In a different embodiment, said means comprise a first interlocking element on the barrel of the syringe, which is adapted to retain the needle by means of a second element that is complementary to the first element and is provided on said needle. The combination of said first and second elements can be for example a bayonet coupling. The connection, regardless of how it is provided, is not permanent, so that the needle can be disconnected from the barrel and reused. The needle can be initially already connected to the barrel (for example Figure 2), or can be

connected thereto at the time of use.

The needle (Figures 7 to 11) is necessarily and exclusively for external application, has a blunt tip and a hollow interior, and can be made of metal, plastics, glass, titanium, Teflon®, ceramics or combinations thereof; preferably, the part 14 to be inserted by screw or bayonet coupling in the external part of the barrel is made of plastics, and the part 15 that makes contact for example with the external surface of the skin may be made of any kind of material.

The dimensions and shapes of the needle may be variable. For example, the needles may be perfectly straight (Figure 7) or bent (as in Figure 8) at an angle, curved, spiral-shaped or having any other shape depending on the functional requirements of the application of the cosmetic product. The embodiment that has a curvature or an angle is preferred, as it facilitates the application of the cosmetic product.

Optionally, and in order to facilitate the application of the cosmetic product, the needles may have, in the distal part of the blunt tip, specific elements, such as special bristles or fibers that advantageously form a small brush (16 in Figure 9) or a sponge (17 in Figure 11). This allows to further optimize the distribution of the cosmetic product in the area selected for application or to obtain a more diffuse application.

The internal cross-section of the needles may vary from 10 microns to 10 cm, preferably from 100 microns to 3 cm. The internal cross-section of the needle may vary in shape; for example, it can be wider in the parts that is designed to be connected to the syringe and narrower in the end part in contact with the region of application of the cosmetic product. The needle may have a cylindrical, oval, flat or other cross-section along its entire length.

The needles, whether made entirely of plastics, entirely of metal, or made of plastics plus metal and/or other materials, may be provided with a cap (Figure 12), which is advantageously made of soft vinyl or other

material and is adapted to maintain the hygiene of the needle and allow its optimum preservation even if the needle is kept disconnected from the barrel.

In another aspect, the present invention provides the new and
5 inventive use of syringes and needles, such as preferably the ones described above, in combination with any cosmetic product to apply said cosmetic product externally to the body and precisely, accurately, uniformly and constantly.

The present invention also provides a kit, which comprises at least
10 one syringe, preferably such as the one described above, at least one needle for external application preferably such as the one described above, and at least one cosmetic product.

In one embodiment, the syringe, or one of the syringes, comprised within the kit already contain(s) a cosmetic product introduced by the
15 manufacturer. In a different embodiment, the kit comprises also, or only, one or more syringes, which are supplied empty, and the at least one cosmetic product is contained in suitable containers, which are separate but still comprised within the kit and from which the end-user can easily draw the product. Even if the syringes are provided already filled with cosmetic
20 product, the kit may advantageously comprise one or more separate containers that contain the cosmetic product, so as to allow reuse of syringes and needles once the quantity of cosmetic product initially introduced by the manufacturer is used up.

In one embodiment, the syringe, or least one of the syringes,
25 contained in the kit is or are supplied with the needle already connected thereto. In a different embodiment, the syringe, or at least one of the syringes, contained in the kit is supplied without the needle, which must therefore be fitted under the responsibility of the end-user.

The kit may comprise more than one different type of syringe and
30 more than one different type of needle, advantageously different and

optimum types for cosmetic products having different physical characteristics.

Although only some preferred embodiments of the invention have been described explicitly in the text, the person skilled in the art will find it
5 immediately evident that numerous structural modifications of the elements involved in the method, in the use and in the kit are possible while maintaining the advantages that arise from the combination on which the present invention is based.

The disclosures in Swiss Patent Application No. 01714/04 from
10 which this application claims priority are incorporated herein by reference.

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

CLAIMS

1. A method for applying a cosmetic product, said method comprising the steps of:

- 5 – providing a syringe, which comprises a barrel (1) and a plunger (8);
- providing a hollow needle for external application with a blunt tip;
- providing at least one cosmetic product;
- applying said at least one cosmetic product on a region of interest selected among the external surfaces of the human body by using
- 10 said syringe connected to said needle for external application.

2. The use of a syringe comprising a barrel (1) and a plunger (8) in combination with a hollow needle for external application having a blunt tip to apply a cosmetic product on a region of interest selected among the external surfaces of the human body.

15 3. A kit for applying a cosmetic product on a region of interest selected among the external surfaces of the human body, said kit comprising:

- at least one syringe that comprises a barrel (1) and a plunger (8),
- at least one hollow needle for external application having a blunt
- 20 tip, and
- at least one cosmetic product to be applied.

4. The kit according to claim 3, comprising more than one type of syringe and/or more than one type of needle.

5. The kit according to claim 3 or 4, further comprising at least one

25 container that is different from the syringes and contains a cosmetic product.

6. The invention according to one or more of claims 1 to 5, wherein said cosmetic product is contained initially in a container that is external with respect to the syringe and from which it is drawn by the user in the intended quantity and at the chosen moment.

7. The invention according to one or more of the preceding claims, wherein said cosmetic product is supplied already contained in one or more syringes, by means of which it is applied directly in the intended quantity and at the intended time.

5 8. The invention according to claim 6 or 7, wherein the syringe is initially supplied without the needle.

9. The invention according to claim 6 or 7, wherein the syringe is supplied initially with the needle already connected thereto.

10 10. The invention according to one or more of the preceding claims, wherein said cosmetic product is an individual compound or a mixture of compounds, each compound being independently liquid, solid or semisolid.

11. The invention according to claim 10, wherein the cosmetic product is selected independently from the group that consists of functional cosmetic products and makeup cosmetic products.

15 12. The invention according to claim 11, wherein said cosmetic product is selected from the group that consists of creams, emulsions, pastes, ointments, lotions, gels and oils for the skin (skin of hands, feet, face, scalp and body), beauty masks, eye makeup and makeup removal products, products intended to be applied to the contour of the eyes,
20 products intended to be applied to the lips and to the contour of the lips, products for cleansing and treating the skin of the face, anti-wrinkle products, dental and oral hygiene products, products for nail hygiene and nail varnishes, products for external personal hygiene, sun care products, products for tanning without the sun, products for lightening the color of the
25 skin, anti-cellulite products, anti-stretch mark products, products for body skin treatment in general, fragrances, eau de toilette and eau de cologne, preparations for baths and showers (such as for example foams, oils, gels, et cetera), hair removal products, deodorants and antiperspirants, hair treatment products, scalp treatment products, shaving products (such as for
30 example soaps, foams, lotions, et cetera), foundations (as liquids, pastes and

powders), makeup powder, after-bath talcum and talcum for body hygiene in general, and mixtures thereof.

13. The invention according to claim 12, wherein the cosmetic product is selected from the group that consists of creams, emulsions, 5 pastes, ointments, lotions, gels and oils for the skin (skin of hands, feet, face, scalp and body), eye makeup and makeup removal products, products intended to be applied to the contour of the eyes, products intended to be applied to the lips and to the contour of the lips, anti-wrinkle products, products for nail hygiene and nail varnishes, products for tanning without 10 the sun, products for lightening the color of the skin, anti-stretch mark products, hair removal products, hair treatment products, scalp treatment products, shaving products (such as for example soaps, foams, lotions, et cetera), foundations (as liquids, pastes and powders), and mixtures thereof.

14. The invention according to claim 13, wherein the cosmetic 15 product is one or more anti-wrinkle products.

15. The invention according to one or more of the preceding claims, wherein said external surfaces of the human body are selected from the group that consists of the skin, the piliferous system, the scalp, hair, nails, lips, external genitalia, and oral mucosae.

20 16. The invention according to claim 15, wherein said external surfaces of the human body are selected from the group that consists of the skin, the piliferous system, the scalp and hair, nails and lips, more preferably the skin, even more preferably wrinkles.

17. The invention according to one or more of the preceding claims, 25 wherein said syringe comprises a barrel (1) and a plunger (8), wherein said barrel comprises a perforated end that is adapted to receive the plunger and an end that lies opposite said end and is provided with means suitable for connection to a hollow needle for external application having a blunt tip.

18. The invention according to claim 17, wherein the barrel (1), made 30 of plastics, metal, glass or combinations thereof, is provided, at one of its

two ends (2) with a receptacle (3) having a variable shape with a truncated end for interlocking with the needle, and is provided, at the opposite end (5), with a wider portion (6) having any shape for the user 's grip of the syringe.

5 19. The invention according to one or more of the preceding claims, wherein one or more of the following elements is printed on said barrel:

- a graduation, i.e., a graduated scale (7),
- the name of the manufacturer,
- the name of the cosmetic product itself.

10 20. The invention according to claim 17, wherein the internal cross-section of the barrel (1) is constant along its entire length and is comprised between 1 mm and 100 mm.

21. The invention according to claim 17, wherein the plunger (8), made of plastics, glass, metal or combinations thereof, has an initial part (9) made of sealing material, said initial portion being adapted to be inserted at
15 one end (5) of said barrel.

22. The invention according to claim 17, wherein the initial part (9) of the plunger is provided with a solid cylindrical element, advantageously made of silicone rubber, which is provided with a screw thread and with two
20 circular bands which, by virtue of the rotation of said solid cylindrical element caused by the screw thread, cause it to advance with a measured graduality.

23. The invention according to claim 17, wherein the plunger, on the opposite part (11) with respect to the rubber part (9), protrudes by a variable
25 length from the barrel (1) and is provided with an element (12) that is wider than the uniform cross-section of the portion to be inserted in the barrel and is adapted to allow the manual sliding of the plunger inside the barrel.

24. The invention according to one or more of the preceding claims, wherein said hollow needle for external application having a blunt tip is
30 made of metal, plastics, glass, titanium, Teflon®, ceramics or combinations

thereof, is adapted to be connected to the syringe and, after application of the cosmetic product can be disconnected, optionally cleaned, and reused for a new application.

25. The invention according to claim 24, wherein the part (14) of the
5 needle to be inserted in the barrel is made of plastics and the part (15) that makes contact with the skin can be made of any kind of material.

26. The invention according to claim 24, wherein the needle is curved.

27. The invention according to claim 24, wherein the needle is
10 provided, in the distal part of the blunt tip, with an element that is selected between a small brush and sponges, both of which are made independently of a material selected among bristles, fibers and combinations thereof.

28. The invention according to claim 24, wherein the needle has an
15 internal cross-section comprised between 10 microns and 10 cm, preferably between 100 microns and 3 cm.

29. The invention according to claim 28, wherein the needle has a variable internal cross-section.

30. The invention according to one or more of the preceding claims,
20 wherein the needle is provided with a cap, advantageously made of soft vinyl or other material adapted to preserve the hygiene of the needle.

31. The invention according to one or more of the preceding claims,
wherein said means suitable for connection between the syringe and the hollow needle for external application having a blunt tip comprise a first thread (4) provided on the barrel of the syringe and a second thread (13) that
25 is complementary to the first thread provided on the needle.

32. The invention according to one or more of the preceding claims,
wherein said means suitable for connection between the syringe and the hollow needle for external application having a blunt tip comprise a first interlocking element, which is arranged on the barrel, and a second element,
30 which is complementary to the first element and is provided on said needle.

33. The invention according to one or more of the preceding claims, wherein the application of the cosmetic product occurs precisely, accurately, and in a repeatable and reproducible manner.