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(54) **ADHESIVE APPLICATOR FOR FIXING TO THE END OF A FINGER**

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(52) **U.S. Cl.** **206/581; 206/823**

(57) **ABSTRACT**

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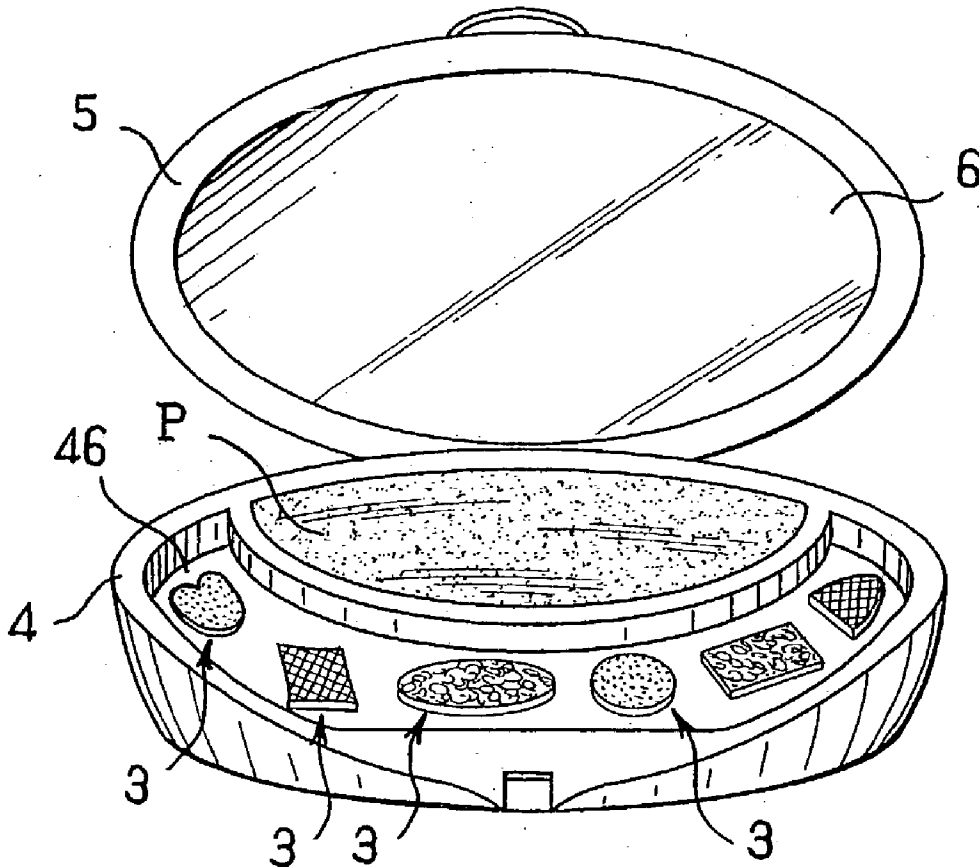
The present invention relates to a device for applying a cosmetic substance, the device comprising a receptacle containing the substance and an applicator suitable for being received in the receptacle or fixed thereon, the applicator comprising, prior to first use, an adhesive surface suitable for fixing the applicator to the skin, a circle of axis X circumscribing the applicator comprising a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

(21) Appl. No.: **10/465,841**

(22) Filed: **Jun. 20, 2003**

Related U.S. Application Data

(60) Provisional application No. 60/392,979, filed on Jul. 2, 2002.



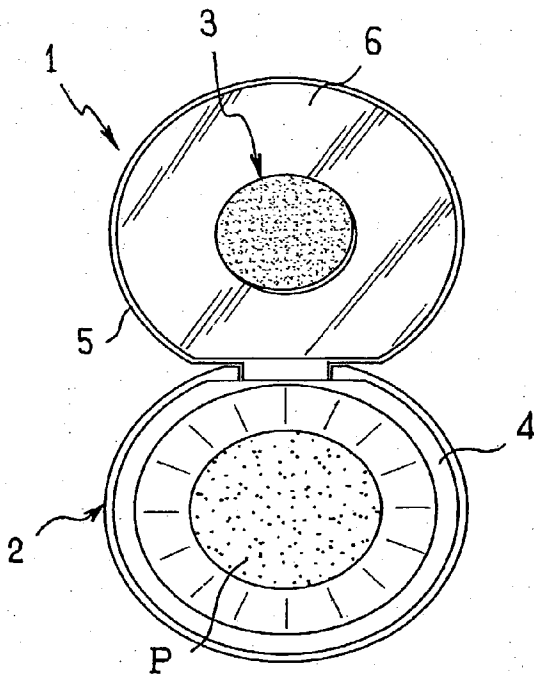


FIG. 1

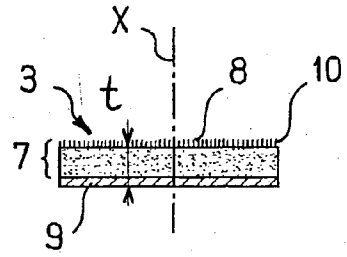


FIG. 2

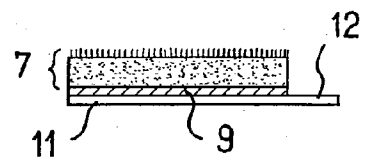


FIG. 3

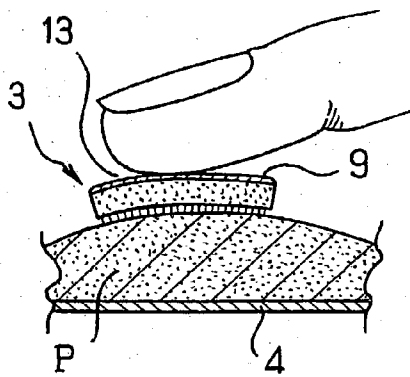


FIG. 4

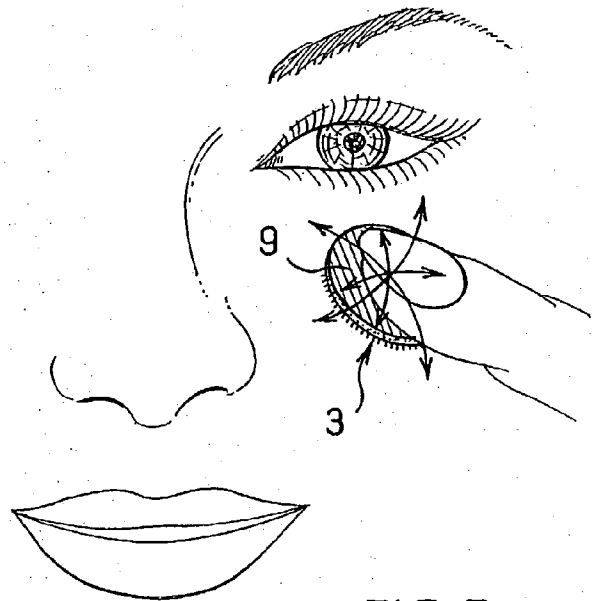


FIG. 5

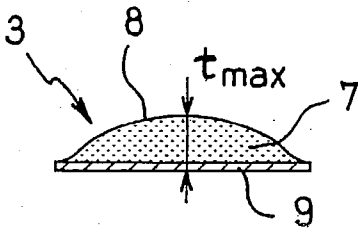


FIG. 6

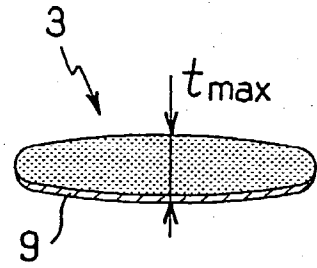


FIG. 7

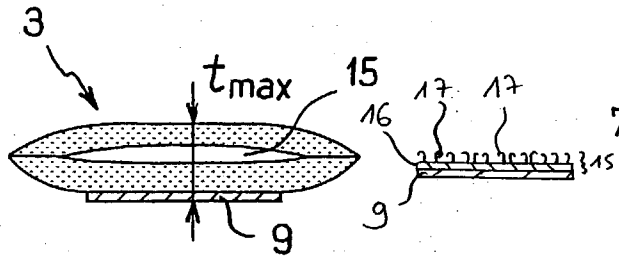


FIG. 8

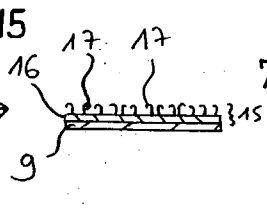


Fig. 9

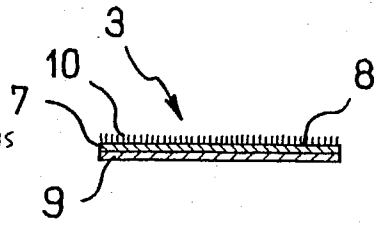


FIG. 10

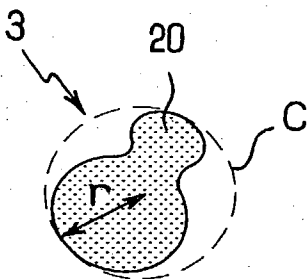


FIG. 11

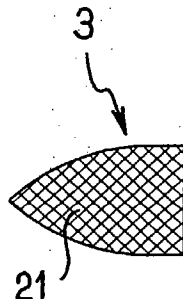


FIG. 12

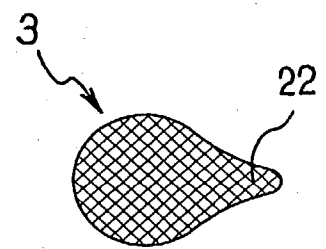


FIG. 13

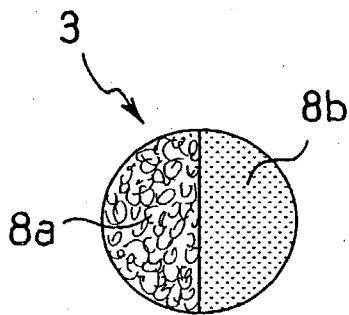


FIG. 14

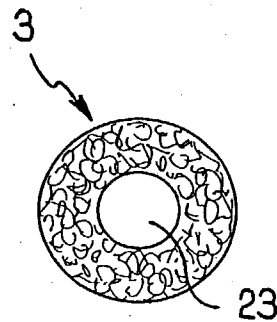


FIG. 15

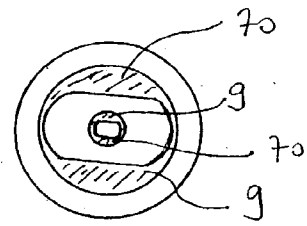


Fig. 19

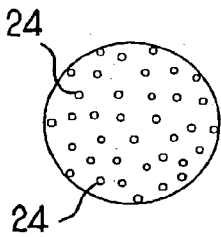


FIG. 16

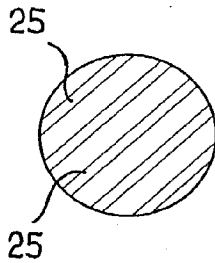


FIG. 17

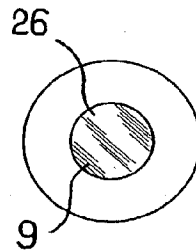


FIG. 18

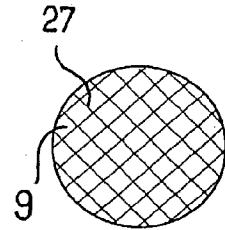


FIG. 20

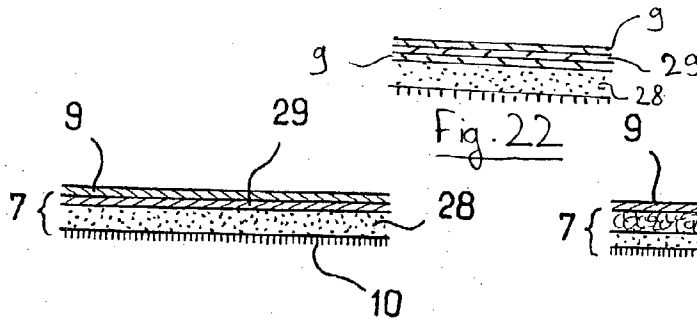


FIG. 21

Fig. 22

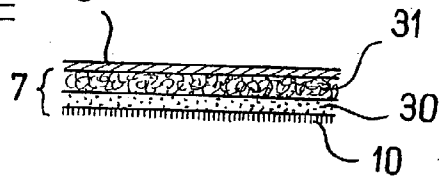


FIG. 23

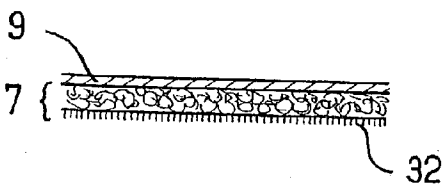


FIG. 24

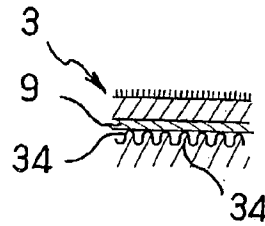


FIG. 25

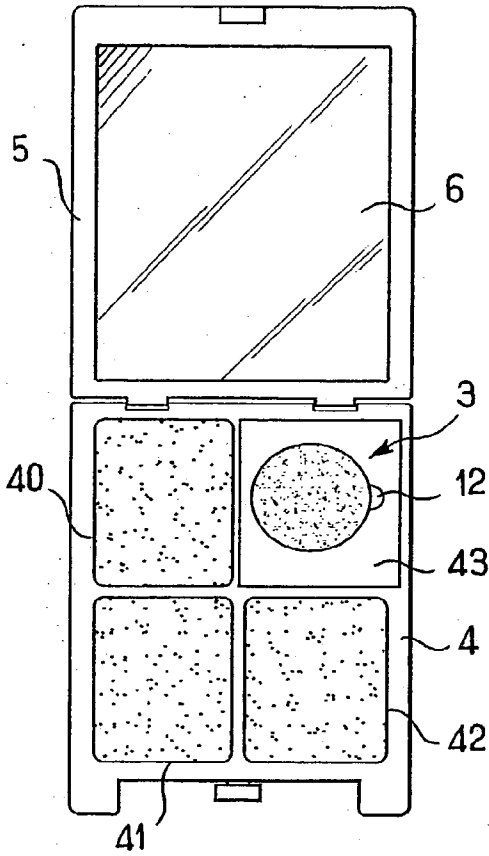


FIG. 26

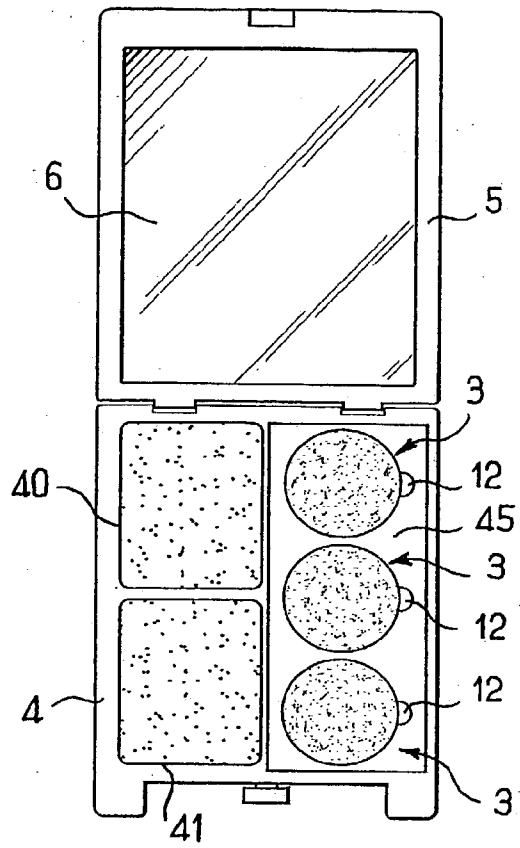


FIG. 27

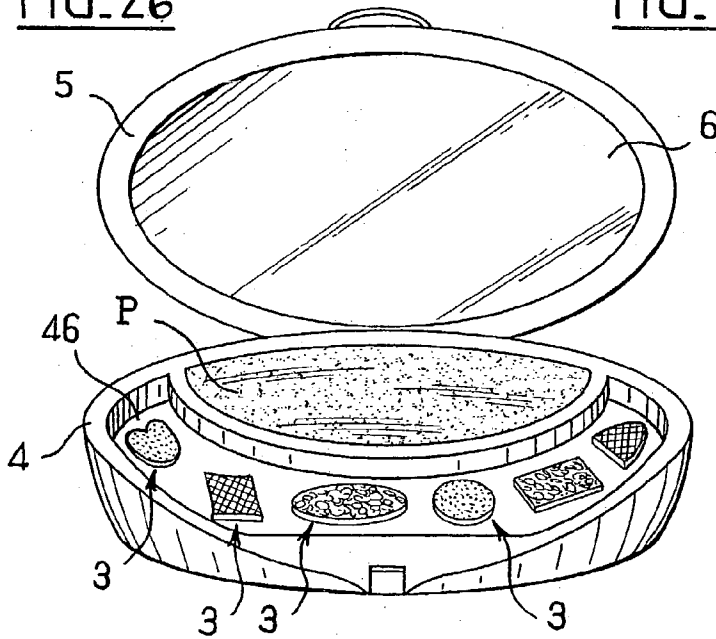


FIG. 28

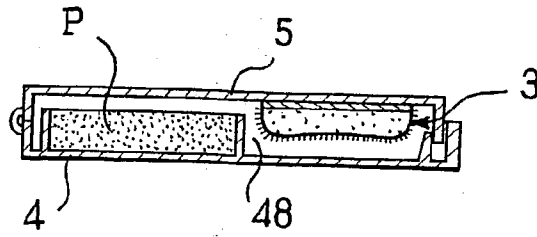


FIG. 29

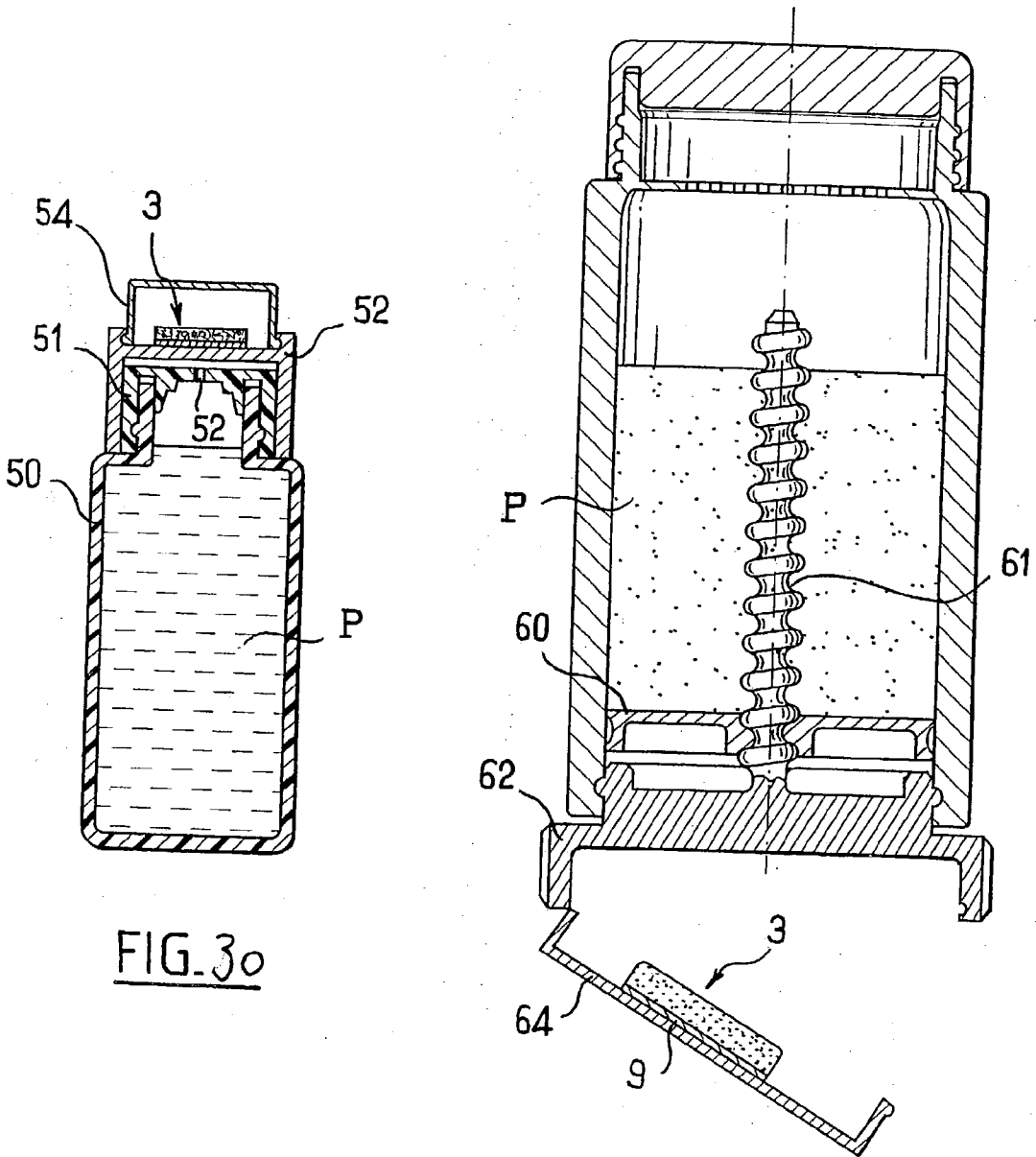


FIG. 30

FIG. 31

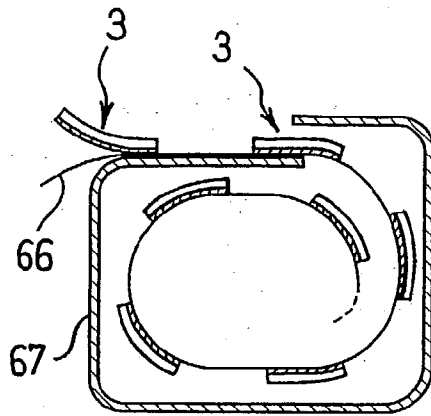


FIG. 32

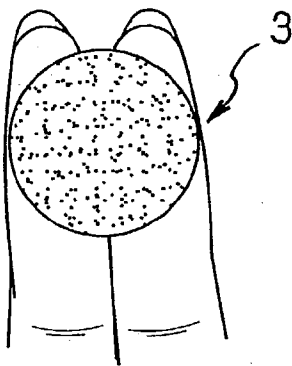


FIG. 33

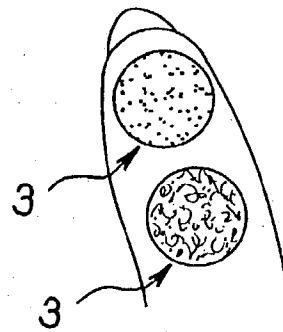


FIG. 34

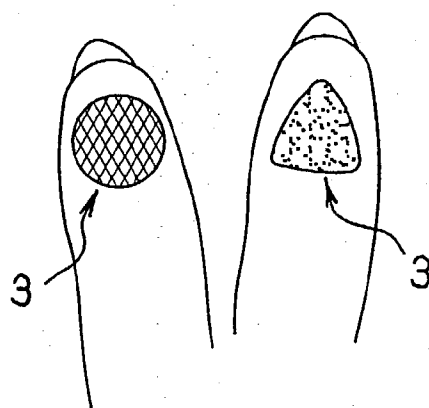


FIG. 35

ADHESIVE APPLICATOR FOR FIXING TO THE END OF A FINGER

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to French Patent Application No. 02 07679 filed Jun. 20, 2002 and U.S. Patent Application No. 60/392,979 filed Jul. 2, 2002, which are incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to devices for applying a substance, and in particular a cosmetic.

BACKGROUND OF THE INVENTION

[0003] Numerous applicators have been proposed which comprise a handle, e.g. a handle made of rigid plastics material, and a flexible application portion fixed in a non-removable manner to the handle.

[0004] Also, French Patent Application No. 2 432 287 discloses a makeup finger stall or "cot" for sticking onto the end of a finger. A medical applicator including a finger stall is described in U.S. Pat. No. 5,045,073.

[0005] U.S. Pat. No. 5,636,406 discloses an applicator sheet for sticking to the inside face of the hand in order to apply a lotion to the body.

[0006] U.S. Pat. No. 2,763,885 describes an abrasive foam impregnated with toothpaste that is designed to be fixed on a finger. U.S. Pat. Nos. 5,794,774, 5,911,319, and 5,678,273 describe similar applicators.

OBJECTS AND SUMMARY OF THE INVENTION

[0007] There exists a need to benefit from a novel applicator capable of providing increased comfort and accuracy in application.

[0008] In one of its aspects, the invention provides a device for applying a cosmetic substance on the face, the device comprising a receptacle containing the substance and an applicator suitable for being received in the receptacle or fixed thereon, the applicator comprising, prior to first use, an adhesive surface, a circle of axis X circumscribing the applicator and having a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0009] The adhesive surface may be suitable for fixing the applicator to the skin.

[0010] Such an applicator is capable of providing the user with a sense of touch during application that it is impossible to obtain with conventional applicators, because the applicator can be positioned on the pulp of the finger which is very sensitive and rich in nerve endings.

[0011] The invention thus makes it possible to obtain accuracy which is close to that which is to be found when a substance is applied on the skin by means of a bare finger. In contrast, the applicator can apply more substance than a bare finger, and comfort in application is improved.

[0012] In one embodiment, the circle of axis X may present a radius that is greater than $\frac{2}{3}$ the maximum thickness, or even greater than the maximum thickness of the applicator.

[0013] By way of example, the maximum thickness of the applicator may be less than or equal to half the radius of the circumscribed circle, or even less than or equal to one-fourth or one-eighth of the radius. Small thickness can enhance the transmission of tactile sensations while the applicator is in use.

[0014] In one aspect of the invention, the applicator is of dimensions that are small enough to avoid extending as far as the palm of the hand (e.g., an average young girl's hand or an average adult woman's hand) when fixed to the end of a finger.

[0015] In one embodiment, the applicator may be configured in such a manner that its adhesive surface cannot adhere completely to the pulp of the first phalanx of the index finger, thus allowing relative movement to take place between the applicator and the pulp of the first phalanx during use to apply a substance. The stiffness of the applicator may be selected in such a manner that the entire adhesive surface cannot adhere to the pulp of the finger.

[0016] Such freedom in relative movement for the applicator at the end of the finger can make it possible for the applicator to match the shape of the surface on which the substance is being applied, as the applicator is moved in contact therewith.

[0017] The compressibility of the applicator may be relatively important. The mean thickness of the applicator may be halved, for example, when a weight of 10 kilograms (kg) is applied to the entire applicator. Other compressibilities can be considered.

[0018] In another aspect of the invention, the applicator is not impregnated with substance prior to first use.

[0019] In another aspect of the invention, the substance is a substance other than toothpaste. In yet another aspect, the substance is toothpaste.

[0020] The applicator may comprise an application surface that comprises flocking, or woven or non-woven cloth.

[0021] The applicator may comprise a coating which may be in the form of woven cloth comprising a plurality of hooks or loops projecting from the surface of the coating.

[0022] The hooks may be of any type, and in particular they may be suitable for cooperating with loops, and they may be in the shape of fish hooks, mushrooms, or open loops, for example.

[0023] The coating may be constituted in particular, by one or other of the elements that are joined together in a Velcro® type fastener.

[0024] The applicator may comprise a foam, in particular a foam comprising cells that are open, semi-open, or closed. In particular, the applicator may comprise a foam whose surface has been subjected to abrasion treatment in order to form a downy surface.

[0025] The applicator may comprise an elastomer, in particular an elastomer foam.

[0026] The applicator may comprise a multilayer structure, e.g. the applicator may comprise a layer of an adhesive for fixing to the skin, a layer defining an application surface, and where appropriate, one or more intermediate layers, for example for conferring greater or lesser stiffness or flexibility to the applicator and/or for improving the capacity of the applicator to absorb a substance or substances. The stiffness of the applicator may be such as to prevent the entire adhesive surface from sticking to the pulp of a finger so as to allow the applicator to change its orientation at the end of the finger, as mentioned above.

[0027] The applicator may comprise a porous material that has been subjected to impregnation treatment by at least one biocidal compound, for example an antifungal agent, an antibacterial agent, or ionic elements. By way of example, the applicator may comprise at least one water absorber.

[0028] The applicator may comprise metal particles, for example magnetic particles dispersed in a foam. An applicator can thus exert a magnetic field during application, thereby encouraging microcirculation of the blood.

[0029] The applicator may be manufactured flat as a sheet of large area with applicators being cut out therefrom.

[0030] The applicator may comprise an application surface having at least two different surface states, for example surface states that are associated with using different materials or that are due to the fact that the applicator has been subjected to different surface treatments.

[0031] The applicator may comprise a hypoallergenic adhesive.

[0032] The applicator may comprise an adhesive whose adhesive power increases with temperature. For example it is possible to use an adhesive that is weakly adhesive below 20° C. and more strongly adhesive at 30° C. Other temperature ranges and adhesive properties can be considered.

[0033] The applicator can thus be more easily separated from the receiving surface of the receptacle while nevertheless adhering sufficiently to the finger to enable it to be used under good conditions.

[0034] The adhesive may completely cover a face of the applicator that is opposite from the face used for applying substance. In a variant, the adhesive may cover the face in part only, for example with adhesive being present in the form of strips or spots. The adhesive may occupy only a central region of a face of the applicator that is opposite from the face used for applying substance. The applicator may comprise an adhesive surface covered by a net for reducing its adhesive power.

[0035] The applicator may comprise a flat shape with its application and adhesive faces being substantially parallel. For instance, in section in the direction of the applicator's thickness, the applicator may have such properties.

[0036] The applicator may also comprise a bulging shape on one side or on two opposite sides. For instance, in section in the direction of the applicator's thickness, the applicator may have such properties.

[0037] The face used for application purposes may be outwardly convex in shape. The same applies to the face

used for fixing to the finger. The convex shape may be due to the fact that the applicator has been heat-sealed around its periphery, for example.

[0038] In front view, the applicator may optionally comprise a circular shape. The applicator may comprise a shape that may be axially symmetric. By way of example, the applicator may comprise a shape that is generally triangular, pear-shaped, lens-shaped, waterdrop shaped, heart shaped, almond shaped, or in the shape of a hollow ring. In front view, the applicator may comprise a recess, for example a recess situated in a central region of the applicator.

[0039] The applicator may comprise a washable material, in particular a material that is washable in water, the adhesive being capable of withstanding water.

[0040] The applicator may comprise an application surface of various colors, and in particular of a color that is not brown.

[0041] The applicator may be covered on its adhesive face, prior to first use, by a removable protective film, e.g. a sheet of silicone paper or a film of polyethylene.

[0042] The receptacle may comprise at least one housing for receiving at least one applicator when not in use.

[0043] By way of example, the receptacle may be in the form of a case comprising a bottom portion and a lid that is movable relative to the bottom portion, for example being hinged thereon.

[0044] The bottom portion may comprise at least one housing containing a substance, for example a dispersible substance, and at least one housing suitable for receiving at least one applicator.

[0045] The case may comprise a mirror.

[0046] The substance may be a powder, a cream, a gel, a liquid, or another substance.

[0047] In embodiments where the substance is viscous, the substance may be contained for example in a receptacle comprising a piston enabling the substance to be extruded through at least one outlet orifice, the outlet orifice being in the bottom of a housing, for example.

[0048] The receptacle may comprise a space of variable volume containing the substance and defined at least in part by a deformable wall that can cause the substance to pass out through at least one outlet orifice when squeezed by the user, or when pressure is otherwise exerted on the wall.

[0049] The receptacle may comprise a cover for protecting the applicator when not in use.

[0050] In one embodiment, prior to use, the applicator may be on a strip. Such a strip may be relatively long and may serve to support a plurality of applicators prior to use, the strip being rolled up inside a dispenser.

[0051] In another of its aspects, independently or in combination with the above, the invention also provides a device for applying a cosmetic substance, the device comprising a receptacle containing the substance and an applicator comprising a multilayer structure, the applicator being configured for being received in the receptacle or fixed thereon, the applicator comprising, prior to first use, an adhesive surface.

[0052] A circle of axis X circumscribing the applicator may have a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0053] The multilayer structure may comprise at least two layers of different hardnesses, for example a more flexible layer adjacent to the application surface and a stiffer layer adjacent to the adhesive surface.

[0054] The stiffer layer may facilitate the handling of the applicator, for example in order to prevent the entire adhesive surface from sticking to the finger when in use.

[0055] The multilayer structure may comprise for example at least two layers of foam, in particular two layers of foams having different hardnesses.

[0056] According to another of its aspects, independently or in combination with the above, the invention also provides a device for applying a cosmetic substance, the device comprising a receptacle containing the substance and an applicator removably fixed on the receptacle, the applicator not being in contact with the substance contained in the receptacle.

[0057] The applicator comprises an adhesive surface that may be fixed on a part of the receptacle different from a housing of the substance, for example on a lid or near the housing containing the substance.

[0058] A circle of axis X circumscribing the applicator may have a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0059] In a preferred embodiment, the adhesive surface is capable of sticking to a finger of the user after having been detached from the receptacle and, if necessary, is capable of sticking again to the receptacle after use.

[0060] In another of its aspects, independently or in combination with the above, the invention also provides a device for applying at least one of at least two different cosmetic substances, the device comprising a receptacle containing the at least two substances and an applicator suitable for being received in the receptacle or fixed thereon, the applicator being provided, prior to first use, with an adhesive surface.

[0061] A circle of axis X circumscribing the applicator may have a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0062] By way of example, the maximum thickness of the applicator may be less than or equal to half the radius of the circumscribed circle, or even less than or equal to one-fourth or one-eighth of the radius.

[0063] In another of its aspects, independently or in combination with the above, the invention also provides a device for applying a cosmetic substance, the device comprising a receptacle containing the substance and at least two applicators suitable for being received in the receptacle or fixed thereon, the applicators being provided, prior to first use, with an adhesive surface.

[0064] A circle of axis X circumscribing the applicator may have a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0065] By way of example, the maximum thickness of the applicator may be less than or equal to half the radius of the circumscribed circle, or even less than or equal to one-fourth or one-eighth of the radius.

[0066] In another of its aspects, independently or in combination with the above, the invention also provides a device for applying a cosmetic substance, the device comprising a receptacle containing a cake of the substance and an applicator suitable for being received in the receptacle or fixed thereon, the applicator being provided, prior to first use, with an adhesive surface.

[0067] A circle of axis X circumscribing the applicator may have a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0068] By way of example, the maximum thickness of the applicator may be less than or equal to half the radius of the circumscribed circle, or even less than or equal to one-fourth or one-eighth of the radius.

[0069] In another of its aspects, independently or in combination with the above, the invention also provides a device for applying a cosmetic substance, the device comprising a receptacle containing the substance and an applicator suitable for being received in the receptacle or fixed thereon, the applicator comprising a shape that is not circular, the applicator being provided, prior to first use, with an adhesive surface.

[0070] A circle of axis X circumscribing the applicator may have a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0071] By way of example, the maximum thickness of the applicator may be less than or equal to half the radius of the circumscribed circle, or even less than or equal to one-fourth or one-eighth of the radius.

[0072] In another of its aspects, independently or in combination with the above, the invention also provides a dispenser for dispensing at least one applicator not impregnated with toothpaste prior to first use, the applicator being provided, prior to first use, with an adhesive surface.

[0073] A circle of axis X circumscribing the applicator may have a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

[0074] The invention also provides a method of applying a substance, in particular a cosmetic, to the skin, the hair, the lips, or the nails, for example the skin of the face. The method comprises a fixing step for fixing an applicator with adhesive to the end of at least one finger, the applicator comprising a portion for applying the substance, the portion extending at least in part over the pulp of the first phalanx of the finger, the applicator not extending as far as the palm of the hand. The method further comprises an applying step for applying the substance to the skin, the hair, the lips, the nails, or another part of the face or body, by bringing the application portion into contact with the region concerned.

[0075] A single applicator may be fixed to the end of one finger, and in particular the index finger.

[0076] In a variant, two applicators may be fixed to the end of one finger, these two applicators comprising shapes and/or surface states that are different, for example.

[0077] In another variant, a single applicator may be fixed to the ends of two fingers held side by side, for example the index finger and the middle finger.

[0078] By way of example, the applicator can be used for making up the cheek bones, the eyelids, or the lips.

[0079] The applicator may be positioned on the pulp of the first phalanx while retaining the possibility to move relative thereto about various axes, by "rolling" in contact with the convex surface of the finger.

[0080] The applicator may be fixed behind the pulp of the first phalanx by means of adhesive present on the applicator prior to first use. The adhesive surface of the applicator may be covered by a removable protective film that the user removes prior to placing the adhesive surface in contact with the finger.

[0081] After use, the applicator may be stuck onto a surface of a receptacle, e.g., a mirror, a lid, or a bottom of a housing provided for receiving the applicator. By way of example, the housing may be situated in the bottom portion of a case.

[0082] The applicator may be for single use only or it may be reused several times, with the adhesive being selected in such a manner as to conserve its adhesive properties from one use to another.

[0083] The surface of the receptacle that receives the applicator when not in use may comprise a relief portion for reducing adhesion of the applicator, for example an array of stripes or projections, or the surface may be coated in an anti-adhesive material or subjected to anti-adhesive treatment. This can make it easier to unstick the applicator, for example.

BRIEF DESCRIPTION OF THE DRAWINGS

[0084] The invention can be better understood on reading the following detailed description of non-limiting embodiments and on examining the accompanying drawings, in which:

[0085] FIG. 1 is a diagrammatic perspective view of a device made in accordance with the invention;

[0086] FIG. 2 shows the applicator of the FIG. 1 device in isolation;

[0087] FIG. 3 shows the FIG. 2 applicator with its adhesive surface covered in a removable protective film;

[0088] FIG. 4 shows the applicator stuck to the end of a finger while picking up substance;

[0089] FIG. 5 shows the applicator in use for applying makeup;

[0090] FIGS. 6 to 8 are diagrammatic axial section views showing other possible shapes for the applicator;

[0091] FIG. 9 is a diagrammatic axial section view showing an example of an applicator with a covering that comprises a plurality of hooks;

[0092] FIG. 10 is a diagrammatic axial section view showing an example of a flocked applicator;

[0093] FIGS. 11 to 15 are front views showing various possible shapes for the applicator;

[0094] FIGS. 16 to 19 show examples of how adhesive can be distributed on the face opposite from the application surface;

[0095] FIG. 20 shows a net on the adhesive surface;

[0096] FIGS. 21 to 24 are diagrammatic axial section views showing various multilayer structures for the applicator;

[0097] FIG. 25 is a diagrammatic section view showing a relief portion on the substance-receiving surface of the applicator;

[0098] FIG. 26 shows an example of a device in which the receptacle is in the form of a case;

[0099] FIGS. 27 to 29 show variant embodiments of cases;

[0100] FIG. 30 shows an embodiment in which the substance is liquid and contained in a flask;

[0101] FIG. 31 shows another embodiment in which the substance is a gel;

[0102] FIG. 32 is a diagram showing an applicator dispenser for dispensing applicators that are on a support strip;

[0103] FIG. 33 shows one applicator positioned on the ends of two touching fingers;

[0104] FIG. 34 shows two applicators fixed on the same finger; and

[0105] FIG. 35 shows two applicators fixed on two respective fingers of the same hand.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0106] FIG. 1 shows a device 1 comprising a receptacle 2 in the form of a case and an applicator 3 for applying a substance P, for example a dispersible substance such as foundation makeup or eye shadow.

[0107] The case comprises a bottom portion 4 and a lid 5 hinged thereto and comprising a catch.

[0108] In its central region, the bottom portion 4 comprises a housing containing the substance P.

[0109] On its inside face, the lid 5 comprises a mirror 6 on which the applicator 3 can be stuck.

[0110] With reference to FIG. 2, it can be seen the applicator 3 comprises a portion 7 for use in applying the substance, defining an application surface 8 on one side and coated on its opposite side in a layer of adhesive 9. The adhesive may be permanent, water resistant, and/or hypoallergenic, and it may adhere more strongly to the application portion 7 than to the skin or to the surface of the receptacle on which the applicator is placed while not in use.

[0111] The adhesive 9, capable of sticking to the skin, may be a food grade adhesive of the acrylic, vinylic or cellulosic type.

[0112] The adhesive 9 may be of the hot-melt type and deposited in the hot state or mixed with a solvent and deposited, the solvent being then eliminated by heating.

[0113] In the example shown, the application surface 8 comprises flocking 10.

[0114] Flocking 10 may for example comprise bristles in Nylon®, having a size of 4 deniers and a length of 1 mm for example, and the bristles may be fixed with a water based adhesive or an epoxy adhesive for example.

[0115] In FIG. 1, the applicator 3 is shown fixed on the mirror 6.

[0116] Prior to first use, the adhesive layer 9 may be covered by a removable protective film 11 that may comprise a tongue 12 that projects beyond the application portion 7 to make the film easier to remove. By way of example, the protective film 11 can comprise silicone paper or a polyethylene or polyester film.

[0117] The device 1 may be put on sale with the applicator 3 already fixed to the receptacle or covered by the protective film 11.

[0118] In order to be used, the applicator 3 is unstuck to the mirror 3, or if the applicator is not fixed on the mirror 6 and has a protective film 11, the film is removed.

[0119] The applicator 3 is then fixed to the pulp of the end phalanx of the index finger, for example, and the user can take substance P, as shown in FIG. 4.

[0120] It may be observed that in the example shown, the adhesive surface 9 comes into contact with the skin of the finger only in its central region. An annular gap 13 thus remains between the pulp of the finger and the adhesive layer 9, thus allowing the applicator 3 to pivot about multiple axes relative to the finger, as shown in FIG. 5 while substance is being applied to the skin. This freedom to pivot can also be useful while taking substance from a cake having a surface that is convex, as shown in FIG. 4.

[0121] After application, the applicator 3 can be unstuck from the finger and stuck back on an applicator-receiving surface of the receptacle 2, for example the mirror 6.

[0122] In front view, the applicator 3 may be circular in shape and of thickness t that is substantially constant, the thickness t being less than half the radius of the applicator, for example, thus giving the applicator a flat shape.

[0123] When the case is closed, the applicator 3 can optionally come into contact with the substance P.

[0124] Naturally, the applicator 3 may be of a different shape without thereby going beyond the ambit of the present invention.

[0125] By way of example, the applicator 3 may comprise an application surface 8 that bulges, e.g. being outwardly convex, as shown in FIG. 6. This bulging shape can be the result, for example, of the thickness of the applicator being reduced at its periphery by deformation, for example by hot deformation of the application portion 7 while performing heat-sealing, for example.

[0126] The maximum thickness t_{\max} , which may be situated on an axis of symmetry of the applicator, can be less than the diameter of the circle circumscribing the applicator. For example, it can be less than half the radius of the circumscribing circle.

[0127] The applicator may also comprise a lens shape in axial section, as shown in FIG. 7, with a thickness that decreases as the distance to the central axis increases.

[0128] The applicator 3 may also be made with a central recess 15 as shown in FIG. 8. Such a recess can serve, for example, to make the applicator more flexible.

[0129] In the examples described above, the application portion 7 may comprise, for example, a layer of open or closed cell foam, a felt, or any other cellular or fibrous structure or a superposition thereof, and the application portion 7 can be porous to a greater or lesser extent.

[0130] A covering 15 of the type involved in a Velcro® fastener can cover or constitute the application portion 7, as shown in FIG. 9. In this figure, the covering 15 comprises a layer 16 of woven cloth and hooks 17 projecting from the surface of the layer 16. The hooks 17 may be of any type capable of co-operating with closed loops, for example they may be fish-hook shaped, mushroom shaped, or they may be open loops.

[0131] The application portion 7 may also comprise or be constituted by a film, the film possibly being of relatively small thickness, as shown in FIG. 10. The film may optionally be covered with flocking 10 on its face that is to serve as the application surface.

[0132] When seen in front view, the applicator 3 may be of a shape other than circular, for example in order to enable a substance to be applied more easily or more accurately over a given portion of the face, for example the eyelids or the lips.

[0133] FIGS. 11 to 15 are front views of various examples of possible shapes, amongst others.

[0134] The applicator 3 may have at least one projection 20 as shown in FIG. 11. The circle 3 circumscribing the applicator has a radius r which is equal to twice the maximum thickness of the applicator, for example, as measured parallel to an axis which passes through the center of the circle and which extends perpendicularly to the plane of FIG. 11.

[0135] As shown in FIG. 12, the applicator 3 may be shield-shaped, being generally triangular, and the application surface 8 may be covered in a woven cloth 21, for example.

[0136] FIG. 13 shows an applicator that is generally pear-shaped, comprising a projection 22 of generally triangular shape.

[0137] As shown in FIG. 14, the application surface of the applicator 3 may comprise at least two regions 8a and 8b having different surface states, which states may be the result, for example, of different treatments applied to the face that is used for application or they may be due to using different materials or coverings for making the application portion.

[0138] By way of example, the regions 8a and 8b may differ from each other in the following ways, amongst others: porosity, roughness, material present on the surface, wettability, magnetic properties, color.

[0139] FIG. 15 shows that the applicator 3 may comprise a through opening 23.

[0140] The adhesive layer 9 may be on the applicator in the form of a film, for example, and the film may cover the entire face of the application portion 7 that is opposite from its application surface 8.

[0141] On the face used for fixing the applicator to the skin, the adhesive may also be in the form of an array of

spots 24, as shown in FIG. 16, a series of strips 25, in order to have a preferential direction for unsticking for example, as shown in FIG. 17, or it may occupy only the central region 26 of the face, as shown in FIG. 18.

[0142] The adhesive may also be in the form of concentric rings 70, as shown in FIG. 19, these rings having variable thicknesses at their periphery for example. The rings 70 may cause the applicator to have a preferential direction for unsticking.

[0143] The adhesive may be deposited by printing.

[0144] The adhesive layer 9 may also be covered by a net 27, for example, thereby enabling its adhesive power to be decreased, as shown in FIG. 20.

[0145] The application portion may comprise a multilayer structure. Various examples of multilayer structures are described with reference to FIGS. 21 to 24.

[0146] In FIG. 21, it can be seen that the application portion 7 comprises a first layer 28, e.g. a foam coated in flocking 10 on its side that is to define the application surface, and covered on its opposite side by a second layer 29, e.g. constituted by a plastics film, for example a polyethylene or a polyester film, with the adhesive layer 9 being deposited thereon.

[0147] In a variant shown in FIG. 22, the second layer 29 may be coated with two adhesive layers 9 on each of its faces. The second layer 29 is, in this case, stuck on the first layer 28.

[0148] In another example, as shown in FIG. 21, the application portion 7 may comprise two foam layers 30 and 31 of different structures, for example a layer of foam comprising open cells and a more dense layer for example comprising closed cells or thinner cells. These two layers may comprise different flexibilities.

[0149] As shown in FIG. 24, the application portion 7 need not have any flocking and may comprise, for example, an open-celled foam whose surface has been subject to abrasion treatment so as to form a downy surface 32.

[0150] The applicator-receiving surface of the receptacle, i.e., the surface on which the applicator is placed when not in use, may comprise a relief portion without thereby going beyond the ambit of the present invention, for example it may comprise projections 34 as shown in FIG. 25 so as to decrease the adhesion of the applicator on the receptacle and so as to enable the user to unstick it more easily in order to fix it onto the end of a finger.

[0151] FIG. 26 shows a variant embodiment in which the receptacle is in the form of a case comprising, as in the example of FIG. 1, a bottom portion 4 and a hinged lid 5 fitted with a mirror 6. In this example, the bottom portion 4 comprises a plurality of housings 40, 41, and 42 that receive different substances. A housing 43 is in the bottom portion 4 beside the housings 40 to 42 for receiving the applicator 3.

[0152] In the variant shown in FIG. 27, the bottom portion 4 has only the housings 40 and 41. The housing 43 in the example of FIG. 26 has been replaced in FIG. 27 by a larger housing 45 suitable for receiving a plurality of applicators 3, for example three applicators as shown.

[0153] It will be appreciated by one skilled in the art that cases having still further shapes could be made in accordance with the invention.

[0154] FIG. 28 shows an example of a case in which the housing 46 is made in the bottom portion 4 for receiving a plurality of applicators 3, which applicators can comprise, as shown in the figure, shapes and textures that are very varied. The user can select a particular applicator as a function of the region to be made up, for example.

[0155] FIG. 29 shows that when the applicator 3 is designed to stick to the lid 5, a corresponding housing 48 can be made in the bottom portion 4.

[0156] The substance P contained in the receptacle may be a liquid or other substance.

[0157] For example, FIG. 30 shows a receptacle in the form of a flask 50 containing a liquid P. The neck of the flask comprises an endpiece 51 comprising at least one orifice 52 for delivering the liquid, which may be done by squeezing the wall of the flask 50, if it is compressible, or by turning the flask upside-down.

[0158] By way of example, the applicator 3 may be fixed on a closure capsule 52 for the receptacle when not in use, possibly being protected from the outside by a removable cap 54, which cap may be transparent.

[0159] The substance P may be viscous and extruded by means of a piston 60 cooperating with a screw 61 driven by a knurled wheel 62, as shown in FIG. 31.

[0160] By way of example, while not in use, the applicator 3 may be fixed on an applicator-receiving surface of the receptacle that is defined, for example, by the inside surface of a lid 64 hinged to the wheel 62.

[0161] In another aspect of the invention and as shown in FIG. 32, prior to first use, applicators 3 may be on a support strip 66. The strip may be rolled up inside a dispenser 67.

[0162] Without going beyond the ambit of the present invention, a single applicator 3 may be placed on the ends of two adjacent fingers, as shown in FIG. 33, or two applicators having different surface states and/or different shapes may be applied to the end of a single finger, as shown in FIG. 34, or two applicators having different shapes and/or different surface states may be applied to two fingers, for example two consecutive

[0163] Naturally, the invention is not limited to the embodiments described above, and the various characteristics thereof can be combined with one another.

[0164] Throughout the description, the term "comprising a" should be understood as being synonymous with "comprising at least one" unless specified to the contrary.

What is claimed is:

1/ A device for applying a cosmetic substance, the device comprising:

a receptacle containing the substance; and

an applicator suitable for being received in the receptacle or fixed thereon, said applicator comprising, prior to first use, an adhesive surface suitable for fixing the applicator to the skin, a circle of axis X circumscribing

the applicator having a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

2/ A device according to claim 1, wherein the circle of axis X has a radius greater than or equal to $\frac{2}{3}$ the maximum thickness.

3/ A device according to claim 1, wherein the maximum thickness of the applicator is not greater than half the radius of the circumscribing circle.

4/ A device according to claim 1, wherein the applicator is of dimensions that are small enough to ensure that the applicator does not extend to a palm of a hand when it is fixed to an end of a finger.

5/ A device according to claim 1, wherein the applicator is configured in such a manner that the adhesive surface cannot adhere in full to the pulp of a first phalanx of an index finger.

6/ A device according to claim 1, wherein, prior to first use, the applicator is not impregnated with the substance to be applied.

7/ A device according to claim 1, wherein the substance is not a toothpaste.

8/ A device according to claim 1, wherein the applicator comprises an application surface comprising at least one of a flocking, a woven cloth and a non-woven cloth.

9/ A device according to claim 8, wherein the application surface comprises a woven cloth, and wherein the woven cloth comprises a plurality of projecting hooks and/or loops.

10/ A device according to claim 1, wherein the applicator comprises a foam.

11/ A device according to claim 10, wherein the foam has been subjected to abrasion treatment in such a manner as to form a downy surface thereon.

12/ A device according to claim 1, wherein the applicator comprises an elastomer.

13/ A device according to claim 1, wherein the applicator comprises a multilayer structure comprising a layer of adhesive for fixing to the skin, a layer defining an application surface, and at least one intermediate layer.

14/ A device according to claim 1, wherein the applicator comprises a porous material that has been subjected to impregnation treatment with at least one biocidal compound.

15/ A device according to claim 1, wherein the applicator comprises magnetic particles.

16/ A device according to claim 15, wherein the magnetic particles are dispersed in a foam.

17/ A device according to claim 1, wherein the applicator comprises an application surface comprising at least two regions with different surface states.

18/ A device according to claim 1, wherein the adhesive is hypoallergenic.

19/ A device according to claim 1, wherein the adhesive layer extends over an entire face of the applicator opposite from its surface used for applying the substance.

20/ A device according to claim 1, wherein the adhesive layer covers part of the face of the applicator opposite from its face used for applying the substance.

21/ A device according to claim 20, wherein the adhesive surface comprises strips or spots of adhesive.

22/ A device according to claim 20, wherein the adhesive layer extends only over a central region of a face of the applicator opposite from its face used for applying the substance.

23/ A device according to claim 1, wherein the applicator comprises a net covering the adhesive surface.

24/ A device according to claim 1, wherein, in section in the direction of the applicator's thickness, the applicator comprises a flat shape with an adhesive face substantially parallel to a face used for application purposes.

25/ A device according to claim 1, wherein, in section in the direction of the applicator's thickness, the applicator comprises a shape that is convex on at least a side of a face used for application purposes.

26/ A device according to claim 1, wherein the applicator is heat-sealed at a periphery of the applicator.

27/ A device according to claim 1, wherein, in front view, the applicator comprises a shape that is not circular.

28/ A device according to claim 27, wherein, in front view, the applicator comprises a shape that is triangular, pear-shaped, lens shaped, waterdrop-shaped, almond-shaped, heart-shaped, or hollow-ring-shaped.

29/ A device according to claim 1, wherein, in front view, the applicator comprises a recess.

30/ A device according to claim 29, wherein the recess is situated in a central region of the applicator.

31/ A device according to claim 1, wherein the applicator comprises a material that is washable.

32/ A device according to claim 31, wherein the material of the applicator is washable in water.

33/ A device according to claim 1, wherein, prior to first use, the adhesive surface is covered by a removable protective film.

34/ A device according to claim 1, wherein the receptacle comprises at least one housing for receiving at least one applicator while not in use.

35/ A device according to claim 1, wherein the receptacle is in the form of a case comprising a bottom portion and a lid that is movable relative to the bottom portion.

36/ A device according to claim 35, wherein the bottom portion comprises at least one housing containing the substance.

37/ A device according to claim 35, wherein the lid comprises a mirror.

38/ A device according to claim 1, wherein the receptacle comprises a piston enabling the substance to be extruded through at least one outlet orifice.

39/ A device according to claim 1, wherein the receptacle comprises a deformable wall.

40/ A device according to claim 1, wherein the receptacle comprises a protective cap for protecting the applicator while not in use.

41/ A device according to claim 1, wherein, prior to use, the applicator is on a strip acting as a support for a plurality of applicators.

42/ A device according to claim 1, wherein the surface of the receptacle which receives the applicator while not in use comprises a relief portion for reducing the adhesion of the applicator.

43/ A device according to claim 42, wherein the relief portion comprises an array of stripes or projections.

44/ A device according to claim 42, wherein the applicator is coated in an anti-adhesive material.

45/ A device according to claim 42, wherein the applicator has been subjected to an anti-adhesive treatment.

46/ A method of applying a substance to at least one of the skin, the hair, the lips and the nails, the method comprising the following steps:

fixing an applicator with adhesive to the end of at least one finger, the applicator comprising a portion for applying the substance, said portion extending at least in part over the pulp of a first phalanx of the finger, said applicator not extending as far as the palm of the hand; and

applying the substance to at least one of the skin, the hair, the lips and the nails, by bringing the application portion into contact with the region concerned.

47/ A method according to claim 46, wherein the applicator is used for making up at least one of the cheek bones, the eyelids and the lips.

48/ A method according to claim 46, wherein the applicator is positioned on the pulp of the first phalanx while retaining the ability to move relative thereto about various axes.

49/ A method according to claim 46, wherein the adhesive surface of the applicator is covered in a removable protective film which the user removes prior to placing the adhesive surface in contact with a finger.

50/ A method according to claim 46, wherein after use, the applicator is stuck onto an applicator-receiving surface of a receptacle, in particular a mirror, a lid, or the bottom of a housing provided for receiving the applicator.

51/ A method according to claim 46, wherein the applicator is used on a plurality of occasions, the adhesive being selected in such a manner as to conserve its adhesive properties from one occasion to another.

52/ A method according to claim 46, wherein the substance is a cosmetic.

53/ A device for applying a cosmetic substance, the device comprising:

a receptacle containing the substance; and

an applicator comprising a multilayer structure, said applicator being configured for being received in the receptacle or fixed thereon, said applicator comprising, prior to a first use, an adhesive surface suitable for fixing the applicator to the skin.

54/ A device according to claim 53, wherein a circle of axis X circumscribing the applicator has a diameter greater than a maximum thickness of the applicator as measured parallel to the axis X.

55/ A device according to claim 53, wherein the applicator comprises two layers of different hardnesses.

56/ A device according to claim 53, wherein the applicator comprises two layers of foam.

57/ A device for applying a cosmetic substance, the device comprising:

a receptacle containing the substance; and

an applicator removably fixed on the receptacle, said applicator not being in contact with the substance contained in the receptacle, said applicator comprising, prior to first use, an adhesive surface suitable for fixing the applicator to the skin.

58/ A device according to claim 57, wherein a circle of axis X circumscribing the applicator has a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

59/ A device for applying at least one of at least two different cosmetic substances, the device comprising:

a receptacle containing at least two substances; and

an applicator suitable for being received in the receptacle or fixed thereon, said applicator comprising, prior to first use, an adhesive surface.

60/ A device according to claim 59, wherein a circle of axis X circumscribing the applicator has a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

61/ A device according to claim 60, wherein the circle of axis X has a radius greater than or equal to $\frac{2}{3}$ rds the maximum thickness.

62/ A device according to claim 60, wherein the maximum thickness of the applicator is not greater than half the radius of the circumscribing circle.

63/ A device for applying a cosmetic substance, said device comprising:

a receptacle containing the substance; and

at least two applicators suitable for being received in the receptacle or fixed thereon, said applicators comprising, prior to first use, an adhesive surface.

64/ A device according to claim 63, wherein a circle of axis X circumscribing the applicator has a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

65/ A device according to claim 64, wherein the circle of axis X has a radius greater than or equal to $\frac{2}{3}$ rds the maximum thickness.

66/ A device according to claim 64, wherein the maximum thickness of the applicator is not greater than half the radius of the circumscribing circle.

67/ A device for applying a cosmetic substance, said device comprising:

a receptacle containing a cake of the substance; and

an applicator suitable for being received in the receptacle or fixed thereon, said applicator comprising, prior to first use, an adhesive surface.

68/ A device according to claim 67, wherein a circle of axis X circumscribing the applicator has a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

69/ A device according to claim 68, wherein the circle of axis X has a radius greater than or equal to $\frac{2}{3}$ rds the maximum thickness.

70/ A device according to claim 68, wherein the maximum thickness of the applicator is not greater than half the radius of the circumscribing circle.

71/ A device for applying a cosmetic substance, said device comprising:

a receptacle containing the substance; and

an applicator suitable for being received in the receptacle or fixed thereon, said applicator comprising a shape that is not circular, said applicator comprising, prior to a first use, an adhesive surface suitable for fixing the applicator to the skin.

72/ A device according to claim 71, wherein a circle of axis X circumscribing the applicator has a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

73/ A device according to claim 72, wherein the circle of axis X has a radius greater than or equal to $\frac{2}{3}$ rds the maximum thickness.

74/ A device according to claim 72, wherein the maximum thickness of the applicator is not greater than half the radius of the circumscribing circle.

75/ A dispenser for dispensing at least one applicator not impregnated with toothpaste prior to first use, said applicator

comprising, prior to first use, an adhesive surface suitable for fixing the applicator to the skin.

76/ A dispenser according to claim 75, wherein a circle of axis X circumscribing the applicator has a diameter greater than the maximum thickness of the applicator as measured parallel to the axis X.

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