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(54) **PACKAGE FOR LATHERING A PERSONAL CARE PRODUCT**

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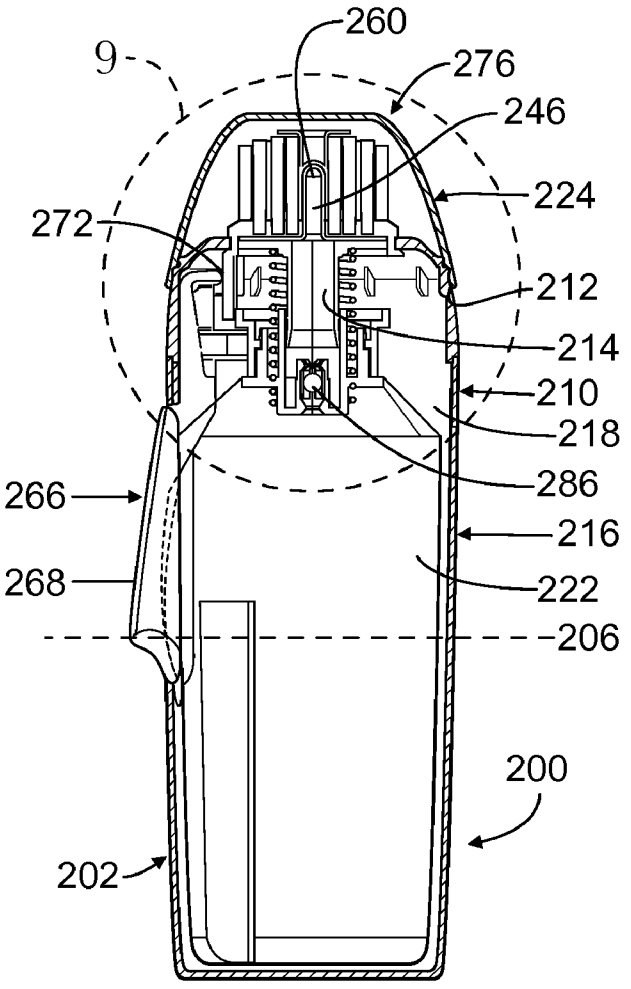
(57) **ABSTRACT**

A package for lathering a liquid personal care product, the package comprising: (a) a body for grasping with a user's hand, wherein the body comprises a horizontal plane defining a first cross-sectional shape; and (b) an applicator comprising a skin-contacting portion, wherein the skin-contacting portion comprises a horizontal plane defining a second cross-sectional shape; wherein each of the first cross-sectional shape and the second cross-sectional shape comprises a major dimension oriented along a first axis and a minor dimension oriented along a second axis, and wherein the major dimensions are greater than the minor dimensions.



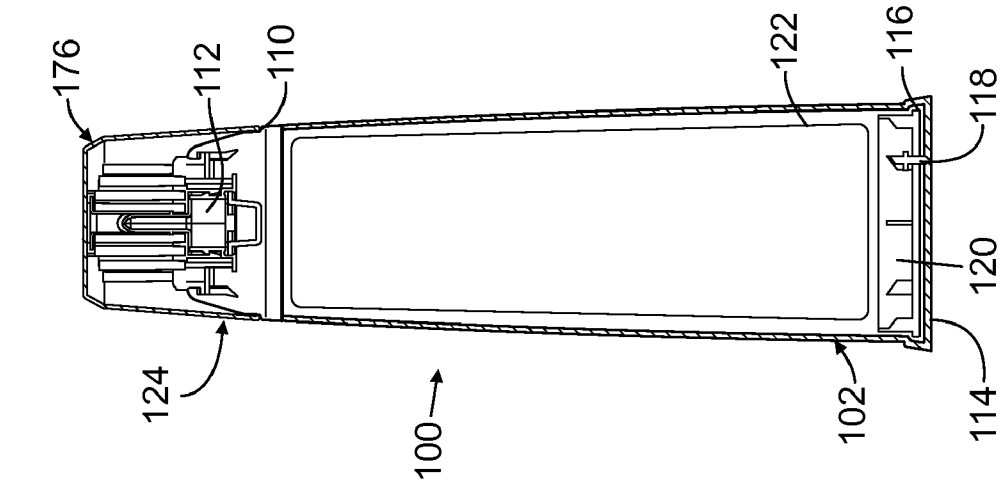


Fig. 3

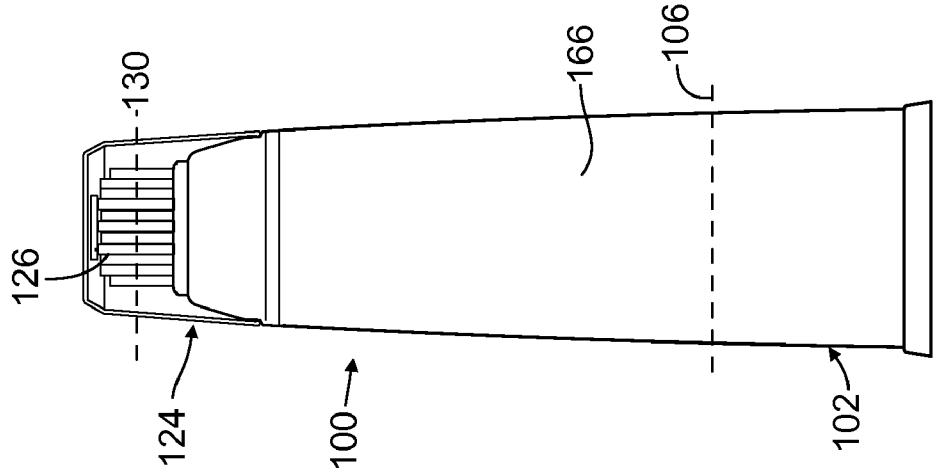


Fig. 2

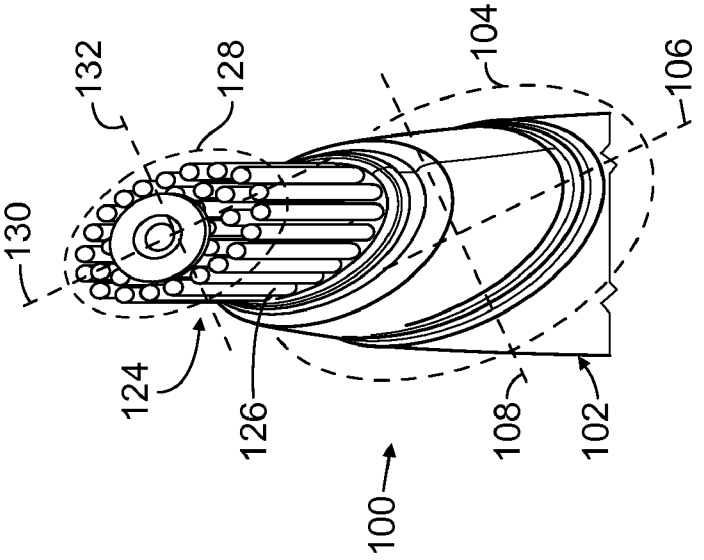


Fig. 1

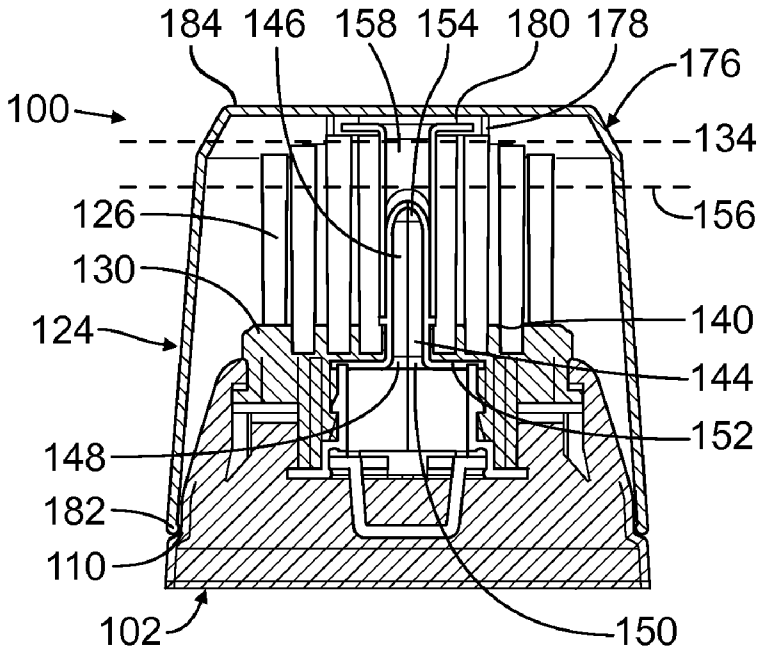

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Fig. 4

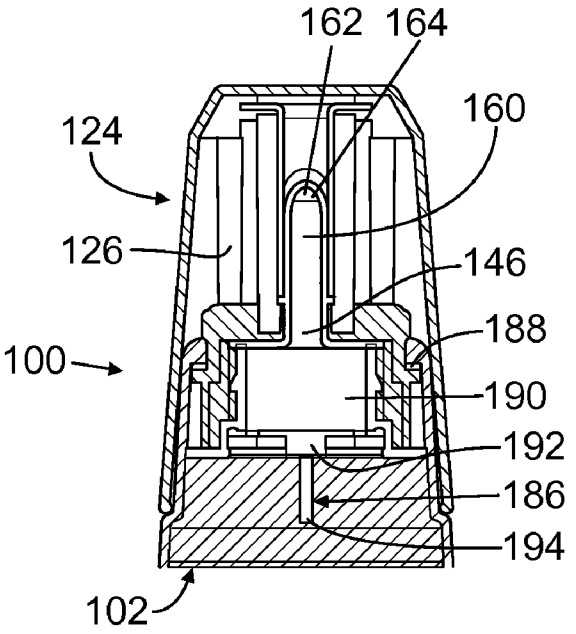
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Fig. 5

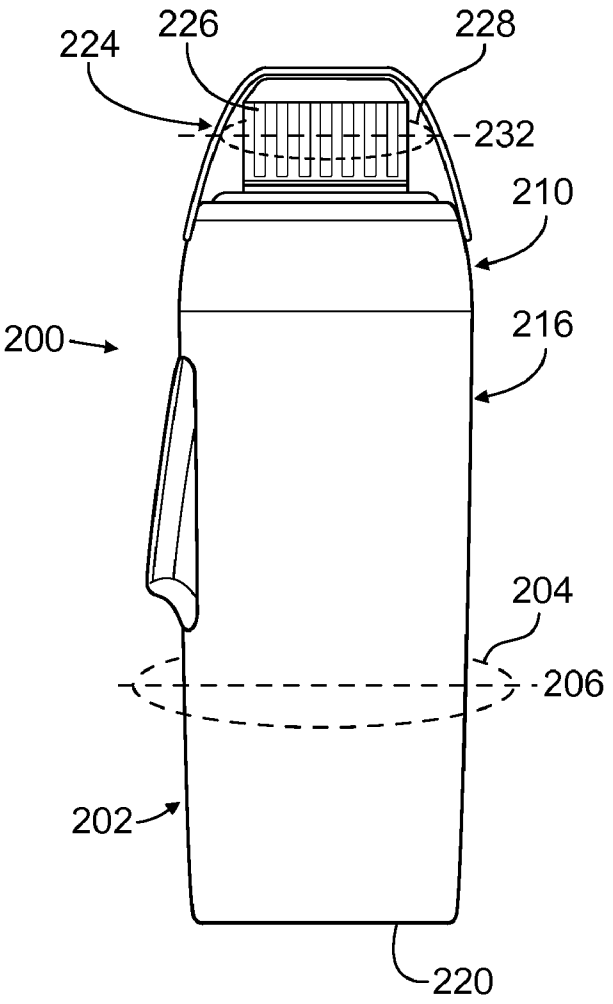
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Fig. 6

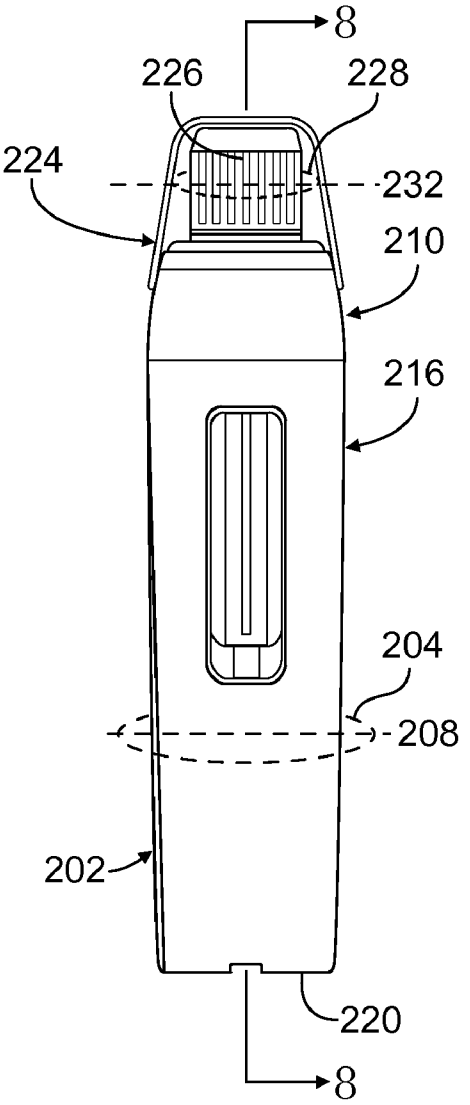
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Fig. 7

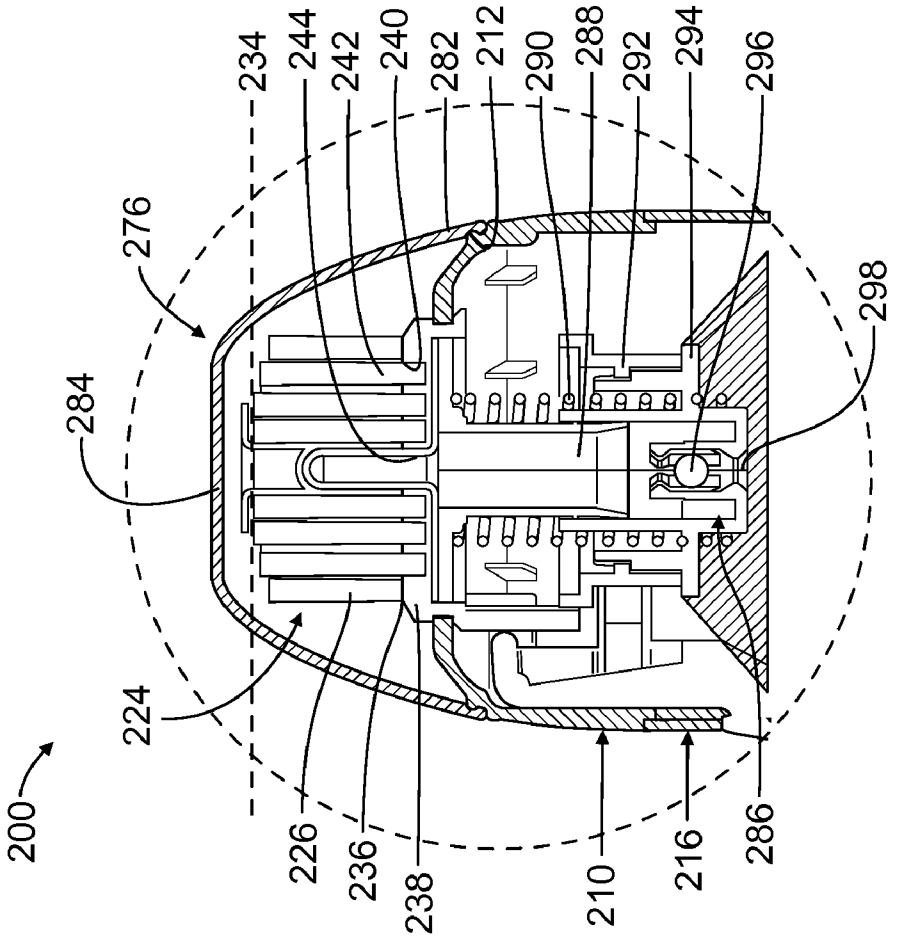
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Fig. 9

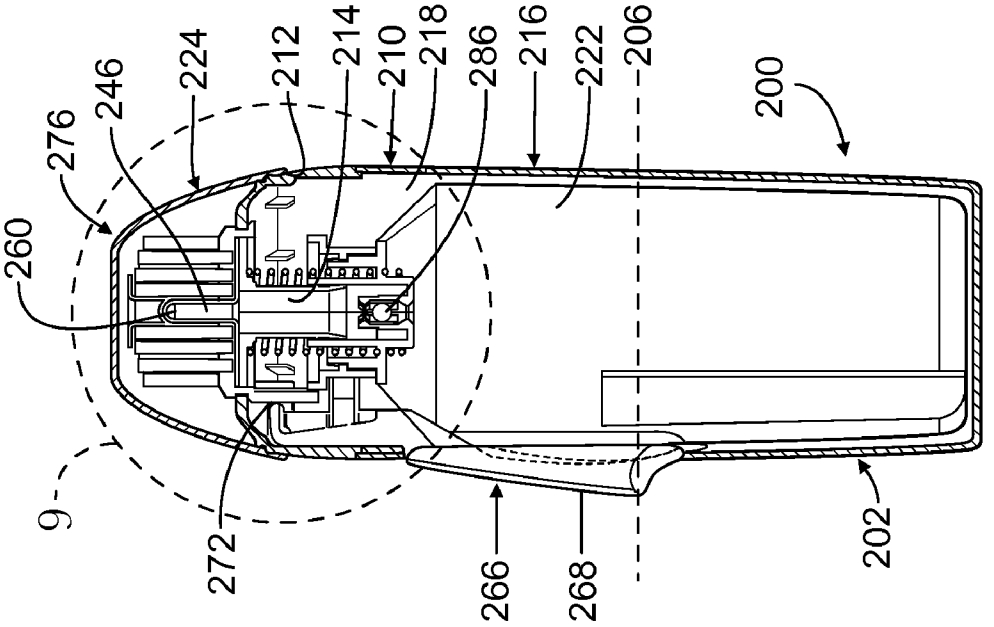
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Fig. 8

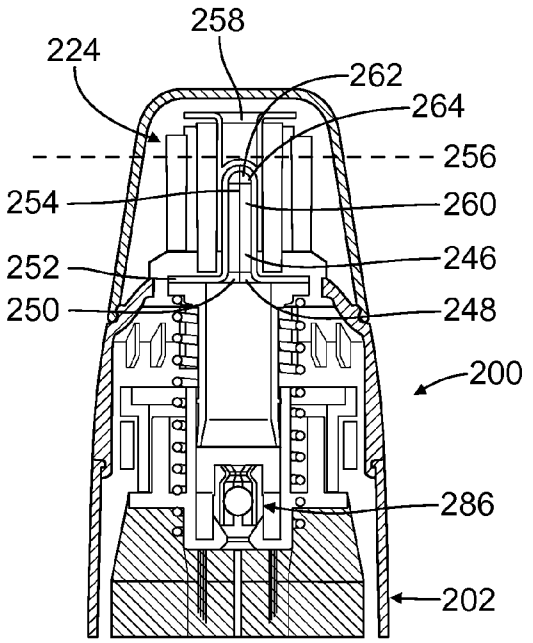

Fig. 10

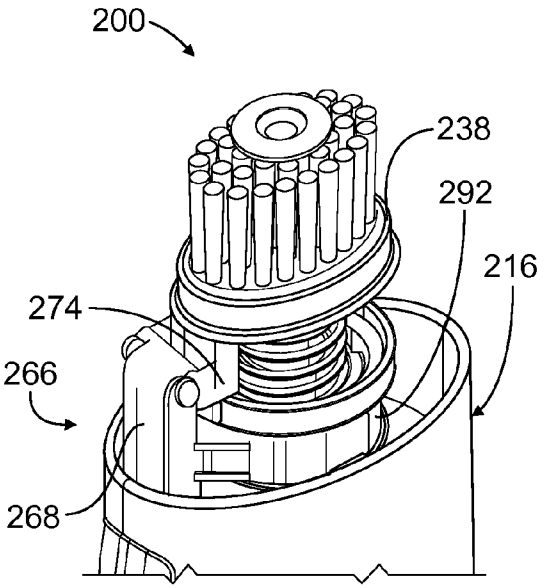

Fig. 11

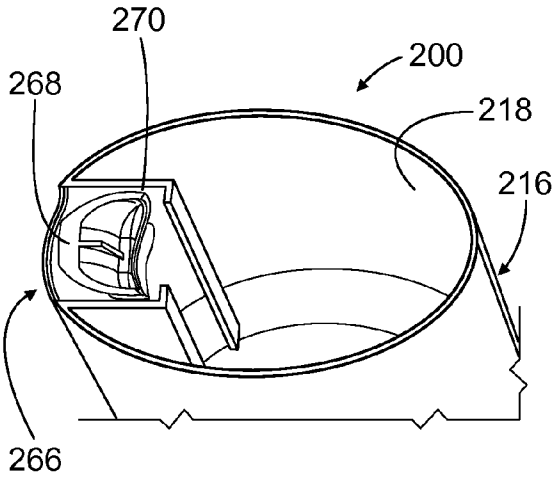

Fig. 12

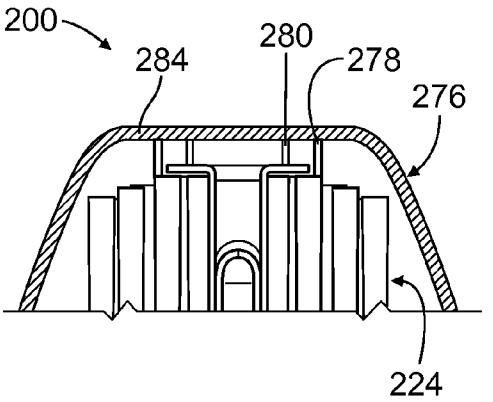

Fig. 13

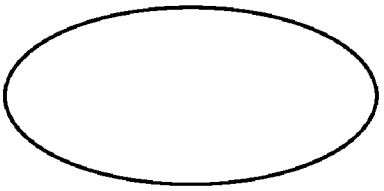

Fig. 14a

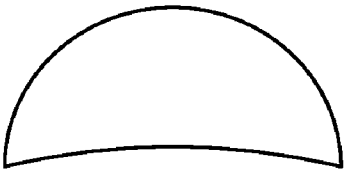

Fig. 14b

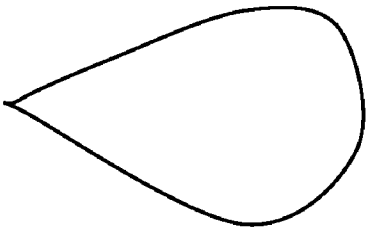

Fig. 14c

Fig.14d

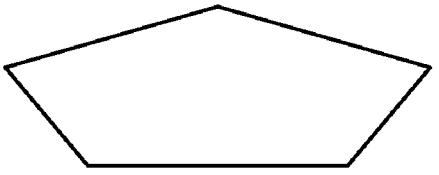

Fig. 14e

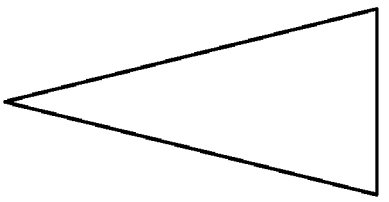

Fig. 14f

PACKAGE FOR LATHERING A PERSONAL CARE PRODUCT

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application No. 61/072,492, filed Mar. 31, 2008.

FIELD OF THE INVENTION

[0002] The present invention is directed to packages for lathering a liquid personal care product.

BACKGROUND OF THE INVENTION

[0003] Liquid personal care products are available in a wide variety of packages, including bottles, jars, tubes, and cans. Liquid personal care products meant for application to the skin are traditionally dispensed from a container onto users' hands and then applied to the skin by hand. Examples of such products include lotion, facial cleanser, and shaving cream. This application method however can be messy, and that portion of the product that does not get transferred from users' fingers is wasted.

[0004] Few liquid personal care products on the market have applicators or lathering aids. While patents relating to brush attachments for shaving cream in traditional aerosol cans do exist, there are no well-known lathering aids for shaving cream currently available for consumer purchase. U.S. Pat. No. 4,603,992 (Kavoussi) (the "'992 patent") is an example of a conventional aerosol shaving cream container with a shaving brush attachment. The '992 patent is believed representative of the prior art: the container is cylindrical and the shaving brush attachment has a cylindrical fan shape that is rounded at the top. This sort of applicator may not work well to lather product onto smaller skin areas, such as the space between the nose and upper lip; an applicator with a shape other than cylindrical may work better. But, if the shape of the applicator is not cylindrical, it may be hard for the user to view the orientation of the applicator, particularly when the applicator contains foamed product and is placed against the skin. Accordingly, there is a need to inform users of the orientation of the applicator as they hold it close to the skin.

[0005] To solve these problems, a package with skin-friendly dispensing and lathering capabilities may be used to apply and lather product directly onto the skin. There is a desire to develop a package that allows the product to be dispensed directly from a container onto the skin. A need exists for a container that better fits into a user's hand. The package may comprise a displacement member located remote from the portion of the package that contacts the skin. There exists a need for a flow-restricting member to keep water and other impurities out of the dispenser and container as well as prevent the product from flowing out of the container unless force is consciously exerted on the container to dispense the product. Also, a need still exists for an applicator and container that are ergonomically designed to lather product on various skin areas. As a result, if an applicator and/or container are not the traditional round shape, a need exists to inform the user of the positioning of the applicator in relation to the positioning of the container so the user may better line up the applicator with the area of skin to be lathered. These are all objects of the present invention; embodiments of the present invention may combine various objects mentioned. A particular embodiment may, but need not, embody every object of the invention.

SUMMARY OF THE INVENTION

[0006] The present invention is directed to a package for lathering a liquid personal care product. A first exemplary embodiment comprises a body for grasping with a user's hand, wherein the body comprises a horizontal plane defining a first cross-sectional shape. The embodiment also comprises an applicator comprising a skin-contacting portion, wherein the skin-contacting portion comprises a horizontal plane defining a second cross-sectional shape. Each of the first cross-sectional shape and the second cross-sectional shape comprises a major dimension oriented along a first axis and a minor dimension oriented along a second axis, wherein the major dimensions are greater than the minor dimensions.

[0007] A second exemplary embodiment comprises all of the elements of the first exemplary embodiment. In addition, the body is flexible, resilient, and inwardly deformable along its second axis in order to urge a volume of a liquid personal care product from within the body to the skin-contacting portion.

[0008] A third exemplary embodiment comprises all of the elements of the first exemplary embodiment. In addition, the body comprises a body cavity. The embodiment comprises a flexible bag, wherein the flexible bag is fillable with a liquid personal care product, and wherein the flexible bag fits within the body cavity. The embodiment also comprises a displacement member associated with the body that is inwardly moveable in order to urge a volume of a liquid personal care product from within the flexible bag to the skin-contacting portion.

[0009] A fourth exemplary embodiment comprises, in addition to the features of the first embodiment, a package in which the body further comprises an outlet for dispensing a liquid personal care product, wherein the applicator is in fluid communication with the body outlet. The first cross-sectional shape orientationally corresponds to the second cross-sectional shape so that as the body is manipulated by a user's hand, a user can be assured that the skin-contacting portion is oriented as intended on the skin.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] While the specification concludes with claims particularly pointing out and distinctly claiming the present invention, it is believed the same will be better understood from the following description taken in conjunction with the accompanying drawings in which:

[0011] FIG. **1** is a perspective view of the top portion of a first exemplary embodiment of the present invention.

[0012] FIG. **2** is a front view of the embodiment shown in FIG. **1**.

[0013] FIG. **3** is a vertical cross-sectional view of the embodiment shown in FIG. **1**, taken along the line I-I.

[0014] FIG. **4** is a view of the top portion of the embodiment shown in FIG. **3**.

[0015] FIG. **5** is a vertical cross-sectional view of the top portion of the embodiment shown in FIG. **1**, taken along the line II-II.

[0016] FIG. **6** is a front view of a second exemplary embodiment of the present invention.

[0017] FIG. **7** is a side view of the embodiment shown in FIG. **6**.

[0018] FIG. **8** is a vertical cross-sectional view of the embodiment shown in FIG. **6**, taken along the line III-III.

[0019] FIG. **9** is a view of the top portion of the embodiment shown in FIG. **8**.

[0020] FIG. **10** is a vertical cross-sectional view of the top portion of the embodiment shown in FIG. **6**, taken along the line IV-IV.

[0021] FIG. **11** is a perspective view of the top portion of the embodiment shown in FIG. **6**.

[0022] FIG. **12** is a horizontal cross-sectional, perspective view of the embodiment shown in FIG. **8**, taken along the line V-V.

[0023] FIG. **13** is a view of the top portion of the embodiment shown in FIG. **9**.

[0024] FIGS. **14***a-f* are examples of cross-sectional shapes the package may comprise.

DETAILED DESCRIPTION OF THE INVENTION

[0025] The present invention may be understood more readily by reference to the following detailed description of illustrative and preferred embodiments. It is to be understood that the scope of the claims is not limited to the specific ingredients, methods, conditions, devices, or parameters described herein, and that the terminology used herein is not intended to be limiting of the claimed invention. Also, as used in the specification, including the appended claims, the singular forms "a," "an," and "the" include the plural, and reference to a particular numerical value includes at least that particular value, unless the context clearly dictates otherwise. When a range of values is expressed, another embodiment includes from the one particular value and/or to the other particular value. Similarly, when values are expressed as approximations, by use of the antecedent basis "about," it will be understood that the particular values form another embodiment. All ranges are inclusive and combinable.

[0026] All percentages and ratios used herein are by weight of the total composition, and all measurements made are at 25° C., unless otherwise designated.

[0027] The packages of the present invention can comprise, consist of, and consist essentially of the features of the invention described herein, as well as any of the additional or optional ingredients, components, steps, or limitations described herein.

[0028] The term "latherable" as used herein refers to a liquid personal care product that is able to form a foam or froth when agitated or spread onto the skin. The liquid personal care product may lather by entrapping air, by comprising a surfactant-type substance, or by another means known to those of ordinary skill in the art. Water addition may or may not be necessary to obtain a foam or froth, but it may enhance benefits or results depending on the type of product used. Agitation or spreading may be by hand, but is preferably by applicator. Agitation or spreading may be rapid or slow, and may comprise irregular and regular movements.

[0029] The term "lathering" as used herein refers to the act of agitating or spreading onto the skin a liquid personal care product to produce a foam or froth. For instance, a product may be dispensed as a gel and then lathered into a foam. If a product is already in the form of a foam or froth when dispensed from its package, lathering may comprise spreading product onto the skin to cover an area of skin.

[0030] The following exemplary packages further describe and demonstrate embodiments within the scope of the present invention. The examples are given solely for the purpose of illustration and are not to be construed as limitations of the present invention as many variations thereof are possible without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

[0031] A first exemplary package **100** is shown in FIGS. **1** to **5**. FIG. **1** illustrates the top portion of package **100**, comprising a body **102**, and an applicator **124**. Body **102** is able to be grasped with a user's hand; it comprises a horizontal plane defining a first cross-sectional shape **104**. Cross-sectional shape **104** comprises a major dimension **106** oriented along a first axis and a minor dimension **108** oriented along a second axis. Body **102** may be provided in a variety of forms or shapes and may be made of various materials. Examples of suitable plastic materials include high density polyethylene ("HDPE"), low density polyethylene ("LDPE"), polyethylene terephthalate ("PET"), polypropylene ("PP"), polyvinyl chloride, polycarbonate, nylon, and fluorinated ethylene propylene. Body **102** may be made via a number of processes known in the art, such as blow molding, injection molding, and the like. Body **102** may be comprised of transparent, translucent, or opaque materials, or it may be comprised of a combination of materials with these properties. In a preferred embodiment, body **102** is opaque and made of thermoplastic resin via an extrusion blow molding process. In other embodiments, body **102** may be transparent to show unique color, texture, pattern, or inclusions of a liquid personal care product; for example, moisturizing beads or white color to signify suitable for use on sensitive skin.

[0032] Many prior art packages have applicators which are attachable, but not integral to the package. Applicator **124** may be attachable or removeably attached to body **102**, such as with screw-threads, a snap-fit collar, or the like. In a preferred embodiment, applicator **124** is integral with body **102**, which means that the applicator is assembled with the body during manufacturing and is not intended to be removed by a consumer during the product lifetime. Applicator **124** comprises a skin-contacting portion **126** comprising a horizontal plane defining a second cross-sectional shape **128**. Cross-sectional shape **128** comprises a major dimension **130** oriented along a first axis and a minor dimension **132** oriented along a second axis. Skin-contacting portion **126** may comprise bristles, a sponge, a loofah, a shower puff, or another material or combination of materials that is capable of lathering a liquid personal care product. Skin-contacting portion **126** may be rinsed after use.

[0033] In a preferred embodiment, at least a part of skin-contacting portion **126** is designed to fit between a user's nose and upper lip. As such, minor dimension **132** of skin-contacting portion **126** may be less than or equal to about 0.75 inches. In another embodiment, minor dimension **132** of skin-contacting portion **126** may be less than or equal to about 0.5 inches. In a preferred embodiment, major dimension **130** of skin-contacting portion **126** is less than or equal to about 1.5 inches. Major dimension **130** and minor dimension **132** may vary depending on the part of the skin skin-contacting portion **126** is meant to contact. For example, dimensions **130**, **132** may be larger if skin-contacting portion **126** is meant for users' legs, or smaller if skin-contacting portion **126** is meant for users' underarms or bikini area.

[0034] In one embodiment, such as shown in FIG. **2**, major dimension **106** of body **102** substantially aligns with major dimension **130** of skin-contacting portion **126**. Also as shown in FIGS. **1** and **2**, first cross-sectional shape **104** and second cross-sectional shape **128** are in vertical alignment. In other embodiments, cross-sectional shape **104** and cross-sectional shape **128** may not be in vertical alignment. For example, skin-contacting portion **126** may be offset from body **102** so that skin-contacting portion **126** is not positioned vertically above body **102**, but rather extends from the side of body **102**. Skin-contacting portion **126** may also extend horizontally from body **102**, or from any angle in between; skin-contacting portion **126** may be fixed at a certain angle or it may be adjustable by users. Cross-sectional shapes **104**, **128** of body **102** and applicator **124**, respectively, may take different forms. In various embodiments, as shown in FIGS. **14***a-f*, first cross-sectional shape **104** and second cross-sectional shape **128** may be oblong circles, squares, or triangles; further exemplary shapes include teardrop and pear. The shapes **104**, **128** may substantially match or not match. For example, in one embodiment, cross-sectional shape **104** may have an oval shape while cross-sectional shape **128** may have a teardrop shape. Cross-sectional shapes **104**, **128** may be symmetrical or asymmetrical. FIG. **1** illustrates cross-sectional shape **104** and cross-sectional shape **128** as symmetrical, oblong circles. In further embodiments, package **100** may comprise more than two distinct cross-sectional shapes.

[0035] Referring to FIG. **3**, body **102** has an outlet **112** that is in fluid communication with applicator **124**. Body **102** comprises a flat surface **114** that package **100** rests on when it is not in use. In a preferred embodiment, the bottom portion of body **102** may comprise a lower gasket **116**, an umbrella valve **118**, and a bottom or bottom plate **120**. Lower gasket **116** is preferably made of a thermoplastic elastomer ("TPE") and bottom plate **120** is preferably made of PP. It should be noted that these aforementioned features, as well as other features described throughout, are not limiting on the scope of the appended claims where such features are not explicitly recited.

[0036] FIG. **4** illustrates applicator **124**. In one embodiment, skin-contacting portion **126** extends to a first height **134** from applicator base **136**, wherein first height **134** is equal to the highest point of skin-contacting portion **126**. In other embodiments, skin-contacting portion **126** may extend to various heights in various zones, so there may be more than one height of interest. In a preferred embodiment, applicator base **136** is made out of PP and comprises a plurality of fiber receiving holes **140** to receive fibers **142** to form skin-contacting portion **126**. Applicator base **136** comprises an orifice **144** to enable dispensing of product onto skin-contacting portion **126**. To prevent dispensed product from getting stuck in the bottom half of skin-contacting portion **126** or clogging outlet **112**, one or more dispensing conduits **146** help direct the product to a preferred location within skin-contacting portion **126**. This makes more efficient use of the product because more product is available for lathering onto the skin rather than filling up the lower portion of skin-contacting portion **126**. FIG. **4** shows dispensing conduit **146** having a proximal end **148** and a distal end **154**. Proximal end **148** has an inlet **150** that is in fluid communication with outlet **112** of body **102** and a compression seal **152**. In a preferred embodiment, a sufficient length of dispensing conduit **146** extends into skin-contacting portion **126**, with distal end **154** located somewhat close to a surface that contacts the skin, thereby dispensing more product closer to the skin. However, dispensing conduit **146** should not extend too far into skin-contacting portion **126** or it might too aggressively contact or scratch a user's skin when in use. As such, in one embodiment, distal end **154** extends from applicator base **136** to a second height **156** that is less than first height **134** of skin-contacting portion **126**. In this configuration, distal end **154** may still contact a user's skin during use, but desirably not to the point of causing significant irritation to one's skin. Dispensing conduit **146** may be comprised of a variety of materials. For example, dispensing conduit **146** may be made of hard plastic and precautions may be taken by the manufacturer or user to prevent dispensing conduit **146** from contacting the skin and causing discomfort, scratches, or injury to the skin. However, in a preferred embodiment, dispensing conduit **146** is made of a softer material; one exemplary material is TPE.

[0037] A safety cap **158** may be provided to cover dispensing conduit **146**. Safety cap **158** prevents damage or disfigurement to skin-contacting portion **126** and it may also prevent leakage of product from dispensing conduit **146**. In a particular embodiment, safety cap **158** is a temporary cover and may be removed and discarded by the consumer after purchase. In a preferred embodiment, safety cap **158** is made of PP.

[0038] Package **100** optionally comprises an over cap **176** that is removeably attached to body **102** or applicator **124**. Over cap **176** may comprise an outer ring **178** to compress safety cap **158** and an inner ring **180** to contain safety cap **158**. In a particular embodiment, a ledge **182** on over cap **176** allows over cap **176** to snap into a notch **110** of body **102**. Over cap **176** may also comprise a flat surface **184**, allowing package **100** to be inverted, thus resting on flat surface **184** when not in use. In one embodiment, over cap **176** is made of PP.

[0039] In particular embodiments, as shown in FIG. **5**, a valve **186** may be disposed between body **102** and applicator **124**. In a preferred embodiment, valve **186** comprises an upper gasket **188** made of TPE or rubber, and a transition piece **190**, a one-way valve **192**, and a valve cover **194**, all three made of PP.

[0040] Some embodiments of the present invention may employ one or more flow-restricting members **160** associated with dispensing conduit **146**. In a preferred embodiment, flow-restricting member **160** is positioned at or near distal end **154** of dispensing conduit **146**. Flow-restricting member **160** acts to inhibit and/or prevent water from entering dispensing conduit **146**, while also preventing product from flowing out of package unless force is consciously exerted on a displacement member to dispense the product. Dispensing of the product may then be more accurately controlled and unwanted dispensing of the product may be substantially prevented.

[0041] "Flow-restricting member" 160 as used herein means any of numerous mechanical devices by which the flow of a liquid personal care product may be started, stopped, or regulated by a movable part that opens, shuts, or partially obstructs one or more ports, orifices or passageways. Flow-restricting member **160** may be manually openable or pressure activated. Flow-restricting members **160** may be any valve known in the art including but not limited to bi-directional, uni-directional, duckbill, claw, umbrella, cross-slit, and slit valves.

[0042] In one particular embodiment, flow-restricting member **160** has at least two opposing members **162**, wherein members **162** converge into a closed or substantially closed state, and diverge into an open state. Members **162** are biased to the closed state to inhibit and/or prevent water or impurities from entering and clogging dispensing conduit **146**, or to inhibit contamination or dilution of the product within dispensing conduit **146** or body **102**. For example, a user may rinse skin-contacting portion **126** under running water after use; the water can clog dispensing conduit **146** or dilute or contaminate the product if it gets inside body **102**. Another reason members **162** are biased to the closed state is to prevent unwanted leakage of the product if package **100** is inverted while not in use. Members **162** may be forced into the open state when a volume of product is communicated from body **102** through dispensing conduit **146** in response to manual forces being applied to a displacement member. Flow-restricting member **160** returns to its closed position upon removal of the manual displacement forces which results in stopping the dispensing of the product through dispensing conduit **146**.

[0043] In another particular embodiment, flow-restricting member **160** comprises a slit valve **164**. "Slit valve" **164** as used herein means a valve whose members are formed from incision(s) that have a closed and open position as described above. Preferably, slit valve **164** is made of a relatively flexible material, such as silicone rubber, polyvinyl chloride, urethane, ethylene vinyl acetate, styrene-butadiene copolymer, and other materials known to those of ordinary skill in the art. In one embodiment, slit valve **164** is made of silicone. The stiffness of slit valve **164** in one embodiment is sufficient to prevent the slit from opening under the hydrostatic pressure of a liquid personal care product when package **100** is placed in an inverted position.

[0044] Body **102** may contain a liquid personal care product. Alternatively, body **102** may comprise a flexible bag **122** to contain a liquid personal care product; flexible bag **122** fits within body **102** and acts as a bladder. In a preferred embodiment, flexible bag **122** attaches to transition piece **190**. Flexible bag **122** may be made out of HDPE, LDPE, mylar film, or other suitable material known to one of ordinary skill in the art.

[0045] Package **100** comprises a means to dispense a product contained within package **100**. In one embodiment, body **102** is flexible and resilient, and it is inwardly deformable along its minor dimension **108** in order to urge a volume of a liquid personal care product from within body **102** to skin-contacting portion **126**.

[0046] In other embodiments, package **100** comprises a displacement member **166** that urges the product out of body **102** and onto skin-contacting portion **126**. Displacement member **166** may be located away from skin-contacting portion **126** to allow product to be manually dispensed by the user while skin-contacting portion **126** is in contact with the skin. In a preferred embodiment, such as in FIG. **2**, displacement member **166** comprises at least a portion, or sidewall, of body **102**; wherein the sidewall (not shown) of body **102** is flexible, resilient, and deformable along its minor dimension **108**. In one embodiment, two sidewalls are located along either side of body **102** along major dimension **106**. In another embodiment, displacement member **166** is a piston (not shown) that is vertically moveable upward from bottom **120** of body **102**. In one embodiment, the piston or similar member may extend partially within body **102** to dispense a liquid personal care product. A further example of displacement member **166** is a trigger, as shown in FIGS. **6-12** and discussed more fully below.

[0047] A second exemplary package **200** is shown in FIGS. **6** to **13**. Package **200** has many of the same features as package **100**; most features are numbered consistently between the two, with a difference in the hundreds numeral, for example, body **102** of package **100** vs. body **202** of package **200**. The descriptions, dimensions, and variations of the features of package **100** may be applied to the corresponding features of package **200** discussed below, unless otherwise noted.

[0048] In a preferred embodiment, body **202** is opaque and made of thermoplastic resin via an extrusion blow molding process.

[0049] FIGS. **7** and **8** depict package **200** comprising a body **202** and an applicator **224**. Body **202** of package **200** comprises a horizontal plane defining a first cross-sectional shape **204**. First cross-sectional shape **204** comprises a major dimension **206** oriented along a first axis, and a minor dimension **208** oriented along a second axis, as shown in FIGS. **7** and **8**. Applicator **224** comprises a skin-contacting portion **226**, wherein skin-contacting portion **226** comprises a horizontal plane defining a second cross-sectional shape **228**. Second cross-sectional shape **228** comprises a major dimension **230** oriented along a first axis and a minor dimension **232** oriented along a second axis, as shown in FIGS. **7** and **8**. In a preferred embodiment, major dimension **206** of body **202** substantially aligns with minor dimension **230** of skin-contacting portion **226**, and first cross-sectional shape **204** and second cross-sectional shape **228** are in vertical alignment. Also in a preferred embodiment, package **200** has first cross-sectional **204** and second cross-sectional **228** shapes that are symmetrical, oblong circles. Body **202** comprises a flat surface **220**. In a preferred embodiment, body **202** comprises an upper body **210** and a lower body **216**.

[0050] FIG. **9** illustrates body **202** having an outlet **214** that is in fluid communication with applicator **224**. Upper body **210** comprises a notch **212**, where an optional over-cap **276** snaps on. Lower body **216** comprises a body cavity **218**, wherein a flexible bag **222** fillable with a liquid personal care product fits within body cavity **218**. FIG. **9** also illustrates a dispensing conduit **246**, a flow-restricting member **260**, a displacement member **266**, and optional valve **286** of package **200**.

[0051] As seen in FIG. **10**, skin-contacting portion **226** of applicator **224** extends to a first height **234** from an applicator base **236**. In a preferred embodiment, applicator base **236** comprises a plurality of fiber receiving holes **240** that receive fibers **242** to form skin-contacting portion **226**. Applicator base **236** comprises an orifice **244** to enable dispensing of product onto skin-contacting portion **226**.

[0052] FIG. **11** illustrates dispensing conduit **246**, and its proximal end **248** and distal end **254**. Proximal end **248** has an inlet **250** and a compression seal **252**. Distal end **254** has a second height **256**. A safety cap **258** may be provided to cover dispensing conduit **246** and prevent leakage. Flow-restricting member **260** is associated with dispensing conduit **246**. In a preferred embodiment, flow-restricting member **260** comprises opposing members **262**. In other embodiments, flow-restricting member **260** comprises a valve, such as a slit valve **264**.

[0053] In particular embodiments, as shown in FIGS. **9-11**, a valve **286** may be disposed between body **202** and applica-

tor **224**. In a preferred embodiment, best seen in FIG. **10**, valve **286** may comprise a stationary piston **288**, a compression spring **290**, a collar **292**, a ball **296**, and a one-way valve **298**. In one embodiment, stationary piston **288** and collar **292** are made of PP, while compression spring **290** and ball **296** are made of stainless steel.

[0054] FIGS. **8-12** depict displacement member **266** which is associated with body **202**. Displacement member **266** is inwardly moveable in order to urge a volume of a liquid personal care product from within flexible bag **222** to skin-contacting portion **226**. In a preferred embodiment, displacement member **266** is a trigger **268** that is depressible along body's **202** major dimension **206**. In one embodiment, a rib **272** from upper body **210** locks trigger **268** in place. In FIG. **11**, a trigger holder **274** extends off applicator base **236** to hold trigger **268** in place; trigger **268** has two arms which hug the collar **292**. Two L ribs **270** and the tail of trigger **268** are visible in body cavity **218**, as seen in FIG. **12**. L ribs **270** are optional; their purpose is to prevent trigger **268** from damaging or pinching flexible bag **222**. In operation, trigger **268** displaces a moving cylinder **294** which in turn displaces a volume of the product from flexible bag **222** to skin-contacting portion **226**. In a particular embodiment, trigger **268**, L ribs **270**, rib **272**, trigger holder **274**, and moving cylinder **294** are made of PP.

[0055] FIGS. **9** and **13** best show an optional over cap **276** that is removeably attached over applicator **224**. Over cap **276** comprises an outer ring **278** to compress safety cap **258** and an inner ring **280** to contain safety cap **258**. A ledge **282** on over cap **276**, visible in FIG. **9**, allows over cap **276** to snap into notch **212** of body **202**. Over cap **276** may also comprise a flat surface **284**, allowing package **200** to be inverted, thus resting on flat surface **284** when not in use.

[0056] It is contemplated that the package **100**,**200** of the present invention may include alternate mechanisms for dispensing the personal care compositions of the present invention. These include electronic pumps, manual pumps, screw-containing mechanisms, aerosols, pressurized gasses, trigger pumps, and the like. One of ordinary skill would readily be able to integrate the mechanism for dispensing the personal care composition into the present invention.

[0057] In an exemplary method of use, after obtaining package **100**,**200**, a user may remove optional over cap **176**, **276** and safety cap **158**,**258**. If preferred, the user may wet skin-contacting portion **126**,**226**. The user may then hold skin-contacting portion **126**,**226** against the desired skin surface and deform body **102**,**202** or move displacement member **186**,**266** inwardly. In response, an amount of product is forced out of package **100**,**200** via dispensing conduit **146**, **246** to skin-contacting portion **126**,**226**. As the user moves skin-contacting portion **126**,**226** around on the skin surface, the product dispensed is lathered by skin-contacting portion **126**,**226**. In an example where the product is a shave prep composition, the user may create a lather with skin-contacting portion **126**, **226**, then use a razor to shave the prepared area. In an example where the product is a facial or body cleanser, skin-contacting portion **126**,**226** may be used to exfoliate and cleanse the skin while creating a lather. In particular embodiments, when the first axes of body **102**,**202** and skin-contacting portion **126**,**226** are in alignment, the user may more easily determine the orientation of skin-contacting portion **126**,**226** because body **102**,**202** visually intimates the positioning of skin-contacting portion **126**,**226**. This may be important, for example, if a user is trying to lather the area between the nose and upper lip.

[0058] Packages **100**,**200** of the present invention may contain a wide variety of liquid personal care products, preferably those that are latherable by skin-contacting portion **126**, **226**. Exemplary product forms include gels, creams, foaming and non-foaming liquids, mechanically pumpable liquids, non-aerosol gels, aerosol gels, aerosol foams, pastes, serums, and sprays. Examples of suitable products to be contained in body **102**,**202** or flexible bag **122**,**222** include body wash, body lotion, facial cleanser, facial lotion, shampoo, conditioner, deodorant, shave gel or cream, self tanner, nail polish, nail polish remover, and other personal care products. In a preferred embodiment, the liquid personal care product is a shave prep composition. The following six examples of shave prep products are given solely for the purpose of illustration and are not to be construed to limit scope of the present invention as many variations thereof are possible without departing from the spirit and scope of the invention.

Ingredient	Ex. 1 Base	Ex. 2 Base	Ex. 3 Base	Ex. 4 Base	Ex. 5 Base	Ex. 6 Base
Water	QS	QS	QS	QS	QS	QS
Palmitic Acid	7.75	6.0	0	0	6.0	0
Triethanolamine	6.05	4.7	8.76	8.76	4.7	8.76
Stearic Acid	2.6	2.0	0	0	2	0
Myristic Acid	0	0	14.0	14.0	0	14.0
Mineral Oil kaydol	0	0	0	0	1.5	0
Glyceryl Oleate	2.0	2.0	1.5	1.5	2.5	1.5
Sorbitol (70% solution)	1.0	1.0	0	0	0.5	0
Hydroxyethylcellulose	0.5	0.3	0.75	0.75	0.3	0.75
Polyox WSR-301 (PEG-90M)	0.06	0.06	0	0	0.06	0
Polyox WSR-N-12K (PEG-23M)	0.05	0.05	0	0	0.05	0
Sodium Myristoyl Sarcosinate (30%)	1.0	0	6.67	6.67	0	6.67
Polymer LR30M cationic	0.1	0.2	0.45	0.45	0.2	0.45
Fragrance	0.85	0.85	0.85	0.85	0.85	0.85
PVP K60 (45% solution)	0	0	0.49	0.49	0	0.49
Glycerin	0.5	1.5	8.5	8.5	0.5	8.5
Colorant	0.002	0.002	0.002	0.002	0.002	0.002
Parts of Base Mixed w/Lathering Agent	97.15	97.15	96	97.15	97.15	100
Volatile Lathering Agent	2.85	2.85	4.0	2.85	2.85	0

[0059] The above examples can be made as follows: Mix the water with glycerin and then add to this mixture a preblend of the LR30M and hydroxyethylcellulose powders. For formulas containing sodium myristoyl sacrosinate, add this component next. For formulas containing PVP K60, add this component next. Mix until homogeneous and start heating. Stop mixing, and then add the fatty acids. When the temperature reaches 75° C., add triethanolamine and mix for approximately 10 more minutes. Cool to less than 35° C., and then add the fragrance and colorant. For example 6, store in closed container until it is charged into an appropriate dispenser. For examples 1-5, combine the base composition with the lathering agent and charge the mixture into containers or packages capable of containing volatile agents.

[0060] As noted above, the applicator or skin-contacting portion thereof may comprise a number of different materials and material forms, such as, bristles, foam pads, sponges, etc. Regarding the use of bristles, material and physical properties of bristles can impact skin feel and latherability, for example. Table 1 and the following discussion illustrate this notion.

TABLE 1

(Dimensions are in inches)

Bristle Material	Bristle Diameter	Bristle Length	Skin-Contacting Major Dimension	Skin-Contacting Minor Dimension
Nylon	0.006	0.68	1.12	0.73
Nylon	0.008	0.55	1.12	0.73
Nylon	0.006	0.7	1.17	0.73
Nylon	0.008	0.54	1.17	0.73
Nylon	0.008	0.65	1.19	0.66
Nylon	0.008	0.55	1.19	0.66
Nylon	0.003	0.7	1.18	0.73
Nylon	0.004	0.7	1.18	0.73
Nylon	0.003	0.5	1.18	0.73
Nylon	0.004	1.0	1.18	0.73
Silicone	0.06	0.53	0.73	0.63

Consumers perceived the nylon bristles having a bristle diameter of 0.006 or 0.008 inches to be too stiff, and nylon bristles having a bristle diameter of 0.003 or 0.004 as being in the right range for softness. Bristles having a "mid-length" (that is those of 0.7 inches) were preferred for stiffness over those that were shorter or longer.

[0061] The dimensions and values disclosed herein are not to be understood as being strictly limited to the exact numerical values recited. Instead, unless otherwise specified, each such dimension is intended to mean both the recited value and a functionally equivalent range surrounding that value. For example, a dimension disclosed as "40 mm" is intended to mean "about 40 mm."

[0062] Every document cited herein, including any cross referenced or related patent or application, is hereby incorporated herein by reference in its entirety unless expressly excluded or otherwise limited. The citation of any document is not an admission that it is prior art with respect to any invention disclosed or claimed herein or that it alone, or in any combination with any other reference or references, teaches, suggests or discloses any such invention. Further, to the extent that any meaning or definition of a term in this document conflicts with any meaning or definition of the same term in a document incorporated by reference, the meaning or definition assigned to that term in this document shall govern.

[0063] While particular embodiments of the present invention have been illustrated and described, it would be obvious to those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

What is claimed is:

1. A package for lathering a liquid personal care product, the package comprising:

a body for grasping with a user's hand, wherein the body comprises a horizontal plane defining a first cross-sectional shape; and

an applicator comprising a skin-contacting portion, wherein the skin-contacting portion comprises a horizontal plane defining a second cross-sectional shape;

wherein each of the first cross-sectional shape and the second cross-sectional shape comprises a major dimension oriented along a first axis and a minor dimension oriented along a second axis, and wherein the major dimensions are greater than the minor dimensions.

2. A package according to claim **1**, wherein the first axis of the body substantially aligns with the first axis of the skin-contacting portion.

3. A package according to claim **1**, wherein the first cross-sectional shape is oblong.

4. A package according to claim **1**, wherein the second cross-sectional shape is oblong.

5. A package according to claim **1**, wherein the first cross-sectional shape is symmetrical.

6. A package according to claim **1**, wherein the second cross-sectional shape is symmetrical.

7. A package according to claim **1**, wherein the first cross-sectional shape is asymmetrical.

8. A package according to claim **1**, wherein the second cross-sectional shape is asymmetrical.

9. A package according to claim **1**, wherein the first cross-sectional shape and the second cross-sectional shape are in vertical alignment.

10. A package according to claim **1**, wherein the first cross-sectional shape and the second cross-sectional shape are not in vertical alignment.

11. A package according to claim **1**, wherein the skin-contacting portion is designed to fit between a user's nose and upper lip.

12. A package according to claim **1**, wherein the minor dimension of the skin-contacting portion is less than or equal to about 0.75 inches.

13. A package according to claim **1**, wherein the minor dimension of the skin-contacting portion is less than or equal to about 0.5 inches.

14. A package according to claim **1**, wherein the major dimension of the skin-contacting portion is less than or equal to about 1.5 inches.

15. A package according to claim **1**, wherein the package comprises an over-cap, the over-cap being removeably attached to the body.

16. A package according to claim **1**, wherein the body contains a shave prep composition.

17. A package for lathering a liquid personal care product, the package comprising:

a flexible and resilient body for grasping with a user's hand, wherein the body comprises a horizontal plane defining a first cross-sectional shape; and

an applicator comprising a skin-contacting portion, wherein the skin-contacting portion comprises a horizontal plane defining a second cross-sectional shape;

wherein each of the first cross-sectional shape and the second cross-sectional shape comprises a major dimension oriented along a first axis and a minor dimension oriented along a second axis, wherein the major dimensions are greater than the minor dimensions, and wherein the body is inwardly deformable along its minor dimension in order to urge a volume of a liquid personal care product from within the body to the skin-contacting portion.

18. A package according to claim **17**, wherein the body contains a shave prep composition.

19. A package for lathering a liquid personal care product, the package comprising:

a body for grasping with a user's hand, wherein the body comprises a body cavity and a horizontal plane defining a first cross-sectional shape;

a flexible bag, wherein the flexible bag is fillable with a liquid personal care product, and wherein the flexible bag fits within the body cavity;

an applicator comprising a skin-contacting portion, wherein the skin-contacting portion comprises a horizontal plane defining a second cross-sectional shape; and

a displacement member associated with the body that is inwardly moveable in order to urge a volume of a liquid personal care product from within the flexible bag to the skin-contacting portion;

wherein each of the first cross-sectional shape and the second cross-sectional shape comprises a major dimension oriented along a first axis and a minor dimension oriented along a second axis, and wherein the major dimensions are greater than the minor dimensions.

20. A package according to claim **19**, wherein the body comprises a sidewall, and wherein the displacement member is the sidewall, wherein the sidewall is flexible, resilient, and deformable along the body's second axis.

21. A package according to claim **19**, wherein the body comprises a bottom, and wherein the displacement member is a piston that is vertically moveable upward from the bottom.

22. A package according to claim **19**, wherein the displacement member is a trigger.

23. A package according to claim **19**, wherein the body contains a shave prep composition.

24. A package for lathering a liquid personal care product, the package comprising:

a body for grasping with a user's hand, wherein the body comprises a horizontal plane defining a first cross-sectional shape, and wherein the body further comprises an outlet for dispensing a liquid personal care product; and

an applicator comprising a skin-contacting portion, wherein the skin-contacting portion comprises a horizontal plane defining a second cross-sectional shape, and wherein the applicator is in fluid communication with the body outlet;

wherein each of the first cross-sectional shape and the second cross-sectional shape comprises a major dimension oriented along a first axis and a minor dimension oriented along a second axis, wherein the major dimensions are greater than the minor dimensions, wherein the first cross-sectional shape orientationally corresponds to the second cross-sectional shape so that as the body is manipulated by a user's hand, a user can be assured that the skin-contacting portion is oriented as intended on the skin.

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