A method of manufacturing a receptacle configured to contain a substance, such as a cosmetic, the method including: disposing a preform, at least in part, inside a hollow covering piece having an outside surface that is one of fibrous and rough textured, the preform having a single opening; and deforming the preform by exerting internal pressure, so as to make the preform substantially match a shape of an inside surface of the covering piece.
RECEPTACLE AND A METHOD OF MANUFACTURING THE SAME

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of French Application No. 03 08554 filed on Jul. 11, 2003 and of U.S. Provisional Application No. 60/490,277 filed on Jul. 28, 2003, the entire disclosures of which are incorporated by reference herein.

FIELD OF INVENTION

[0002] The present invention relates to receptacles designed, for example, for packaging fluids, such as sprays, liquids, or gels, and also relates to methods of manufacturing such receptacles.

BACKGROUND

[0003] European patent application EP 1 281 333 describes a cosmetic article that is covered on its outside by a fabric.

[0004] International patent application WO 97/28944 describes the manufacture of an article that is made of plastics material covered by a fabric, the plastics material being injected onto the fabric.

SUMMARY OF THE INVENTION

[0005] A need exists to further improve the appearance of receptacles, without overly complicating their manufacture.

[0006] Exemplary embodiments of the invention provide a method of manufacturing a receptacle configured to contain a substance, such as a cosmetic, the method comprising: disposing a preform, at least in part, inside a hollow covering piece having an outside surface that is one of fibrous and rough textured, the preform having a single opening; and deforming the preform by exerting internal pressure, so as to make the preform substantially match a shape of an inside surface of the covering piece.

[0007] In exemplary embodiments, the preform may be deformed by blow-molding.

[0008] Exemplary embodiments of the invention may, for example, enable a receptacle to be made having a non-cylindrical shape while being covered over all or practically all of its height, for example, up to a base of a neck, by the covering. For example, the receptacle may include shoulders at the base of the neck, covered by the covering.

[0009] In exemplary embodiments, the covering may be retained mechanically on the receptacle by the shape of said receptacle.

[0010] In exemplary embodiments, the covering piece may include a single opening, for example, via which the preform is inserted before the blow-molding operation.

[0011] In exemplary embodiments, the preform may be made by injection or by extrusion. Making the preform by injection may be preferred, for example, when the receptacle is to be made with a threaded neck, or to be provided with a relief that enables a pump or a valve to be fastened thereto.

[0012] In such embodiments, the preform may be made with the neck by injection, and blow-molding may be performed in such a manner as to avoid modifying the shape of the neck, for example, with said neck being held captive by a mold during the blow-molding operation.

[0013] In exemplary embodiments in which manufacturing the preform is by extrusion, the preform may be pinched in order to close the preform at one end, before putting the preform in place in the covering piece.

[0014] In exemplary embodiments, the covering piece may optionally be disposed in a mold before the deformation of the preform, for example, before the blow-molding operation, depending on the nature of the deformation, and on the shape that the receptacle is to be given, for example.

[0015] In exemplary embodiments, the covering piece may comprise one of the materials selected from: woven fabric, non-woven fabric, such as felt, leather, imitation leather, fur, imitation fur, flocking, paper, metal, and the like. For example, the covering piece may comprise a metal grid.

[0016] In exemplary embodiments, where necessary, the covering piece may contribute to reinforcing the strength of the receptacle, for example, when said receptacle is designed to contain a substance under pressure.

[0017] In exemplary embodiments, the body of the receptacle may be preferably made of optionally-transparent thermoplastic material, for example, polyolefin, such as polyethylene (PE) or polypropylene (PP).

[0018] In exemplary embodiments, the preform may be made of glass. In such embodiments, the covering piece may be made of a material that is sufficiently resistant to heat, for example, a metal fabric.

[0019] In exemplary embodiments, the covering piece may include at least one seam. For example, the covering piece may include at least two, or indeed at least three seams, in order to produce an assembly of pieces of fabric or of some other material that substantially reproduces the shape of the receptacle to be made.

[0020] In exemplary embodiments, the covering piece may have no seams, and may include portions that are assembled together by adhesive or by heat sealing, or may even be constituted by using a single sheet, said sheet being thermomolded, for example.

[0021] In exemplary embodiments, the method of the invention may further comprise disposing an insert inside the covering piece prior to blow-molding the preform, for example, an insert designed to give the receptacle a flat bottom so as to enable the receptacle to stand on a planar surface.

[0022] In exemplary embodiments, the insert may be a piece made of plastics material or made of some other material, for example, metal, in order to ballast the receptacle where necessary.

[0023] In exemplary embodiments, the method of the invention may also comprise fixing an external element onto the covering piece prior to blow-molding the preform, in order, for example, to cover an opening in said preform. For example, such an element may constitute a stand that enables the receptacle to stand on a planar surface.

[0024] In such embodiments, during the blow-molding step, the preform may come into contact with at least a
portion of the insert or the external element, and may match a shape thereof, at least in part.

[0025] In exemplary embodiments, the dispenser member may be made integrally as a single piece with the preform by molding plastics material, for example, by injection-molding.

[0026] For example, the dispenser member may be no more than a neck provided with an external thread that enables a closure cap to be screwed onto the receptacle.

[0027] In exemplary embodiments, where necessary, the closure cap may include an applicator which extends into the inside of the receptacle when said receptacle is closed.

[0028] In exemplary embodiments, the dispenser member may not form part of the preform, and may be put in place after blow-molding said preform.

[0029] For example, the dispenser member may include a pump, a valve, or a flow reducer.

[0030] After blow-molding the preform, the covering piece may have various shapes, and, for example: an optionally-circular cylindrical shape, for example, of substantially circular, oval, elliptical, or polygonal cross-section; a substantially polyhedral shape, for example, a rectangular parallelepiped, a cube, a pyramid, a sphere, or an egg-shape; or even a pear-shape or a kidney-shape; or the like.

[0031] In exemplary embodiments, the wall of the receptacle may be flexible or rigid. For example, the receptacle may return elastically to its initial shape after a user has exerted pressure thereon in order to dispense the substance.

[0032] For example, the capacity of the receptacle may lie in the range of about 10 milliliters (ml) to about 500 ml.

[0033] Exemplary embodiments of the invention also provide, independently or in combination with the foregoing features, a receptacle configured to contain a cosmetic. The receptacle may comprise: an inside wall having an inside surface designed to come into contact with the cosmetic; and a covering piece covering at least a portion of the inside wall, the inside wall being made using the effect of internal pressure, such as blow-molding, to deform a preform engaged at least in part inside the covering piece, the inside surface of the inside wall including at least one portion in relief having a shape that substantially matches a shape of a portion in relief of the covering piece.

[0034] In exemplary embodiments, the covering piece may include openings inside which the inside wall extends at least in part, for example, openings defined by a mesh of a woven fabric or a grid.

BRIEF DESCRIPTION OF THE DRAWINGS

[0035] The invention will be better understood on reading the following detailed description of non-limiting embodiments thereof, and on examining the accompanying drawings, in which:

[0036] FIG. 1 is a diagrammatic perspective view of a receptacle according to a first exemplary embodiment of the invention;

[0037] FIG. 2 is a diagrammatic longitudinal cross-section view of the receptacle of FIG. 1;

[0038] FIG. 3 is a diagrammatic perspective view separately illustrating the covering piece and the preform used to make the receptacle of FIG. 1;

[0039] FIG. 4 is a detailed partial cross-section view of a portion IV in FIG. 2;

[0040] FIG. 5 is a detailed partial cross-section view of a portion similar to FIG. 4 showing a second exemplary embodiment according to the invention;

[0041] FIG. 6 is a diagrammatic and fragmentary perspective view of a mold in which the covering piece of FIG. 3 can be disposed before blow-molding the preform;

[0042] FIG. 7 is a diagrammatic and fragmentary cross-section view of a third exemplary embodiment of a receptacle according to the invention, including an insert disposed inside the covering piece;

[0043] FIG. 8 is a diagrammatic and fragmentary cross-section view of a fourth exemplary embodiment of a receptacle according to the invention, including an external element fixed onto the covering piece;

[0044] FIG. 9 is a diagrammatic and fragmentary cross-section view of a fifth exemplary embodiment of a receptacle according to the invention, using a covering piece having a multi-layer structure;

[0045] FIG. 10 is a diagrammatic and fragmentary view of a sixth exemplary embodiment of a receptacle according to the invention, fitted with a dispenser member constituted by a pump or by a valve; and

[0046] FIG. 11 is a diagrammatic elevation view of an exemplary kit according to the invention constituted by associating a garment with a receptacle that includes a covering made of a same fabric as the garment.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

[0047] FIGS. 1 and 2 show a first exemplary embodiment of a receptacle 1 that is designed to contain a liquid, for example, a cosmetic, and includes a body 2 that is elongate along a longitudinal axis X. The exemplary receptacle 1 is generally pear-shaped with a flat bottom 3.

[0048] At a top end thereof, the receptacle 1 includes a dispenser member 4, constituted in the first exemplary embodiment by a neck 5 that is threaded on an outside thereof, and defines a single opening 6. The opening 6 can be closed in a sealed manner by a closure cap 13 that is arranged so as to be screwed onto the neck 5.

[0049] As shown particularly in FIG. 2, the outside of the body 2 comprises a covering piece 10, and the inside of the body 2 comprises an inside wall 11. The inside wall 11 matches the shape of the covering piece 10. The neck 5 is made integrally as a single piece made of plastics material with the inside wall 11.

[0050] In accordance with an aspect of the invention, the covering piece 10 has an outside surface 14 that is fibrous or that has a rough texture, i.e., is rough textured.

[0051] In exemplary embodiments of the invention, the receptacle 1 may be made as follows.
[0052] The covering piece 10 is made in such a manner that the covering 10 substantially matches the shape of the receptacle 1.

[0053] For example, the covering piece 10 may be made by assembling together several pieces of fabric along seams.

[0054] For example, one of the pieces can extend over the bottom 3 of the receptacle 1, and the other pieces may extend between the bottom 3 and a top end of the covering piece 10, the other pieces being assembled together along longitudinal seams 12a to define overall a single opening 7, for example, a substantially circular opening. The piece extending over the bottom 3 of the receptacle may be sewn along a substantially circular seam line 12b.

[0055] In addition, a preform 15 made of thermoplastic material may be made by injection molding.

[0056] In the first exemplary embodiment, as shown in FIG. 3, the preform 15 includes a tubular body 27 that is closed at a bottom end thereof. The tubular body 27 is fastened at a top end thereof to the neck 5.

[0057] The preform 15 is then inserted into the opening 7 of the covering piece 10 until only the neck 5 emerges from the covering piece 10. For example, the diameter of the opening 7 may be substantially equal to an outside diameter of the neck 5 at the base thereof. In the first exemplary embodiment, the neck 5 has an annular shoulder 8 that comes to rest on an edge 9 of the opening 7, as shown in FIGS. 2 and 3.

[0058] The mold used to make the preform 15 may include a portion serving to mold the neck 5, which also serves to hold the neck 5 during the blow-molding operation. Alternatively, the preform 15 may be made by injection molding, unmolded completely, and then transported by an appropriate member to a blow-molding station.

[0059] Hot gas is injected through the opening 6 into the inside of the preform 15, in such a manner as to expand the still sufficiently hot tubular body 27 until said tubular body 27 substantially matches the shape of the inside surface 16 of the covering piece 10.

[0060] As shown in FIG. 4, the inside surface 16 can include a plurality of portions in relief 20, that result, in the example shown, from the presence of the yarns 19 of the fabric of which the covering piece 10 is made.

[0061] An outside surface 17 of the inside wall 11 may come to match at least one portion in relief 20, and an inside surface 18 of the inside wall 11 may have at least one portion in relief 21 of substantially corresponding shape, as a result of the inside wall 11 being formed by blow-molding.

[0062] Where necessary, the material of the preform may be engaged substantially in the openings or the interstices of surfaces features resulting from the roughness of the covering piece. For example, FIG. 5 is a detailed partial cross-section view of a portion, similar to FIG. 4, showing a second exemplary embodiment of a covering piece comprising a metal grid that defines a mesh in which the material of the preform is substantially engaged. Wires 19 of the metal grid thus appear embedded in the material of the preform (the inside wall 11). Where necessary, the covering piece can contribute to reinforcing the strength of the receptacle, for example, against impacts or internal pressure.

[0063] The preform 15 may be blow-molded without placing the covering piece 10 in a mold. In such embodiments, the covering piece 10 is made in such a manner as to withstand the pressure exerted by the preform 15 during blow-molding.

[0064] Alternatively, the covering piece 10 may also be disposed inside a mold M having at least two portions M1 and M2, which are brought together before blow-molding, as illustrated in FIG. 6, so as to form a mold cavity against which the covering piece 10 can come to bear during blow-molding.

[0065] For example, for the purpose of making it easier to provide a flat bottom, an insert 25 may be engaged inside the covering piece 10 before the preform 15 is inserted therein, as in a third exemplary embodiment of a receptacle according to the invention, shown in FIG. 7.

[0066] An insert may be used with or without a mold.

[0067] For example, the presence of an insert can make it possible to avoid having to use a mold cavity having a very precise shape.

[0068] For example, the insert 25 may be in the form of a disk having a circular outline, and may be made of a relatively rigid plastics material or a metal.

[0069] In such embodiments, during blow-molding, the inside wall 11 substantially matches the shape of the insert 25 and a setback 22 is formed at a periphery of said insert 25.

[0070] In a fourth exemplary embodiment of a receptacle according to the invention, shown in FIG. 8, the covering piece 10 includes, at a bottom portion thereof, an opening 24 which is covered by an external element 26 that is fastened onto the covering piece 10 at said opening 24. For example, the external element 26 may be bonded onto the region of the covering piece 10 bordering the opening 24 by adhesive or by heat sealing.

[0071] An external element may be used with or without a mold.

[0072] In such embodiments, a setback 23 is formed during blow-molding of the inside wall 11 at the edge of the opening 24.

[0073] Where necessary, the inside wall 11 may be assembled to the external element 26 by local melting of material. In the fourth exemplary embodiment, said external element 26 forms a stand on which the receptacle can stand.

[0074] The covering piece 10 may be a single-layer, as shown in the embodiments of FIGS. 1 to 8, or may be multi-layer, as in a fifth exemplary embodiment shown in FIG. 9.

[0075] For example, as shown in FIG. 9, the covering piece 10 may include an outer layer 10a and an inner layer 10b, said inner layer 10b coming into contact with the inside wall 11.

[0076] For example, the outer layer 10a may include flocking, and the inner layer 10b may include a film supporting the hairs of the flocking.
The dispenser member 4 need not be merely a simple opening, but may include a pump or a valve 30, as in a sixth exemplary embodiment shown in FIG. 10.

The covering piece 10 may be constituted by a fibrous material, for example, a textile. Said textile may be obtained by weaving or by knitting. The textile may include natural or synthetic fibers, for example, yarn of cotton or other plant material. The fabric may also include polyester or polyamide yarn, or even metal wires. The fibrous material may also be a felt, a non-woven fabric, animal fur, or imitation animal fur. The fibrous material may also be flocking.

The covering piece 10 may include a print or can be subjected to a surface treatment. Instead of fibers, the covering piece 10 may include particles, for example, mineral particles embedded in a film of plastics material, enabling a rough texture to be imparted thereto. The covering piece 10 may also be made of leather or imitation leather.

The inside wall 11 may be devoid of fibers and may be constituted by a thermoplastic material, for example, a polyolefin, such as polyethylene (PE) or polypropylene (PP). For example, the thickness of the inside wall 11 may lie in the range of about 0.5 millimeters (mm) to about 2.5 mm, for example, about 0.5 mm to about 1.5 mm.

A receptacle made in accordance with the invention may be associated with an object, for example, an article of clothing. The fabric of which the article is made may be the same as the fabric constituting the covering piece 10, as illustrated in the exemplary embodiment of a kit shown in FIG. 11.

Whatever its nature, the covering piece may, where necessary, be coated on an inside surface thereof with an adhesive designed to improve adhesion on the material constituting the preform.

Naturally, the invention is not limited to the embodiments described above.

For example, the receptacle may be of a shape that is different from that shown in the drawings.

The preform may be deformed in a manner other than by blowing a gas.

The preform may, for example, be deformed by blowing or injecting a liquid or a powder.

The preform may also be deformed by disposing therein a material which changes state or expands as a result of a chemical reaction. Where necessary, the material may be removed after the material has expanded by being dissolved by a solvent, for example.

Throughout the description, including the claims, the term “comprising a” should be understood as being synonymous with “comprising at least one”, unless specified to the contrary.

Although the present invention herein has been described with reference to particular embodiments, it is to be understood that these embodiments are merely illustrative of the principles and applications of the present invention. It is therefore to be understood that numerous modifications may be made to the illustrative embodiments and that other arrangements may be devised without departing from the spirit and scope of the present invention.

What is claimed is:
1. A method of manufacturing a receptacle configured to contain a substance, the method comprising:
   - disposing a preform, at least in part, inside a hollow covering piece having an outside surface that is one of fibrous and rough textured, the preform having a single opening; and
   - deforming the preform by exerting internal pressure, so as to make the preform substantially match a shape of an inside surface of the covering piece,
   - the covering piece not being disposed in a mold during deforming the preform.
2. A method according to claim 1, wherein the preform is deformed by blow-molding.
3. A method according to claim 1, wherein the covering piece includes a single opening.
4. A method according to claim 1, comprising making the preform by injection.
5. A method according to claim 1, comprising making the preform by extrusion.
6. A method according to claim 1, wherein the covering piece comprises at least one of a woven fabric, a non-woven fabric and a metal.
7. A method according to claim 6, wherein the covering piece comprises at least one of felt, leather, imitation leather, fur, imitation fur, flocking and paper.
8. A method according to claim 6, wherein the covering piece comprises a metal in the form of one of a woven fabric and a grid.
9. A method according to claim 1, wherein the preform comprises thermoplastic material.
10. A method according to claim 9, wherein the preform comprises a polyolefin.
11. A method according to claim 10, wherein the polyolefin comprises one of polyethylene and polypropylene.
12. A method according to claim 1, wherein the covering piece comprises one seam.
13. A method according to claim 1, further comprising disposing an insert inside the covering piece.
14. A method according to claim 13, wherein the insert is designed to give the receptacle a flat bottom.
15. A method according to claim 1, wherein the preform comprises a threaded neck.
16. A method according to claim 1, further comprising providing a substance in the deformed preform.
17. A receptacle configured to contain a cosmetic, the receptacle comprising:
   - an inside wall having an inside surface designed to come into contact with the cosmetic; and
   - a covering piece covering at least a portion of the inside wall, and having an outside surface that is one of fibrous and rough textured,
   - the inside wall being made using the effect of internal pressure to deform a preform engaged at least in part inside the covering piece, the covering piece not being disposed in a mold during deforming the preform.
18. A receptacle according to claim 17, wherein the inside surface of the inside wall includes at least one portion in
relief having a shape that substantially matches a shape of a portion in relief of the covering piece.

19. A receptacle according to claim 17, wherein the covering piece includes at least one seam.

20. A receptacle according to claim 17, wherein the covering piece includes openings inside which the inside wall extends at least in part.

21. A receptacle according to claim 20, wherein the openings are defined by one of a mesh of a woven fabric and a grid.

22. A receptacle according to claim 17, wherein the inside wall is blow molded.

23. A method of manufacturing a receptacle configured to contain a substance, the method comprising:

   disposing a preform, at least in part, inside a hollow covering piece having an outside surface that is one of fibrous and rough textured, the preform having a single opening; and

   deforming the preform by exerting internal pressure, so as to make the preform substantially match a shape of an inside surface of the covering piece, the covering piece including at least one seam.

24. A method according to claim 23, wherein the preform is deformed by blow-molding.

25. A method according to claim 23, wherein the covering piece includes a single opening.

26. A method according to claim 23, comprising making the preform by injection.

27. A method according to claim 23, comprising making the preform by extrusion.

28. A method according to claim 23, wherein the covering piece comprises at least one of a woven fabric, a non-woven fabric and a metal.

29. A method according to claim 28, wherein the covering comprises at least one of felt, leather, imitation leather, fur, imitation fur, flocking and paper.

30. A method according to claim 28, wherein the covering piece comprises a metal in the form of one of a woven fabric and a grid.

31. A method according to claim 23, wherein the preform comprises thermoplastic material.

32. A method according to claim 31, wherein the preform comprises a polyolefin.

33. A method according to claim 32, wherein the polyolefin comprises one of polyethylene and polypropylene.

34. A method according to claim 23, further comprising disposing the covering piece in a mold during deforming the preform.

35. A method according to claim 23, wherein the covering piece is not disposed in a mold during deforming the preform.

36. A method according to claim 23, further comprising disposing an insert inside the covering piece.

37. A method according to claim 36, wherein the insert is designed to give the receptacle a flat bottom.

38. A method according to claim 23, wherein the preform comprises a threaded neck.

39. A method according to claim 23, further comprising providing a substance in the deformed preform.

40. A receptacle configured to contain a cosmetic, the receptacle comprising:

   an inside wall having an inside surface designed to come into contact with the cosmetic; and

   a covering piece covering at least a portion of the inside wall, and having an outside surface that is one of fibrous and rough textured,

   the inside wall being made using the effect of internal pressure to deform a preform engaged at least in part inside the covering piece, the covering piece including at least one seam.

41. A receptacle according to claim 40, wherein the inside surface of the inside wall includes at least one portion in relief having a shape that substantially matches a shape of a portion in relief of the covering piece.

42. A receptacle according to claim 40, wherein the covering piece includes openings inside which the inside wall extends at least in part.

43. A receptacle according to claim 42, wherein the openings are defined by one of a mesh of a woven fabric and a grid.

44. A receptacle according to claim 40, wherein the inside wall is blow molded.

45. A receptacle according to claim 40, wherein the covering piece is not disposed in a mold during deforming the preform.

46. A method of manufacturing a receptacle configured to contain a substance, the method comprising:

   disposing a preform, at least in part, inside a hollow covering piece having an outside surface that is one of fibrous and rough textured, the preform having a single opening; and

   deforming the preform by exerting internal pressure, so as to make the preform substantially match a shape of an inside surface of the covering piece, wherein an insert is disposed inside the covering piece.

47. A method according to claim 46, wherein the preform is deformed by blow-molding.

48. A method according to claim 46, wherein the covering piece includes a single opening.

49. A method according to claim 46, comprising making the preform by injection.

50. A method according to claim 46, comprising making the preform by extrusion.

51. A method according to claim 46, wherein the covering piece comprises at least one of a woven fabric, a non-woven fabric and a metal.

52. A method according to claim 51, wherein the covering piece comprises at least one of felt, leather, imitation leather, fur, imitation fur, flocking and paper.

53. A method according to claim 51, wherein the covering piece comprises a metal in the form of one of a woven fabric and a grid.

54. A method according to claim 46, wherein the preform comprises thermoplastic material.

55. A method according to claim 54, wherein the preform comprises a polyolefin.

56. A method according to claim 55, wherein the polyolefin comprises one of polyethylene and polypropylene.

57. A method according to claim 46, further comprising including the covering piece in a mold during deforming the preform.
58. A method according to claim 46, wherein the covering piece is not disposed in a mold during deforming the preform.

59. A method according to claim 46, wherein the covering piece includes at least one seam.

60. A method according to claim 46, wherein the insert is configured to give the receptacle a flat bottom.

61. A method according to claim 46, wherein the preform comprises a threaded neck.

62. A method according to claim 46, further comprising providing a substance in the deformed preform.

63. A receptacle configured to contain a cosmetic, the receptacle comprising:

an inside wall having an inside surface designed to come into contact with the cosmetic; and

a covering piece covering at least a portion of the inside wall, and having an outside surface that is one of fibrous and rough textured,

the inside wall being made using the effect of internal pressure to deform a preform engaged at least in part inside the covering piece, and

an insert disposed inside the covering piece.

64. A receptacle according to claim 63, wherein the inside surface of the inside wall includes at least one portion in relief having a shape that substantially matches a shape of a portion in relief of the covering piece.

65. A receptacle according to claim 63, wherein the covering piece includes at least one seam.

66. A receptacle according to claim 63, wherein the covering piece includes openings inside which the inside wall extends at least in part.

67. A receptacle according to claim 66, wherein the openings are defined by one of a mesh of a woven fabric and a grid.

68. A receptacle according to claim 63, wherein the inside wall is blow molded.

69. A receptacle according to claim 63, wherein the insert is designed to give the receptacle a flat bottom.

70. A receptacle according to claim 63, wherein the covering piece is not disposed in a mold during deforming the preform.

71. A method according to claim 16, wherein the substance comprises a cosmetic.

72. A method according to claim 39, wherein the substance comprises a cosmetic.

73. A method according to claim 62, wherein the substance comprises a cosmetic.

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