



(11) **EP 3 646 754 A1**

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
06.05.2020 Bulletin 2020/19

(51) Int Cl.:
A45D 40/26 (2006.01) **A45D 40/18** (2006.01)
A46B 9/10 (2006.01) **A46B 3/00** (2006.01)

(21) Application number: **18822683.1**

(86) International application number:
PCT/KR2018/007489

(22) Date of filing: **02.07.2018**

(87) International publication number:
WO 2019/004805 (03.01.2019 Gazette 2019/01)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

(72) Inventors:
• **HAN, Eunsil**
Yongin-si, Gyeonggi-do 17074 (KR)
• **CHO, Yeonju**
Yongin-si, Gyeonggi-do 17074 (KR)
• **KIM, Hyewon**
Yongin-si, Gyeonggi-do 17074 (KR)
• **SHIM, Minkyung**
Yongin-si, Gyeonggi-do 17074 (KR)

(30) Priority: **30.06.2017 KR 20170083840**

(74) Representative: **Delorme, Nicolas et al**
Cabinet Germain & Maureau
BP 6153
69466 Lyon Cedex 06 (FR)

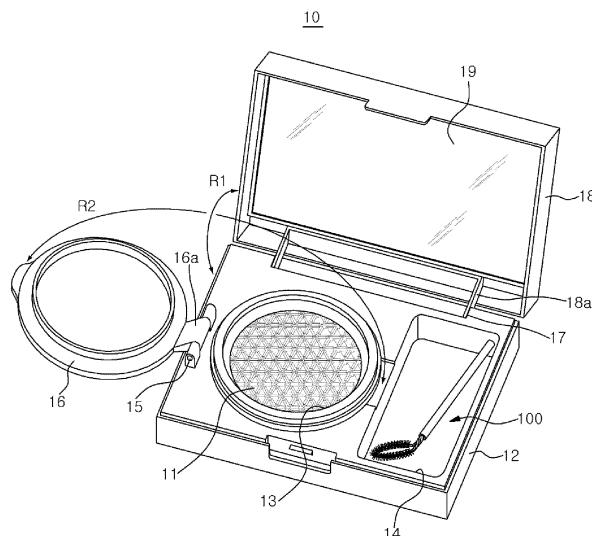
(71) Applicant: **Amorepacific Corporation**
Seoul 04386 (KR)

(54) **BRUSH AND MASCARA CONTAINER INCLUDING SAME**

(57) The invention relates to a brush and a mascara container including same. The brush includes a brush rod connecting portion having one side portion made of a twisted wire and a plurality of other side portions branched from the one side portion; a brush body integrally formed at the other side portions to be extended

from the other side portion of the brush rod connecting portion to form a hoop structure or a closed loop structure; and a plurality of fibers pressed by the twisted wire of the brush body and protruded toward the inner side and outer side of the brush body.

[FIG. 2]



EP 3 646 754 A1

Description**TECHNICAL FIELD**

[0001] The invention relates to a brush and a mascara vessel having the same.

BACKGROUND ART

[0002] In general, a mascara cosmetic applied by make-up tools can be used to create an elegant and refined style for the eyebrows.

[0003] In the prior art, the mascara make-up tool stores a mascara liquid in a container body and installs a packing or wiper for suppressing an outflow of the mascara liquid.

[0004] According to the prior art, the mascara make-up tool is equipped with a wiper at the entrance of the container body. Thus, if the diameter of the brush is larger than the diameter of the brush rod or the inner diameter of the wiper, the brush rod itself to which the brush is connected has the disadvantage that it cannot be separated from the container body.

[0005] Further, in the prior art, the brushes simply have a shape or 1-shape extended in the same or similar direction as the axis extension direction of the brush rod. Accordingly, there is a disadvantage in that it is very inconvenient to apply or draw the mascara liquid to the eyebrows having various curves.

[0006] According to the mascara make-up tools of the prior art, the brush has a rod shape coupled to the brush rod. Accordingly, since the contact between the eyelashes and the mascara brush is made in a straight line shape, or the width of the brush is narrow, only the surface contact therebetween is possible. As a result, the applying method may be very limited.

[0007] Patent Document: Korean Utility Model Laid-Open Publication No. 20-2000-0012867 (published on July 15, 2000)

DISCLOSURE**TECHNICAL PROBLEM**

[0008] Therefore, exemplary embodiments of the present invention, which have been proposed to solve the above problems, are to provide a brush and a mascara vessel having the brush, wherein a surface shape of one side of the brush is different from that of the other side of the brush according to a bent three-dimensional shape in order to make a surface contact of a plurality of shapes, such that it can be performed in a variety of applying methods.

TECHNICAL SOLUTION

[0009] According to an aspect of the present invention, there is provided a brush comprising: a brush rod con-

necting portion having one side portion made of a twisted wire and a plurality of other side portions branched from the one side portion; a brush body integrally formed at the other side portions to be extended from the other side portion of the brush rod connecting portion to form a hoop structure or a closed loop structure; and a plurality of fibers pressed by the twisted wire of the brush body and protruded toward the inner side and outer side of the brush body.

[0010] Further, there is provided a brush, wherein the brush includes a brush rod of a shaft member shape having a hole coupled to the brush rod connecting portion to support the brush body.

[0011] Further, there is provided a brush, wherein the fibers are provided in either an entire section or a partial section of the brush body.

[0012] Further, there is provided a brush, wherein the brush rod connecting portion is configured such that: the one side portion is inserted into the hole at the end of the brush rod in a force-fitting manner, the other side portion is disposed toward the outer side of the hole, and a bending portion is included for connecting between the other side portion and the one side portion, in a state that is bent corresponding to an inclination angle with respect to the direction extended from the one side portion.

[0013] Further, there is provided a brush, wherein the one side portion of the brush rod connecting portion includes: an open end portion corresponding to the other side of the twisted wire, and a closed end portion corresponding to one side of the twisted wire, and wherein the open end portion and the closed end portion are disposed at an end of the one side portion facing the hole in a state of being close to each other.

[0014] Further, there is provided a brush, wherein the twisted wire is made of any one of a stainless steel material, a synthetic resin material, and a plastic material.

[0015] Further, there is provided a brush, wherein the brush body integrated with the fibers is manufactured in the form of a ring made by cutting or bending the twisted wire to form the hoop structure or closed loop structure, and wherein the brush body has a shape of any one of a round, an oval, a multi-hoop, a crown, a spoon, an inverted triangle, an inverted pentagon, a fan, a rectangle, a triangle, and a cactus.

[0016] According to another aspect of the present invention, there is provided a mascara vessel comprising the brush of any one of claims 1 to 7 for applying a mascara cosmetic, the mascara vessel comprising: a carrying body carrying the cosmetic; and a vessel main body having a first groove portion for accommodating the carrying body and a second groove portion for accommodating the brush.

[0017] Further, there is provided a mascara vessel, wherein the vessel main body is configured such that the first groove portion is disposed on one side of the upper surface of the vessel main body and the second groove portion is disposed on the other side of the upper surface of the vessel main body, wherein the vessel main body

includes: the inner cover being rotatably coupled to a hinge portion of one side of the vessel main body to shield the first groove portion; and an outer cover rotatably coupled to a hinge portion of the other side of the vessel main body to cover the inner cover and the second groove portion, and wherein the second groove portion has a groove volume that is capable of accommodating the brush, in singular or in plural, including the brush body, the brush rod connecting portion and the brush rod.

[0018] Further, there is provided a mascara vessel comprising: a brush including a brush body having a plurality of fibers protruded therefrom and a brush rod connected to be inclined at an angle with the brush body; a carrying body carrying the cosmetic; and a vessel main body having a first groove portion for accommodating the carrying body and a second groove portion for accommodating the brush.

ADVANTAGEOUS EFFECTS

[0019] According to an aspect of the present invention, the brush has a hoop structure or closed loop structure, and therefore, provides an advantage that it is very easy to implement various shapes of the brush.

[0020] According to the aspect of the present invention, the mascara vessel including the brush is capable of facilitating the use and possession of the vessel by storing the mascara cosmetic in the carrying body so as to dip the mascara cosmetic.

[0021] According to the aspect of the present invention, the brush is capable of improving the grip feeling of the brush and easily applying the mascara cosmetic of the carrying body due to the inclination formed between the brush and the brush rod.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022]

FIG. 1 is a perspective view of a mascara vessel including a brush according to an embodiment of the present invention.

FIG. 2 is a perspective view of a state in which an outer cover and an inner cover are unfolded by rotation in the mascara vessel shown in FIG. 1.

FIG. 3 is an exploded perspective view illustrating a coupling relationship of the brush illustrated in FIG. 1. FIG. 4 is a flowchart for describing a method of manufacturing the brush illustrated in FIG. 3.

FIG. 5 is a view for explaining shapes of the brush body that can be coupled to the brush rod shown in FIG. 3.

BEST MODE

[0023] Hereinafter, specific embodiments of the present invention will be described in detail with reference to the accompanying drawings.

[0024] In addition, in describing the present invention, when it is determined that the detailed description of the related known configuration or function may obscure the gist of the present invention, the detailed description thereof will be omitted.

[0025] FIG. 1 is a perspective view of a mascara vessel including a brush according to an embodiment of the present invention, FIG. 2 is a perspective view of a state in which an outer cover and an inner cover are unfolded by rotation in the mascara vessel shown in FIG. 1, FIG. 3 is an exploded perspective view illustrating a coupling relationship of the brush illustrated in FIG. 1, FIG. 4 is a flowchart for describing a method of manufacturing the brush illustrated in FIG. 3, and FIG. 5 is a view for explaining shapes of the brush body that can be coupled to the brush rod shown in FIG. 3.

[0026] Referring to FIGS. 1 to 5, the brush 100 of the embodiment may be manufactured separately from the mascara vessel 10. Accordingly, the brush 100 may be the mascara cosmetic applicator itself that can be accommodated and integrated in the vessel 10, or may be a cosmetic article or a make-up tool set together with the vessel 10. For example, the vessel 10 may be configured to include the brush 100. Although not shown, the vessel 10 is not limited to a specific container shape because it may contain only the carrying body 11 and have a container shape that can be opened or shielded by a rotary lid.

[0027] The brush 100 may include a brush rod 110, a brush rod connecting portion 120, a brush body 130, and fibers 140.

[0028] The brush rod 110 may be coupled with the brush body 130. The brush rod 110 may be shaped as a handle or a knob, or a shaft member to support the brush body 130, and may have a hole 111 coupled to the brush rod connecting portion 120 at an end surface of the brush rod 110.

[0029] The carrying body 11 may be formed of a sponge or a porous polymer material. Accordingly, the mascara cosmetic carried in the interior voids of the material may be stored, or may serve to supply the mascara cosmetic toward the brush 100 through contact with the brush 100.

[0030] For example, when compared to oil base raw materials, that is, semi-solid or high viscosity liquid raw materials, the mascara cosmetic stored in the carrying body 11 may be made of a color cosmetic raw material having a relatively low viscosity compared to the above described conventional raw materials. The viscosity of the cosmetic may be 1000 to 50000 cPs. The mascara cosmetic may be easily carried in the carrying body 11, and may be easily supplied from the carrying body 11 to the fibers 140 of the brush body 130.

[0031] This embodiment may also solve the problem of the cosmetic product in the form in which the conventional wiper is mounted, by help of the carrying body 11 and the brush 100.

[0032] For example, when the brush 120 and the brush

body 130 are coupled in an angular and bent form, or when the brush 100 of the hoop structure or the closed loop structure is used in a conventional mascara vessel, it may be difficult to enter and exit an entrance hole of the wiper provided in the entrance of the conventional mascara vessel. In this case, if the size of the entrance hole of the wiper is large, it may be difficult to adjust the amount of the mascara cosmetic. In addition, even if the structure of the entrance hole of the wiper is implemented to adjust the amount of the mascara cosmetic, the brush 100 may be completely submerged in a fluid-type cosmetic of the inner side of the general mascara vessel. In this case, the cosmetic may be introduced into the space of the inner side of the hoop of the brush 100, and the introduced cosmetic may be formed along the inner surface of the brush body 130 by the viscous force (for example, the fluid force between the soap bubble dispenser and the soap bubble liquid). As a result, unnecessary outflow of the cosmetic may occur.

[0033] However, in this embodiment, the brush 100 may be configured to be in a manner to be in contacted with the carrying body 11. Accordingly, there are advantages in that the amount of the mascara cosmetic may be easily adjusted, and it can prevent a condensation phenomenon caused by being completely submerged in the cosmetic with the fibers 140 and the brush body 130 of the brush 100 and can easily perform the applying work by efficiently receiving a suitable amount of the cosmetic from the carrying body 11.

[0034] The fibers 140 and the brush body 130 around the fibers 140 may be further formed with a surface treatment portion (not shown) having a shape suitable for applying or transporting a mascara cosmetic such as flocking. For example, some or all of the outer surfaces of the brush body 130 and the fibers 140 may be processed and provided by flocking.

[0035] In addition, the carrying body 11 carrying the mascara cosmetic material may be made of a porous polymer material that allows elastic deformation and fluid absorption, and may be made to have any one of a plate member, a circular block, a square block, and a cushion in a shape. The carrying body 11 may carry one or two kinds of mascara cosmetics. In this case, the inner portion of the center of the carrying body 11 may be formed with a partition wall (not shown) for partitioning one side and the other side of the carrying body 11 or partitioning a plurality of sectors.

[0036] The carrying body 11 may be mounted on a vessel main body 12. For example, the vessel main body 12 may have a first groove 13 for accommodating the carrying body 11 and a second groove 14 for accommodating the brush 100. The first groove portion 13 and the second groove portion 14 may be manufactured or injection-molded in the form of a circular or square groove.

[0037] In this case, in the vessel main body 12, the first groove portion 13 may be disposed on one side of the upper surface of the vessel main body 12, whereas the second groove portion 14 may be disposed on the other

side of the upper surface of the vessel main body 12.

[0038] This vessel main body 12 may have a structure similar to a compact cosmetic product, and the vessel main body 12 in its shape and structure may be injection-molded in various forms according to the use or function of the vessel 10.

[0039] In addition, the vessel main body 12 may include an inner cover 16 rotatably coupled to a hinge portion 15 of one side of the vessel main body 12 to shield the first groove 13.

[0040] The inner cover 16 may be formed in the same or similar shape (e.g., circular) to the shape of the first groove portion 13. The inner cover 16 may be in contact with the upper surface of the edge of the first groove 13 to maintain a seal or shield. In addition, the inner cover 16 may include a single hinge connecting portion 16a rotatably coupled to the hinge portion 15.

[0041] Further, the vessel main body 12 may include an outer cover 18 to be rotatably coupled, at an angle R1, to a hinge portion 17 of the other side of the vessel main body 12 so as to cover the inner cover and the second groove portion 14.

[0042] The outer cover 18 may include a dual hinge connecting portion 18a protruded from the rectangular cover edge corner to be rotatably coupled to the other hinge portion 17.

[0043] Further, a mirror 19 may be attached to the inner surface of the outer cover 18 for user convenience.

[0044] Moreover, the second groove portion 14 may have a volume capable of accommodating the brush 100, in singular or in plural, which includes the fibers 140, the brush body 130, the brush rod connecting portion 120, and the brush rod 110.

[0045] Referring to FIG. 3, the brush rod connecting portion 120 of the brush 100 may include one side portion 121 made of a twisted wire 33 and a plurality of other side portions 123 branched from the one side portion 121. The twisted wire 33 may be a work-piece of a steel wire type made by twisting the wire 30 having a two-line hairpin shape in a state in which the fibers 140 are planted.

[0046] In addition, the brush body 130 may be extended from the branched other side portion 123 of the brush rod connecting portion 120 to form a hoop structure or a closed loop structure. In this case, the brush body 130 is integrally formed at the branched other side portion.

[0047] Further, the plurality of fibers 140 may be fixed by the twisted wire 33 of the brush body 130. In this case, the middle portion of each fiber 140 is pressed by the twisted wire 33 and the end of each fiber 140 may be disposed in the inner side or outer side of the brush body 130. That is, the plurality of fibers 140 may be fixed based on the twisted wire 33 of the brush body 130 and protruded toward the inner side and outer side of the brush body 130.

[0048] The brush rod connecting portion 120, the brush body 130, and the fibers 140 may be efficiently manufactured in large quantities by the manufacturing method

shown in FIG. 4.

[0049] First, by a worker or in a brush manufacturing apparatus, a step S10 for supplying raw materials may be performed to receive the fibers 140 aligned in plural and a wire 30 having a 2-line hairpin shape bent in a U shape.

[0050] In this case, one side of the wire 30 may be a closed end portion 31 of the ring shape closed by the U-shaped bending. In addition, the other side of the wire 30 may be an open end portion 32 having two free ends and branched with each other.

[0051] The open end portion 32 has a rough surface, such as a burr or the like according to wire cutting.

[0052] In contrast, the closed end portion 31 has a smooth curved surface along the U-shaped bending.

[0053] Subsequently, in a state in which the fibers 140 are aligned, a step S20 for arranging the fibers and the wire along the gap between the upper and lower portions of the wire 30 may be performed.

[0054] The brush manufacturing apparatus may include a fixing means 41 for crimping and fixing the open end portion 32 and a rotating means 42 for making the twisted wire 33 by holding and rotating the closed end portion 31.

[0055] By the brush manufacturing apparatus, a step S30 of manufacturing the twisted wire 33 including the fibers 140 may be performed.

[0056] The wire 30 or the twisted wire 33 may serve to fix or support the fibers 140 and may be made of any one of a stainless steel material, a synthetic resin material, and a plastic material.

[0057] Thereafter, a step S40 for forming a brush including the fibers 140 by bending the twisted wire 33 may be performed. In the brush forming step S40, a conventional steel wire or wire bending forming machine (not shown) may be employed.

[0058] In addition, as shown in FIG. 3, the wire bending forming machine may serve to bend the brush rod connecting portion 120 at a predetermined angle T.

[0059] When twisted or bent in this way, the brush rod connecting portion 120 may be inserted in a way that one side portion 121 thereof may be inserted into the hole 111 at the end of the brush rod 110 in a force-fitting manner, and the other side portion thereof may be disposed toward the outer side of the hole 111. In this case, the brush rod connecting portion 120 allows the bending portion 122 to be included for connecting between the other side portion 123 and the one side portion 121, in a state that is bent corresponding to an inclination angle T with respect to the direction extended from the one side portion 121.

[0060] In the brush forming step S40, a process S41 in which the type of the brush is determined depending on the quantity of the fibers 140 or the length L of the fiber arrangement may be performed.

[0061] That is, in the case where a relatively large quantity of fibers 140 is used and the length of the fiber arrangement L is prepared to be relatively long corre-

spondingly, a bending process S42 of a type in which all of the fibers are arranged may be performed.

[0062] For example, the twisted wire 33 except for the brush rod connecting portion 120 may be bent into one of the shapes to be described with reference to FIG. 5. As a result, it may be made in the form of a provisional product in which the fibers 140 are distributed or dispersed over the entire section of the brush body 130.

[0063] On the other hand, in the case where a relatively small quantity of fibers 140 is used and the length of the fiber arrangement L is prepared to be relatively short correspondingly, a bending process S43 of a type in which some of the fibers is arranged may be performed.

[0064] That is, it may be made in the form of different types of the provisional products in which the fibers 140 are only distributed or dispersed in a section 131, except for the brush rod connecting portion 120 and a partial section 132 of the brush body 130 connected to the brush rod connecting portion 120.

[0065] That is, the fibers 140 may be provided in the entire section or the partial section of the brush body 130 depending on the respective types of the products.

[0066] In this case, one side portion 121 of the brush rod connecting portion 120 may include an open end portion 32 corresponding to the other side of the twisted wire 33 and a closed end portion 31 corresponding to one side of the twisted wire 33. Herein, the open end portion 32 and the closed end portion 31 are disposed at an end of the one side portion 121 of the brush rod connecting portion 120 facing the hole 111 of the brush rod 110 in a state of being close to each other.

[0067] In particular, the smooth curved surface of the closed end portion 31 serves as an insertion guide surface or a sliding contact surface at the time of assembling the brush rod connecting portion 120 and the brush rod 110, so that the brush rod connecting portion 120 and the brush rod 110 serve to increase the assembly performance.

[0068] Meanwhile, the open end portion 32 overlapped in a state close to the closed end portion 31 is first guided by the closed end portion 31, and therefore, it may be relatively easily inserted into the hole 111 of the brush rod 110. Subsequently, when the process of rotating the brush rod connecting portion 120 is performed in a state where the brush rod 110 is fixed, the burr of the open end portion 32 may be fixed as if scratched on the inner surface of the hole 111. Accordingly, it may play a role of increasing the fixing force of the brush rod connecting portion 120 and the brush rod 110.

[0069] Meanwhile, a step S50 for assembling a brush rod may be performed through the use of assembling the fibers 140 made in the form of the provisional product, the brush body 130 and the brush rod connecting portion 120 into the brush rod 110.

[0070] Referring to FIG. 5, the brush body 130 integrated with the fibers 140 may have a shape manufactured in the form of a ring made by cutting or bending a hoop structure or a closed loop structure, respectively.

For example, the brush body 130 supported by the brush rod connecting portion 120 and integrated together with the fibers 140 may have an oval shape or a circular shape (not shown), as shown in (a) of FIG. 5.

[0071] In addition, the brush body 130 may have a shape in which a plurality of hoop shapes is overlapped, that is, a shape such as a multi-hoop type or a crown shape bending and overlapping the twisted wire 33, as shown in (b) of FIG. 5.

[0072] Of course, in the case of making a crown-shaped brush body 130 having two or more hoop structures as in (b) of FIG. 5 by overlapping the twisted wire 33 of a relatively large amount, it may also be required to change the diameter and length of the brush rod 110, the diameter and depth of the hole 111 of the brush rod 110, and the like. In addition, according to the size or shape change of the brush 100, the design change of the vessel 10 may be naturally made in this embodiment as well.

[0073] Furthermore, the brush body 130 may have any one of a shape of a spoon, an inverted triangle, an inverted pentagon, a fan, a rectangle, a triangle, and a cactus, as illustrated in (c) to (i) of FIG. 5.

[0074] Thus, the brush body 130 of the present embodiment may easily manufacture the ring structure, the loop structure, the hoop structure or the closed loop structure by bending or cutting the twisted wire 33. Accordingly, the mascara cosmetic may be applied in various ways to the central portion, the tail portion, the front hair portion of the upper eyelashes or the eyelashes of the user. For example, the oval or circular brush body 130 shown in (a) of FIG. 5 may perform contact corresponding to the circular or arc shape, based on the front of FIG. 5 of the brush body 130, with reference to a mascara make-up part. In addition, when using the side portion of the brush body 130, the contact in the form of a straight or curved may be performed. As such, the brush body 130 may apply the mascara cosmetic in various ways to the upper eyelashes or lower eyelashes of the user.

[0075] In addition, since the brush body 130 has a reference slope of the brush rod 110 or the brush rod connecting portion 120, there are advantages of easily adjusting the angle adjusted and improving the touch feeling to the carrying body 11.

[0076] Although the brush and mascara vessel including the same according to an embodiment of the present invention have been described as specific embodiments, this is only an example, and the present invention is not limited thereto. Therefore, it should be interpreted as having the broadest range in accordance with the basic idea disclosed herein. It will be apparent to those skilled in the art that the disclosed embodiments can be combined, substituted, and embodied in a pattern that is not indicated, but this also does not depart from the scope of the present invention. In addition, those skilled in the art can easily change or modify the disclosed embodiments based on the present specification; it is obvious that such changes or modifications belong to the scope of the

present invention.

Claims

1. A brush comprising:
 - a brush rod connecting portion having one side portion made of a twisted wire and a plurality of other side portions branched from the one side portion;
 - a brush body integrally formed at the other side portions to be extended from the other side portion of the brush rod connecting portion to form a hoop structure or a closed loop structure; and
 - a plurality of fibers pressed by the twisted wire of the brush body and protruded toward the inner side and outer side of the brush body.
2. The brush according to claim 1, wherein the brush includes a brush rode of a shaft member shape having a hole coupled to the brush rod connecting portion to support the brush body.
3. The brush according to claim 2, wherein the fibers are provided in either an entire section or a partial section of the brush body.
4. The brush according to claim 3, wherein the brush rod connecting portion is configured such that:
 - the one side portion is inserted into the hole at the end of the brush rod in a force-fitting manner, the other side portion is disposed toward the outer side of the hole, and
 - a bending portion is included for connecting between the other side portion and the one side portion, in a state that is bent corresponding to an inclination angle with respect to the direction extended from the one side portion.
5. The brush according to claim 4, wherein the one side portion of the brush rod connecting portion includes:
 - an open end portion corresponding to the other side of the twisted wire, and
 - a closed end portion corresponding to one side of the twisted wire, and
 - wherein the open end portion and the closed end portion are disposed at an end of the one side portion facing the hole in a state of being close to each other.
6. The brush according to claim 1, wherein the twisted wire is made of any one of a stainless steel material, a synthetic resin material, and a plastic material.
7. The brush according to claim 6, wherein the brush

body integrated with the fibers is manufactured in the form of a ring made by cutting or bending the twisted wire to form the hoop structure or closed loop structure, and

wherein the brush body has a shape of any one of a round, an oval, a multi-hoop, a crown, a spoon, in inverted triangle, an inverted pentagon, a fan, a rectangle, a triangle, and a cactus. 5

8. A mascara vessel comprising the brush of any one of claims 1 to 7 for applying a mascara cosmetic, the mascara vessel comprising: 10

a carrying body carrying the cosmetic; and
a vessel main body having a first groove portion for accommodating the carrying body and a second groove portion for accommodating the brush. 15

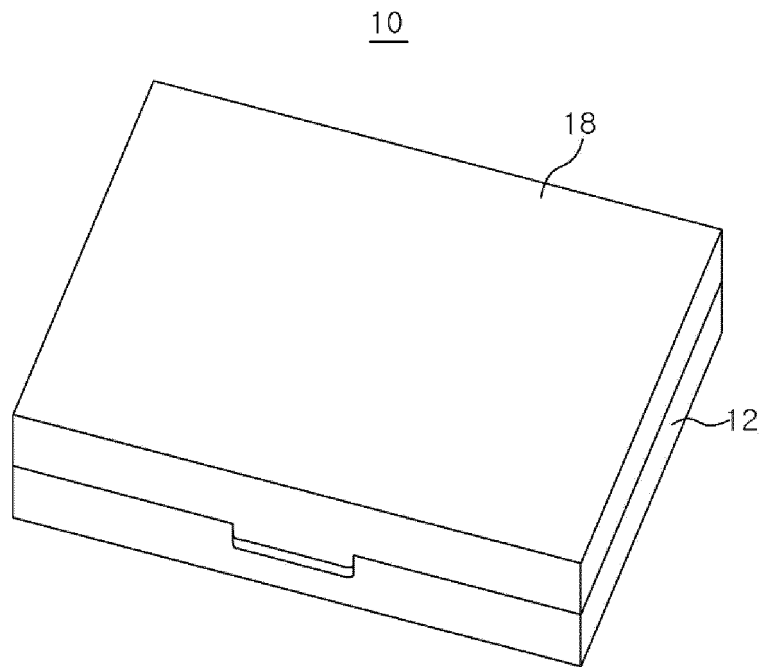
9. The mascara vessel according to claim 8, wherein the vessel main body is configured such that the first groove portion is disposed on one side of the upper surface of the vessel main body and the second groove portion is disposed on the other side of the upper surface of the vessel main body, 20
wherein the vessel main body includes: 25

the inner cover being rotatably coupled to a hinge portion of one side of the vessel main body to shield the first groove portion; and 30
an outer cover rotatably coupled to a hinge portion of the other side of the vessel main body to cover the inner cover and the second groove portion, and
wherein the second groove portion has a groove volume that is capable of accommodating the brush, in singular or in plural, including the brush body, the brush rod connecting portion and the brush rod. 35
40

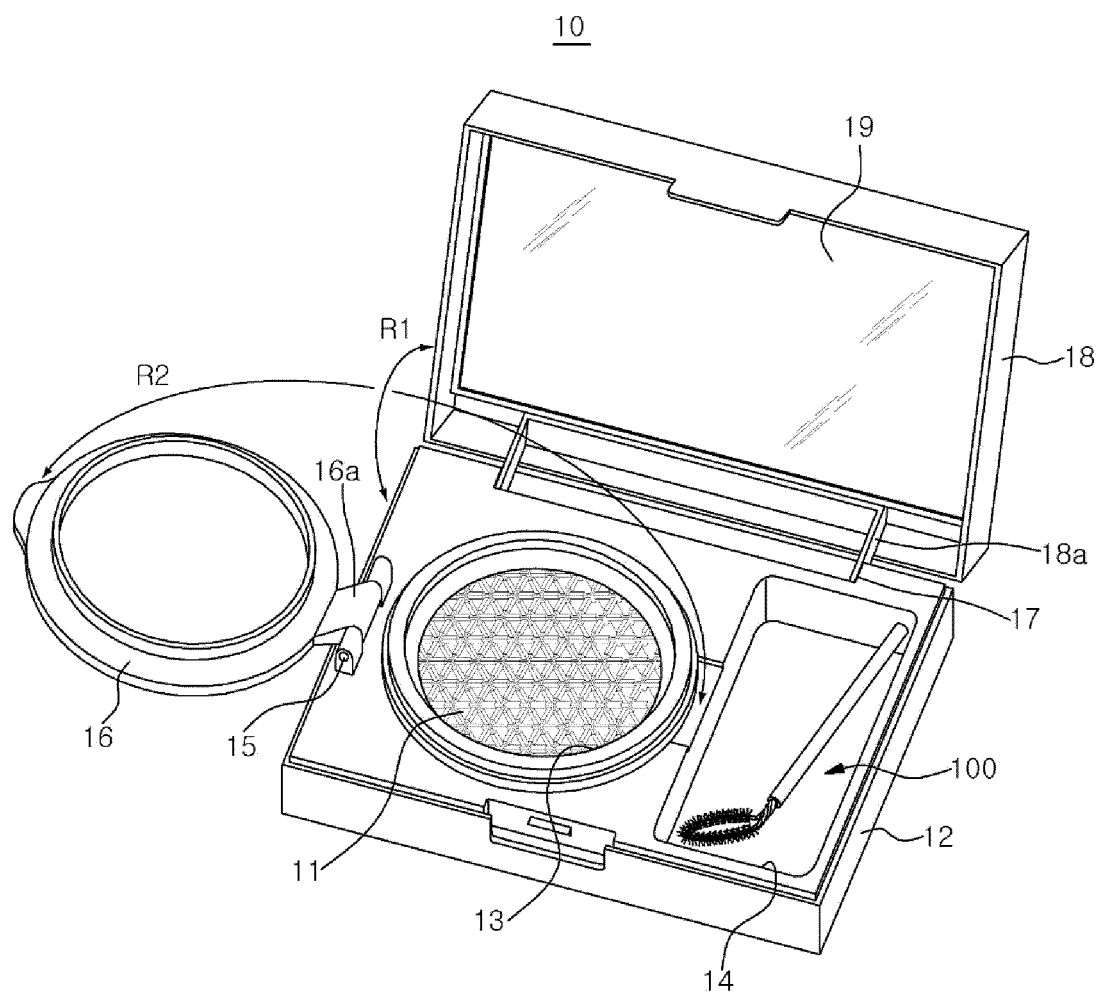
10. A mascara vessel comprising:

a brush including a brush body having a plurality of fibers protruded therefrom and a brush rod connected to be inclined at an angle with the brush body; 45
a carrying body carrying the cosmetic; and
a vessel main body having a first groove portion for accommodating the carrying body and a second groove portion for accommodating the brush. 50
55

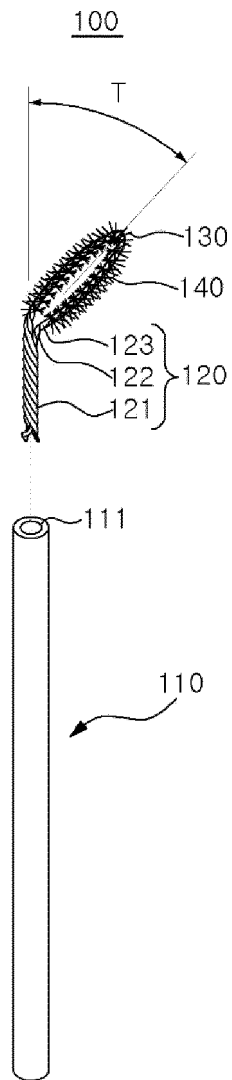
【FIG. 1】



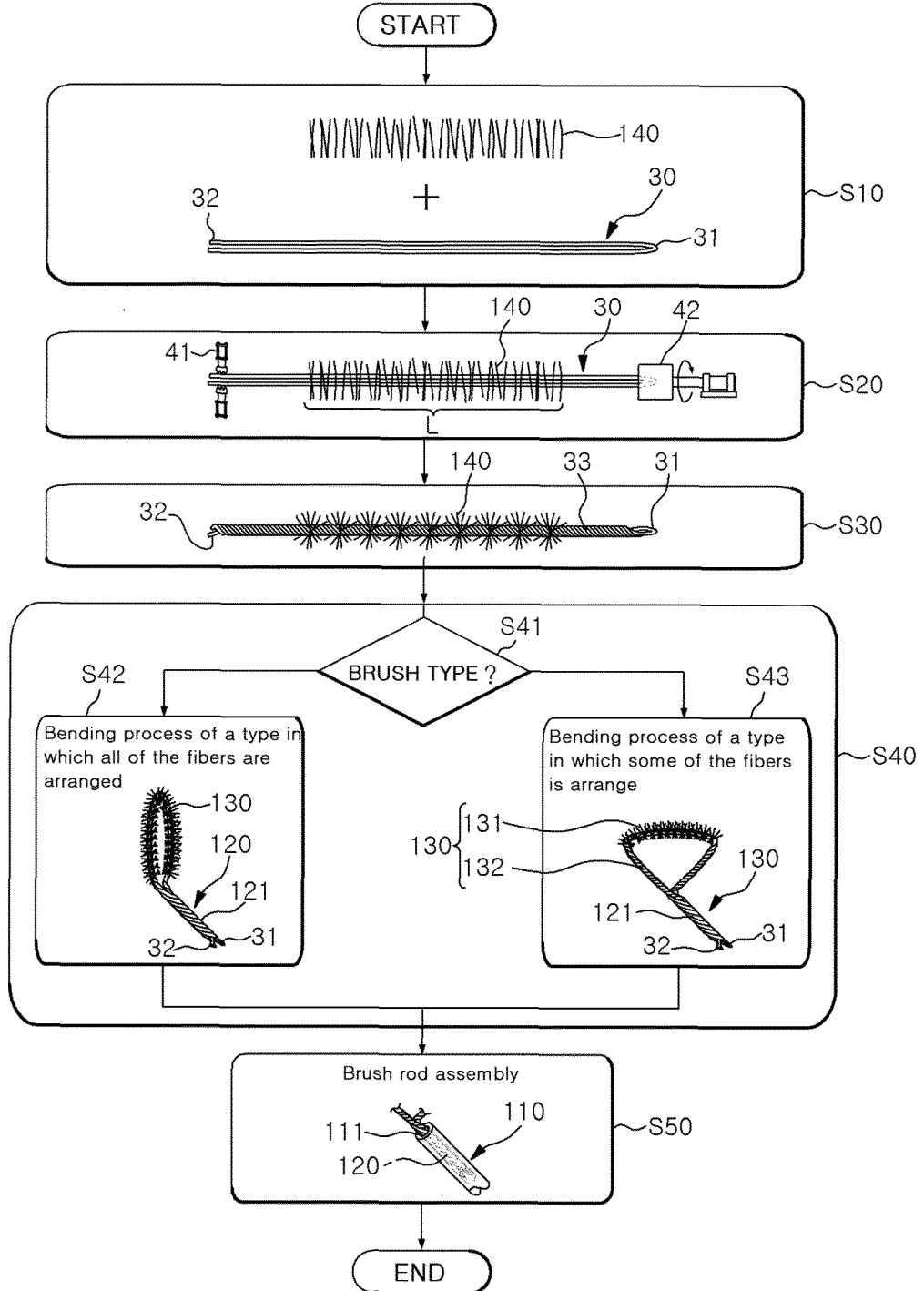
【FIG. 2】



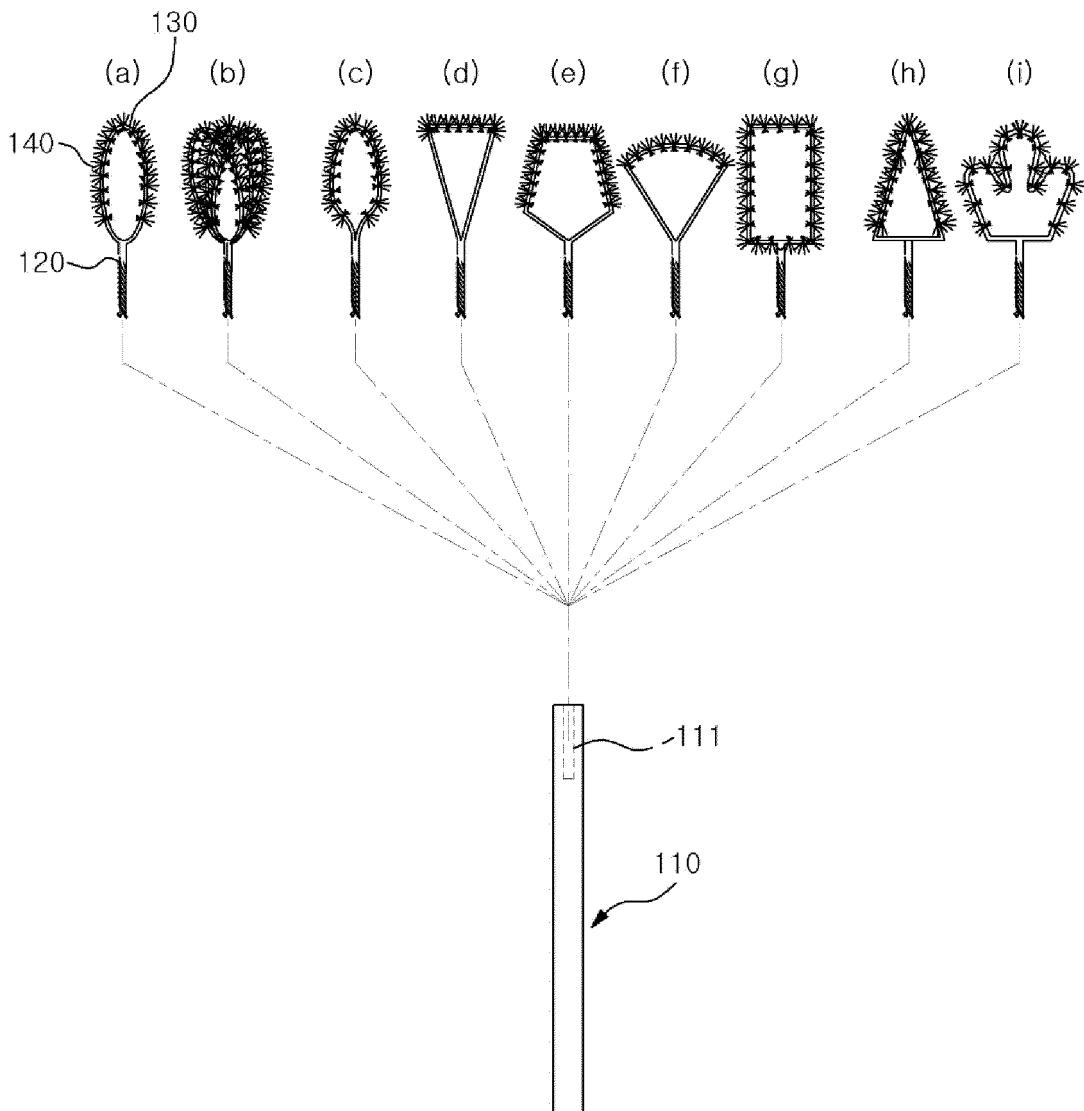
【FIG. 3】



【FIG. 4】




【FIG. 5】



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2018/007489

5	<p>A. CLASSIFICATION OF SUBJECT MATTER</p> <p><i>A45D 40/26(2006.01)i, A45D 40/18(2006.01)i, A46B 9/10(2006.01)i, A46B 3/00(2006.01)i</i></p> <p>According to International Patent Classification (IPC) or to both national classification and IPC</p>																										
	<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols)</p> <p>A45D 40/26; A45D 33/00; A45D 33/34; A45D 34/00; A45D 34/04; A46B 3/18; A45D 40/18; A46B 9/10; A46B 3/00</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility models and applications for Utility models: IPC as above Japanese Utility models and applications for Utility models: IPC as above</p>																										
10	<p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)</p> <p>eKOMPASS (KIPO internal) & Keywords: twist, wire, closed loop, brush, carrier, container</p>																										
15	<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th style="width: 10%;">Category*</th> <th style="width: 70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width: 20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>KR 10-2002-0095158 A (COLOR ACCESS, INC.) 20 December 2002 See page 3; and figures 1-2, 14.</td> <td>1-3,6-7</td> </tr> <tr> <td>Y</td> <td></td> <td>4-5,8-10</td> </tr> <tr> <td>25</td> <td>Y</td> <td>KR 20-2000-0003975 U (KIM, Hye Young) 25 February 2000 See pages 2-3; and figures 2-4.</td> <td>4-5,10</td> </tr> <tr> <td></td> <td>Y</td> <td>JP 3688343 B2 (YOSHINO KOGYOSHO CO., LTD.) 24 August 2005 See paragraphs [0008], [0013]; and figure 1.</td> <td>8-10</td> </tr> <tr> <td>30</td> <td>Y</td> <td>KR 20-2017-0000230 U (LG HOUSEHOLD & HEALTH CARE LTD.) 18 January 2017 See paragraphs [0027], [0030], [0037], [0041]-[0042], [0054]; and figures 1-2, 5.</td> <td>8-10</td> </tr> <tr> <td>35</td> <td>A</td> <td>JP 2015-107154 A (KAO CORP.) 11 June 2015 See paragraphs [0015]-[0024]; and figures 1-3.</td> <td>1-10</td> </tr> </tbody> </table>		Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	KR 10-2002-0095158 A (COLOR ACCESS, INC.) 20 December 2002 See page 3; and figures 1-2, 14.	1-3,6-7	Y		4-5,8-10	25	Y	KR 20-2000-0003975 U (KIM, Hye Young) 25 February 2000 See pages 2-3; and figures 2-4.	4-5,10		Y	JP 3688343 B2 (YOSHINO KOGYOSHO CO., LTD.) 24 August 2005 See paragraphs [0008], [0013]; and figure 1.	8-10	30	Y	KR 20-2017-0000230 U (LG HOUSEHOLD & HEALTH CARE LTD.) 18 January 2017 See paragraphs [0027], [0030], [0037], [0041]-[0042], [0054]; and figures 1-2, 5.	8-10	35	A	JP 2015-107154 A (KAO CORP.) 11 June 2015 See paragraphs [0015]-[0024]; and figures 1-3.	1-10
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																									
X	KR 10-2002-0095158 A (COLOR ACCESS, INC.) 20 December 2002 See page 3; and figures 1-2, 14.	1-3,6-7																									
Y		4-5,8-10																									
25	Y	KR 20-2000-0003975 U (KIM, Hye Young) 25 February 2000 See pages 2-3; and figures 2-4.	4-5,10																								
	Y	JP 3688343 B2 (YOSHINO KOGYOSHO CO., LTD.) 24 August 2005 See paragraphs [0008], [0013]; and figure 1.	8-10																								
30	Y	KR 20-2017-0000230 U (LG HOUSEHOLD & HEALTH CARE LTD.) 18 January 2017 See paragraphs [0027], [0030], [0037], [0041]-[0042], [0054]; and figures 1-2, 5.	8-10																								
35	A	JP 2015-107154 A (KAO CORP.) 11 June 2015 See paragraphs [0015]-[0024]; and figures 1-3.	1-10																								
40	<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.</p>																										
45	<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>45 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>																										
50	<p>Date of the actual completion of the international search</p> <p style="text-align: center;">05 OCTOBER 2018 (05.10.2018)</p>	<p>Date of mailing of the international search report</p> <p style="text-align: center;">05 OCTOBER 2018 (05.10.2018)</p>																									
55	<p>Name and mailing address of the ISA/KR</p> <p> Korean Intellectual Property Office Government Complex Daejeon Building 4, 189, Cheongsu-ro, Seo-gu, Daejeon, 35208, Republic of Korea Facsimile No. +82-42-481-8578</p>	<p>Authorized officer</p> <p>Telephone No.</p>																									

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/KR2018/007489

5

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member	Publication date
KR 10-2002-0095158 A	20/12/2002	AU 2001-73304 A1	05/02/2002
		AU 2001-73304 B2	09/09/2004
		CA 2384093 A1	31/01/2002
		CA 2384093 C	22/09/2009
		EP 1303206 A2	23/04/2003
		EP 1303206 B1	09/11/2005
		JP 2004-504085 A	12/02/2004
		JP 4439180 B2	24/03/2010
		KR 10-0790266 B1	31/12/2007
		US 6408857 B1	25/06/2002
		WO 2002-007559 A2	31/01/2002
		WO 2002-007559 A3	06/06/2002
		KR 20-2000-0003975 U	25/02/2000
JP 3688343 B2	24/08/2005	JP 8294412 A	12/11/1996
KR 20-2017-0000230 U	18/01/2017	KR 20-0483617 Y1	05/06/2017
JP 2015-107154 A	11/06/2015	NONE	

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- KR 2020000012867 [0007]