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(54) ATOMIZING ASSEMBLY AND ATOMIZER FORMED THEREBY

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 ENSEMBLE D'ATOMISATION ET ATOMISEUR AINSI FORMÉ

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Description**BACKGROUND OF THE INVENTION****1. FIELD OF THE INVENTION**

[0001] The present invention relates to an atomizing assembly and an atomizer formed thereby, which is used to atomize liquid into fine droplets and may function as a distributor of essence and perfume, a humidity modifier, a skin moisturizing device, or a sprayer for dispensing fine droplets. The present invention particularly involves an atomizing assembly, which can be detached from the atomizer for replacing or replenishing the atomizing assembly, whereby the convenience of using the atomizer is promoted.

2. DESCRIPTION OF THE PRIOR ART

[0002] U.S. Patent Nos. 7784712, 7607589, 6805393 and 4533082 disclosed an atomizer whose nozzle plate is vibrated to atomize out the liquid in a storage chamber into fine droplets. The atomizing mechanism of the atomizer comprises a nozzle plate and a vibrating member. Fig. 1 shows a conventional atomizer 1000 whose atomizing assembly 1010 and base 1100 are integrated into a single piece. The atomizing assembly 1010 is less likely or unlikely to be separated from the base 1100. While the user replenishes the atomizer 1000 with liquid, the liquid may intrude into the internal circuits or batteries and cause malfunction or current leakage. While a user intends to replace the original liquid with another liquid, he has to drain out the original liquid or even clean the liquid storage chamber 1024. Thus, moisture is very likely to intrude into the internal circuit of the atomizer 1000. The user may alternatively directly replace the original atomizer 1000 with another atomizer 1000 containing the desired liquid. However, it would increase the cost of using the atomizer 1000. Besides, while one of the components of the atomizer 1000 (such as the containing part 1020, the atomizing part 1030 or the base 1100) breaks down, it is hard to detach or repair because the atomizing assembly 1010 is integrated with the base 1100. Consequently, the cost of using the atomizer 1000 is increased.

[0003] Further, the conventional atomizer 1000 is electrically connected with the base 1100 via string type wires (not shown). However, the string type wires are more likely to be melted by the heat generated by great current and also more likely to be broken apart, so that the corresponding circuit easily suffers from risks of short circuit or break circuit. Because the string type wire has a risk to be broken/fracture, it is unsuitable to be used in detachable devices but only suitable to be used in integral devices to avoid the situation that the string type wire is pulled and dragged to break apart during disassembly.

[0004] EP 2910268 A1 discloses an aerosol generator unit with an aerosol generator housing which is separated into a first housing part and a second housing part. The

aerosol generator housing comprises a bottom. A top of the aerosol generator unit opposite to the bottom is formed by a lid. Besides, the first housing part forms a nebulization chamber into which the aerosol is introduced during operation of the aerosol generator.

[0005] JP 2010099169 A, US 2005/011514 A1 and US 5,758,637 A disclose further nebulizers (atomizing assemblies).

10 SUMMARY OF THE INVENTION

[0006] In order to solve the problems of the conventional technology, the present invention proposes an atomizing assembly and an atomizer formed thereby. The atomizing assembly can be easily detached from the base of the atomizer, whereby the liquid that is to be atomized can be replenished or replaced conveniently; whereby the atomizing assembly or the base, which has malfunctioned, can be easily replaced to repair the atomizer. Further, the atomizing assembly is configured to be installed in an appropriate power source to form an atomizer so as to promote the convenience of using the atomizing assembly and the atomizer formed thereby. Besides, the atomizing assembly of the present invention is electrically connected with the base via a pin element so as to overcome the break-apart problem resulting from that the conventional atomizing assembly is connected with the base via string type wires.

[0007] In one broad aspect, there is provided an atomizing plug assembly according to claim 1. This atomizing plug assembly comprises a containing part and an atomizing part. Said containing part has a containing body. Said containing body defines a containing space thereinside and has an opening on exterior thereof. Said opening communicates with said containing space. Said atomizing part is integrated with or detachably connected with said containing part. Said atomizing part includes a vibrating member, a nozzle plate and a pin element. Said nozzle plate is located corresponding to said opening. Said vibrating member is connected with said nozzle plate and has an atomizing electrical connecting portion. Said pin element is electrically connected with said atomizing electrical connecting portion.

[0008] According to the invention, said atomizing part further includes a rotatable portion rotatably and electrically connected with said atomizing electrical connecting portion. Said pin element is integrated with or detachably connected with said rotatable portion, and said pin element is electrically connected with said rotatable portion.

[0009] Preferably, there is provided an atomizer comprising said atomizing assembly and comprising a base. Said base includes a base body. Said base body has a base electrical connecting portion. Said base electrical connecting portion is configured to be electrically connected with said atomizing electrical connecting portion. Said base electrical connecting portion is also electrically connected with said pin element.

[0010] Preferably, there is provided an atomizer com-

prising said atomizing assembly and comprising a base. Said base includes a base body. Said base body has a base connecting portion. Said containing body has an installation connecting portion corresponding to said base connecting portion. Said installation connecting portion is detachably connected with said base connecting portion.

[0011] Other advantages of the present invention will become apparent from the following descriptions taken in conjunction with the accompanying drawings wherein certain embodiments of the present invention are set forth by way of illustration and examples.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The foregoing aspects and many of the accompanying advantages of this invention will become more readily appreciated as the same becomes better understood by reference to the following detailed descriptions, when taken in conjunction with the accompanying drawings, wherein:

Fig. 1 is a front view schematically showing a conventional atomizer;

Fig. 2 is a diagram schematically showing an atomizing assembly according to one example of the present invention;

Fig. 3A is a front view schematically showing a vibrating member having an atomizing electrical connecting portion;

Fig. 3B is a front view schematically showing a vibrating member having an atomizing electrical connecting portion and a pin element according to one example which is not part of the present invention;

Fig. 3C is a front view schematically showing a vibrating member having an atomizing electrical connecting portion, a pin element and a rotatable portion according to one example of the present invention;

Fig. 4A is a perspective exploded view schematically showing an atomizing assembly and a base of an atomizer according to one example which is not part of the present invention;

Fig. 4B is a perspective view taken from another angle and schematically showing the base shown in Fig. 4A; and

Fig. 5 is a perspective view schematically showing that a rotatable portion of an atomizing assembly is configured to be installed in bases respectively at different angles according to one example of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] Fig. 2 shows an atomizing assembly 10 of an example of the present invention. The atomizing assembly 10 comprises a containing part 20 and an atomizing part 30. The atomizing part 30 is integrated with or detachably connected with the containing part 20. The con-

taining part 20 has a containing body 22. The containing body 22 defines a containing space 24 therein and has an opening 26 on the exterior thereof. The opening 26 communicates with the containing space 24. The containing space 24 contains a liquid to be atomized (not shown in the drawings). The atomizing part 30 includes a vibrating member 32 and a nozzle plate 34. The vibrating member 32 or the nozzle plate 34 is connected with the containing body 22. The nozzle plate 34 is located corresponding to the opening 26. The vibrating member 32 is connected with the nozzle plate 34, whereby the liquid inside the containing space 24 is atomized into fine droplets by the nozzle plate 34, which is vibrated by the vibrating member 32 at a high frequency, and then the liquid is sprayed out. It should be noted: although the atomizing part 30 is arranged inside the containing space 24 in Fig. 2, the present invention is not limited to the configuration. In other words, the atomizing part 30 may be arranged outside the containing space 24 in some embodiments of the present invention (not shown). Preferably, the atomizing part 30 is arranged outside the containing space 24 (not shown), whereby the atomizing part 30 can be more easily detached from the containing part 20 in the case that the atomizing part 30 is detachably connected with the containing part 20.

[0014] As shown in Fig. 3A, the vibrating member 32 further includes an atomizing electrical connecting portion 36, which is electrically connected with the vibrating member 32. In an example, which is not part of the invention as shown in Fig. 3B, the atomizing part 30 further includes a pin element 40, which is integrated with or detachably connected with the atomizing electrical connecting portion 36. According to the invention, as shown in Fig. 3C, the atomizing part 30 further includes a rotatable portion 38 and a pin element 40, wherein the rotatable portion 38 is rotatably and electrically connected with the atomizing electrical connecting portion 36. The pin element 40 is integrated with or detachably and electrically connected with the rotatable portion 38. The region where the rotatable portion 38 is electrically connected with the atomizing electrical connecting portion 36 is electrically connected with the region where the rotatable portion 38 is electrically connected with the pin element 40, whereby the pin element 40 is electrically connected with the atomizing electrical connecting portion 36.

[0015] Referring to Figs. 4A-4B, a base 100 comprises a base body 110. The base body 110 includes a base electrical connecting portion 112. The base electrical connecting portion 112 is configured to be electrically connected with the atomizing electrical connecting portion 36 of the vibrating member 32. The base electrical connecting portion 112 is a power source or electrically connected with a power source. The electric connection of the atomizing electrical connecting portion 36 and the base electrical connecting portion 112 enables the atomizing assembly 10 to function as an atomizer 1. In one example, the base 100 is a portable power source (such

as a mobile power source bank) or a fixed-position power source (such as a fixed power socket or an extension power socket) which is provided at specific locations/positions. In one example, one end of the pin element 40 is electrically connected with one atomizing electrical connecting portion 36, and the other end of the pin element 40 is electrically connected with one base electrical connecting portion 112, whereby the atomizing electrical connecting portion 36 are electrically connected with the base electrical connecting portion 112. Wherein, the pin element 40 is detachably connected with the base electrical connecting portion 112. It should be noted that the present invention uses the pin element 40 of the atomizing part 30 of the atomizing assembly 10 to replace the string type wires of the conventional technology and function as an electric connection structure. The pin element 40 is made of an electric conduction material having a specified thickness. Preferably, the electric conduction material is a metallic material having a specific rigidity and strength, which can provide a sufficient structural rigidity for the connection of the atomizing assembly 10 and the base 100. Thus, the present invention avoids from the problems of insufficient and poor structural rigidity of the connection between the atomizing assembly 10 and the base 100 of the conventional technology using the string type wires as the electric connection structure. Further, in the circumstance that a mechanical connection structure is provided between the atomizing assembly 10 and the base 100 for enhancing the connecting structural rigidity the atomizing assembly 10 and the base 100, the pin element 40 can still further contribute some rigidity to the connection of the atomizing assembly 10 and the base 100. As the pin element 40 having a specific rigidity are used as the components of the detachable connection structure between the atomizing assembly 10 and the base 100, the atomizing assembly 10 can be easily detached from the base 100. Further, as the pin element 40 have a specific rigidity, they are less likely to be broken during detachment or assemblage, which is likely to occur in the string type wires used by the conventional technology.

[0016] Fig. 5 shows another example where the rotatable portion 38 (also shown in Fig. 3) can be installed in different bases 100a and 100b respectively at different angles. The base 100a is installed on a wall 200a, and the base 100b is installed on a ground 200b. The atomizing electrical connecting portion 36 are electrically connected with the base electrical connecting portion 112 via electrically connecting one end of the pin element 40 with one atomizing electrical connecting portion 36 and electrically connecting the other end of the pin element 40 with the base electrical connecting portion 112. The movement of the rotatable portion 38 enables the atomizing assembly 10 to be installed in the base electrical connecting portions 112 of the base 100a and 100b respectively at different angles. In other words, the atomizing assembly 10 can be adjusted or rotated with respect to the base 100 via the movement of the rotatable portion

38 according to requirement. In one practical example, the atomizing assembly 10 can be installed in the base electrical connecting portions 112 of the bases 100a and 100b respectively at different angles, maintained at an identical angle with respect to the horizontal plane by adjusting the angle/movement of the rotatable portion 38.

[0017] Referring to Fig. 4A and Fig. 4B again, the base body 110 further includes a base connecting portion 150. The containing body 22 of the containing part 20 has an installation connecting portion 50 corresponding to the base connecting portion 150, whereby the installation connecting portion 50 can be detachably connected with the base connecting portion 150. Preferably, one of the base body 110 and the atomizing assembly 10 has at least one protrusion 60; the other one of the base body 110 and the atomizing assembly 10 has at least one support portion 62 corresponding to the protrusions 60, wherein the protrusion 60 contacts the support portion 62 while the installation connecting portion 50 is connected with the base connecting portion 150, whereby to increase the contact area between the base body 110 and the atomizing assembly 10 and enhance the connection of the base body 110 and the atomizing assembly 10. Thus, the structural strength of the entire atomizer 1 is promoted, and the safety and reliability of the connection of the base body 110 and the atomizing assembly 10 is secured.

[0018] Under the above-mentioned configuration of the atomizing assembly 10 and the base 100, a user can separate the atomizing assembly 10 from the base 100 to replenish or replace the liquid while the liquid is used up or needs replacement so as to prevent the liquid from intruding into the base 100, especially the base electrical connecting portion 112, and damaging the base electrical connecting portion 112. Alternatively, a user can replace the original atomizing assembly 10 with another atomizing assembly 10 having the desired liquid to prevent from possible contaminations while he replenishes or replaces the liquid. In such a case, the user does not need to replace the base 100 simultaneously and thus save the cost of the base 100. Further, the required liquid is replaced quickly via this way. In another case, when the containing part 20 or atomizing part 30 is breakdown of damaged, the atomizer 1 can be functioned again by simply replacing the atomizing assembly 10 without changing a new atomizer 1 to save the cost.

[0019] Preferably, in the example that the containing part 20 and atomizing part 30 are configured to be detachably connected to each other, while the liquid is used up or needs replacement, a user can separate the containing part 20 from the atomizing part 30 before he replenishes or replaces the liquid so as to prevent the liquid from intruding into the atomizing part 30 or the base 100, especially the atomizing electrical connecting portion 36 or the base electrical connecting portion 112, to damage the atomizing electrical connecting portion 36 or the base electrical connecting portion 112. Alternatively, the user can directly replace the original containing part 20 with

another containing part 20 having the desired liquid to prevent from possible contaminations while he replenishes or replaces the liquid; whereby the user does not need to replace the base 100 simultaneously and thus save the cost of the base 100 and the atomizing part 30, and achieves the effect of replenishing or replacing the liquid quickly. In another case, while the containing part 20 or the atomizing part 30 is breakdown or damaged, a user can only replace the damaged one of the containing part 20 and the atomizing part 30 to save the cost and satisfy the requirement of environmental protection.

[0020] It should be noted that the term "detachable connection" used in the specification refers to that each of the elements or components of the "detachable connection" has at least one connecting portion (not shown in the drawings), which enables a detachable connection, including the engaging type connection, the hooking type connection, the snap-fitting type connection, and the inserting type connection (such as the plug-and-socket type connection). However, the present invention does not limit that the "detachable connection" must be one of the above-mentioned types of connections. The "detachable connection" is the conventional technology familiar to the persons skilled in the art. Therefore, the detail thereof will not repeat herein. Owing to the "detachable connection" of the elements and components, while one of the elements or components is damaged or malfunctions, the user needn't replace the entire atomizer or the assembly containing the damaged or malfunctioning element or component but can only replace the damaged or malfunctioning element or component. Therefore, the present invention can save the cost of maintaining or repairing atomizers.

[0021] While the invention can be subject to various modifications and alternative forms, a specific example thereof has been shown in the drawings and is herein described in detail. It should be understood, however, that the invention is not to be limited to the particular form disclosed, but on the contrary, the invention is to cover all modifications, equivalents, and alternatives falling within the scope of the appended claims.

Claims

1. An atomizing plug assembly (10) comprising
 a containing part (20) having a containing body (22), wherein said containing body (22) defines a containing space (24) thereinside and has an opening (26); and
 an atomizing part (30) integrated with or detachably connected with said containing part (20); wherein said atomizing part (30) includes a vibrating member (32), a nozzle plate (34), a pin element (40) and a rotatable portion (38), wherein said nozzle plate (34) is located corresponding to said opening (26), said vibrating member

(32) is connected with said nozzle plate (34) and has an atomizing electrical connecting portion (36), said pin element (40) is electrically connected with said atomizing electrical connecting portion (36), said rotatable portion (38) rotatably and electrically connected with said atomizing electrical connecting portion (36), said pin element (40) is integrated with or detachably connected with said rotatable portion (38), and said pin element (40) is electrically connected with said rotatable portion (38); and said opening (26) communicating with said containing space (24) and being located at the exterior of said containing body (22) in such a way that liquid inside said containing space (24) is atomized by said nozzle plate (34) and vibrated by said vibrating member (32) to said opening (26) to be sprayed out to an atmosphere.

- 2. An atomizer (1) comprising an atomizing plug assembly (10) according to claim 1 and comprising a base (100), wherein said base (100) includes a base body (110), said base body (110) has a base electrical connecting portion (112), said pin element (40) of said atomizing plug assembly (10) is plugged into said base electrical connecting portion (112) of said base body (110) to make electrical connection, and wherein said base electrical connecting portion (112) is a power source or electrically connected with a power source for said atomizing plug assembly (10).
- 3. The atomizer according to claim 2, wherein said pin element (40) is detachably connected with said base electrical connecting portion (112).
- 4. An atomizer (1) comprising an atomizing plug assembly (10) according to claim 1 and comprising a base (100), wherein said base (100) includes a base body (110) with a base connecting portion (150), said containing body (22) has an installation connecting portion (50), said installation connecting portion (50) of said atomizing plug assembly (10) is detachably connected with said connecting portion (150) of into said base body (110) and said base body (110).
- 5. The atomizer according to claim 4, wherein one of said base connecting portion (150) and said installation connecting portion (50) has a protrusion (60), another one of said base connecting portion (150) and said installation connecting portion (50) has a support portion (62) corresponding to said protrusion (60), said protrusion (60) engages with said support portion (62) while said base connecting portion (150) is connected with said installation connecting portion (50).
- 6. The atomizer according to claim 5, wherein said base body (110) has a base electrical connecting portion

(112), said base electrical connecting portion (112) is electrically connected with said atomizing electrical connecting portion (36).

7. The atomizer according to claim 6, wherein said pin element (40) is electrically and detachably connected with said base electrical connecting portion (112).

Patentansprüche

1. Zerstäubungs-Steckeranordnung (10), umfassend einen Aufnahmeteil (20), der einen Aufnahmekörper (22) aufweist, wobei der Aufnahmekörper (22) einen Aufnahmeraum (24) darin definiert und eine Öffnung (26) aufweist; und einen Zerstäubungsteil (30), der in den Aufnahmeteil (20) integriert ist oder abnehmbar damit verbunden ist; wobei der Zerstäubungsteil (30) ein Schwingungselement (32), eine Düsenplatte (34), ein Stiftelement (40) und einen drehbaren Abschnitt (38) umfasst, wobei die Düsenplatte (34) der Öffnung (26) entsprechend angeordnet ist, wobei das Schwingungselement (32) mit der Düsenplatte (34) verbunden ist und einen Zerstäubungs-Stromanschlussabschnitt (36) aufweist, wobei das Stiftelement (40) mit dem Zerstäubungs-Stromanschlussabschnitt (36) elektrisch verbunden ist, wobei der drehbare Abschnitt (38) mit dem Zerstäubungs-Stromanschlussabschnitt (36) drehbar und elektrisch verbunden ist, wobei das Stiftelement (40) in den drehbaren Abschnitt (38) integriert ist oder abnehmbar damit verbunden ist, und wobei das Stiftelement (40) mit dem drehbaren Abschnitt (38) elektrisch verbunden ist; und wobei die Öffnung (26) mit dem Aufnahmeraum (24) kommuniziert und derart an der Außenseite des Aufnahmekörpers (22) angeordnet ist, dass eine Flüssigkeit im Inneren des Aufnahmeraums (24) durch die Düsenplatte (34) zerstäubt wird und durch das Schwingungselement (32) zu der Öffnung (26) hin in Schwingung versetzt wird, um in eine Atmosphäre ausgesprüht zu werden.
2. Zerstäuber (1), umfassend eine Zerstäubungs-Steckeranordnung (10) nach Anspruch 1 und umfassend eine Basis (100), wobei die Basis (100) einen Basiskörper (110) umfasst, wobei der Basiskörper (110) einen Basis-Stromanschlussabschnitt (112) aufweist, wobei das Stiftelement (40) der Zerstäubungs-Steckeranordnung (10) in den Basis-Stromanschlussabschnitt (112) des Basiskörpers (110) gesteckt wird, um eine elektrische Verbindung herzustellen, und wobei der Basis-Stromanschlussabschnitt (112) eine Leistungsquelle ist oder mit einer Leistungsquelle für die Zerstäubungs-Steckeranordnung (10) elektrisch verbunden ist.

3. Zerstäuber nach Anspruch 2, wobei das Stiftelement (40) abnehmbar mit dem Basis-Stromanschlussabschnitt (112) verbunden ist.

4. Zerstäuber (1), umfassend eine Zerstäubungs-Steckeranordnung (10) nach Anspruch 1 und umfassend eine Basis (100), wobei die Basis (100) einen Basiskörper (110) mit einem Basis-Verbindungsabschnitt (150) umfasst, wobei der Aufnahmekörper (22) einen Installations-Verbindungsabschnitt (50) aufweist, wobei der Installations-Verbindungsabschnitt (50) der Zerstäubungs-Steckeranordnung (10) mit dem Verbindungsabschnitt (150) des Basiskörpers (110) und dem Basiskörper (110) abnehmbar verbunden ist.

5. Zerstäuber nach Anspruch 4, wobei einer von dem Basis-Verbindungsabschnitt (150) und dem Installations-Verbindungsabschnitt (50) einen Vorsprung (60) aufweist, wobei ein anderer von dem Basis-Verbindungsabschnitt (150) und dem Installations-Verbindungsabschnitt (50) einen Halteabschnitt (62) aufweist, der dem Vorsprung (60) entspricht, wobei der Vorsprung (60) mit dem Halteabschnitt (62) in Eingriff tritt, während der Basis-Verbindungsabschnitt (150) mit dem Installations-Verbindungsabschnitt (50) verbunden wird.

6. Zerstäuber nach Anspruch 5, wobei der Basiskörper (110) einen Basis-Stromanschlussabschnitt (112) aufweist, wobei der Basis-Stromanschlussabschnitt (112) mit dem Zerstäubungs-Stromanschlussabschnitt (36) elektrisch verbunden ist.

7. Zerstäuber nach Anspruch 6, wobei das Stiftelement (40) mit dem Basis-Stromanschlussabschnitt (112) elektrisch und abnehmbar verbunden ist.

Revendications

1. Ensemble de branchement d'atomisation (10) comprenant une partie de contenance (20) ayant un corps de contenance (22), dans lequel ledit corps de contenance (22) définit un espace de contenance (24) à l'intérieur de celui-ci et possède une ouverture (26); et une partie d'atomisation (30) intégrée ou raccordée de manière détachable à ladite partie de contenance (20); dans lequel ladite partie d'atomisation (30) comporte un organe vibrant (32), une plaque de buse (34), un élément de broche (40) et une portion rotative (38), dans lequel ladite plaque de buse (34) est située de manière correspondante à ladite ouverture (26), ledit organe vibrant (32) est raccordé à ladite plaque de

- buse (34) et possède une portion de connexion électrique d'atomisation (36), ledit élément de broche (40) est connecté électriquement à ladite portion de connexion électrique d'atomisation (36), ladite portion rotative (38) étant raccordée en rotation et connectée électriquement à ladite portion de connexion électrique d'atomisation (36), ledit élément de broche (40) est intégré ou raccordé de manière détachable à ladite portion rotative (38), et ledit élément de broche (40) est connecté électriquement à ladite portion rotative (38) ; et ladite ouverture (26) communiquant avec ledit espace de contenance (24) et étant située à l'extérieur dudit corps de contenance (22) de telle sorte qu'un liquide à l'intérieur dudit espace de contenance (24) soit atomisé par ladite plaque de buse (34) et mis en vibration par ledit organe vibrant (32) vers ladite ouverture (26) pour être pulvérisé vers une atmosphère.
2. Atomiseur (1) comprenant un ensemble de branchement d'atomisation (10) selon la revendication 1 et comprenant une base (100), dans lequel ladite base (100) comporte un corps de base (110), ledit corps de base (110) possède une portion de connexion électrique de base (112), ledit élément de broche (40) dudit ensemble de branchement d'atomisation (10) est branché dans ladite portion de connexion électrique de base (112) dudit corps de base (110) pour établir une connexion électrique, et dans lequel ladite portion de connexion électrique de base (112) est une source d'alimentation ou est connectée électriquement à une source d'alimentation pour ledit ensemble de branchement d'atomisation (10).
3. Atomiseur selon la revendication 2, dans lequel ledit élément de broche (40) est raccordé de manière détachable à ladite portion de connexion électrique de base (112).
4. Atomiseur (1) comprenant un ensemble de branchement d'atomisation (10) selon la revendication 1 et comprenant une base (100), dans lequel ladite base (100) comporte un corps de base (110) avec une portion de raccordement de base (150), ledit corps de contenance (22) possède une portion de raccordement d'installation (50), ladite portion de raccordement d'installation (50) dudit ensemble de branchement d'atomisation (10) est raccordée de manière détachable à ladite portion de raccordement (150) dans ledit corps de base (110) et audit corps de base (110).
5. Atomiseur selon la revendication 4, dans lequel l'une de ladite portion de raccordement de base (150) et de ladite portion de raccordement d'installation (50) possède une saillie (60), une autre de ladite portion de raccordement de base (150) et de ladite portion
- de raccordement d'installation (50) possède une portion de support (62) correspondant à ladite saillie (60), ladite saillie (60) s'engage avec ladite portion de support (62) tandis que ladite portion de raccordement de base (150) est raccordée à ladite portion de raccordement d'installation (50).
6. Atomiseur selon la revendication 5, dans lequel ledit corps de base (110) possède une portion de connexion électrique de base (112), ladite portion de connexion électrique de base (112) est connectée électriquement à ladite portion de connexion électrique d'atomisation (36).
7. Atomiseur selon la revendication 6, dans lequel ledit élément de broche (40) est connecté électriquement et raccordé de manière détachable à ladite portion de connexion électrique de base (112).

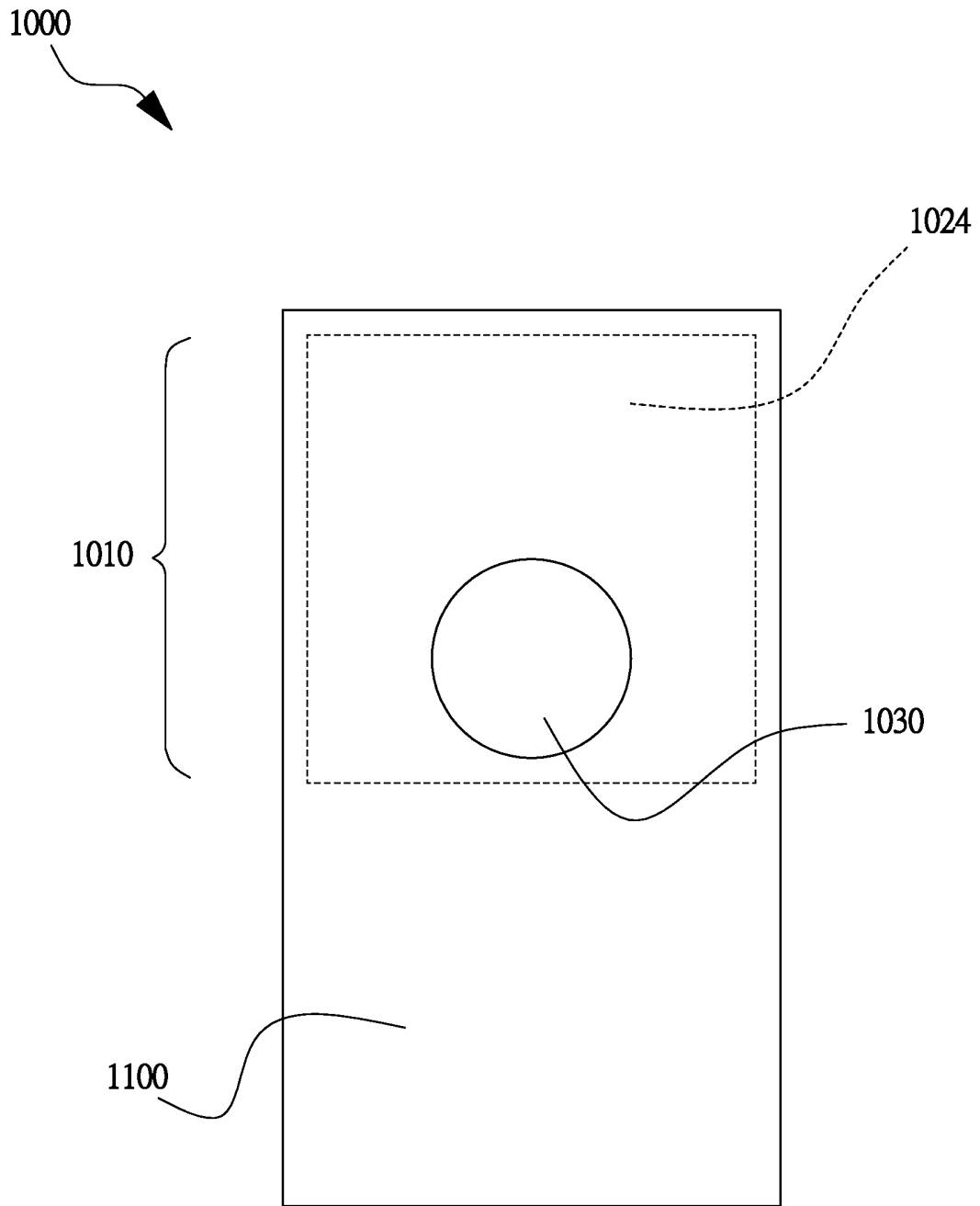


Fig. 1

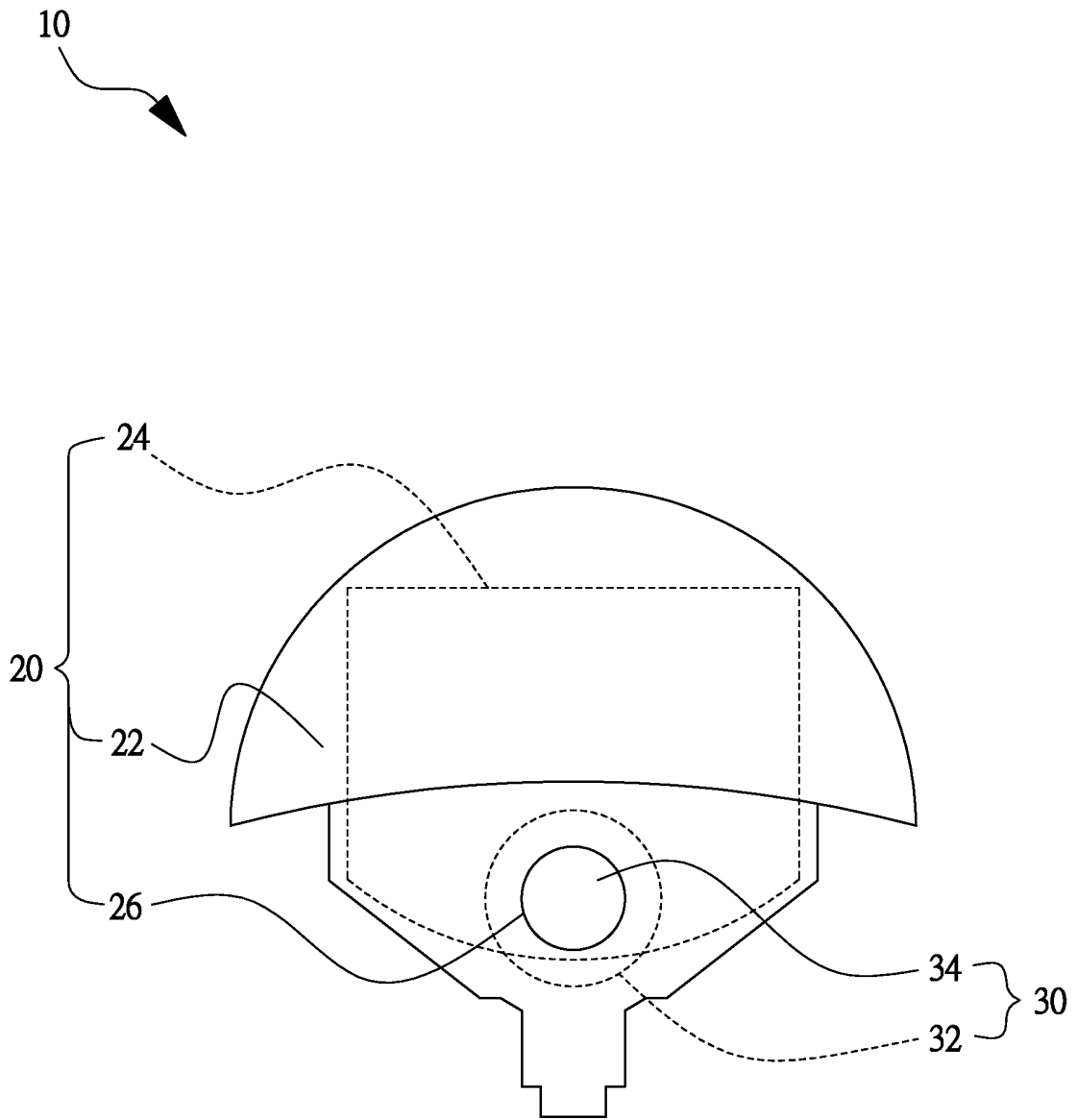


Fig. 2

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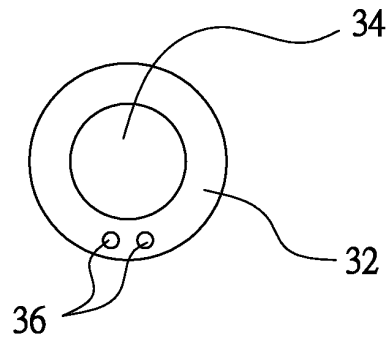


Fig. 3A

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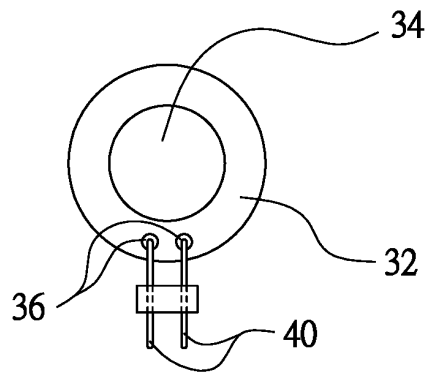


Fig. 3B

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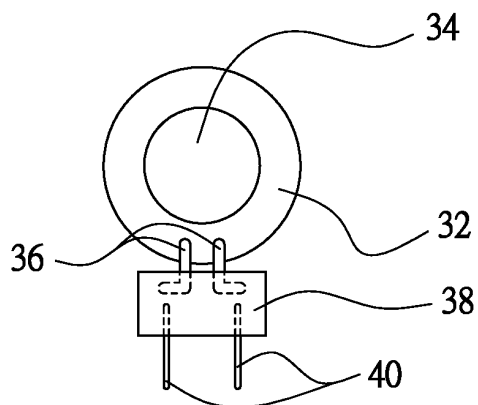


Fig. 3C

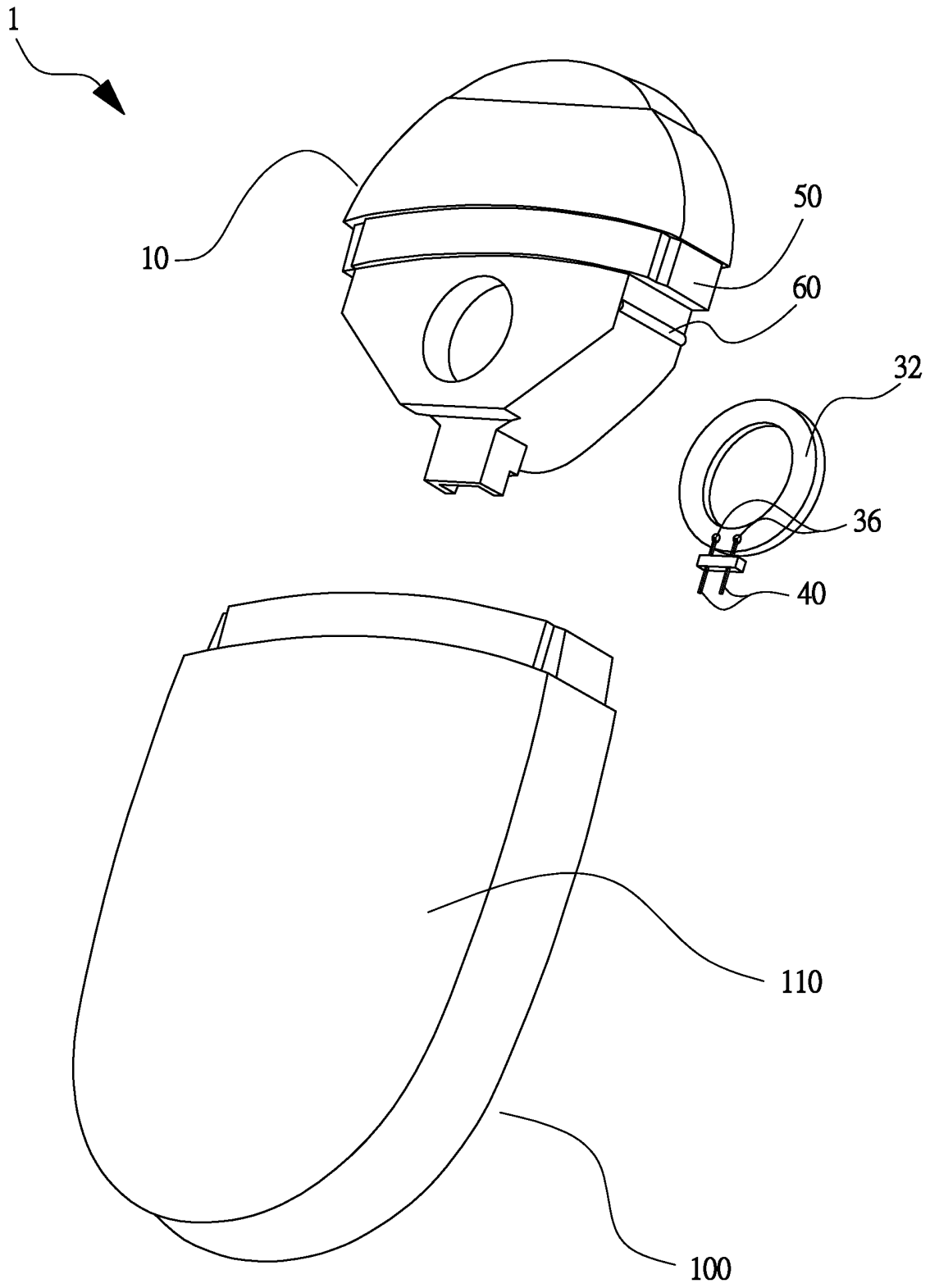


Fig. 4A

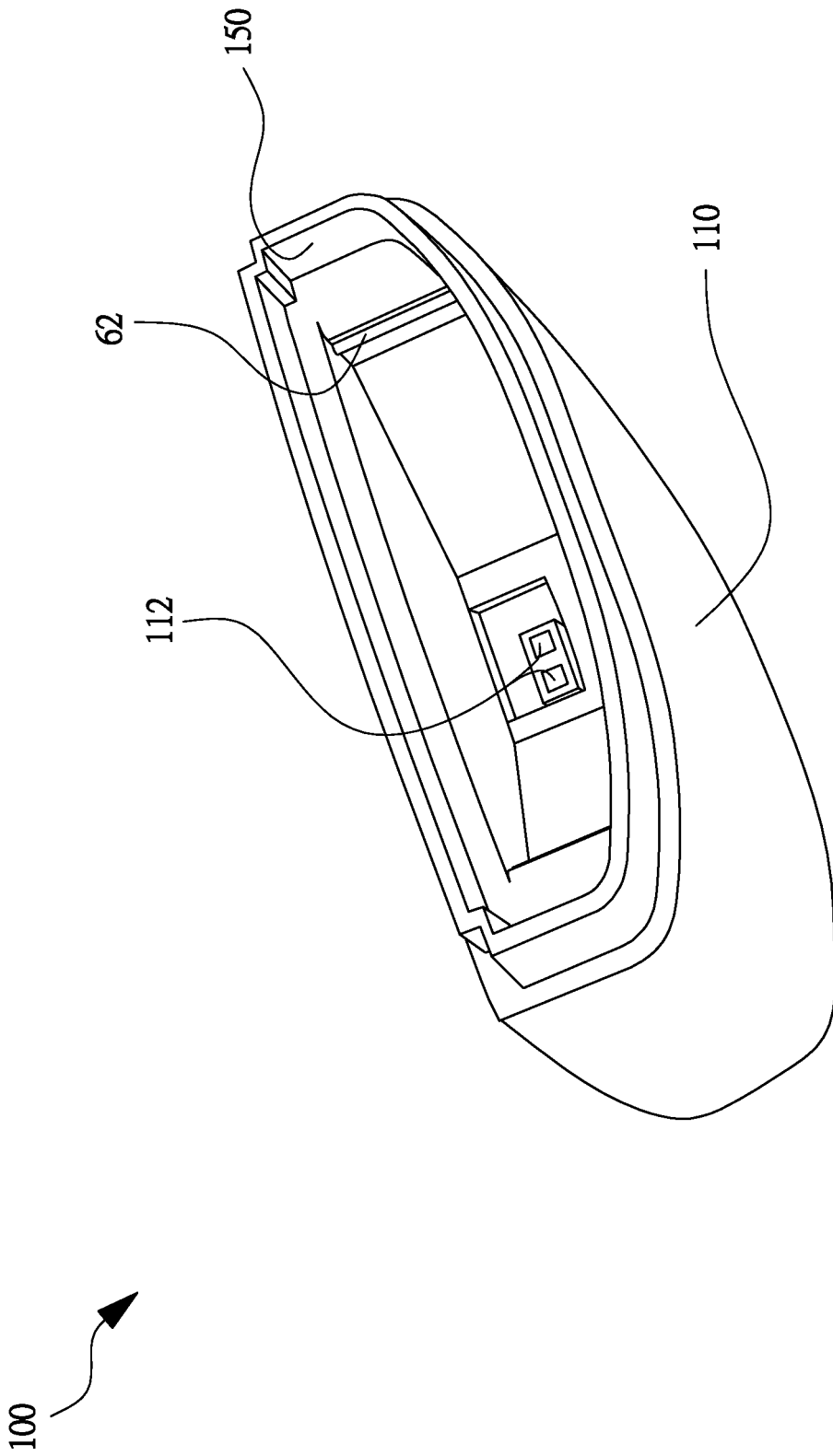


Fig. 4B

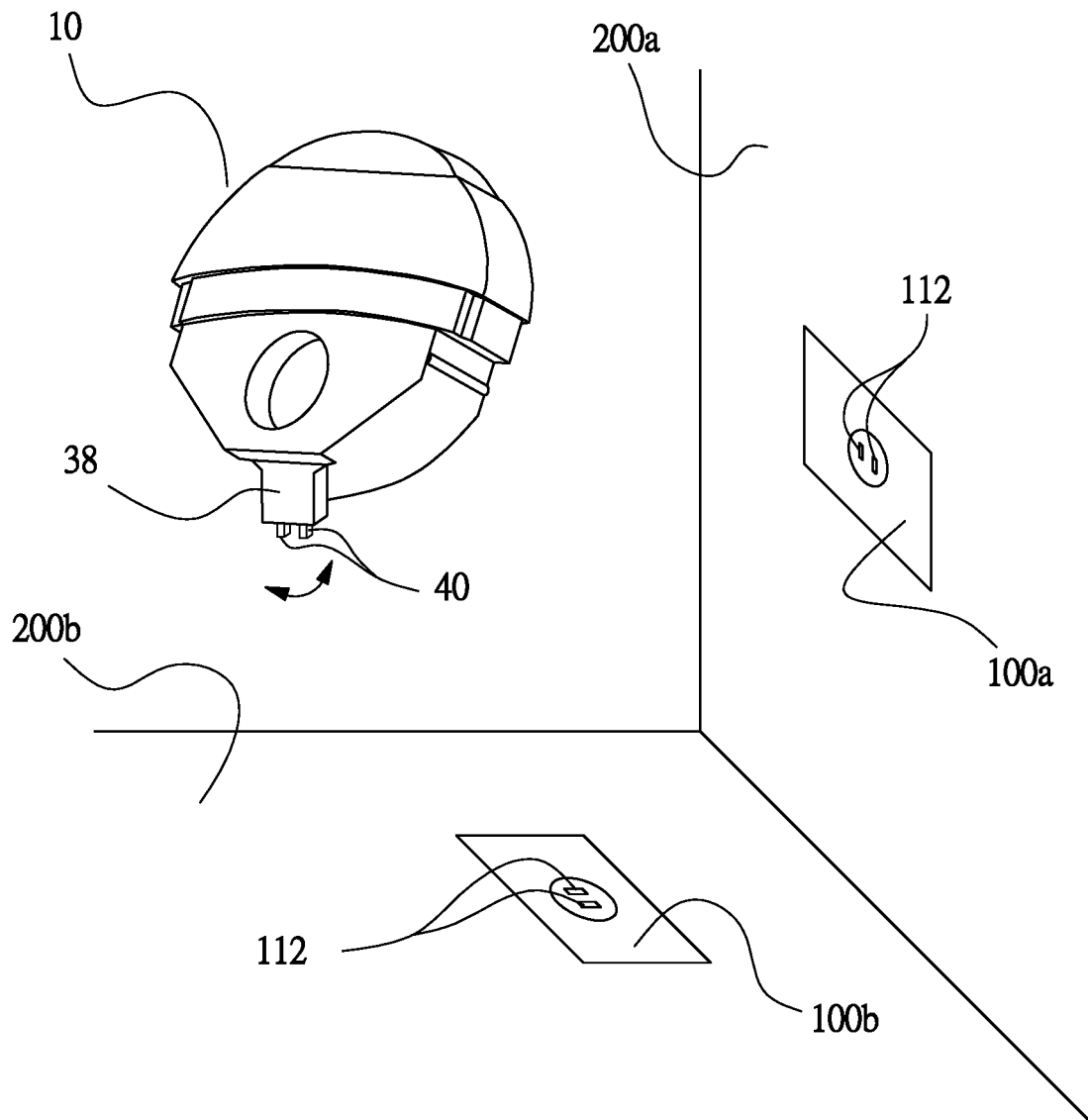


Fig. 5

REFERENCES CITED IN THE DESCRIPTION

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