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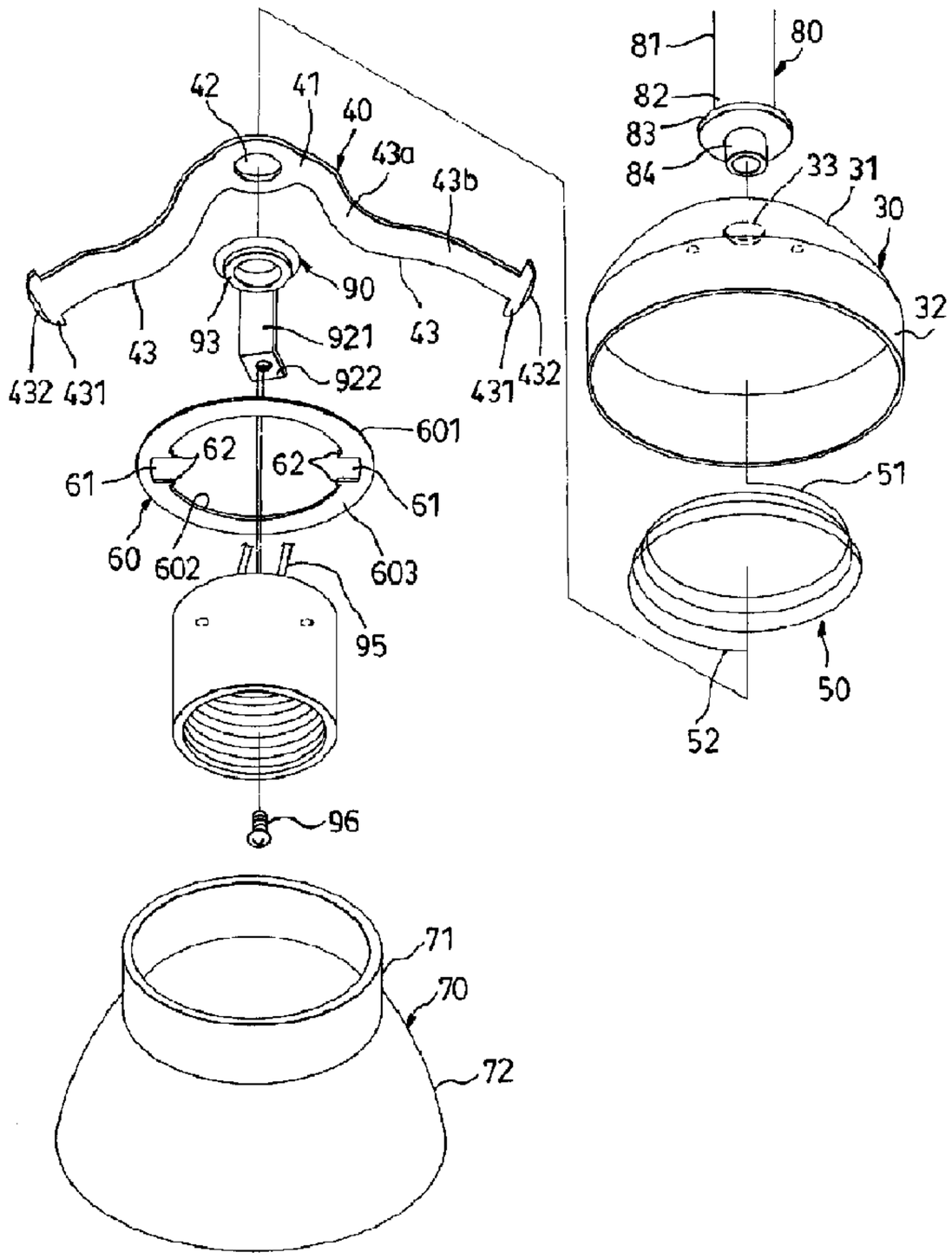
(54) Titre : ACCESSOIRE D'ABAT-JOUR POUR MASQUER L'AMPOULE ET LA DOUILLE
(54) Title: LAMPSHADE FITTING FOR SHADING A LAMP BULB AND A LAMP SOCKET



(57) Abrégé/Abstract:
A lampshade fitting includes a retaining member mounted on a shank, and having at least two resilient arms that extends downwardly to straddle away from an axis of the shank. The arms have proximate portions and distal portions. The biasing

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(57) Abrégé(suite)/Abstract(continued):
action between the proximate portions is smaller than that between the distal portions. A restraining member has at least two engaging portions at its inner periphery for sliding engagement with the arms so as to move from a first position where the engaging portions act against the biasing action of the distal portions, to a second position where the engaging portions act against the biasing action of the proximate portions. A lampshade has an annular upper wall and a skirt portion. When the upper wall is brought to receive the distal portions while the restraining member is at the first position, it will push the restraining member toward the shank. When the upper wall continues to push the restraining member to the second position, the skirt portion will be biased by the distal portions.

ABSTRACT OF THE DISCLOSURE

A lampshade fitting includes a retaining member mounted on a shank, and having at least two resilient arms that extends downwardly to straddle away from an axis of the shank. The arms have proximate portions and distal portions. The biasing action between the proximate portions is smaller than that between the distal portions. A restraining member has at least two engaging portions at its inner periphery for sliding engagement with the arms so as to move from a first position where the engaging portions act against the biasing action of the distal portions, to a second position where the engaging portions act against the biasing action of the proximate portions. A lampshade has an annular upper wall and a skirt portion. When the upper wall is brought to receive the distal portions while the restraining member is at the first position, it will push the restraining member toward the shank. When the upper wall continues to push the restraining member to the second position, the skirt portion will be biased by the distal portions.

(Fig. 3)

LAMPSHADE FITTING FOR SHADING A LAMP BULB AND A LAMP SOCKET

BRIEF DESCRIPTION OF THE DRAWINGS

Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiment of the invention, with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a conventional ceiling fan with a lamp mounted thereon;

Fig. 2 is a fragmentary, partly sectioned schematic view showing the conventional of Fig. 1;

Fig. 3 is an exploded view of a preferred embodiment of a lampshade fitting according to this invention;

Fig. 4 is a fragmentary, partly sectioned schematic view showing the lampshade fitting of the preferred embodiment before a lampshade is mounted on a lampshade-retaining assembly;

Fig. 5 is a perspective view showing how a restraining member slidably engages a pair of resilient arms of the lampshade-retaining assembly; and

Fig. 6 is a fragmentary, partly sectioned schematic view showing the lampshade fitting of the preferred embodiment after the lampshade is retained on the lampshade-retaining assembly.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a lampshade fitting for shading a lamp and a lamp socket, more particularly to

a lampshade fitting with a lampshade-retaining assembly and a lampshade which is assembled conveniently on the lampshade-retaining assembly.

2. Description of the Related Art

Referring to Fig. 1, a conventional ceiling fan 10 with a lamp assembly 20 is shown to include a lamp seat 21, a lamp socket 22 mounted in the lamp seat 21 for connecting with a lamp bulb 23, and a lampshade 24 mounted on the lamp seat 21. With reference to Fig. 2, the lamp seat 21 has a lower ring 211 formed with a plurality of screw holes 212. The lampshade 24 has an annular upper wall which is formed with an annular groove 241. A plurality of screw fasteners 25 pass through the screw holes 212 and engage the annular groove 241 so as to retain the lampshade 24 on the lamp seat 21.

However, assembly and disassembly of the lampshade 24 to the lamp seat 21 is inconvenient to conduct due to the use of the screw fasteners 25. In addition, excessive tightening of the screw fasteners 25 to the lampshade 24 can cause the latter to break. On the other hand, insufficient tightening of the screw fasteners 25 can result in a noise due to vibrations when the ceiling fan 10 rotates.

SUMMARY OF THE INVENTION

The object of the present invention is to provide a lampshade fitting that includes a lampshade-retaining assembly and a lampshade which is conveniently and

steadily retained on the lampshade-retaining assembly without the use of screw fasteners.

According to this invention, a lampshade fitting includes a shank, and a retaining member with an annular mounting portion mounted on the shank, and at least two resilient arms extending downwardly from the mounting portion and straddling away from an axis of the shank. The arms have proximate and distal portions relative to the annular mounting portion. The distance between the proximate portions is smaller than that between the distal portions. An annular restraining member is formed with at least two engaging portions on its inner periphery for sliding engagement with the arms. Each engaging portion is movable from a first position where the engaging portion acts against a first biasing action of the respective distal portion, to a second position the engaging portion acts against a second biasing action of the respective proximate portion. A lampshade has an annular upper wall with an inner periphery, and a skirt portion flaring downwardly from the annular upper wall. When the annular upper wall is brought along the axis to receive the distal portions while the restraining member is at the first position, it will push the restraining member toward the shank. Further, when the annular upper wall continues to push the restraining member to the second position, the skirt portion will be biased by the distal portions so as to urge the annular upper wall to abut against the

restraining member at the second position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figs. 3 and 4, the preferred embodiment of a lampshade fitting according to the present invention is shown to comprise a shank 80 with an upper end 81 to be connected to a base seat of a pendant lamp (not shown), a lower end 82 which is formed with a annular flange 83 and an insert portion 84, and a through hole 85 which extends along an axis of the shank 80.

A cap member 30 has an arcuate mounting portion 31 that is formed with a through hole 33 for passage of the insert portion 84 of the shank 80 and that abuts against the annular flange 83, and a skirt portion 32 that extends downwardly from the mounting portion 31.

A retaining member 40 has an annular mounting portion 41 with a through hole 42 for downward passage of the insert portion 84. A support seat 90 has an upper ring 93 which abuts against the mounting portions 41,31 and which is secured on the insert portion 84 so as to clamp the cap member 30 and the retaining member 40 securely between the upper ring 93 and the annular flange 83. The support seat 90 further has a lug portion 921 which extends downwardly from the upper ring 93 and which has a lower mounting portion 922 for engaging securely a lamp socket 94 with the use of a screw 96. Electrical lead wires 95 of the lamp socket 94 pass through the upper ring 93 and the through holes 42,33 and extend into the shank 80.

The retaining member 40 further has a pair of resilient arms 43 which extend downwardly from an outer periphery of the mounting portion 41 and which straddle away from the axis of the shank 80. The arms 43 include proximate and distal portions 43a, 43b relative to the mounting portion 41. A first distance is formed between the proximate portions 43a in a transverse direction of the axis, and is substantially smaller than a second distance formed between the distal portions 43b. Referring to Fig. 5, each distal portion 43b has an enlarged end 431 with a lip portion 432.

A compression spring 50 is sleeved on the arms 43, and has an upper end 51 abutting against the cap member 30 and a lower end 52 abutting against an annular retraining member 60.

The retraining member 60 has an outer periphery 601, an inner periphery 602, and an intermediate portion 603 between the inner and outer peripheries 602,601. The inner periphery 602 is formed respectively with a pair of notches 61 that serve as engaging portions, and two pairs of protrusions 62, each pair of which project inwardly from the inner periphery 602 opposite to the respective notch 61. A third distance is formed between the notches 61 and is somewhat smaller than the first distance between the proximate portions 43a. As such, when the restraining member 60 is sleeved on the arms 43 with the notches 61 engaging the arms 43, the restraining member 60 is slidable

from a first position where the retraining member 60 act against a first biasing action of the distal portions 43b (as shown in Fig. 4), to a second position where the restraining member 60 act against a second biasing action of the proximate portions 43a (as shown in Fig. 6).

As illustrated, the aforementioned components can be assembled to form a lampshade-retaining assembly for retaining a lampshade 70.

The lampshade 70 has an annular upper wall 71 with an inner periphery 711, and a skirt portion 72 which flares downwardly from the annular upper wall 71.

When assembling the lampshade 70 on the lampshade-retaining assembly, the upper wall 71 is brought along the axis to receive the distal portions 43b by the guidance of the lip portions 432 at the enlarged ends 431, thereby pushing the restraining member 60 at the first position toward the shank 80 via abutment with the intermediate portion 603. Further, when the annular upper wall 71 continues to push the restraining member 60 upwardly to the second position, the skirt portion 72 will be biased by the distal portions 43b so as to urge the annular upper wall 71 to abut against the restraining member 60 at the second position, as shown in Fig. 6. The cap member 30 can conceal the annular upper wall 71 at this time.

During disassembly, forces are applied on the enlarged ends 431 of the arms 43 to push the same inwardly so as to move the retraining member 40 with the use of the

downward biasing action of the compression spring 50 until the retraining member 40 is stopped by the enlarged ends 431. As such, the lampshade 70 can be disassembled from the lampshade-retaining assembly.

It is noted that the protrusions 62 prevent the movement of the enlarged ends 431 of the arms 43 out of the notches 61 when the retraining member 60 is sleeved on the arms 43.

As mentioned above, in the lampshade fitting according to this invention, the lampshade 70 is assembled on the lampshade-retaining assembly by the biasing action of the distal portions 43b of the resilient arms 43, and is disassembled by counteracting the biasing action, thereby facilitating assembly and disassembly of the lampshade 70. In addition, assembly of the lampshade 70 obviates the use of screw fasteners so as to prevent damage to the lampshade 70.

While the present invention has been described in connection with what is considered the most practical and preferred embodiment, it is understood that this invention is not limited to the disclosed embodiment but is intended to cover various arrangements included within the spirit and scope of the broadest interpretations and equivalent arrangements.

I CLAIM:

1. A lampshade fitting for shading a lamp bulb and a lamp socket, comprising:

a shank having a through hole that extends along an axis thereof to pass a lead for electrical connection with the lamp socket;

a retaining member having an annular mounting portion mounted on said shank, and at least two resilient arms extending downwardly from an outer periphery of said annular mounting portion and straddling away from said axis, said arms respectively having a proximate portion relative to said annular mounting portion, said proximate portions being spaced apart from each other with a first distance in a transverse direction to said axis, and a distal portion, said distal portions being spaced apart from each other with a second distance in said transverse direction, said second distance being larger than said first distance;

an annular restraining member having an outer periphery and an inner periphery which is formed with at least two engaging portions spaced apart from each other with a third distance that is smaller than said first distance, said engaging portions slidably and respectively engaging said arms such that each of said engaging portions is movable from a first position in a respective one of said distal portions, where a

respective one of said engaging portions acts against a first biasing action of said respective one of said distal portions, to a second position in a respective one of said proximate portions, where said respective one of said engaging portions acts against a second biasing action of said respective one of said proximate portions; and

a lampshade having an annular upper wall with an inner periphery of a dimension such that when said annular upper wall is brought along said axis to receive said distal portions while said annular retraining member is at said first position, said annular upper wall will push said annular restraining member toward said shank via abutment at a position between said outer and inner peripheries of said annular restraining member, said lampshade further having a skirt portion which flares downwardly from said annular upper wall with a dimension such that when said annular upper wall continues to push said annular restraining member to said second position, said skirt portion will be biased by said distal portions so as to urge said annular upper wall to abut against said annular restraining member at said second position.

2. The lampshade fitting as claimed in Claim 1, further comprising a cap member mounted to said shank so as to conceal said annular upper wall of said lampshade when said annular upper wall abuts against said annular

restraining member at said second position.

3. The lampshade fitting as claimed in Claim 2, further comprising a biasing member having an end abutting against said cap member and an opposite end abutting against said annular restraining member so as to bias against pushing movement of said annular upper wall of said lampshade toward said shank.

4. The lampshade fitting as claimed in Claim 1, wherein said inner periphery of said annular restraining member is formed with at least two notches that serve as said engaging portions respectively, said distal portions of said resilient arms respectively having enlarged ends so as to prevent said annular restraining member from sliding out of said distal portions when said annular restraining member is being pulled away from said second position.

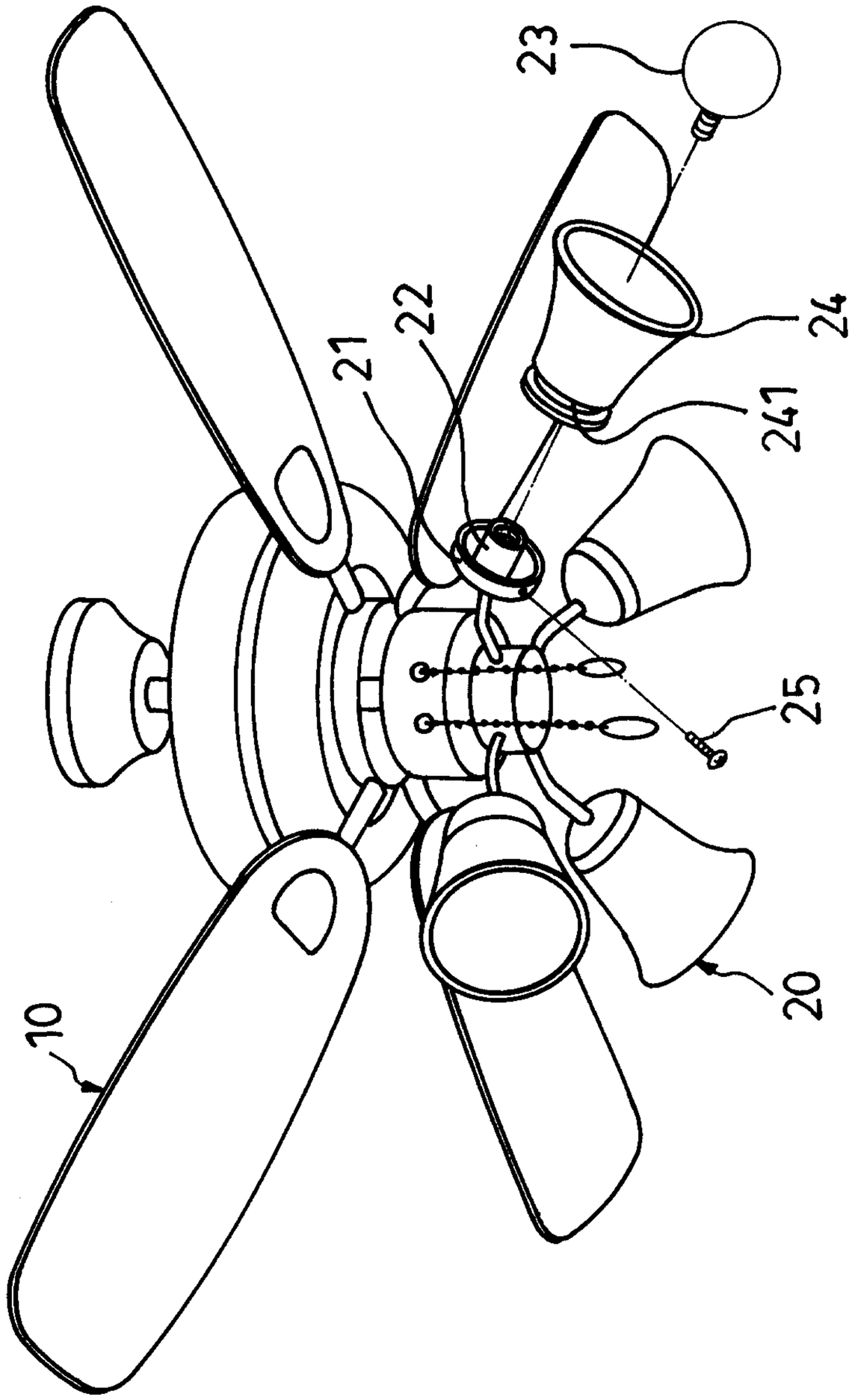

FIG.1

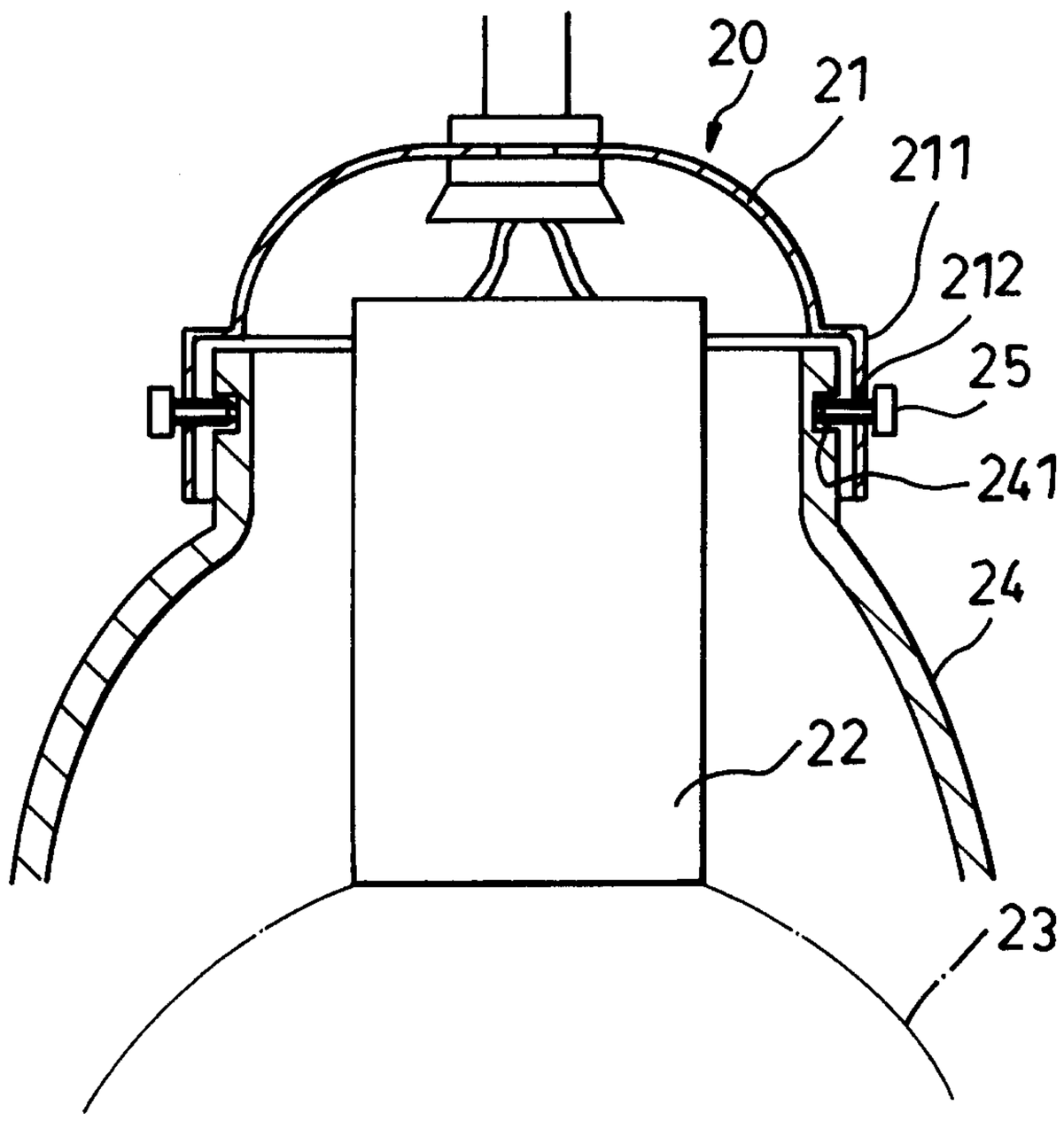

FIG.2

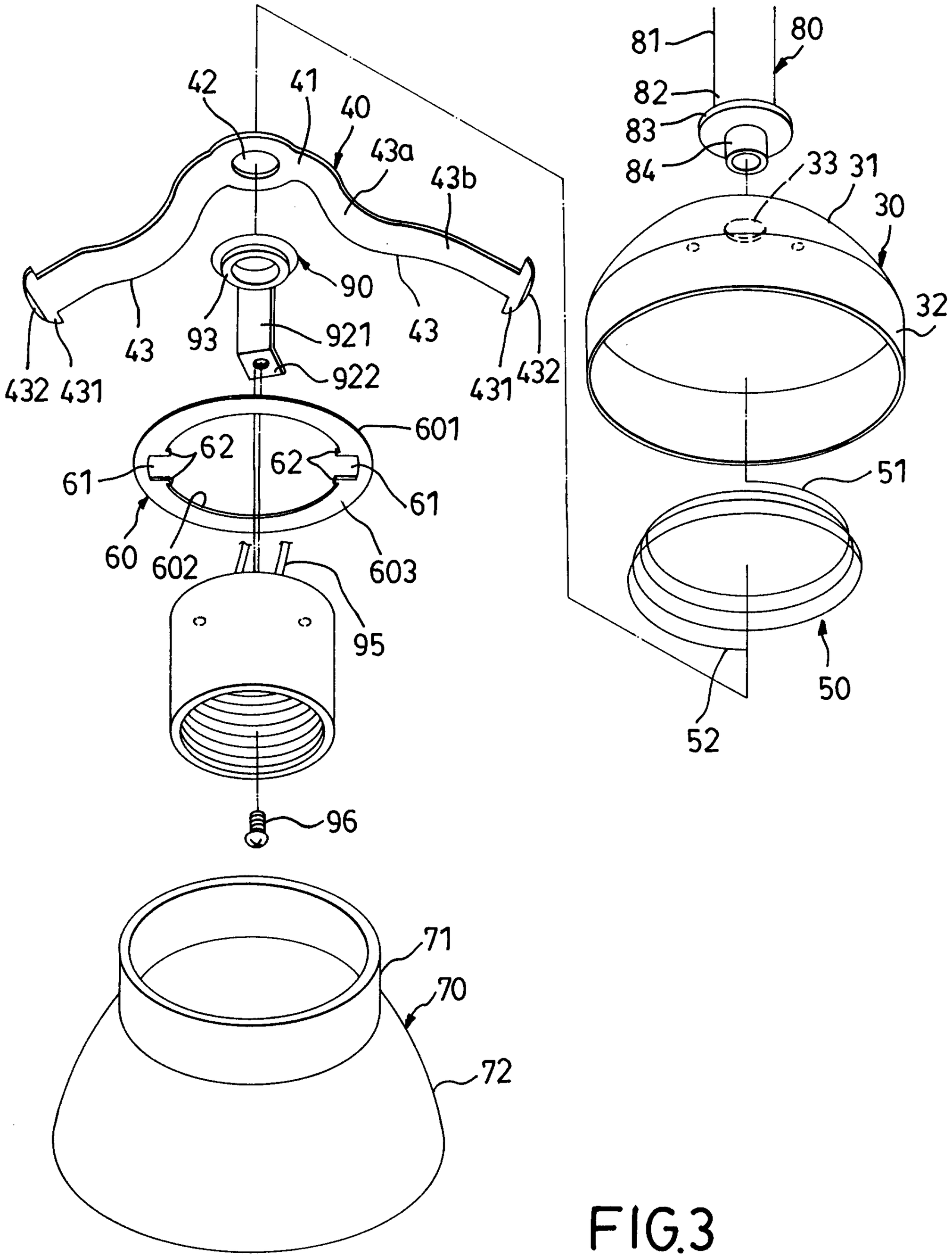

FIG.3

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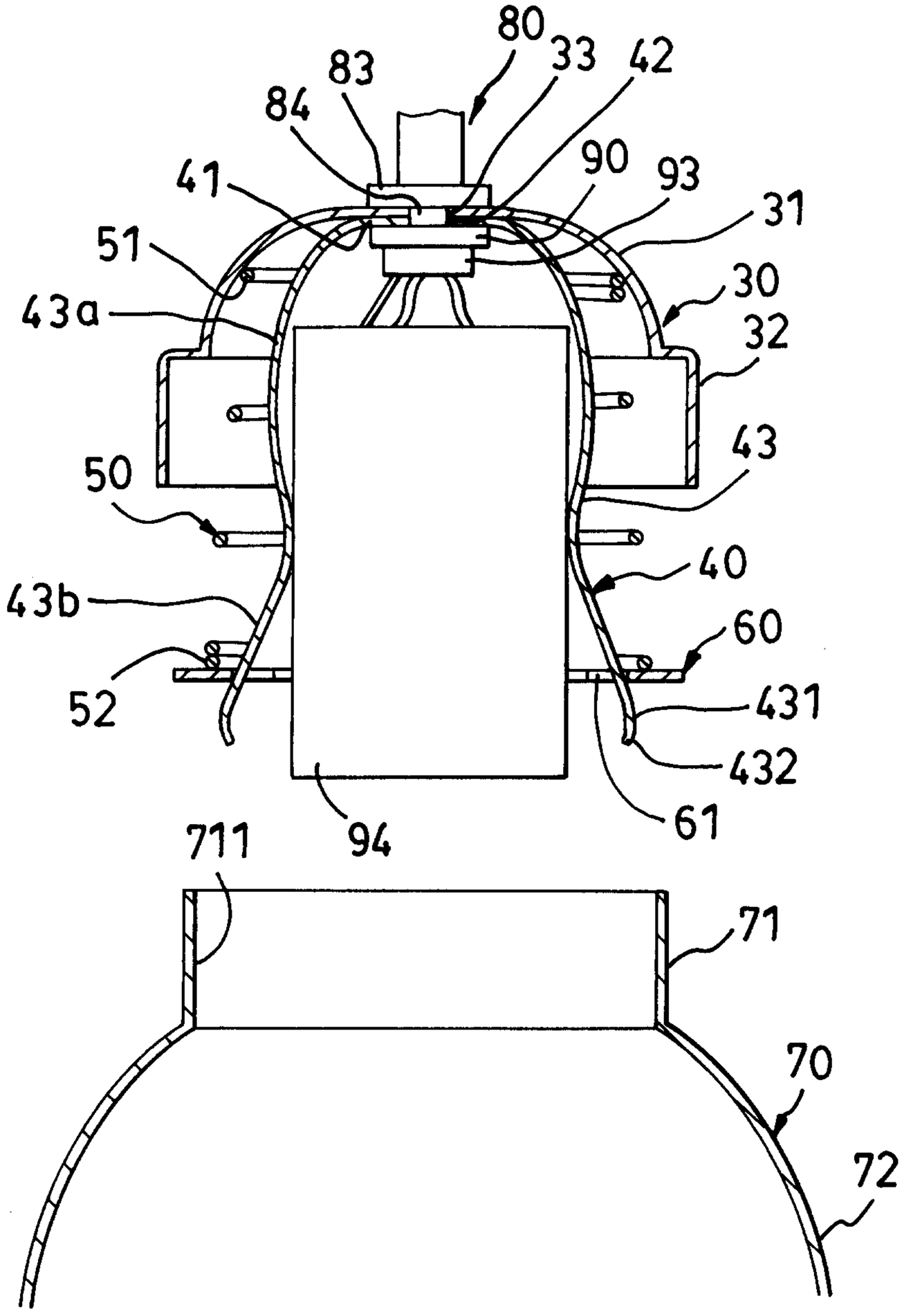
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FIG.4

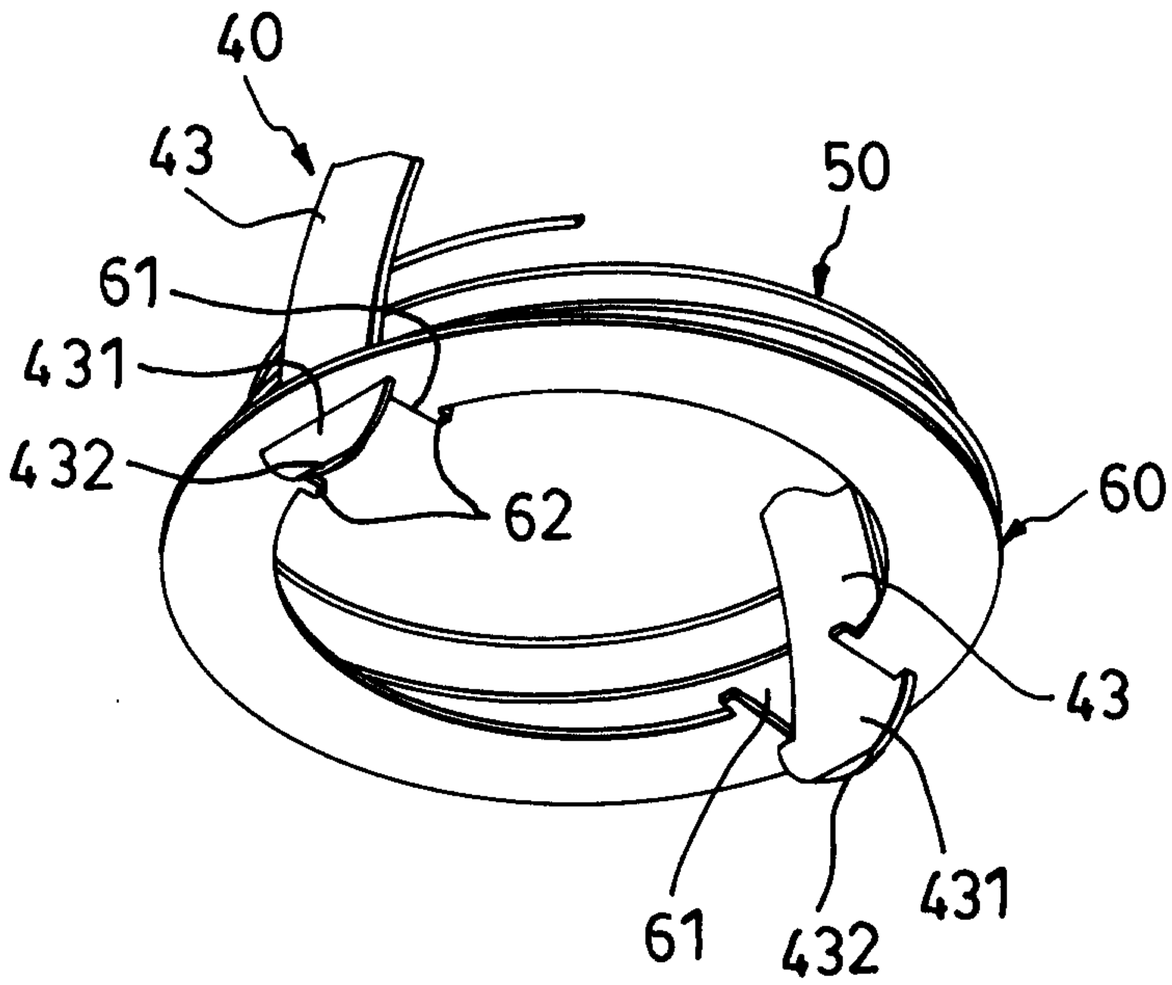


FIG.5

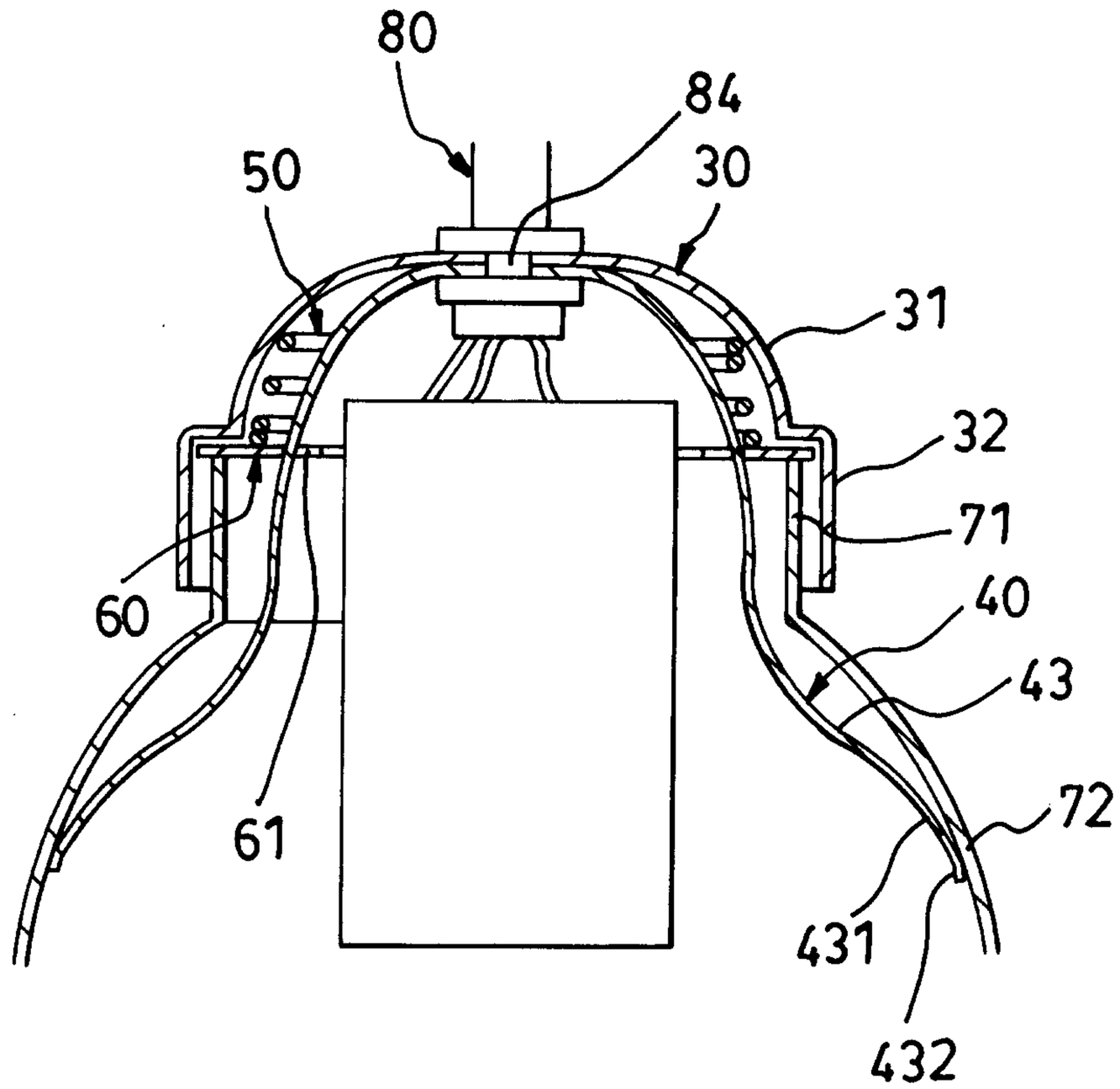
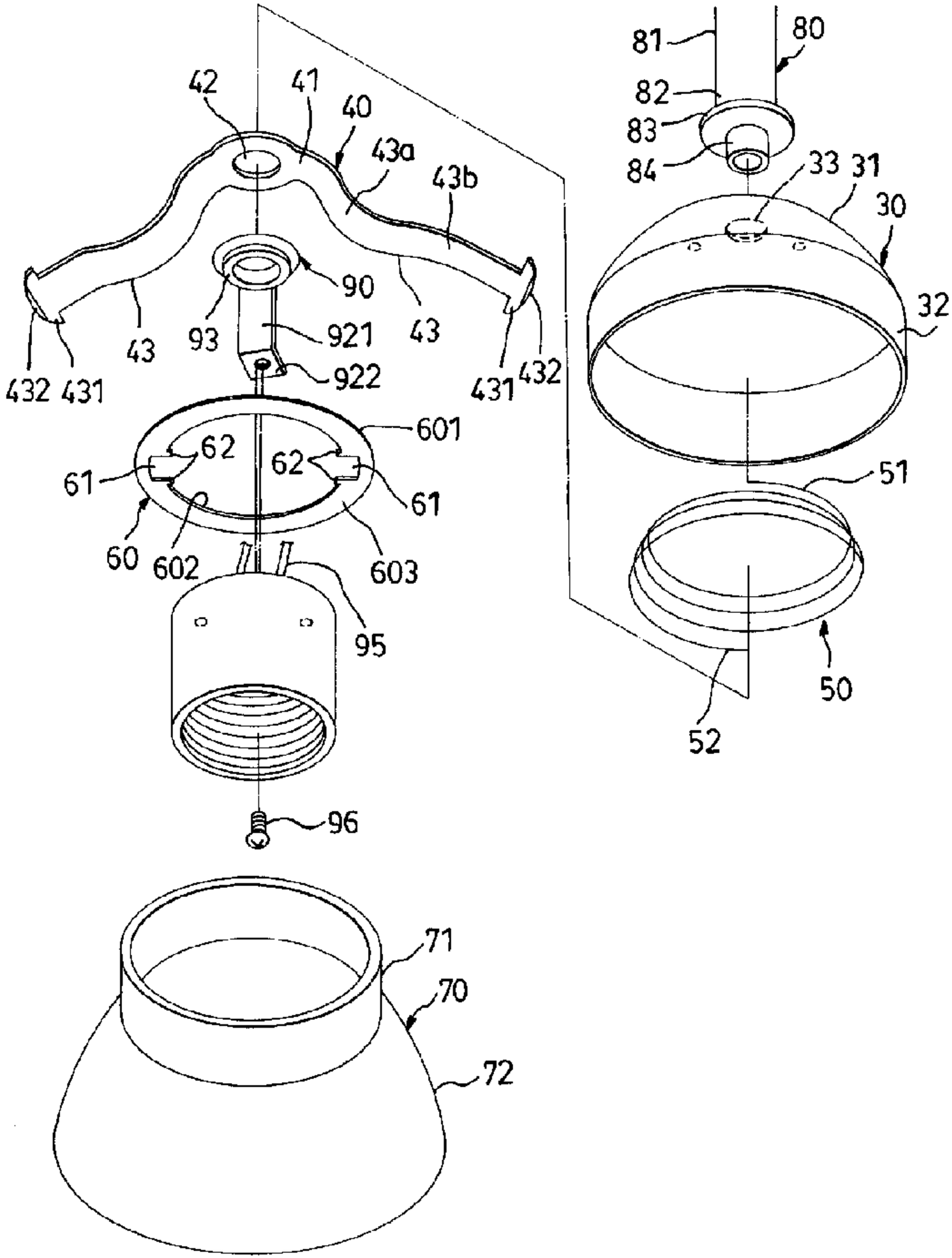


FIG.6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