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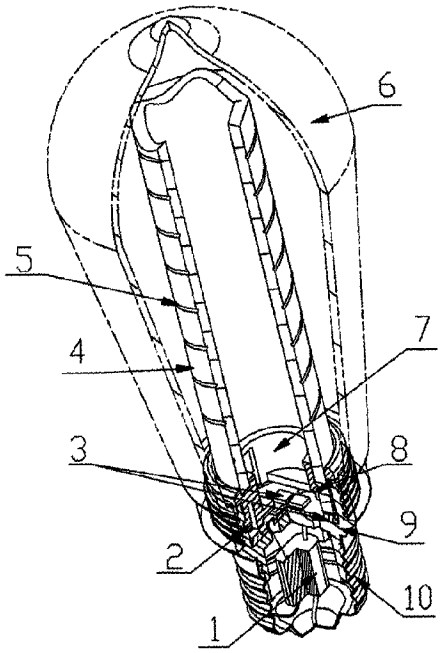
(54) **Titre : AMPOULE A DEL COMPRENANT UN CORPS DE GUIDAGE DE LUMIERE**
(54) **Title: LED BULB HAVING LIGHT GUIDE BODY**



(57) **Abrégé/Abstract:**
The utility model discloses an LED bulb having a light guide body, including a bulb holder, a bulb shell, a luminous body, a power source, a connector, and a light guide body. The connector is fixedly connected to the bulb holder, the bulb shell is fixed on the connector, the luminous body and the power source are located in the bulb holder, the luminous body and the power source are connected by using a wire, a lower end of the light guide body is plugged with the connector, and a bottom of the light guide body is in contact with the luminous body, where the light guide body is engraved with glyphs. The LED bulb having a light guide body of the utility model can both provide light and have a decorative effect.

ABSTRACT

The utility model discloses an LED bulb having a light guide body, including a bulb holder, a bulb shell, a luminous body, a power source, a connector, and a light guide body. The connector is fixedly connected to the bulb holder, the bulb shell is fixed on the connector, the luminous body and the power source are located in the bulb holder, the luminous body and the power source are connected by using a wire, a lower end of the light guide body is plugged with the connector, and a bottom of the light guide body is in contact with the luminous body, where the light guide body is engraved with glyphs. The LED bulb having a light guide body of the utility model can both provide light and have a decorative effect.

LED BULB HAVING LIGHT GUIDE BODY

BACKGROUND

Technical Field

The utility model relates to an LED bulb having a light guide body, and belongs to the field of lighting technologies.

Related Art

At present, lighting bulbs commonly used in the market are mostly formed by patches or strips of incandescent bulbs and ordinary LED bulbs. The incandescent bulbs have a filament support in a bulb shell, and glow by using a filament on the filament support. The incandescent bulbs have disadvantages of a short life of a filament, a complex production process, high manufacture costs, and low production efficiency. The ordinary LED bulbs have the similar production process manufacture problem, and also cannot achieve a decorative effect of the incandescent bulbs. Therefore, people use an LED bulb having a light guide body. A bottom of the light guide body is in contact with a luminous body, and depending on total internal reflection, light is transmitted in the light guide body. The light guide body is generally made of optical materials such as acrylic polyester, polycarbonate, epoxy resin, and glass. A light guide effect of the light guide body made of the foregoing materials is still unsatisfactory, and a lighting effect is affected. Some can only be used as decorative bulbs, and cannot reach a lighting requirement.

SUMMARY

An objective of the utility model is to provide an LED bulb that has a light guide body and that can both provide light and have a decorative effect.

To resolve the foregoing technical problem, the technical solutions of the utility model are:

An LED bulb having a light guide body includes a bulb holder, a bulb shell, a luminous body, a power source, a connector, and a light guide body. The connector is fixedly connected to the bulb holder, the bulb shell is fixed on the connector, the luminous body and the power source are located in the bulb holder, the luminous body and the power source are connected by using a wire, a lower end of the light guide body is plugged with the connector, and a bottom of

the light guide body is in contact with the luminous body, where the light guide body is engraved with glyphs.

Further, the light guide body is a cylinder, and an outer wall of the light guide body is engraved with spiral glyphs.

Further, the light guide body is a cylinder, and an outer wall of the light guide body is engraved with glyphs arranged in a V shape.

Further, a top of the light guide body is in a wavy shape.

Further, the luminous body is an LED luminous body.

Further, a top of the light guide body is in a rhombus shape.

Further, outer threads are disposed with on the connector, and the bulb shell and the connector are connected by using the threads.

Further, a first fastener used for connecting to the light guide body is disposed inside the connector.

Further, a second fastener is disposed inside the connector, and a heat dissipation piece connected to the second fastener is disposed inside the bulb holder.

After the foregoing technical solutions are used, because a light guide body is engraved with glyphs, light glow and light guide effects may be enhanced by using the glyphs, to ensure that the lightness reaches a lighting requirement. At the same time, the glyphs can further have a decorative effect. Compared with an incandescent bulb, a service life of a bulb is prolonged, and compared with an ordinary LED bulb, a manufacture process is simplified, and manufacture costs are reduced. In addition, a top of the light guide body is in a wavy shape or a rhombus shape, and may have a light gathering effect, thereby resolving a problem of glowing at the top of the light guide body, and making the entire bulb body glow evenly and softly.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a three-dimensional view of a first structure of an LED bulb having a light guide body according to the utility model;

FIG. 2 is a schematic sectional view of FIG. 1;

FIG. 3 is a three-dimensional view of a second structure of an LED bulb having a light guide body according to the utility model;

FIG. 4 is a schematic sectional view of FIG. 3.

In the figures, 1. Power source, 2. Second fastener, 3. Luminous body, 4. Light guide body, 5. Glyphs, 6. Bulb shell, 7. Connector, 8. First fastener, 9. Heat dissipation piece, 10. Bulb holder.

DETAILED DESCRIPTION

To make the content of the utility model understood more easily, the following further describes the utility model in detail according to specific embodiments and with reference to the accompanying drawings.

Embodiment 1

As shown in FIG. 1 and FIG. 2, an LED bulb having a light guide body includes a bulb holder 10, a bulb shell 6, a luminous body 3, a power source 1, a connector 7, and a light guide body 4. The connector 7 is fixedly connected to the bulb holder 10, the bulb shell 6 is connected to the connector 7 by using threads, the luminous body 3 and the power source 1 are located in the bulb holder 10, the luminous body 3 is an LED luminous body, and the luminous body 3 and the power source 1 are connected by using a wire. A lower end of the light guide body 4 is plugged with the connector 7, and a bottom of the light guide body 4 is in contact with the luminous body 3. The light guide body 4 is a cylinder, the light guide body 4 is engraved with spiral glyphs 5, and a top of the light guide body 4 is in a wavy shape. The top of the light guide body 4 may also be in a rhombus shape. The top of the light guide body 4 uses the wavy shape or the rhombus shape and may have a light gathering effect, thereby resolving a problem of glowing at the top of the light guide body 4, and making the entire bulb body glow evenly and softly.

As shown in FIG. 2, a first fastener 8 used for connecting to the light guide body 4 is disposed inside the connector 7. The first fastener 8 facilitates the connection between the light guide body 4 and the connector 7, and may ensure close connection between them, without generating a shaking phenomenon.

As shown in FIG. 2, a second fastener 2 is disposed inside the connector 7, and a heat

dissipation piece 9 connected to the second fastener 2 is disposed in the bulb holder 10. The heat dissipation piece 9 is configured to dissipate heat inside the bulb holder 10, and prevent excessively high temperature in the bulb holder 10.

Embodiment 2

As shown in FIG. 3 and FIG. 4, an LED bulb having a light guide body includes a bulb holder 10, a bulb shell 6, a luminous body 3, a power source 1, a connector 7, and a light guide body 4. The connector 7 is fixedly connected to the bulb holder 10, the bulb shell 6 is connected to the connector 7 by using threads, the luminous body 3 and the power source 1 are located in the bulb holder 10, the luminous body 3 is an LED luminous body, and the luminous body 3 and the power source 1 are connected by using a wire. A lower end of the light guide body 4 is plugged with the connector 7, and a bottom of the light guide body 4 is in contact with the luminous body 3. The light guide body 4 is a cylinder, the light guide body 4 is engraved with glyphs 5 arranged in a V shape, and a top of the light guide body 4 is in a wavy shape. The top of the light guide body 4 may also be in a rhombus shape. The top of the light guide body 4 uses the wavy shape or the rhombus shape, and may have a light gathering effect, thereby resolving a problem of glowing at the top of the light guide body 4, and making the entire bulb body glow evenly and softly.

As shown in FIG. 4, a first fastener 8 used for connecting to the light guide body 4 is disposed inside the connector 7. The first fastener 8 facilitates the connection between the light guide body 4 and the connector 7, and may ensure close connection between them, without generating a shaking phenomenon.

As shown in FIG. 4, a second fastener 2 is disposed inside the connector 7, and a heat dissipation piece 9 connected to the second fastener 2 is disposed in the bulb holder 10. The heat dissipation piece 9 is configured to dissipate heat inside the bulb holder 10, to prevent excessively high temperature in the bulb holder 10.

The foregoing specific embodiments further describe the objective, the technical solutions, and the beneficial effect of the utility model in detail. It should be understood that, the foregoing descriptions are only specific embodiments of the utility model, and are not used for limiting the utility model. Any modifications, equivalent replacements, improvements made

without departing from the spirit and principle of the utility model shall all fall within the protection scope of the utility model. Particularly, the form of glyphs is not limited to be arranged in the thread shape in Embodiment 1 and the V shape in Embodiment 2. The shape of a light guide body is also not limited to a cylinder, and may also be in rhombus, square, and strip shapes, or may be made into a light guide plate. In addition to the spiral shape and the V shape, the glyphs may also be shapes of other forms.

CLAIMS

What is claimed is:

1. A light-emitting diode (LED) bulb comprising a bulb holder (10), a bulb shell (6), a luminous body (3), a power source (1), a connector (7), and a light guide body (4), wherein the connector (7) is fixedly connected to the bulb holder (10), the bulb shell (6) is fixed on the connector (7), the luminous body (3) and the power source (1) are located in the bulb holder (10), the luminous body (3) and the power source (1) are connected by using a wire, a lower end of the light guide body (4) is plugged with the connector (7), and a bottom of the light guide body (4) is in contact with the luminous body (3), wherein the light guide body (4) is engraved with glyphs (5) and a top of the light guide body (4) is in a wavy shape.

2. The LED bulb according to claim 1, wherein the light guide body (4) is a cylinder and wherein the glyphs (5) are engraved on an outer wall of the light guide body (4) and are spiral glyphs.

3. The LED bulb according to claim 1, wherein the light guide body (4) is a cylinder, and wherein the glyphs (5) are engraved on an outer wall of the light guide body (4) and arranged in a V shape.

4. The LED bulb according to any one of claims 1-3, wherein the luminous body (3) is an LED luminous body.

5. The LED bulb according to any one of claims 1-3, wherein a top of the light guide body (4) is in a rhombus shape.

6. The LED bulb according to any one of claims 1-3, wherein outer threads are disposed on the connector (7), and the bulb shell (6) and the connector (7) are connected by using the threads.

7. The LED bulb according to any one of claims 1-3, wherein a first fastener (8) used for connecting the connector (7) to the light guide body (4) is disposed inside the connector (7).

8. The LED bulb according to any one of claims 1-3, wherein a second fastener (2) is

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disposed inside the connector (7), and a heat dissipation piece (9) connected to the second fastener (2) is disposed in the bulb holder (10).

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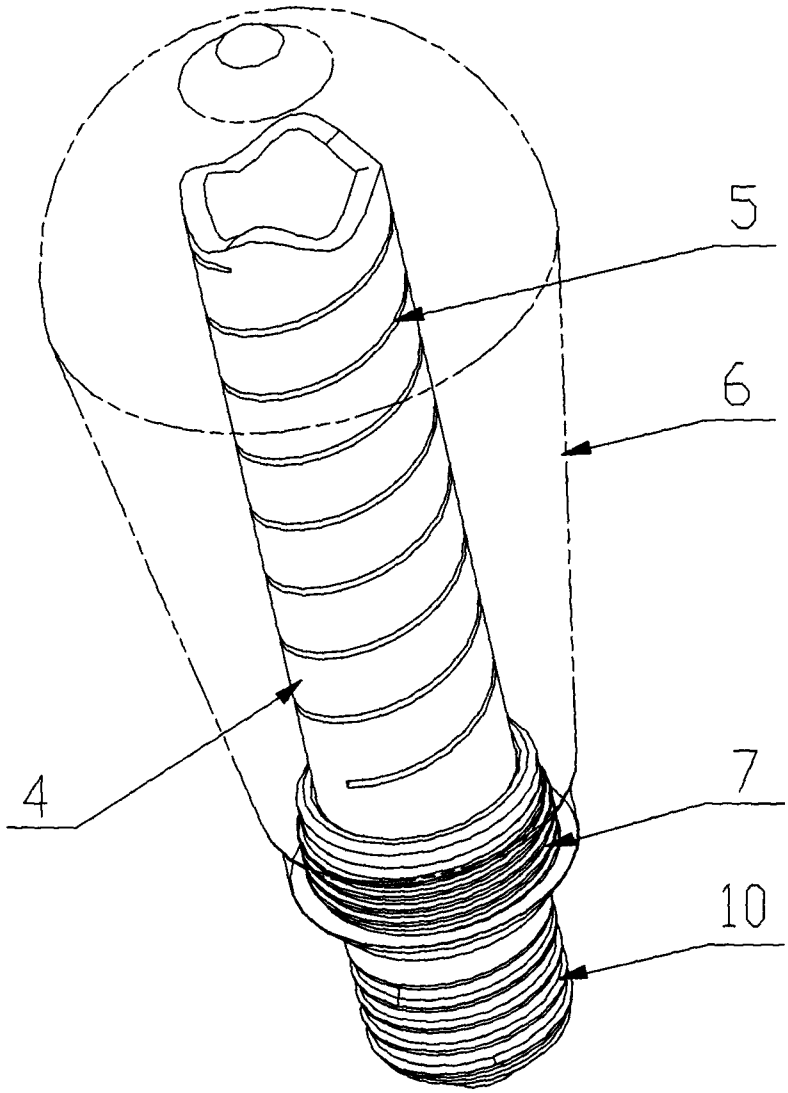


FIG. 1

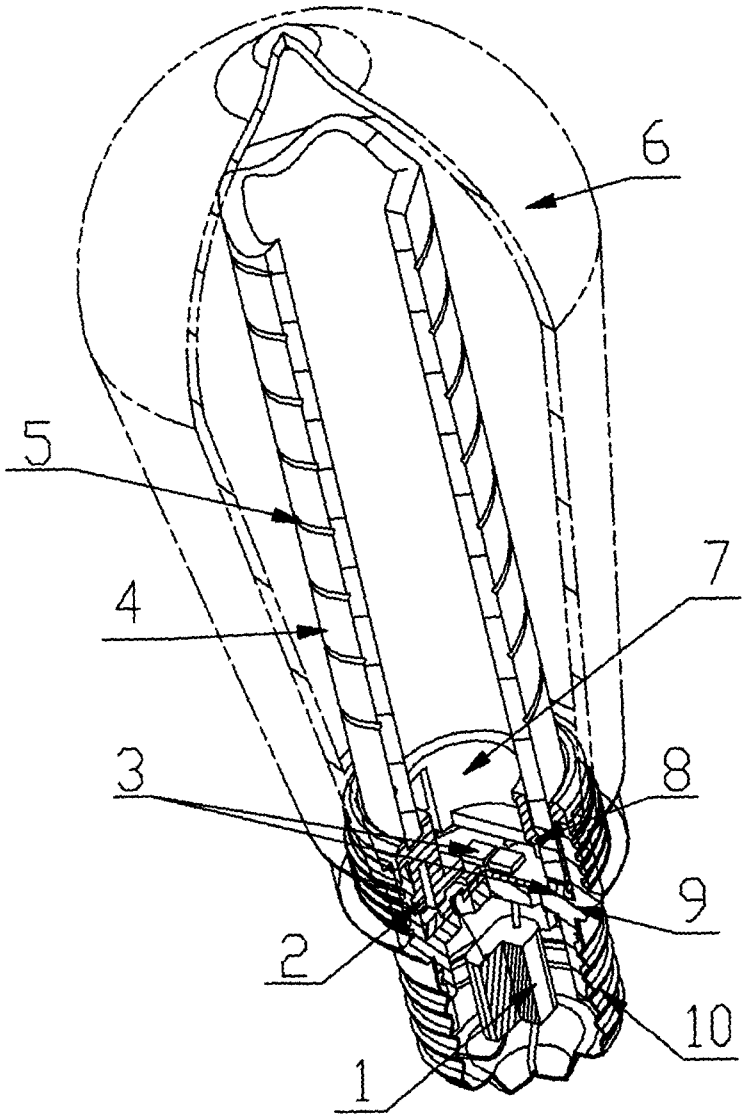


FIG. 2

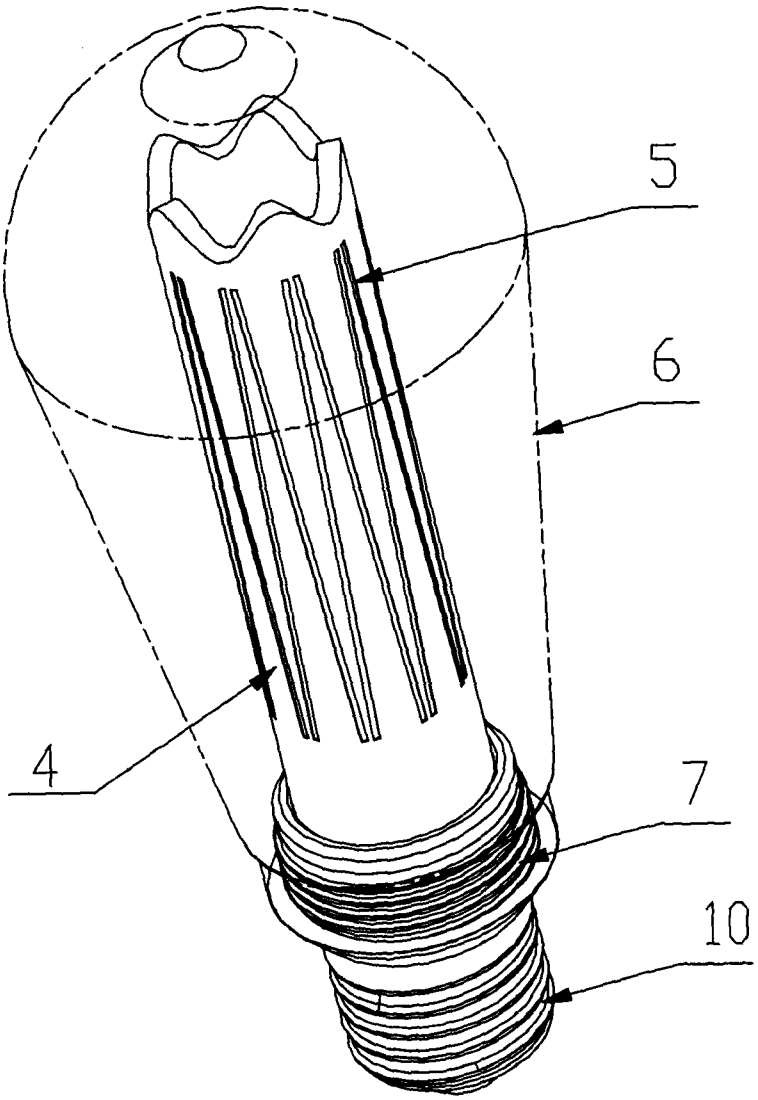


FIG. 3

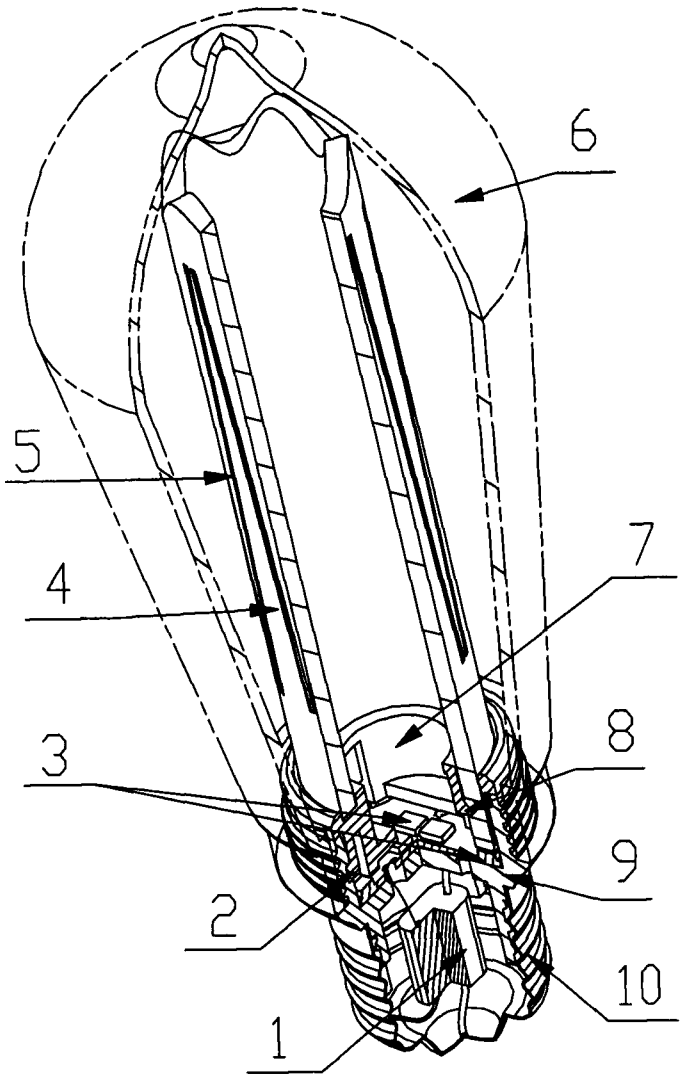
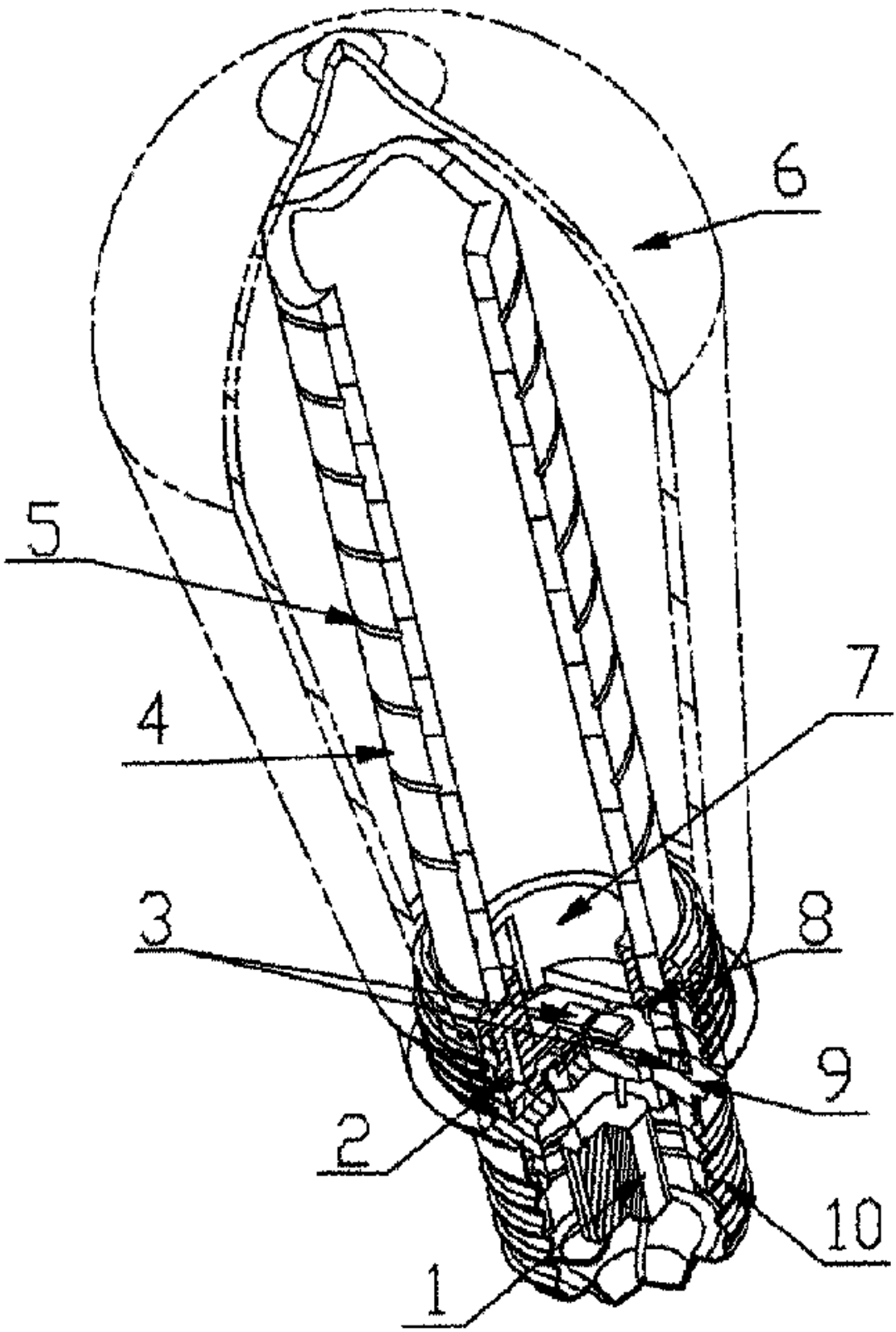


FIG. 4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