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(54) **Illuminating device for illuminating park or public square.**

(57) Socket fittings (4) for attaching a lamp socket (5) to a lamp holder (3) attached to a top portion of a pole (1) erected in a park or a public square include an attachment plate (17) formed in a substantially inverted-U shape and having a surface center portion (17a) and a reverse surface center portion (17b), attaching screws (16a, 16b) for attaching the attachment plate to the lamp holder, and fixing screws (18a, 18b) for fixing the lamp socket to one of the surface center portion and the reverse surface center portion in accordance with intended use. Where the lamp socket (5) is attached to the surface center portion (17a) of the attachment plate (17) with the reverse surface center portion (17b) directed downward, a lamp (6) screwed in the lamp socket (5) is positioned at its high level. On the other hand, where the lamp socket (5) is attached to the reverse surface center portion (17b) of the attachment plate (17) with the surface center portion (17a) directed downward, the lamp (6) screwed in the lamp socket (5) is positioned at its low level.

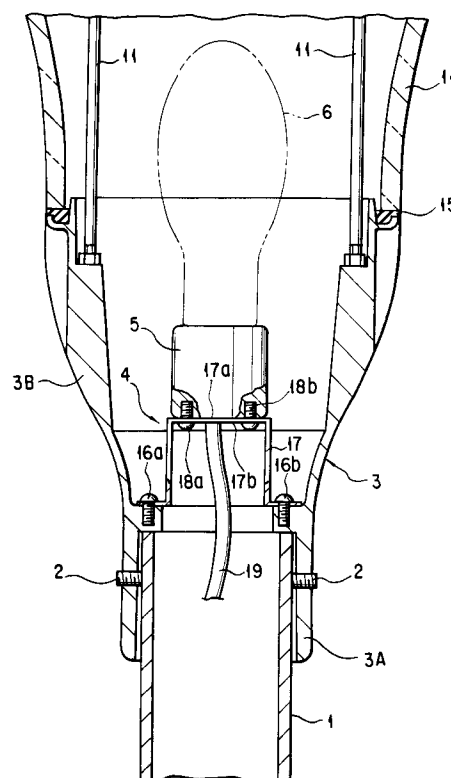


FIG. 2

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This invention relates to an illuminating device for illuminating a park, a public square, etc.

In general, an illuminating device for illuminating a park, a public square, etc. includes a pole erected in the park or the public square, a lamp holder attached to a top portion of the pole, and a lamp socket attached to the holder by means of socket fittings. In this illuminating device, light emitted from a lamp screwed into the lamp socket is reflected obliquely downward by a reflector located above the lamp holder, and the reflected light passes through a globe interposed between the reflector and the lamp holder, thereby illuminating the space about the pole.

Since in the above illuminating device, a part of light emitted from the lamp directly enters the globe and then spreads from the globe in the horizontal direction, it can illuminate a large space and hence is suitable to illuminating a gay place. However, the feature that light from the lamp directly enters the globe and spreads horizontally is not suitable to illuminating a park or a public square adjacent to a residential quarter.

It is an object of the invention to provide an illuminating device capable of reducing or increasing the degree of expansion of light which has passed a globe employed therein, with the use of a simple structure.

It is another object of the invention to provide an illuminating device capable of varying the degree of expansion of light which has passed the globe, in accordance with a place in which the lamp is installed.

To attain the objects, there is provided an illuminating device for illuminating a park, a public square, etc., comprising: a pole erected in the park, the public square, etc.; a lamp holder attached to the pole; a lamp socket secured to the lamp holder by means or socket fittings; a reflector located above the lamp holder for reflecting downward obliquely light emitted from a lamp connected to the lamp socket; and a globe provided between the reflector and the lamp holder for allowing the light emitted from the lamp to spread to the outside. The socket fittings include an attachment plate formed in a substantially inverted-U shape and having a surface center portion and a reverse surface center portion, attaching screws for attaching the attachment plate to the lamp holder, and fixing screws for fixing the lamp socket to one of the surface center portion and the reverse surface center portion in accordance with intended use.

This invention can be more fully understood from the following detailed description when taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a front view, showing an embodiment of the invention;

FIG. 2 is a cross sectional view, showing a part of the embodiment of the invention;

FIG. 3 is a cross sectional view, showing another part of the embodiment of the invention;

FIG. 4 is a perspective view of an attachment plate shown in FIG. 2; and

FIG. 5 is a cross sectional view, showing the level of a lamp assumed when a lamp socket shown in FIG. 2 is attached to a reverse surface center portion of the attachment plate.

The embodiment of the invention will be explained with reference to FIGS. 1 - 5.

As is shown in FIG. 1, the embodiment includes a pole 1 erected in a park, a public square, etc., a lamp holder 3 attached to a top portion of the pole 1 by means of a plurality of screws 2, and a lamp socket 5 attached to the lamp holder 4 by means of socket fittings 4.

As is shown in FIG. 2, the lamp holder 3 has a cylindrical portion 3A in which the top portion of the lamp pole 1 is fitted, and a socket receiving portion 3B extending from the upper end of the cylindrical portion 3A. The socket receiving portion 3B is substantially cylindrical, and has such a height as can cover a side portion of a lamp 6 screwed into the lamp socket 5.

A reflector 7 for downwardly reflecting light emitted from the lamp 6 screwed into the lamp socket 5 is located above the lamp holder 3. As is shown in FIG. 3, the reflector 7 is formed of a metal plate having an electrolytically-polished surface, and attached to the lower surface of a globe fixing ring 8 made of an aluminum alloy.

The globe fixing ring 8 has a hinge 10 rotatably supporting a shade 9. The ring 8 is fixed to a globe 14 located between the lamp holder 3 and the reflector 7, by means of a plurality of globe fixing rods 11 extending upward from the lamp holder 3 and a plurality of globe fixing nuts 12 mounted on the upper ends of the globe fixing rods 11, through a packing ring 13 made of an elastic material such as chloroprene rubber.

The shade 9 and the lamp holder 3 are formed by subjecting aluminum to die-cast molding, and hence have a high weather resistance and a light weight.

The globe 14 is formed of transparent or semi-transparent hard glass, for passing light emitted from the lamp 6, to the outside. The globe 14 is fixed to the lamp holder 3 by means of the globe fixing ring 8 with a packing ring 15 formed of an elastic material such as chloroprene rubber interposed therebetween.

As is shown in FIG. 2, the socket fittings 4 include an attachment plate 17 detachably secured to the lamp holder 3 by means of attaching screws 16a and 16b, and fixing screws 18a and 18b for fixing the lamp socket 6 to a surface center portion

17a or a reverse surface center portion 17b of the attachment plate 17 in accordance with intended use.

As is shown in FIG. 14, the attachment plate 17 is formed in a substantially inverted-U shape, and has a hole 20 for inserting therethrough a power supply cable 19 connected to the lamp socket 5, small holes 21 for inserting therethrough the attaching screws 16a and 16b, and small holes 22 for inserting therethrough the fixing screws 18a and 18b. The small holes 21 are formed in opposite end portions of the attachment plate 17, and the small holes 22 are formed in a center portion of the same.

Where the lamp socket 5 is fixed to the surface center portion 17a of the attachment plate 17 by means of the fixing screws 18a and 18b with the reverse surface center portion 17b directed downward, as is shown in FIG. 2, the lamp 6 connected to the lamp socket 5 is positioned in a substantially middle portion of the globe 14. As a result, light emitted horizontally from the lamp 6 directly enters the globe 14, and hence spreads greatly.

On the other hand, where the lamp socket 5 is fixed to the reverse surface center portion 17b of the attachment plate 17 by means of the fixing screws 18a and 18b with the surface center portion 17a directed downward, as is shown in FIG. 5, the lamp 6 connected to the lamp socket 5 is positioned within the lamp holder 3. As a result, light emitted horizontally from the lamp 6 is prevented from directly entering the globe 14, and hence from spreading greatly.

As described above, in the embodiment of the invention, the level of the lamp 6 connected to the lamp socket 5 can be changed by the use of simple fittings, thereby varying the amount of light which passes the globe 14.

Claims

1. An illuminating device for illuminating a park, a public square, etc., including:

a pole (1) erected in the park, the public square, etc.;

a lamp holder (3) attached to the pole;

a lamp socket (5) secured to the lamp holder by means of socket fittings (4);

a reflector (7) located above the lamp holder for reflecting downward obliquely light emitted from a lamp (6) connected to the lamp socket; and

a globe (14) provided between the reflector and the lamp holder for allowing the light emitted from the lamp to spread to the outside;

characterized in that the socket fittings include an attachment plate (17) formed in a substantially inverted-U shape and having a

surface center portion (17a) and a reverse surface center portion (17b), attaching screws (16a, 16b) for attaching the attachment plate to the lamp holder, and fixing screws (18a, 18b) for fixing the lamp socket to one of the surface center portion and the reverse surface center portion in accordance with intended use.

2. The illuminating device according to claim 1, characterized in that the lamp holder includes a cylindrical portion having an upper end and mounted on a tip portion of the lamp pole, and a socket receiving portion formed continuous from the upper end of the cylindrical portion.

3. The illuminating device according to claim 1, characterized in that the socket receiving portion is formed substantially cylindrical, and has a level higher than the level of the lamp assumed when the lamp is screwed into the lamp socket fixed to the reverse surface center portion of the attachment plate.

4. The illuminating device according to claim 1, characterized in that the attachment plate has a hole (20) for inserting therethrough a power supply cable connected to the lamp socket.

5. The illuminating device according to claim 4, characterized in that the hole for inserting the power supply cable is formed in a center portion of the attachment plate.

6. The illuminating device according to claim 1, characterized in that the lamp holder is obtained by subjecting an aluminum alloy to die-casting.

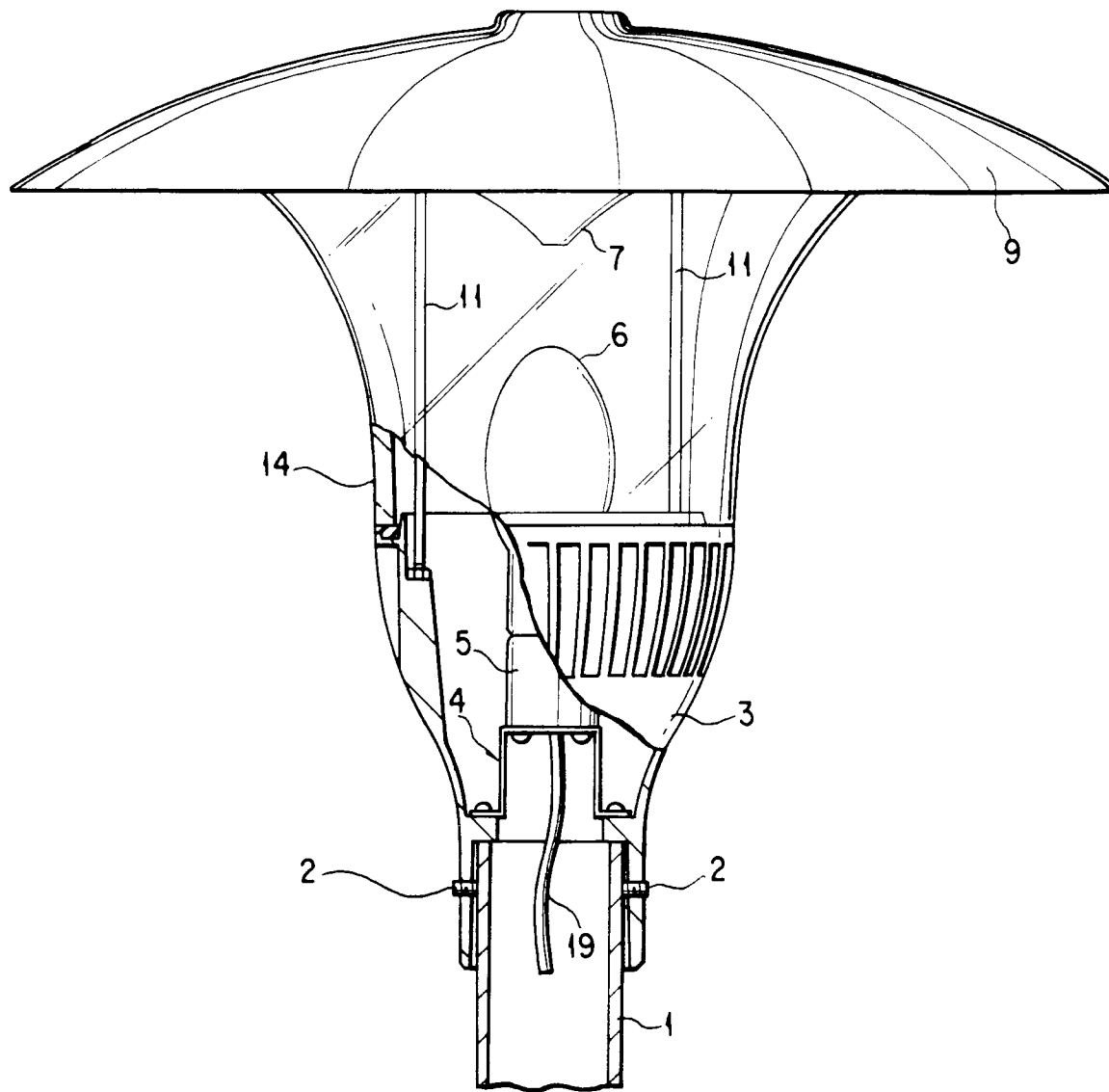


FIG. 1

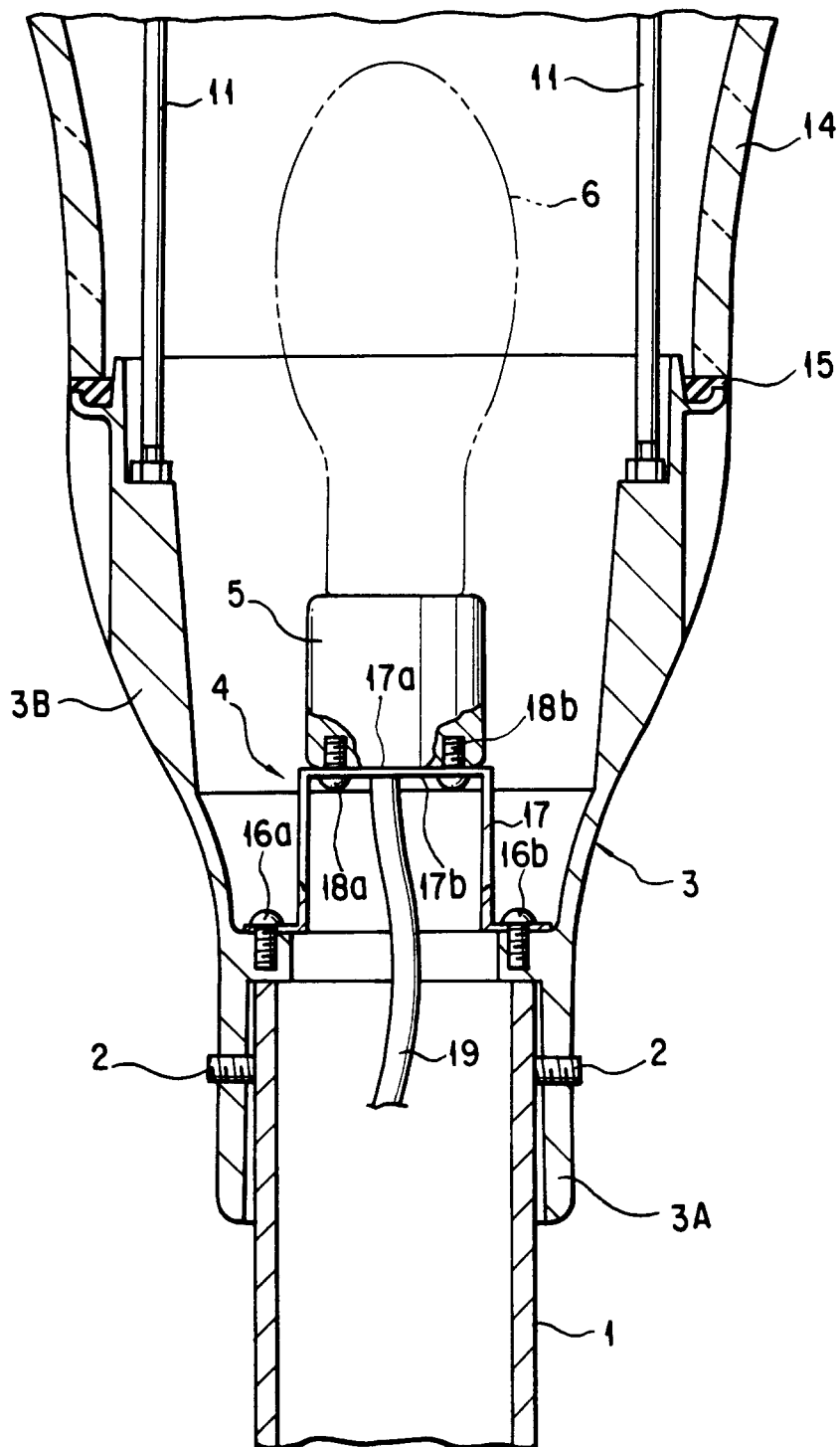


FIG. 2

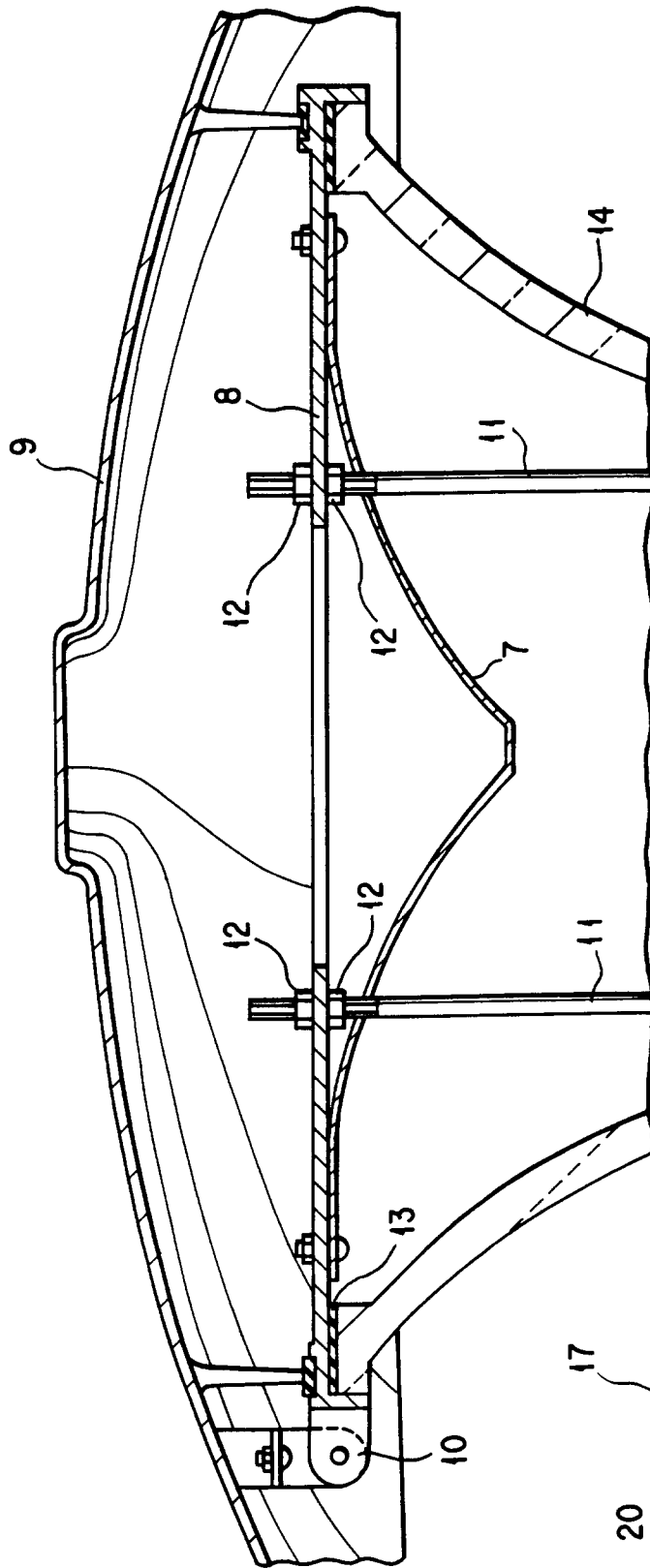


FIG. 3

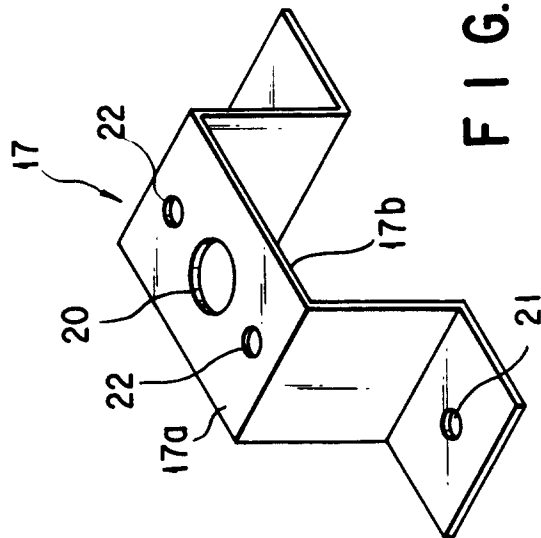


FIG. 4

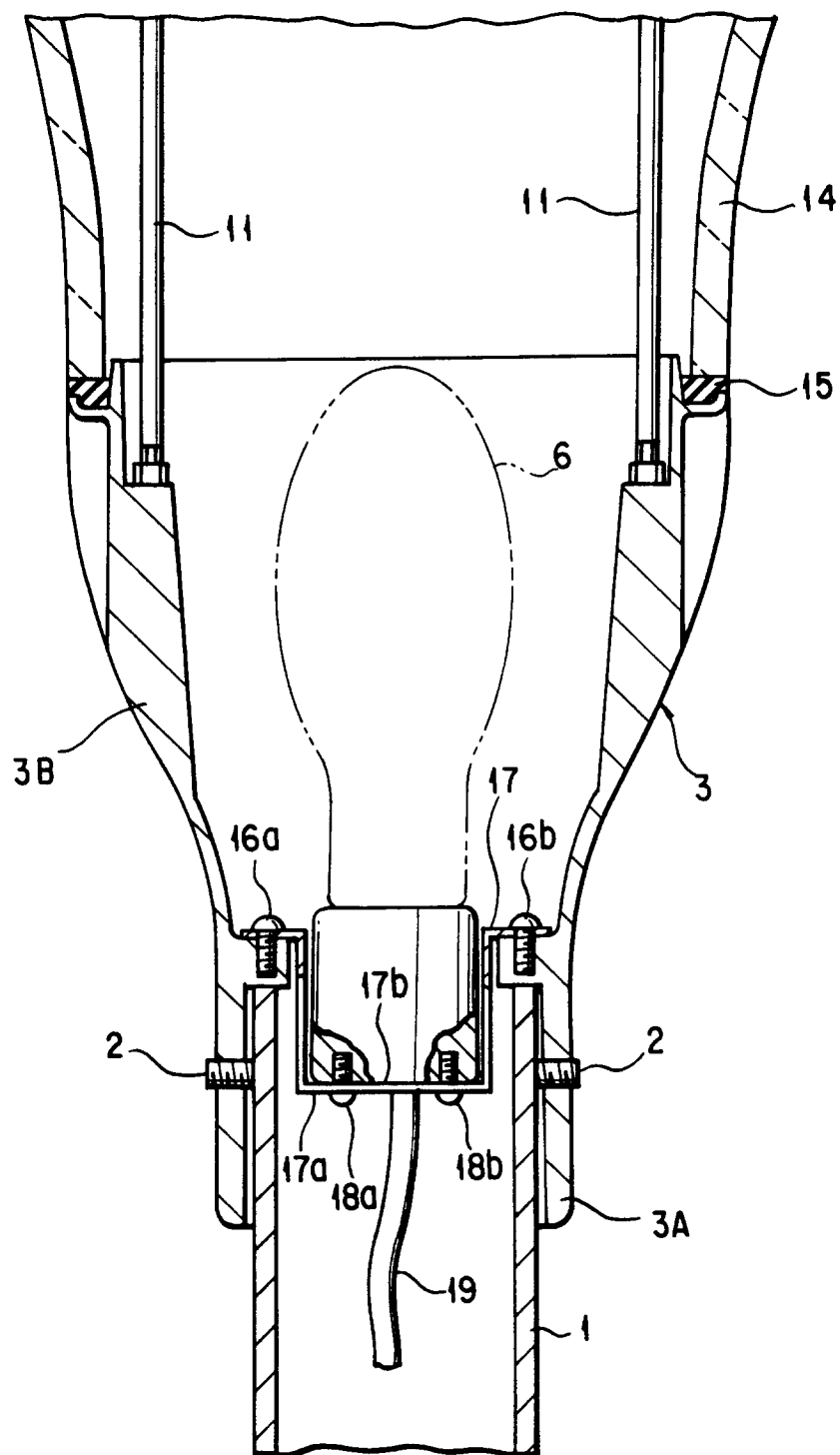


FIG. 5



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EUROPEAN SEARCH REPORT

Application Number
EP 94 11 4334

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION
Y	US-A-3 651 320 (LASKER) * column 2, line 38 - line 70 * * column 3, line 3 - line 9; figures 1,2 * ---	1,2,6	F21S1/10
Y	US-A-3 170 635 (CURTIN) * column 3, line 25 - line 44; figure 1 *	1,2,6	
A	---	4,5	
A	US-A-2 066 631 (LE GORRE) * page 1, column 2, line 20 - line 28; figure 3 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.CL.6)
			F21V F21S
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 16 January 1995	Examiner Martin, C
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