

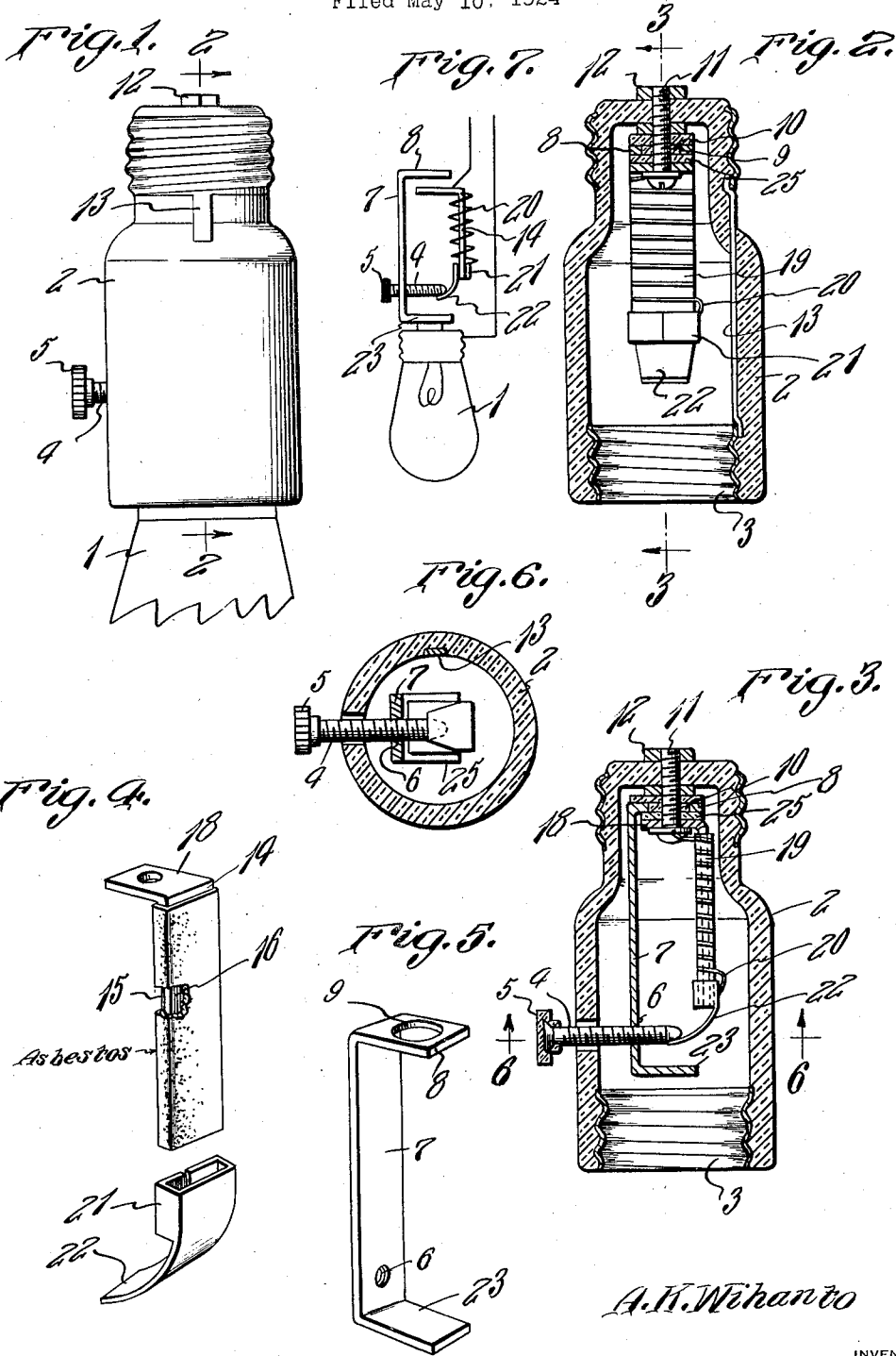
May 18, 1926.

1,585,580

A. K. WIHANTO

FLASH SOCKET FOR INCANDESCENT ELECTRIC LAMPS

Filed May 10, 1924



W. Markward

WITNESS:

A. K. Wihanto

INVENTOR

BY *Victor J. Evans*

ATTORNEY

UNITED STATES PATENT OFFICE.

ADOLPH K. WIHANTO, OF JAMAICA PLAIN, MASSACHUSETTS.

FLASH SOCKET FOR INCANDESCENT ELECTRIC LAMPS.

Application filed May 10, 1924. Serial No. 712,345.

My present invention pertains to sockets for incandescent electric lamps, and contemplates the provision of a socket provided with new and improved equipments for causing the filament of the lamp attached to its socket, to be alternately lighted and extinguished so as to afford flashes of light.

Other objects and practical advantages of the invention will be fully understood from the following description and claim when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:—

Figure 1 is a side elevation showing my novel socket associated with a portion of an incandescent electric lamp bulb.

Figure 2 is a diametrical section of the socket constituting the preferred embodiment of my invention, said section being taken in the plane indicated by the line 2—2 of Figure 1.

Figure 3 is a section taken in the plane indicated by the line 3—3 of Figure 2.

Figure 4 is a detail enlarged perspective of the thermostatic arm of my improvements.

Figure 5 is an enlarged detail perspective of the conductive support comprised in the improvements.

Figure 6 is a cross-section taken in the plane indicated by the line 6—6 of Figure 3.

Figure 7 is a diagrammatic view illustrative of my invention.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

The incandescent electric lamp bulb 1 shown in Figure 1 may be and preferably is of any of the ordinary well known constructions and need not therefore, be further described here. My novel socket is clearly illustrated in Figures 1 to 3 and 6, and by reference to said figures it will be noticed that among other elements the socket comprises a dielectric body 2, having a threaded ferrule to fit an ordinary electric light socket and a threaded ferrule 3 for connection of the bulb 1.

Through the side wall of the body 2 is a threaded conductive screw 4, the head 5 of which is preferably of dielectric material for obvious reasons, the said screw 4 being threaded at 6 through the conductive support 7 pendent in the body 2. At its upper end the said support or arm 7 is provided with an angularly disposed portion 8 in

which is a large opening 9 for the reception of a dielectric washer 10, which, in turn, receives a conductive screw 11, headed at its lower end and extending upwardly through the upper end of the body 2 and equipped above the body with a nut 12.

At 13 the body 2 is provided with a grounding conductor which extends partly within and partly exterior of the body 2, and each end makes connections between the two connector threads as shown in Figures 1 and 2.

In addition to the elements referred to my novel device comprises a thermostatic metal arm 14 best shown in Figure 4. The said arm 14 is formed of a layer 16 of iron and a layer 15 of brass.

The arm 14 is provided at its upper end with an angularly disposed apertured portion 18 which receives the screw 11 after the manner shown in Figure 3, as will be presently described.

The arm 14 is covered throughout its length with asbestos 19, and coiled about the asbestos 19 is a heater wire 20, and a metal clip 21 is attached to the lower end of arm 14 over the asbestos and one terminal of the heater wire terminates at the clip 21 which by tension of the arm 14 is in electric connection with the adjusting screw 4 carried by the conductive arm 7. The other terminal of the heater coil is electrically in connection with the screw 11 which screw, in turn, is designed to be connected with a source of electric energy.

The arm 14 is adapted to move out of and into contact with the screw 4, out of contact by heat of the heater coil, and in to contact by the tension of the thermostatic arm 14. The clip 21 is inclined at 22 shown in Figures 3 and 4 so as to have a sort of wiping motion as it moves out and into contact along and against the smooth end of the screw 4. Such a wiping motion will manifestly and positively prevent carbonization of the contact points which is an important feature and in that way will contribute to serviceability.

In the practical use of my improvements it will be understood that when the parts are arranged as shown in Figures 1 and 7, and current is supplied to the conductive screw 11, the current will pass through heater wire 20 and to the conductor clip 21 and to the adjusting screw 4 and the arm 7, it being understood that in this connection the angu-

lar lower portion 23 of the arm 7 is in contact with one of the terminals of the filament of the lamp, then through the lamp filament to the ground in ordinarily well known manner.

5 Incident to said passage of current the filament of the lamp will brightly glow, at the same time the heater wire 20 heats the thermostatic arm 14 which causes the thermostatic arm 14 to expand, this expansion

10 breaks the contact between the screw 4 and clip 21 whereupon the current cannot pass to the filament, hence the extinguishing of the light. This condition will obtain until the thermostatic arm 14 cools down and its

15 tension brings the portion 21 again in to contact with the smooth ended screw 4 so as to make the contact as it ultimately will. Then the filament of the lamp will be caused to brightly glow until the arm 14 is again

20 heated sufficiently to move 21 out of engagement with screw 4. Manifestly by turning the adjusting screw 4 relative to normal position of the clip 21 the length of the intervals between the flashings or bright glowing of the filament of the lamp may be increased or diminished.

By particular reference to Figure 3 it will be observed that the asbestos 19 covers entirely the thermostatic arm 14, up to the angularly disposed portion 18. At 25 is insulating material preferably mica washer, said insulation having a hole in it and receives the screw 11 thrust through the aperture in portion 18 of the thermostatic arm 14 and then

30 receiving the angularly disposed portion 8 together with dielectric washer 10 of the conductive arm 7 so as to adequately insulate said portions 18 and 8 from each other, and then again a dielectric washer is inserted to

40 the screw and a nut tightens these in to one union, having the coil 20 and clip 21 also attached. Then the screw 11 is thrust through the hole on top of dielectric body 2 and nut 12 tightened up. The adjusting screw 4 is

45 then inserted and the flasher is ready for use.

Notwithstanding the practical advantages of my novel devices as pointed out in the foregoing, it will be noted that the device

50 is simple and inexpensive in construction and is exceptionally well adapted to perform its duty and to withstand the usage to a supe-

rior degree to which electrical devices are ordinarily subjected.

I have entered into a detailed description 55 of the construction and relative arrangements of the parts embraced in the present and preferred embodiments of my invention in order to impart a full, clear and exact understanding of the said embodiments. I do 60 not desire, however, to be understood as confining myself to the specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made 65 such as fall within the scope of my invention as defined in my appended claim.

It is to be understood that the thickness of the heater wire is determined by the use to which the socket is put, the wire in some 70 cases being thicker than in others.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

A flasher socket for incandescent electric 75 lamps comprising a body, threaded ferrules secured to the ends of said body and adapted to be received in a lamp socket and receive a lamp respectively, means passing through a portion of said body for electrically connect- 80 ing said ferrules, a threaded screw depending within and from the upper portion of said body, a conductive supporting arm fixed to said screw and depending therefrom with an opening arranged therein adjacent 85 its lower end, a thermostatic arm also secured to said screw and depending in parallelism with said conductive supporting arm, said thermostatic arm being insulated from the conductive supporting arm, asbestos cover- 90 ing said thermostatic arm for a distance of its length, a heater wire surrounding said thermostatic arm and fixed to said screw at one end, a clip fixed to the lower end of said thermostatic arm and receiving the opposite 95 end of said wire, and a conductive screw passing through said body and opening of the conductive supporting arm respectively, and being adjustably associated with said clip for causing the flash of the lamps as 100 described.

In testimony whereof I affix my signature.

ADOLPH K. WIHANTO.