Dec. 9, 1941. R. S. BÁEZ 2,265,886

INCANDESCENT LAMP

Filed Feb. 27, 1941

FIG. 1.

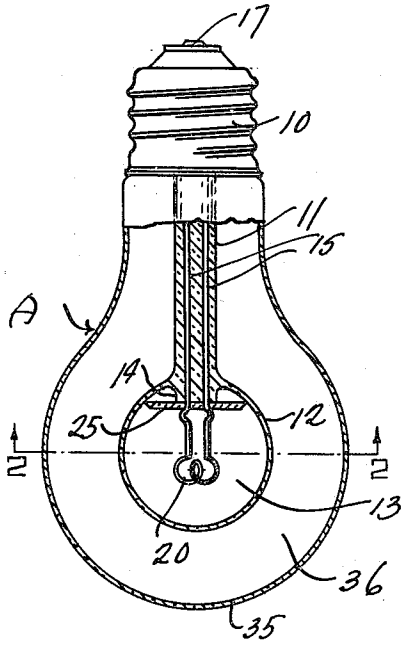
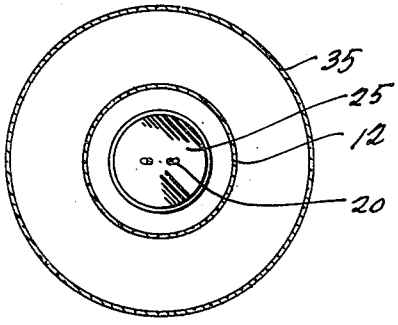


FIG. 2.



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Patented Dec. 9, 1941

2,265,886

UNITED STATES PATENT OFFICE

2,265,886

INCANDESCENT LAMP

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Application February 27, 1941, Serial No. 380,937

4 Claims. (Cl. 176—16)

This invention relates to improvements in electric incandescent lamps.

The primary object of this invention is the provision of an efficient incandescent lamp adapted to utilize argon gas in such manner that the transfer of heat to the external portions of the lamp will be reduced to a minimum.

A further object of this invention is the provision of an electric incandescent lamp which will provide great illumination in a manner which is more economical than the modern phosphorescent mercury lamp.

Further objects of this invention will be apparent during the course of the following detailed description.

In the accompanying drawing, forming a part of this specification and wherein similar reference characters designate corresponding parts thruout the several views,

Figure 1 is a vertical cross sectional view taken thru the improved lamp.

Figure 2 is a transverse sectional view taken substantially on the line 2—2 of Figure 1.

In the drawing, wherein for the purpose of illustration is shown only a preferred embodiment of the invention, the letter A may generally designate the improved electric incandescent lamp which may include a conventional base plug 10 having mounted therein, in usual manner, an ordinary fused glass stem 11 terminating at its lower end in a small circular glass bulb or envelope 12, the space 13 of which is preferably filled with argon gas. The stem 11 within the compartment 13 is provided with a slight projection 14. The stem 11 is provided with wires 15 therethru, connected in usual manner to the plug 10 and contact 17 at the base of the bulb and terminating within the compartment 13 of the small bulb 12 in a filament 20, which may be of alloy tungsten or nickel, or any other approved filament material.

At the extreme end of the projection 14 of the glass tube 11, within the compartment 13, there is disposed a flat insulation disc 25, preferably of mica or any other approved non-heat conductive material. The edges preferably terminate against the inner surface of the bulb 12 to entirely seal off the compartment 13 from the glass tube 11; the disc being provided with apertures just sufficiently large to permit the wires of the filament to extend therethru. It is thus noted that an annular heat insulating space is also provided above the disc 25 and within the inner bulb 12.

The lamp A furthermore includes an outer bulb or heat conserving jacket 35 which is connected in usual manner with the base 10 of the lamp and extends therefrom in spaced relation surrounding the glass tube 11 and the bulb 12. The compartment 36 between the inner surface of this jacket or bulb portion 35 and the inner bulb 12 and glass stem 11 provides a partial vacuum.

Changes in details may be made to the shape, size and arrangement of parts without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. An incandescent lamp comprising a base, a sealed inner bulb containing a gas such as argon gas, filament means for the lamp disposed within the inner bulb, an outer bulb surrounding said inner bulb and secured to said base in spaced relation therewith, the space between the inner and outer bulbs forming a partial vacuum, and an insulator in the inner bulb at the base of the filament to prevent undue transfer of heat to the base of the lamp.

2. An incandescent lamp comprising a base, an insulation stem connected with the base and extending therefrom, a bulb at the end of the base having the compartment therein filled with a gas such as argon gas, conducting wires extending from the base thru said stem and terminating in a filament in said compartment of the bulb, an insulator connected at the end of the stem within the compartment of said bulb between the filament and said stem to prevent undue transfer of heat thru said stem to the base, and an outer jacket connected with said base in spaced relation with the stem and bulb first mentioned and having a partial vacuum therein.

3. An incandescent lamp comprising a base having a glass stem extending therefrom, a small bulb at the end of the glass stem connected therewith and defining a compartment filled with argon gas, wires extending thru the stem in properly connected relation with the base and terminating in the bulb in a filament, a flat insulation disc connected with the stem at its terminal in the bulb and marginally abutting the inner surface of the bulb to prevent undue transfer of heat from the bulb thru said stem to the base, and an outer bulb connected with the base and surrounding the stem and inner bulb.

4. An incandescent lamp comprising a base, an elongated stem of insulation material connected with the base, a bulb at the end of the base having a gas filled compartment therein, conducting wires extending through the stem and ter-

minating in a filament in said bulb, an outer bulb connected with the base and extending in spaced relation with respect to the stem and inner bulb, the space being partially evacuated, and an insulation disc secured at the extreme bottom of said stem within the inner bulb having the wires aforesaid extending therethrough to said filament, said insulation disc having its peripheral margin abutting the interior of said inner bulb and defining an annular space within the inner bulb and separated from the filament space therein.

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