

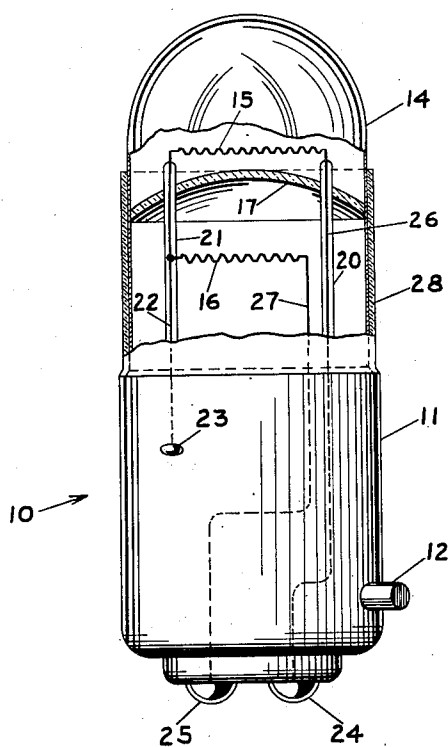
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AIRPLANE LIGHT

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2,391,922

AIRPLANE LIGHT

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3 Claims. (Cl. 176-26)

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This invention relates to an airplane light and has for an object to provide an improved airplane light including a two-color lamp; that is, a lamp that may be so connected that it will emit two colors of light alternately, preferably white and red, although any other combination of colors may be substituted.

A further object of this invention is to provide an improved two-color lamp for use in airplane two-color light flashing equipment, similar in nature to that shown in the U. S. patents to Adler, Jr., Nos. 2,265,095 and 2,273,748, but particularly improved thereover in that each color on applicant's lamp is visible completely throughout the light desired range of visibility, and wherein neither color emitting means serves to obstruct the visibility of the other color emitting means in any degree whatsoever.

Still another object of this invention is to provide a two-color lamp for use in airplane light of the above nature, wherein the two-color lamp occupies substantially no more space and hence can be fitted into the same fixture as the ordinary lamp, thus eliminating the necessity for enlarging the fitting in which it is used.

Still a further object of this invention is to provide a two-color lamp utilizing two filaments displaced vertically with relation to each other as a result of which each color is visible horizontally throughout the entire desired range of visibility.

With the foregoing and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter set forth, claimed and illustrated in the drawing in which:

The figure is an elevational view partly in section, of the two-color lamp of this invention.

There is shown at 10 the two-color lamp of this invention, including a base 11 having one or more bayonet pins 12 for mounting it in a receptacle. Extending upwardly from the base 11 is the lamp bulb 14 within which are two filaments 15 and 16, each located in an evacuated chamber and separated from each other by a colored partition 17 made of colored glass, or of any suitable colored plastic. As shown, the partition 17 may be concave somewhat to assist it in remaining in proper position and is likewise mounted about a pair of filament stanchions 20 and 21. The filament stanchion 21 also serves as a support for a common ground lead 22 from both filaments 15 and 16 to a ground contact 23 formed in the side of the lamp base 11. At the bottom of the lamp base 11 are provided two

power contacts 24 and 25, the contact 24 being connected by a lead 26 through the stanchion 20 to the filament 15, while the contact 25 connects through a lead 27 to the filament 16.

5 The compartment containing the filament 16 beneath the partition 17 is surrounded by a cylindrical plastic or glass envelope 28 of the same color as the partition 17; hence, when the filament 16 is lighted, a colored light, such as red, for instance, will be visible from any angle at which the light is emitted as permitted by the fixture. When filament 16 is not lit, and filament 15 is lit, then only a white light will be visible, assuming that the lamp bulb 14 is of clear glass.

15 In operation, this lamp is intended to be used in a circuit similar to that shown in Fig. 5 of U. S. patent to Adler, Jr., No. 2,265,095, wherein there is shown a circuit for providing a flashing light signal in connection with running or position lights or rudder or tail lights of an airplane.

20 This two-color lamp 10 may be located in a lamp receptacle of the ordinary size within the usual running light or tail light fixture, the receptacle being altered, of course, so that it will be provided with two terminals to cooperate with the lamp contacts 24 and 25, and of course will be grounded so as to cooperate with the grounding contact 23. With the lamp in operation, the light will continuously alternate between the color resulting from the filament 16 through the partition 17 and envelope 28 and the color from the filament 15 through the glass bulb 14. Obviously, the partition 17 and envelope 28 may be of any other color including green, as it would be when it takes the place of the green running light, and the glass bulb 14 may be of any other color than clear glass, such as amber, for instance, for better visibility.

40 The important feature of the present invention is that it can be used in existing light installations occupying no more space than the existing lights and that when so used, each color is clearly visible horizontally with the complete range permitted by the fixture in which it is used.

45 Other modifications and changes in the number and arrangement of the parts may be made by those skilled in the art without departing from the nature of this invention, within the scope of what is hereinafter claimed.

50 The invention herein described and claimed may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

What is claimed is:

1. A lamp for use in an airplane position light, said lamp comprising a single base, a transparent cylindrical bulb supported on said single base, a partition dividing said bulb into two compartments, a separate filament in each of said two compartments, a separate power contact leading to each separate filament thereby connecting said filaments in parallel, and means coloring the wall of one compartment differently from the color of the wall of the other of said compartments.

2. A lamp for use in an airplane position light, said lamp comprising a single base, a transparent bulb supported on said single base, a partition dividing said bulb into two compartments, a separate filament in each of said two compartments, a separate power contact leading to each separate filament thereby connecting said filaments

in parallel, and means coloring the wall of one compartment differently from the color of the wall of the other of said compartments, said compartments and filaments being disposed vertically one relative to the other.

3. A lamp for use in an airplane position light, said lamp comprising a single base, a transparent bulb supported on said single base, a partition dividing said bulb into two compartments, a separate filament in each of said two compartments, a separate power contact leading to each separate filament thereby connecting said filaments in parallel, and means coloring the wall of one compartment differently from the color of the wall of the other of said compartments, the light from each filament being entirely unobstructed horizontally by the other filament.

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