Feb. 23, 1937. W. HONING ET AL 2,071,979

ELECTRIC INCANDESCENT LAMP

Filed Aug. 8, 1934

Fig 1

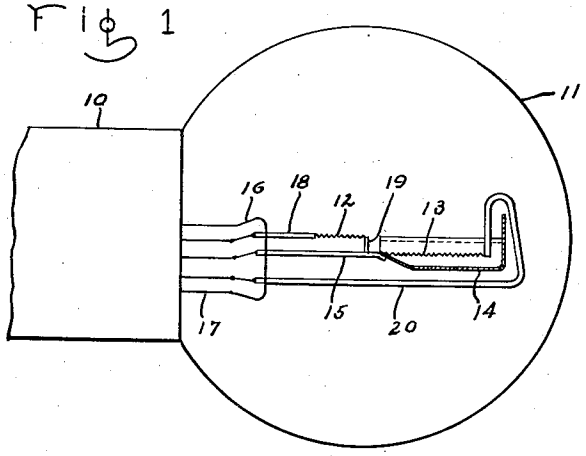


Fig 2

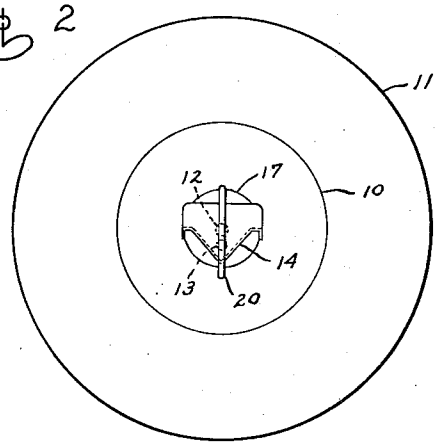


Fig 3

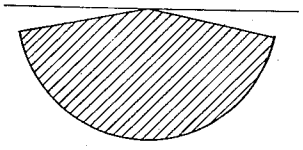
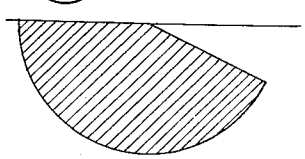


Fig 4



INVENTORS
WILHELM HONING
GILLIS OUDEMANS
BY Harry E. Dunham
THEIR ATTORNEY

Patented Feb. 23, 1937 2,071,979

UNITED STATES PATENT OFFICE

2,071,979

ELECTRIC INCANDESCENT LAMP

Wilhelm Honing and Gillis Oudemans, Eindhoven, Netherlands, assignors to General Electric Company, a corporation of New York

Application August 8, 1934, Serial No. 739,039
In Great Britain August 17, 1933

3 Claims. (Cl. 176—26)

Our invention relates to electric incandescent lamps and has for its object to provide an improved lamp of the double filament type for use in a vehicle headlight.

According to our invention, the lamp comprises a filament located therein so as to be at the focus of the headlight reflector, a second filament parallel to the lamp axis but spaced therefrom, and a V-sectioned screen or trough, preferably of dull or non-reflecting material, cooperating with said second filament.

For a further understanding of the invention, reference may be had to the drawing, in which Fig. 1 is a side elevation of a lamp comprising our invention; Fig. 2 is a front end view thereof; and Figs. 3 and 4 are diagrams of beams produced by the screened filament.

Referring to Figs. 1 and 2, the lamp comprises a base 10 and a bulb 11 having a pair of filaments 12, 13 sealed therein. The filament 12 lies on the longitudinal axis of the lamp and is located therein so as to be at the focus of the usual parabolic reflector of the headlight into which the bulb is inserted when in use. The second filament 13 is parallel to, but spaced away from, the said axis of the lamp. A V-sectioned screen or trough 14 is placed around the filament 13 and has its upper edges in a plane substantially at the longitudinal axis of the lamp. The said trough is preferably of a dull or non-reflecting material and is mounted at its rear end on the end of a leading-in wire 15 which extends forwardly into the bulb from the press portion 16 of a stem tube 17. The filament 12 is mounted on the ends of a leading-in wire 18 and a short vertical wire 19 which is attached to the leading-in wire 15. A third leading-in wire 20 extends from the stem press 16 forwardly beyond the edge of the screen or trough 14, then upwardly, and then back and down into the interior of the said trough 14. The filament 13 is attached to the end of said leading-in wire 20 and to the rear end of the trough 14 or the leading-in wire 15.

With the arrangement shown in Figs. 1 and 2, when the filament 12 is rendered incandescent the lamp provides a full driving light while when the filament 13 is rendered incandescent the lamp produces a non-glare beam below the horizontal having the form shown in Fig. 3. By tilting the trough 14 slightly, the non-glare beam may be swung around as in Fig. 4 so as to throw more light on the pavement on the near side of the vehicle and diminish the amount of light projected to the off side, i. e., in the direction of on-coming vehicles. The beam shown in Fig. 4 is shown as swung to the left or clockwise in accordance with foreign practice, but it will be understood that the said beam would be swung or rotated in the opposite direction to conform to the practice in this country.

While the filament 12 is shown extending axially it may have a V-shape, the center of which lies in the axis of the lamp and the focus of the reflector, or it may extend across the bulb with its center point in the axis of the lamp and in the focus of the reflector.

What we claim as new and desire to secure by Letters Patent of the United States is:

1. An electric incandescent lamp for use in a vehicle headlight comprising a bulb, a filament disposed therein substantially at the longitudinal axis of the lamp, a second filament extending parallel to the said axis but spaced therefrom and displaced longitudinally from said first filament, and a V-sectioned screen or trough extending longitudinally of said lamp and surrounding said second filament, the upper edges of said screen or trough being located in a plane substantially at the said axis of the lamp, and said second filament being located wholly within said trough.

2. An electric incandescent lamp for use in a vehicle headlight comprising a bulb, a filament disposed therein substantially at the longitudinal axis of the lamp, a second filament extending parallel to the said axis but spaced therefrom and displaced forwardly along said axis from said first filament, and a V-sectioned screen or trough extending longitudinally of said lamp and disposed under and surrounding said second filament, said second filament being located wholly within said trough.

3. An electric incandescent lamp for use in a vehicle headlight comprising a bulb, a filament disposed therein substantially at the longitudinal axis of the lamp, a second filament extending parallel to said axis and located below said axis and ahead of said first filament, and a concave non-reflecting trough longitudinally coextensive with and located under said second filament, said second filament being located wholly within said trough.

WILHELM HONING.
GILLIS OUDEMANS.