

[54] HEAD-UP DISPLAY FOR MOTOR VEHICLES

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[52] U.S. Cl. 340/705; 340/980; 350/174; 353/14

[58] Field of Search 340/705, 971, 980, 763, 340/796, 97, 98; 353/11, 12, 13, 14, 61, 68; 350/171, 174, 331 T, 331 R, 257, 407, 277, 279, 276 R; 358/103, 109, 250; 73/178 R

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[57] ABSTRACT

Disclosed herein is a head-up display for a motor vehicle having a dashboard with a top surface, which comprises a projector enclosed in the dashboard, the projector including a light source, an object from which visual information is to be displayed and a lens, an aperture formed on the top surface of the dashboard which is covered by the lens or a transparent member for preventing dust or the like from entering thereinto, a reflecting member provided in front of a driving seat on which light projected from the projector through the aperture is reflected to produce the image of the visual information thereon, and a reflection preventing member for preventing the reflection of light entering from the outside of the vehicle on the lens of the projector or on the transparent member. An antireflection coating such as a black paint is applied on the upper surface of the reflection preventing member. The reflection preventing member being shiftable between a first position in which the member covers the lens or the transparent member to close the aperture and a second position in which the member uncovers the lens or the transparent member to open the aperture. The reflection preventing member is shifted to the second position from the first position only when the head-up display is employed. Accordingly, it can prevent external light from being reflected on the lens or the transparent member toward eyes of the driver of the vehicle.

11 Claims, 5 Drawing Sheets

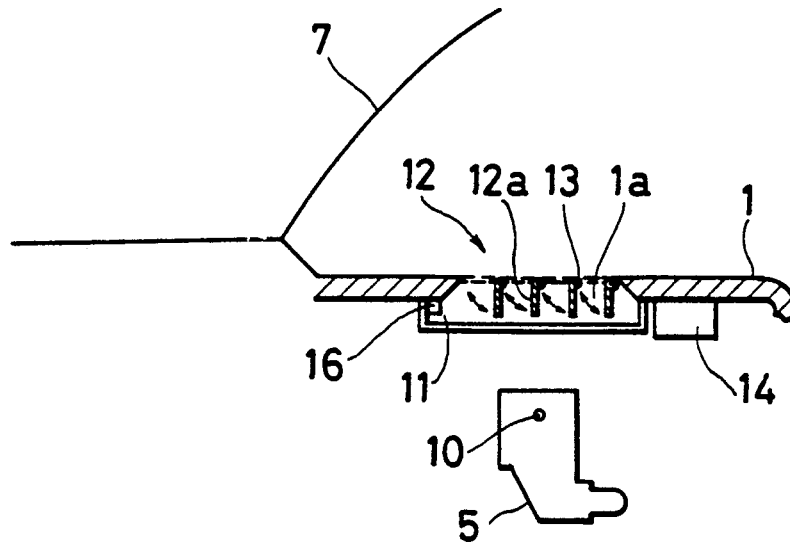


FIG. 1
PRIOR ART

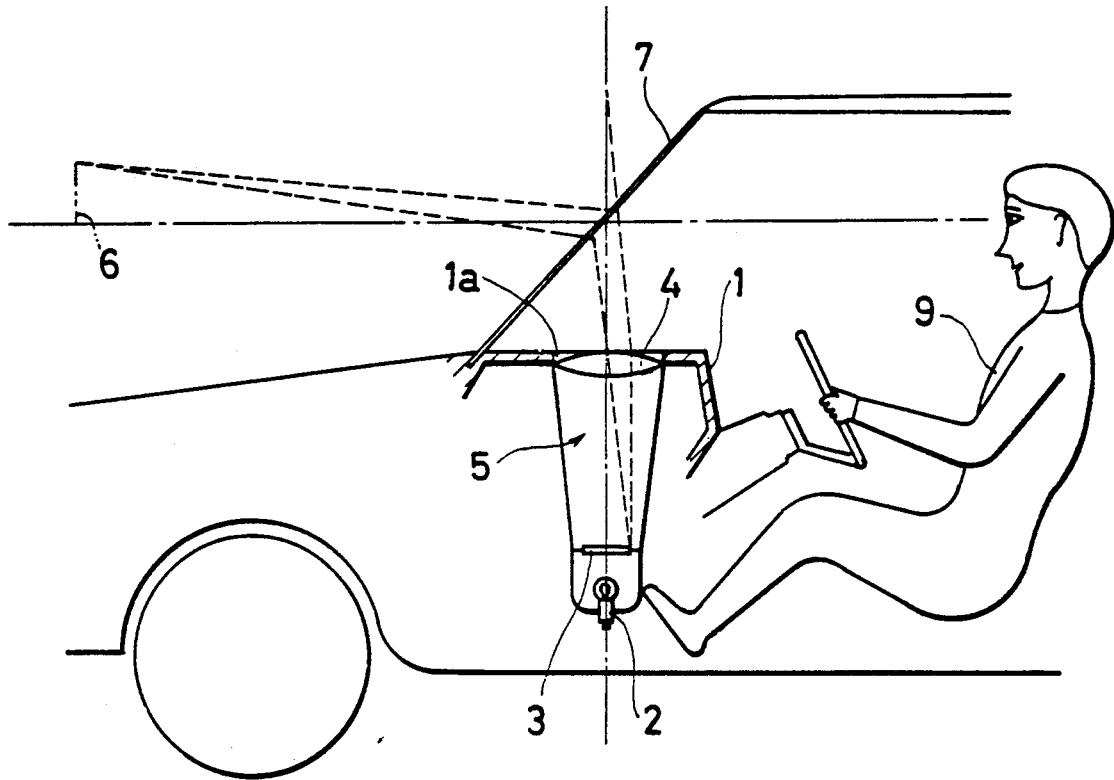


FIG. 2
PRIOR ART

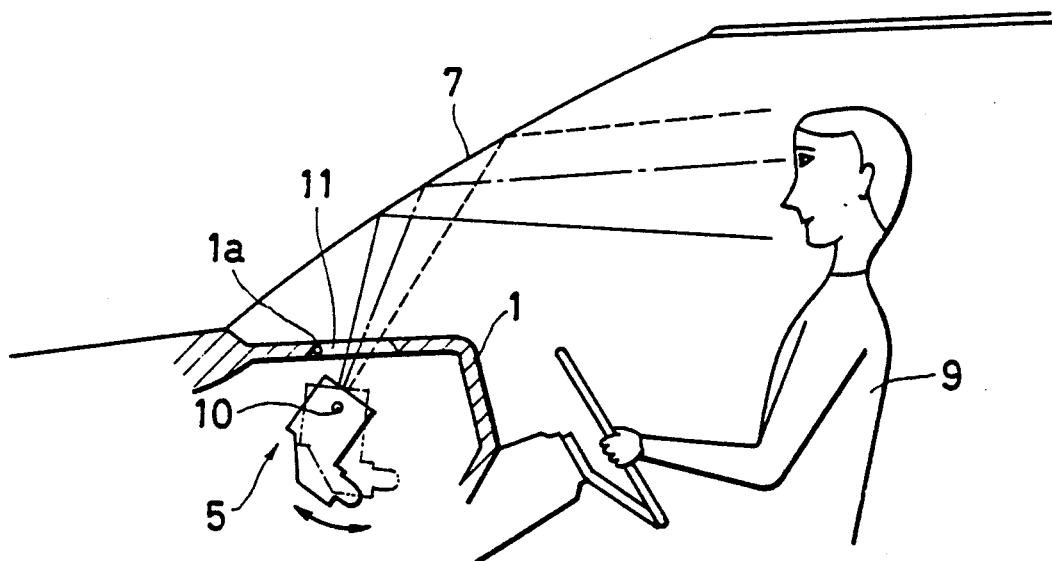


FIG. 3

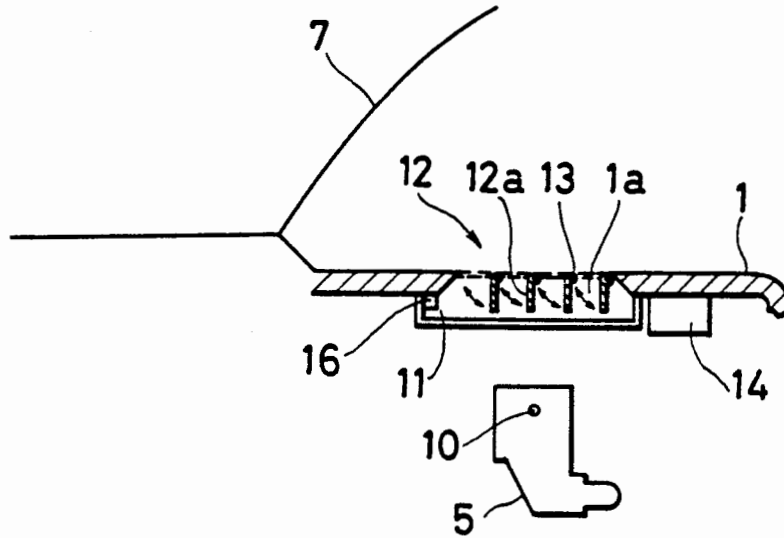


FIG. 4(a)

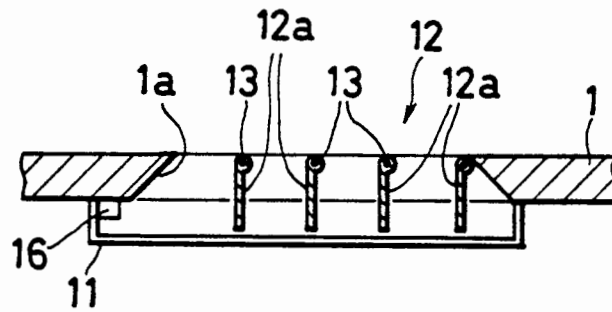
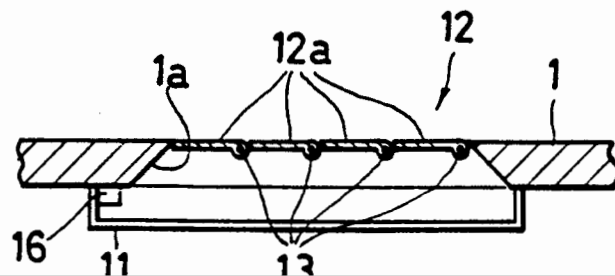


FIG. 4(b)



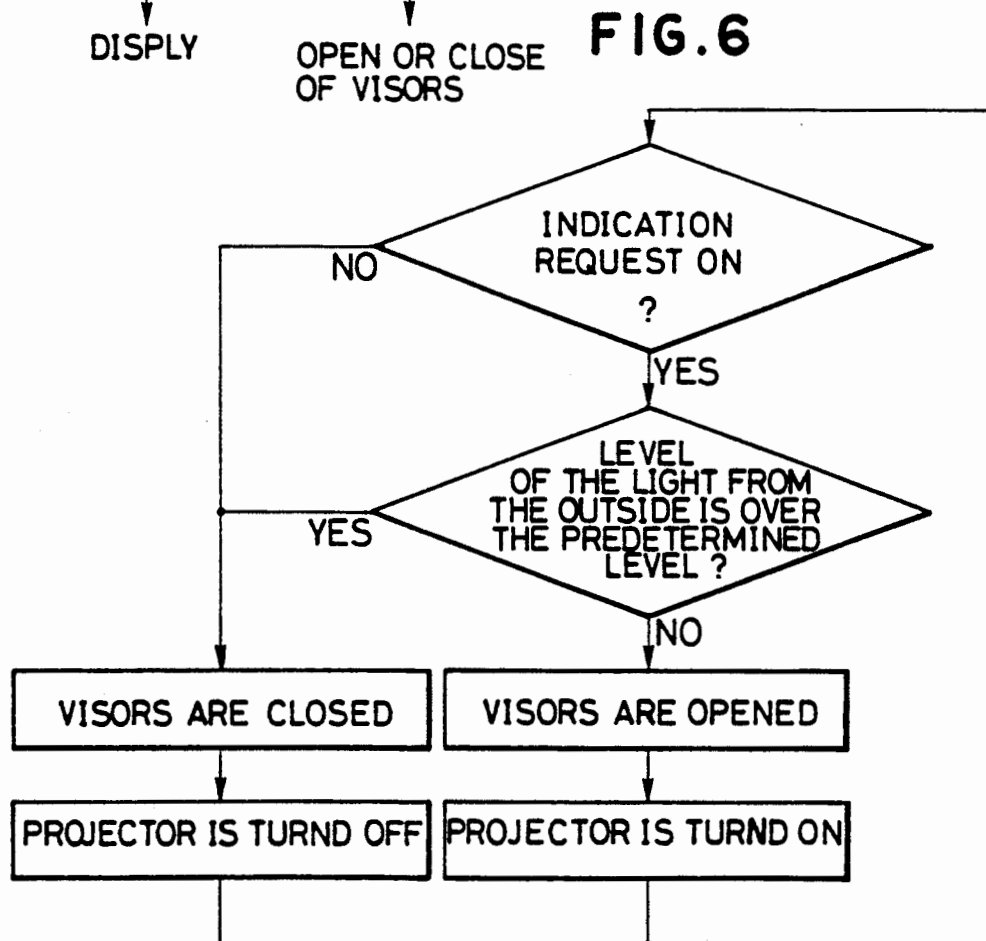
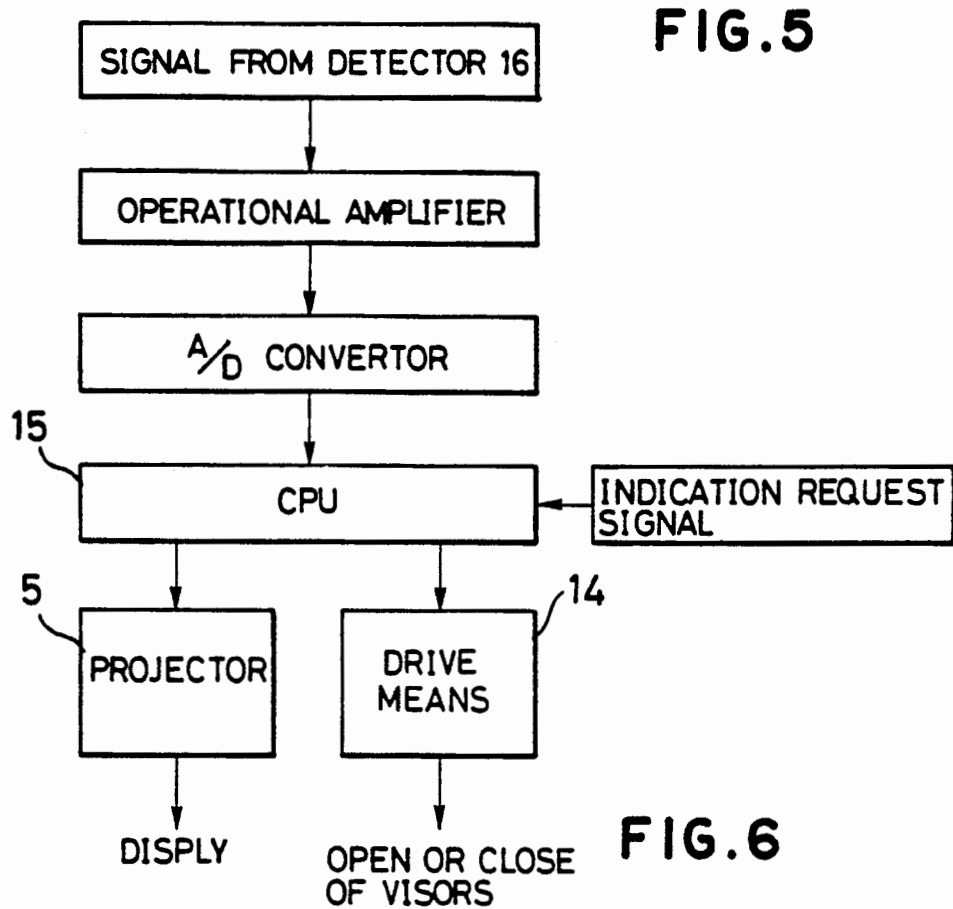


FIG. 7(a)

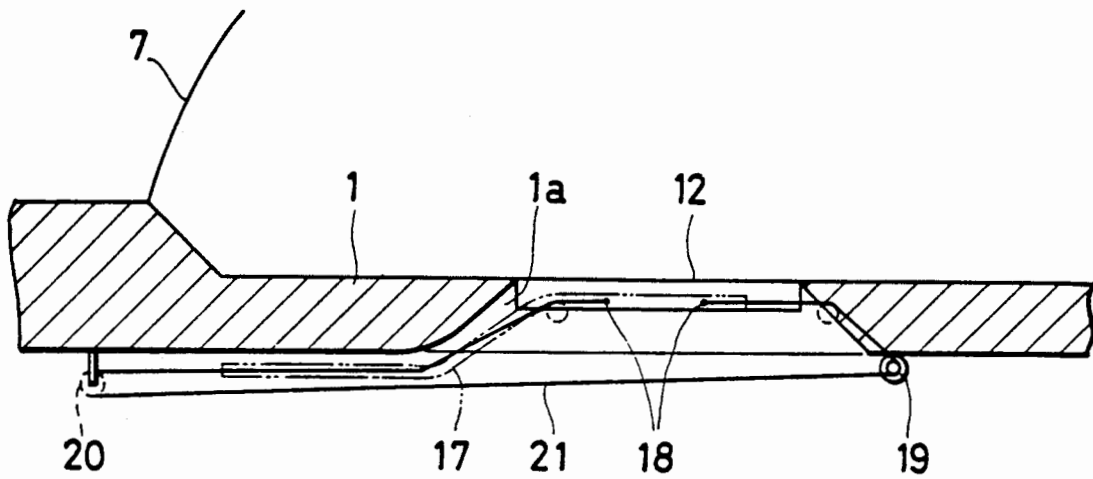
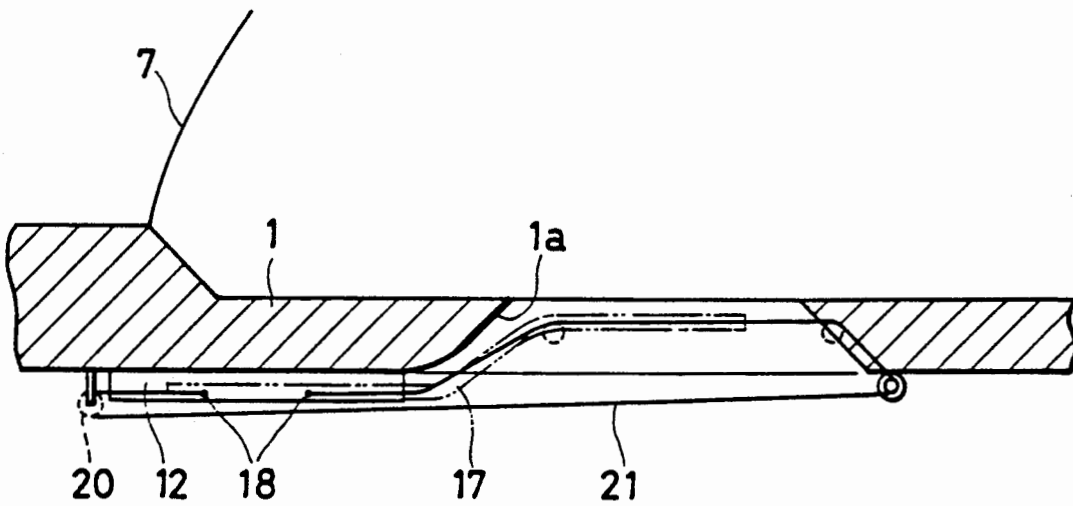


FIG. 7(b)



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