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United States Patent [19]

Golden

[11] **3,961,181**

[45] **June 1, 1976**

[54] **EYE-SHADING MEANS FOR AUTOMOTIVE VEHICLE OPERATORS**

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[22] Filed: **Feb. 18, 1975**

[21] Appl. No.: **550,213**

[52] **U.S. Cl.**..... **250/208;** 250/215; 250/229; 250/237 R; 250/578; 350/160 LC; 350/276 R

[51] **Int. Cl.²**..... **G02F 1/13;** H01J 39/12

[58] **Field of Search**..... 250/215, 237 R, 200, 250/208, 209, 204, 216, 225, 229, 578; 350/160 LC, 276 R; 315/77, 149, 153, 154

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[57] **ABSTRACT**

An eye shade is provided for vehicle drivers which separately but simultaneously shields the two eyes of the driver against the blinding glare of direct sunlight in the daytime or of approaching vehicle headlights at night, while leaving the space between and outside the shielded zones clear. The eye shade desirably consists primarily of a laterally extending series of contiguous substantially vertically disposed, electrically darkenable cells or zones such as liquid crystals, each of which cells or zones has the characteristic that it is transparent when no voltage is applied to it, but that it becomes progressively opaque with increase of applied voltage. The applied voltage is controlled by a laterally extending array of contiguous photosensitive sensor cells, each characterized by the fact that its electrical resistance increases as intensity of light exposure diminishes. The sensor cells are individually cross-associated electrically with several electrically darkenable, liquid crystal cells or zones of the eye shield. In one embodiment, pairs of electrically darkenable cells or zones are rendered opaque by the shielding of their associated sensors against exposure to sunlight or to approaching headlights. Alternatively, spaced pairs of electrically darkenable cells or zones may be rendered temporarily opaque by the exposure of their associated sensor cells to light. In the first instance the associated sensor cell and light darkenable eye-shading zone are connected electrically in parallel; in the other instance, which is preferred, they are connected in series.

8 Claims, 12 Drawing Figures