

[54] CONTROL DEVICE FOR DRIVING ROAD-VEHICLE ELECTRIC-POWERED EQUIPMENT

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[30] Foreign Application Priority Data

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[52] U.S. Cl. .... 364/424; 318/466; 318/103; 364/140; 307/140

[58] Field of Search ..... 364/424, 715, 425, 140; 340/52 F; 318/102, 652, 103, 596, 444, 443, 446, 447, 452, 466; 200/1 R; 307/139, 140, 141

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[57] ABSTRACT

Automatic opening/closing control of side windows of a vehicle. An electronic control device mainly composed of a microcomputer reads respective time-serial opening/closing patterns of key switches. These time-serial opening/closing patterns are respectively allocated to commands sent to the electronic control device. The electronic control device controls driving of the opening/closing mechanism for each side window in accordance with the commands. The electronic control device further effects overload detection of the opening/closing mechanism, limit position detection in movement thereof as well as arithmetic operation of the actual position, and then stops driving of the opening/closing mechanism at the time when the opening/closing mechanism undergoes overload and at the time when the actual position reaches the goal position.

8 Claims, 25 Drawing Figures

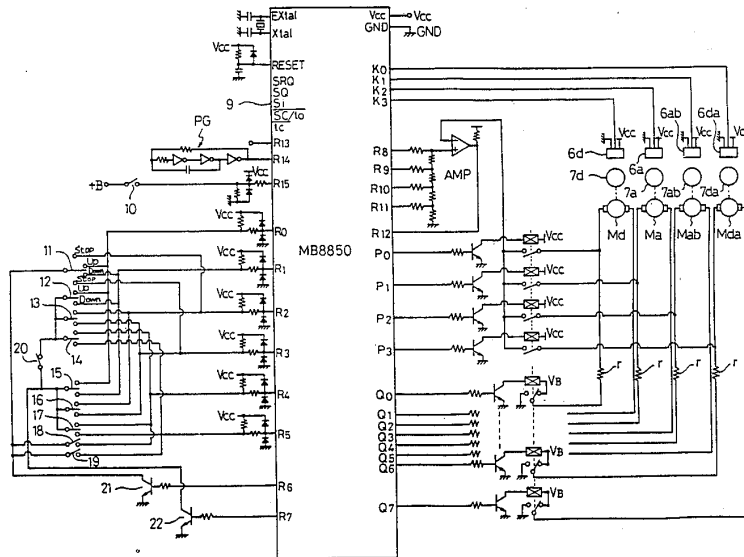


Fig.1a

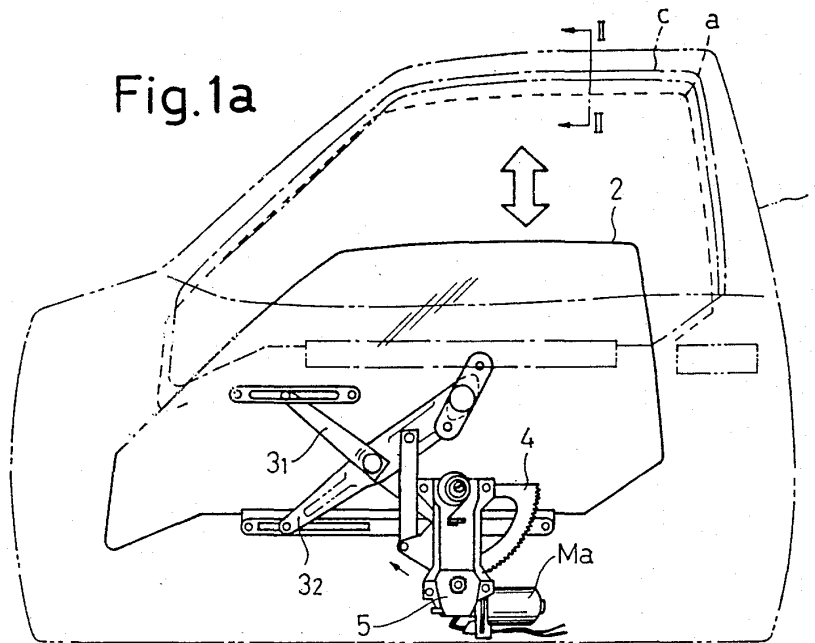


Fig.1b

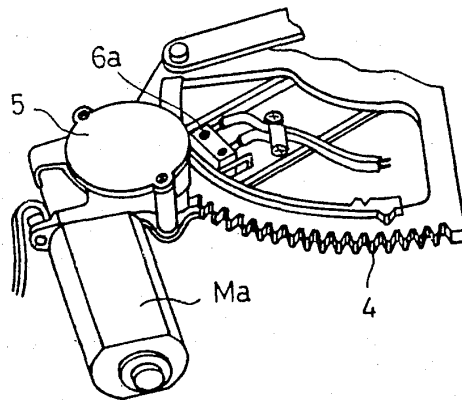


Fig.1c

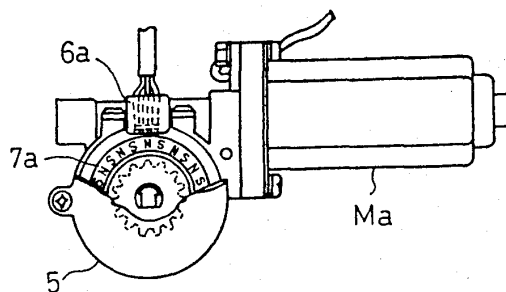


Fig.2b

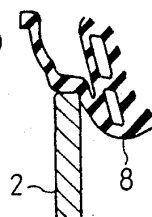


Fig.2a

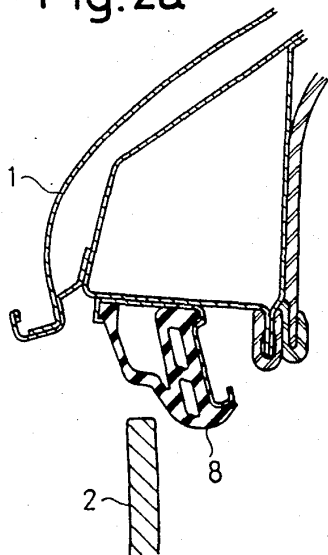


Fig.2c

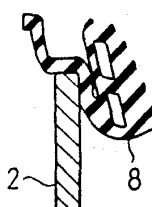


Fig.2d

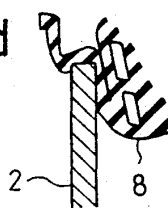


Fig. 3a

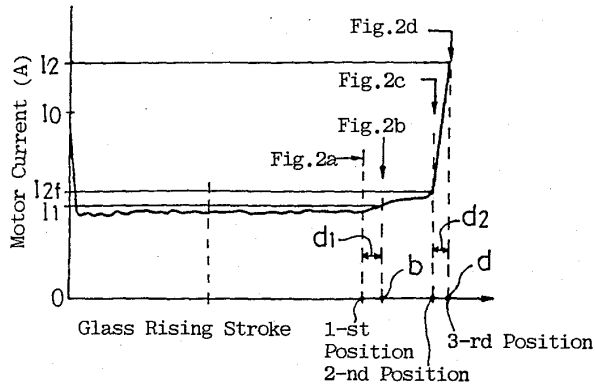


Fig. 3b

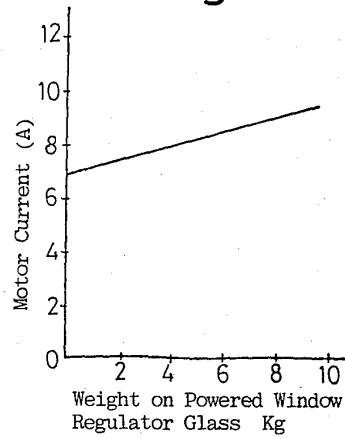


Fig. 4b

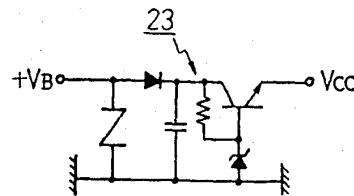
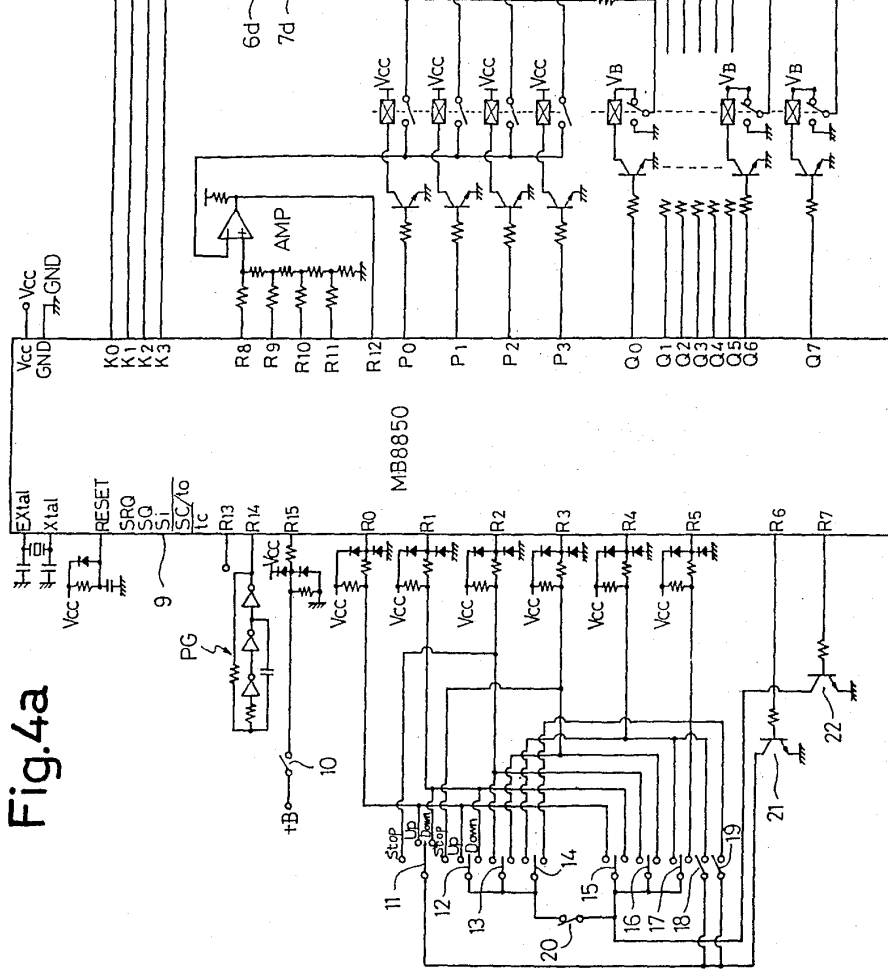


Fig.4a



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