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(12) United States Patent Yamabe

(54) DOOR MIRROR

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See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

2,916,967 A *	12/1959	Husak 359/855
4,022,520 A *	5/1977	Scifres 359/855
4,498,738 A	2/1985	Kumai
4,502,759 A *	3/1985	Herzog et al 359/876
5,760,978 A *	6/1998	Smith
6,193,377 B1*	2/2001	Spigner 359/602

(10) Patent No.: US 6,984,048 B2 (45) Date of Patent: Jan. 10, 2006

FOREIGN PATENT DOCUMENTS

DE	3839322		5/1990
GB	2 200 609 A	÷	8/1988
GB	2223724 A	韓	4/1990
JP	08-058473 A	*	3/1996
JP	08-198010 A	*	8/1996
JP	09-301072 A	*	11/1997
JP	11-115631 A	*	4/1999
JP	2000-052862 A	*	2/2000
JP	2000-108786 A	*	4/2000
JP	2003-040037 A	*	2/2003
WO	WO 03/011641 A1	*	2/2003

OTHER PUBLICATIONS

"Correct Car Mirror Adjustment for YOUR Safety", Popular Science, p. 43, Dec. 1992.*

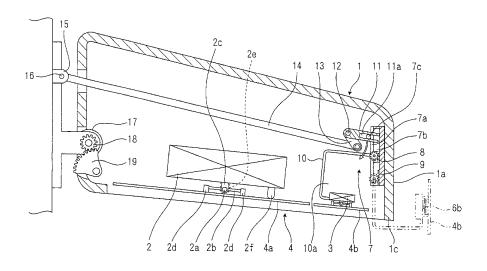
* cited by examiner

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(57) ABSTRACT

A door mirror which is installed on a motor vehicle's body in such a manner as to project laterally from the vehicle's body so as to reflect on a surface of the mirror what is behind the vehicle's body, wherein the mirror surface of the door mirror is divided into two parts, and thus divided mirror surfaces are respectively provided with reflection angle adjusting mechanisms so that reflection angles of the divided mirror surfaces can be independently and arbitrarily adjusted, and the divided mirror surface positioned on the outer side can be turned to project laterally from the door mirror to face outward.

10 Claims, 15 Drawing Sheets





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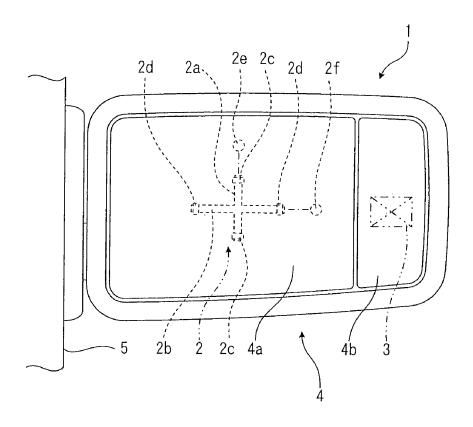


FIG. 2

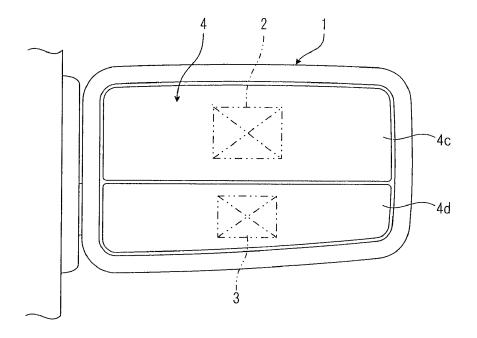
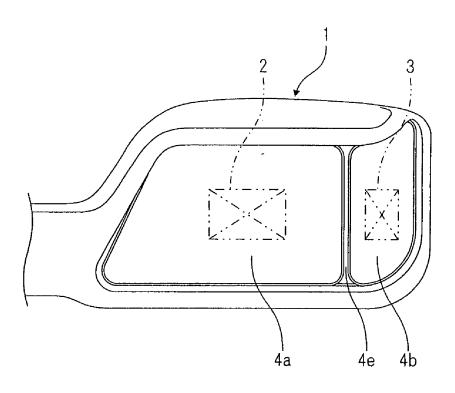
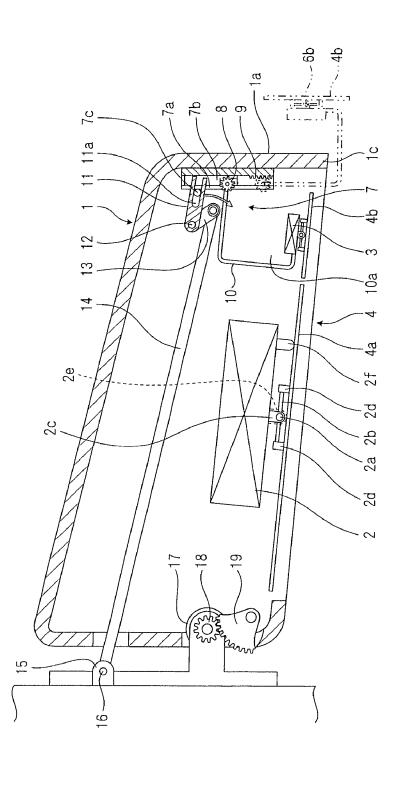


FIG. 3



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