



US00D620858S

(12) **United States Design Patent**
Noguchi et al.

(10) **Patent No.:** **US D620,858 S**
(45) **Date of Patent:** **** Aug. 3, 2010**

(54) **FM ANTENNA FOR AUTOMOTIVE GLASS**

(75) Inventors: **Akihiro Noguchi**, Matsuzaka (JP);
Yasuo Takagi, Matsuzaka (JP); **Yuji Katada**, Matsuzaka (JP)

(73) Assignee: **Central Glass Co., Ltd.**, Ube-Shi,
Yamaguchi-Ken (JP)

(**) Term: **14 Years**

(21) Appl. No.: **29/311,524**

(22) Filed: **Apr. 10, 2009**

(30) **Foreign Application Priority Data**

Nov. 28, 2008 (JP) 2008-030662

(51) **LOC (9) Cl.** **12-16**

(52) **U.S. Cl.** **D12/182; D14/230**

(58) **Field of Classification Search** D12/182-183,
D12/317; 219/203; 296/84.1, 77.1, 94.1,
296/96.12, 96.19, 97.1, 95.1; 160/370.21,
160/370.22; 428/155, 172

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,527,164	A *	7/1985	Cestaro et al.	.....	343/713
4,914,447	A *	4/1990	Ishii et al.	.....	343/713
6,002,373	A *	12/1999	Taniguchi et al.	.....	343/713
6,057,803	A *	5/2000	Kane et al.	.....	343/713
6,064,345	A *	5/2000	Ohnishi et al.	.....	343/713
6,239,758	B1 *	5/2001	Fuchs et al.	.....	343/713
6,485,082	B2 *	11/2002	Campfield et al.	.....	296/95.1
6,576,845	B2 *	6/2003	Von Alpen et al.	.....	174/149 R
6,625,875	B2 *	9/2003	Sol	.....	29/621
6,634,695	B2 *	10/2003	Campfield et al.	.....	296/95.1
6,765,177	B2 *	7/2004	Noguchi et al.	.....	219/203
6,791,066	B2 *	9/2004	Hawk	.....	219/203

6,866,918	B2 *	3/2005	Sauer	.....	428/172
6,870,134	B2 *	3/2005	Sol et al.	.....	219/203
6,904,923	B2 *	6/2005	Chai et al.	.....	135/88.09
6,906,287	B2 *	6/2005	Sol	.....	219/203
D522,941	S *	6/2006	Metros et al.	.....	D12/182
7,508,406	B2 *	3/2009	Oehrlein	.....	347/224
D613,276	S *	4/2010	Oliver	.....	D14/230
2006/0138798	A1 *	6/2006	Oehrlein	.....	296/84.1
2008/0169989	A1 *	7/2008	Li et al.	.....	343/713
2008/0169990	A1 *	7/2008	Taniguchi et al.	.....	343/713
2009/0033123	A1 *	2/2009	Torr et al.	.....	296/96.19
2009/0262032	A1 *	10/2009	Chung	.....	343/713
2009/0289852	A1 *	11/2009	Li et al.	.....	343/700 MS
2010/0085261	A1 *	4/2010	Baranski	.....	343/713

* cited by examiner

Primary Examiner—Caron Veynar

Assistant Examiner—Katrina A Kile

(74) *Attorney, Agent, or Firm*—Manabu Kanesaka

(57) **CLAIM**

The ornamental design for an FM antenna for automotive glass, as shown and described.

DESCRIPTION

FIG. 1 is a front view of an FM antenna for automotive glass showing our new design;

FIG. 2 is a rear view thereof;

FIG. 3 is a top view thereof;

FIG. 4 is a bottom view thereof;

FIG. 5 is a right side view thereof;

FIG. 6 is a left side view thereof; and,

FIG. 7 is an enlarged cross sectional view thereof taken along line 7—7 in FIG. 1.

In the drawings, the broken lines depict automotive glass and form no part of the claimed design.

1 Claim, 4 Drawing Sheets

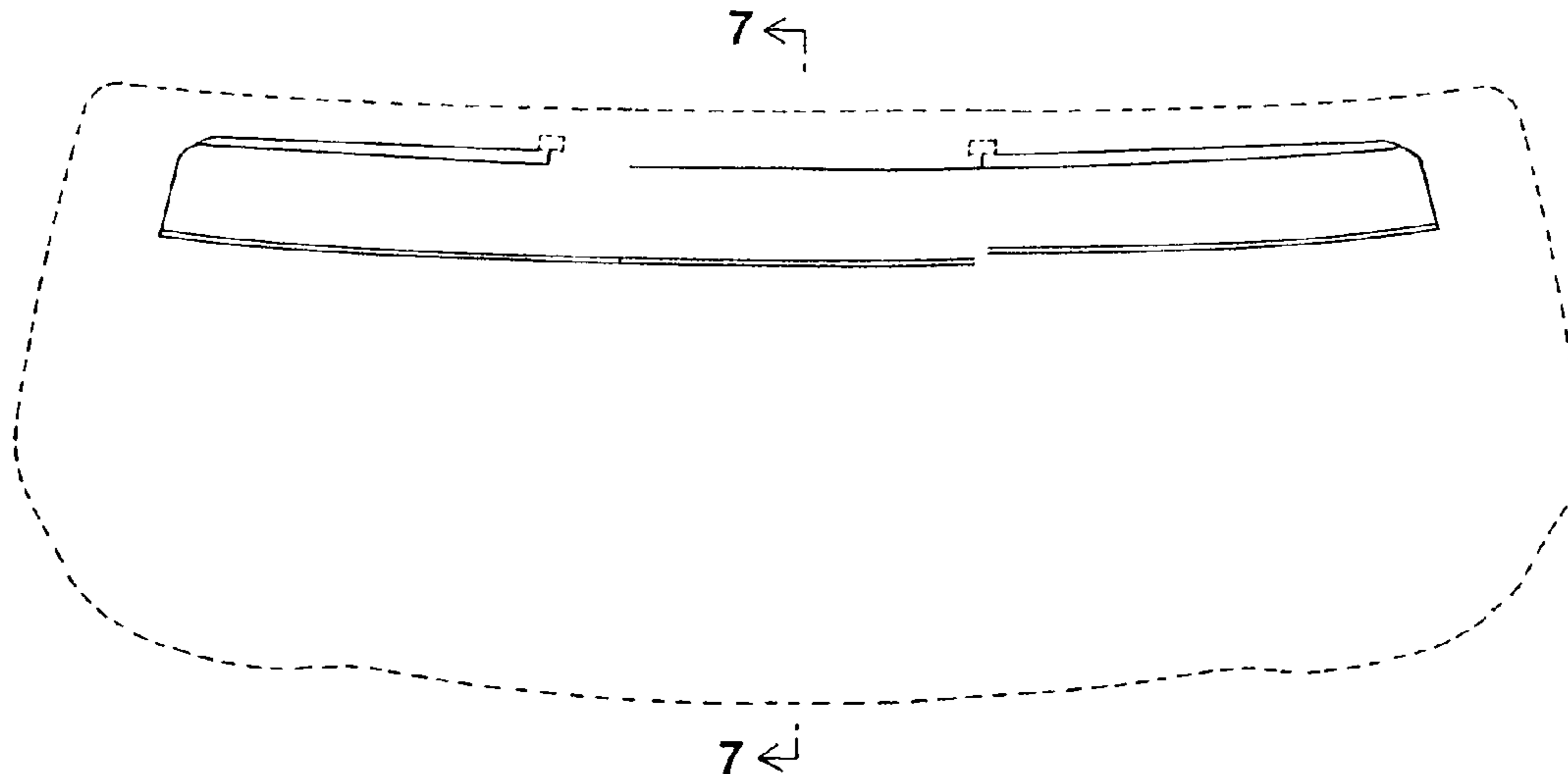


Fig. 1

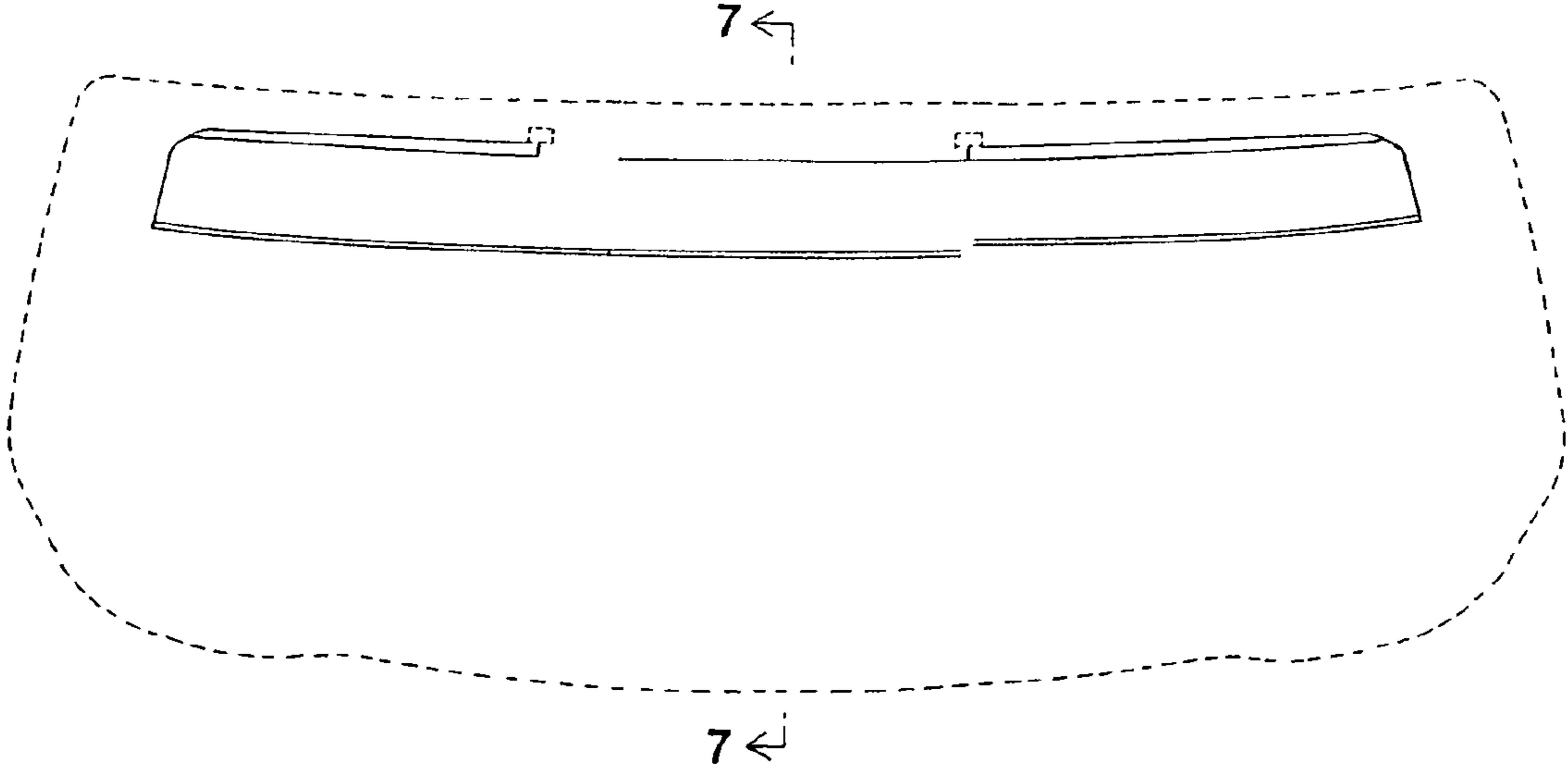


Fig. 2

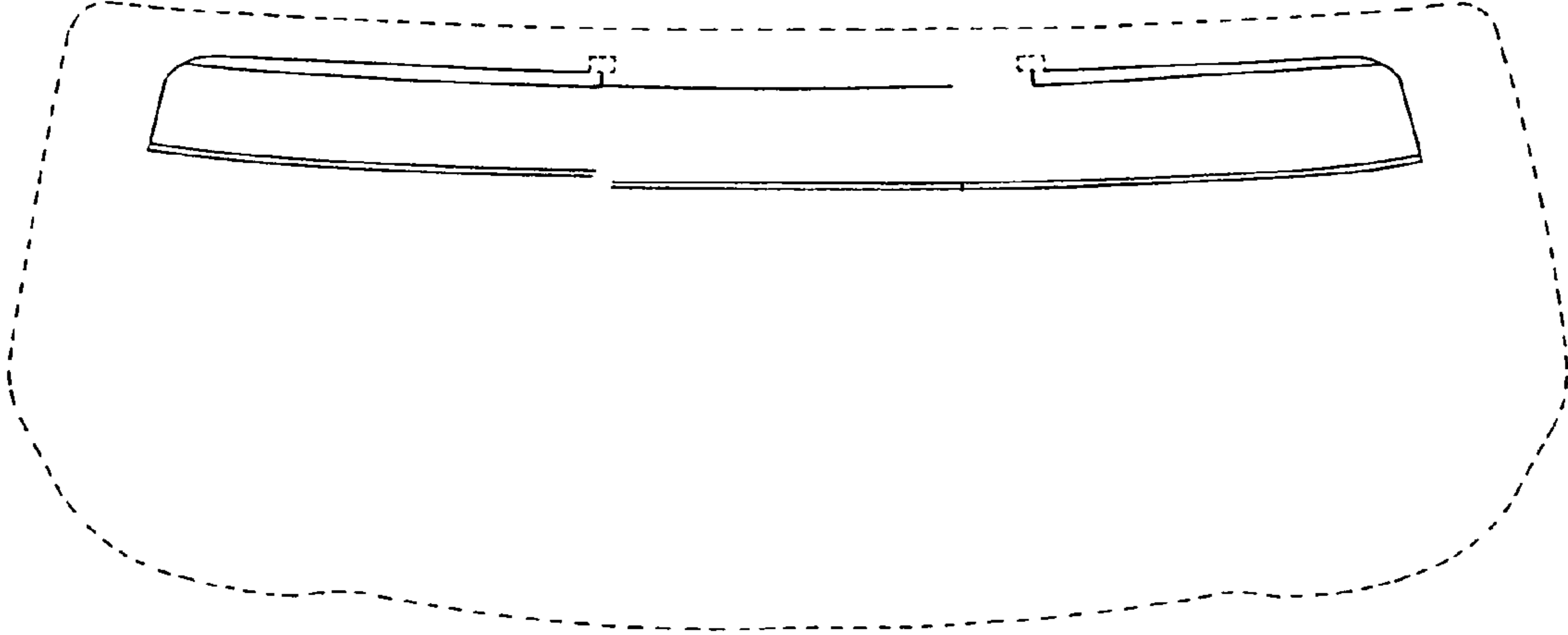


Fig. 3

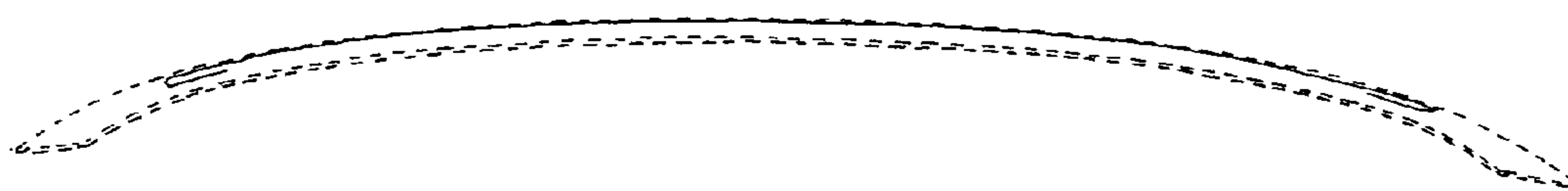


Fig. 4

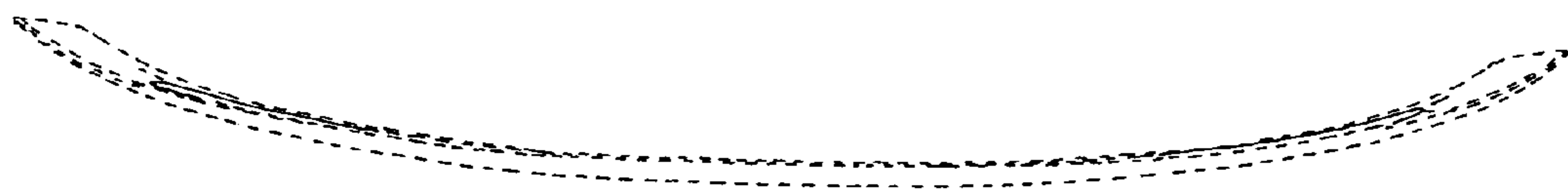


Fig. 5

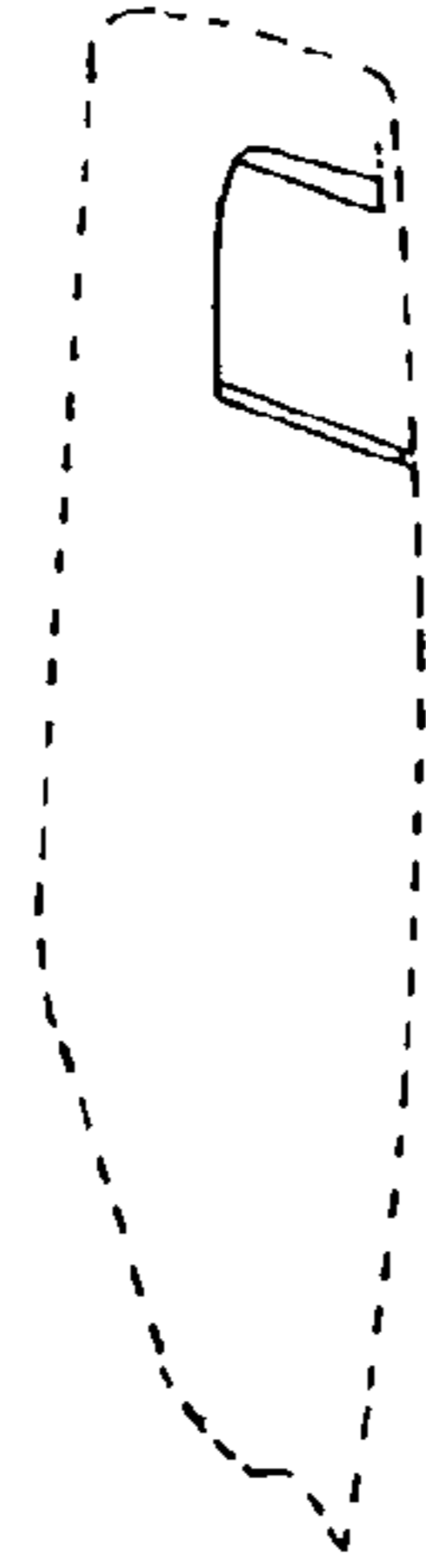


Fig. 6

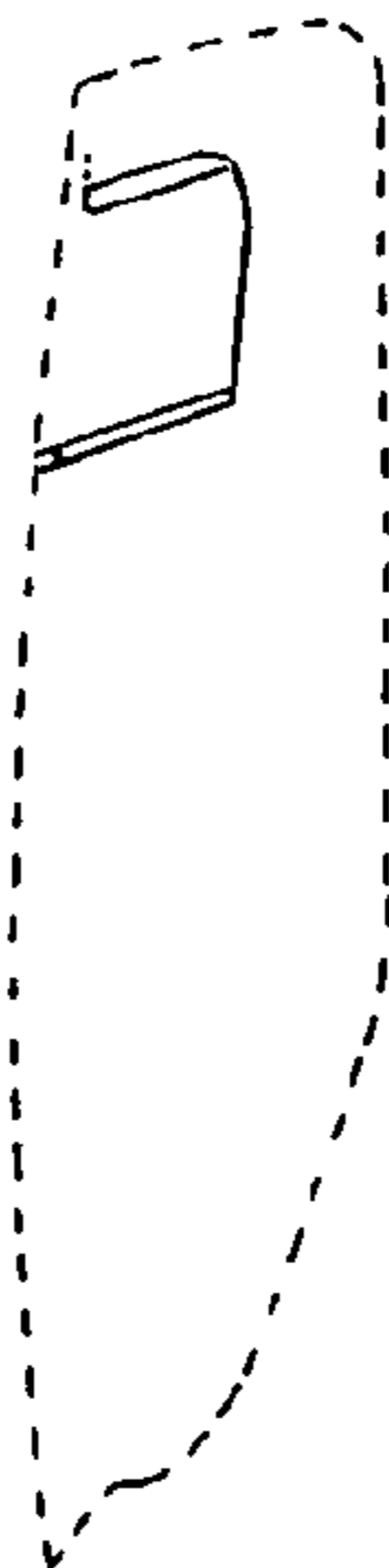


Fig. 7

