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

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(54) **MICROINFUSER**

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

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(51) **LOC (9) Cl.** **24-01**

(52) **U.S. Cl.**
USPC **D24/108; D24/111**

(58) **Field of Classification Search**
USPC **D24/108-133, 169, 186; 604/294-302, 604/46, 95.01, 132, 147, 154, 155**
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,487,603	A	12/1984	Harris	
4,517,971	A *	5/1985	Sorbonne	128/879
4,548,607	A	10/1985	Harris	
D283,045	S *	3/1986	Lynn	D24/146
4,886,514	A	12/1989	Maget	
4,902,278	A	2/1990	Maget et al.	
4,938,354	A *	7/1990	Hernandez	206/365
5,267,963	A	12/1993	Bachynsky	
5,336,180	A	8/1994	Kriesel et al.	
5,389,078	A	2/1995	Zalesky et al.	
D359,120	S *	6/1995	Sallee et al.	D24/130
5,437,636	A *	8/1995	Snoko et al.	600/139
5,582,593	A	12/1996	Hultman	
D393,271	S *	4/1998	Conner et al.	D16/130
5,741,230	A *	4/1998	Miller	604/110
5,814,020	A	9/1998	Gross	

5,840,071	A	11/1998	Kriesel et al.	
5,848,990	A	12/1998	Cirelli et al.	
5,848,991	A	12/1998	Gross et al.	
5,858,001	A	1/1999	Tsals et al.	
D405,524	S *	2/1999	Falk et al.	D24/113
5,957,895	A	9/1999	Sage et al.	
D454,194	S *	3/2002	Bar-Or	D24/108
D455,207	S *	4/2002	Gross et al.	D24/108
6,451,040	B1 *	9/2002	Purcell	606/181
6,500,150	B1	12/2002	Gross et al.	
6,527,744	B1	3/2003	Kriesel et al.	
6,629,949	B1	10/2003	Douglas	

(Continued)

FOREIGN PATENT DOCUMENTS

WO 2011/146166 A1 11/2011

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(57) **CLAIM**

The ornamental design for a microinfuser, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a microinfuser in accordance with an embodiment of the present invention.

FIG. 2 is a bottom view of the microinfuser of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 3 is a rear view of the microinfuser of FIG. 1 in accordance with an embodiment of the present invention.

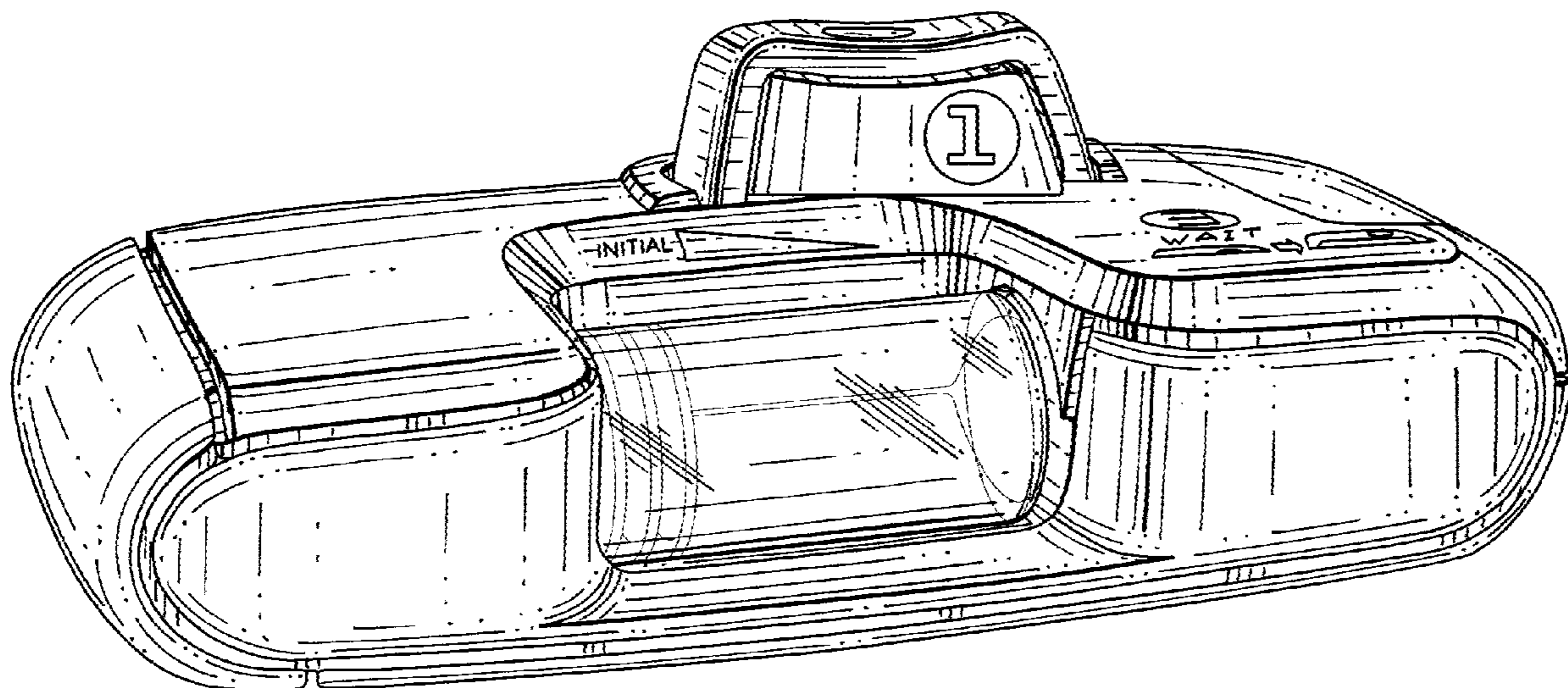
FIG. 4 is a top view of the microinfuser of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 5 is a front view of the microinfuser of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 6 is a right side view of the microinfuser of FIG. 1 in accordance with an embodiment of the present invention; and,

FIG. 7 is a left side view of the microinfuser of FIG. 1 in accordance with an embodiment of the present invention.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

6,641,566 B2 11/2003 Douglas et al.
 6,659,982 B2 12/2003 Douglas et al.
 6,699,218 B2 3/2004 Flaherty et al.
 6,808,506 B2 10/2004 Lastovich et al.
 D535,397 S * 1/2007 Chen D24/146
 7,416,540 B2 8/2008 Edwards et al.
 D602,155 S * 10/2009 Foley et al. D24/113
 D602,586 S * 10/2009 Foley et al. D24/113
 7,628,770 B2 * 12/2009 Ethelfeld 604/164.08
 7,637,891 B2 12/2009 Wall
 7,658,724 B2 2/2010 Rubin et al.
 D612,042 S * 3/2010 Noren D24/104
 7,678,079 B2 3/2010 Shermer et al.
 7,753,879 B2 * 7/2010 Merno 604/131
 7,931,621 B2 * 4/2011 Cross et al. 604/158
 7,955,297 B2 6/2011 Radmer et al.

7,967,795 B1 * 6/2011 Cabiri 604/224
 D641,076 S * 7/2011 Grunstad et al. D24/110
 7,981,085 B2 7/2011 Ethelfeld
 8,128,596 B2 3/2012 Carter
 8,128,597 B2 3/2012 Cross et al.
 8,152,779 B2 * 4/2012 Cabiri 604/240
 8,157,769 B2 * 4/2012 Cabiri 604/151
 8,286,644 B2 * 10/2012 Bennett 132/218
 8,303,615 B2 * 11/2012 Purcell 606/182
 8,348,898 B2 * 1/2013 Cabiri 604/137
 D676,955 S * 2/2013 Orome D24/108
 D681,195 S * 4/2013 Skulley et al. D24/113
 2007/0005017 A1 1/2007 Alchas et al.
 2007/0287969 A1 12/2007 Rezai et al.
 2008/0215015 A1 9/2008 Cindrich et al.
 2009/0221971 A1 9/2009 Mejlhede et al.
 2010/0222743 A1 9/2010 Frederickson et al.
 2010/0292648 A1 11/2010 Lastovich et al.

* cited by examiner

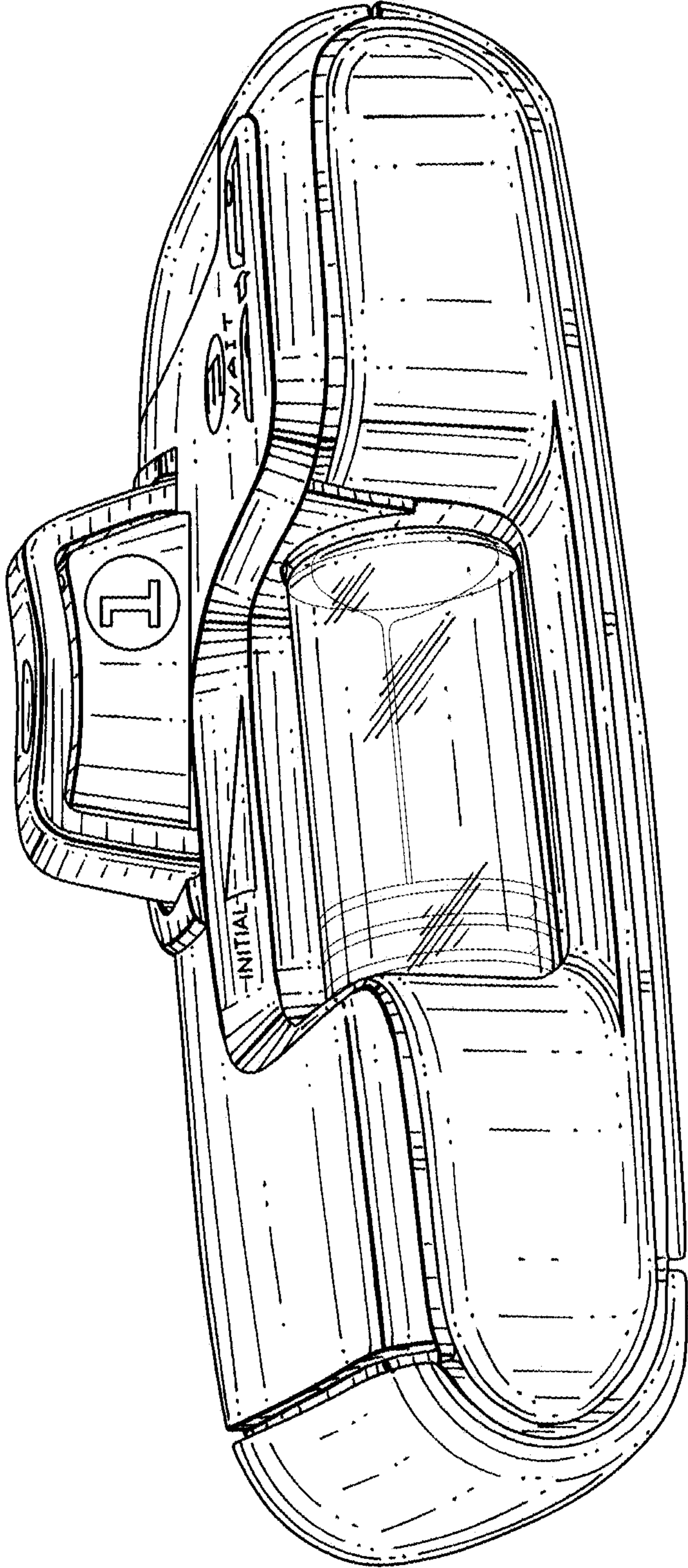


FIG. 1

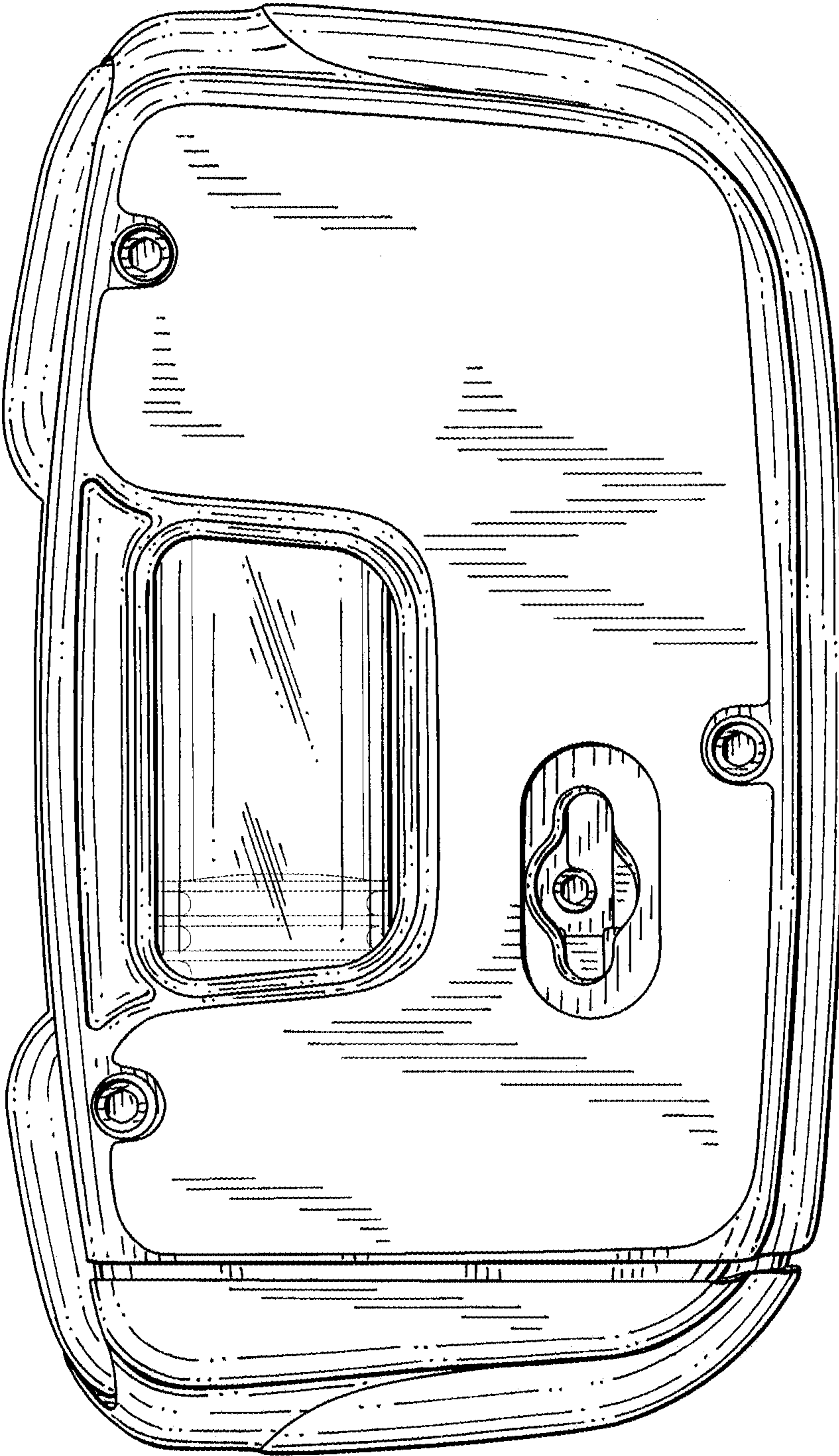


FIG.2

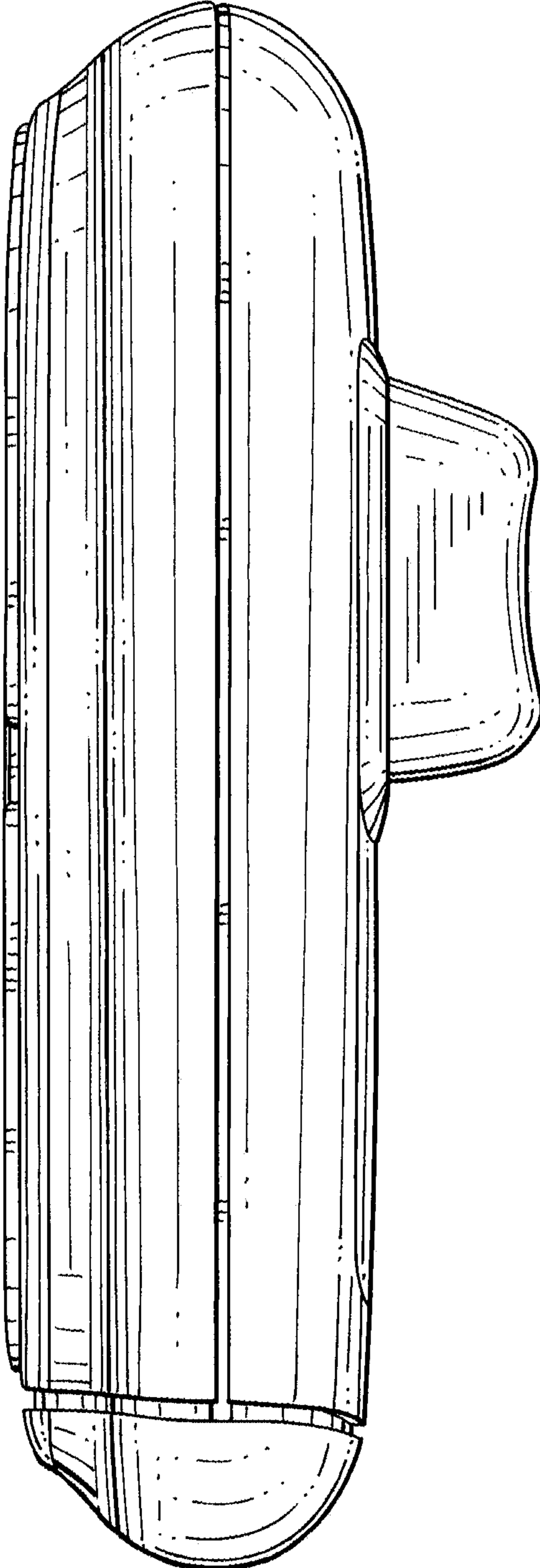


FIG. 3

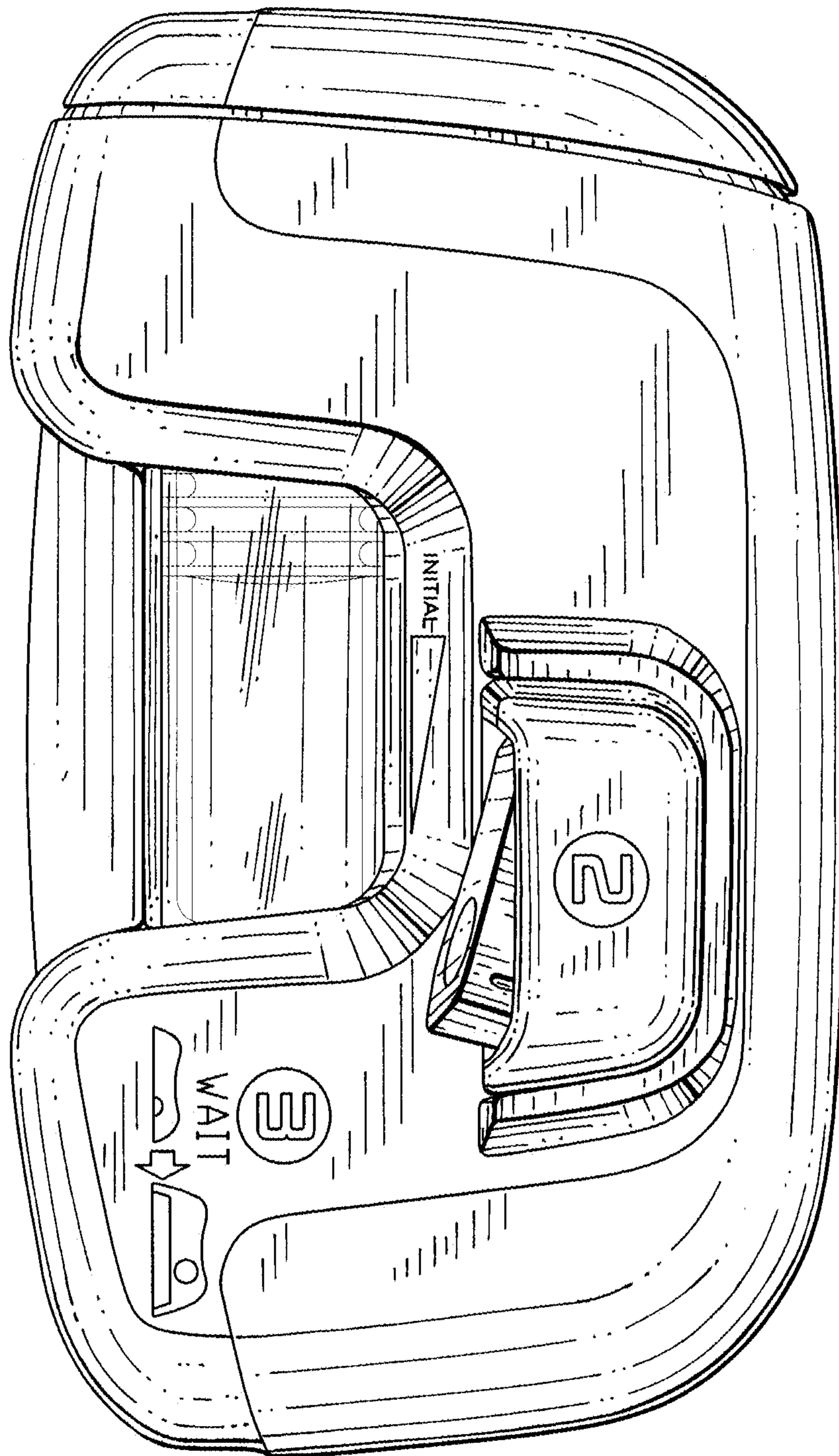


FIG.4

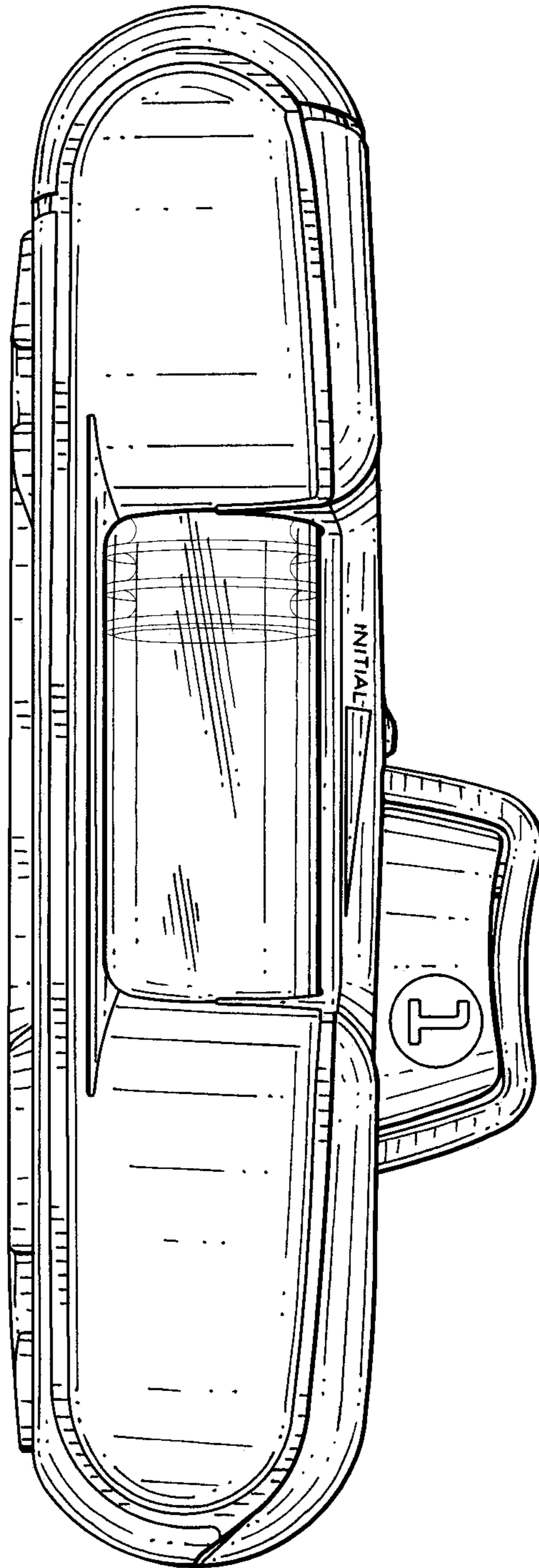


FIG.5

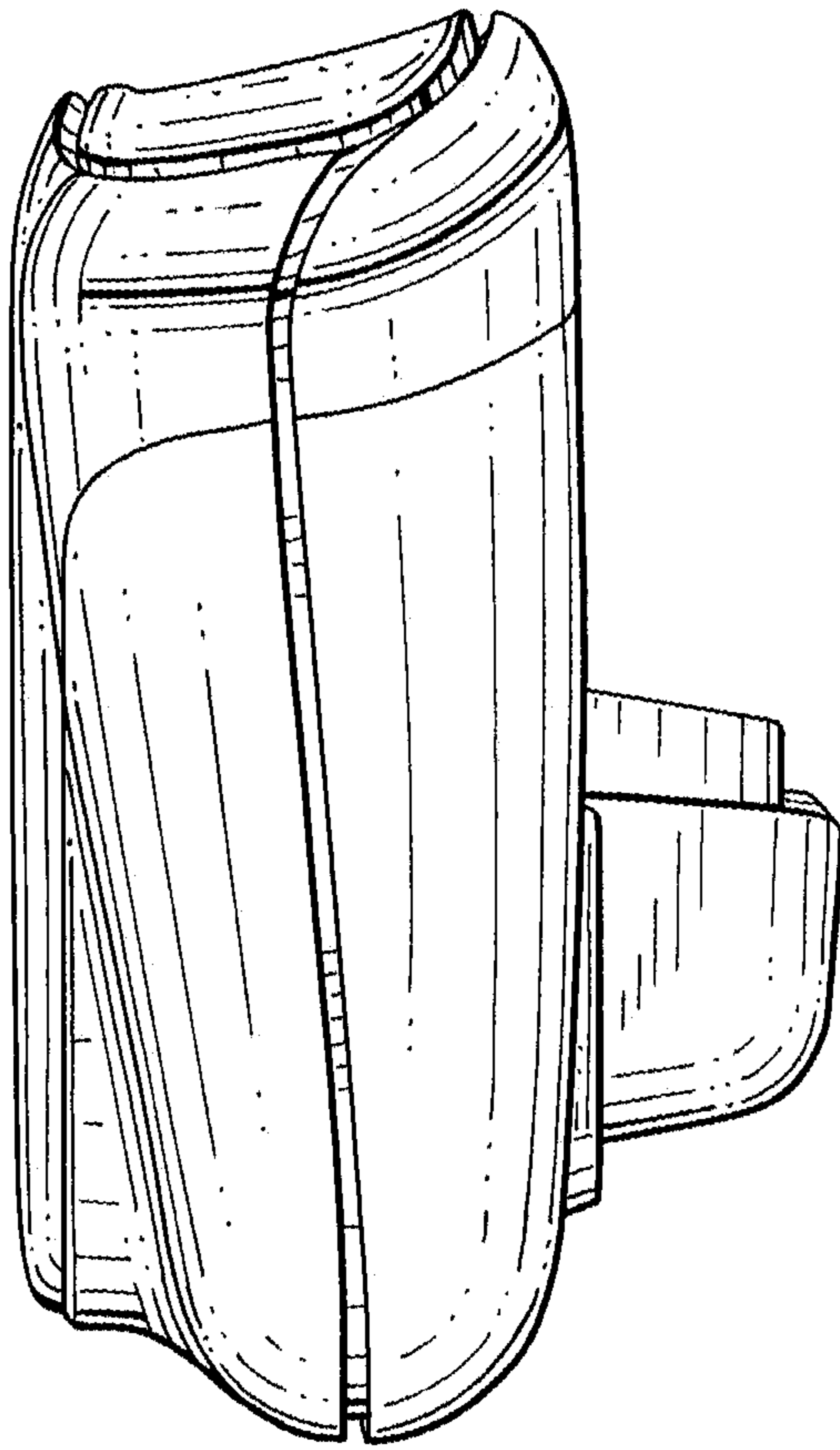


FIG.6

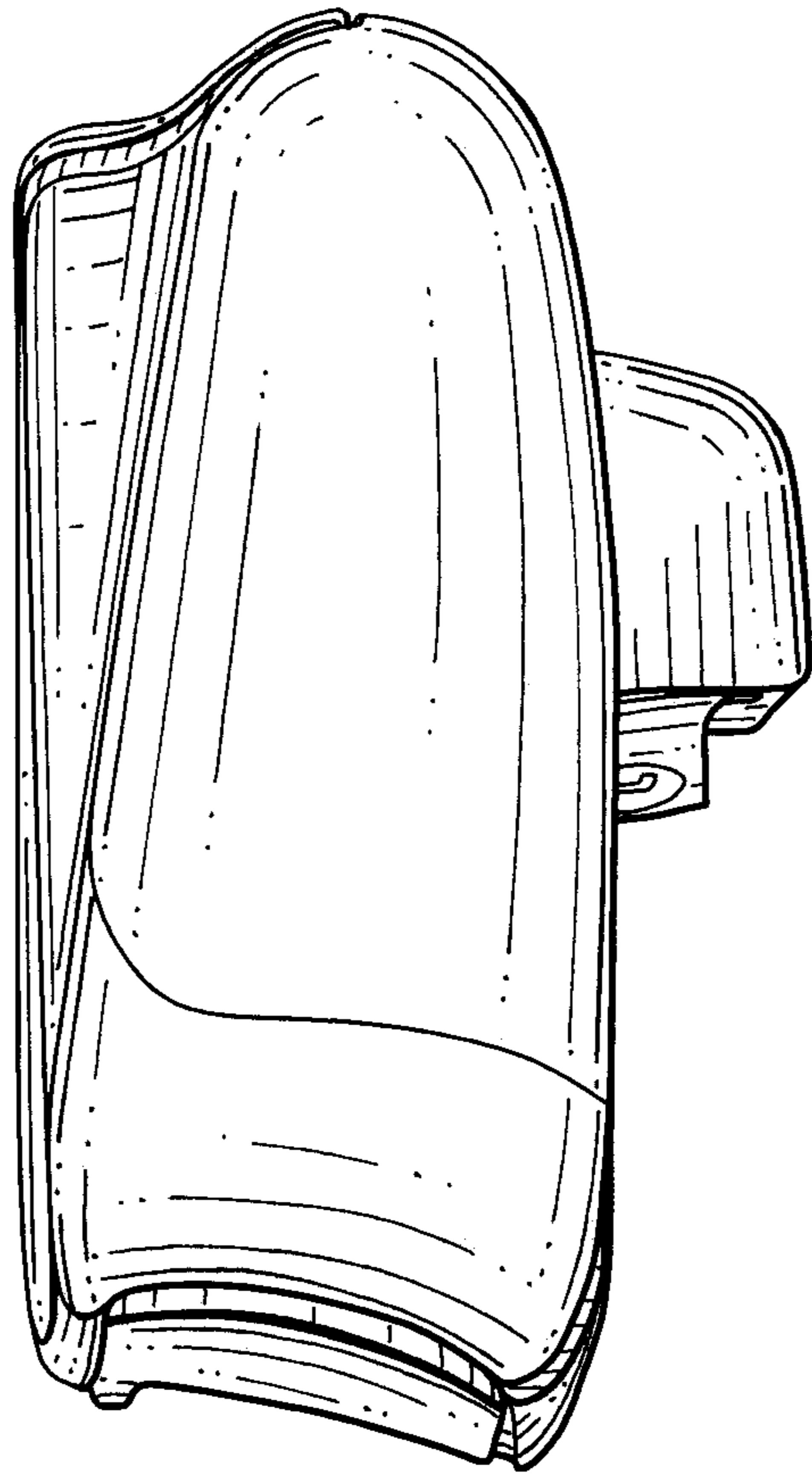


FIG.7