



US00D767130S

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

(10) **Patent No.:** **US D767,130 S**
(45) **Date of Patent:** **** Sep. 20, 2016**

(54) **SURGICAL INSTRUMENT END PORTION**

(71) Applicant: **Intuitive Surgical Operations, Inc.**,
Sunnyvale, CA (US)

(72) Inventors: **Scott Waters**, Hollis, NH (US);
Edward P Donlon, San Jose, CA (US)

(73) Assignee: **Intuitive Surgical Operations, Inc.**,
Sunnyvale, CA (US)

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

(21) Appl. No.: **29/485,144**

(22) Filed: **Mar. 17, 2014**

(51) **LOC (10) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/133; D24/146**

(58) **Field of Classification Search**
USPC D24/113, 127, 133, 138, 147, 183, 184,
D24/215; 600/584; 606/1; D28/58, 59, 62;
74/89.14; 901/41; 700/250
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D438,617 S *	3/2001	Cooper et al.	D24/133
D441,076 S *	4/2001	Cooper et al.	D24/133
D444,555 S *	7/2001	Cooper et al.	D24/133
6,742,413 B2 *	6/2004	Schwital et al.	74/606 R
7,140,151 B2 *	11/2006	Spaziani et al.	49/349
D577,823 S *	9/2008	Hensler et al.	D24/138
D637,287 S *	5/2011	Mudd et al.	D24/133
D652,923 S *	1/2012	Kennedy et al.	D24/138
D657,057 S *	4/2012	Kearsley	D24/133
8,224,484 B2 *	7/2012	Swarup et al.	700/245
8,323,213 B2 *	12/2012	Kim	600/584
8,375,808 B2 *	2/2013	Blumenkranz et al. .	73/862.044
8,423,186 B2 *	4/2013	Itkowitz	A61B 19/2203 606/130
8,466,811 B2 *	6/2013	Kang	G06F 3/014 341/20
D687,599 S *	8/2013	Amit	D28/58
D705,488 S *	5/2014	Cheng	D28/58

8,740,880 B2 *	6/2014	Pinault	A61N 5/1049 606/1
8,862,268 B2 *	10/2014	Robinson	A61B 18/1206 700/245
9,089,972 B2 *	7/2015	Stuart	G06F 19/321
9,161,772 B2 *	10/2015	Hyodo	B25J 13/02

(Continued)

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/485,142, Surgical Instrument End Portion, filed Mar. 17, 2014.

(Continued)

Primary Examiner — Ian Simmons
Assistant Examiner — Samantha Q Lawrence

(57) **CLAIM**

The ornamental design for a surgical instrument end portion, as shown and described.

DESCRIPTION

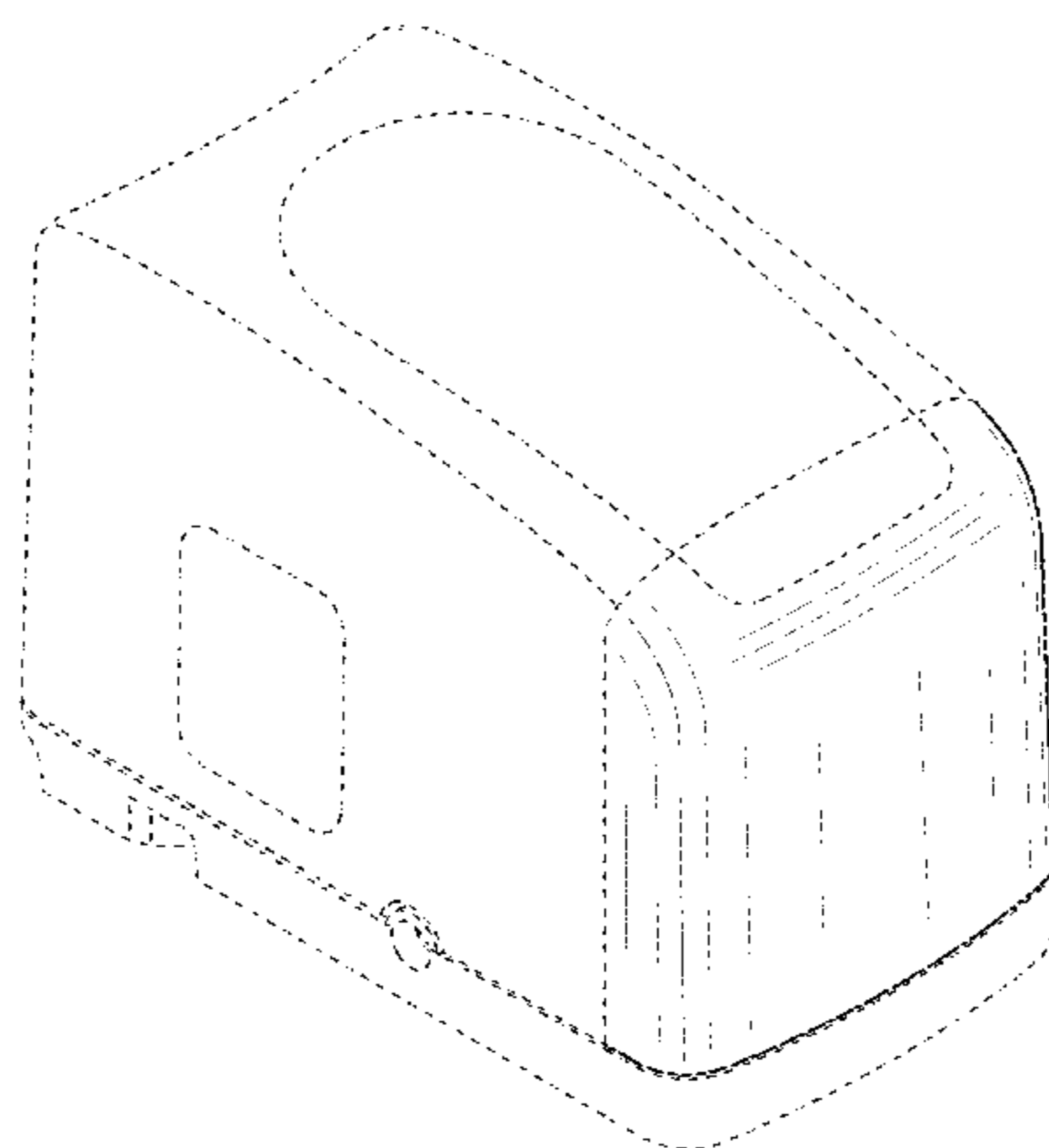
FIG. 1 is a front top perspective view of an embodiment of a surgical instrument end portion of our new design; FIG. 2 is another front top perspective view thereof; FIG. 3 is a rear top perspective view thereof; FIG. 4 is another rear top perspective view thereof; FIG. 5 is a front bottom perspective view thereof; FIG. 6 is a left side view thereof; and, FIG. 7 is a right side view thereof; FIG. 8 is a front view thereof; and, FIG. 9 is a top view thereof.

Rear views of the surgical instrument end portion are omitted as the rear view forms no part of the claimed design, and rear perspective views are shown in FIGS. 3 and 4.

Bottom views of the surgical instrument end portion are omitted as the bottom view forms no part of the claimed design, and a bottom perspective views is shown in FIG. 5. The shade lines in the Figures show contour and not surface ornamentation.

The broken lines shown in FIGS. 1-9 illustrate portions of the surgical instrument end portion that form no part of the claimed design.

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

9,162,358 B2 * 10/2015 Geffard B25J 9/1679
 9,204,934 B2 * 12/2015 Ogawa B25J 3/04
 2005/0251110 A1 * 11/2005 Nixon 606/1
 2006/0074406 A1 * 4/2006 Cooper et al. 606/1
 2007/0005002 A1 * 1/2007 Millman et al. 604/30
 2007/0142824 A1 * 6/2007 Devengenzo et al. 606/1
 2008/0139964 A1 * 6/2008 Murray et al. 600/584
 2009/0248036 A1 * 10/2009 Hoffman et al. 606/130
 2010/0169815 A1 * 7/2010 Zhao et al. 715/771
 2011/0071473 A1 * 3/2011 Rogers et al. 604/167.01
 2011/0071543 A1 * 3/2011 Prisco et al. 606/130
 2011/0118748 A1 * 5/2011 Itkowitz A61B 19/2203
 606/130
 2012/0215220 A1 * 8/2012 Manzo et al. 606/46

2013/0046318 A1 * 2/2013 Radgowski et al. 606/130
 2014/0081455 A1 * 3/2014 Goldberg A61B 19/2203
 700/250
 2014/0128886 A1 * 5/2014 Holop A61B 19/2203
 606/130
 2014/0338477 A1 * 11/2014 Donlon F16H 19/02
 74/89.14
 2015/0257814 A1 * 9/2015 Berry A61B 18/12
 606/34

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/485,147, Surgical Instrument End Portion, filed Mar. 17, 2014.
 Design U.S. Appl. No. 29/485,148, Surgical Instrument End Portion, filed Mar. 17, 2014.

* cited by examiner

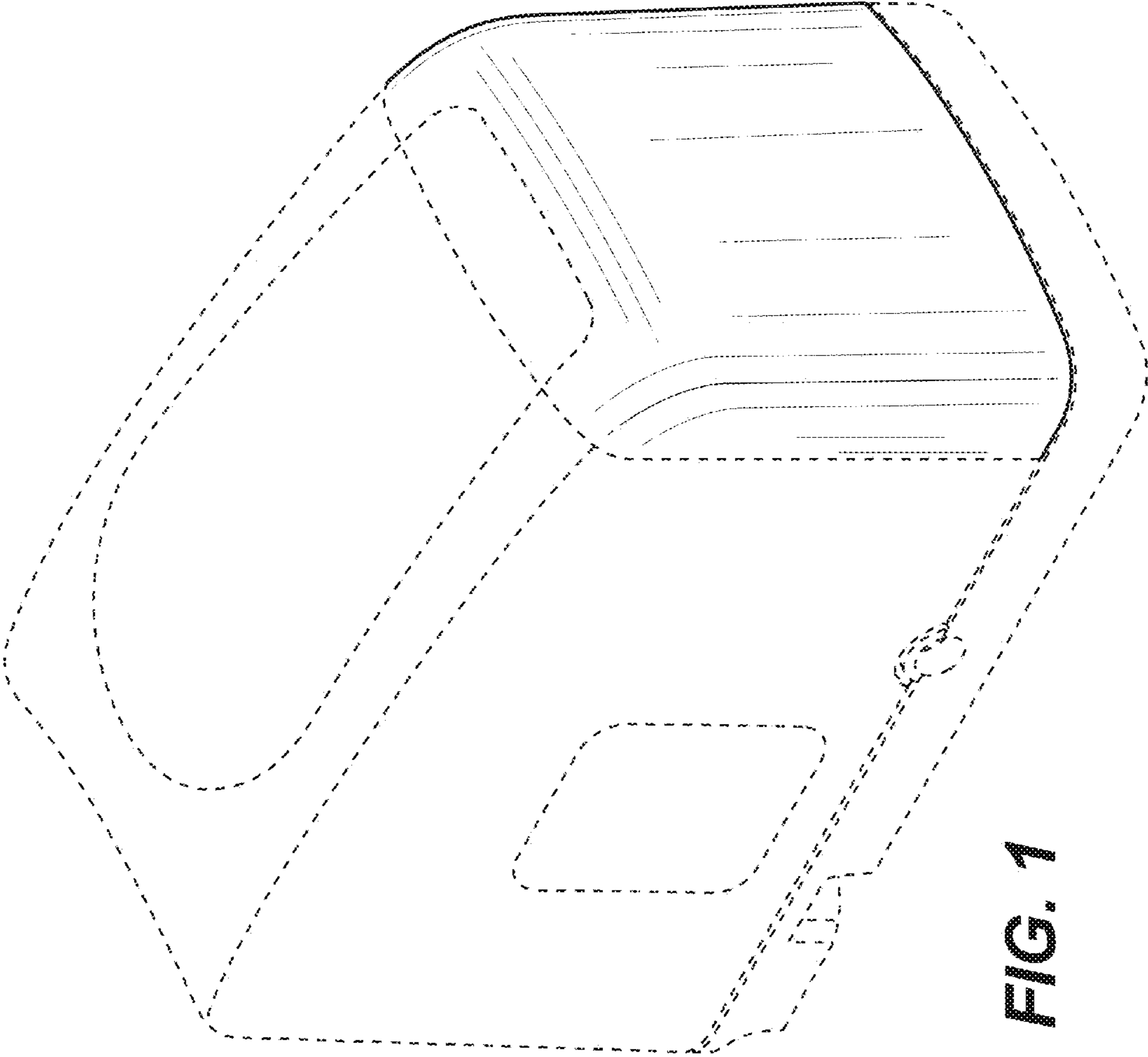


FIG. 1

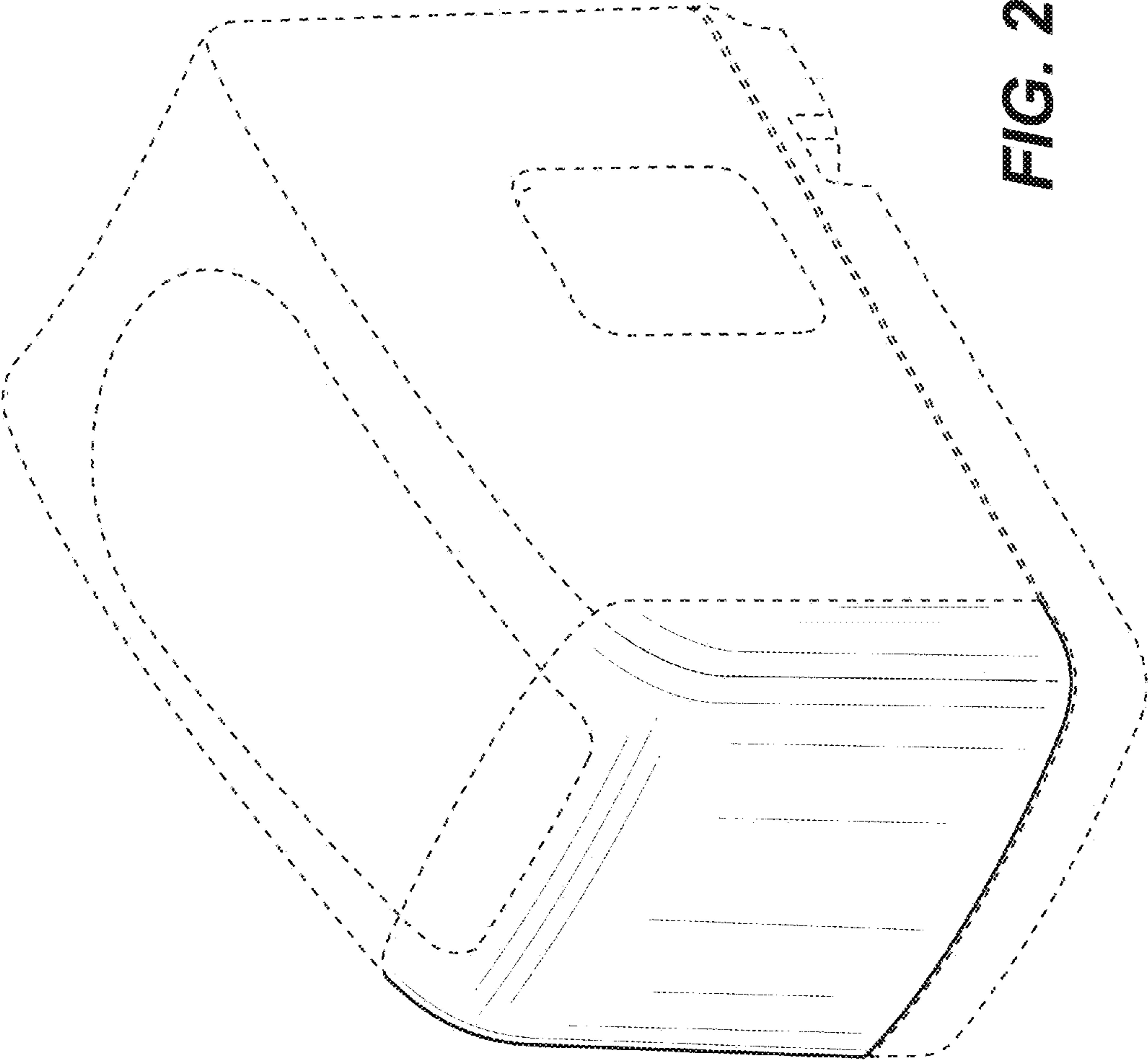


FIG. 2

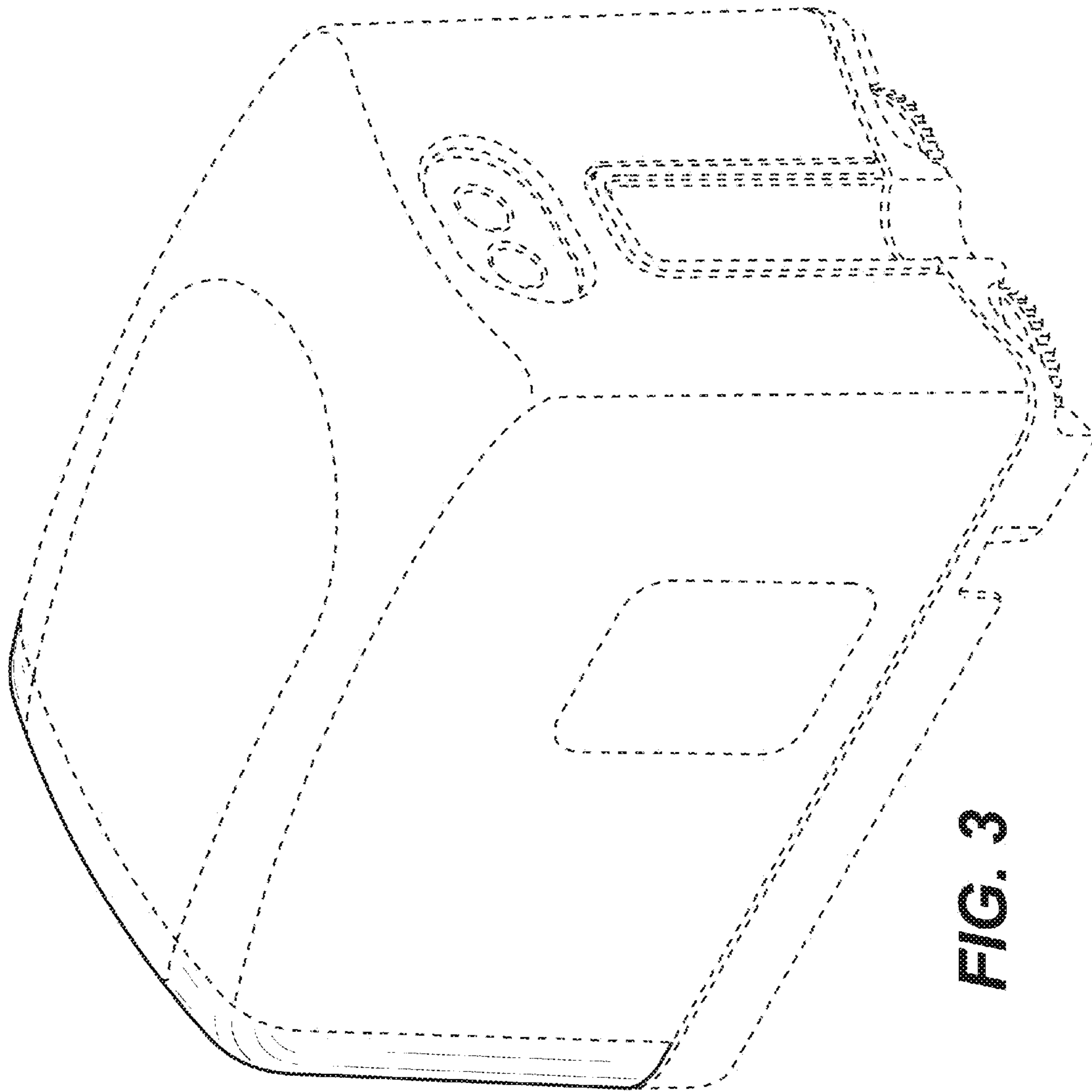


FIG. 3

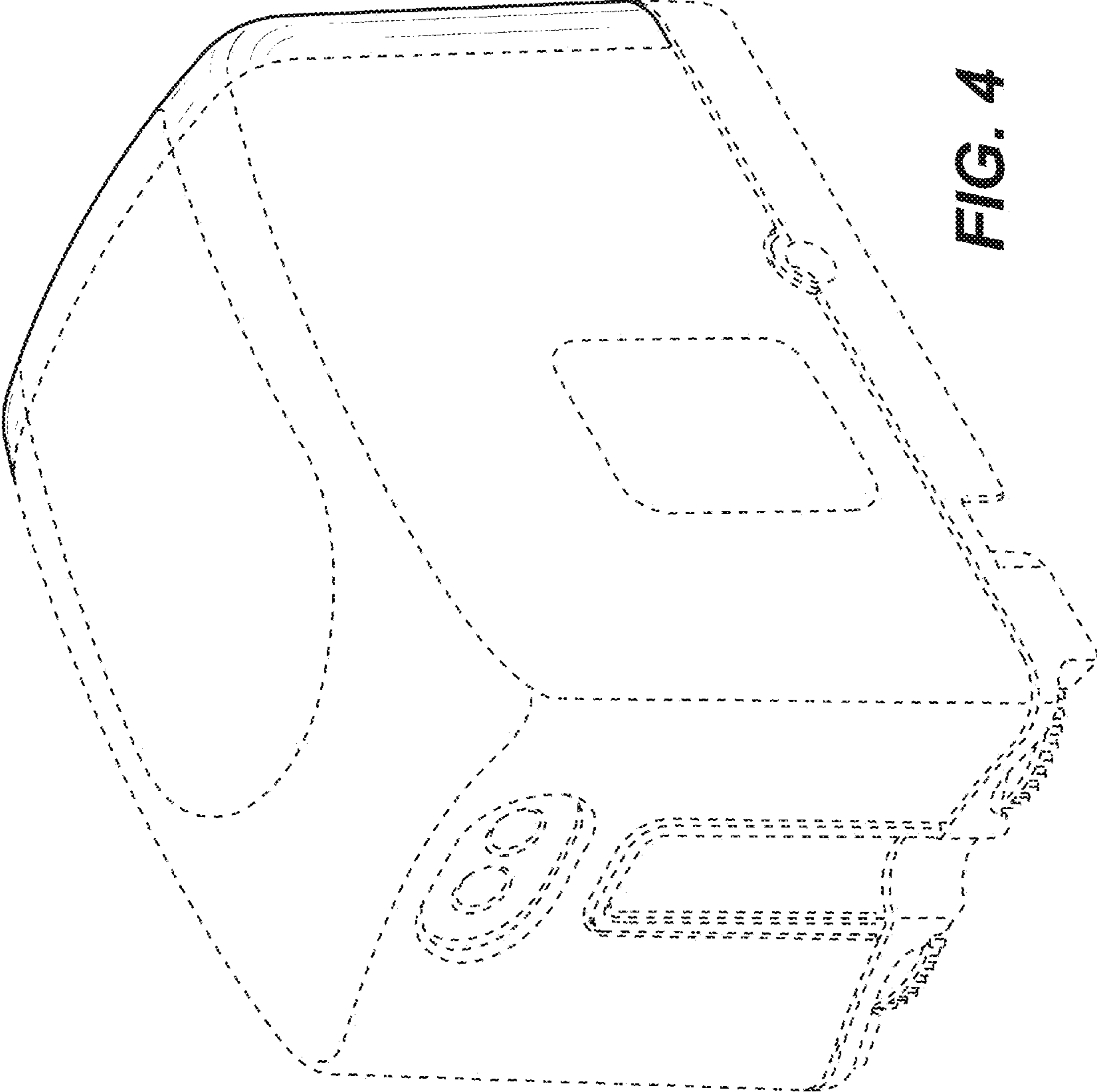


FIG. 4

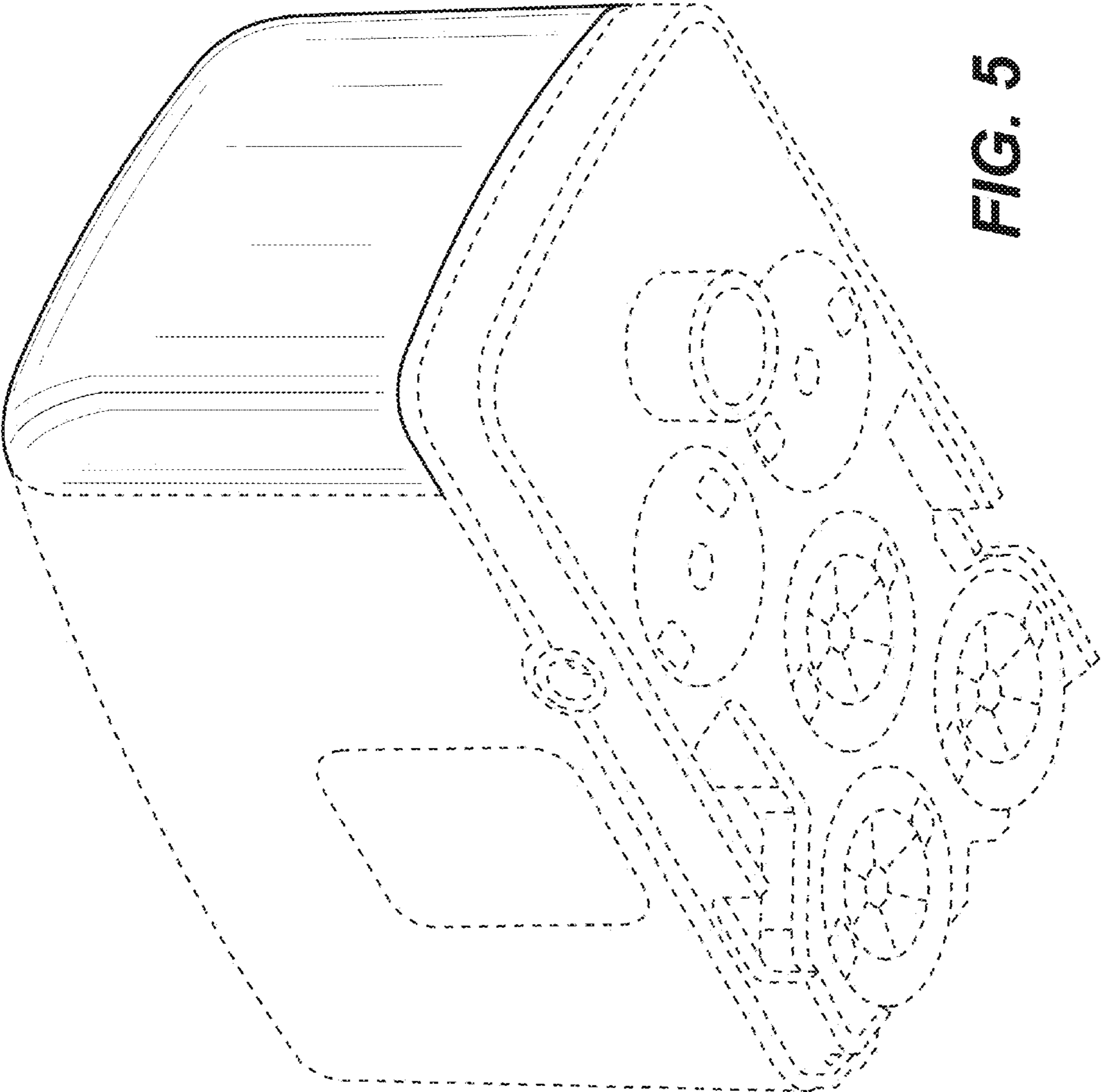


FIG. 5

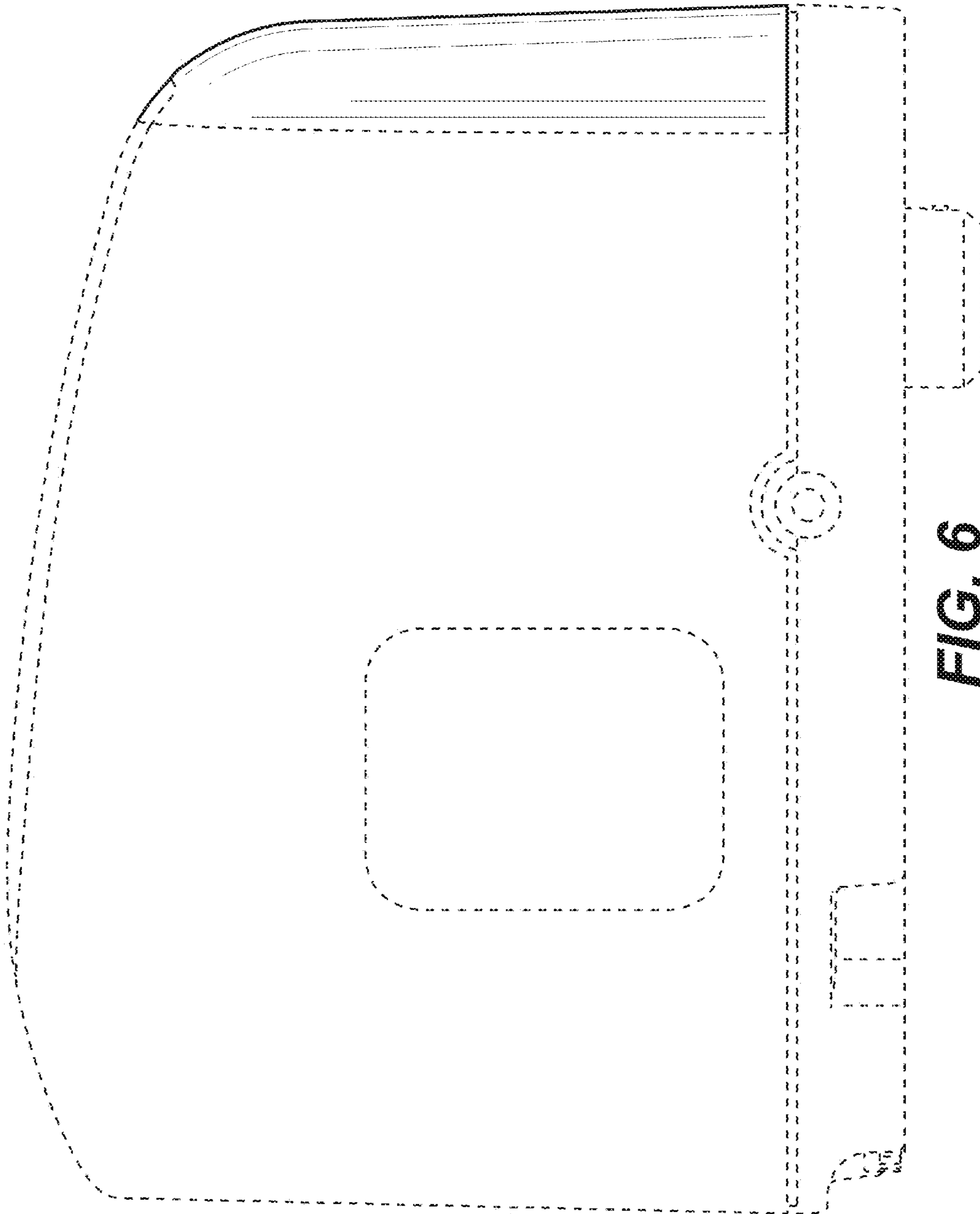


FIG. 6

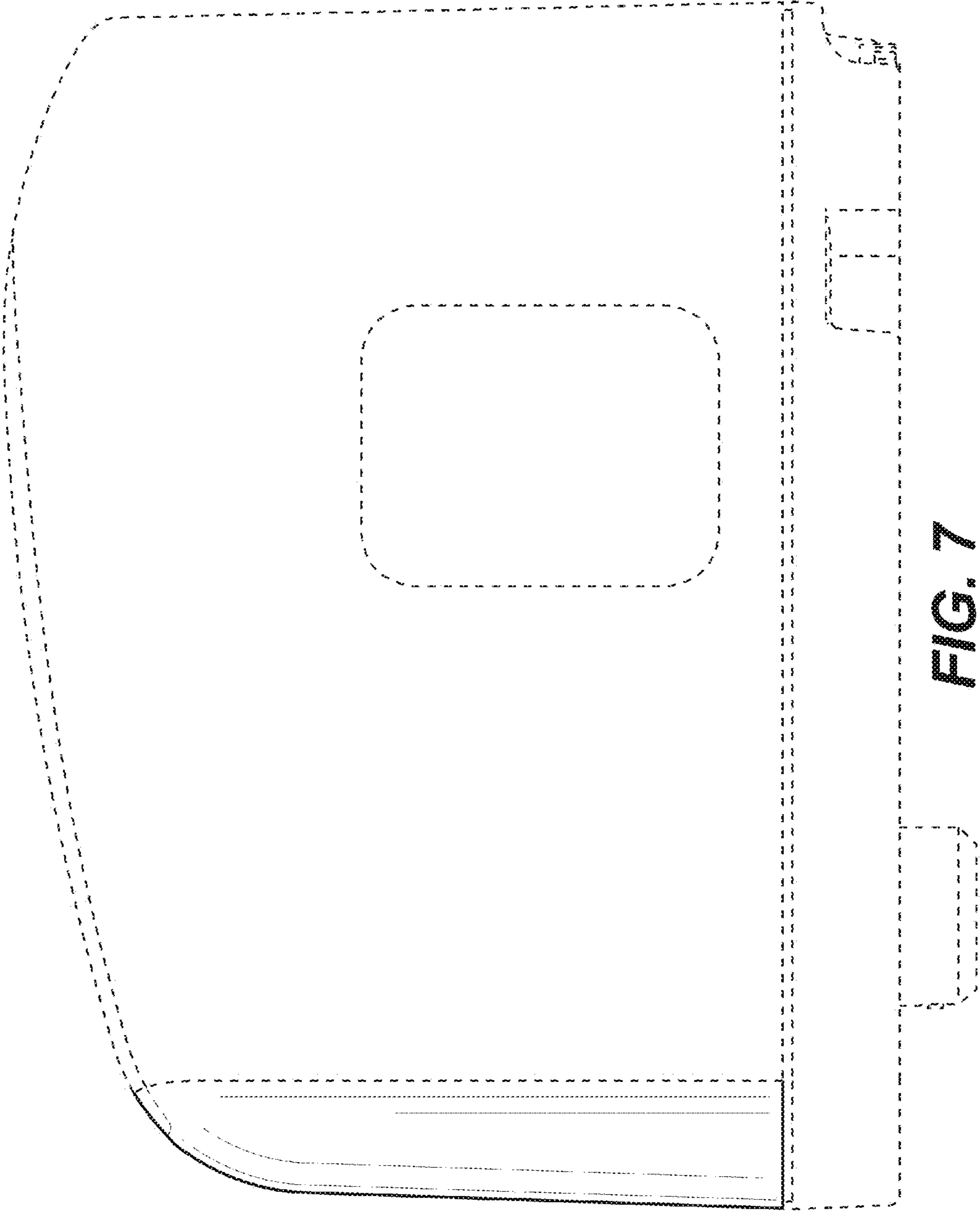


FIG. 7

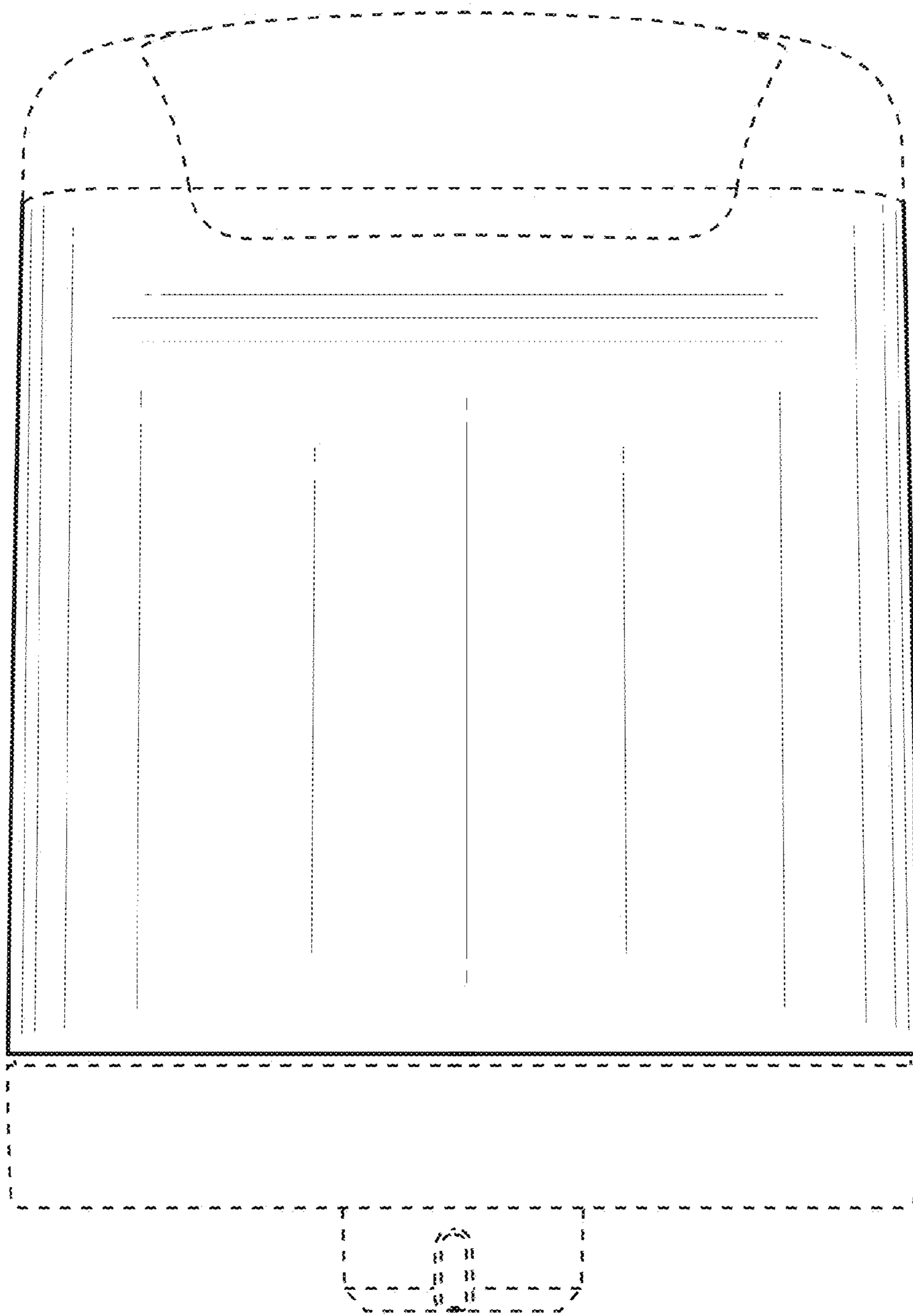


FIG. 8

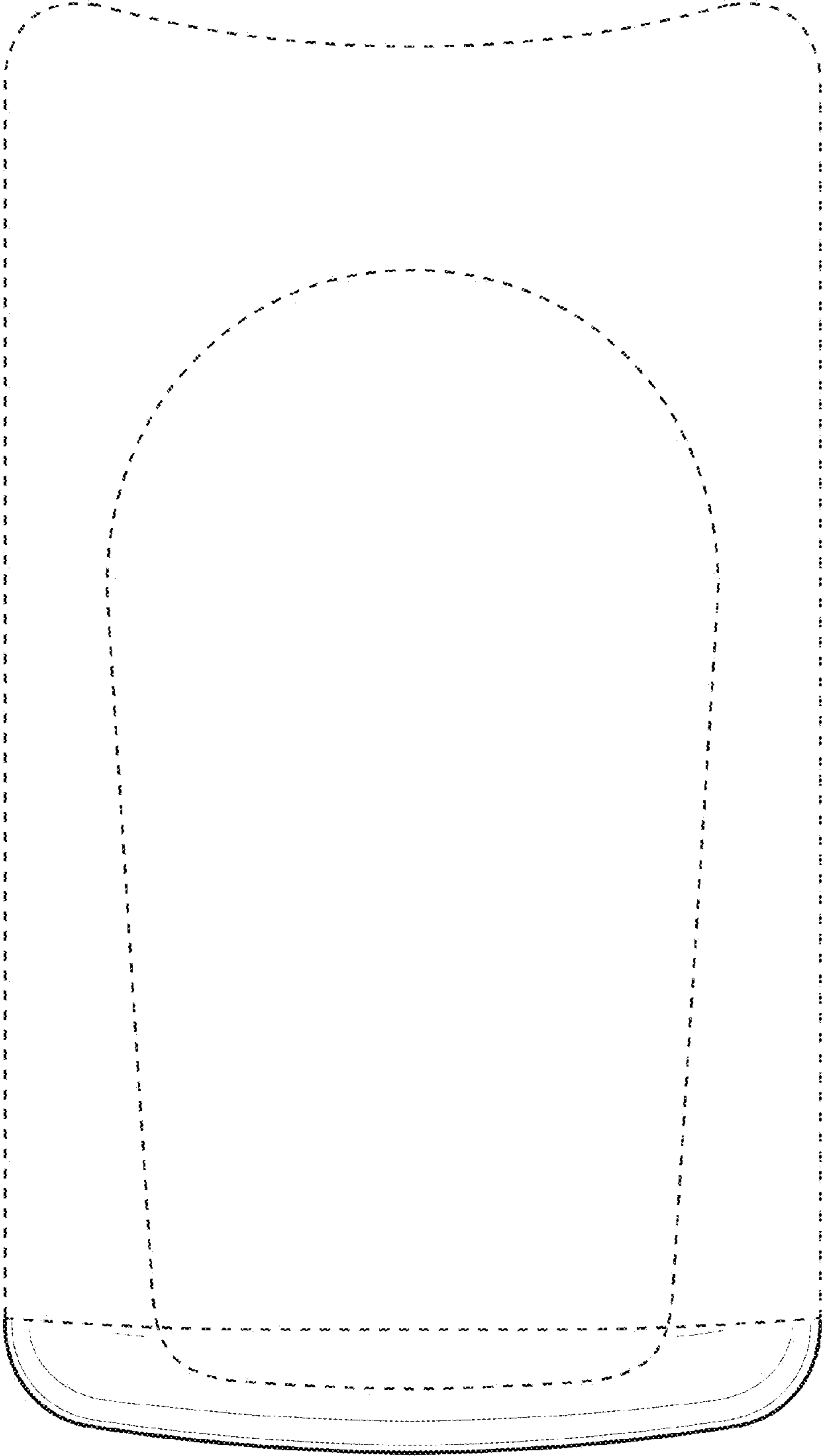


FIG. 9