



US0D1007347S

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

(10) **Patent No.:** **US D1,007,347 S**

(45) **Date of Patent:** **** Dec. 12, 2023**

(54) **SENSOR ASSEMBLY**

(71) Applicant: **Waymo LLC**, Mountain View, CA (US)

(72) Inventors: **YooJung Ahn**, Mountain View, CA (US); **Toshihiro Fujimura**, San Francisco, CA (US); **Jared Gross**, Belmont, CA (US); **Solomon Lyman**, Mill Creek, WA (US)

(73) Assignee: **Waymo LLC**, Mountain View, CA (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/820,819**

(22) Filed: **Dec. 23, 2021**

(51) **LOC (14) Cl.** **10-04**

(52) **U.S. Cl.**
USPC **D10/65; D10/70; D12/187**

(58) **Field of Classification Search**
USPC **D10/65, 70; D12/187, 188**

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D417,165 S 11/1999 Takeda et al.
D499,035 S 11/2004 Cook et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CN 304206135 7/2017
CN 304688785 6/2018

(Continued)

OTHER PUBLICATIONS

“Vehicle Detection Sensor for Barriers and Gates”; motion29.com; retrieved Dec. 19, 2021; published date unknwn, prior to the filing date of the present Application; URL: <<https://www.motion29.com/products/vehicledetectionandcontrol/vehicledetectionsensorforbarriersandgates/default.htm>>.

Primary Examiner — Antoine Duval Davis

(74) *Attorney, Agent, or Firm* — Banner & Witcoff, Ltd.

(57) **CLAIM**

The ornamental design for a sensor assembly, as shown and described.

DESCRIPTION

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

FIG. 1 is a top, front, left perspective view of a first embodiment of the claimed design for a sensor assembly; FIG. 2 is a front view thereof; FIG. 3 is a back view thereof; FIG. 4 is a right side view thereof; FIG. 5 is a left side view thereof; FIG. 6 is a top view thereof; FIG. 7 is a bottom view thereof; FIG. 8 is a top, front, left perspective view of a second embodiment of the claimed design for a sensor assembly; FIG. 9 is a front view thereof; FIG. 10 is a back view thereof; FIG. 11 is a right side view thereof; FIG. 12 is a left side view thereof; FIG. 13 is a top view thereof; FIG. 14 is a bottom view thereof; FIG. 15 is a top, front, left perspective view of a third embodiment of the claimed design for a sensor assembly; FIG. 16 is a front view thereof; FIG. 17 is a back view thereof; FIG. 18 is a right side view thereof; FIG. 19 is a left side view thereof; FIG. 20 is a top view thereof; FIG. 21 is a bottom view thereof; FIG. 22 is a top, front, left perspective view of a fourth embodiment of the claimed design for a sensor assembly; FIG. 23 is a front view thereof; FIG. 24 is a back view thereof; FIG. 25 is a right side view thereof; FIG. 26 is a left side view thereof; FIG. 27 is a top view thereof; FIG. 28 is a bottom view thereof; FIG. 29 is a top, front, left perspective view of a fifth embodiment of the claimed design for a sensor assembly; FIG. 30 is a front view thereof; FIG. 31 is a back view thereof;

(Continued)

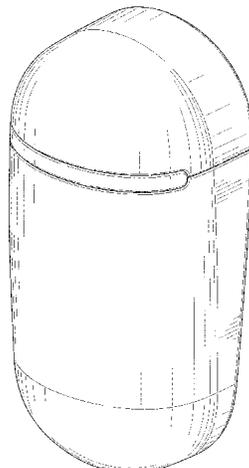


FIG. 32 is a right side view thereof;
 FIG. 33 is a left side view thereof;
 FIG. 34 is a top view thereof;
 FIG. 35 is a bottom view thereof;
 FIG. 36 is a top, front, left perspective view of a sixth embodiment of the claimed design for a sensor assembly;
 FIG. 37 is a front view thereof;
 FIG. 38 is a back view thereof;
 FIG. 39 is a right side view thereof;
 FIG. 40 is a left side view thereof;
 FIG. 41 is a top view thereof;
 FIG. 42 is a bottom view thereof;
 FIG. 43 is a top, front, left perspective view of a seventh embodiment of the claimed design for a sensor assembly;
 FIG. 44 is a front view thereof;
 FIG. 45 is a back view thereof;
 FIG. 46 is a right side view thereof;
 FIG. 47 is a left side view thereof;
 FIG. 48 is a top view thereof;
 FIG. 49 is a bottom view thereof;
 FIG. 50 is a top, front, left perspective view of an eighth embodiment of the claimed design for a sensor assembly;
 FIG. 51 is a front view thereof;
 FIG. 52 is a back view thereof;
 FIG. 53 is a right side view thereof;
 FIG. 54 is a left side view thereof;
 FIG. 55 is a top view thereof; and,
 FIG. 56 is a bottom view thereof.
 The broken lines showing the remainder of the sensor assembly depict environmental structure and form no part of the claimed design.

1 Claim, 48 Drawing Sheets
(11 of 48 Drawing Sheet(s) Filed in Color)

(58) **Field of Classification Search**
 CPC G01S 7/4808; G01S 7/481; G01S 7/4813;
 G01S 17/93; G01S 17/936; G08G 1/16;

B60R 1/12; B60R 1/074; B60R 1/072;
 B60R 1/06; B60R 1/003; B60R 1/00;
 B60R 1/0605; B60R 1/0607; B60R
 1/0612; B60R 11/04; B60R 11/0258;
 B60R 11/0264; B60R 2001/1223; B60R
 2011/004; B62D 15/00; B62D 15/024

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

D736,107	S	*	8/2015	Lee	D10/70
D826,941	S		8/2018	Zhou et al.	
D853,257	S	*	7/2019	Mörsch	D10/70
D854,436	S		7/2019	Morita et al.	
D862,266	S		10/2019	Kondo et al.	
D873,828	S		1/2020	Zhou et al.	
D875,575	S	*	2/2020	Fagnot	D10/70
10,773,273	B2		9/2020	Mousavi Ehteshami et al.	
D915,229	S	*	4/2021	King	D10/70
2020/0116828	A1		4/2020	Yautz et al.	
2021/0016703	A1		1/2021	Shitara et al.	
2021/0339710	A1		11/2021	Adams et al.	
2021/0341583	A1		11/2021	Adams et al.	
2021/0341613	A1		11/2021	Adams et al.	

FOREIGN PATENT DOCUMENTS

JP	D1464896	3/2013
JP	D1471850	6/2013
JP	D1515122	1/2015
JP	D1609381	7/2018
JP	D1609382	7/2018
JP	D1614073	9/2018
WO	D099365-001	5/2018
WO	D099365-002	5/2018
WO	D099365-003	5/2018
WO	D099365-004	5/2018
WO	D212419-001	2/2021

* cited by examiner

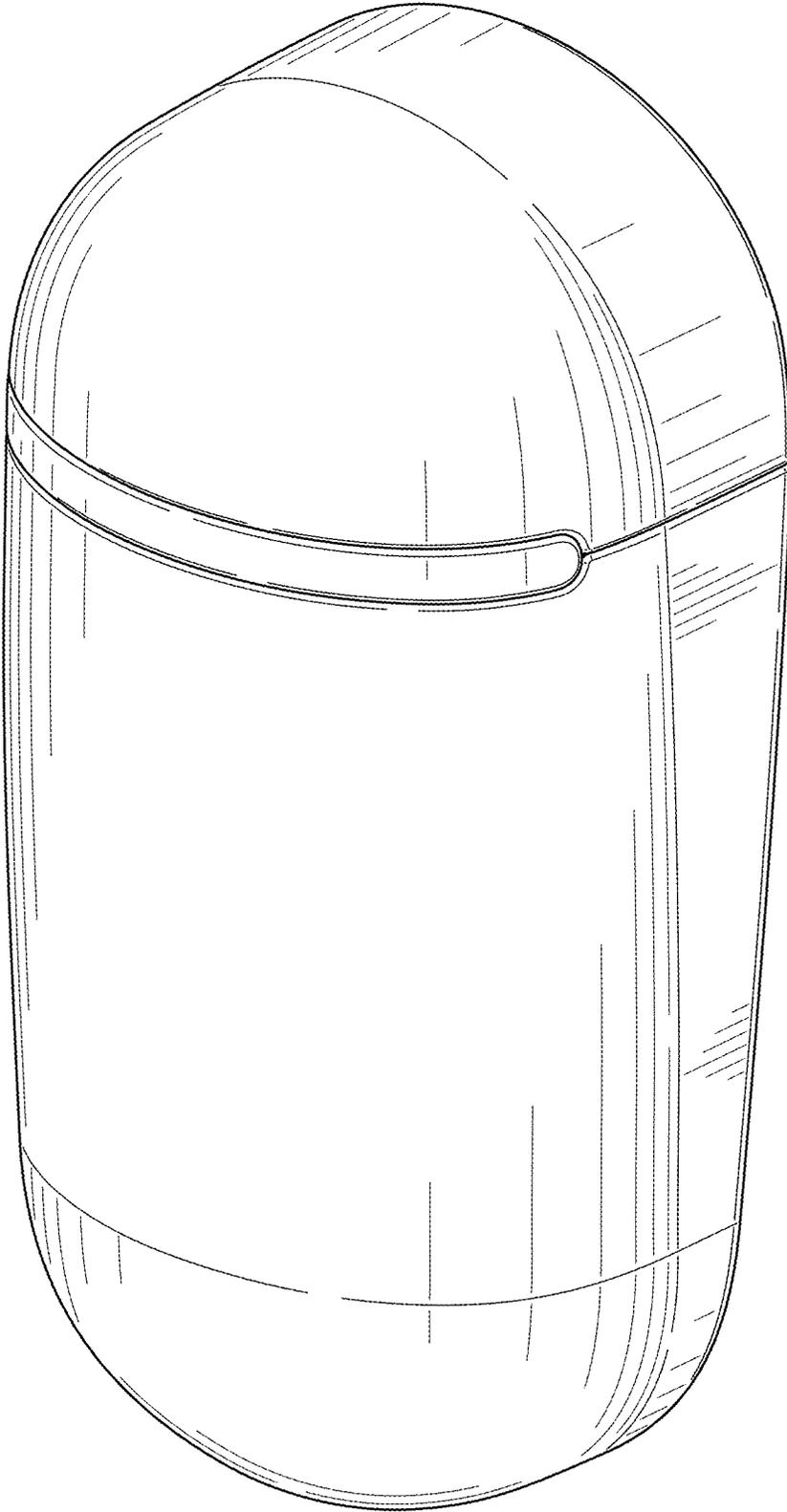


FIG. 1

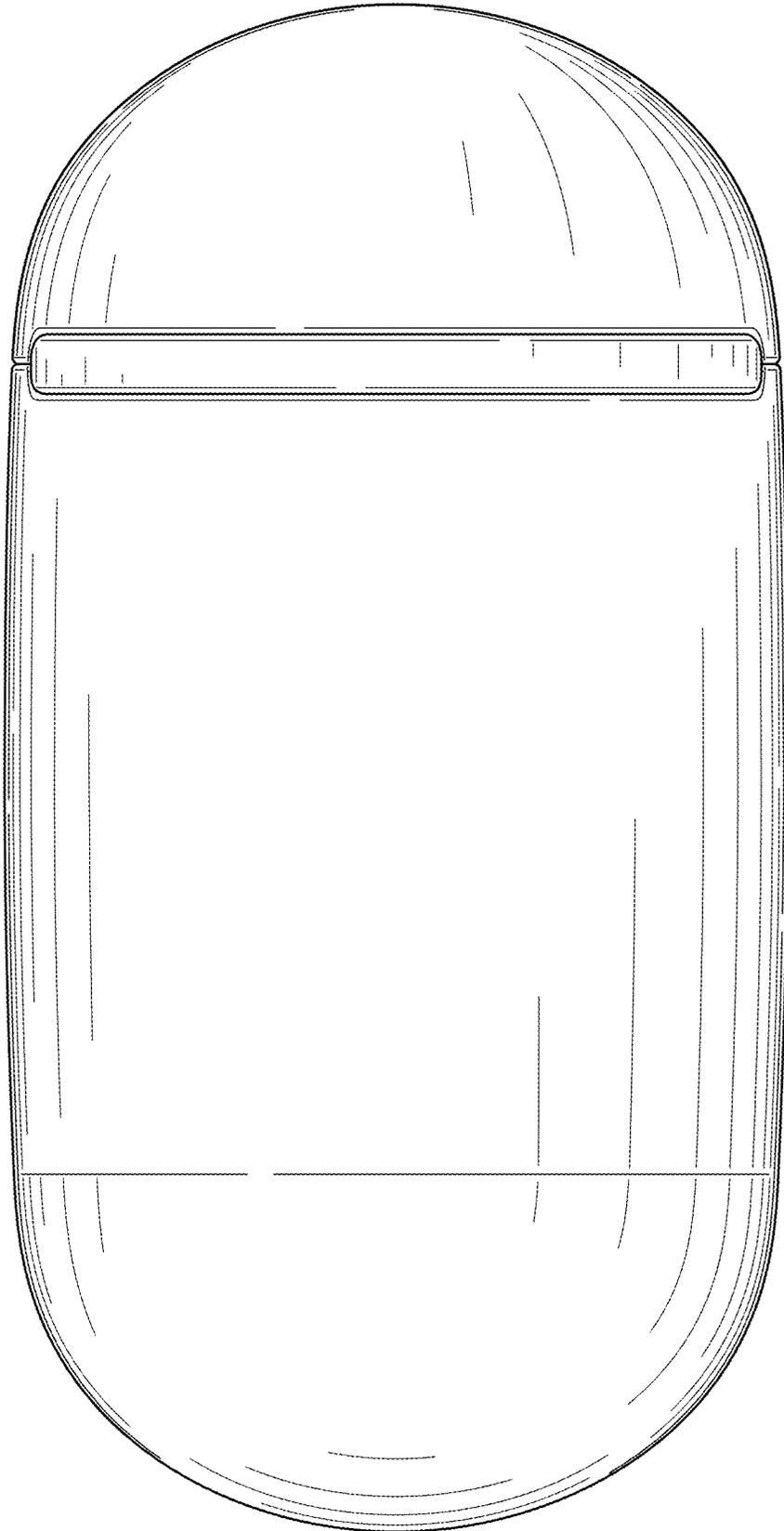


FIG. 2

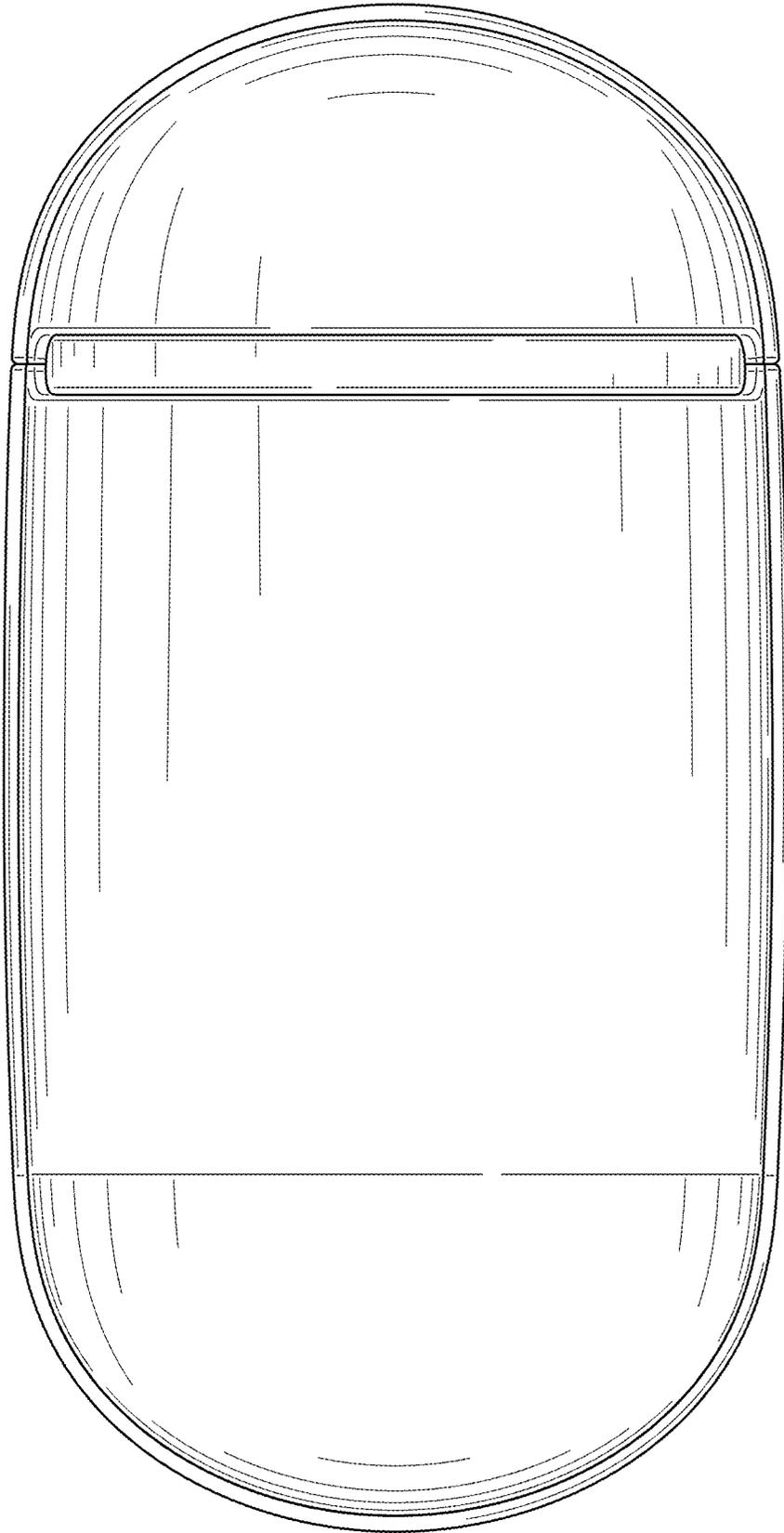


FIG. 3

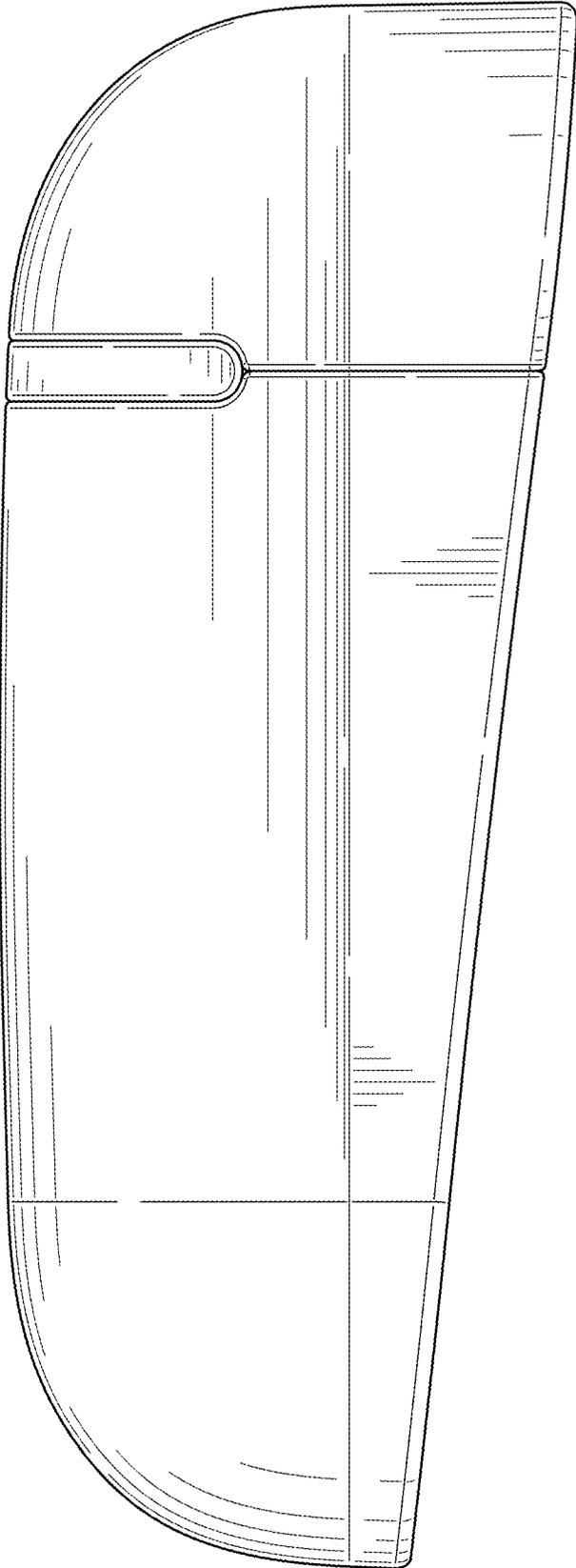


FIG. 4

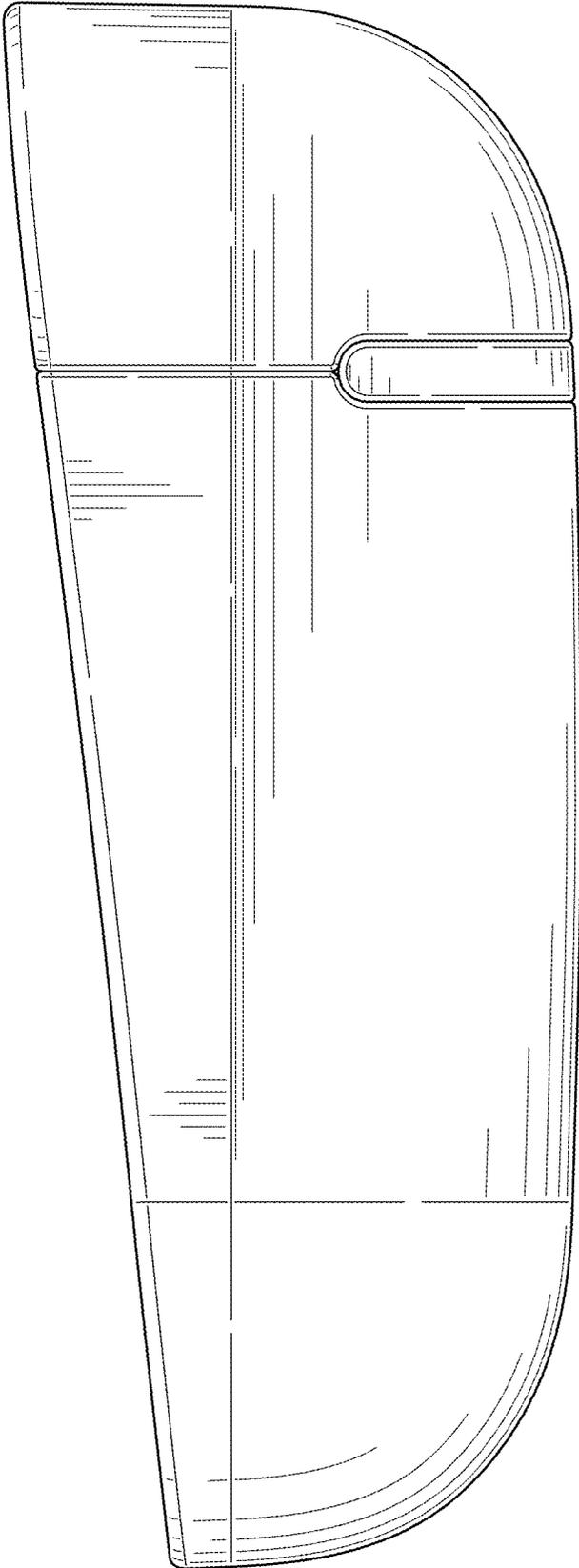


FIG. 5

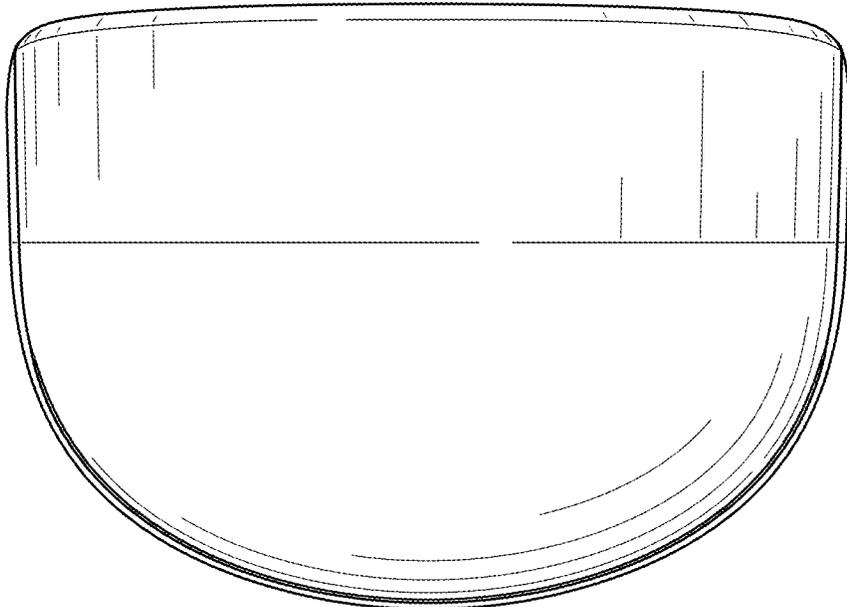


FIG. 6

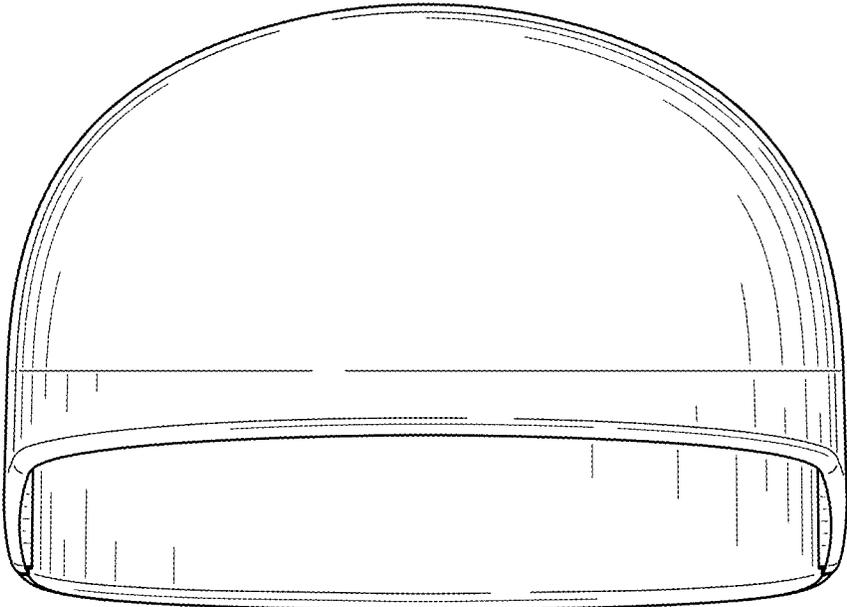


FIG. 7

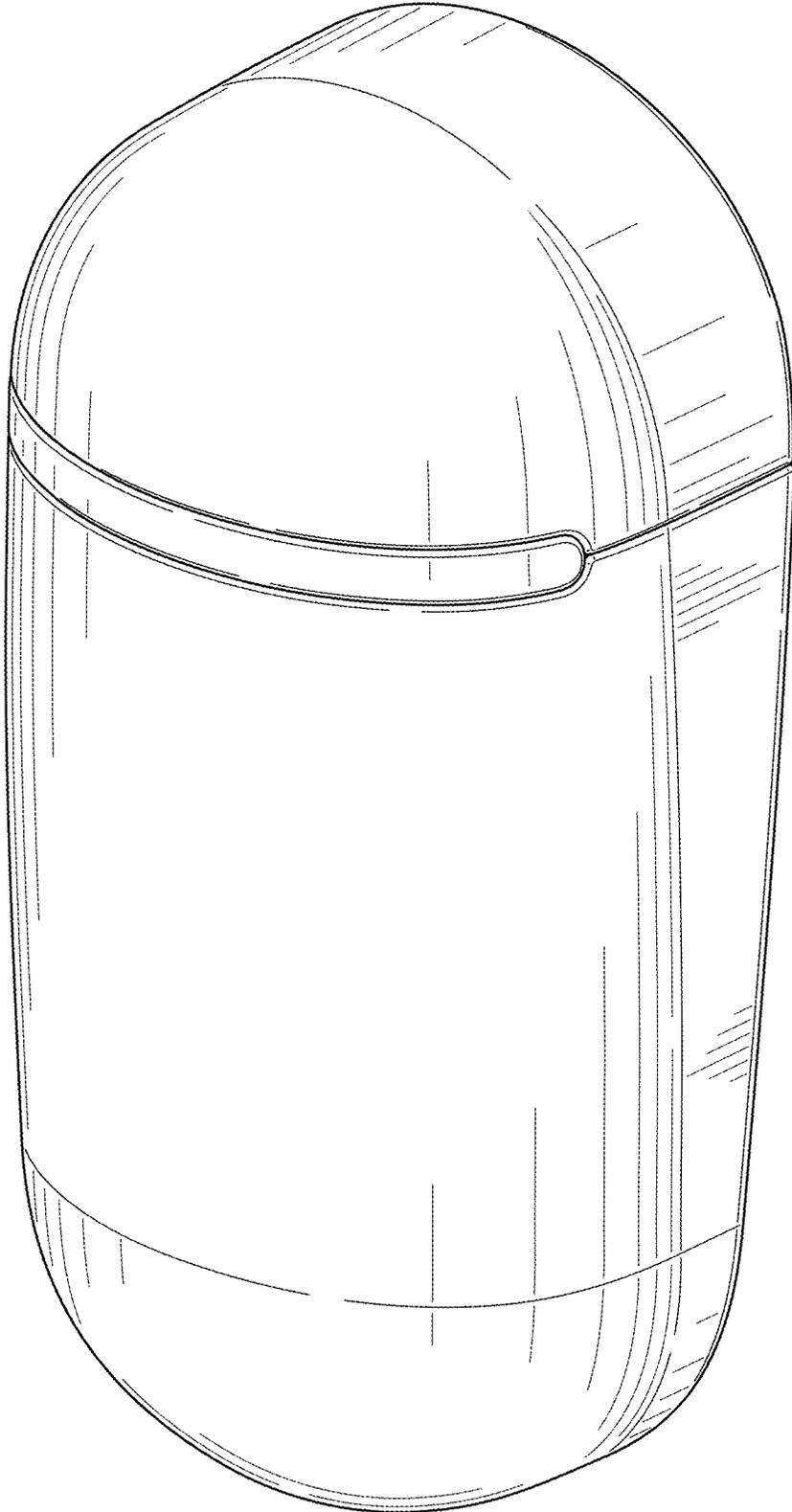


FIG. 8

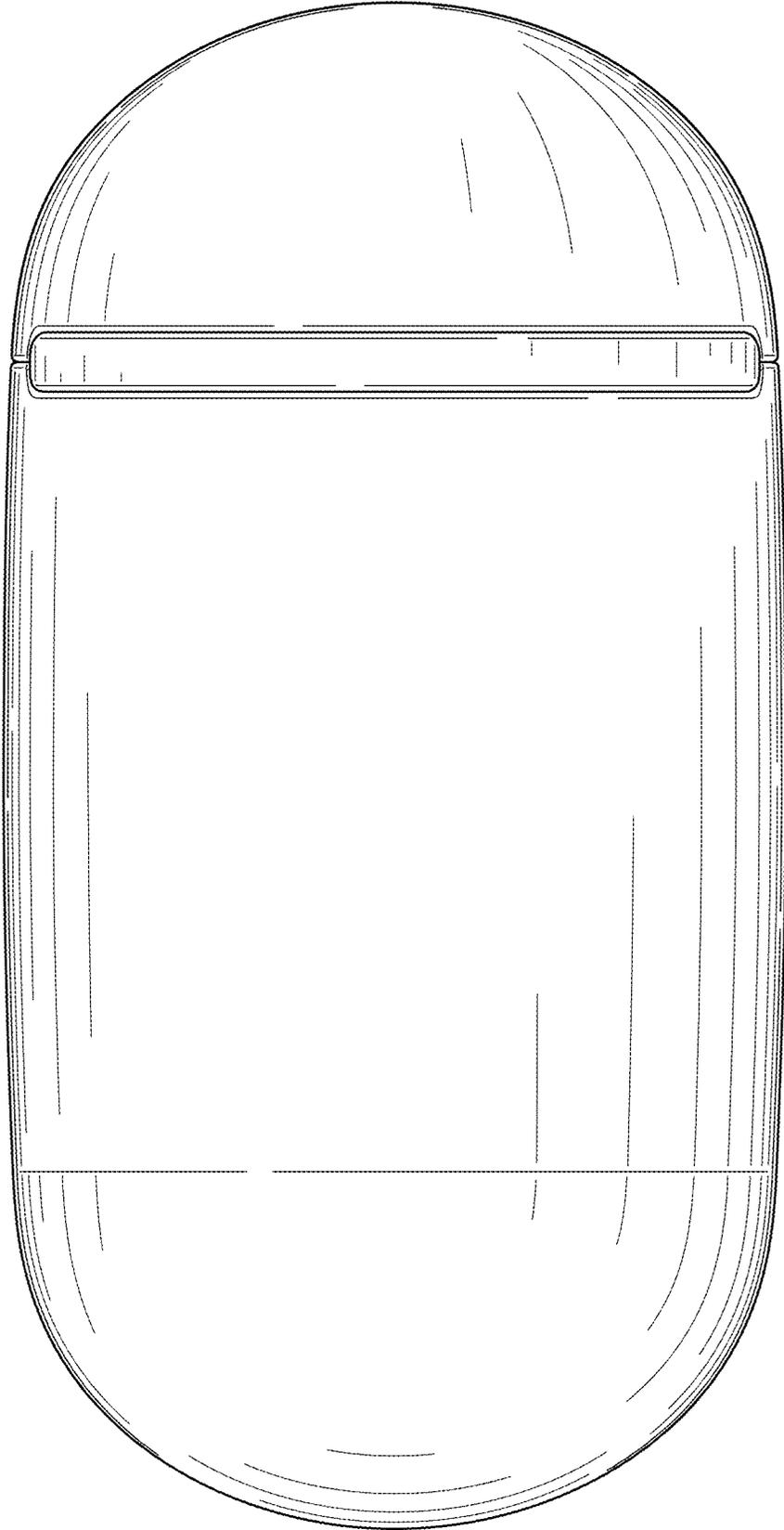


FIG. 9

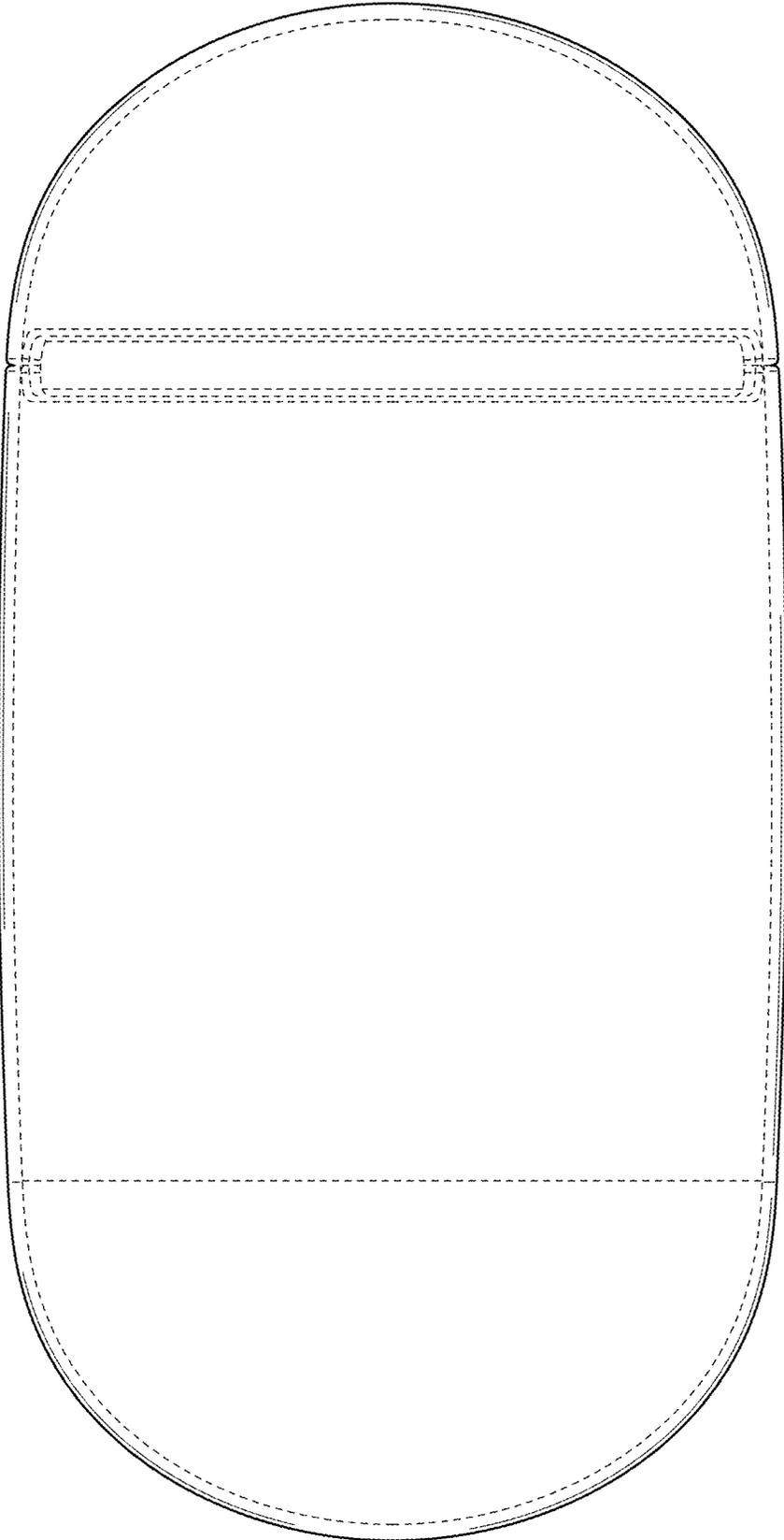


FIG. 10

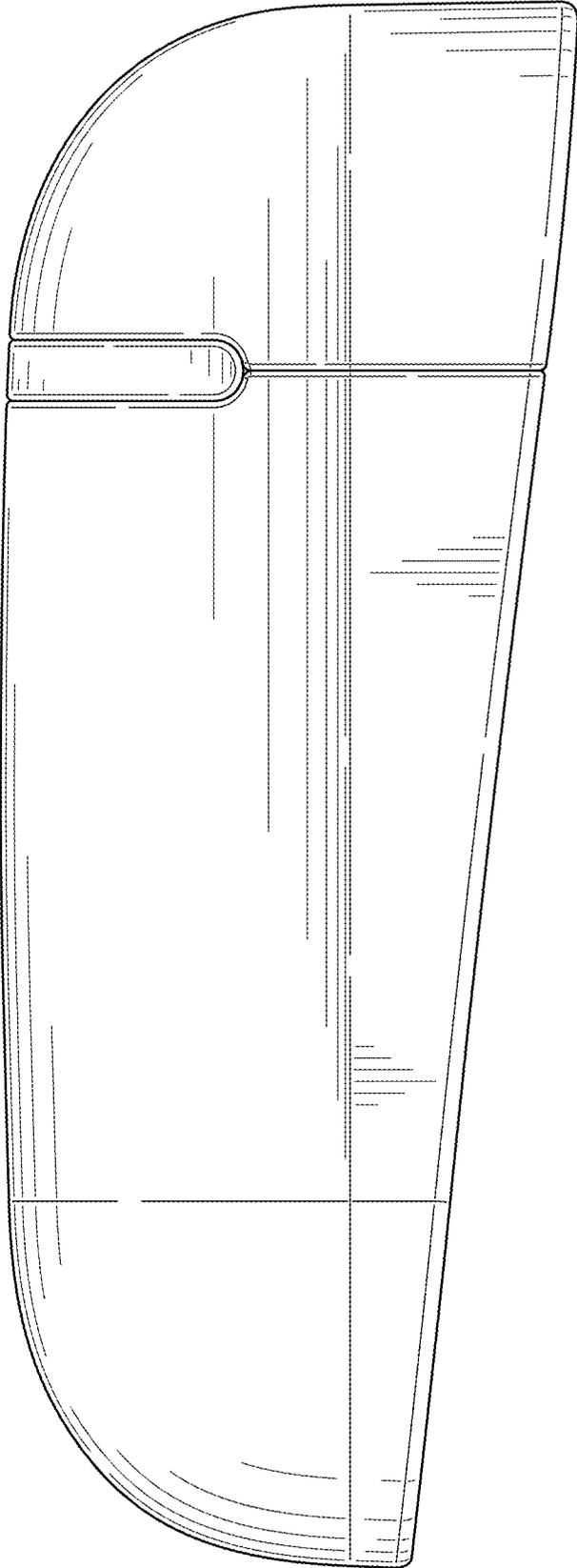


FIG. 11

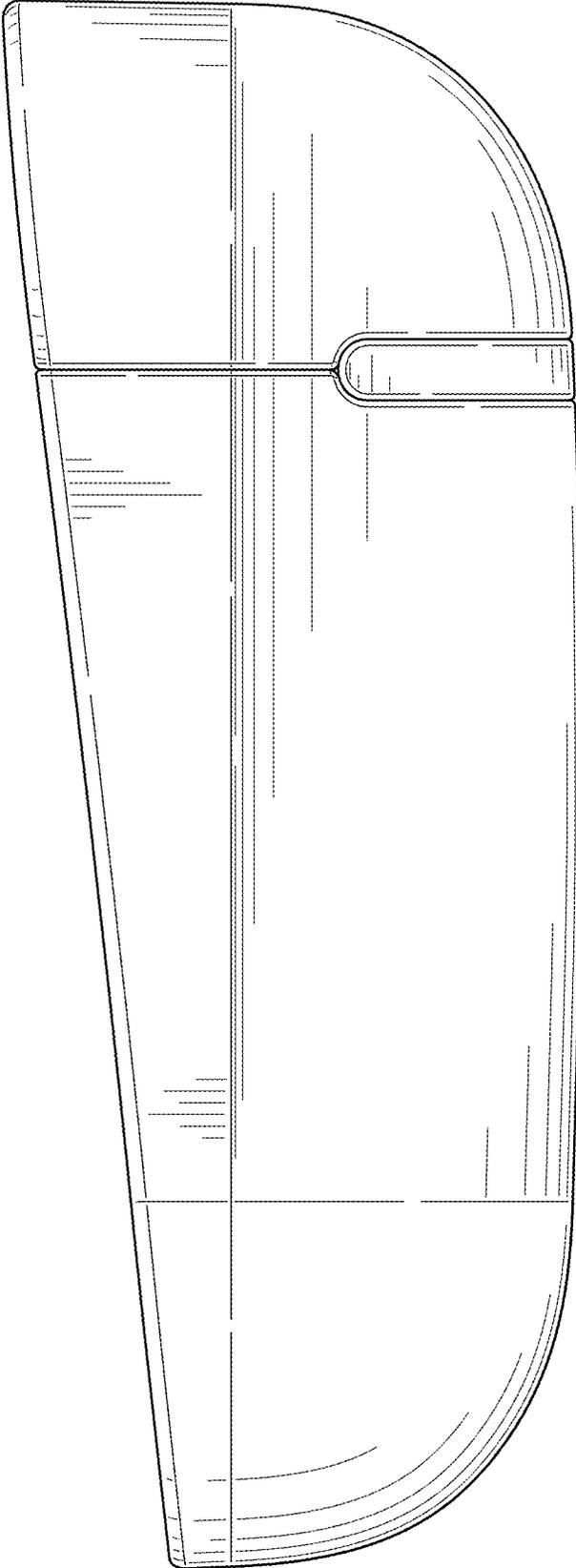


FIG. 12

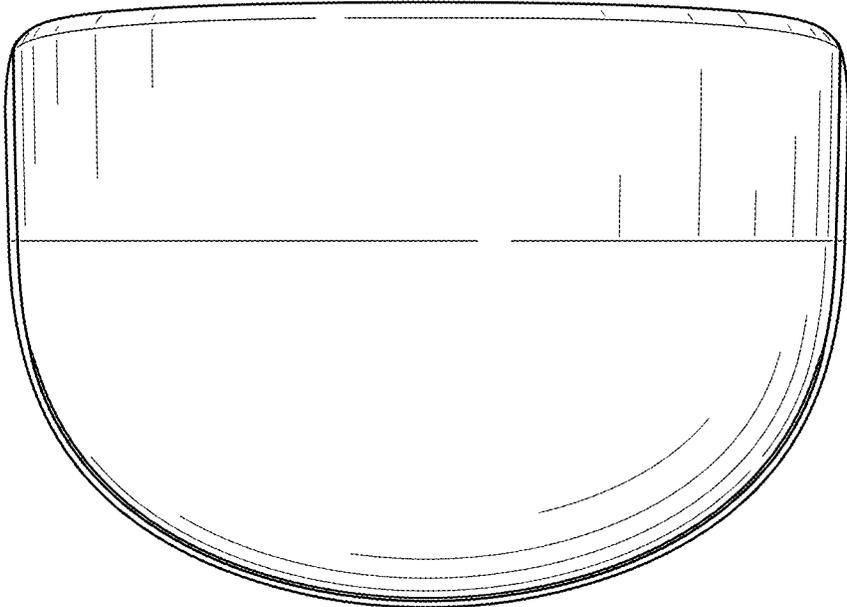


FIG. 13

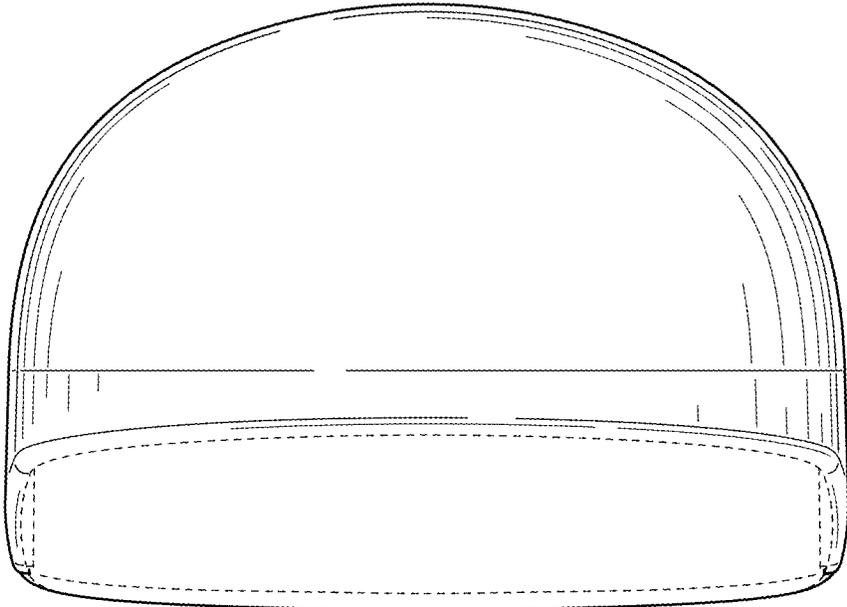


FIG. 14

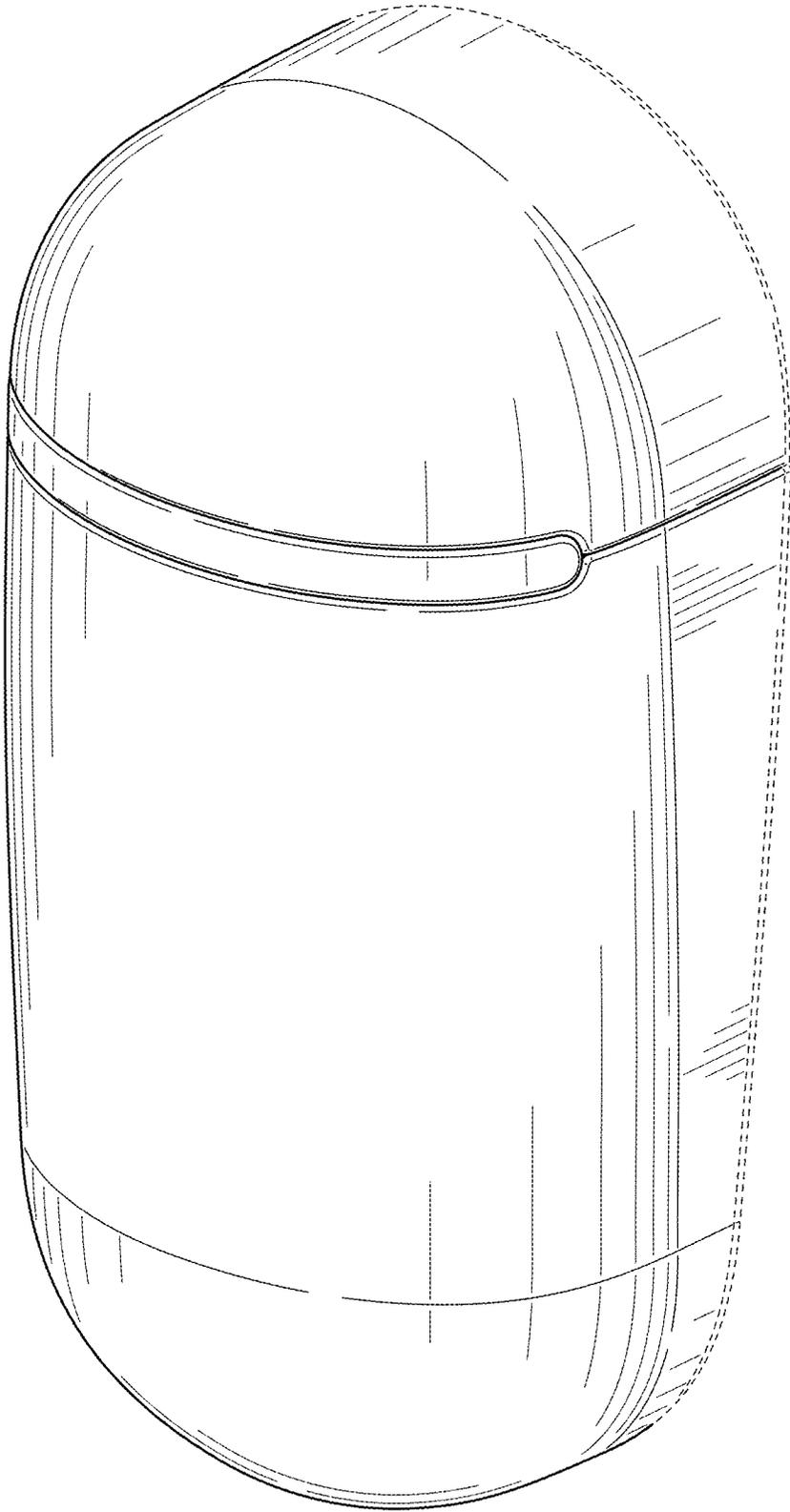


FIG. 15

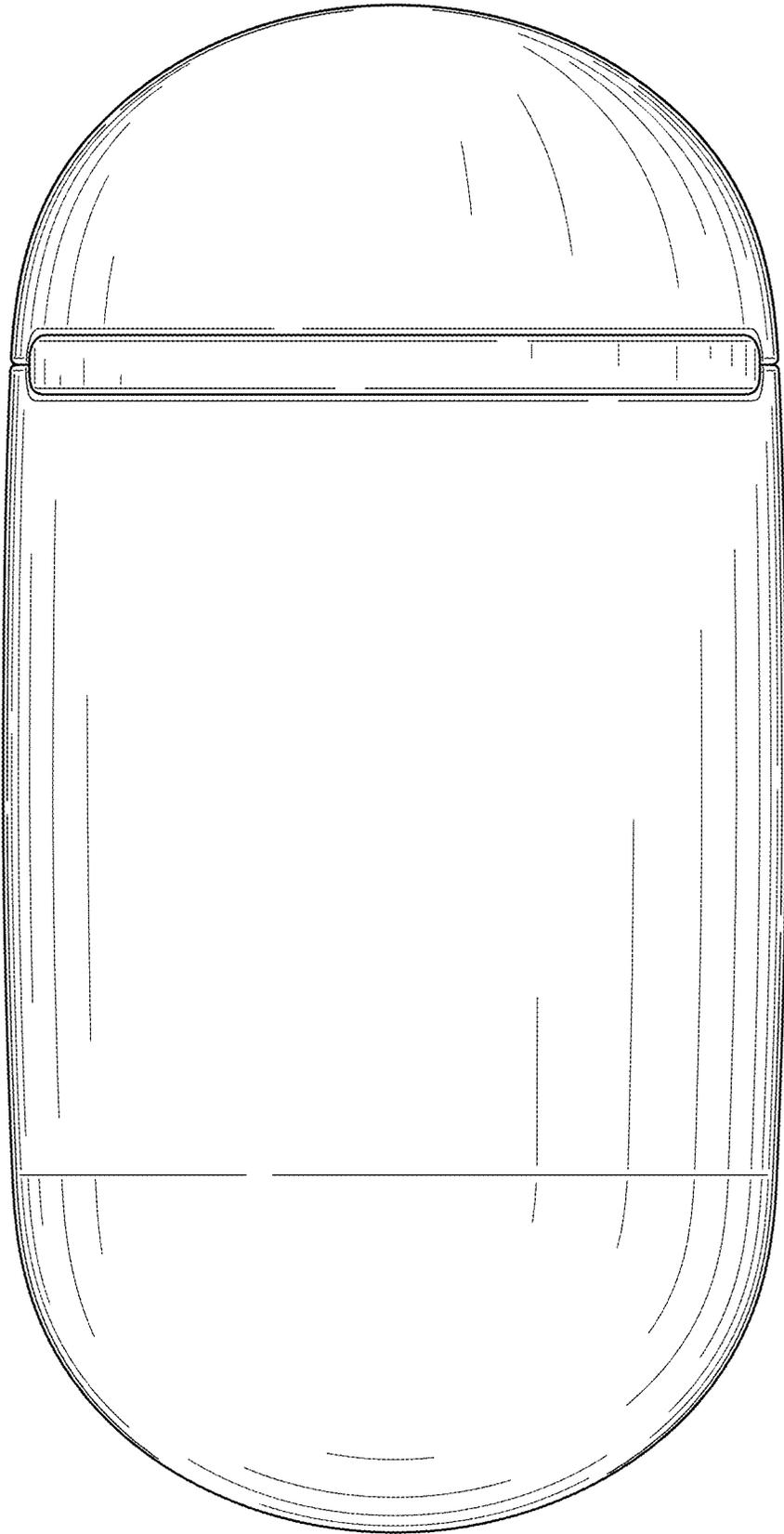


FIG. 16

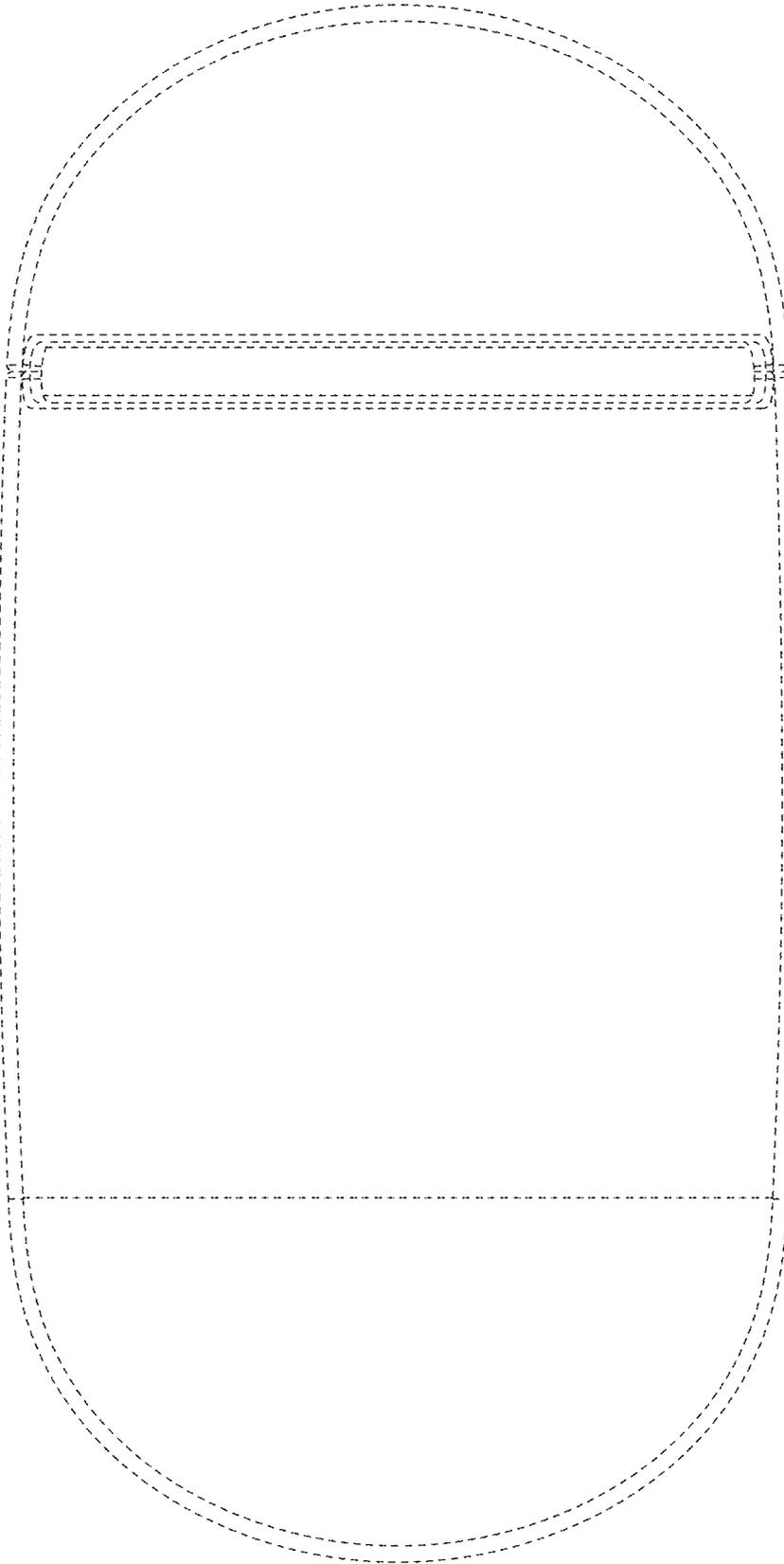


FIG. 17

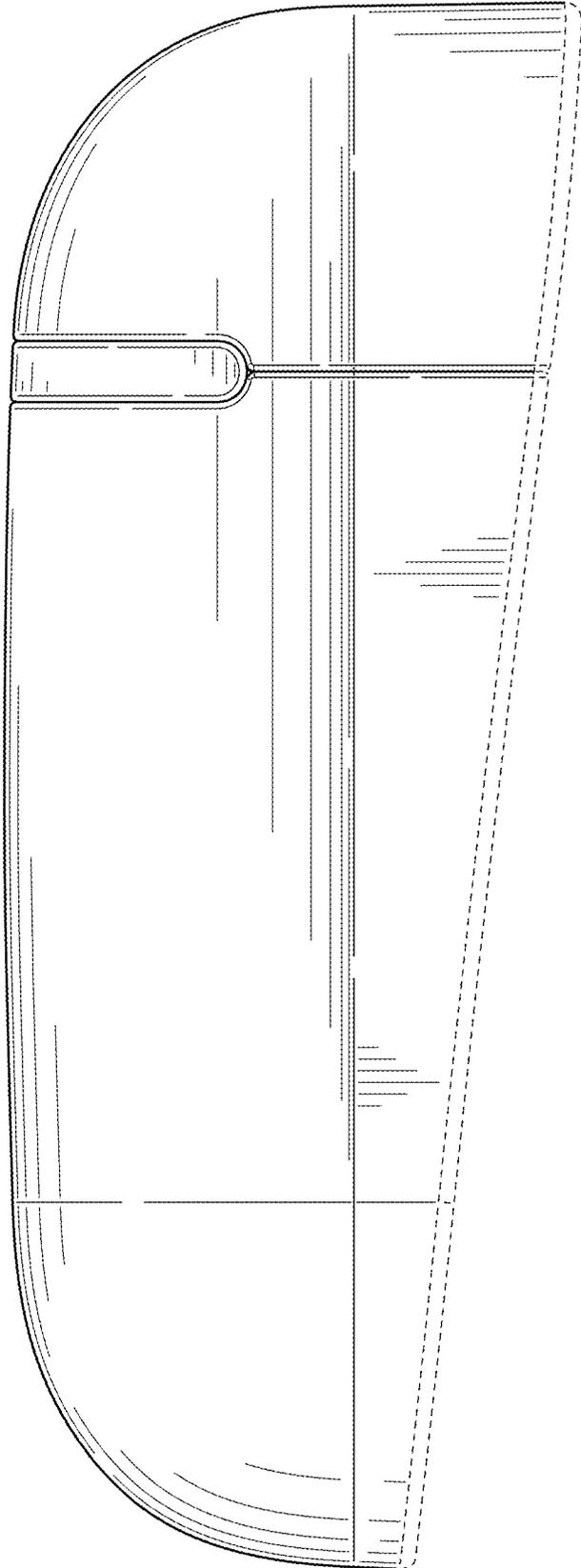


FIG. 18

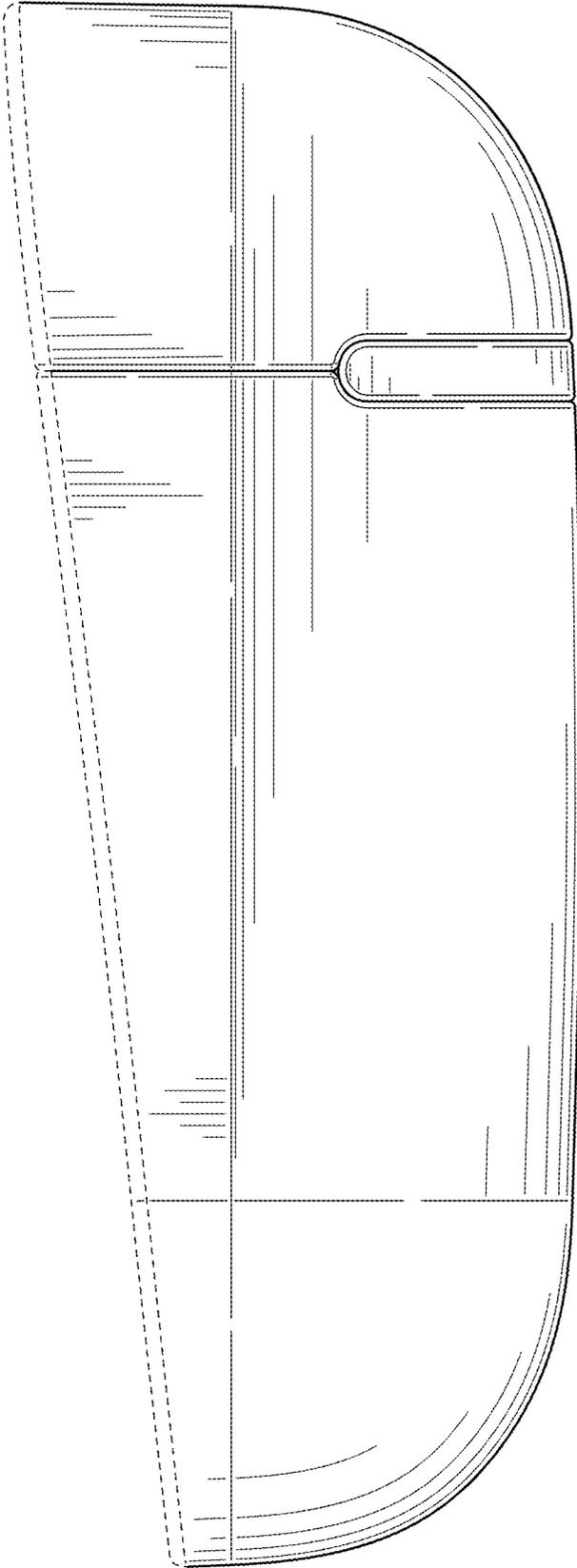


FIG. 19

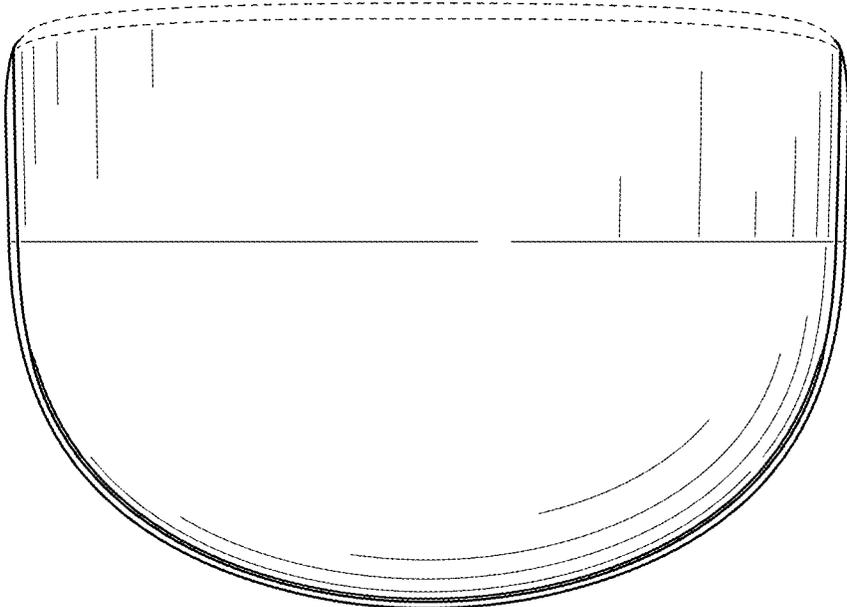


FIG. 20

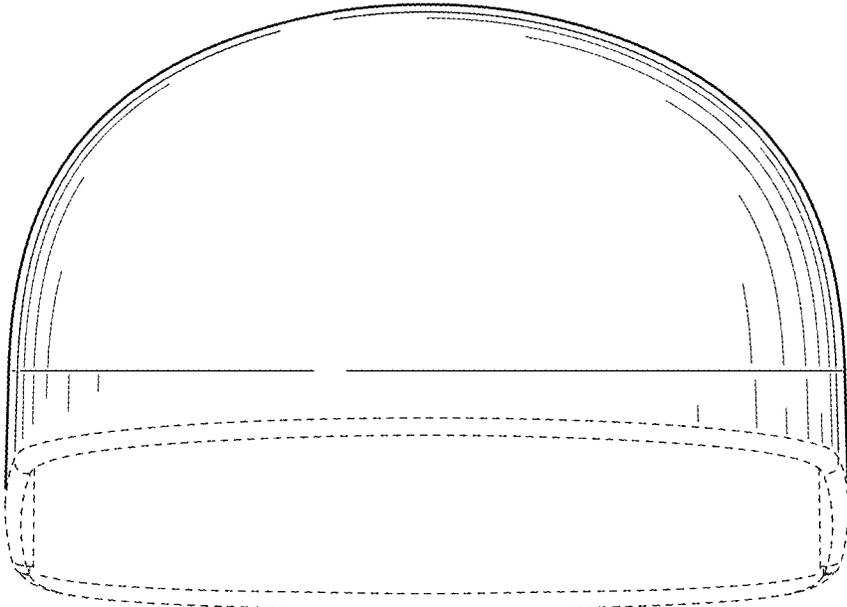


FIG. 21

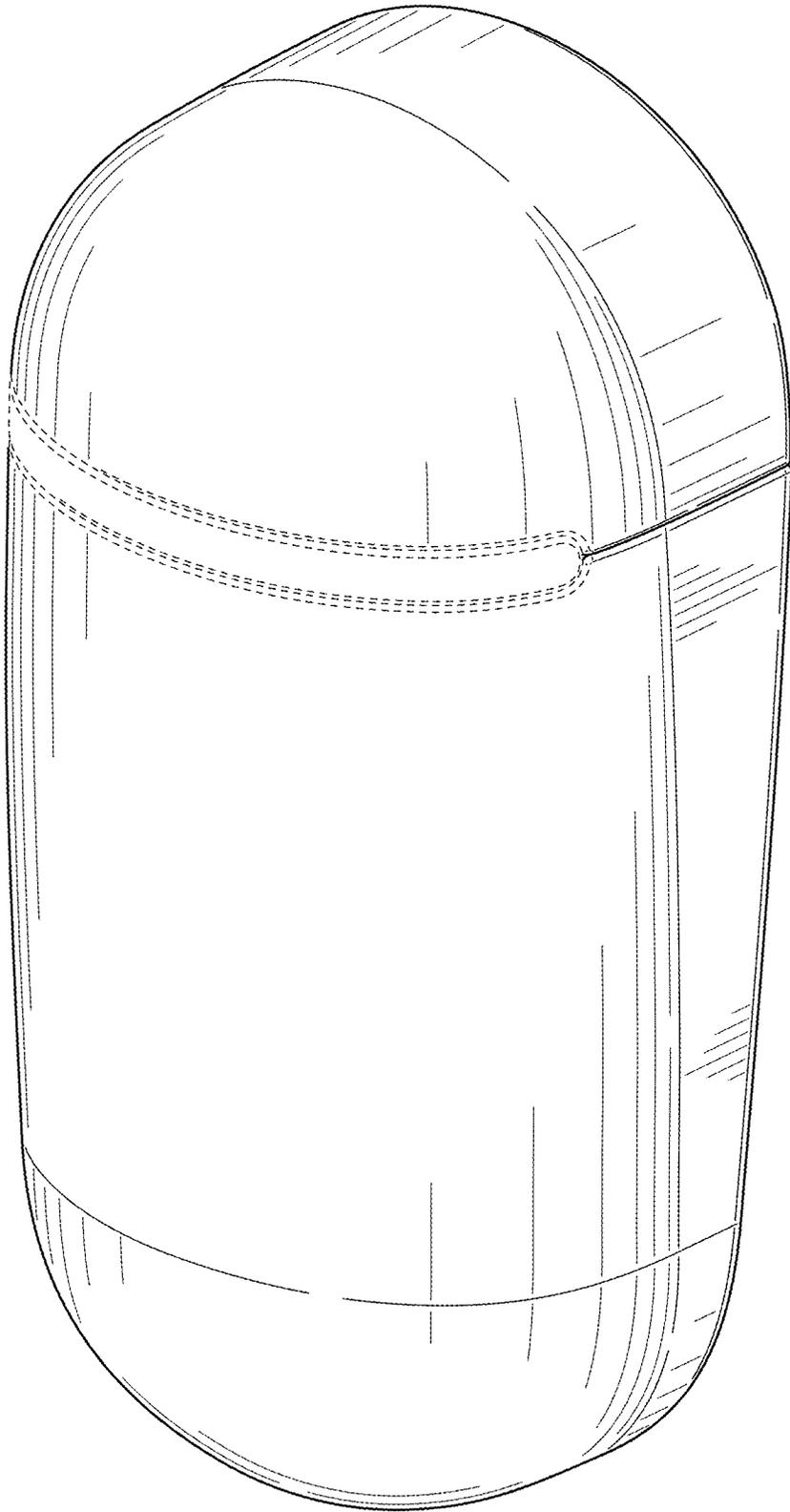


FIG. 22

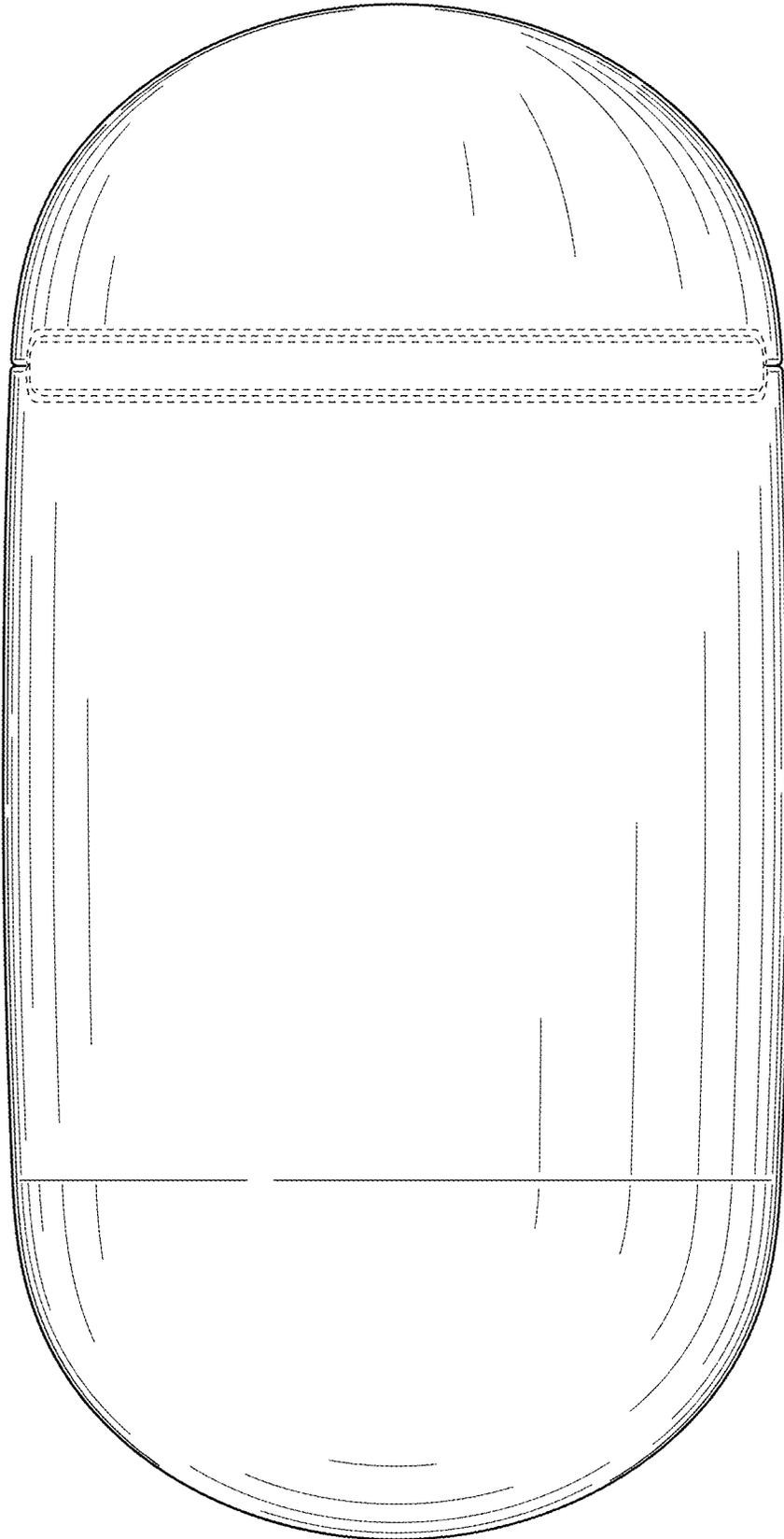


FIG. 23

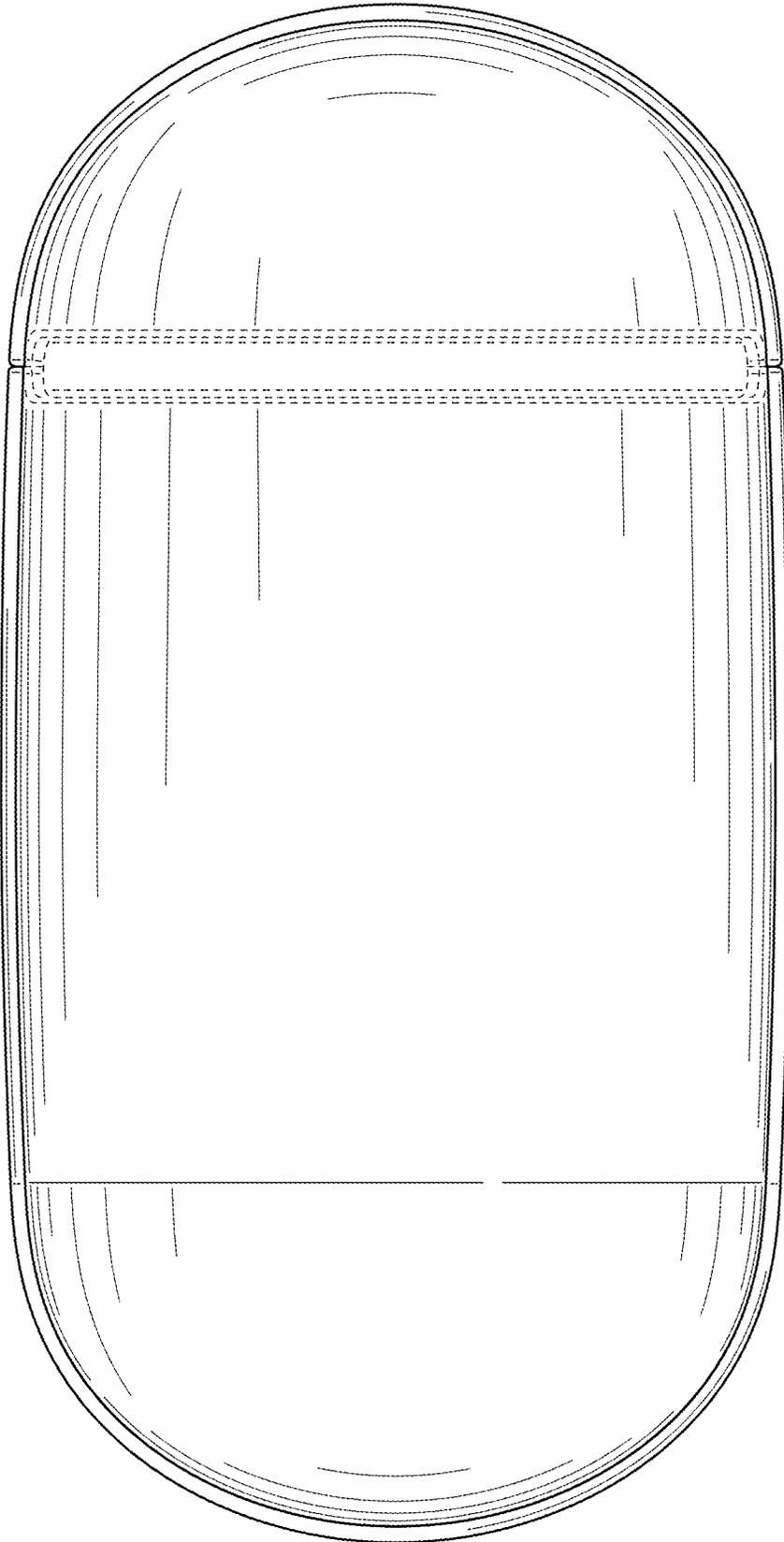


FIG. 24

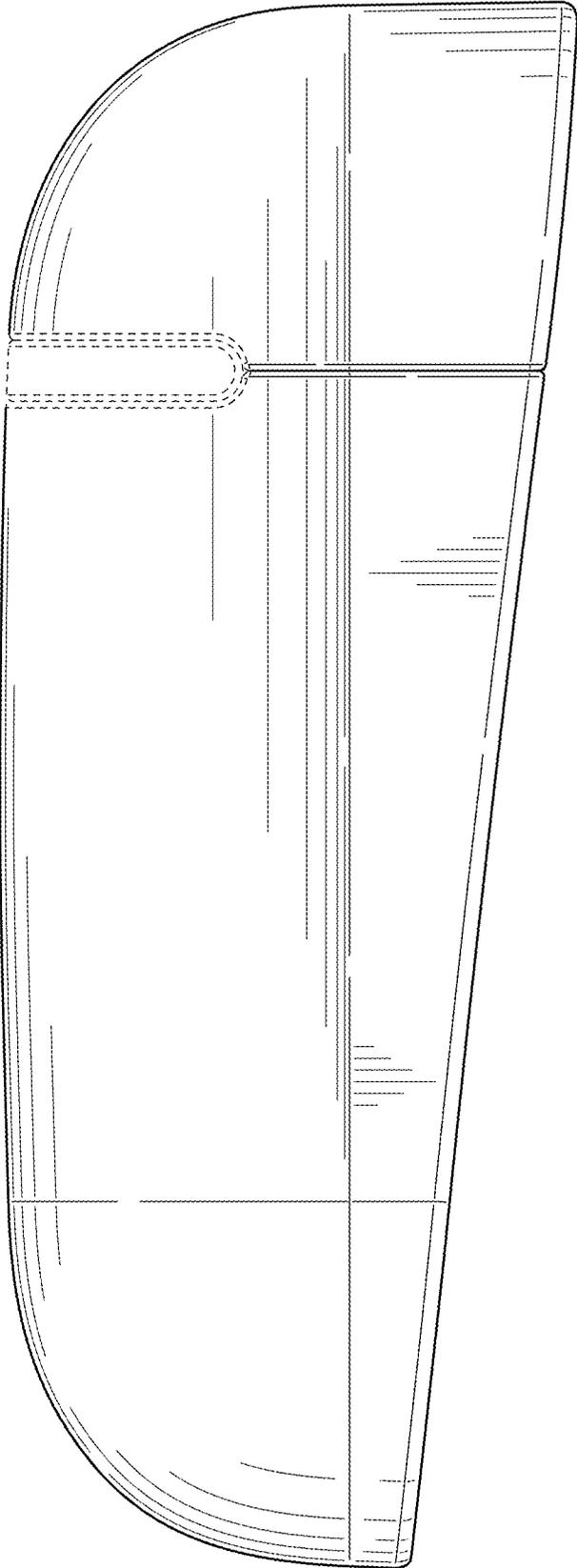


FIG. 25

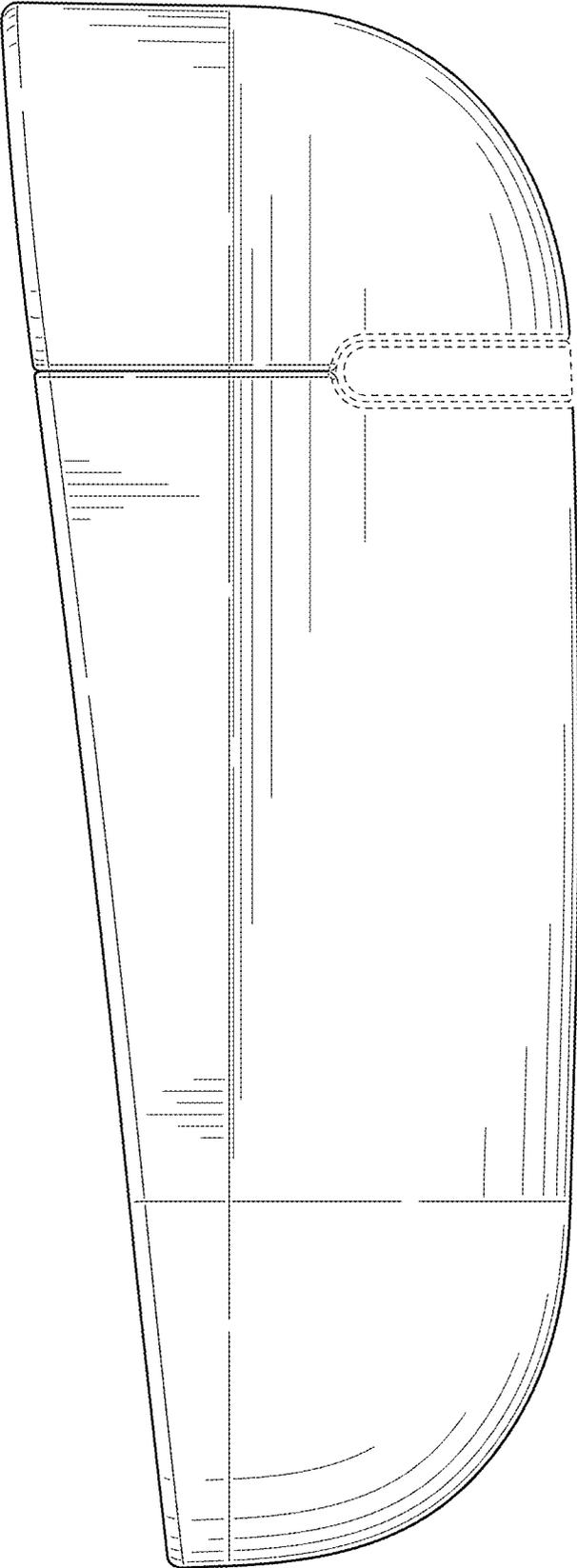


FIG. 26

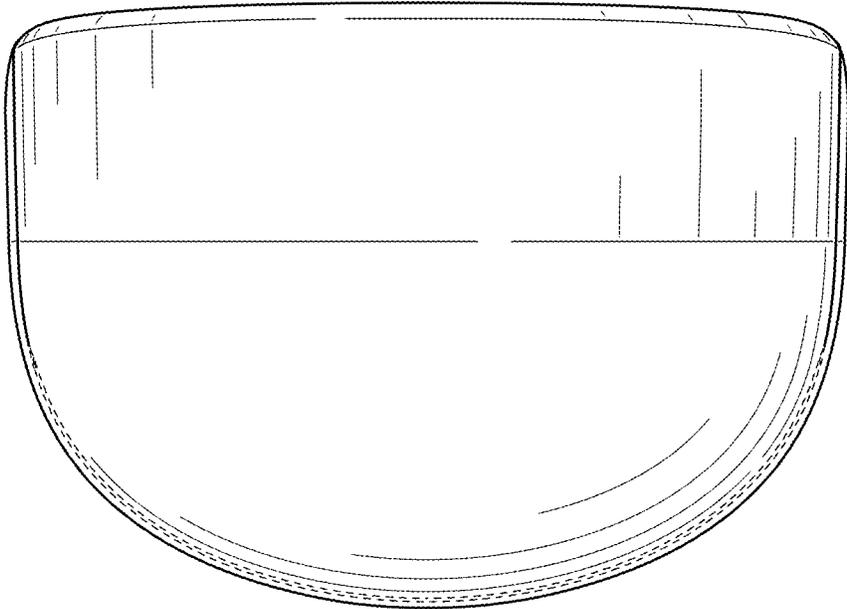


FIG. 27

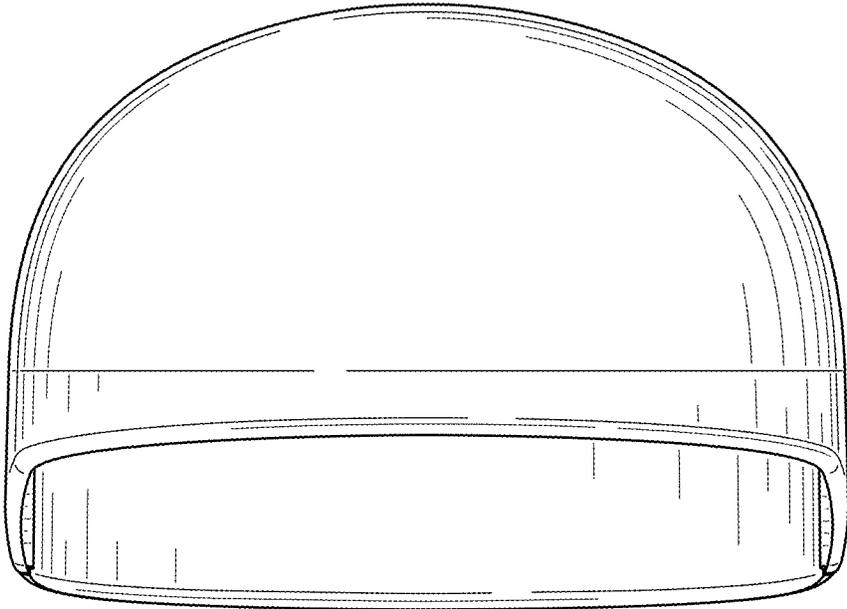


FIG. 28

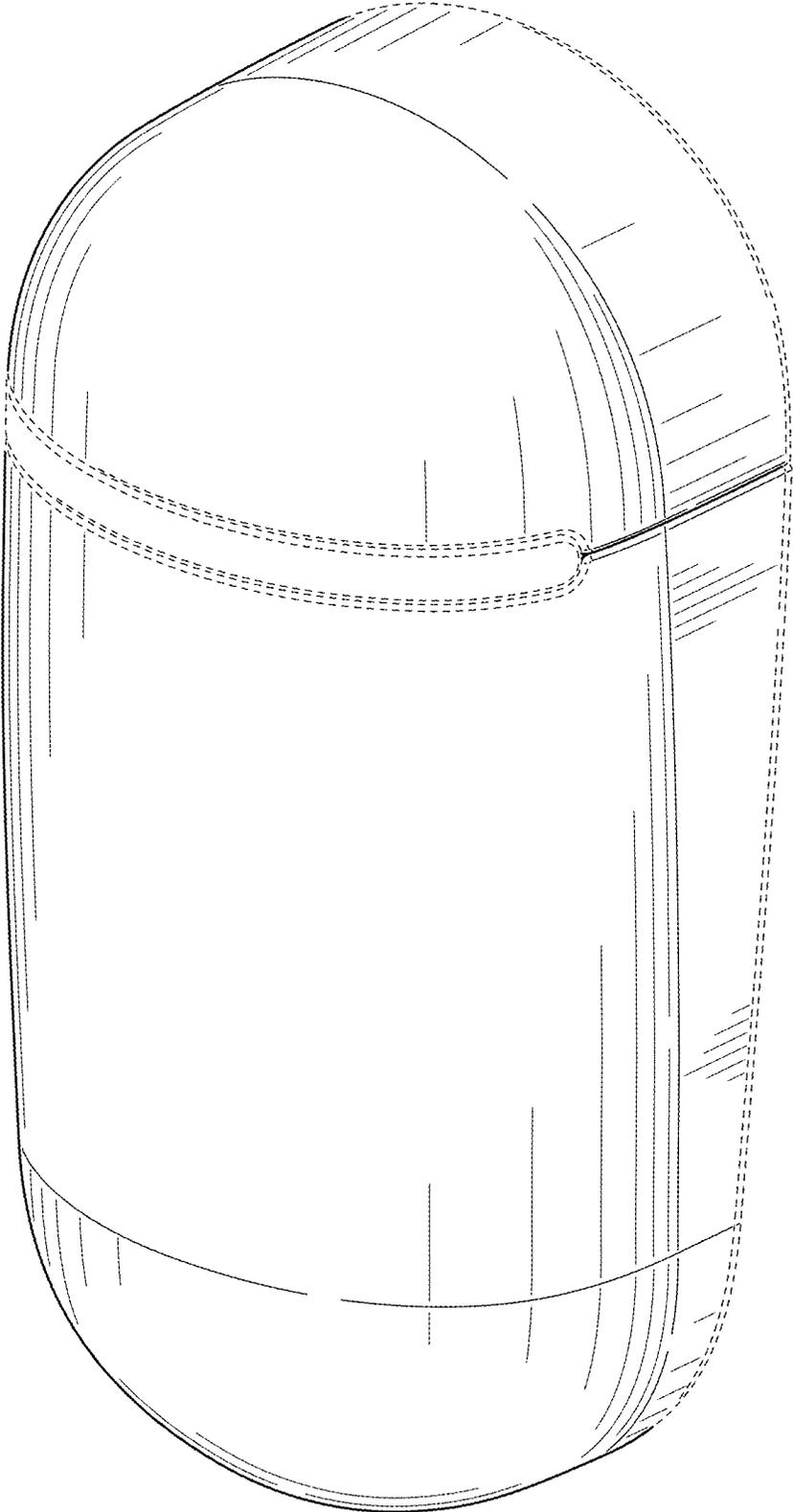


FIG. 29

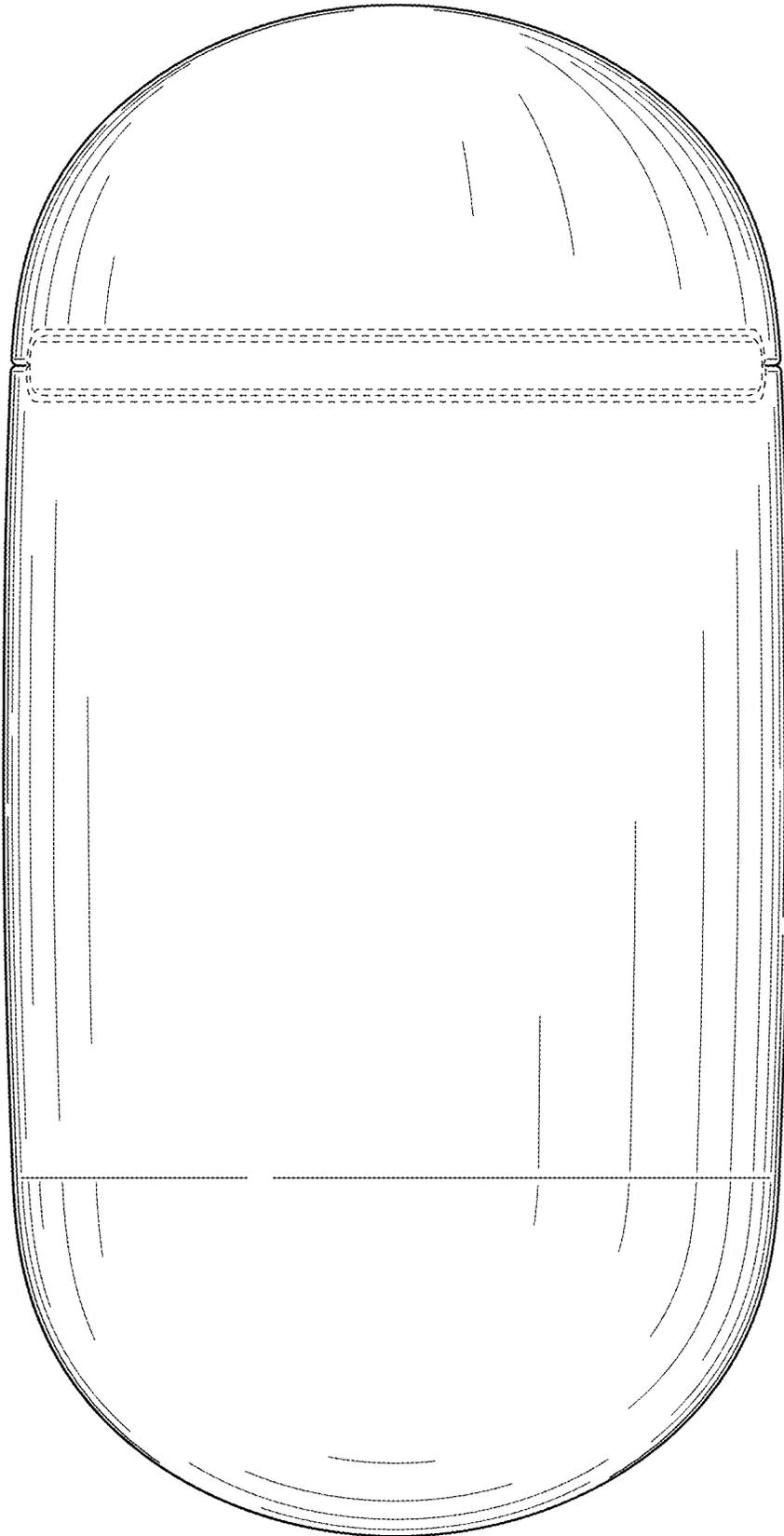


FIG. 30

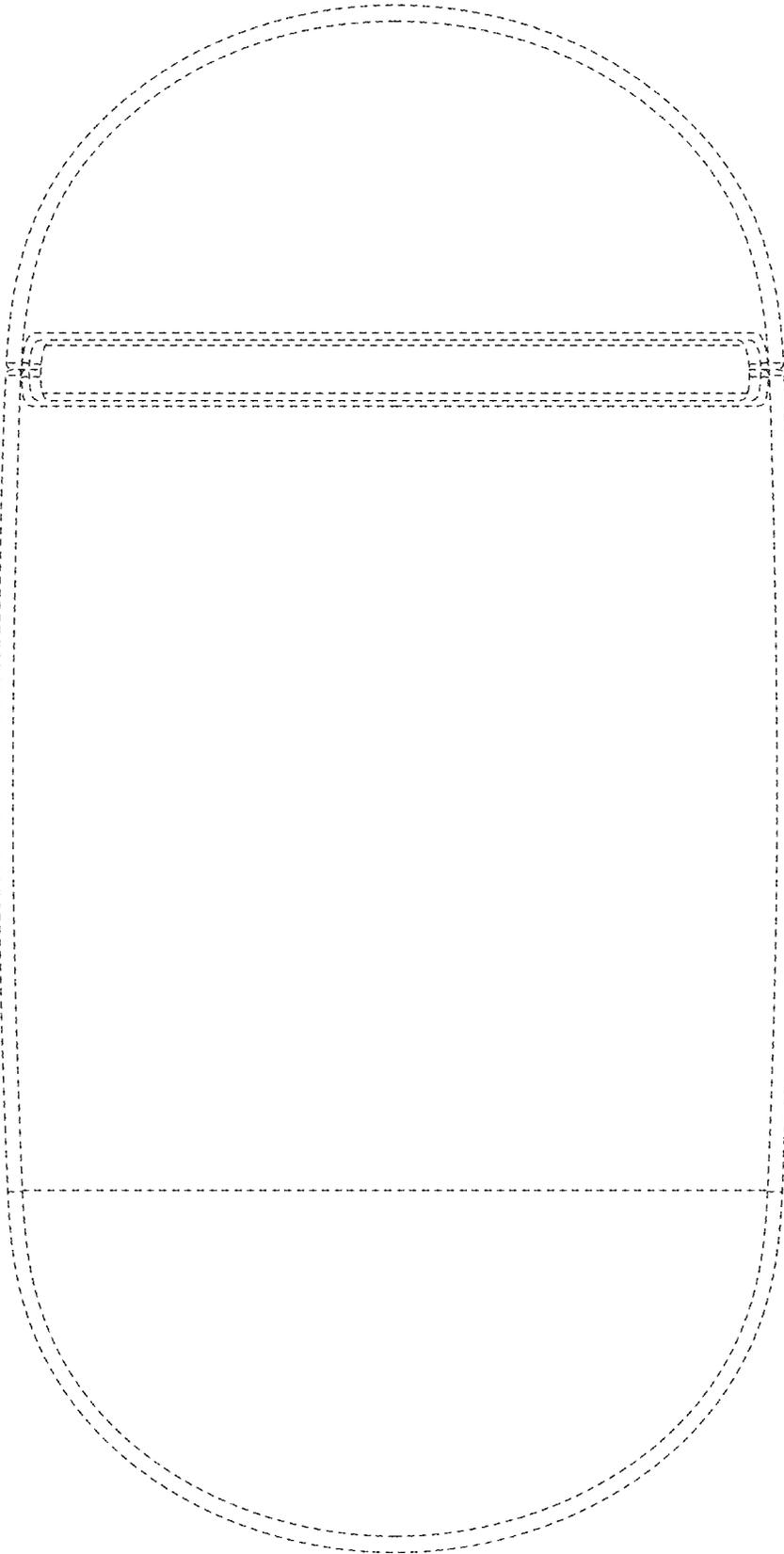


FIG. 31

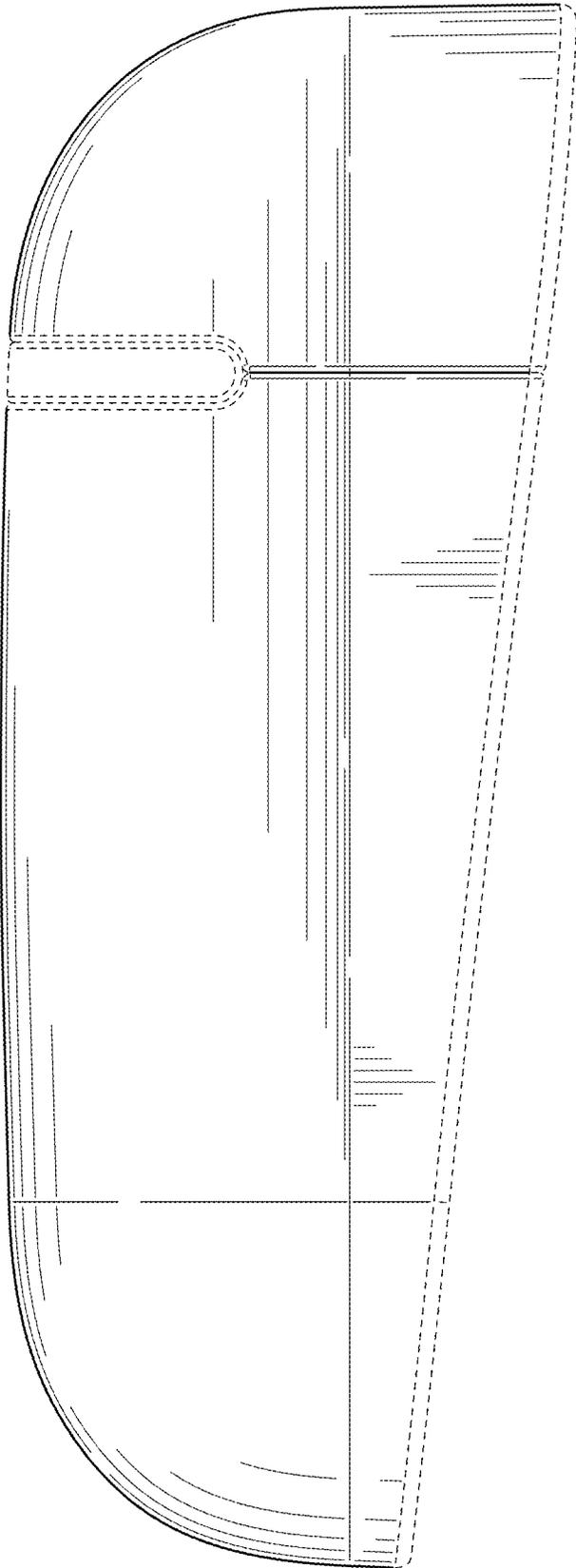


FIG. 32

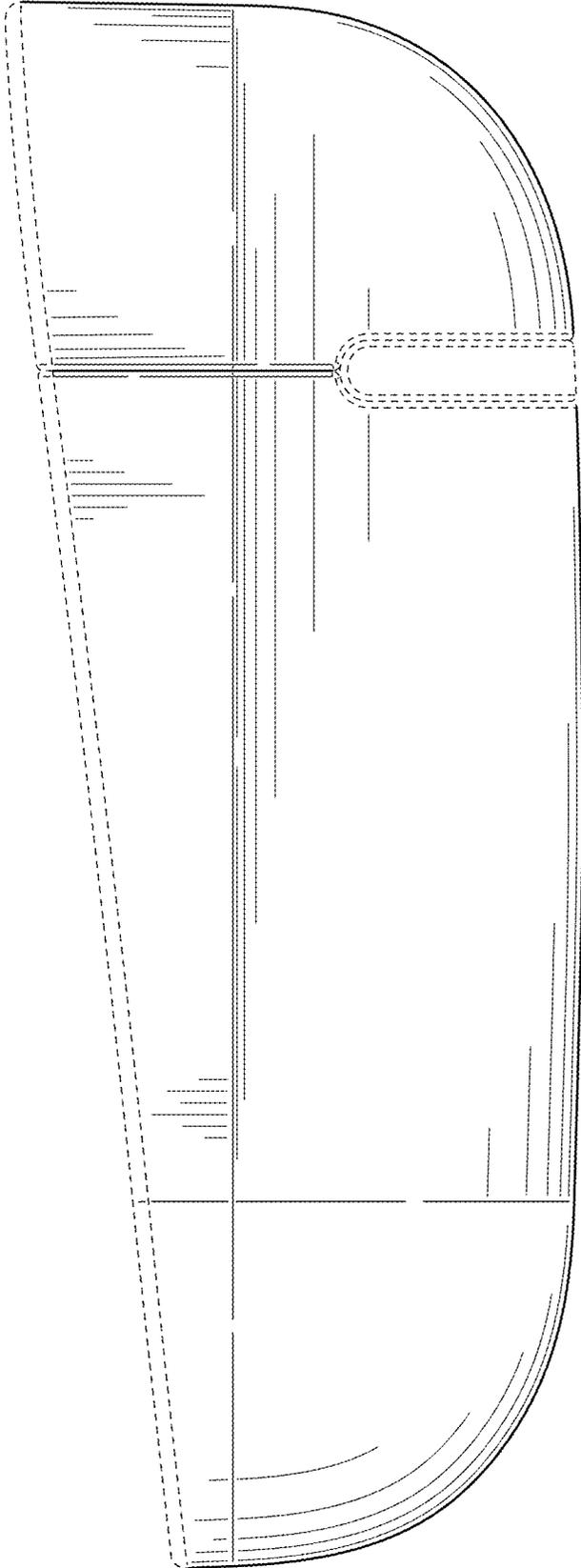


FIG. 33

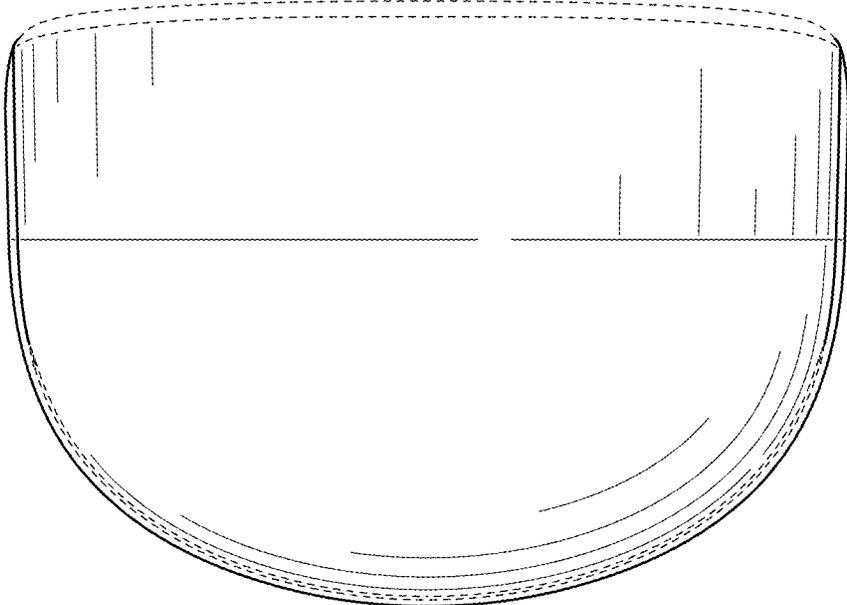


FIG. 34

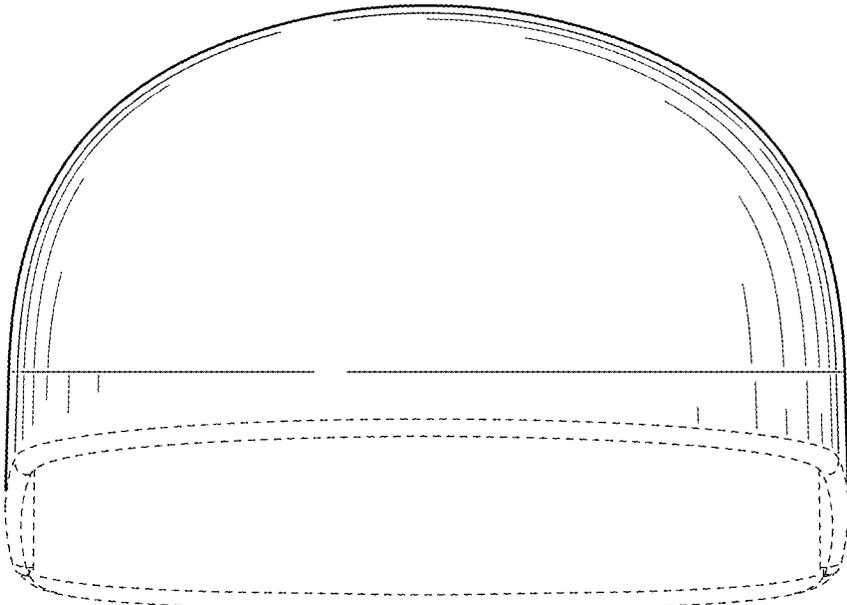


FIG. 35

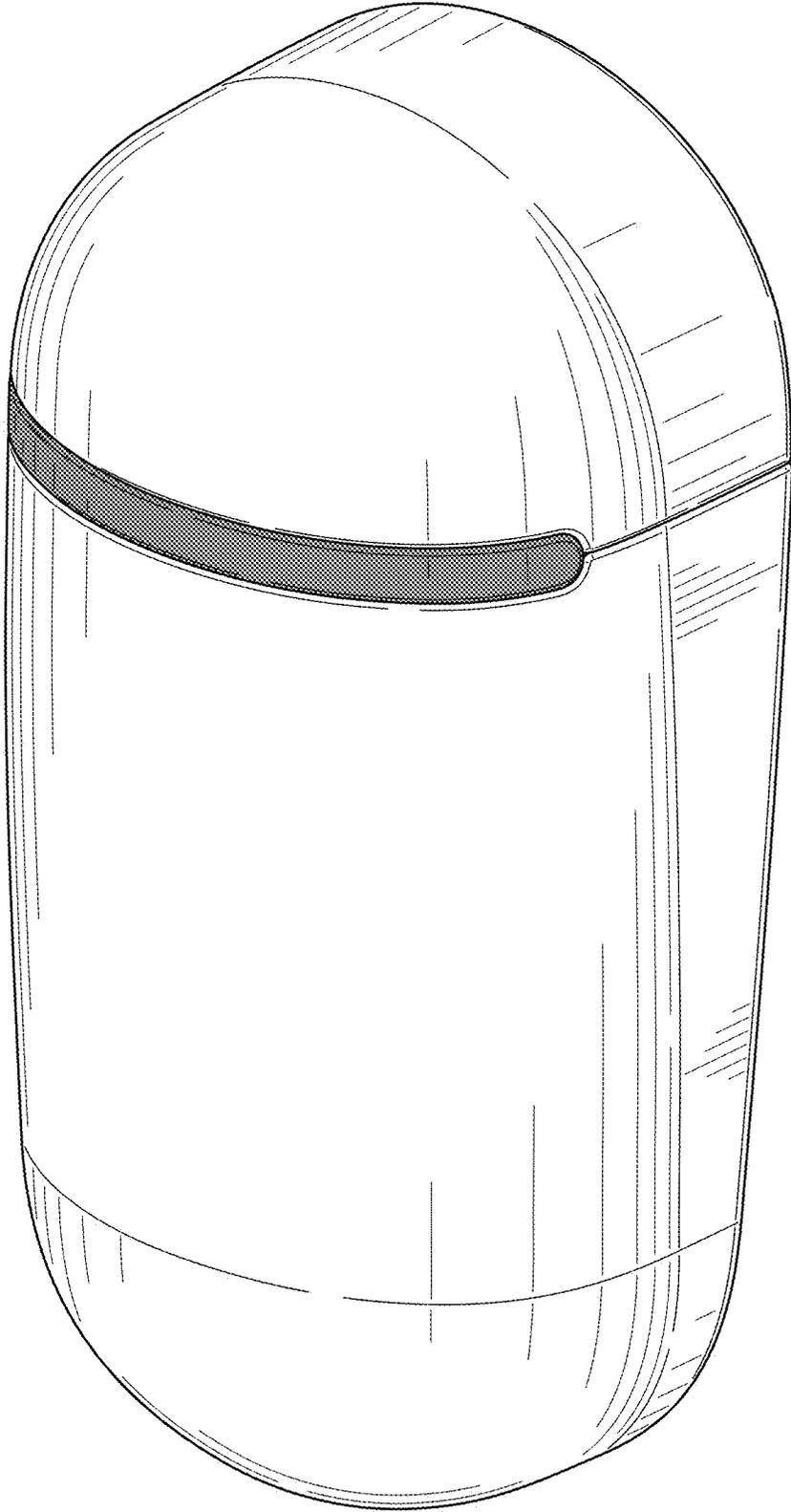


FIG. 36

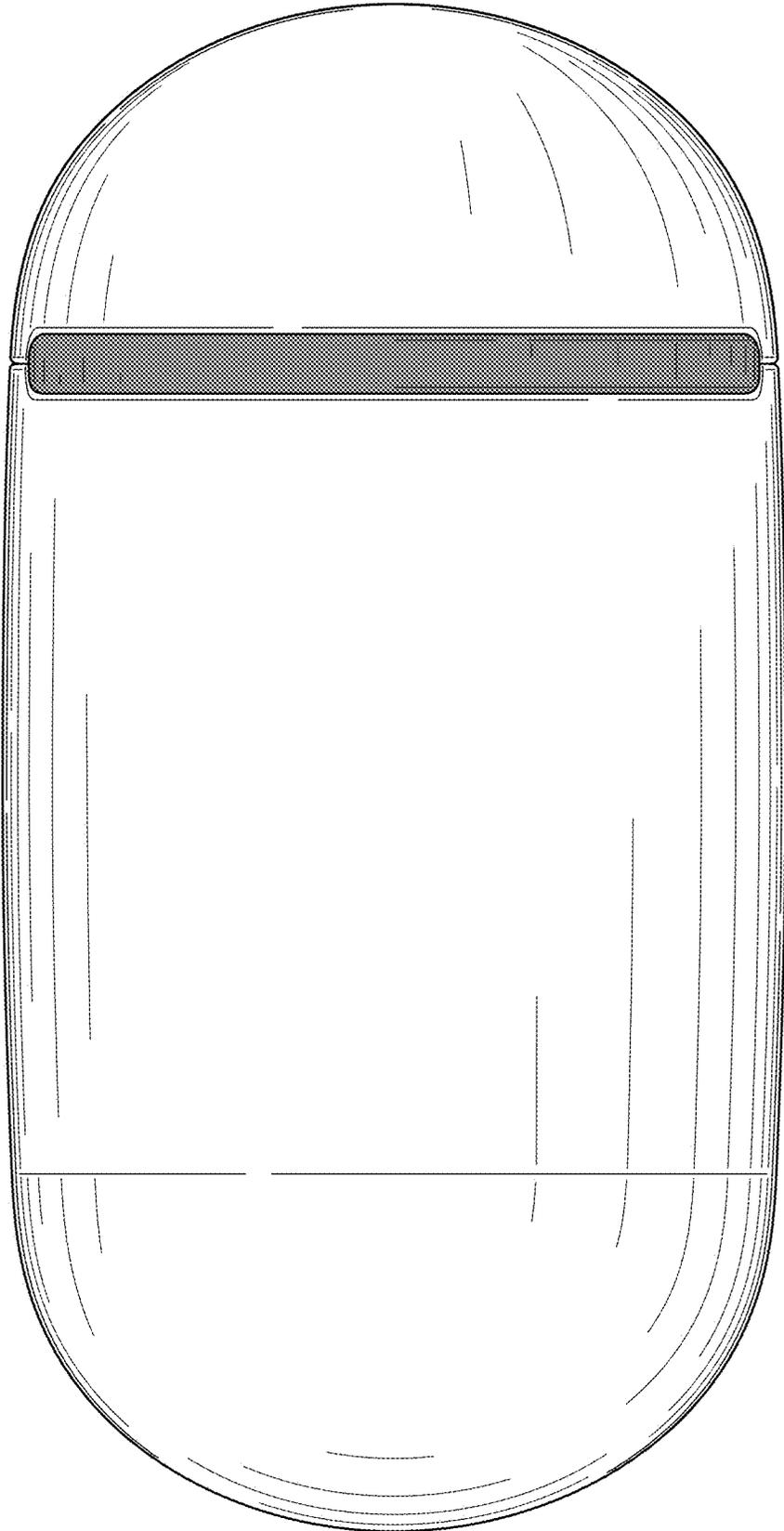


FIG. 37

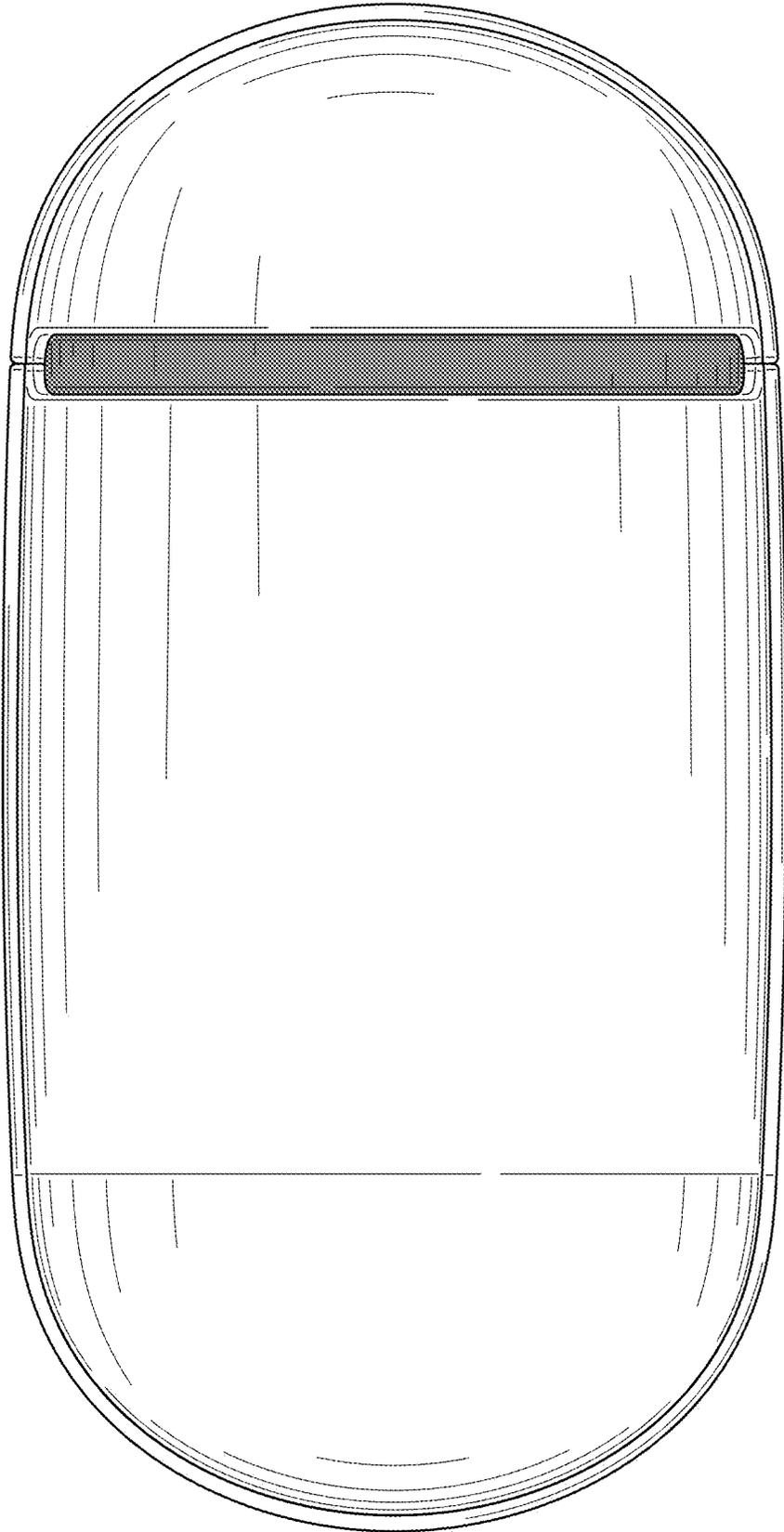


FIG. 38

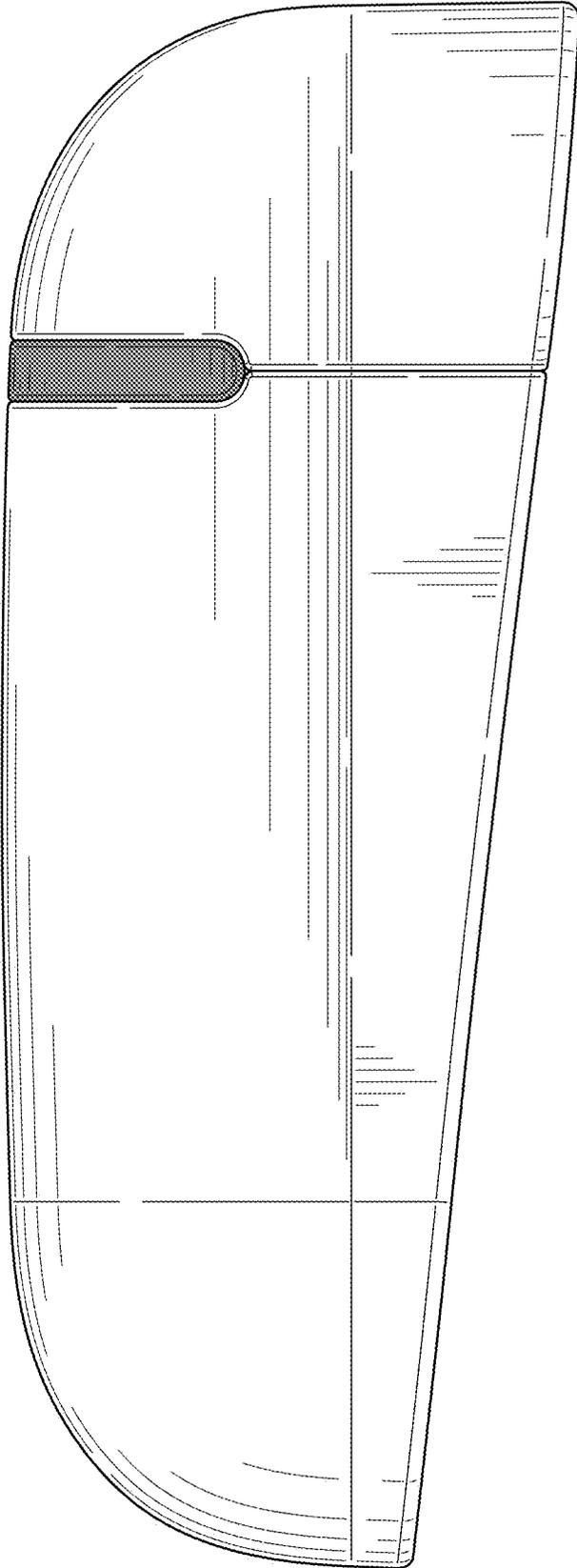


FIG. 39

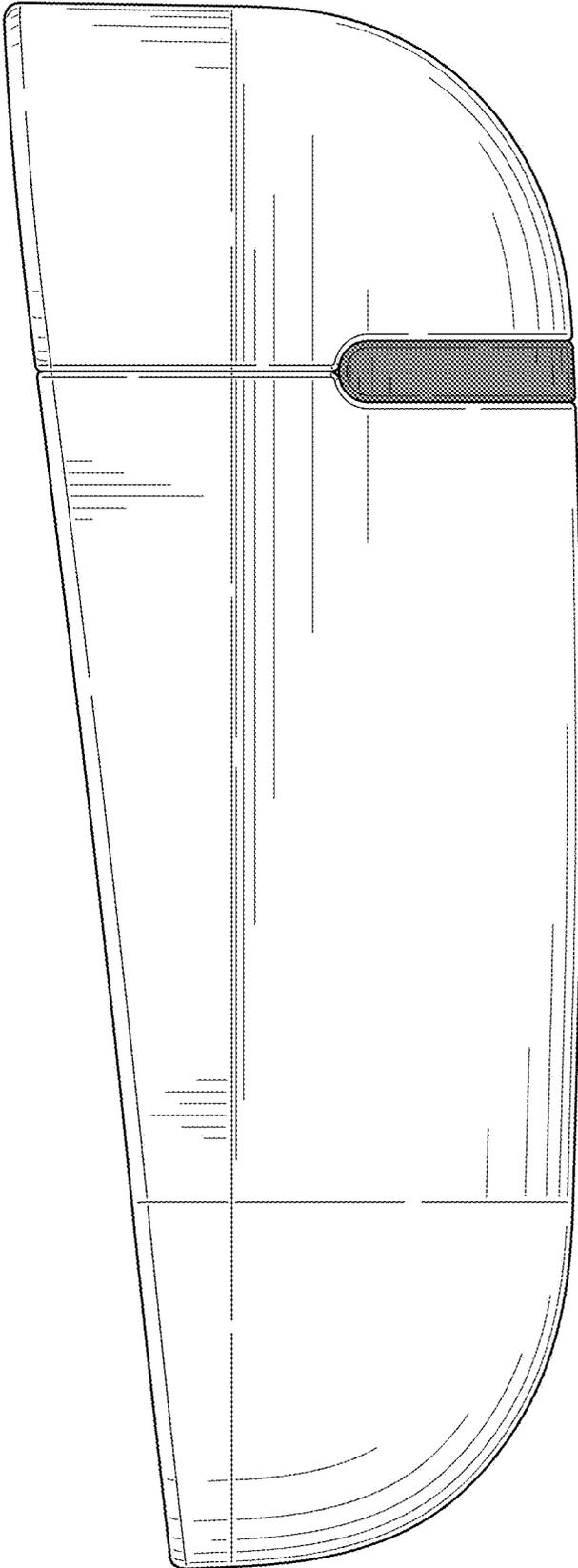


FIG. 40

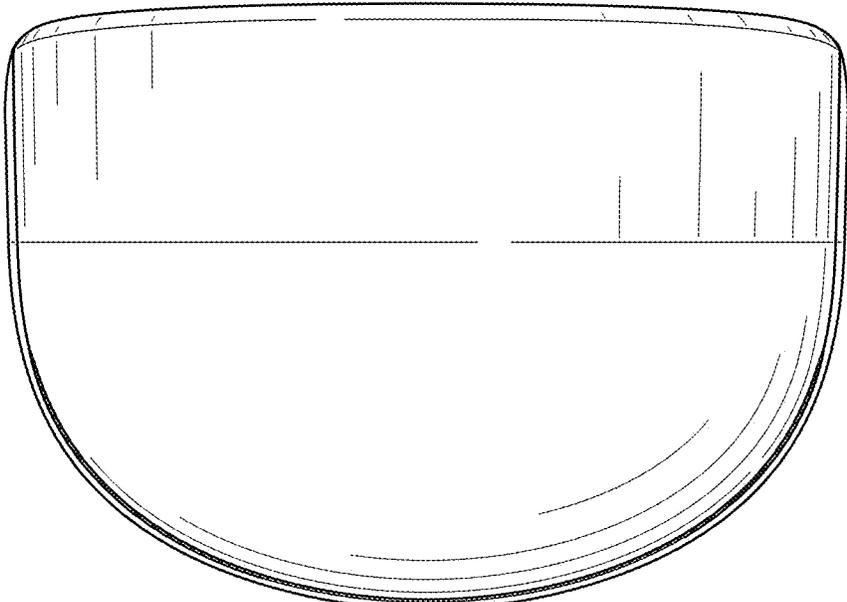


FIG. 41

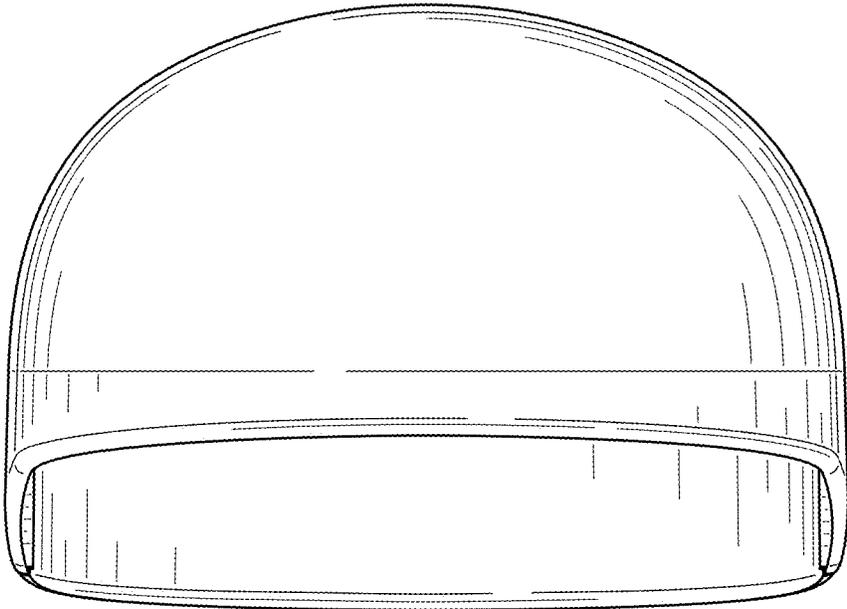


FIG. 42

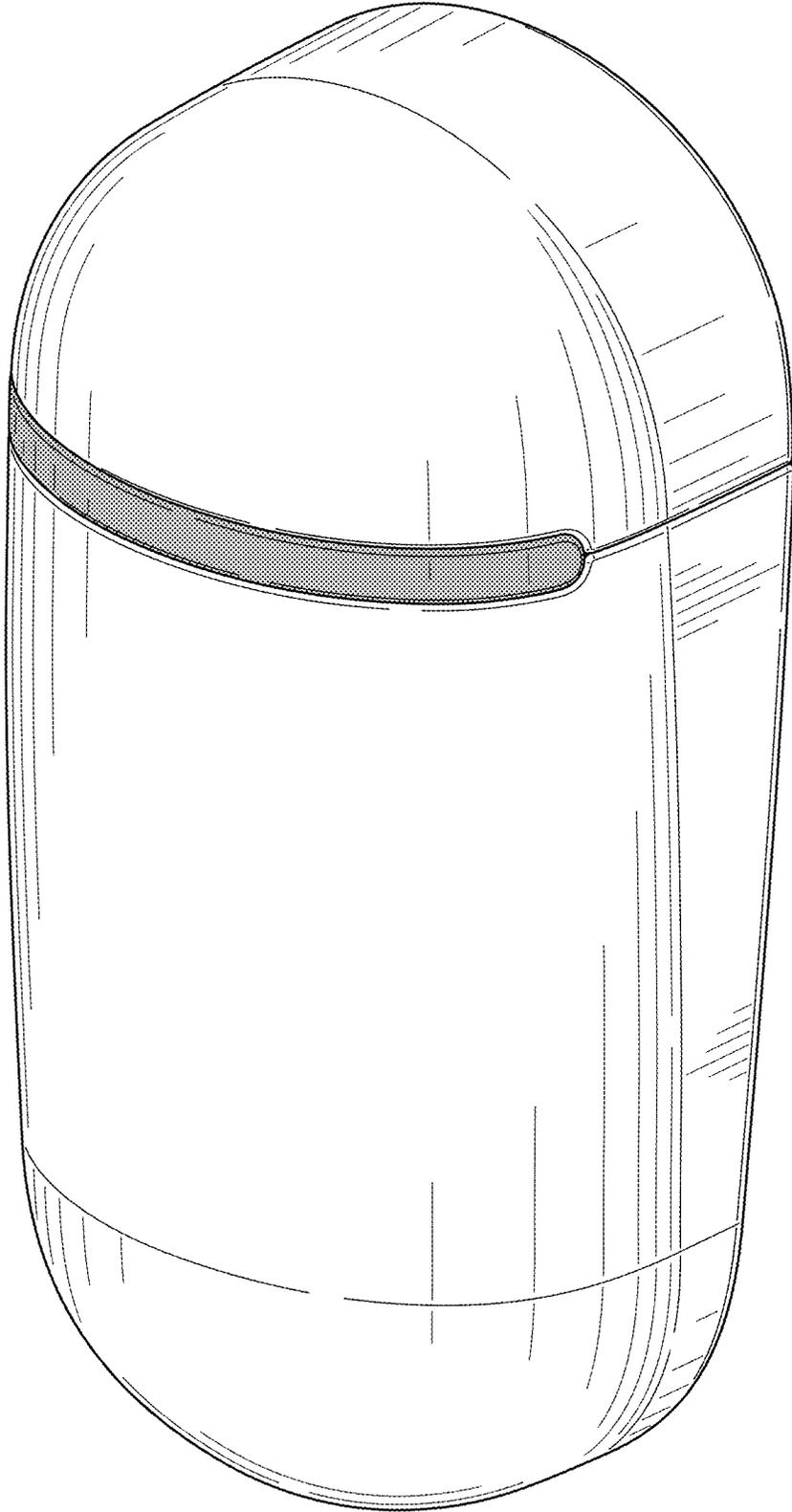


FIG. 43

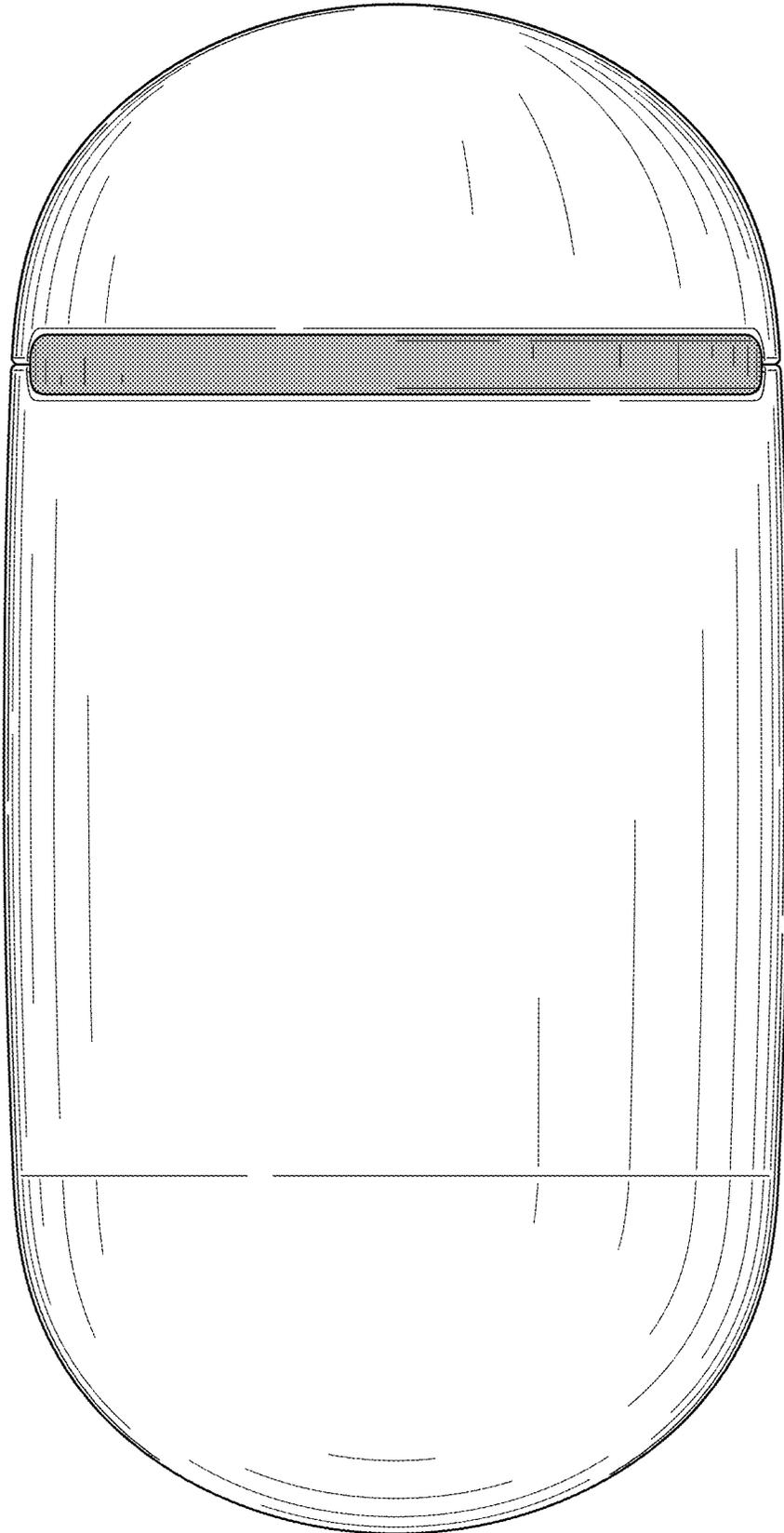


FIG. 44

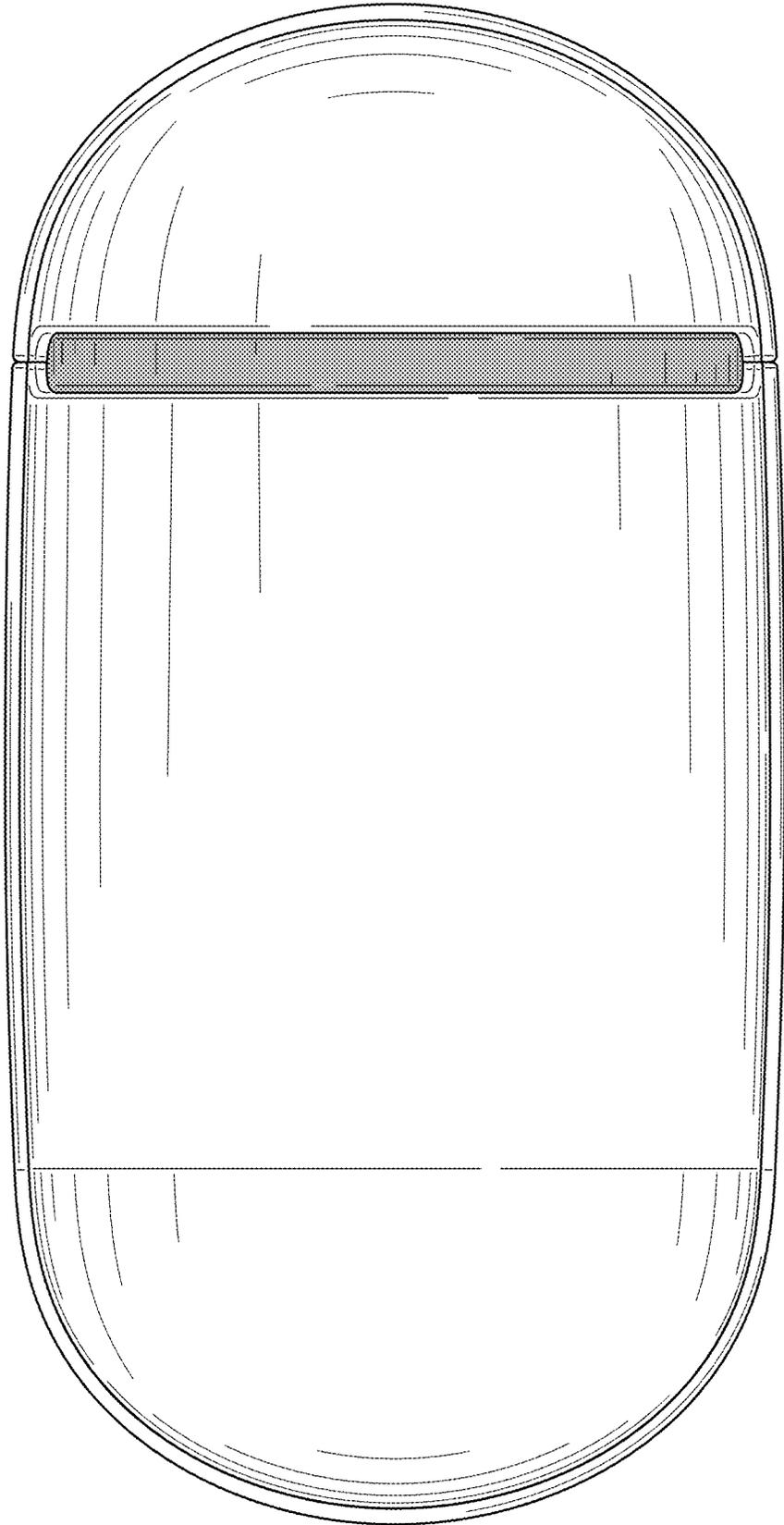


FIG. 45

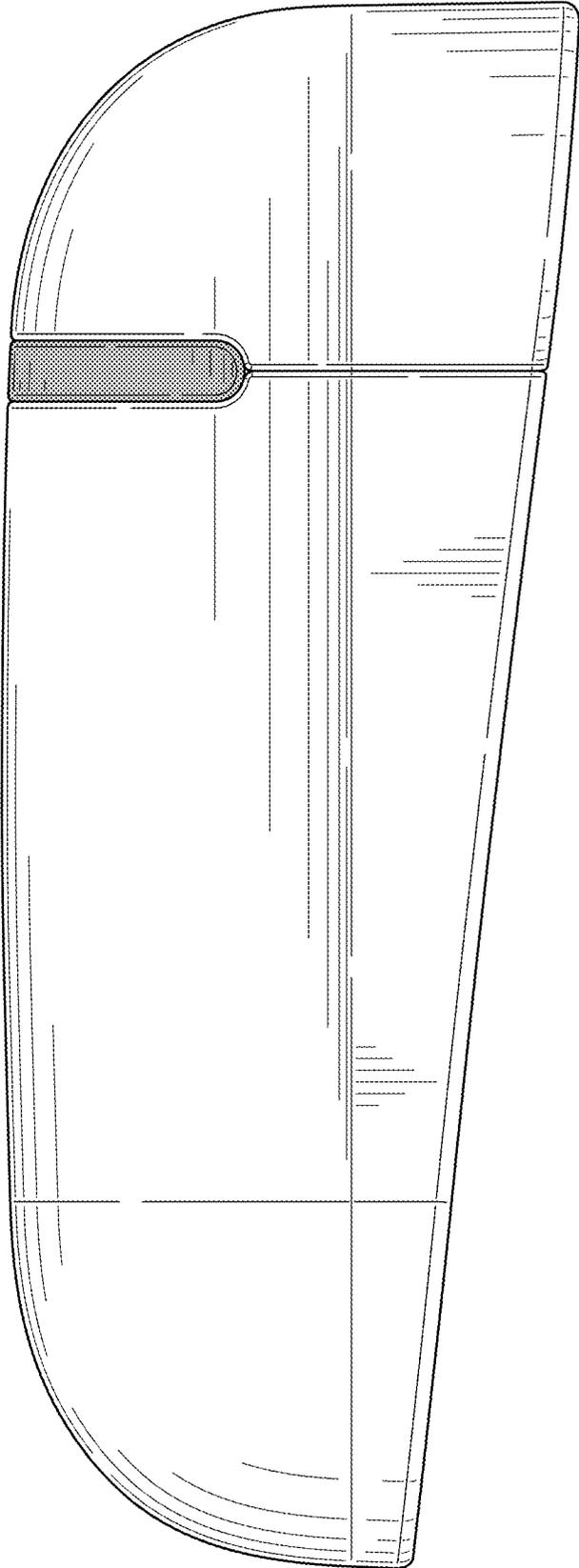


FIG. 46

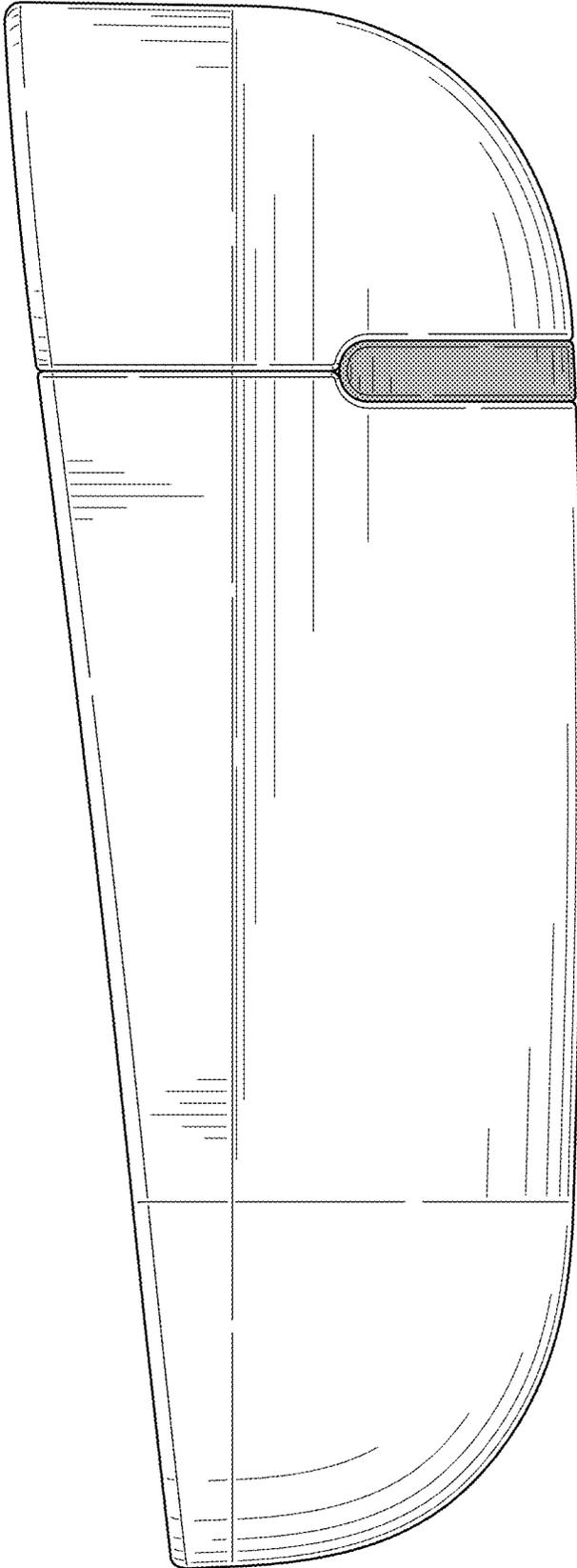


FIG. 47

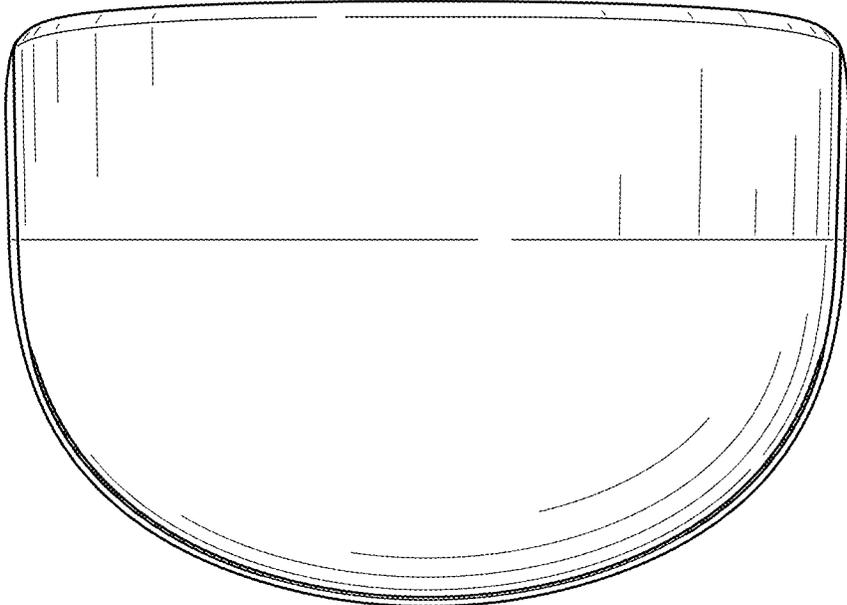


FIG. 48

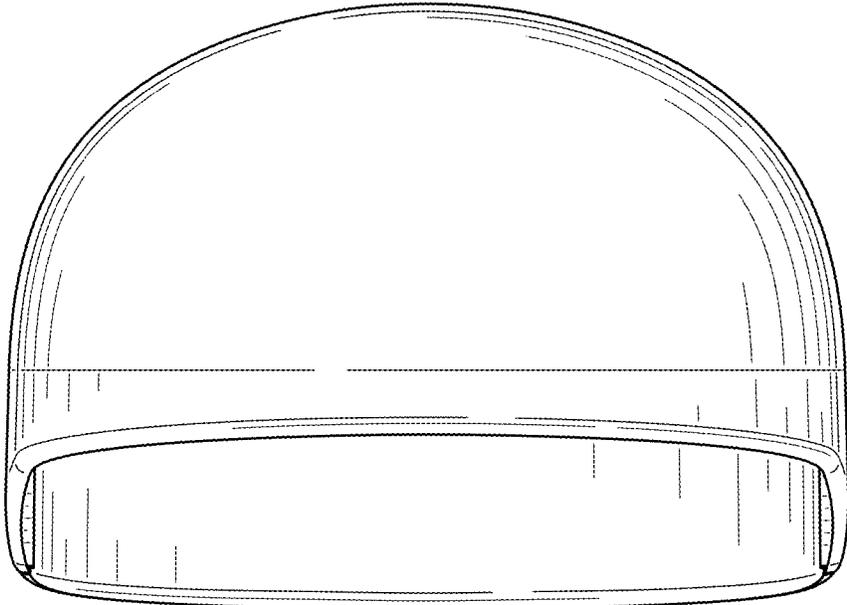


FIG. 49



FIG. 50



FIG. 51



FIG. 52

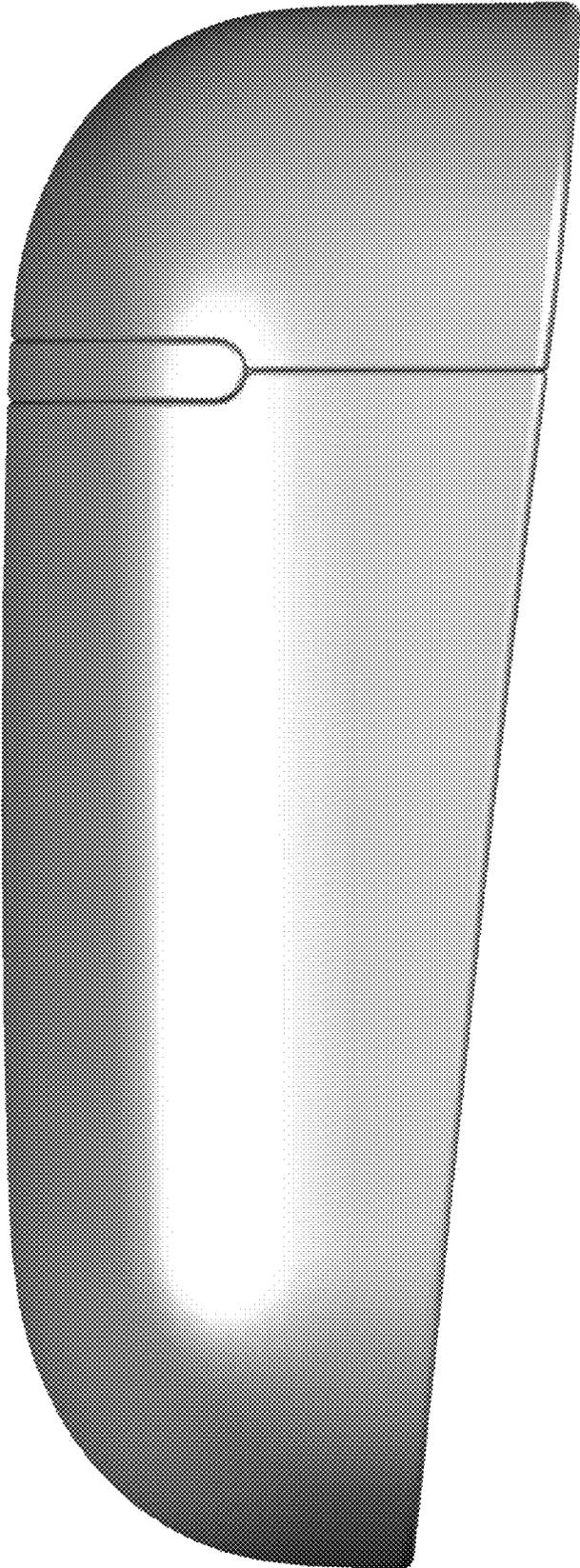


FIG. 53

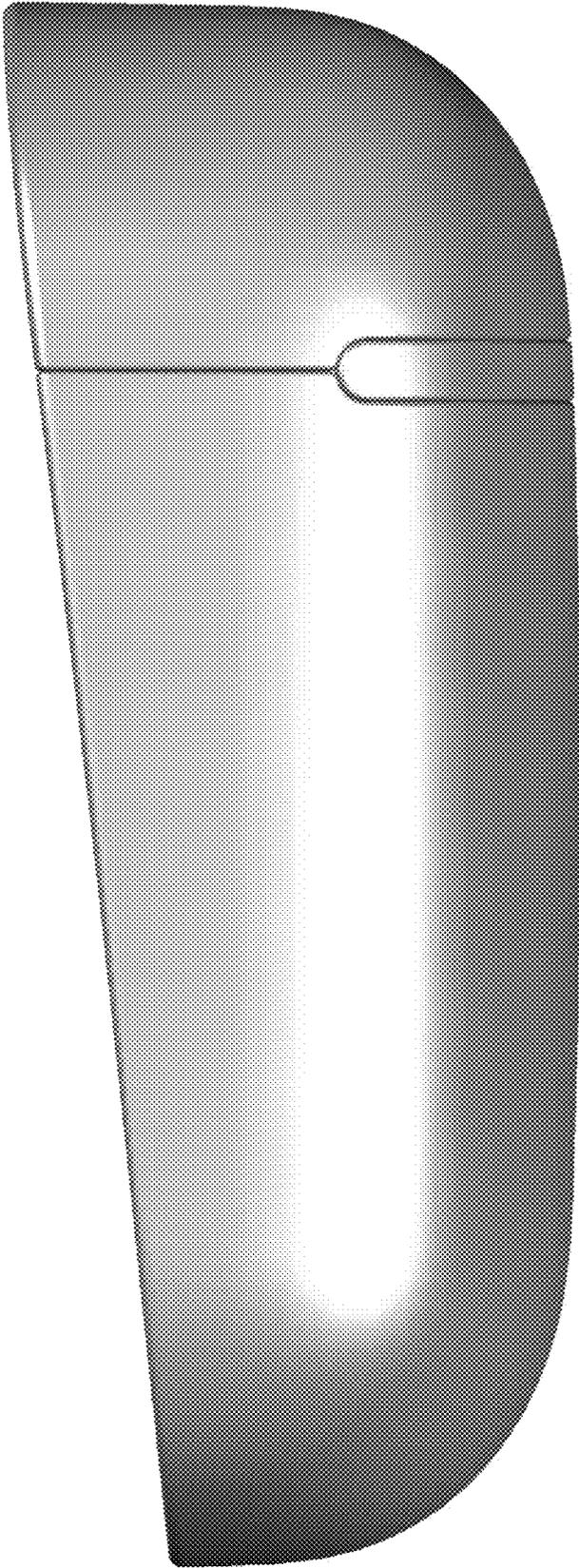


FIG. 54

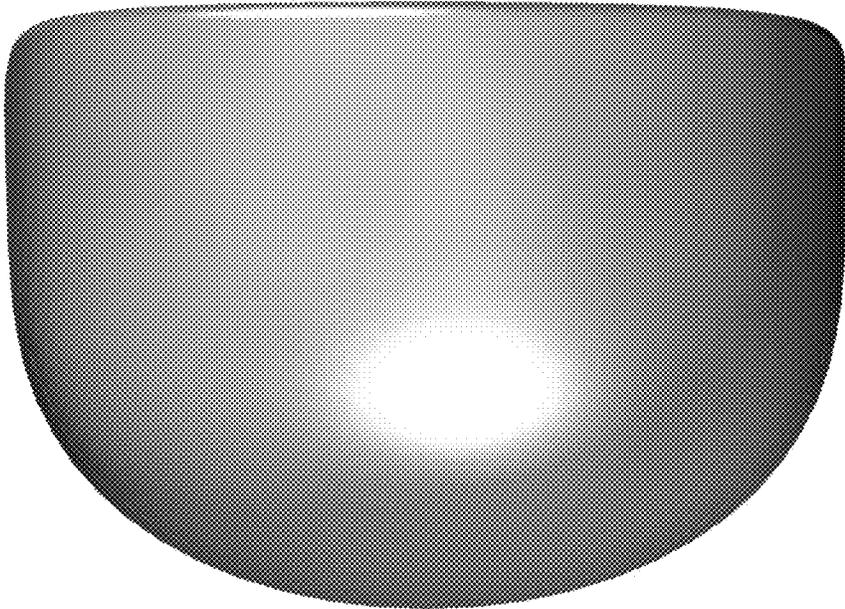


FIG. 55

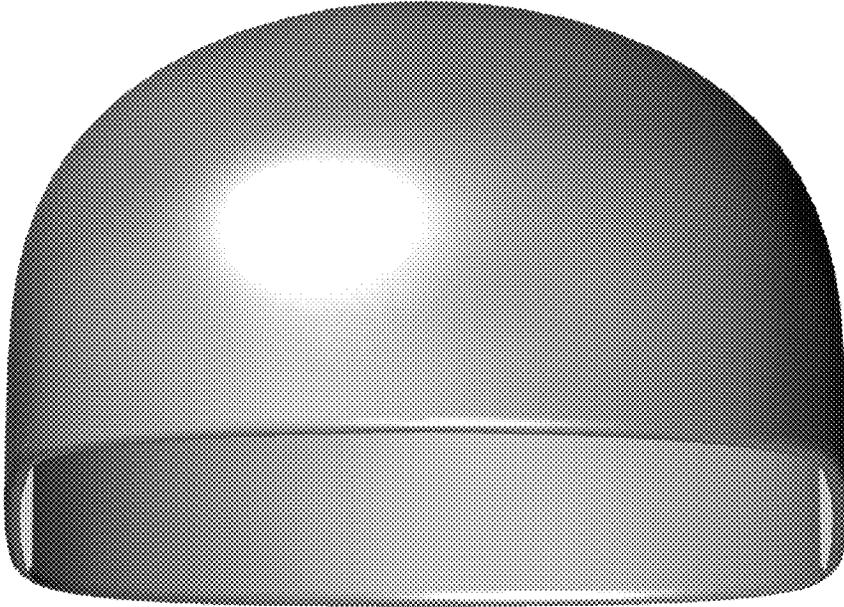


FIG. 56