



US00D870402S

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

(10) **Patent No.:** **US D870,402 S**

(45) **Date of Patent:** **** Dec. 17, 2019**

(54) **ROBOT CLEANER**

(71) Applicant: **SAMSUNG ELECTRONICS CO., LTD.**, Suwon-si, Gyeonggi-do (KR)

(72) Inventors: **Deoksang Yun**, Uiwang-si (KR);
Hyounsub Choi, Goyang-si (KR);
Sangin Lee, Seoul (KR); **Hwandong Lee**, Seoul (KR)

(73) Assignee: **SAMSUNG ELECTRONICS CO., LTD.**, Gyeonggi-Do (KR)

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

(21) Appl. No.: **29/659,461**

(22) Filed: **Aug. 9, 2018**

Related U.S. Application Data

(63) Continuation of application No. 29/628,114, filed on Dec. 1, 2017, now Pat. No. Des. 828,663, which is a continuation of application No. 29/595,208, filed on Feb. 27, 2017, now Pat. No. Des. 808,096.

(30) **Foreign Application Priority Data**

Dec. 20, 2016 (KR) 30-2016-0061990

(51) **LOC (12) Cl.** **15-05**

(52) **U.S. Cl.**
USPC **D32/21**

(58) **Field of Classification Search**

USPC D32/21, 31; D13/108-109; 15/319

CPC E04H 4/1654; A47L 2201/00; A47L

2201/02; A47L 2201/04; A47L 2201/06;

A47L 9/0461; A47L 9/2805; B25J 9/1694

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D548,411 S * 8/2007 Schroter D32/21

D548,902 S 8/2007 Chun et al.

D551,815 S * 9/2007 Schroeter D32/21

D593,265 S * 5/2009 Can D32/21

D625,059 S 10/2010 Morenstein et al.

D625,477 S 10/2010 Morenstein et al.

8,505,158 B2 8/2013 Han et al.

D691,337 S 10/2013 Kim et al.

D703,397 S 4/2014 Sungkyung et al.

D720,103 S * 12/2014 Haug D32/21

D743,647 S 11/2015 Heck et al.

D745,757 S 12/2015 Choi et al.

D746,005 S 12/2015 Cheon et al.

D751,777 S 3/2016 Cheon et al.

D778,514 S 2/2017 Park et al.

D781,512 S 3/2017 Neumann et al.

D784,640 S 4/2017 Verhoorn

D785,879 S 5/2017 Bu et al.

(Continued)

Primary Examiner — Ruth McInroy

(74) *Attorney, Agent, or Firm* — Cantor Colburn LLP

(57) **CLAIM**

The ornamental design for a robot cleaner, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a robot cleaner, showing our new design;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a left side view thereof;

FIG. 5 is a right side view thereof;

FIG. 6 is a top view thereof;

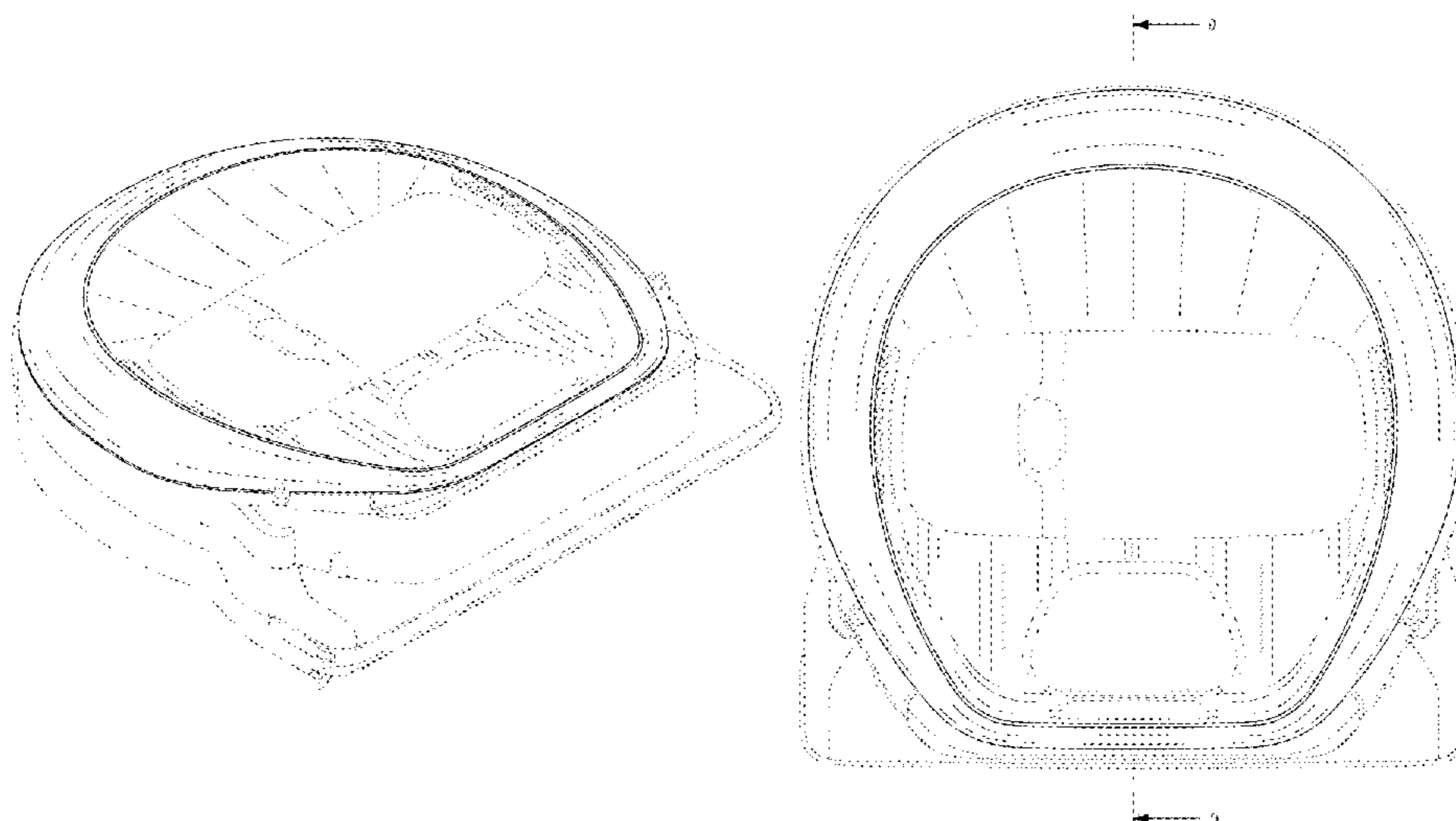
FIG. 7 is a bottom view thereof;

FIG. 8 is a rear perspective view thereof; and,

FIG. 9 is a cross-sectional view taken along line 9-9 of FIG. 6.

The broken lines illustrating portions of the robot cleaner form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D796,757 S	9/2017	Verhoorn et al.	
D808,096 S *	1/2018	Yun	D32/21
9,854,956 B2	1/2018	Song et al.	
9,968,233 B2 *	5/2018	Strang	A47L 11/4011
9,968,234 B2 *	5/2018	Chao	A47L 11/305

* cited by examiner

FIG. 1

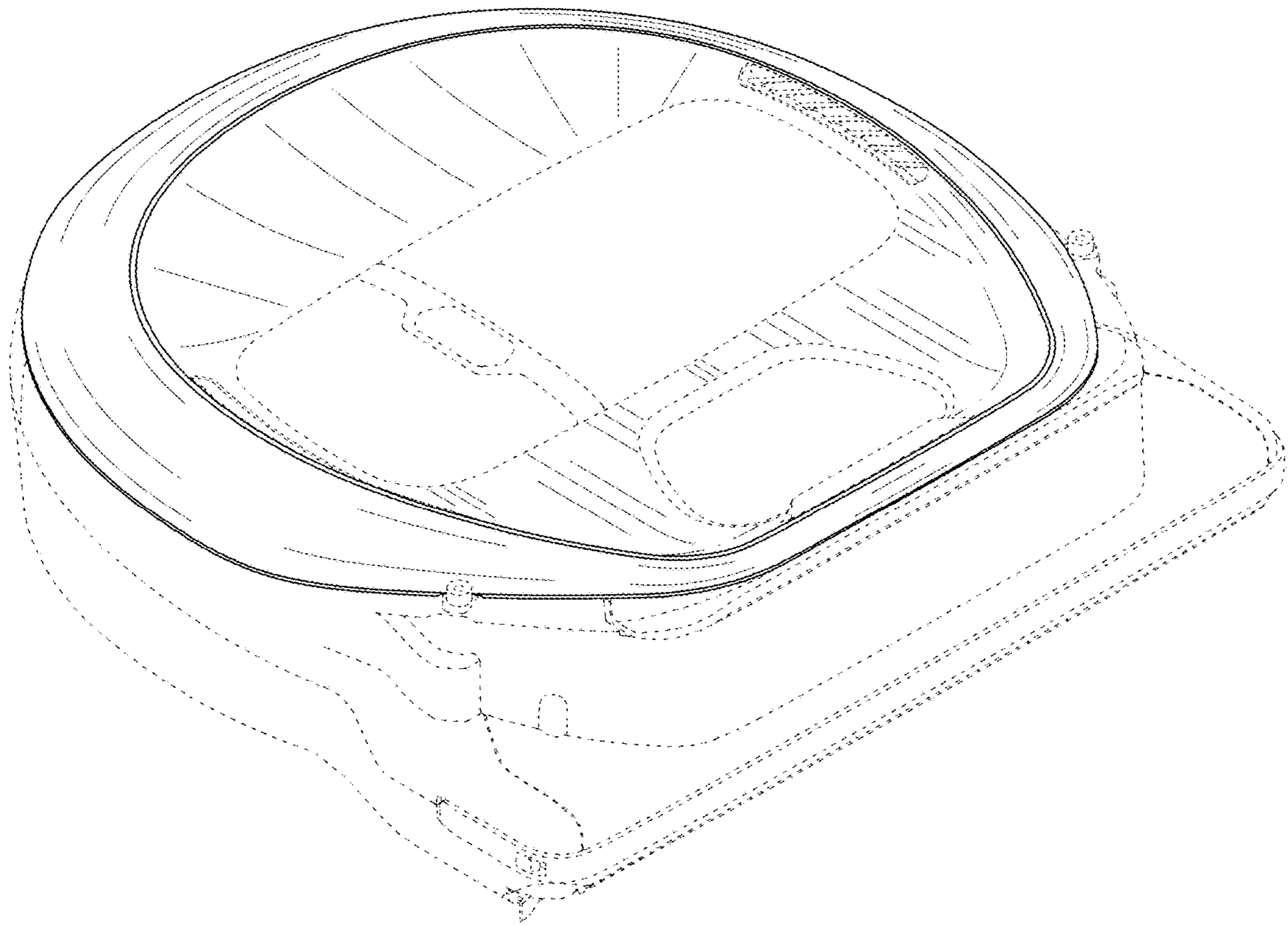


FIG. 2

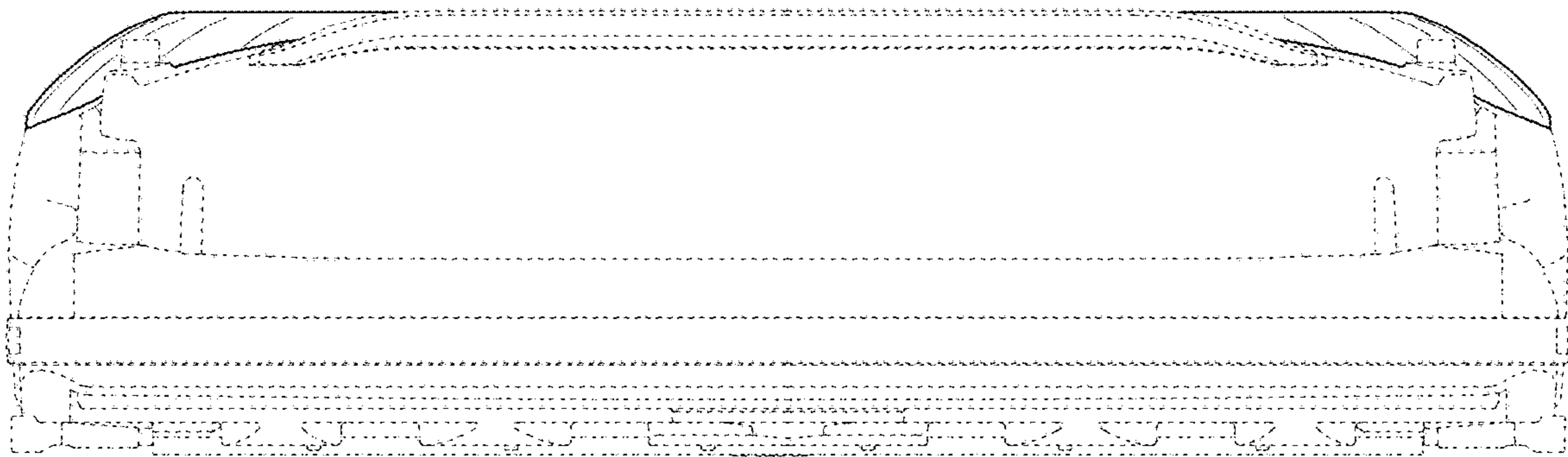


FIG. 3

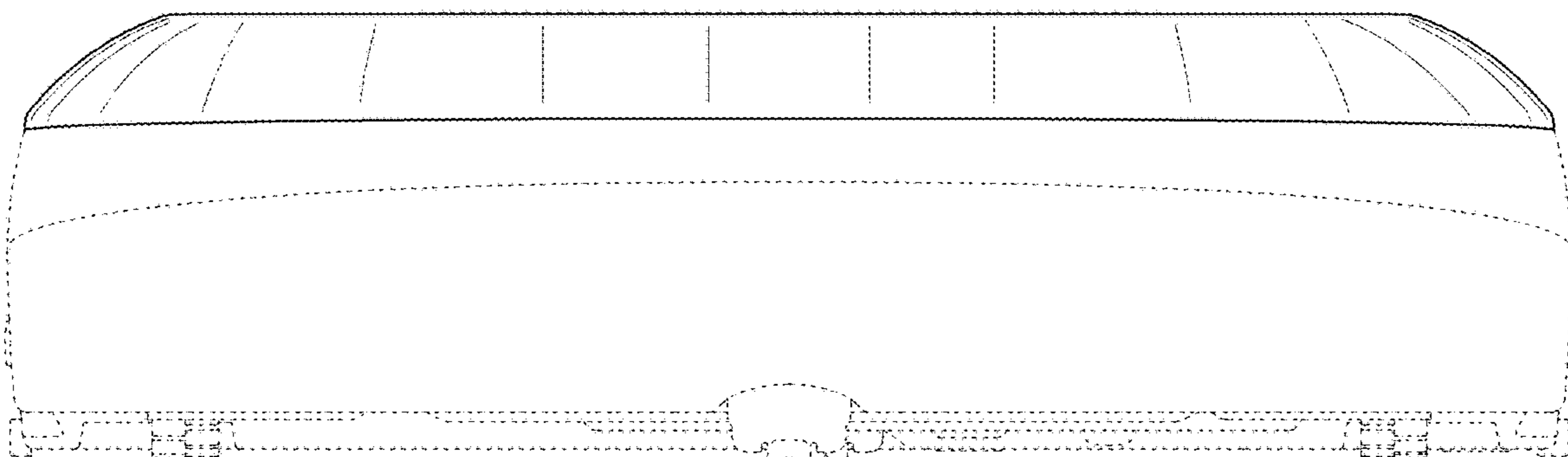


FIG. 4

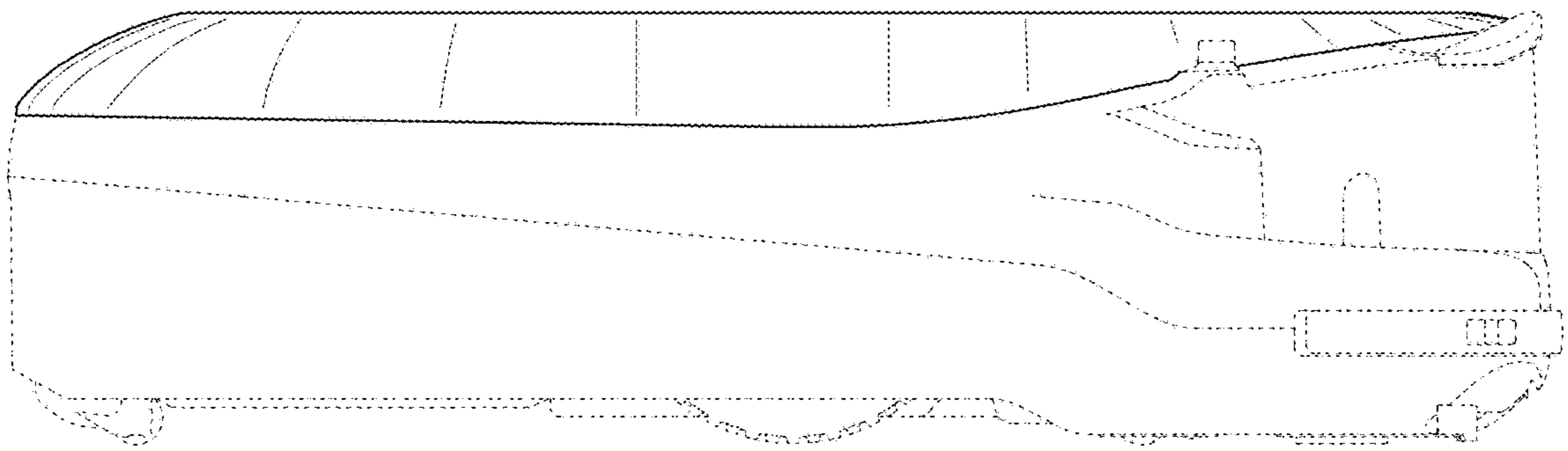


FIG. 5

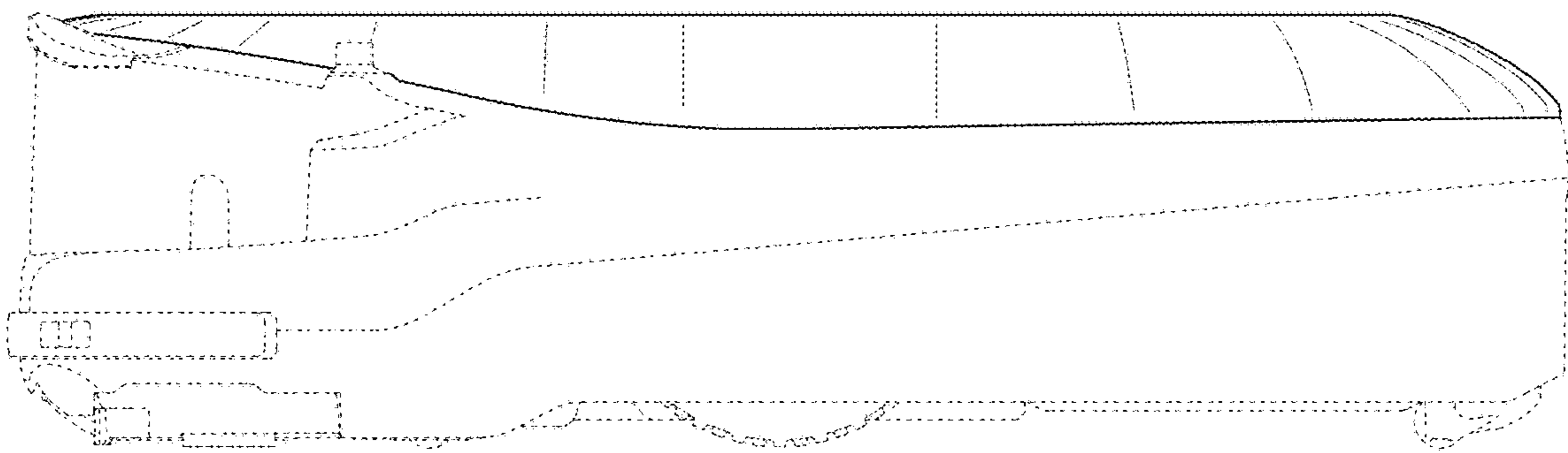


FIG. 6

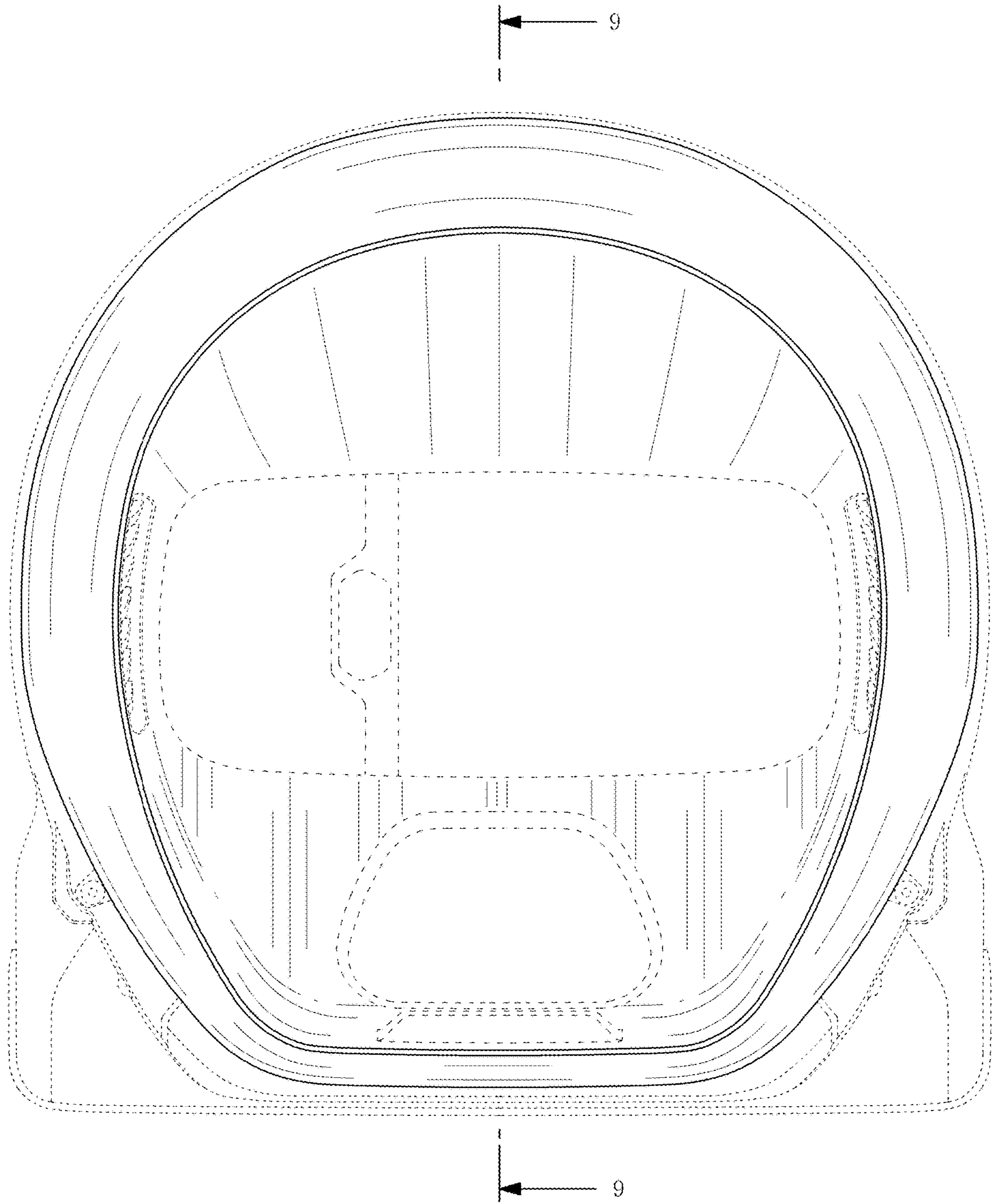


FIG. 7

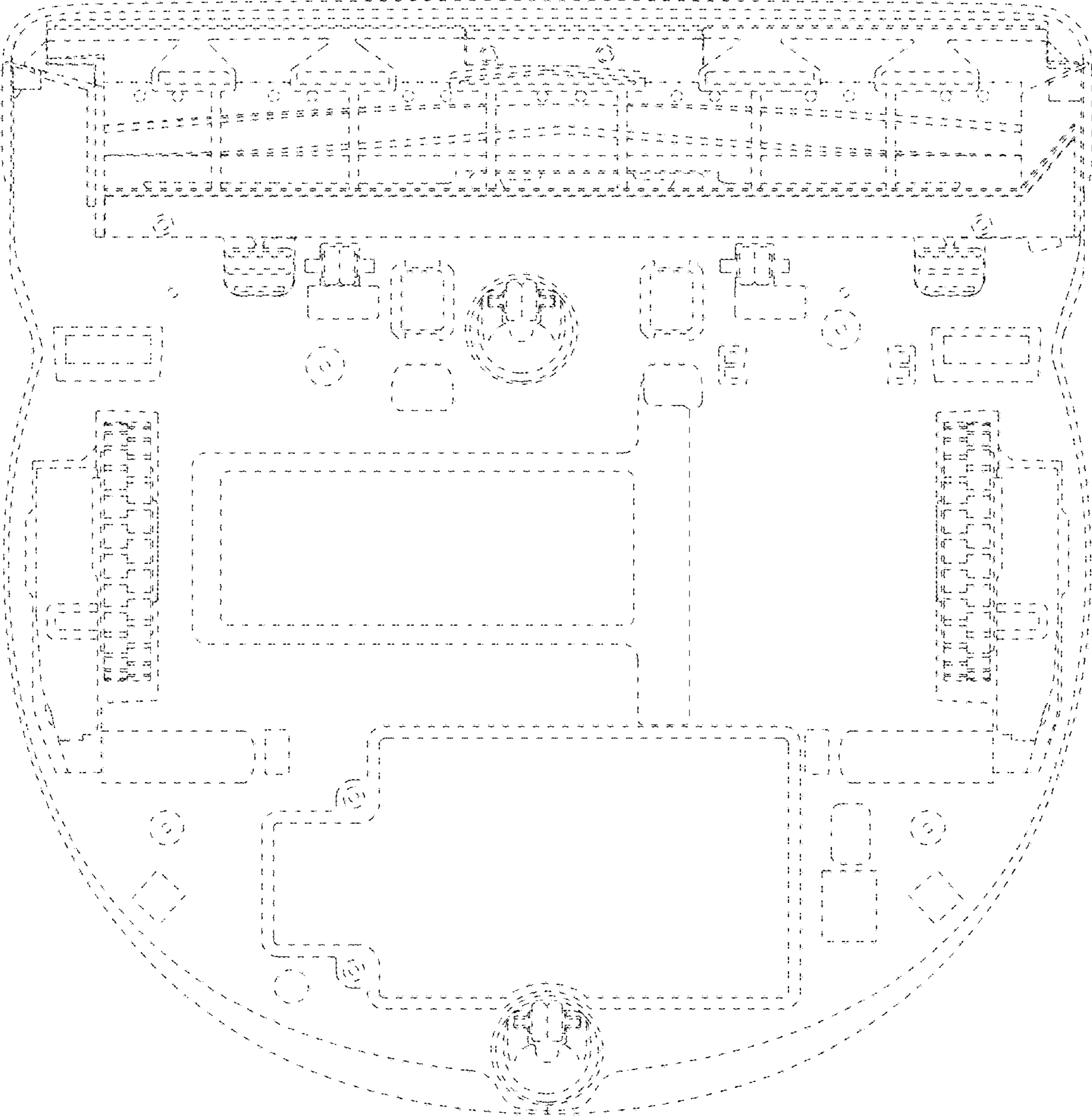


FIG. 8

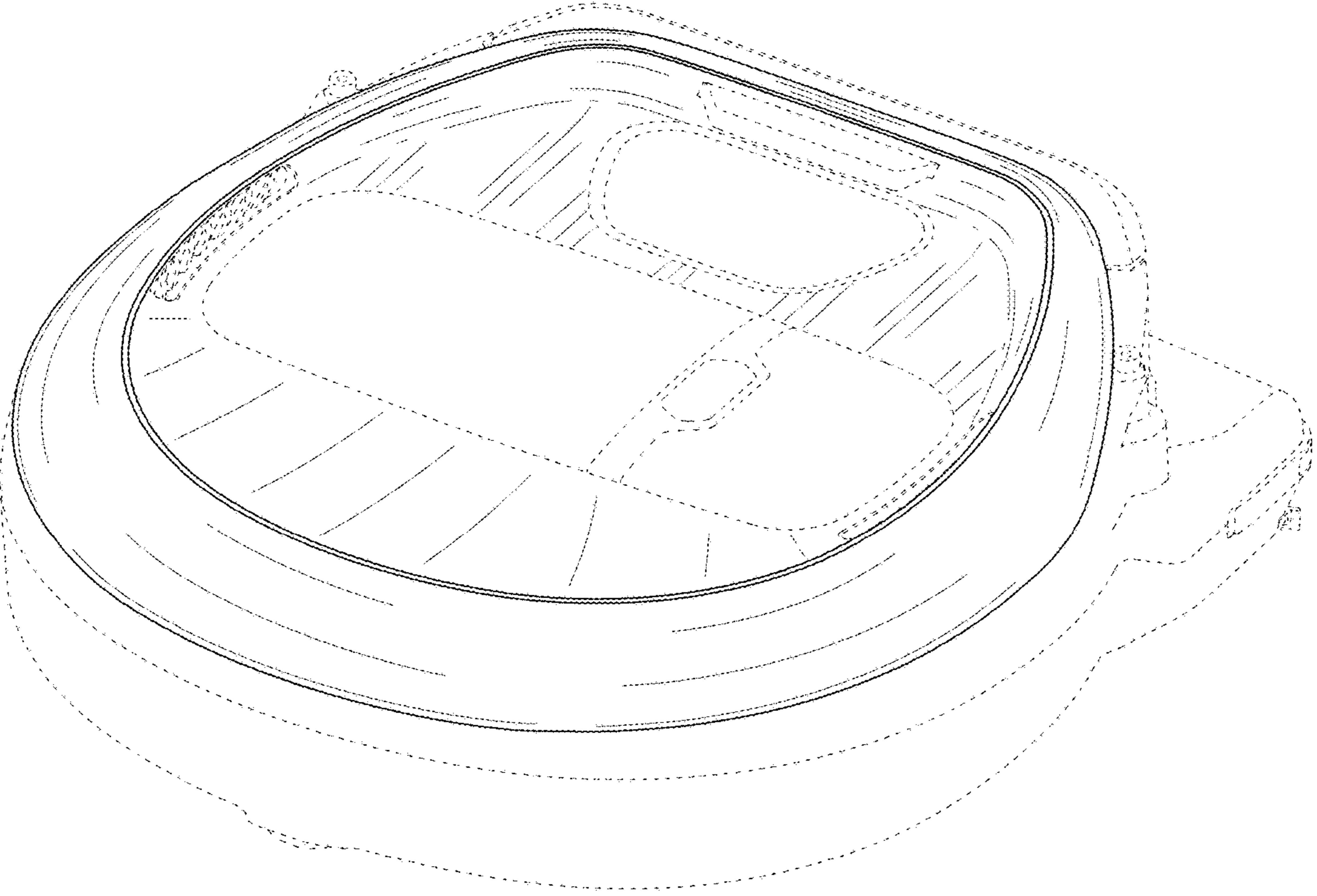


FIG. 9

