



US00D953176S

(12) **United States Design Patent** (10) **Patent No.:** **US D953,176 S**
Chen et al. (45) **Date of Patent:** **** May 31, 2022**

- (54) **SENSOR HOUSING ASSEMBLY**
- (71) Applicant: **Waymo LLC**, Mountain View, CA (US)
- (72) Inventors: **Benjamin Chen**, San Francisco, CA (US); **Thomas Southworth**, Royal Oak, CA (US)
- (73) Assignee: **Waymo LLC**, Mountain View, CA (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/725,212**
- (22) Filed: **Feb. 24, 2020**
- (51) **LOC (13) Cl.** **10-04**
- (52) **U.S. Cl.**
USPC **D10/70**
- (58) **Field of Classification Search**
USPC D14/138 C, 250, 251; D12/167, 174, D12/400; D10/75, 78
CPC G08C 17/00; G08C 17/02; G01S 1/02
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D320,982 S *	10/1991	Siddoway	.....	D14/137
D350,726 S *	9/1994	Cooper	.....	D13/107
D359,284 S *	6/1995	Hung	.....	D14/148
D369,803 S *	5/1996	Ka Hung	.....	D14/149
D393,625 S *	4/1998	Riccobon	.....	D13/107
D578,960 S *	10/2008	Fisher	.....	D13/108
D605,643 S *	12/2009	Landry	.....	D14/240
D616,409 S *	5/2010	Townsend	.....	D14/149
D617,303 S *	6/2010	Hasegawa	.....	D14/149
D657,771 S *	4/2012	Sakamoto	.....	D14/150
D659,690 S *	5/2012	Huang	.....	D14/240
D790,997 S *	7/2017	Dewey	.....	D10/78
D821,232 S	6/2018	Ewringmann et al.		

D822,580 S *	7/2018	Eriksson	.....	D12/413
D825,357 S	8/2018	Ahn et al.		
D831,657 S *	10/2018	Shim	.....	D14/435

(Continued)

OTHER PUBLICATIONS

Smartmicro, Project Documentation, Getting Started User Guide For Automotive and Industrial Radar Sensors, Oct. 23, 2019, pp. 1-16.

(Continued)

Primary Examiner — L. A. Grabenstetter
Assistant Examiner — Antoinette Martine Suiter
(74) *Attorney, Agent, or Firm* — Banner & Witcoff, Ltd.

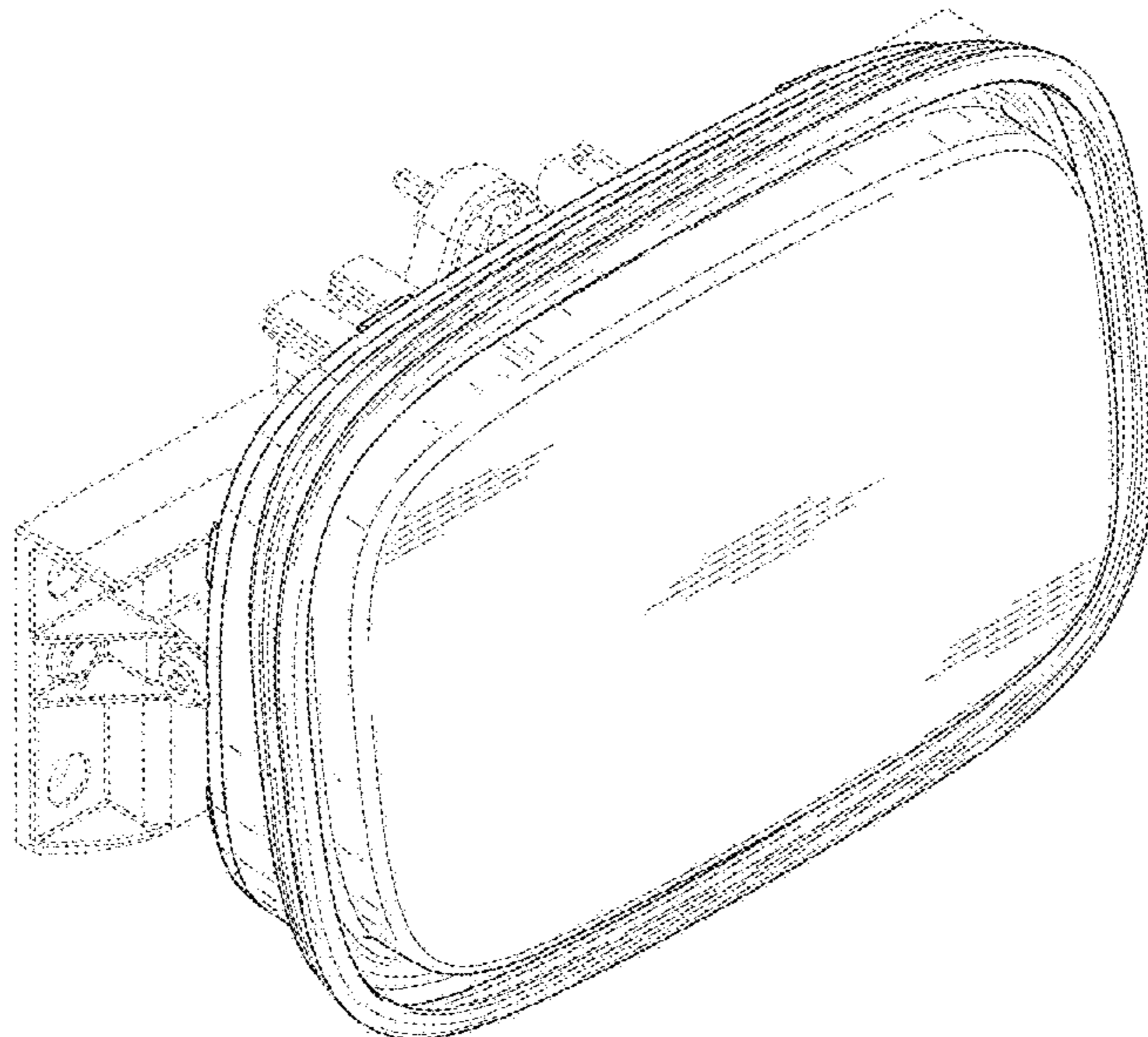
(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a front perspective view of a sensor housing assembly according to a first embodiment of our design; FIG. 2 is a front elevation view thereof; FIG. 3 is a back elevation view thereof; FIG. 4 is a right side elevation view thereof; FIG. 5 is a left side elevation view thereof; FIG. 6 is a top plan view thereof; FIG. 7 is a bottom plan view thereof; FIG. 8 is a front perspective view of a sensor housing assembly according to a second embodiment of our design; FIG. 9 is a front elevation view thereof; FIG. 10 is a back elevation view thereof; FIG. 11 is a right side elevation view thereof; FIG. 12 is a left side elevation view thereof; FIG. 13 is a top plan view thereof; and, FIG. 14 is a bottom plan view thereof. The broken lines in the figures illustrate portions of the Sensor Housing Assembly that form no part of the claimed design.

1 Claim, 12 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D835,028 S 12/2018 Ahn et al.
D858,381 S 9/2019 Ahn et al.
D858,503 S * 9/2019 Qi D14/250
D860,180 S * 9/2019 Lehmann D14/250
D885,215 S * 5/2020 Dewey D10/78
D917,472 S * 4/2021 Kwon D14/348
2008/0059015 A1 3/2008 Whittaker et al.
2017/0222311 A1 8/2017 Hess et al.
2018/0017680 A1 1/2018 Pennecot et al.

OTHER PUBLICATIONS

Smartmicro, UMRR Automotive Type 153 Data Sheet, Automotive Radar Sensor, Dec. 2, 2019, pp. 1-23.
Smartmicro, UMRR-11, Automotive Sensor, Type 132, Jan. 9, 2020, pp. 1-16.
Design U.S. Appl. No. 29/688,902, filed Apr. 25, 2019.
Design U.S. Appl. No. 29/689,690, filed May 1, 2019.

* cited by examiner

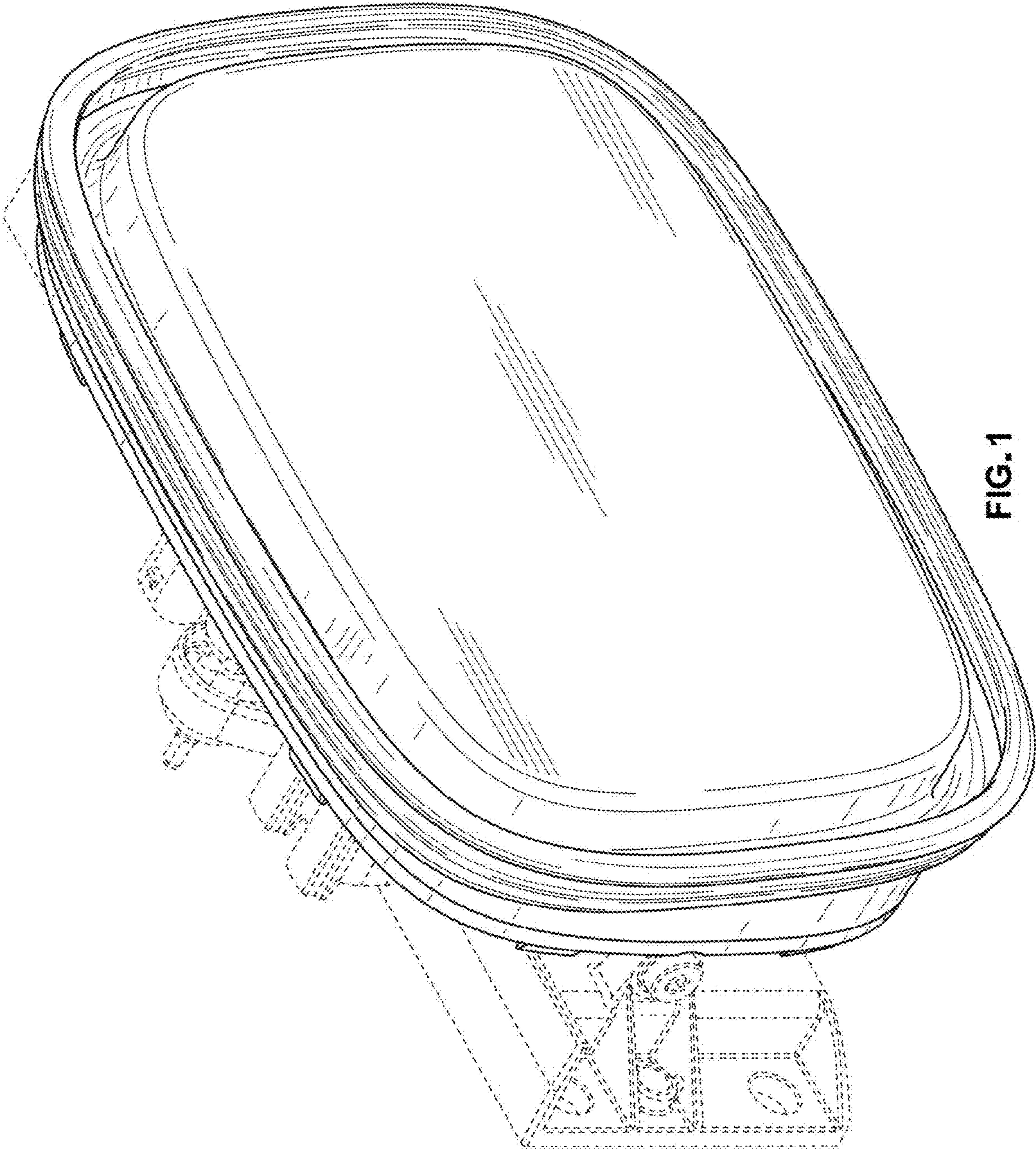


FIG. 1

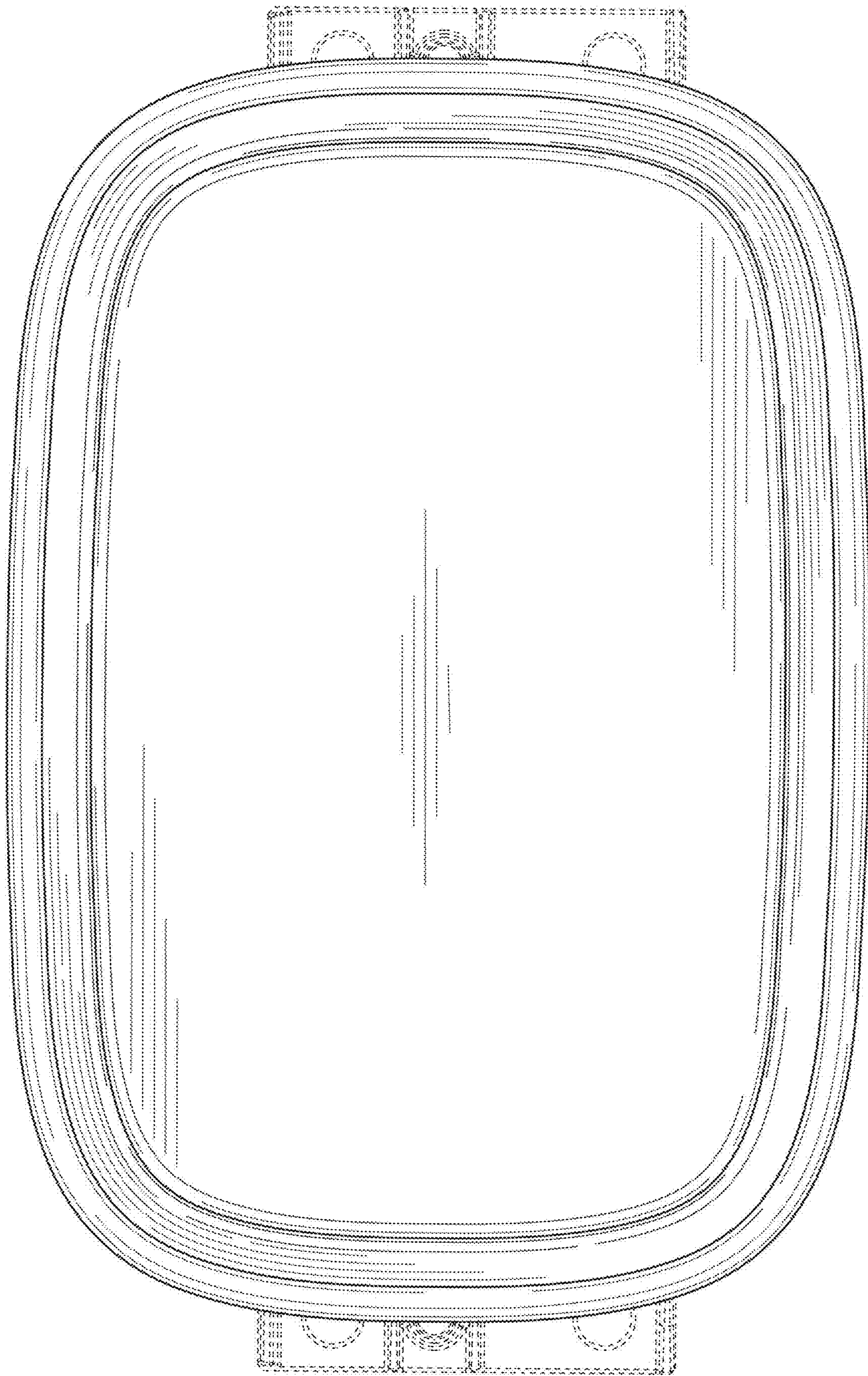


FIG. 2

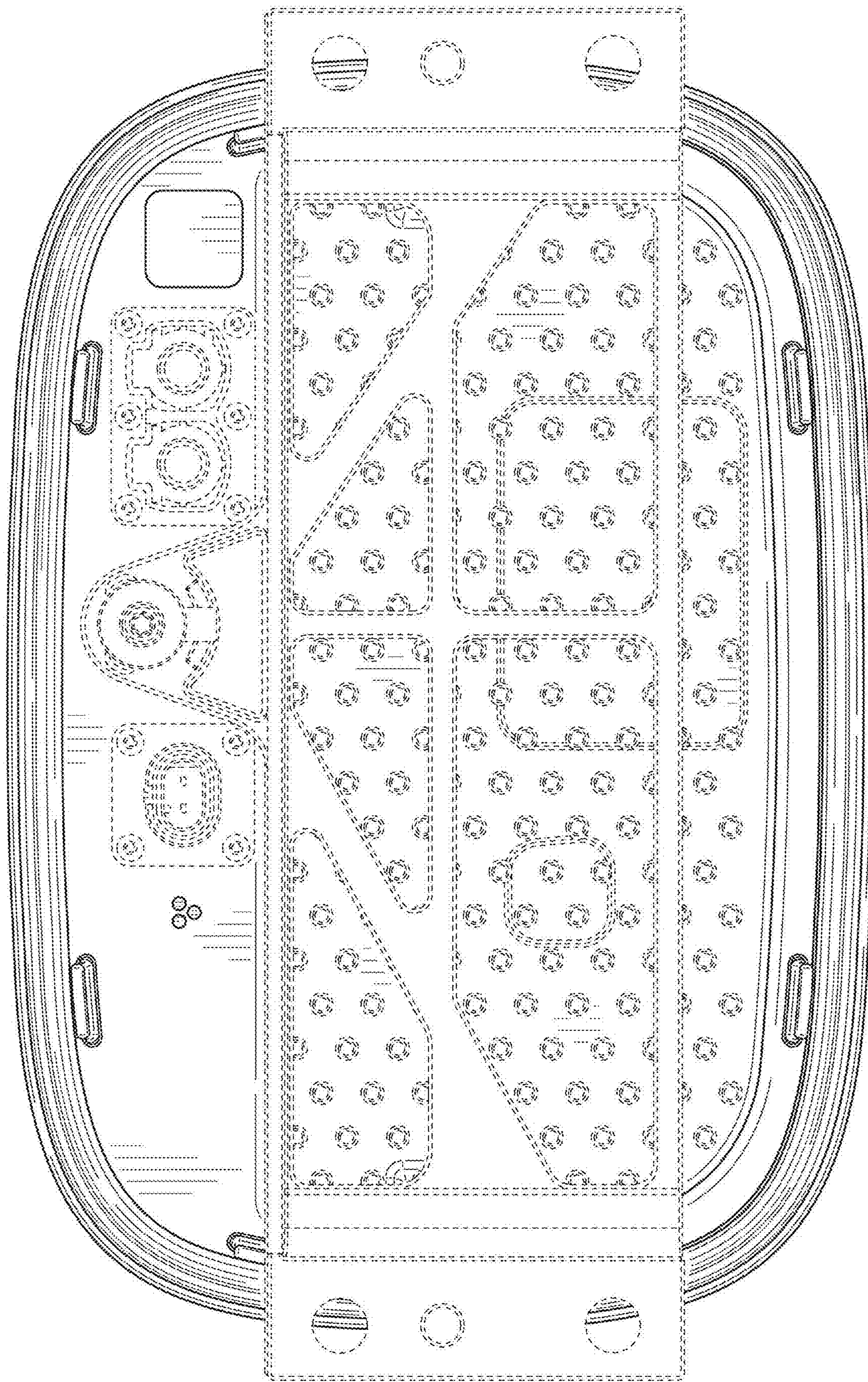


FIG. 3

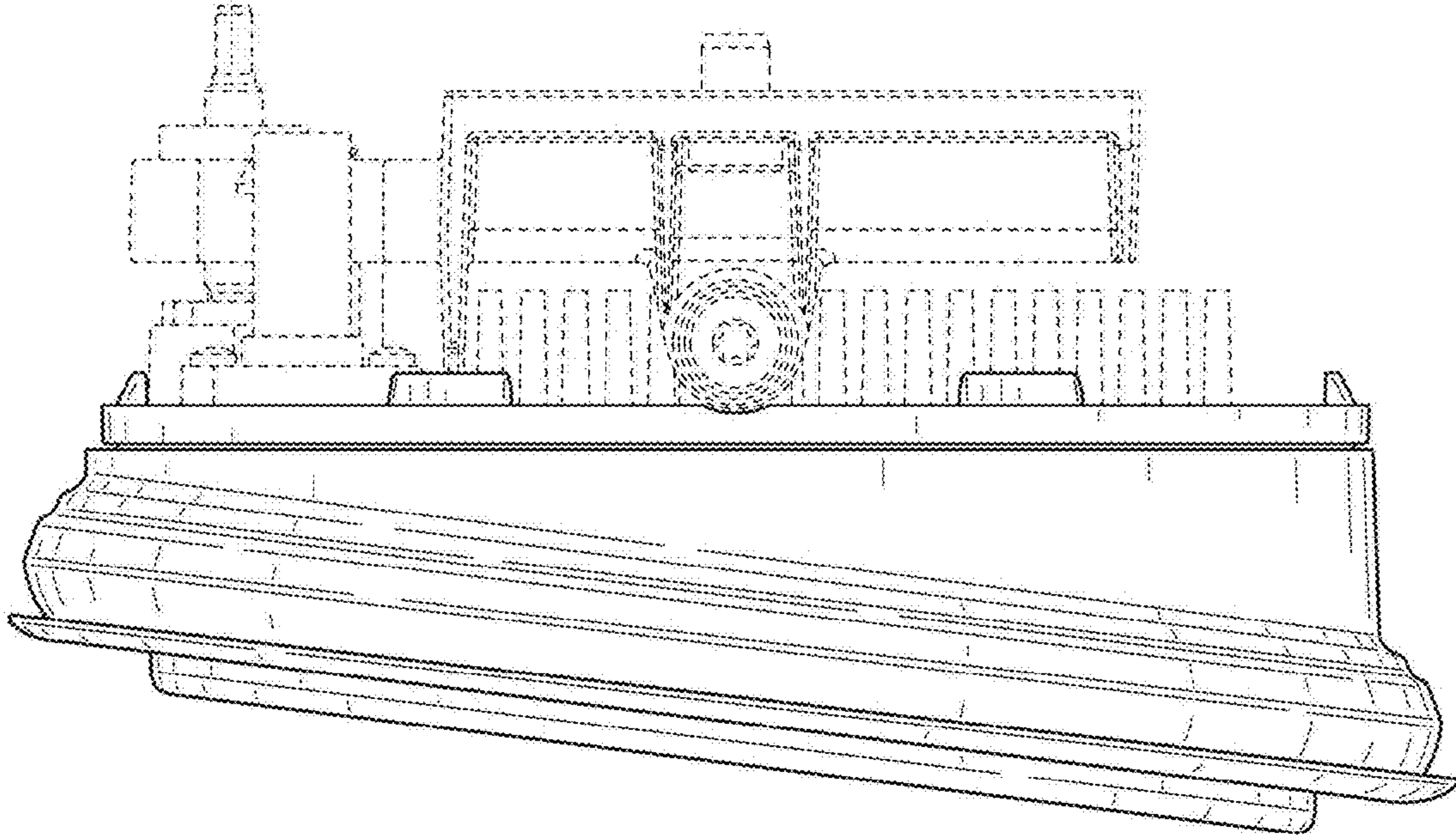


FIG. 5

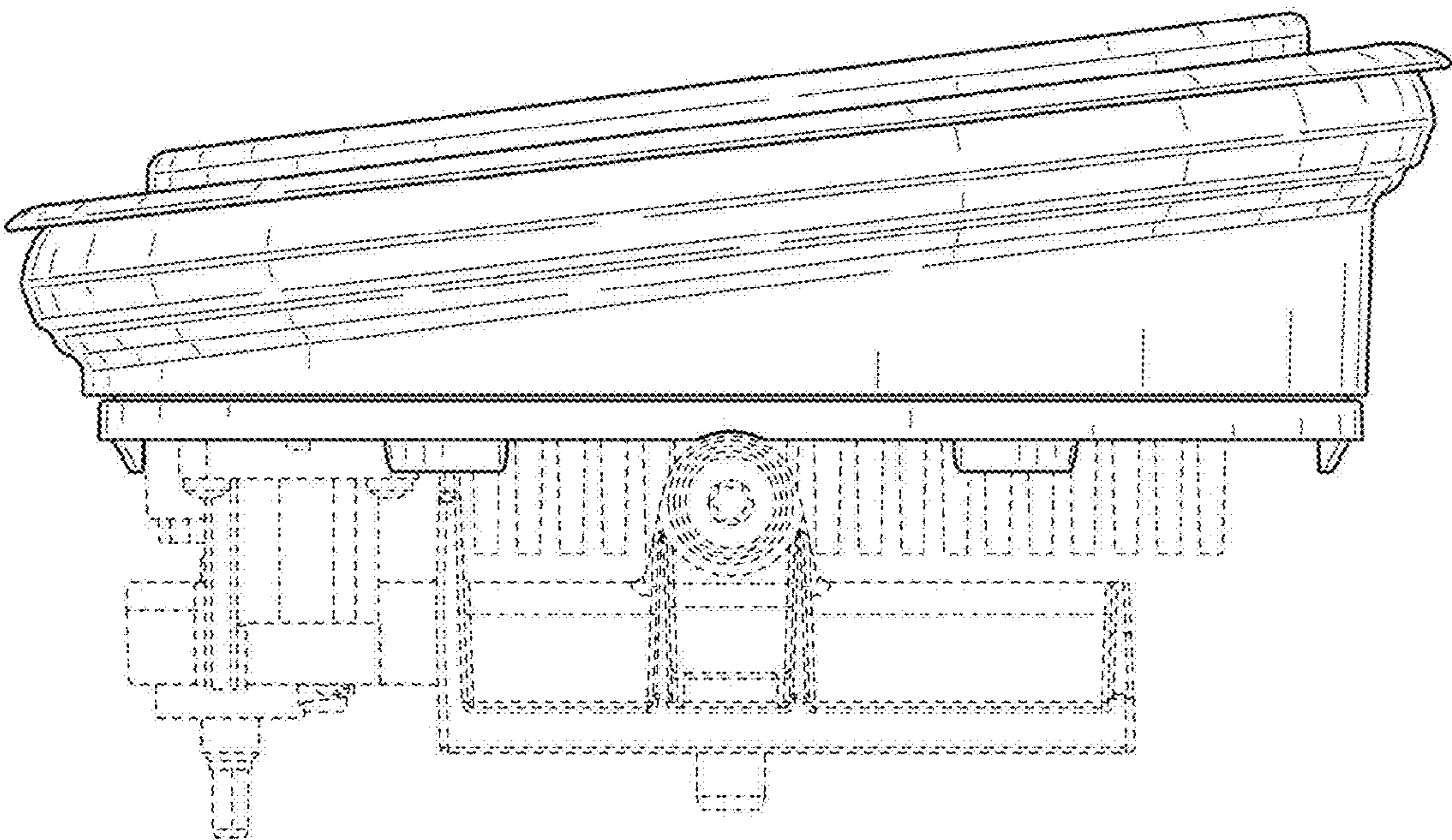


FIG. 4

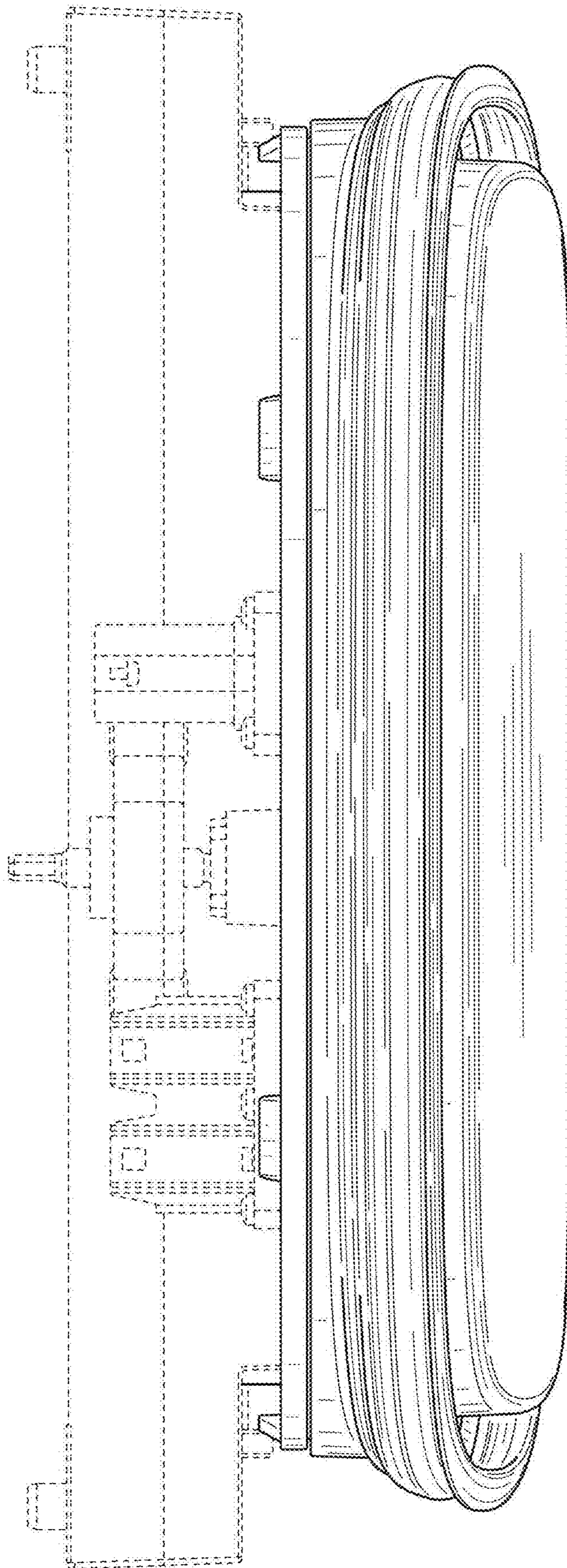


FIG. 6

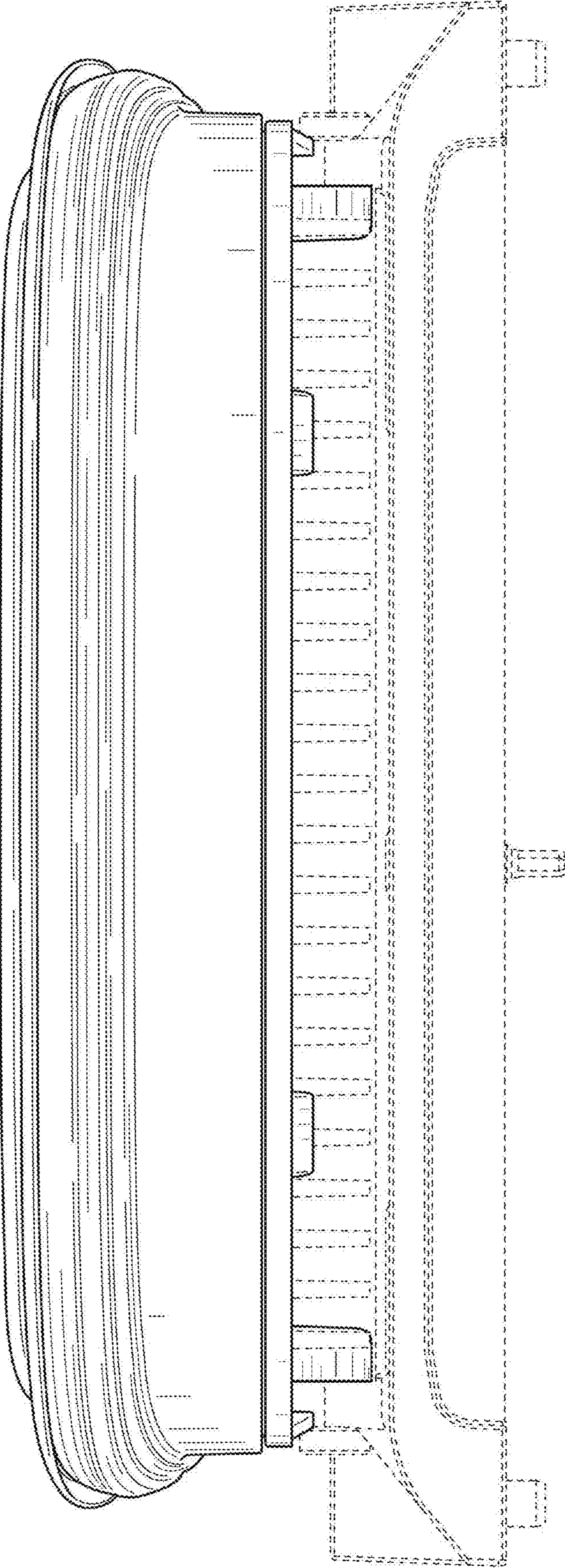


FIG. 7

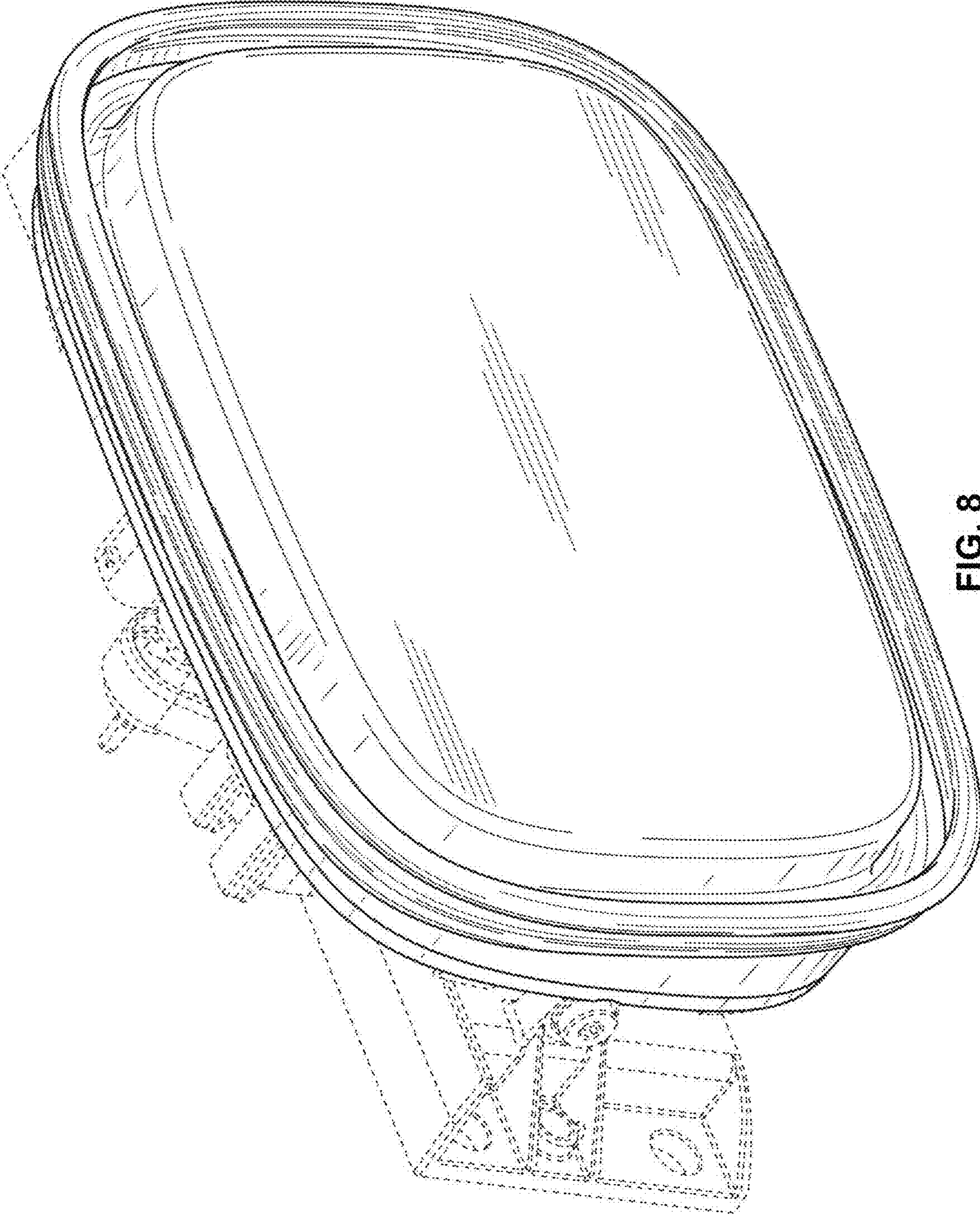


FIG. 8

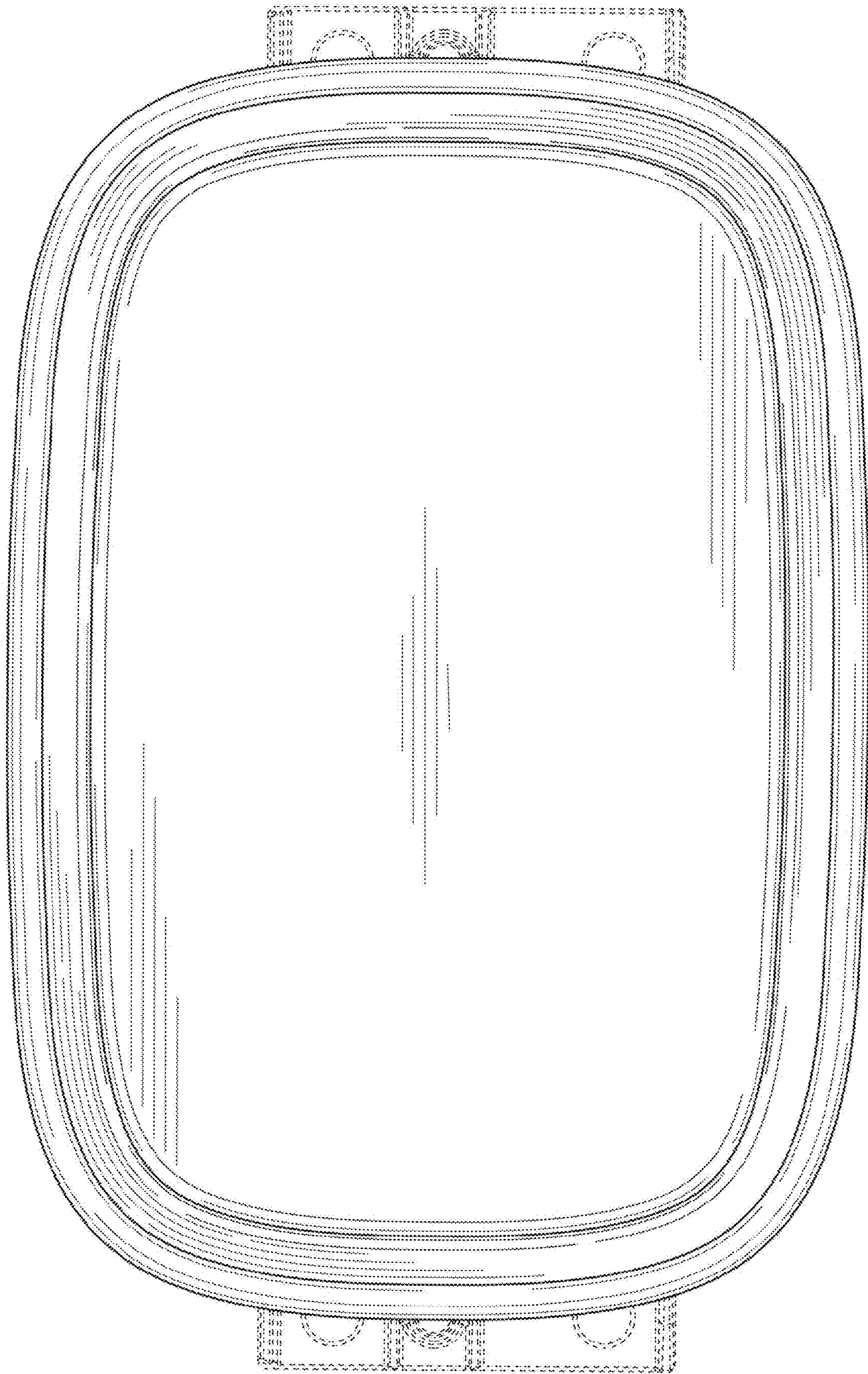


FIG. 9

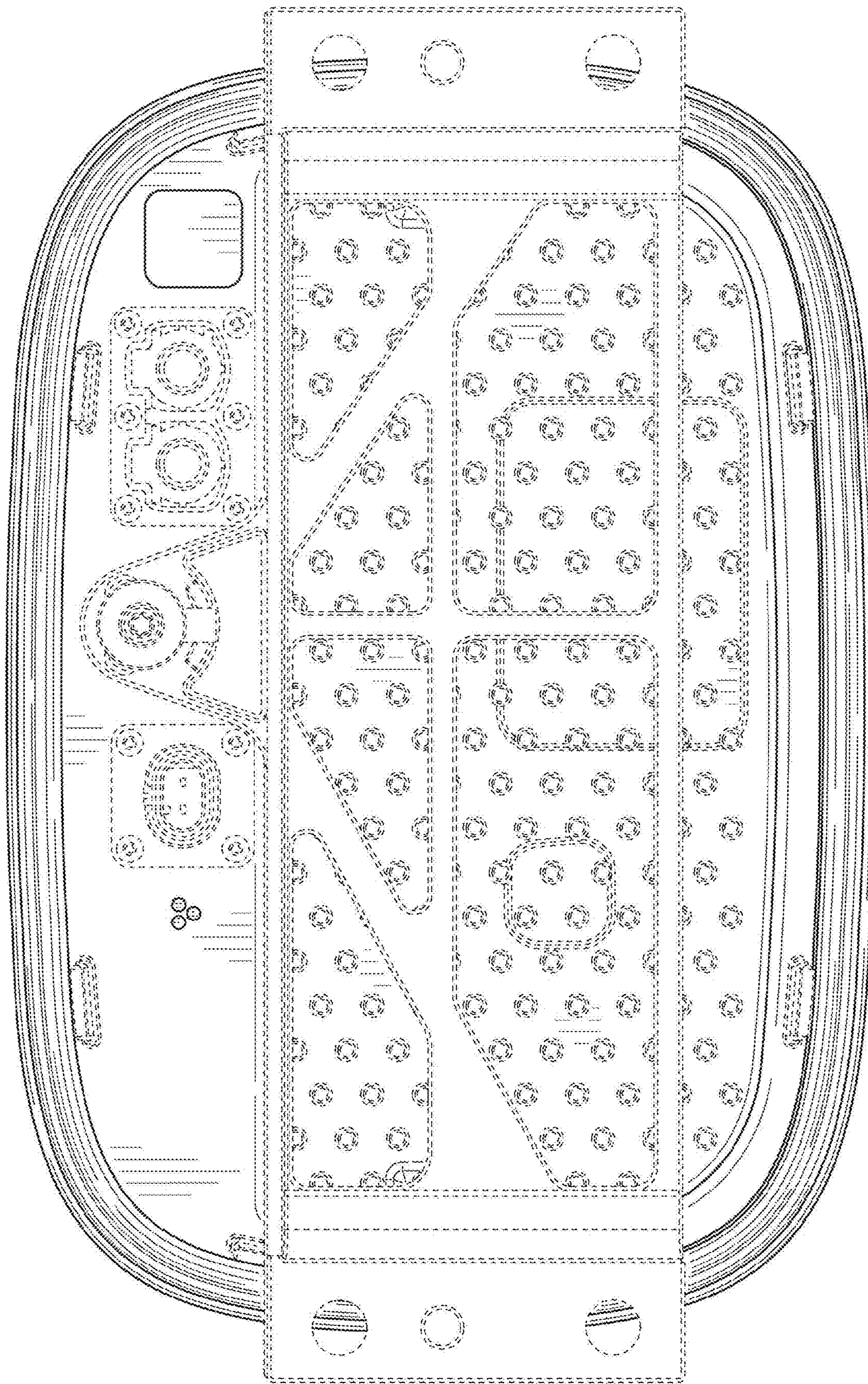


FIG. 10

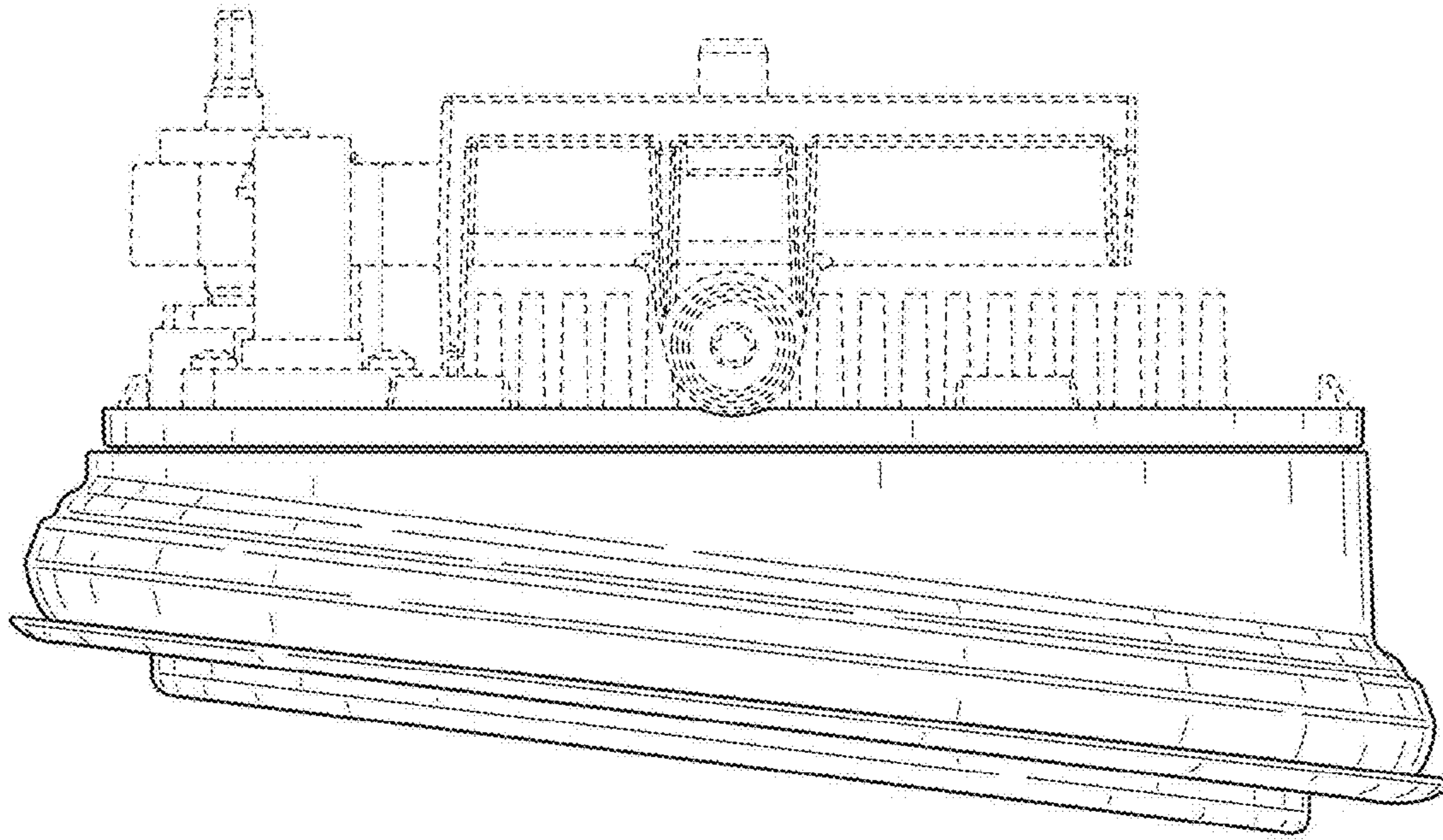


FIG. 12

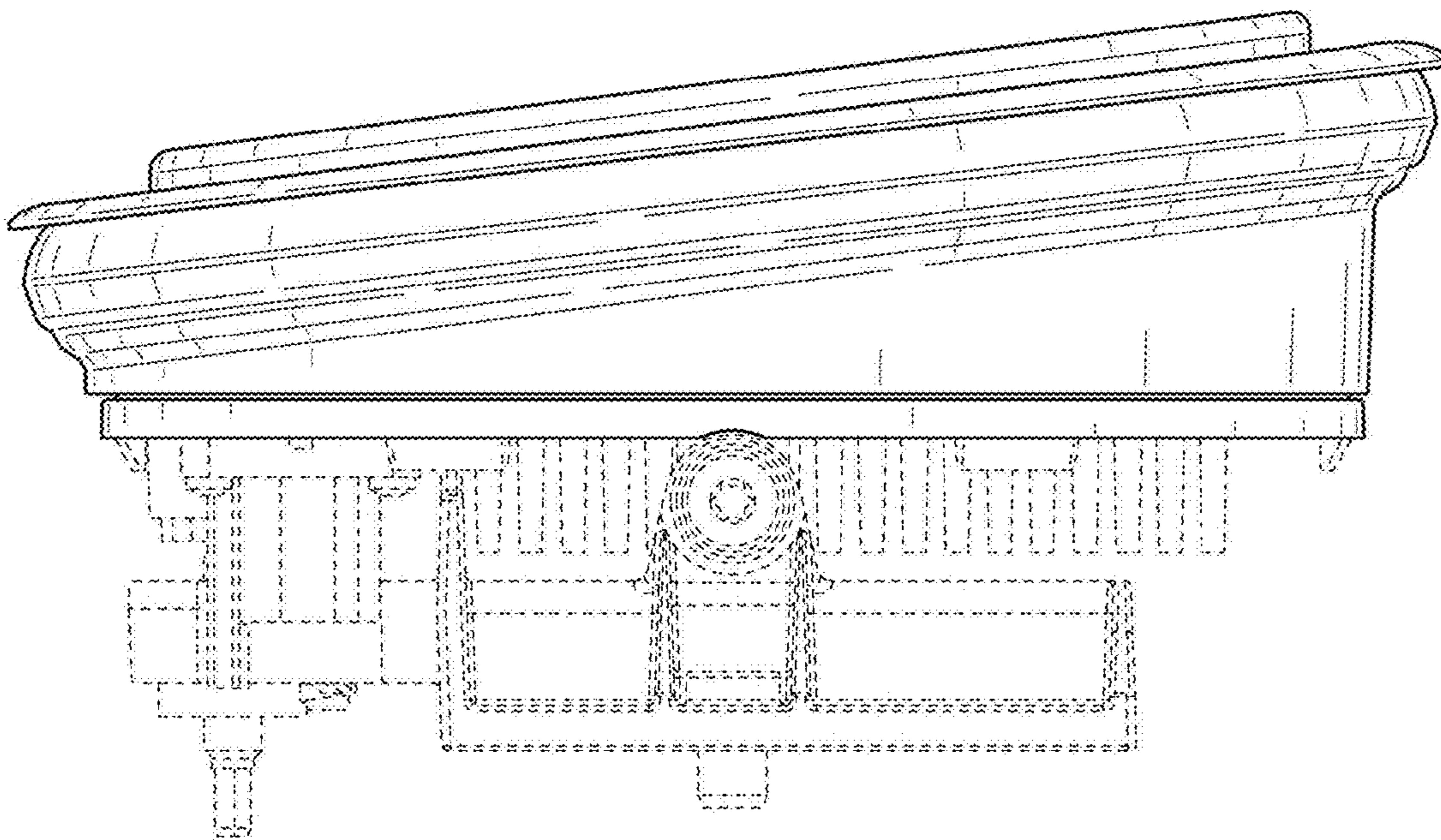


FIG. 11

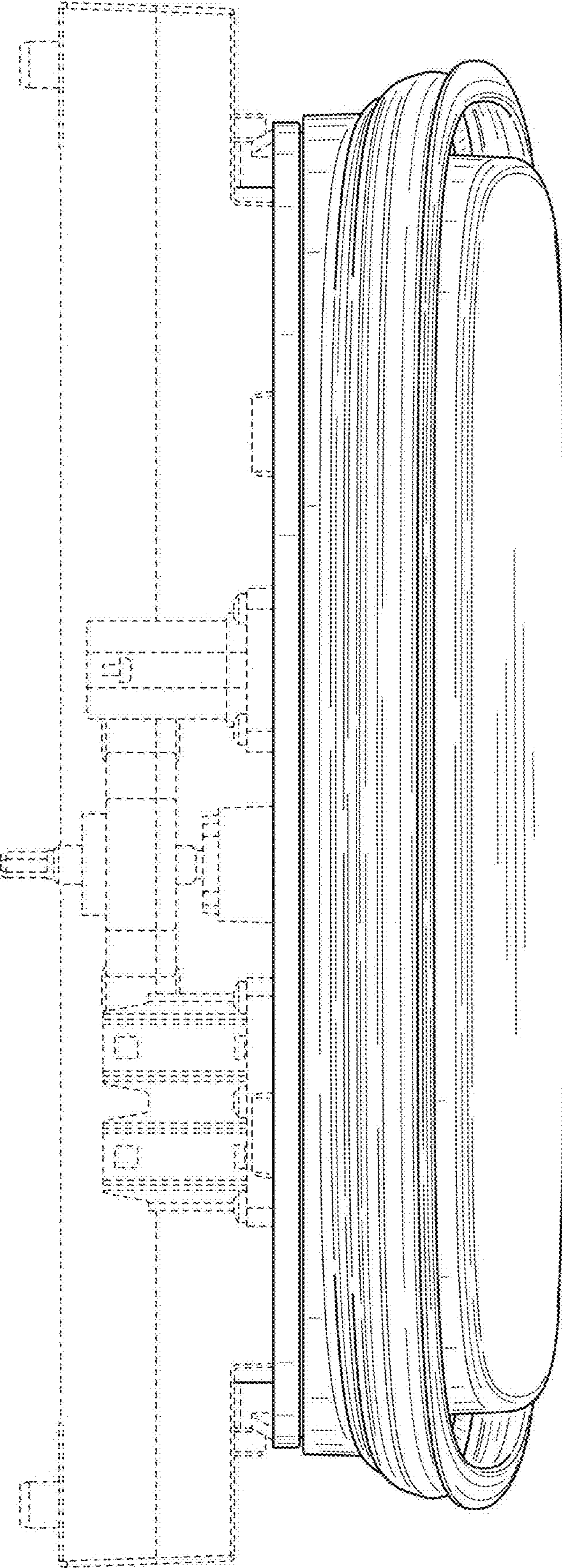


FIG. 13

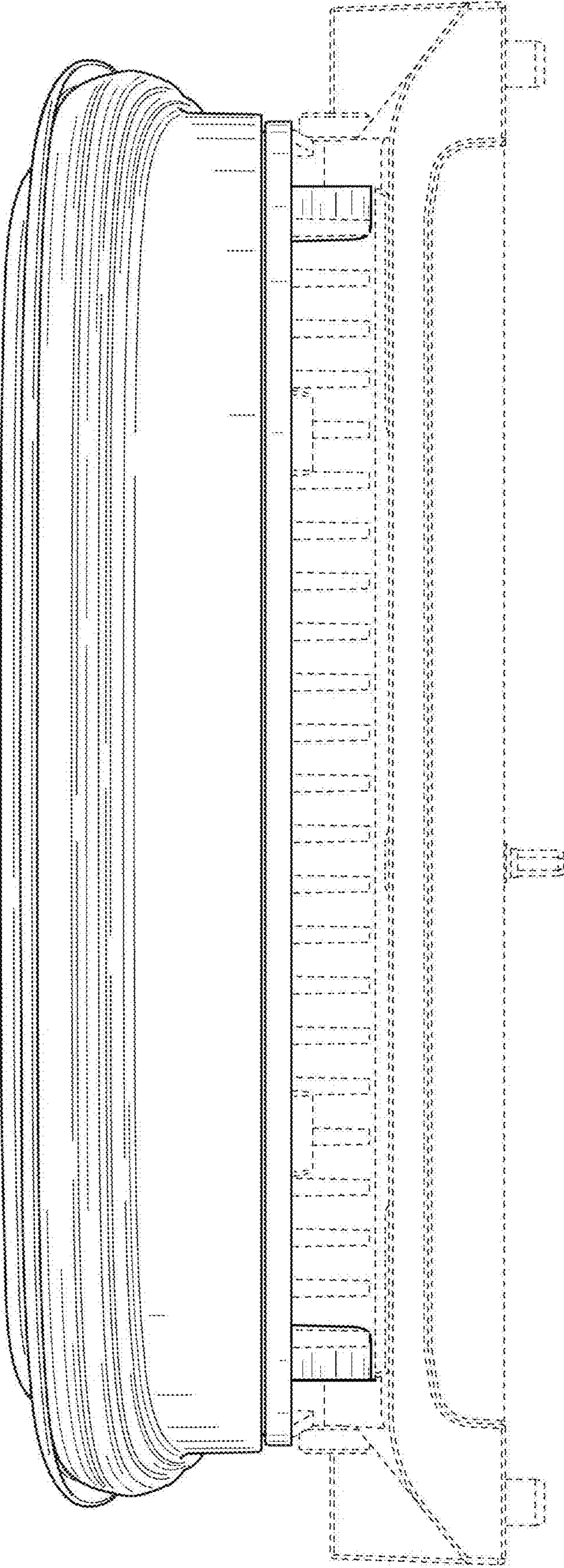


FIG.14