



US00D882110S

(12) **United States Design Patent** (10) **Patent No.:** **US D882,110 S**
Klein et al. (45) **Date of Patent:** **** Apr. 21, 2020**

(54) **ASSAY READER**

(71) Applicant: **Neogen Corporation**, Lansing, MI (US)
(72) Inventors: **Frank Eric Klein**, Howell, MI (US); **Andrew John Wheeler**, Hollis Center, ME (US); **Andrew John DenHartigh**, Lansing, MI (US); **William Hoerner**, Lansing, MI (US); **Nathaniel Banner**, Lansing, MI (US); **Damon Borich**, Austin, TX (US); **Andrea Grbavac**, Austin, TX (US); **Alejandro Silveyra**, Austin, TX (US); **Michelle Silveyra**, Austin, TX (US); **Zwckxally Obregon**, Cedar Creek, TX (US)

(73) Assignee: **NEOGEN CORPORATION**, Lansing, MI (US)

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

(21) Appl. No.: **29/653,674**

(22) Filed: **Jun. 18, 2018**

Related U.S. Application Data

(62) Division of application No. 29/600,835, filed on Apr. 17, 2017, now Pat. No. Des. 829,337.

(51) **LOC (12) Cl.** **24-01**

(52) **U.S. Cl.**
USPC **D24/216**

(58) **Field of Classification Search**
USPC D24/107, 185, 186, 216, 231–234, 223; D10/81; D14/420
CPC G01N 21/0483; G01N 21/0303; G01N 21/6428; G01N 21/6486; G01N 35/00029; G01N 35/00019; G01N 2035/00326; G01N

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,599,219 A 7/1986 Cooper et al.
4,920,046 A 4/1990 McFarland et al.
(Continued)

FOREIGN PATENT DOCUMENTS

WO WO2009038798 A1 3/2009
WO WO2011140476 A1 11/2011
(Continued)

OTHER PUBLICATIONS

2012 Neogen Corporation's Product Brochure for AccuScan Pro, 1 page.

(Continued)

Primary Examiner — Anhdao Doan

(74) *Attorney, Agent, or Firm* — Honigman LLP; Douglas H. Siegel; Jonathan P. O'Brien

(57) **CLAIM**

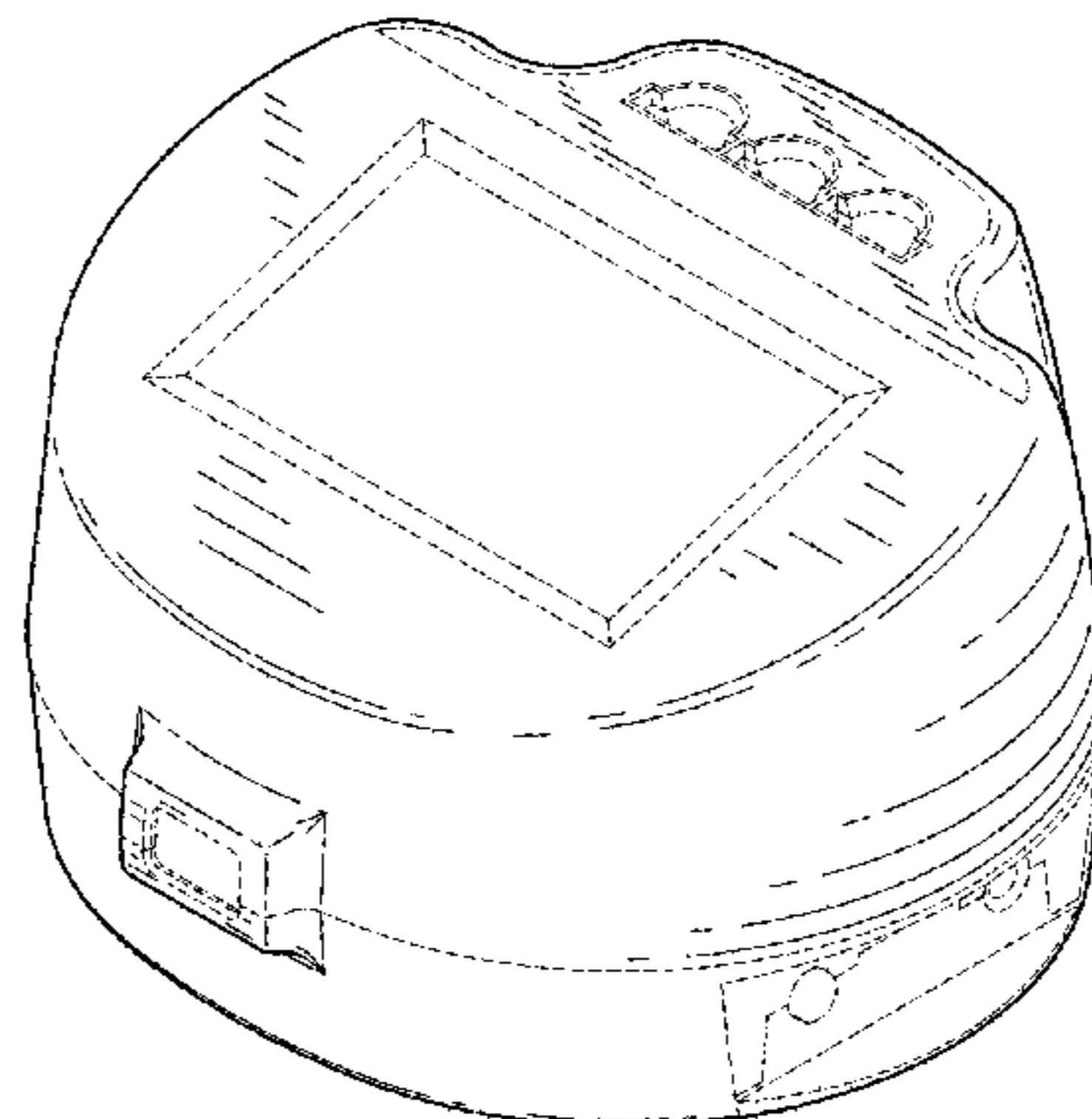
The ornamental design for an assay reader, as shown and described.

DESCRIPTION

FIG. 1 is a right front top perspective view of an assay reader showing our new design;
FIG. 2 is a left back top perspective view thereof;
FIG. 3 is a front elevational view thereof;
FIG. 4 is a back elevational view thereof;
FIG. 5 is a right-side elevational view thereof;
FIG. 6 is a left-side elevational view thereof;
FIG. 7 is a top plan view thereof; and,
FIG. 8 is a bottom plan view thereof.

The broken lines immediately adjacent the shaded areas represent the bounds of the claim, while all other broken

(Continued)



lines are directed to environment and are for illustrative purposes only; the broken lines form no part of the claimed design.

1 Claim, 6 Drawing Sheets

(58) Field of Classification Search

CPC .. 2201/061; B01L 3/527; B01L 3/5027; B01L 2200/027; B01L 2300/0816; B01L 2300/0822

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

D418,602	S *	1/2000	Prokop	D24/169
D424,956	S *	5/2000	von Buelow	D10/81
6,124,585	A	9/2000	Reidel et al.	
6,136,610	A	10/2000	Polito et al.	
6,207,369	B1	3/2001	Wohlstadter et al.	
7,044,919	B1	5/2006	Catt et al.	
7,172,897	B2	2/2007	Blackburn et al.	
D571,474	S	6/2008	Sjo-Gaber et al.	
D612,514	S	3/2010	Johnston et al.	
D631,968	S *	2/2011	Sevel	D24/186
8,005,280	B2	8/2011	Mott et al.	
D647,209	S *	10/2011	Muller	D24/216
D682,432	S	5/2013	Khan et al.	
8,475,731	B2	7/2013	Abraham et al.	
8,848,988	B2	9/2014	Plickert et al.	
D717,459	S *	11/2014	Lin	D24/216
8,883,489	B2	11/2014	Pang et al.	
9,008,373	B2	4/2015	Markovsky et al.	
D737,702	S *	9/2015	Selberg	D24/216
D746,999	S	1/2016	Johnsson et al.	
D759,253	S	6/2016	Bar-Or et al.	
D762,860	S	8/2016	He et al.	
9,488,657	B2	11/2016	Graham et al.	
D828,574	S *	9/2018	Fujiwara	D24/216
2006/0160205	A1	7/2006	Blackburn et al.	
2006/0292036	A1	12/2006	Gould et al.	
2008/0031779	A1	2/2008	Polito et al.	
2011/0008880	A1	1/2011	Uehata et al.	

2011/0171754	A1	7/2011	Redmond et al.	
2012/0088230	A1 *	4/2012	Givens	G01N 21/0303 435/5
2013/0137189	A1	5/2013	Polito et al.	
2013/0309778	A1	11/2013	Lowe et al.	
2014/0057362	A1	2/2014	Markovsky et al.	
2014/0120556	A1	5/2014	Moll et al.	
2014/0154792	A1	6/2014	Moynihan et al.	
2014/0271362	A1	9/2014	Markovsky et al.	
2014/0334980	A1	11/2014	Graham et al.	
2015/0004717	A1	1/2015	McDevitt et al.	
2015/0276613	A1	10/2015	Markovsky	
2016/0018426	A1	1/2016	Moriya et al.	
2016/0103075	A1	4/2016	Borich et al.	
2016/0187239	A1	6/2016	Givens et al.	

FOREIGN PATENT DOCUMENTS

WO	WO2012027583	A2	3/2012
WO	WO2014126918	A1	8/2014
WO	WO2016203019	A1	12/2016

OTHER PUBLICATIONS

2014 Neogen Corporation's AccuScan Pro User Manual, 14 pages.
 Alere™ Reader, 7 pages, [date unknown].
 Neogen Corporation's user guide presentation regarding AccuScan Pro, Aug. 2012, 13 pages.
 Neogen Corporation's User's Guide for Reveal AccuScan III, Nov. 2010, 9 pages.
 Reveal Sciences CareType™ Analysis System, 2 pages, 2009.
 Charm EZ brochure, Jun. 2015, 4 pages.
 Charm EZ Lite brochure, May 2015, 2 pages.
 Charm EZ-M brochure, Sep. 2015, 4 pages.
 ESEQuant Lateral Flow Reader, 3 pages, believed to be publicly available before Apr. 17, 2016.
 IDEXX SNAPshot DSR Reader Operator's Guide, 2008, 100 pages.
 Siemens Medical Solutions USA, Inc.'s "Clinitek Status+ Urine Analyzer", 4 pages, believed to be publicly available before Apr. 17, 2016.
 Skannex BioAssay Reader Systems™ SkanMulti, 2 pages, believed to be publicly available before Apr. 17, 2016.
 Vicam's Vertu Lateral Flow Reader, 1 page, believed to be publicly available before Apr. 17, 2016.

* cited by examiner

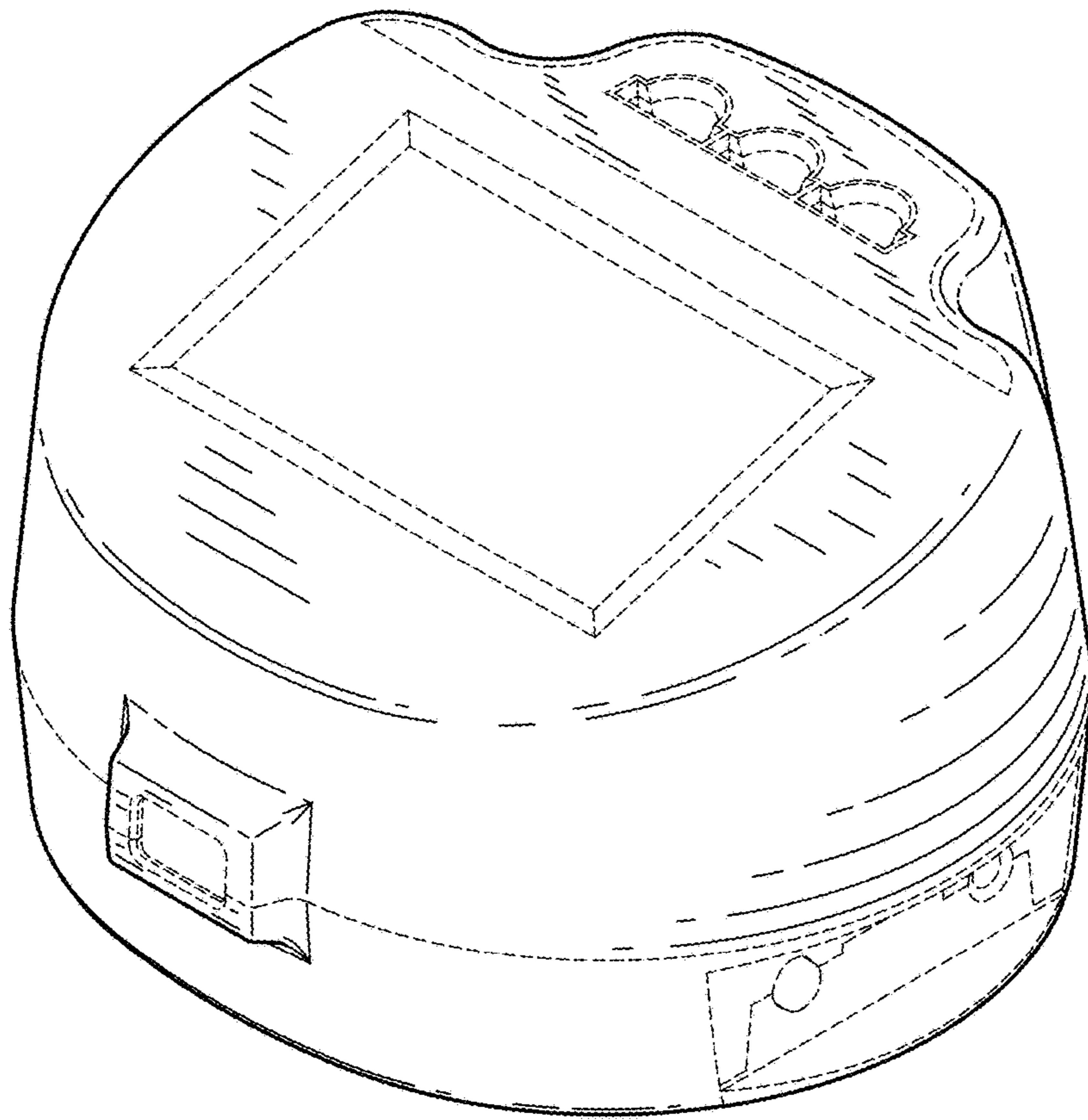


FIG. 1

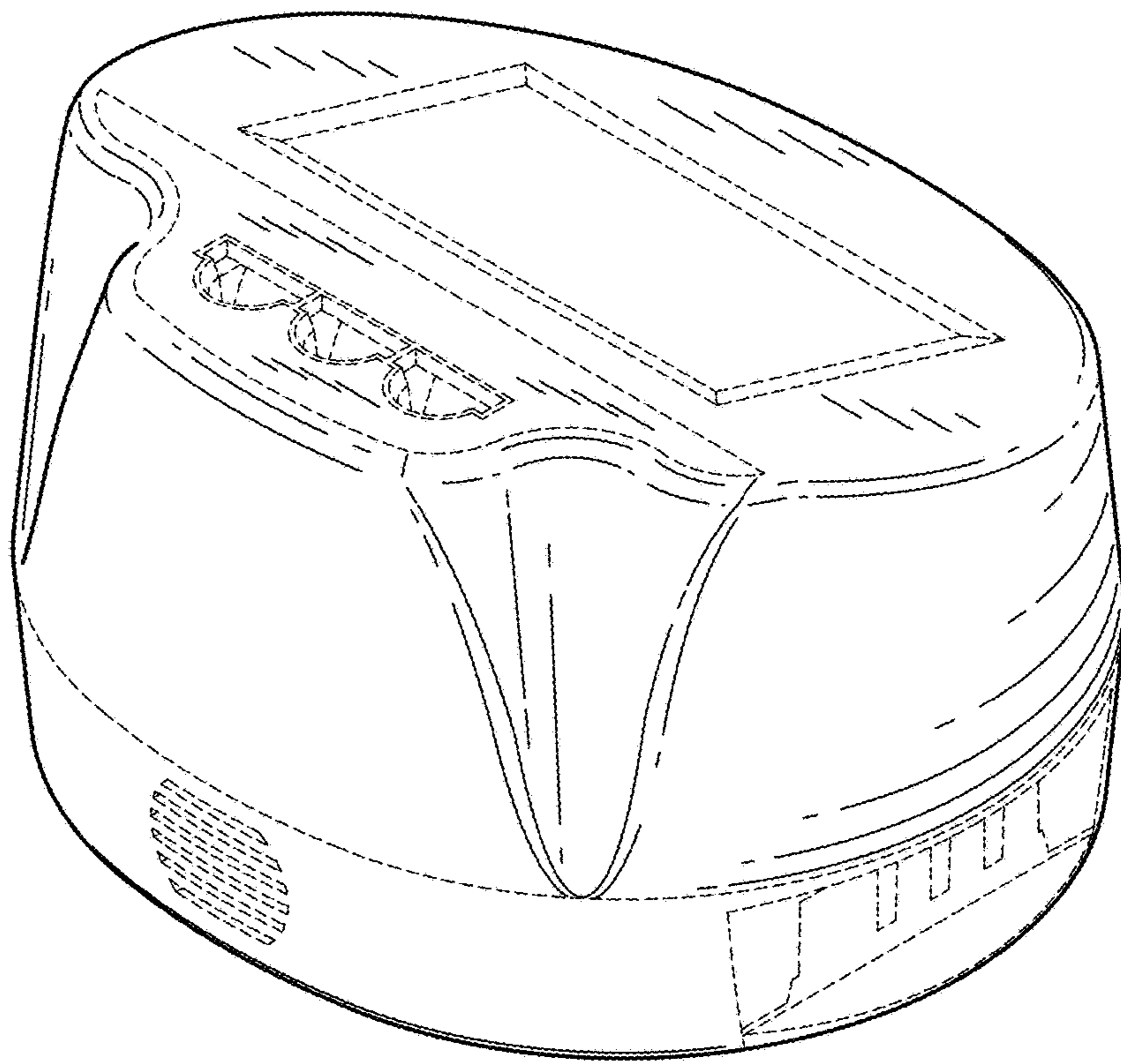


FIG. 2

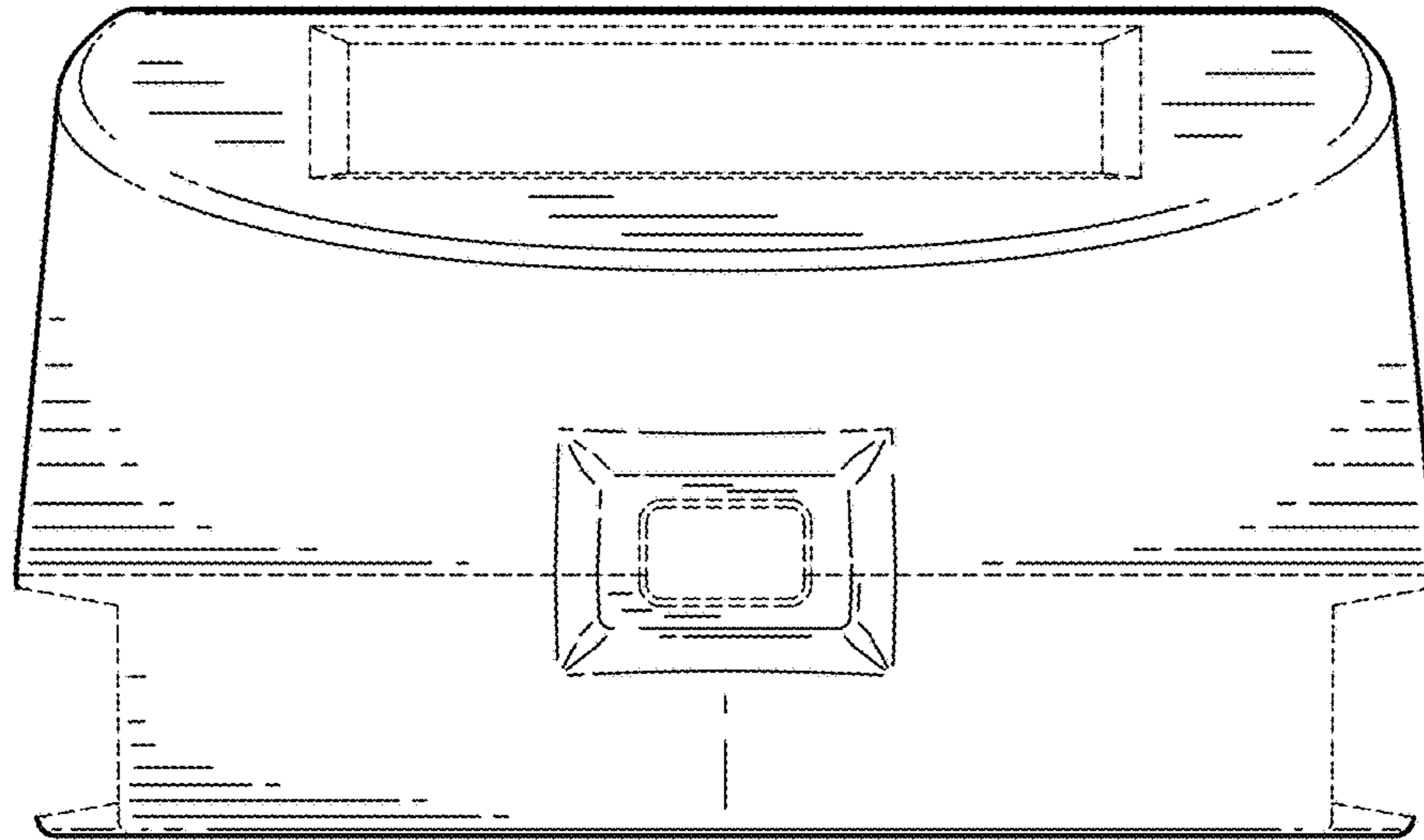


FIG. 3

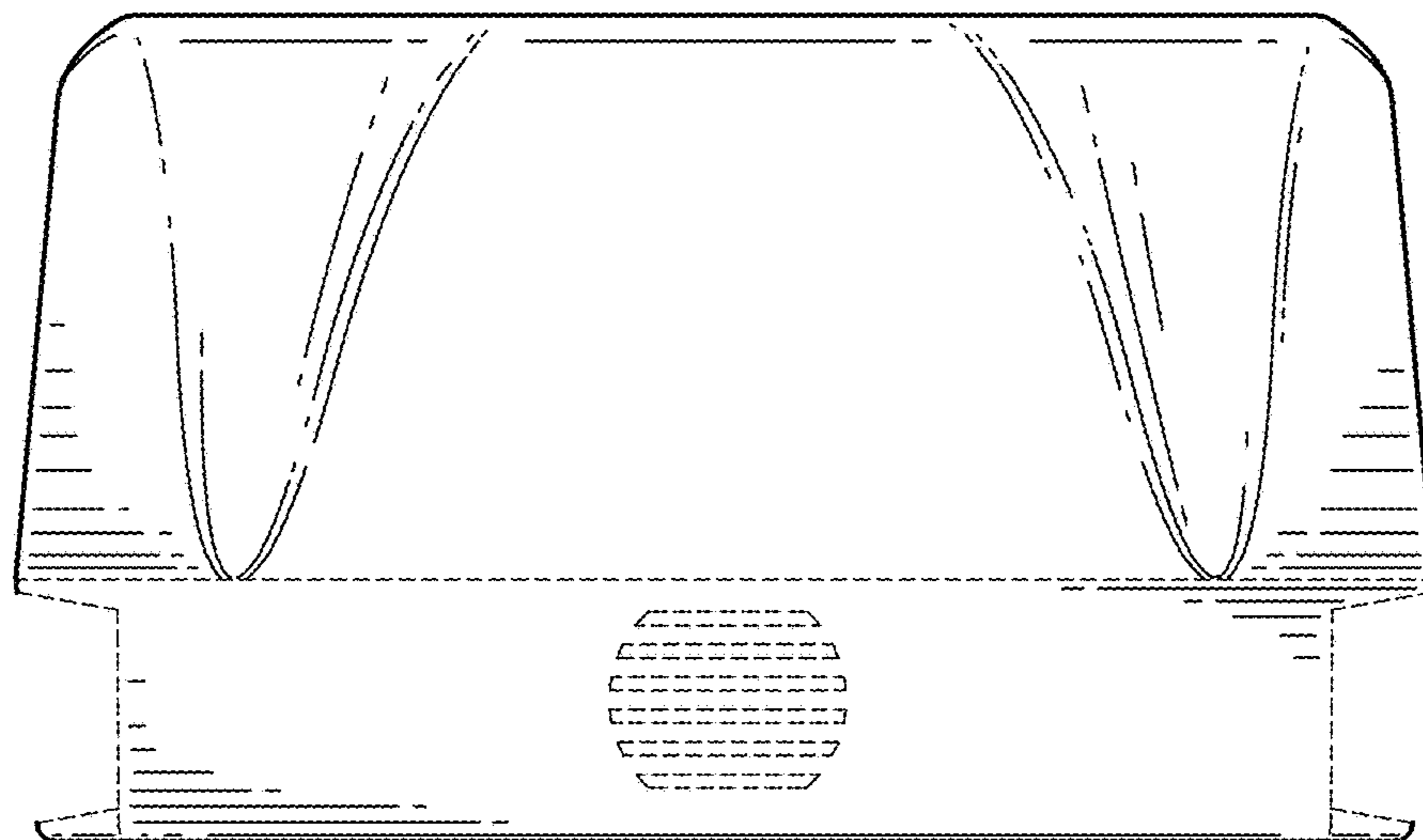


FIG. 4

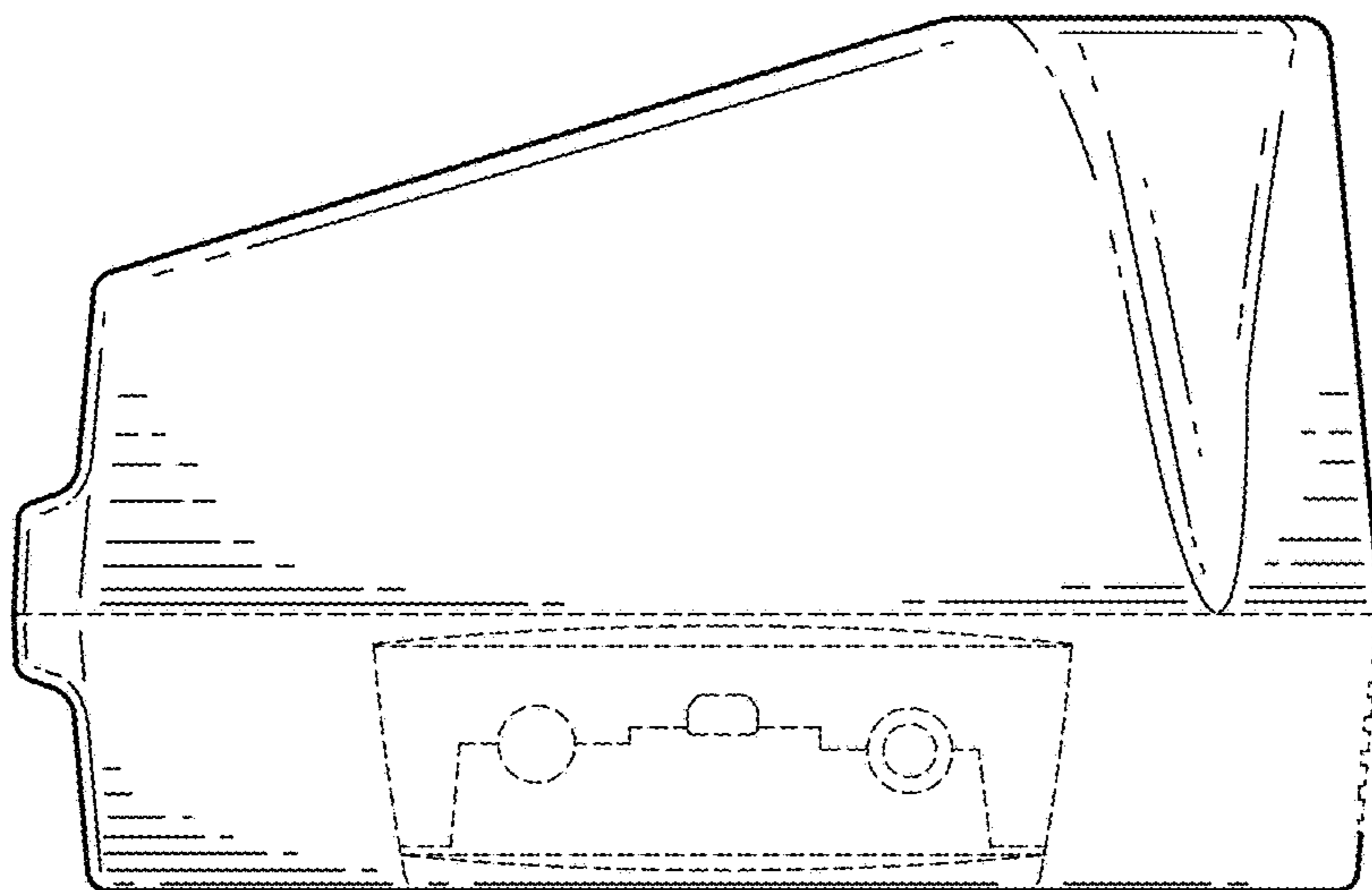


FIG. 5

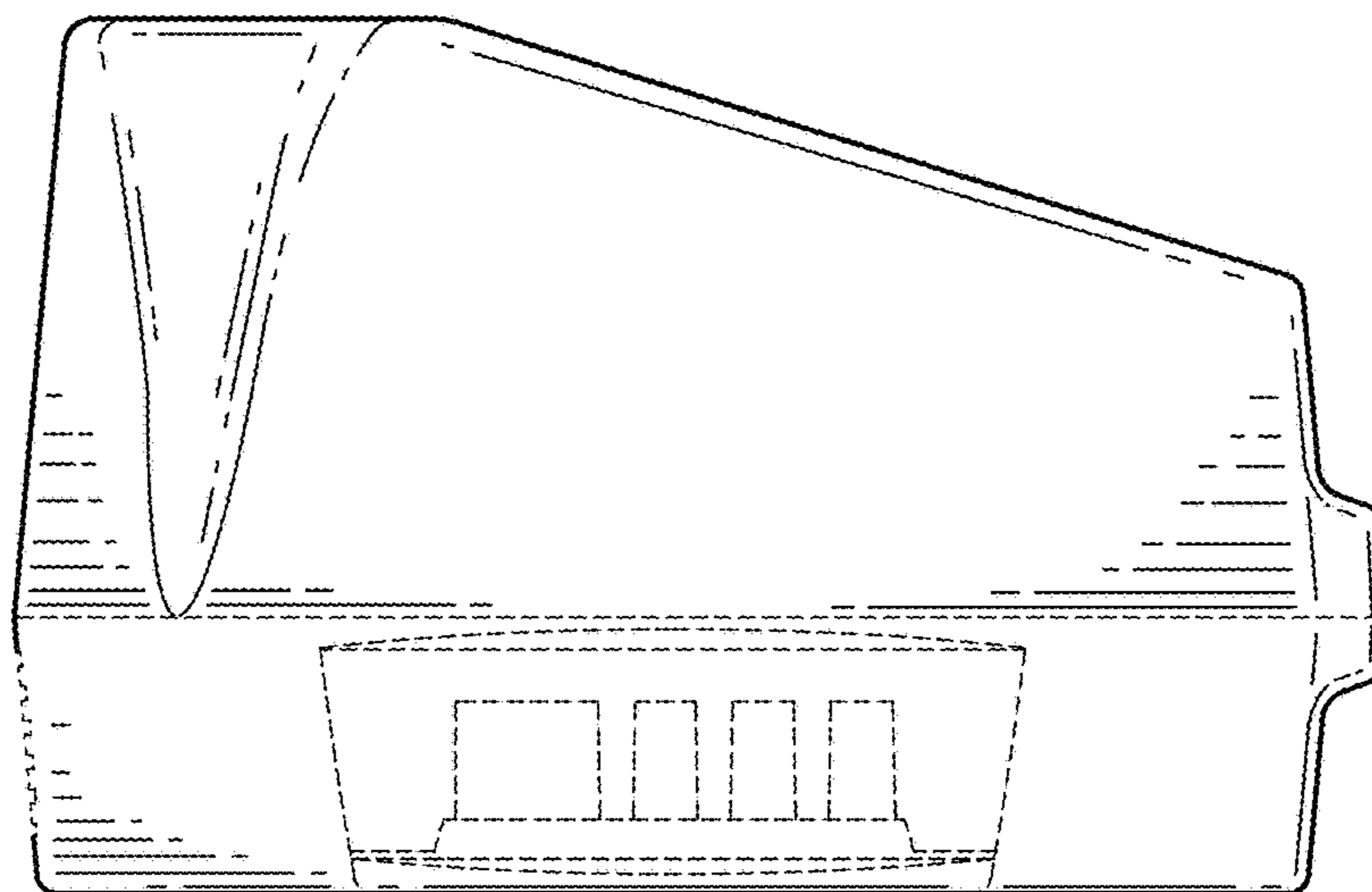


FIG. 6

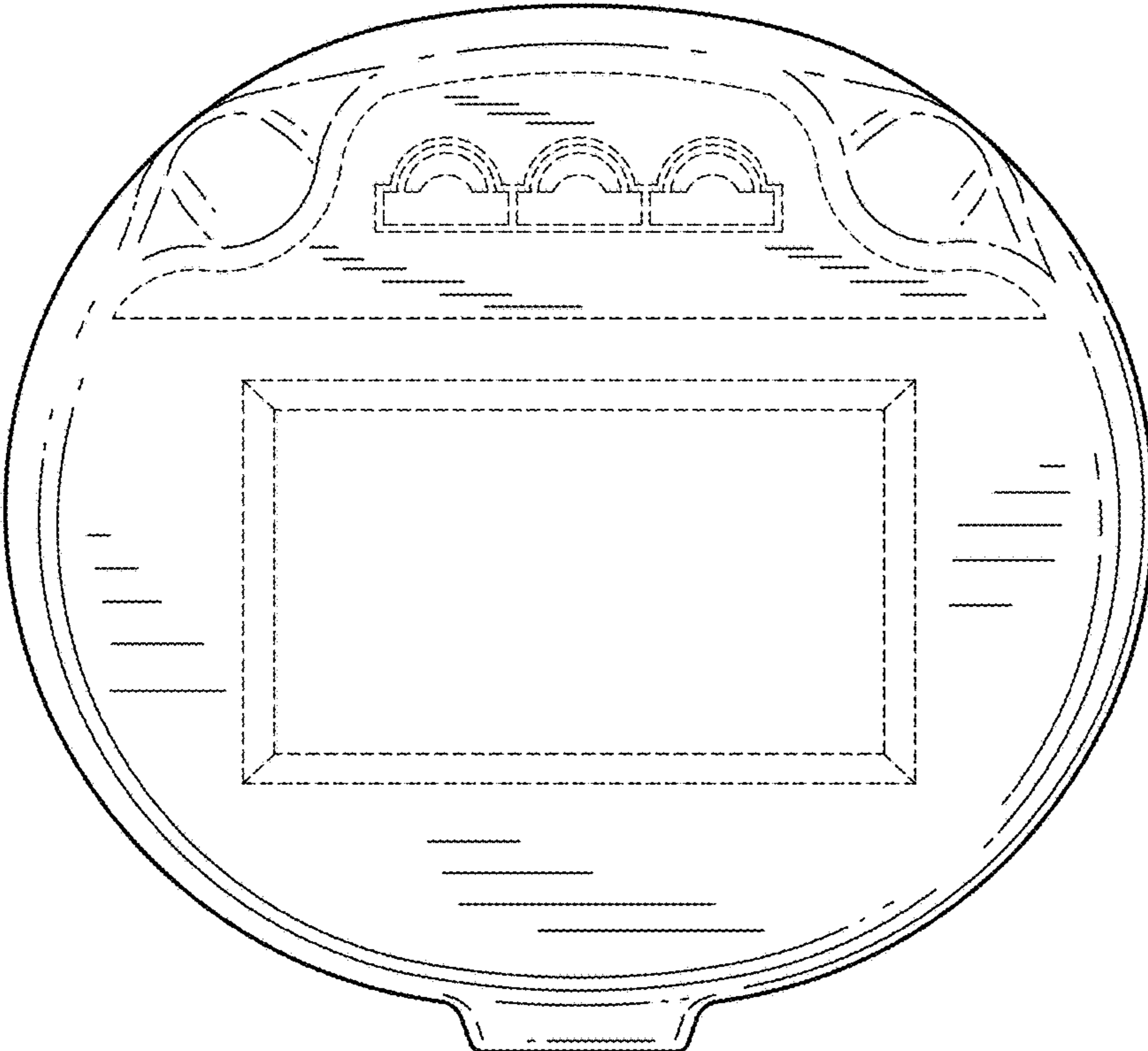


FIG. 7

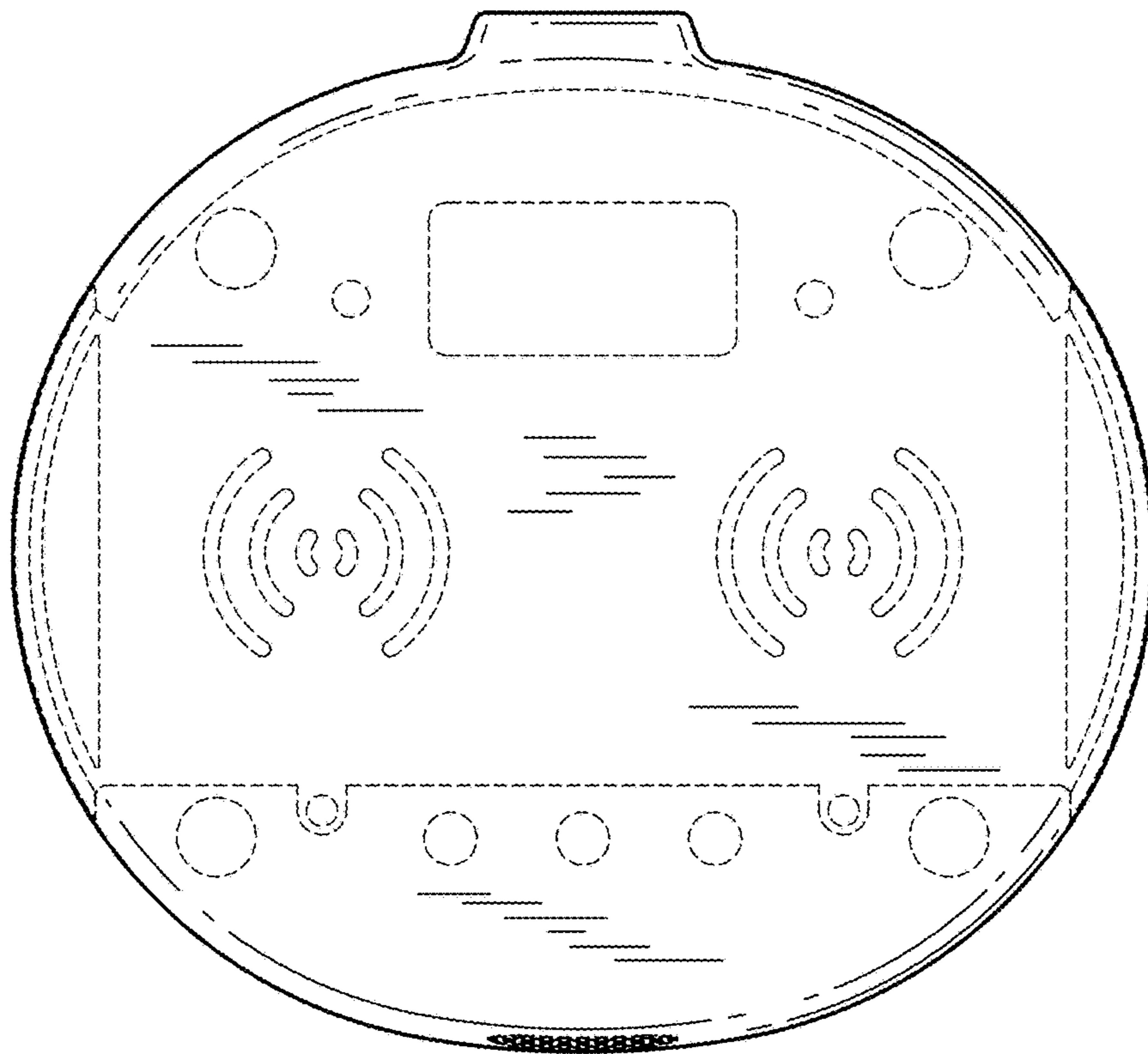


FIG. 8