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(12) **United States Design Patent** (10) **Patent No.:** **US D890,904 S**
Farone et al. (45) **Date of Patent:** **** Jul. 21, 2020**

(54) **AIR PURIFIER**

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(51) **LOC (12) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/364**

(58) **Field of Classification Search**
USPC D23/355–366, 352, 369, 332, 333, 335, D23/336, 342, 351; 422/120, 122; 55/356, 473, 504; 96/97; D14/188, 170, D14/172; 261/DIG. 17, DIG. 65, 261/DIG. 88, DIG. 31; D18/34.6
CPC .. A61L 9/16; A61L 9/22; B01D 47/00; B01D 47/027; B01D 2221/02; B01D 2259/4508; B03C 3/155; B03C 3/368; F24F 3/16; F24F 13/20; F24F 13/28; F24F 3/1405; F24F 3/1603; F24F 13/222
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D489,801 S *	5/2004	Shimizu	.....	D23/364
D498,296 S *	11/2004	Shimizu	.....	D23/364
D537,512 S *	2/2007	Nakajima	.....	D23/359
D548,313 S *	8/2007	Chiu	.....	D23/333
D549,308 S *	8/2007	Chiu	.....	D23/333
D549,811 S *	8/2007	Chen	.....	D23/359
D556,309 S *	11/2007	Chiu	.....	D23/333

D557,783 S *	12/2007	Yoo	.....	D23/359
D572,810 S *	7/2008	Chiu	.....	D23/333
D575,857 S *	8/2008	Chiu	.....	D23/333
D587,794 S *	3/2009	Yoo	.....	D23/359
D590,488 S *	4/2009	Chiu	.....	D23/333
D605,745 S *	12/2009	Chun	.....	D23/359
D606,184 S *	12/2009	Chiu	.....	D23/359

(Continued)

OTHER PUBLICATIONS

Guardian technologies.com, GermGuardian AC5600WDLX 18" Air Purifier with HEPA151 sq. ft., Mar. 16, 2020, <https://www.guardiantechnologies.com/air-purifiers-with-uv-hepa-filters/germguardian-ac5600wdlx-4-in-1-air-purifier-with-hepa-filter-and-odor-reductio.html> (Year: 2020).*

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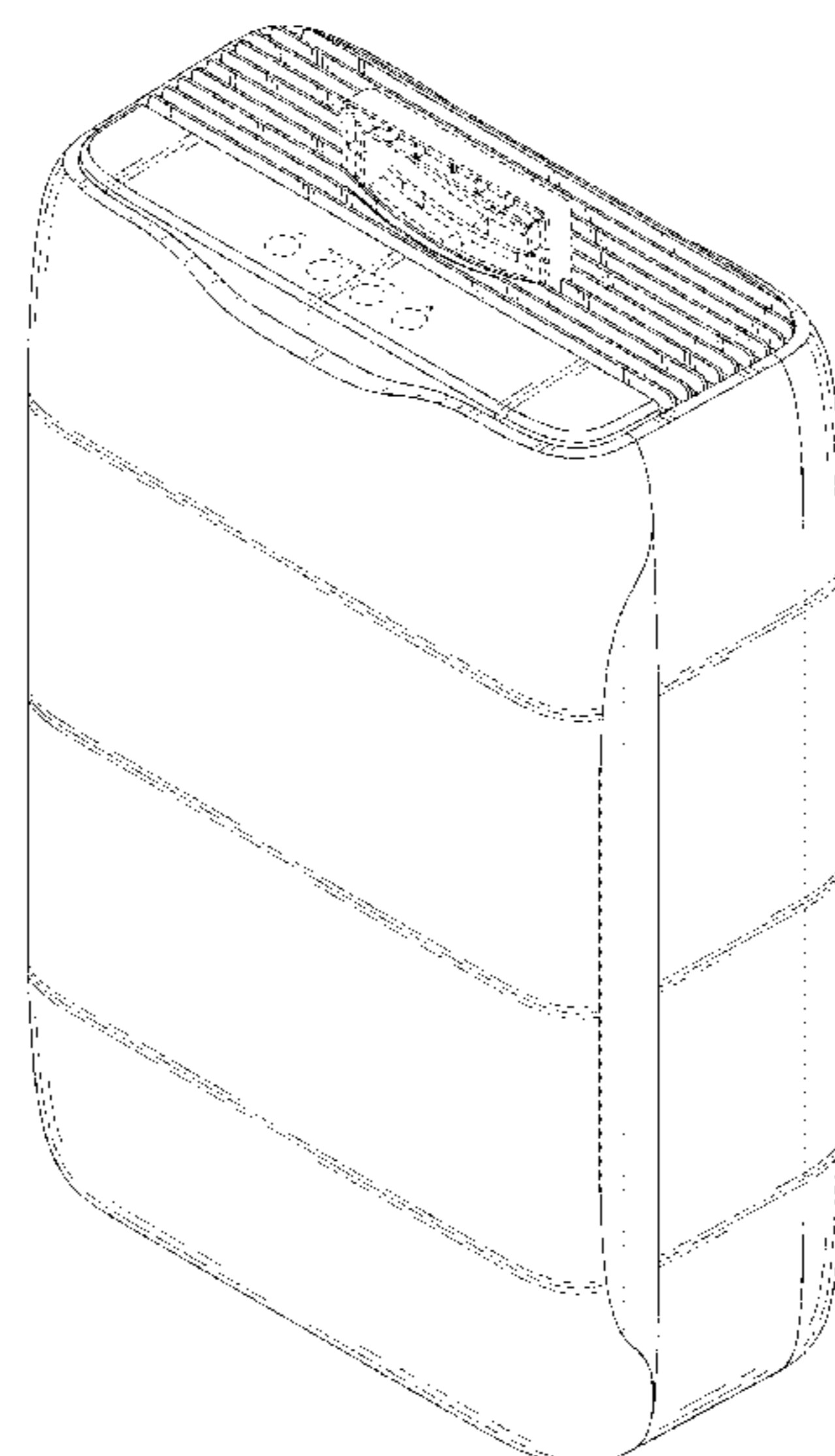
(57) **CLAIM**

The ornamental design for an air purifier, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an air purifier of the new design;
FIG. 2 is a front elevational view of the air purifier of FIG. 1;
FIG. 3 is a right side elevational view of the air purifier of FIG. 1;
FIG. 4 is back elevational view of the air purifier of FIG. 1;
FIG. 5 is a left side elevational view of the air purifier of FIG. 1;
FIG. 6 is a top plan view of the air purifier of FIG. 1; and, FIG. 7 is bottom view of the air purifier of FIG. 1.
The broken lines in the drawings are for the purpose of illustration elements of the air purifier that form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D634,828 S * 3/2011 Nakamura D23/355
D638,110 S * 5/2011 Zeng D23/333
7,993,589 B1 * 8/2011 Shigemoto A61L 9/01
422/122
D658,280 S * 4/2012 Niki D23/364
D660,947 S * 5/2012 Varma D23/333
D660,948 S * 5/2012 Varma D23/333
D662,577 S * 6/2012 Nakamura D23/364
D682,250 S * 5/2013 Mattioli D14/172
D683,439 S * 5/2013 Choi D23/364
D684,247 S * 6/2013 Chouji D23/364
D702,825 S * 4/2014 Satou D23/364
D735,845 S * 8/2015 Huang D23/359
D741,464 S * 10/2015 Ikegaya D23/364
D746,426 S * 12/2015 Zhao D23/359
D748,235 S * 1/2016 Yamashita D23/364
D754,831 S * 4/2016 Yin D23/359
D799,015 S * 10/2017 Tang D23/364
D803,368 S * 11/2017 Priester D23/364
D810,259 S * 2/2018 You D23/364
D830,528 S * 10/2018 Zhou D23/364
D840,012 S * 2/2019 Zhou D23/359
D841,783 S * 2/2019 Hu D23/264
D854,133 S * 7/2019 Sheng D23/359
2014/0224127 A1 * 8/2014 Nagata B01D 46/0038
96/134
2020/0003451 A1 * 1/2020 Yoon F24F 13/20

* cited by examiner

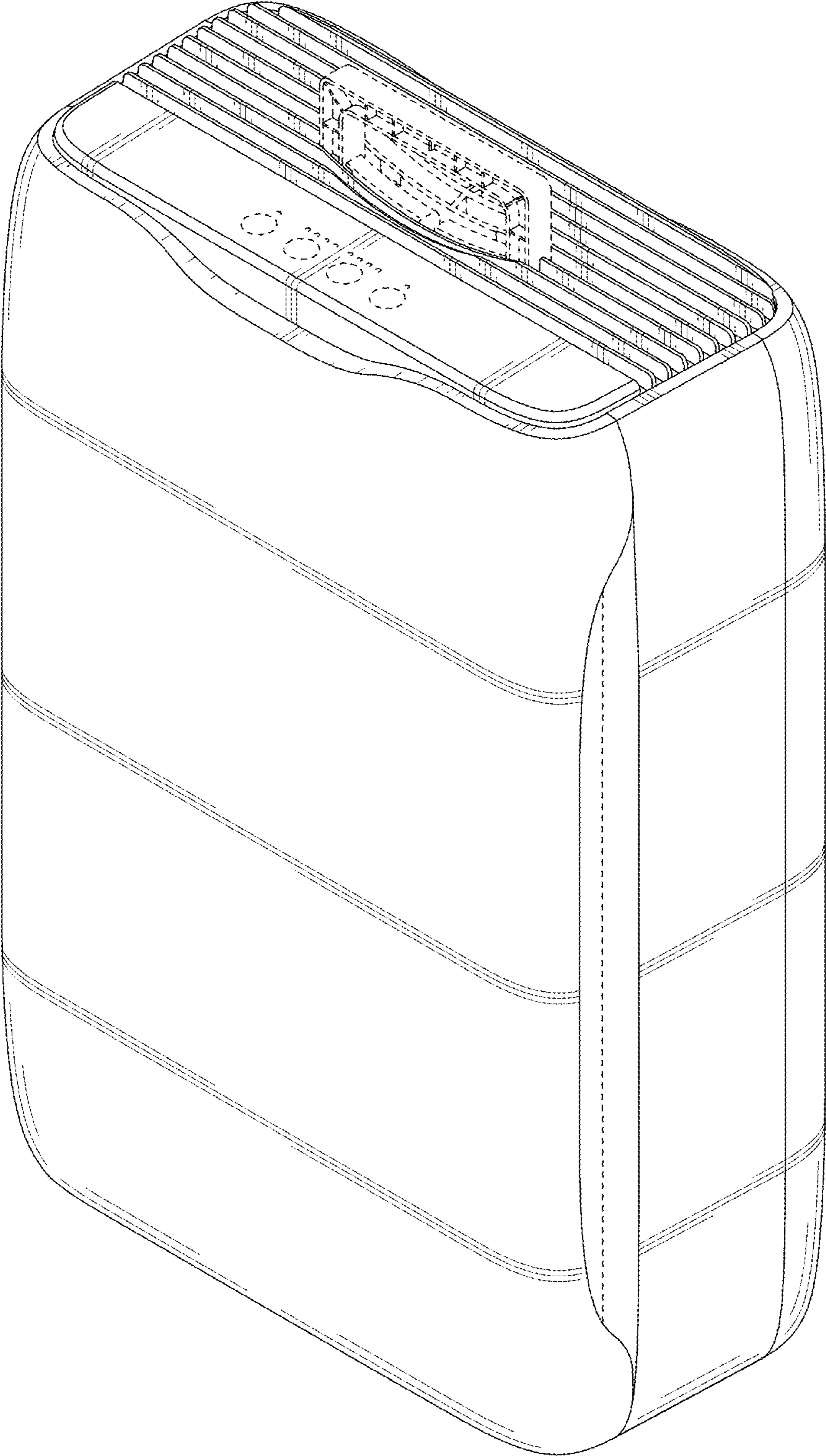


FIG. 1

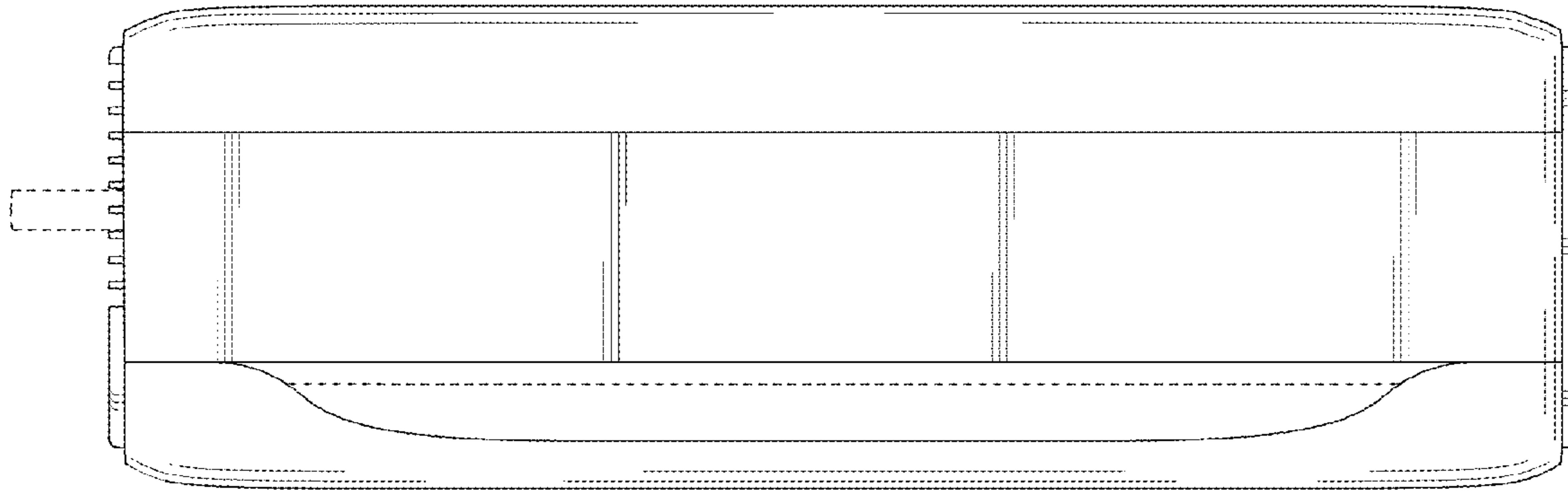


FIG. 3

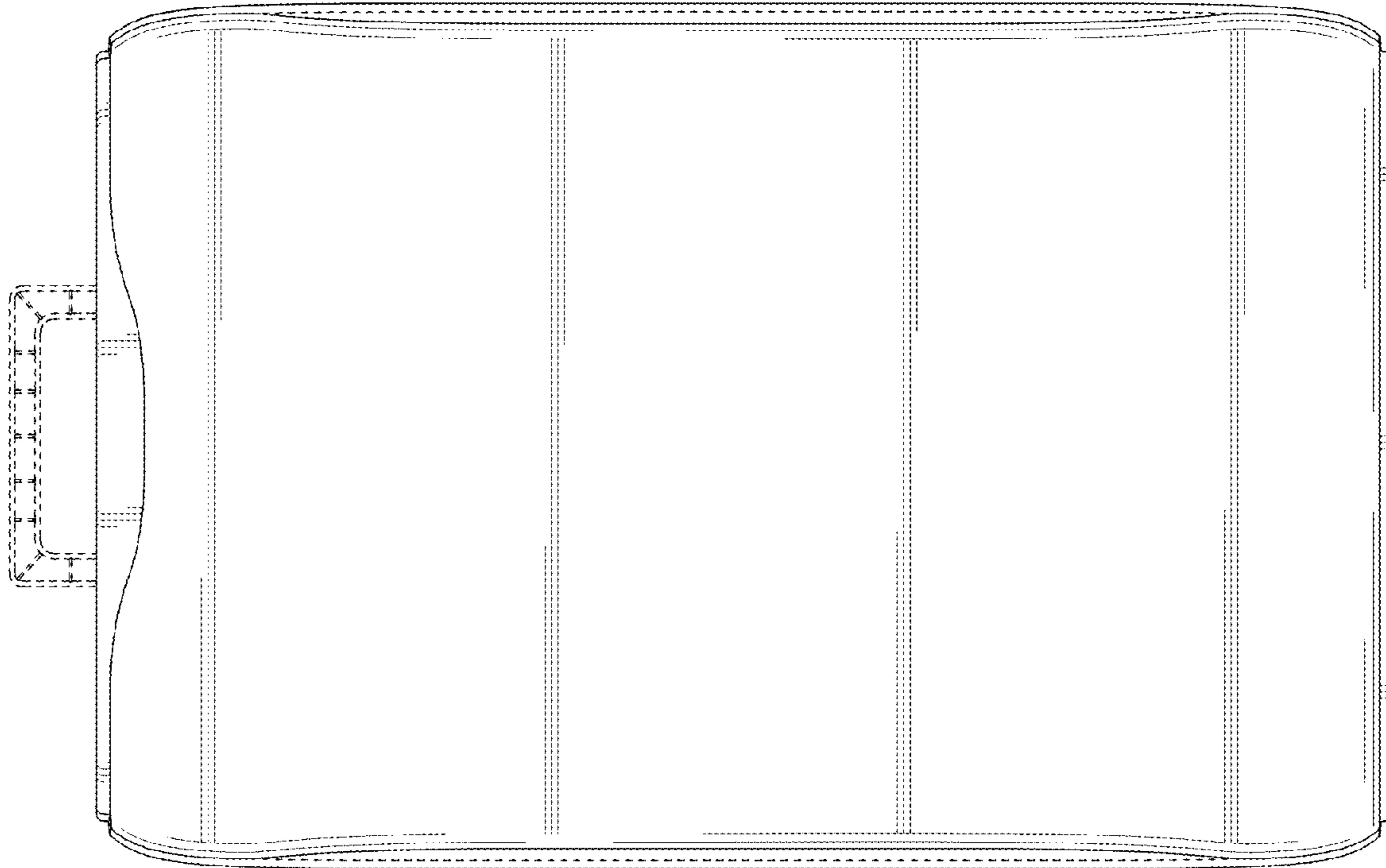


FIG. 2

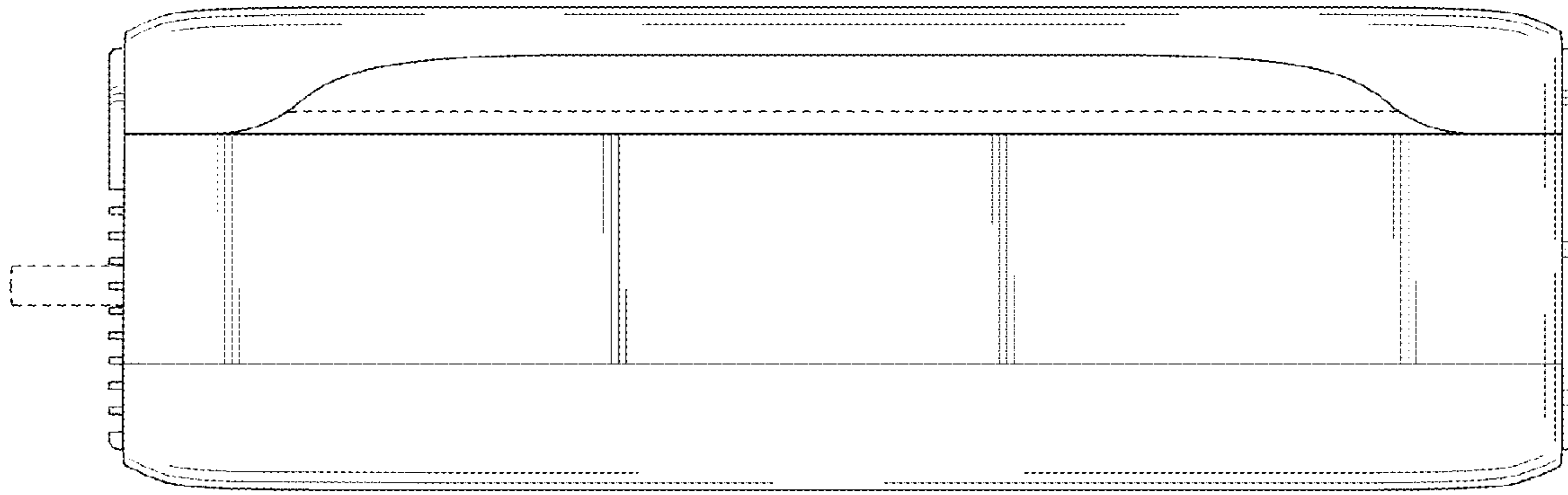


FIG. 5

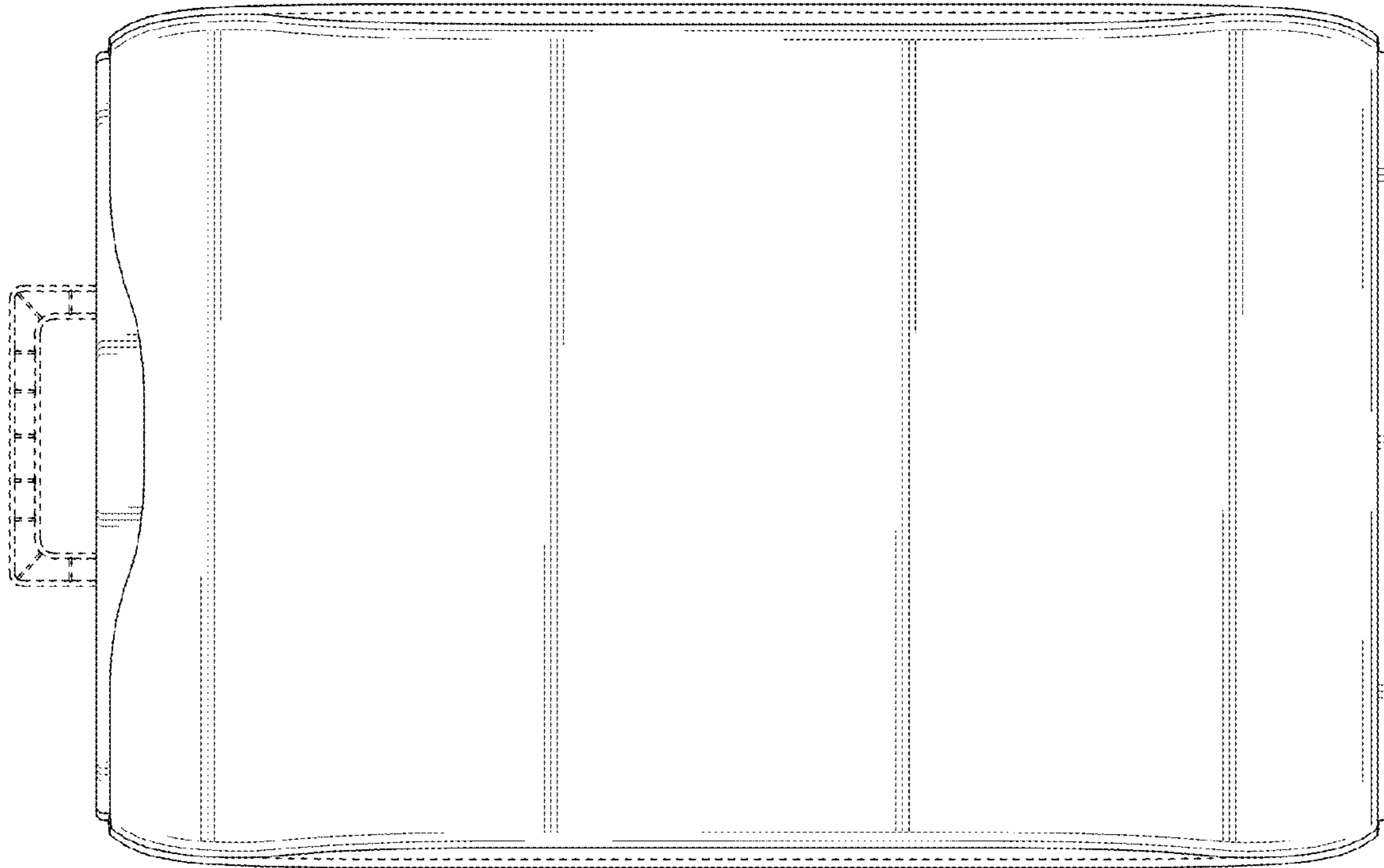


FIG. 4

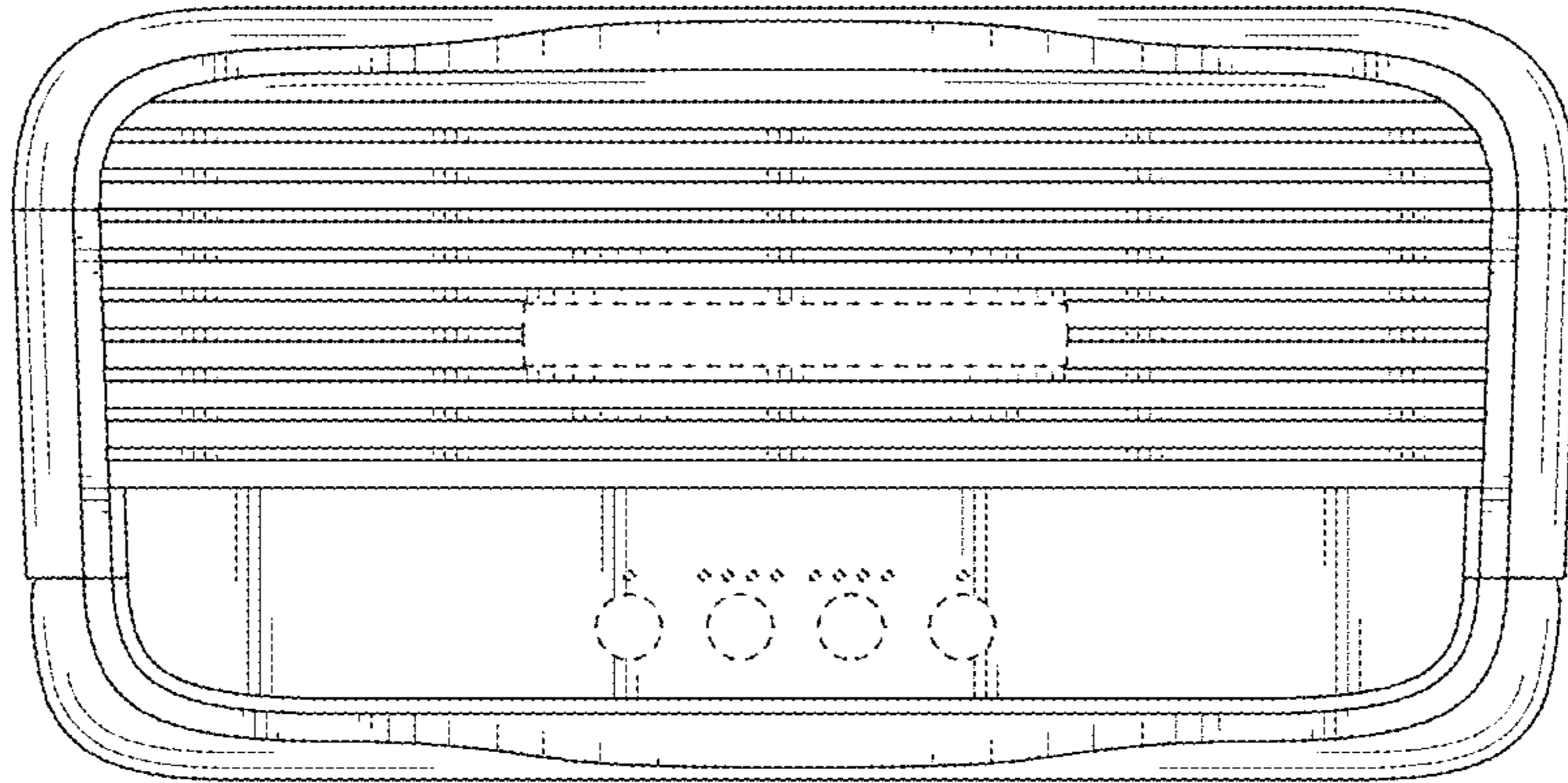


FIG. 6

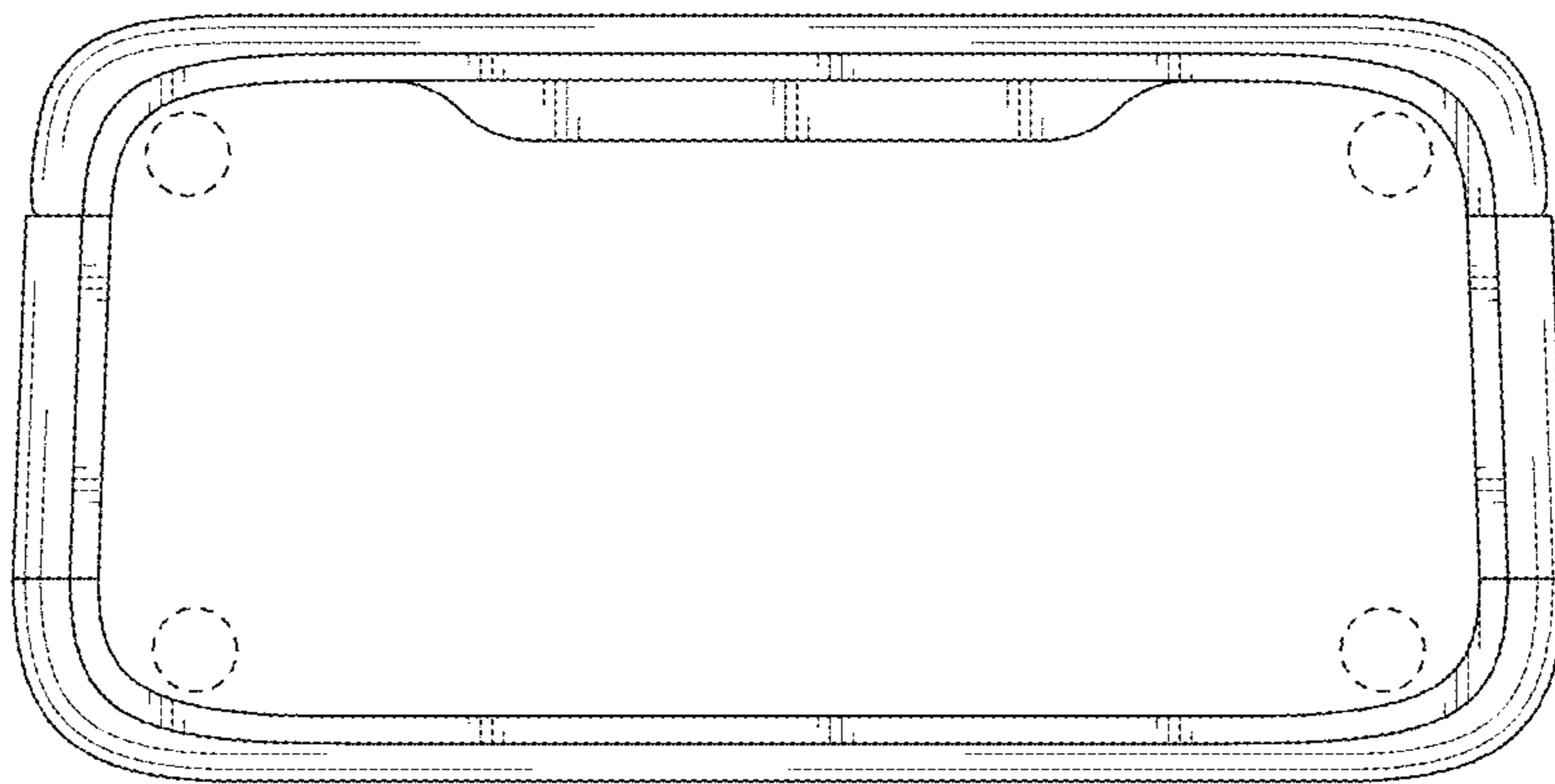


FIG. 7