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(12) **United States Design Patent** (10) **Patent No.:** **US D949,851 S**
Ohtani et al. (45) **Date of Patent:** **** Apr. 26, 2022**

(54) **DATA READER**

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (13) Cl.** **14-02**

(52) **U.S. Cl.**
USPC **D14/357; D14/358; D10/75**

(58) **Field of Classification Search**
USPC D14/356, 357, 358, 432, 441, 488, 140,
D14/140.1, 150, 217, 257, 240, 496, 299,
D14/242, 125, 129, 130, 142, 155, 167,
D14/168, 172, 188, 195, 348, 351, 197,
D14/198, 230, 104.6, 300, 301, 312, 313,
D14/388; D13/123, 162, 162.1, 168, 173,
D13/177, 184, 199, 152, 158, 146;
D10/104.1, 106.1, 106.95, 46, 52, 53, 60,
D10/75, 80, 83, 94, 103, 122, 123-125,
D10/61, 62, 70, 71

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,955,073 A * 5/1976 Carew G01B 7/02
702/161

D265,906 S * 8/1982 Steinbugler D14/242

(Continued)

OTHER PUBLICATIONS

Mitutoyo Data Processing Equipment. (Design—© Questel) orbit.com. [online PDF of Foreign references] 78 pgs. Print Dates range Apr. 13, 2020-Mar. 8, 2021. [Retrieved Dec. 16, 2021] <https://www.orbit.com/export/QPTUJ214/pdf2/552f123c-dbf6-40e8-9c5a-80c9db91ec8d-202050.pdf>.*

(Continued)

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(57) **CLAIM**

The ornamental design for a data reader, as shown and described.

DESCRIPTION

FIG. 1 is a front, left-side, top perspective view of the data reader;

FIG. 2 is a front elevational view thereof;

FIG. 3 is a rear elevational view thereof;

FIG. 4 is a left-side elevational view thereof;

FIG. 5 is a right-side elevational view thereof;

FIG. 6 is a top plan view thereof;

FIG. 7 is a bottom plan view thereof;

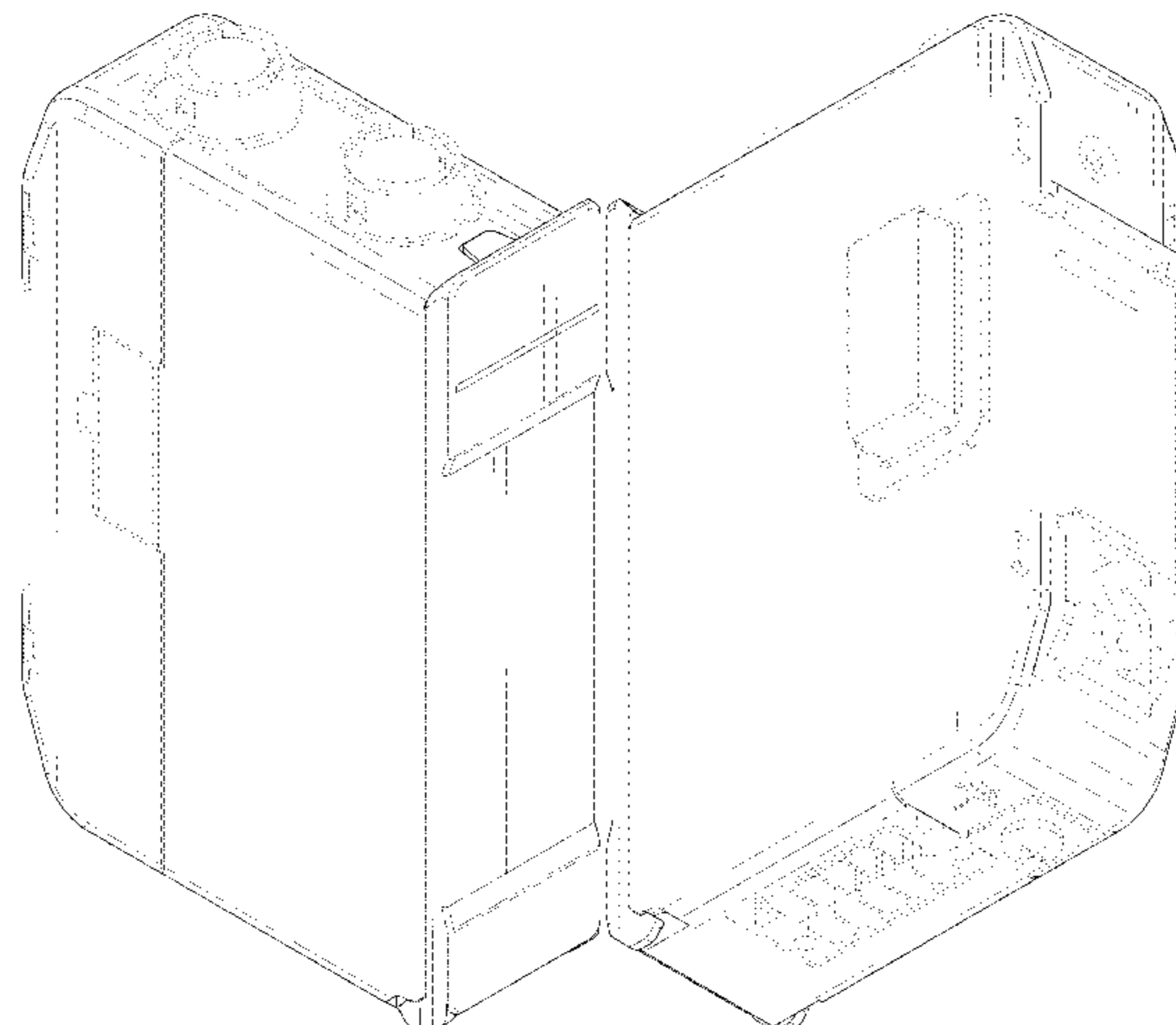
FIG. 8 is a rear, right-side, bottom perspective view thereof;

FIG. 9 is a reference view showing the data reader in a state of use within its environment; and,

FIG. 10 is a reference view showing the data reader in a state of conduction.

The additional broken lines seen in FIG. 9 depict state of use environment only and form no part of the claim; while all other broken lines depict parts of the data reader that form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(58) **Field of Classification Search**

CPC H04B 5/00; H04B 5/0025; H04B 5/0031;
 H04B 5/0043; G06F 3/14; G06F 11/3041;
 G06F 13/00; G06F 12/063; G06F
 15/7839; G06F 15/786; A61B 90/06;
 A61B 5/322; A61B 5/333; A61B 5/335;
 G01B 3/205; G01B 2210/40; G01B 7/12
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D269,345	S	*	6/1983	Payne, Jr.	.....	D14/242
D271,202	S	*	11/1983	Endt	.....	D14/368
D283,686	S	*	5/1986	Walser	.....	D10/108
D285,926	S	*	9/1986	Kies	.....	D14/357
D289,648	S	*	5/1987	Felix	.....	D14/242
D295,178	S	*	4/1988	Pedinielli	.....	D14/242
D304,823	S	*	11/1989	Pfeifer	.....	D14/353
D311,740	S	*	10/1990	Wagner	.....	D14/358
D311,910	S	*	11/1990	Pedinielli	.....	D14/242
4,982,509	A	*	1/1991	Luttmer	.....	G01B 7/02 33/706
D323,818	S	*	2/1992	Willis	.....	D14/353
D330,702	S	*	11/1992	Hutton	.....	D13/184
D331,391	S	*	12/1992	Furuta	.....	D14/353
D338,193	S	*	8/1993	Sasaki	.....	D13/147
D340,059	S	*	10/1993	Wetzel	.....	D14/433
D343,800	S	*	2/1994	Spinks	.....	D10/75
D345,144	S	*	3/1994	Thomas	.....	D13/162.1
D348,873	S	*	7/1994	Mizusugi	.....	D14/357
D353,598	S	*	12/1994	Brandt	.....	D14/242
D357,684	S	*	4/1995	Moreland	.....	D14/240
D364,859	S	*	12/1995	Fenton	.....	D14/357
D365,529	S	*	12/1995	Peroni	.....	D13/184
D368,905	S	*	4/1996	Otani	.....	D14/125
D381,317	S	*	7/1997	Yu	.....	D13/139.4
D383,139	S	*	9/1997	Hill	.....	D14/242
D389,801	S	*	1/1998	Foye	.....	D13/147
D394,046	S	*	5/1998	Kurokawa	.....	D14/358
D405,092	S	*	2/1999	Ohshima	.....	D14/239
D408,812	S	*	4/1999	Danis	.....	D14/137
D419,139	S	*	1/2000	Kohara	.....	D14/308
D431,231	S	*	9/2000	Goto	.....	D14/356
D443,248	S	*	6/2001	Sakasegawa	.....	D13/123
D443,587	S	*	6/2001	Sakasegawa	.....	D13/123
D444,083	S	*	6/2001	Ohtani	.....	D10/73
D448,766	S	*	10/2001	Adriaansen	.....	D14/356
D452,969	S	*	1/2002	Adriaansen	.....	D14/356
D454,873	S	*	3/2002	Clark	.....	D14/358
D462,351	S	*	9/2002	Tanaka	.....	D14/356
D463,413	S	*	9/2002	Harris	.....	D14/240
D464,339	S	*	10/2002	Tomino	.....	D14/240
D465,495	S	*	11/2002	Goto	.....	D14/242
D467,543	S	*	12/2002	Sakasegawa	.....	D13/123
D468,262	S	*	1/2003	Lee	.....	D13/123
D471,541	S	*	3/2003	Tomino	.....	D14/240
D477,570	S	*	7/2003	Zdinak	.....	D13/147
D483,756	S	*	12/2003	Tanaka	.....	D14/356
D491,187	S	*	6/2004	Mambakkam	.....	D14/383

D501,648	S	*	2/2005	Fiorentino	.....	G06F 1/188 D13/110
D505,657	S	*	5/2005	Suckle	.....	D13/110
D512,059	S	*	11/2005	Zhang	.....	D14/348
D525,266	S	*	7/2006	Smith	.....	D14/217
D526,662	S	*	8/2006	Choi	.....	D14/217
D535,279	S	*	1/2007	Krieger	.....	D14/155
D538,803	S	*	3/2007	Chen	.....	D14/348
D539,735	S	*	4/2007	Suckle	.....	D13/110
D565,571	S	*	4/2008	Trifilio	.....	D14/356
D576,561	S	*	9/2008	Kaluza	.....	D13/162
D576,562	S	*	9/2008	Kaluza	.....	D13/162
D585,374	S	*	1/2009	Kim	.....	D13/123
D598,403	S	*	8/2009	Huang	.....	D14/125
D609,704	S	*	2/2010	Sin	.....	D14/363
D610,928	S	*	3/2010	Ohtani	.....	D10/73
D611,036	S	*	3/2010	Cooper	.....	D14/217
D611,850	S	*	3/2010	Ohtani	.....	D10/73
D613,270	S	*	4/2010	Cooper	.....	D14/217
D659,650	S	*	5/2012	Kang	.....	D13/162
D661,696	S	*	6/2012	Takada	.....	D14/356
D670,681	S	*	11/2012	Chang	.....	D14/242
D691,554	S	*	10/2013	Tanaka	.....	D13/110
D706,264	S	*	6/2014	Taniho	.....	D14/358
D711,821	S	*	8/2014	Wang	.....	D13/108
D719,862	S	*	12/2014	Fiedler	.....	D10/106.95
D721,291	S	*	1/2015	Matsumiya	.....	D10/80
D721,349	S	*	1/2015	Sugai	.....	D14/159
D721,706	S	*	1/2015	Rooyackers	.....	D14/435
D721,738	S	*	1/2015	Hochman	.....	D14/496
D737,765	S	*	9/2015	Sekine	.....	D13/110
D744,956	S	*	12/2015	Sekine	.....	D13/147
D751,987	S	*	3/2016	Ravi	.....	D13/123
D755,761	S	*	5/2016	Reynolds	.....	D14/242
D774,928	S	*	12/2016	Matsumiya	.....	D10/73
D781,812	S	*	3/2017	Cho	.....	D14/204
D790,539	S	*	6/2017	Lee	.....	D14/358
D794,479	S	*	8/2017	Zhang	.....	D10/73
D810,043	S	*	2/2018	Suzuki	.....	D14/188
D848,418	S	*	5/2019	Jun	.....	D14/356
D848,419	S	*	5/2019	Jun	.....	D14/356
D881,837	S	*	4/2020	Xu	.....	D14/198
D886,752	S	*	6/2020	Xiang	.....	D13/184
D895,561	S	*	9/2020	Xiang	.....	D13/184
D896,191	S	*	9/2020	Xiang	.....	D13/184
D903,665	S	*	12/2020	Yoon	.....	D14/349
D912,553	S	*	3/2021	Thurnherr	.....	D10/75
D919,628	S	*	5/2021	Ma	.....	D14/433
D937,234	S	*	11/2021	Xiang	.....	D13/184
D937,235	S	*	11/2021	Xiang	.....	D13/184
D937,236	S	*	11/2021	Xiang	.....	D13/184

OTHER PUBLICATIONS

CC-Link Interface Unit Main Module MG50-CL. Magnescale Co., Ltd. 2018. https://www.hegewald-peschke.de/fileadmin/daten/magnescale/PIT_MGSE5.1/MG50-CL_MG51_en.pdf.
 Contact-type Digital Displacement Sensor HG-S Series. pp. 1093-1110. https://www3.panasonic.biz/ac/e_download/fasys/measurement/measurement/catalog/hg-s_e_cata.pdf?f_cd=402219.

* cited by examiner



FIG. 1

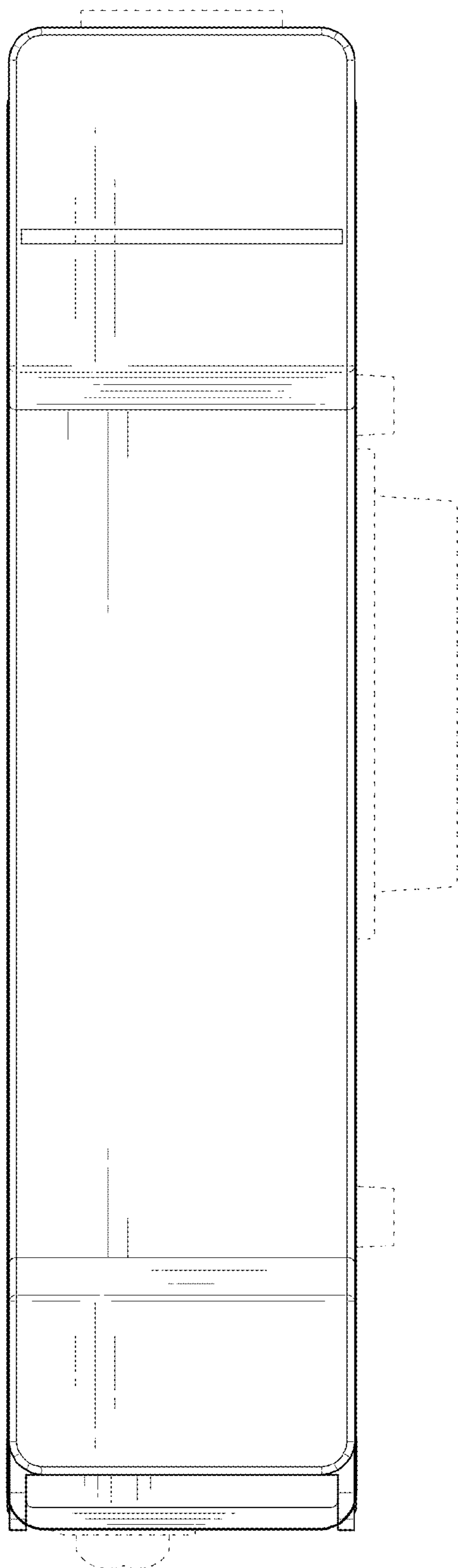


FIG. 2

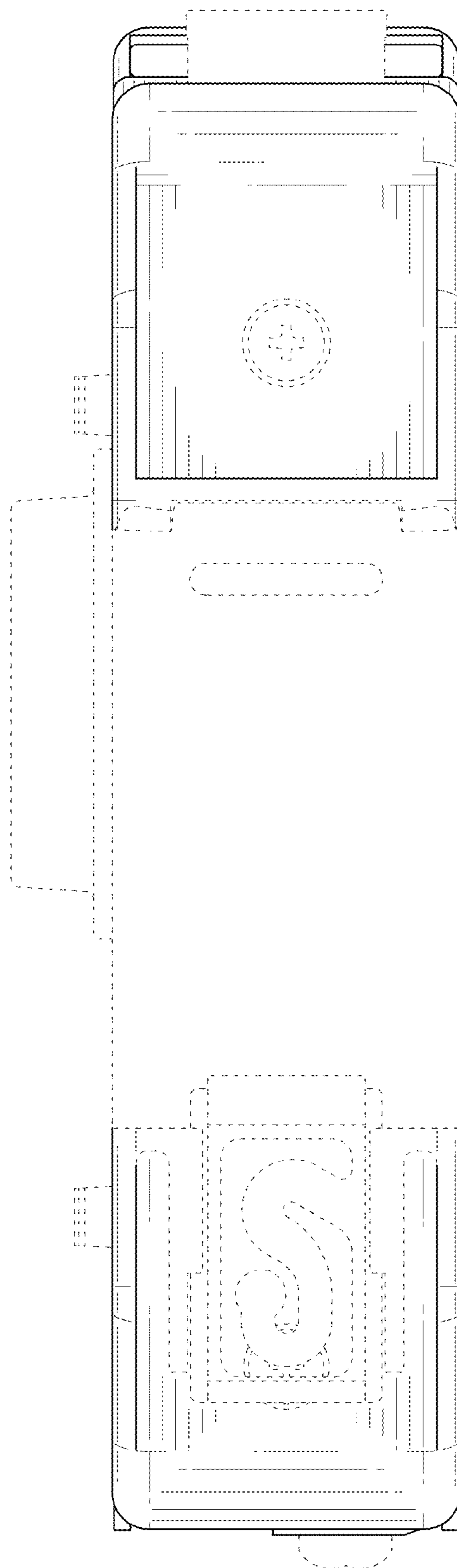


FIG. 3

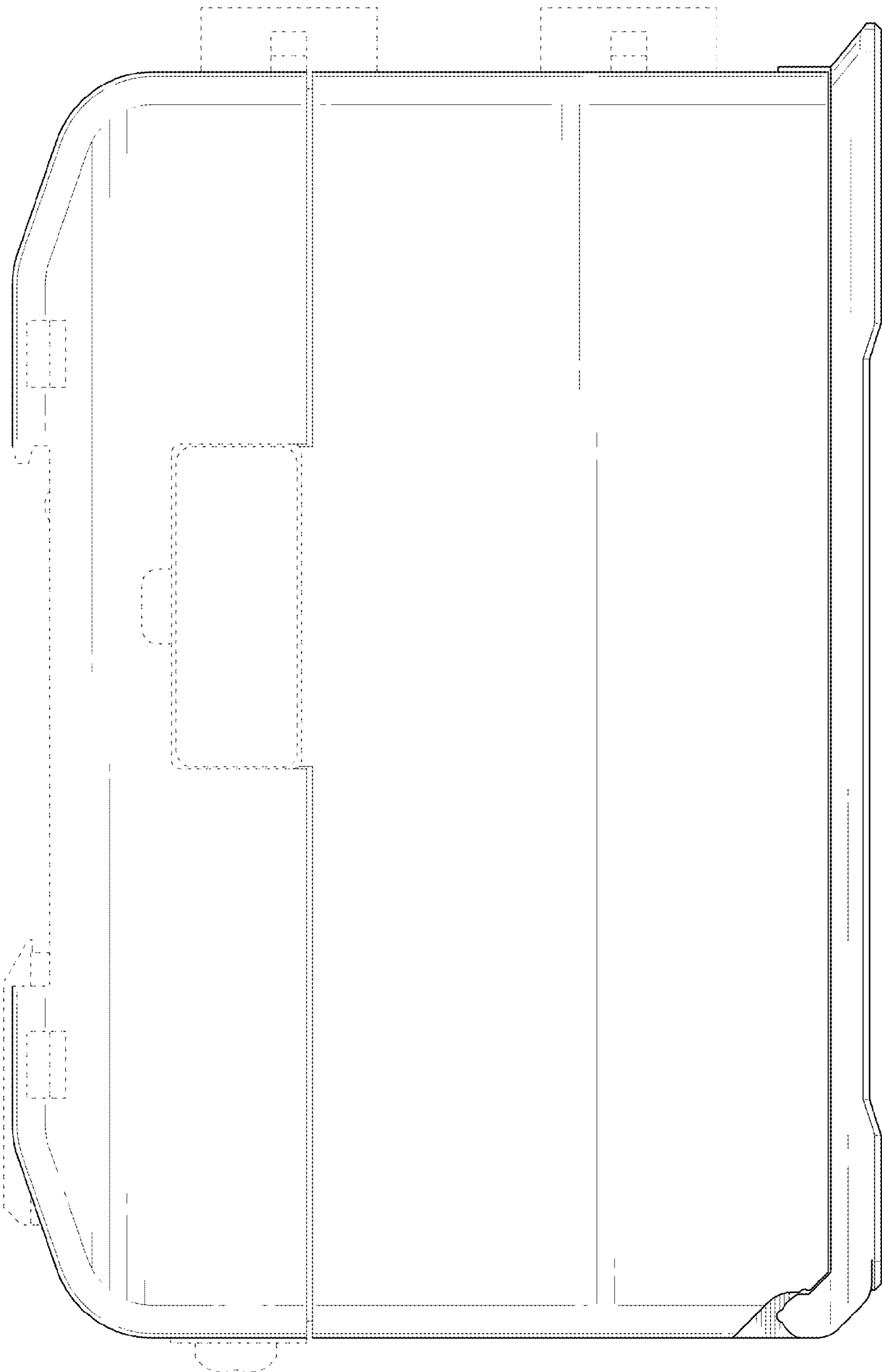


FIG. 4

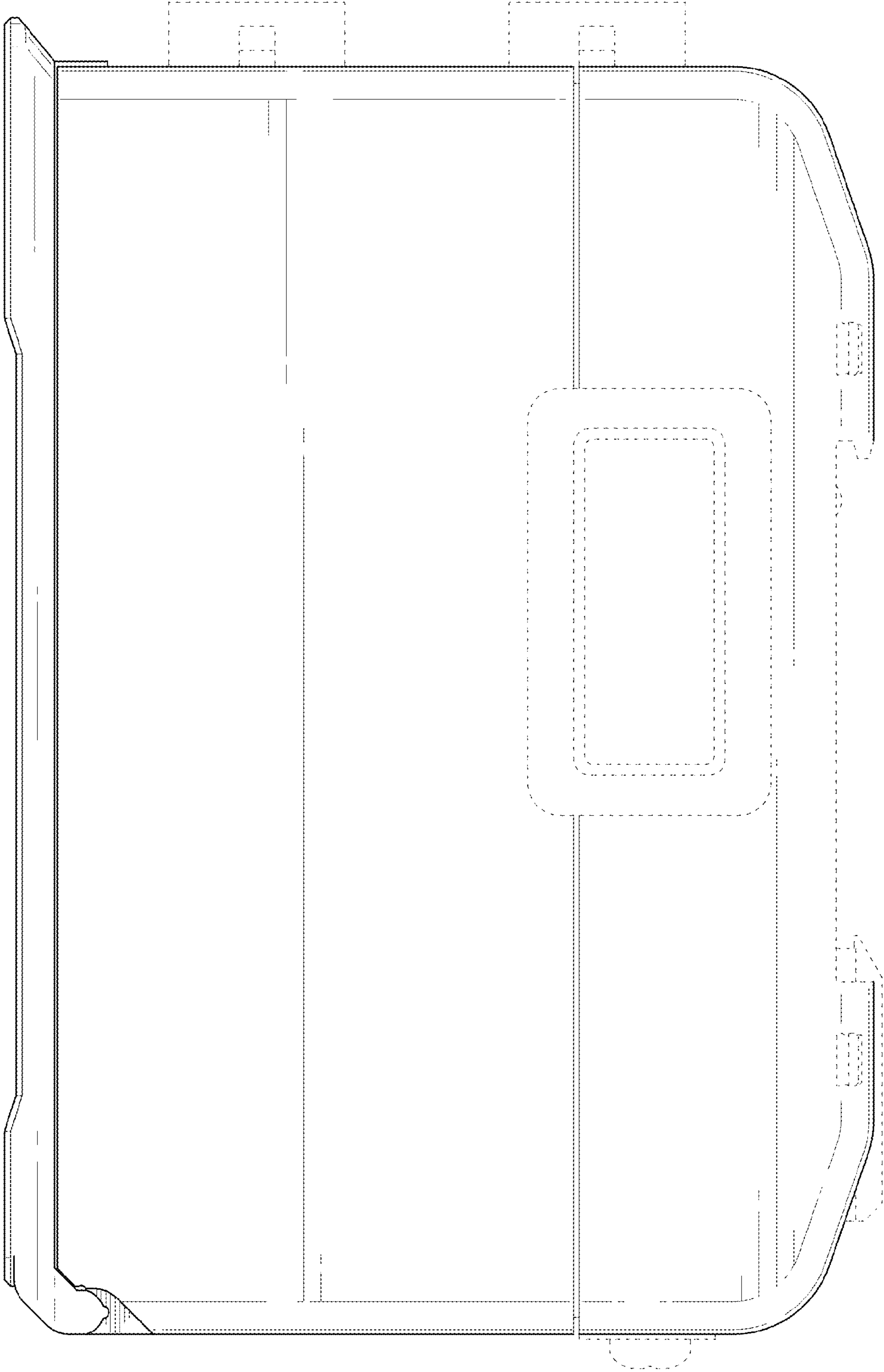


FIG. 5

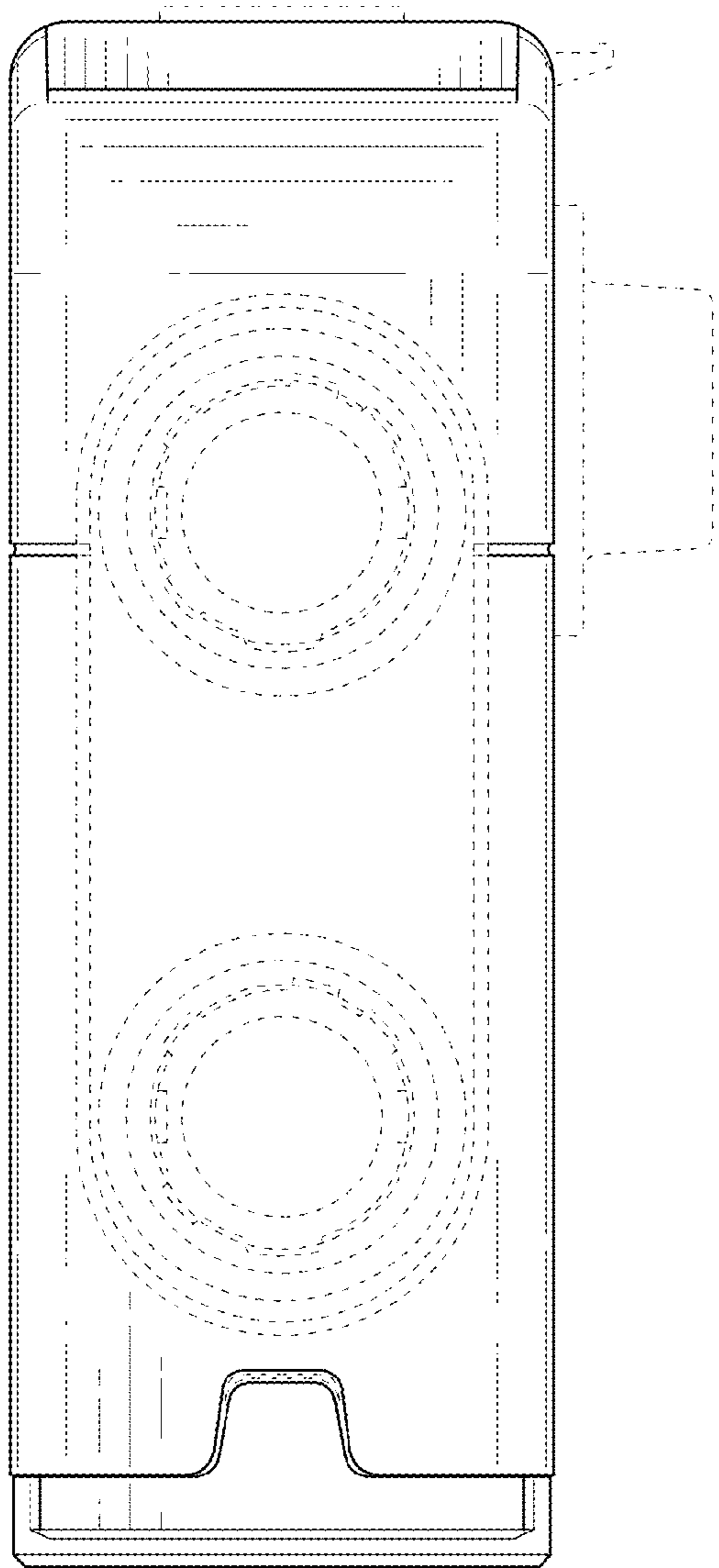


FIG. 6

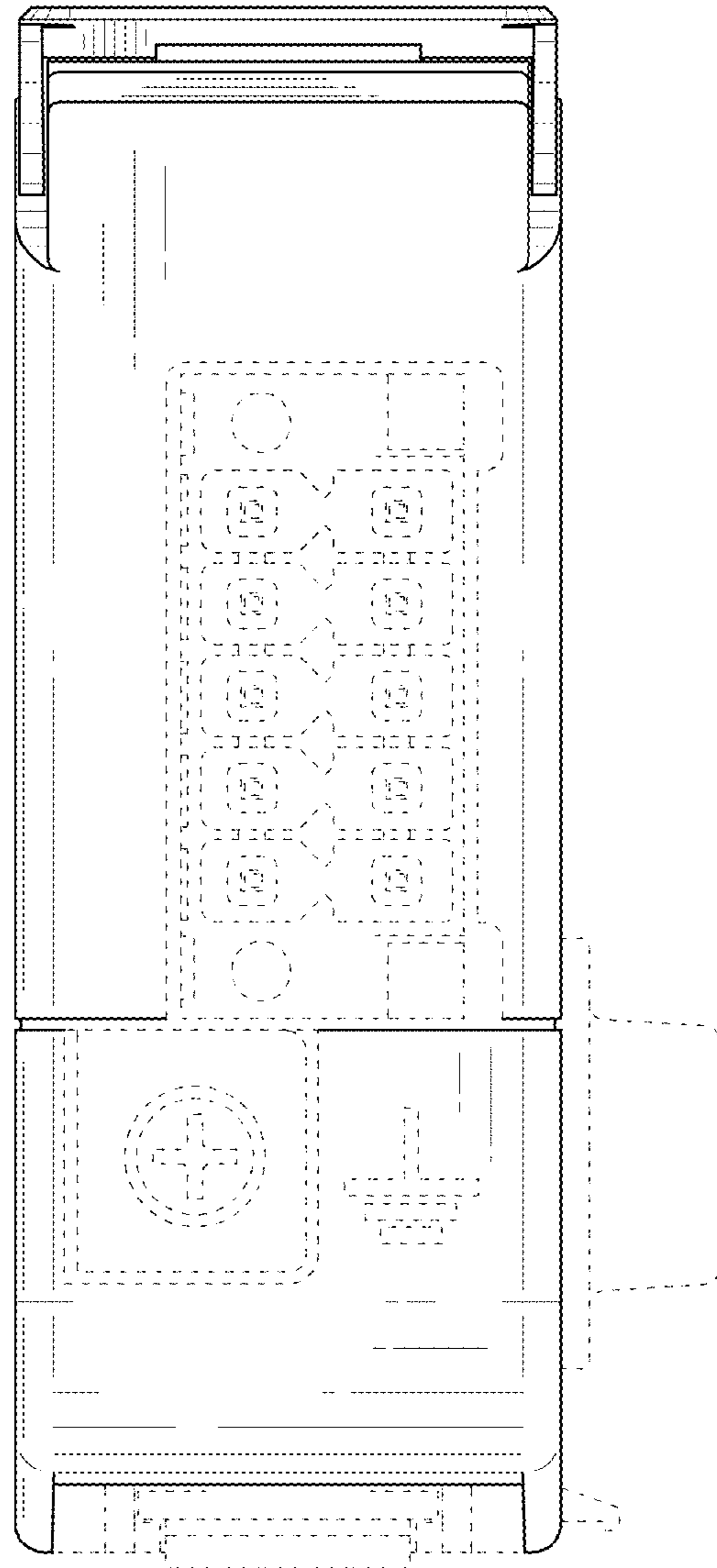


FIG. 7

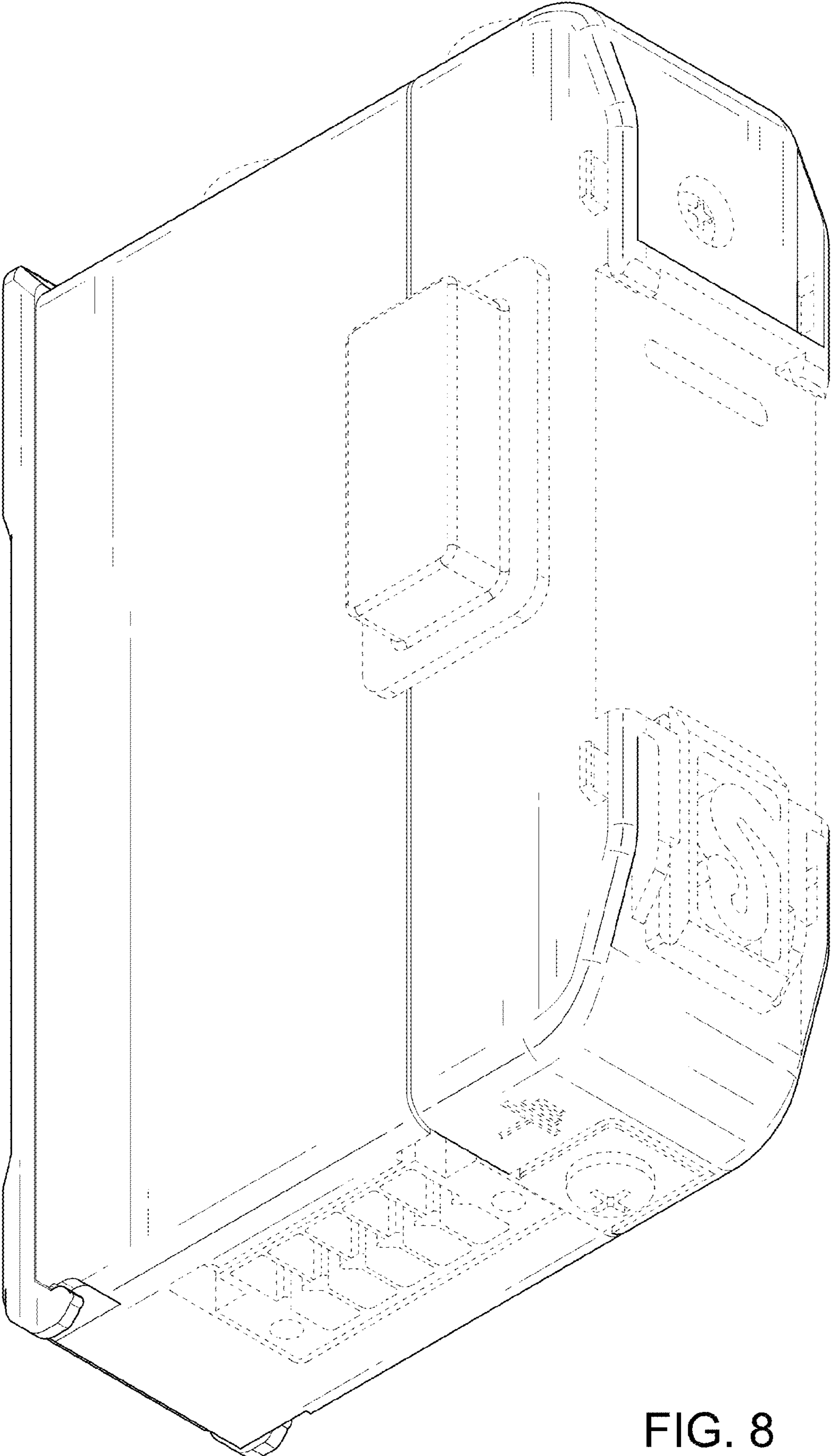


FIG. 8

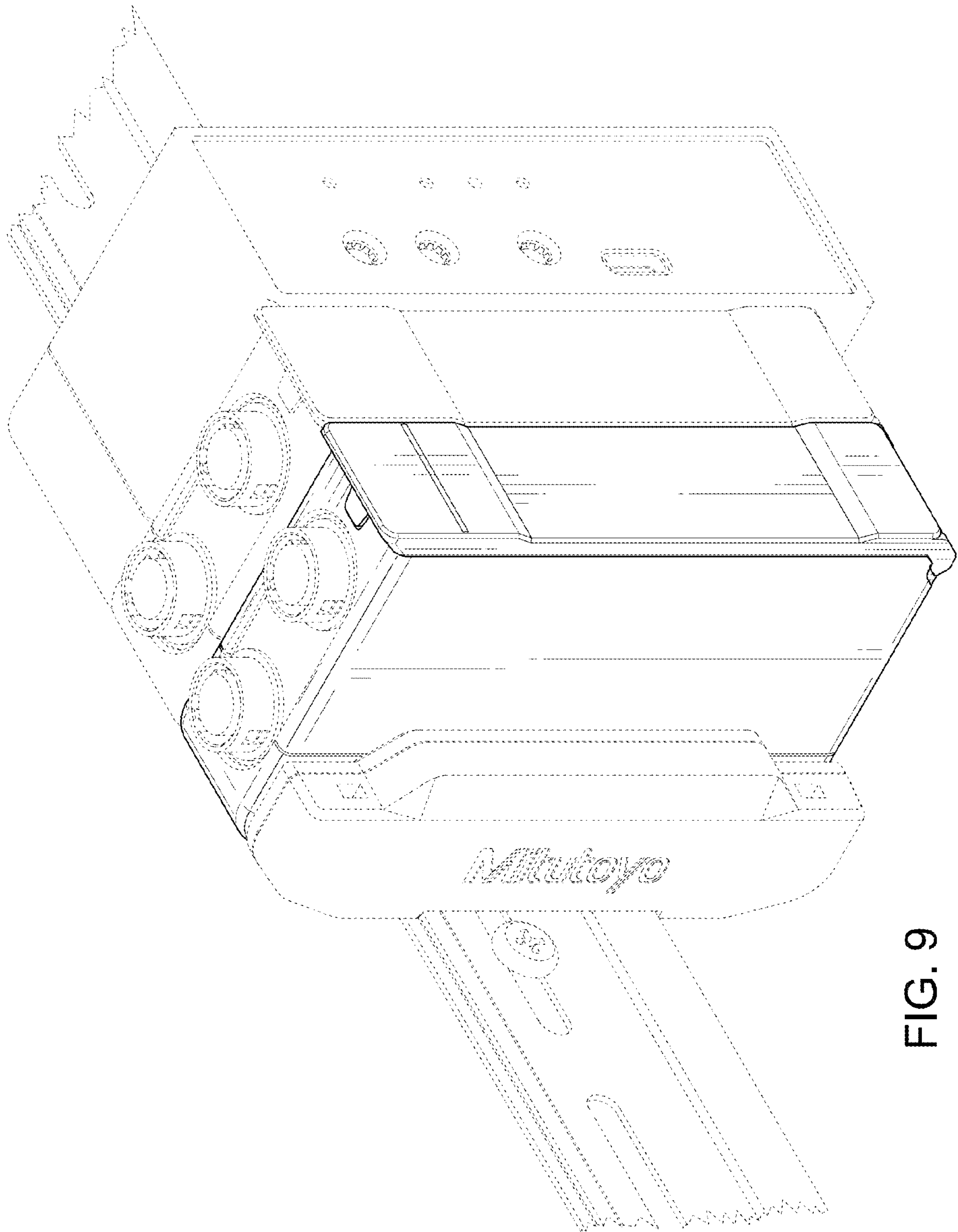


FIG. 9

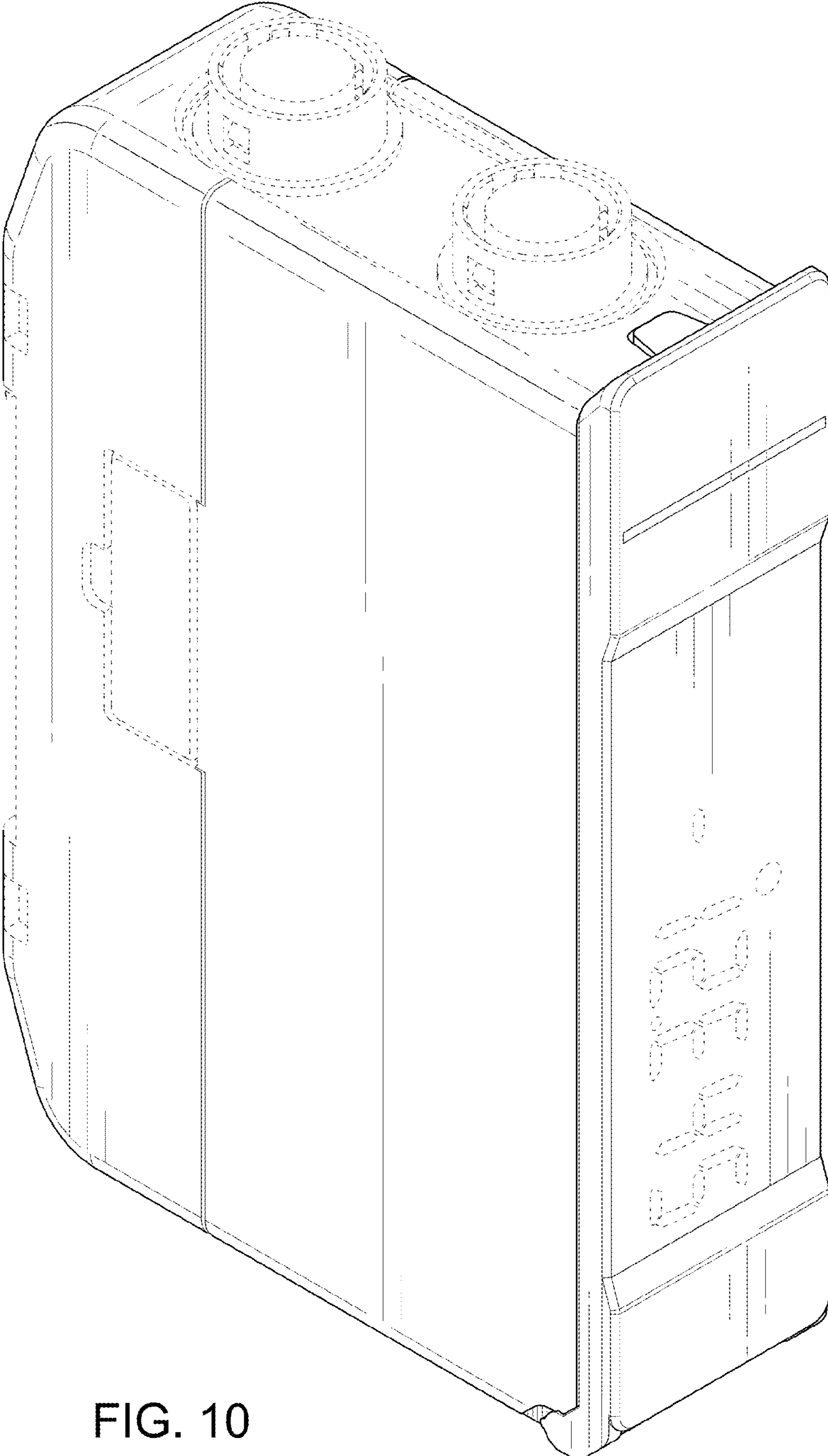


FIG. 10