



US00D611898S

(12) **United States Design Patent**
Yang

(10) **Patent No.:** **US D611,898 S**
(45) **Date of Patent:** **** Mar. 16, 2010**

(54) **INDUCTION CHARGER**

(76) Inventor: **Lin Wei Yang**, No. 1 Henghai Road,
South District Zhongsham, Guangdong
(CN) 528400

(**) Term: **14 Years**

(21) Appl. No.: **29/340,379**

(22) Filed: **Jul. 17, 2009**

(51) **LOC (9) Cl.** **13-02**

(52) **U.S. Cl.** **D13/108**

(58) **Field of Classification Search** D13/102,
D13/107-110, 118-119, 184; D14/251,
D14/253, 432, 434; 320/103, 107-115

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,675,108	A	7/1972	Nicholl	
3,938,018	A	2/1976	Dahl	
4,496,896	A	1/1985	Melocik	
4,654,573	A	3/1987	Rough	
D321,855	S *	11/1991	Ross, Jr.	D13/107
5,122,729	A	6/1992	Itoga	
5,157,319	A	10/1992	Klontz	
D331,573	S *	12/1992	Iino	D14/434
5,396,538	A	3/1995	Hong	
5,600,225	A	2/1997	Goto	
5,654,621	A	8/1997	Seelig	
5,734,254	A	3/1998	Stephens	
D393,451	S *	4/1998	Faranda et al.	D14/434
D402,642	S *	12/1998	Faranda et al.	D14/434
5,850,135	A	12/1998	Kuki	
5,889,384	A	3/1999	Hayes	
5,896,278	A	4/1999	Tamura	
D409,582	S *	5/1999	Falkenberg	D14/451
D412,319	S *	7/1999	Lee et al.	D14/434
5,929,598	A	7/1999	Nakama	
D413,108	S *	8/1999	Suzuki	D14/434
D413,578	S *	9/1999	Larson et al.	D13/152
5,955,865	A	9/1999	Koike	
5,963,012	A	10/1999	Garcia	
D416,547	S *	11/1999	Lee et al.	D14/434

6,016,046	A	1/2000	Kaite	
6,028,413	A	2/2000	Brockmann	
D421,424	S *	3/2000	Lee et al.	D14/434
6,040,986	A	3/2000	Sakamoto	

(Continued)

FOREIGN PATENT DOCUMENTS

CN 201204235 Y 3/2009

(Continued)

OTHER PUBLICATIONS

“Chargers and Charging,” Electropedia, accessed Aug. 11, 2009,
accessed at: <http://www.mpoweruk.com/chargers.htm>; 12 pages.

(Continued)

Primary Examiner—Rosemary K Tarcza
(74) *Attorney, Agent, or Firm*—Merchant & Gould P.C.

(57) **CLAIM**

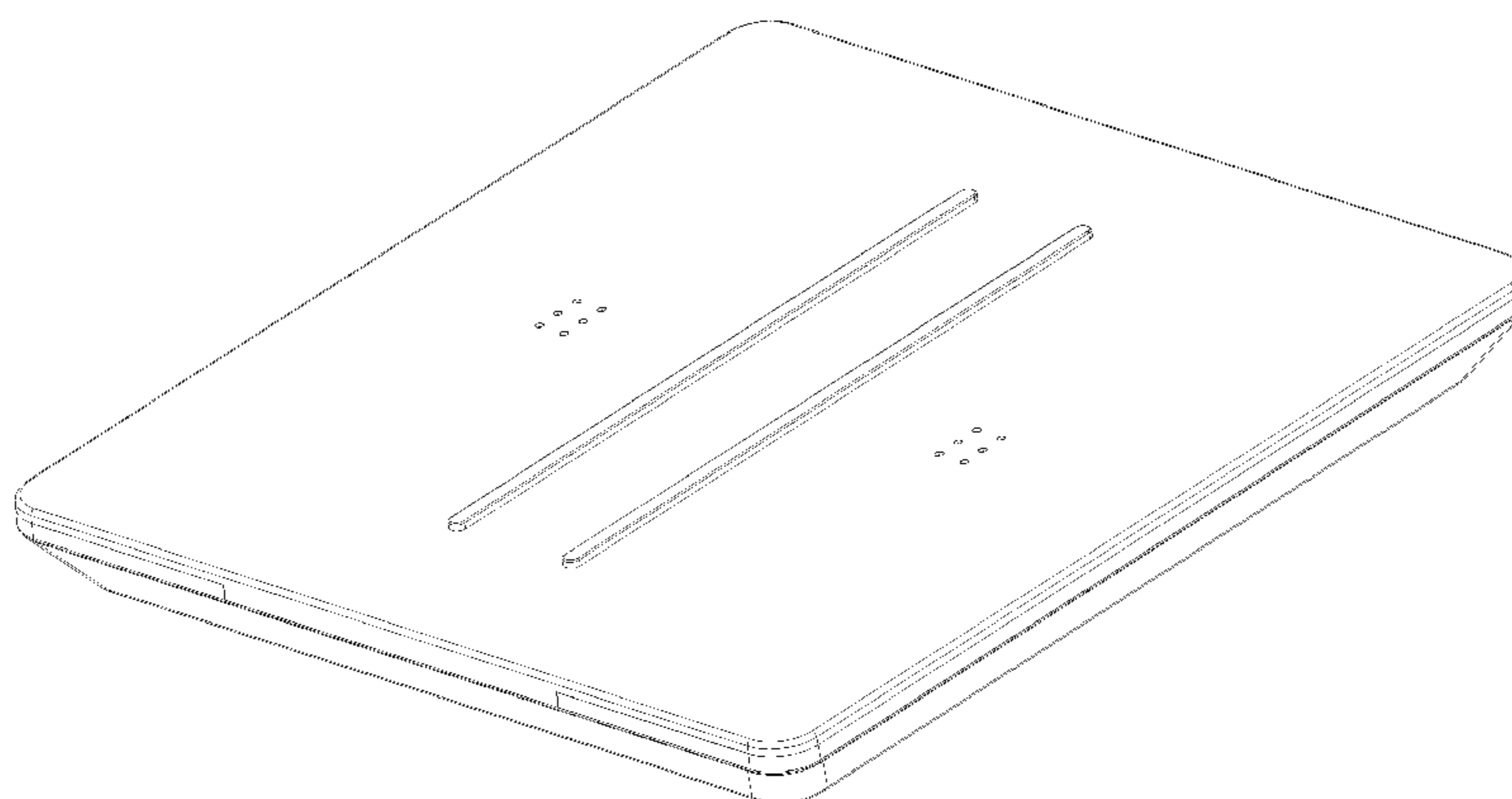
The ornamental design for an induction charger, as shown and described.

DESCRIPTION

FIG. 1 is a top, front, and right perspective view of an induction charger showing my new design;
FIG. 2 is a top, rear, and left perspective view thereof;
FIG. 3 is a top plan view thereof;
FIG. 4 is a left side elevation view thereof;
FIG. 5 is a right side elevation view thereof;
FIG. 6 is a bottom plan view thereof;
FIG. 7 is a front elevation view thereof; and,
FIG. 8 is a rear elevation view thereof.

The broken lines shown in the drawings are included for the purpose of illustrating environmental structure and form no part of the claimed design.

1 Claim, 8 Drawing Sheets



US D611,898 S

U.S. PATENT DOCUMENTS

6,118,249	A	9/2000	Brockmann	
6,127,799	A	10/2000	Krishnan	
6,154,005	A	11/2000	Hyogo	
6,184,651	B1	2/2001	Fernandez	
6,208,115	B1	3/2001	Binder	
6,310,465	B2	10/2001	Najima	
D450,707	S *	11/2001	Francavilla et al.	D14/434
6,316,909	B1	11/2001	Honda	
6,331,744	B1	12/2001	Chen	
6,351,098	B1	2/2002	Kaneko	
6,356,049	B2	3/2002	Oguri	
6,366,050	B2	4/2002	Kajiura	
6,489,745	B1	12/2002	Koreis	
6,498,456	B2	12/2002	Ettes	
D470,849	S *	2/2003	Bertagnole et al.	D14/434
6,636,017	B2	10/2003	Zink	
6,756,765	B2	6/2004	Bruning	
6,917,182	B2	7/2005	Burton	
6,935,797	B2	8/2005	Sim	
6,972,543	B1	12/2005	Wells	
7,151,357	B2	12/2006	Xian	
D535,613	S *	1/2007	Varalo et al.	D13/108
7,164,255	B2	1/2007	Hui	
7,180,265	B2	2/2007	Naskali	
7,208,912	B2	4/2007	Ghabra	
7,211,986	B1	5/2007	Flowerdew	
7,248,017	B2	7/2007	Cheng	
7,271,569	B2	9/2007	Oglesbee	
7,274,168	B2	9/2007	Tskukamoto	
7,373,133	B2	5/2008	Mickle	
7,375,493	B2	5/2008	Calhoon	
7,378,817	B2	5/2008	Calhoon	
7,400,112	B2	7/2008	Barbeau	
D574,769	S *	8/2008	Fisher et al.	D13/108
7,414,380	B2	8/2008	Tang	
D578,960	S *	10/2008	Fisher et al.	D13/108
D578,961	S *	10/2008	Fisher et al.	D13/108
7,443,135	B2	10/2008	Cho	
7,471,060	B2	12/2008	Raghunath	
7,471,062	B2	12/2008	Bruning	
7,495,414	B2	2/2009	Hui	
7,518,267	B2	4/2009	Baarman	
7,518,337	B2	4/2009	Beart	
7,548,040	B2	6/2009	Lee	
7,570,994	B2	8/2009	Tamura	
2003/0030342	A1	2/2003	Chen	
2004/0145342	A1	7/2004	Lyon	
2004/0189246	A1	9/2004	Bulai	
2005/0156560	A1	7/2005	Shimaoke	
2005/0162125	A1	7/2005	Yu	
2005/0268472	A1	12/2005	Bourilkov	
2006/0028176	A1	2/2006	Tang	
2006/0061324	A1	3/2006	Oglesbee	
2006/0061326	A1	3/2006	Vine	
2006/0108974	A1	5/2006	Castillo	
2007/0046256	A1	3/2007	Kim	
2007/0096691	A1	5/2007	Duncan	
2007/0145830	A1	6/2007	Lee	
2007/0182367	A1	8/2007	Partovi	
2007/0222426	A1	9/2007	Waffenschmidt	
2008/0001572	A9	1/2008	Baarman	
2008/0111518	A1	5/2008	Toya	
2008/0116847	A1	5/2008	Loke	
2008/0137890	A1	6/2008	Petersen	
2008/0150754	A1	6/2008	Quendt	
2008/0164840	A1	7/2008	Kato	
2008/0164844	A1	7/2008	Kato	
2008/0211455	A1	9/2008	Park	
2008/0224655	A1	9/2008	Tilley	
2008/0234009	A1	9/2008	Zeiger	
2008/0278112	A1	11/2008	Hui	

2008/0303479	A1	12/2008	Park	
2008/0315826	A1	12/2008	Alberth, Jr.	
2009/0001930	A1	1/2009	Pohjonen	
2009/0001931	A1 *	1/2009	Lin	320/108
2009/0015211	A1	1/2009	Ribellino	
2009/0033280	A1	2/2009	Choi	
2009/0040794	A1	2/2009	Williams	
2009/0048003	A1	2/2009	Lu	
2009/0049319	A1	2/2009	Meynants	
2009/0058358	A1	3/2009	Inoue	
2009/0072784	A1	3/2009	Erickson	
2009/0075704	A1	3/2009	Wang	
2009/0090763	A1	4/2009	Zemlok	
2009/0096412	A1	4/2009	Huang	
2009/0102416	A1 *	4/2009	Burley	320/103
2009/0102419	A1	4/2009	Gwon	
2009/0108805	A1	4/2009	Liu	
2009/0111393	A1	4/2009	Scalisi	
2009/0121675	A1	5/2009	Ho	
2009/0140690	A1	6/2009	Jung	
2009/0140692	A1	6/2009	Hwang	
2009/0146608	A1	6/2009	Lee	
2009/0153098	A1	6/2009	Toya	
2009/0154149	A1	6/2009	Huang	
2009/0156268	A1	6/2009	Kim	
2009/0182388	A1	7/2009	Von Arx	
2009/0184680	A1	7/2009	Kao	
2009/0195214	A1	8/2009	Gehrke	

FOREIGN PATENT DOCUMENTS

EP	0 369 662	A2	5/1990
EP	1 432 097	A1	6/2004
EP	1 727 395	A2	11/2006
EP	1 962 365	A1	8/2008
KR	2003-0072999	A	9/2003
KR	2004-0028312		4/2004
WO	WO 00/54387	A1	9/2000
WO	WO 02/15320	A1	2/2002
WO	WO 02/37641	A1	5/2002
WO	WO 03/075415	A1	9/2003
WO	WO 03/105311	A1	12/2003
WO	WO 2004/073176	A2	8/2004
WO	WO 2004/088816	A1	10/2004
WO	WO 2006/001557	A1	1/2006
WO	WO 2007/000055	A1	1/2007
WO	WO 2007/086673	A1	8/2007
WO	WO 2008/016273	A1	2/2008
WO	WO 2008/026080	A2	3/2008
WO	WO 2008/044875	A1	4/2008
WO	WO 2008/091138	A1	7/2008
WO	WO 2008/137996	A1	11/2008
WO	WO 2008/140333	A2	11/2008
WO	WO 2009/031673	A1	3/2009
WO	WO 2009/050624	A2	4/2009
WO	WO 2009/050625	A2	4/2009
WO	WO 2009/066296	A2	5/2009
WO	WO 2009/071908	A1	6/2009
WO	WO 2009/080786	A2	7/2009

OTHER PUBLICATIONS

Choi et al., Design and Implementation of Low-Profile Contactless Battery charger Using Planar Printed Circuit Board Windings as Energy Transfer Device, vol. 51, 2004, 1 page.
 Electronic Design, published Dec. 04, 2008, 5 pages.
 Hirai et al., Study on Intelligent Battery charging Using Inductive Transmission of Power and Information, Mar. 2000, pp. 335-345.
 Hui et al., A New Generation of Universal Contactless Battery Charging Platform for Portable Consumer Electronic Equipment, vol. 1, 2004, pp. 638-644.
 Jang et al., A New Soft-Switched Contactless Battery Charger with Robust Local Controllers, Oct. 19-23, 2003, 7 pages.

Kim et al., Design of a Contactless Battery Charger for Cellular Phone, © 2000 IEEE, 5 pages.

Leung et al., Wireless Power Transmission and Charging Pad, accessed Oct. 20, 2009, 9 pages.

Murph, Darren, "Seiko Epson, Murata Team Up on Contactless Quick Charger" Sep. 29, 2007, 4 pages.

Nissan Develops Contactless Charging System, Jul. 29, 2009, © Ubergizmo, 4 pages.

WildCharge, Life Unplugged!, Company Information, accessed on Oct. 19, 2009, accessed at: http://www.wildcharge.com/index.cfm/fuseaction/category.display/category_ID/257/Com...; 2 pages.

WildCharge, Life Unplugged!, Our Technology Information, accessed on Oct. 19, 2009, accessed at: http://www.wildcharge.com/index.cfm/fuseaction/category.display/category_id/262/Our...; 2 pages.

WildCharge, Life Unplugged!, Technology Information, accessed on Oct. 19, 2009, accessed at: http://www.wildcharge.com/index.cfm/fuseaction/category.display/category_ID/255/How...; 2 pages.

WildCharge, Life Unplugged!, Versatile New PowerDisc Enables Wire-Free Charging for Hundreds of Mobile Devices, accessed on Oct. 19, 2009, accessed at: <http://www.wildcharge.com/index.cfm>; 2 pages.

* cited by examiner

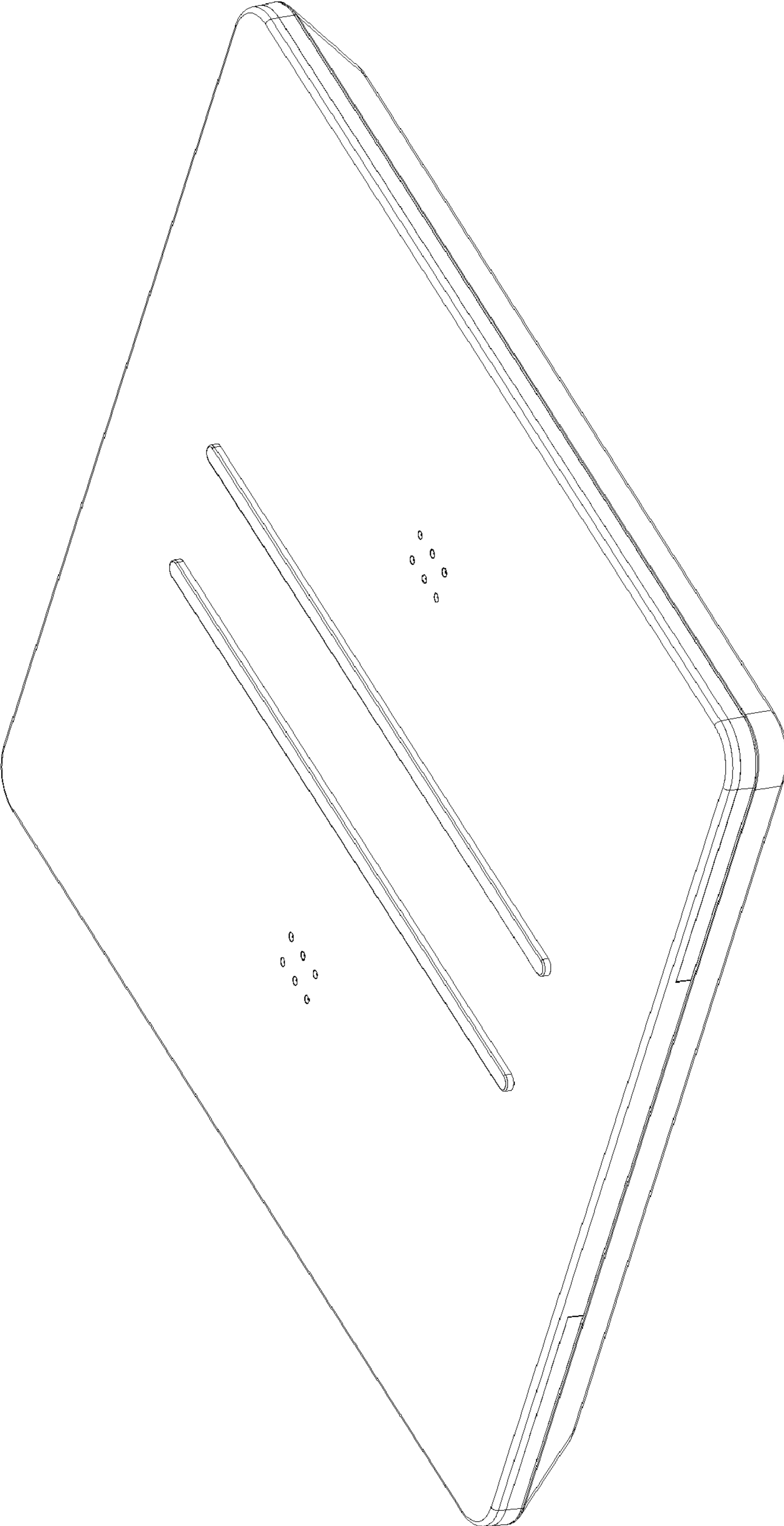


FIG. 1

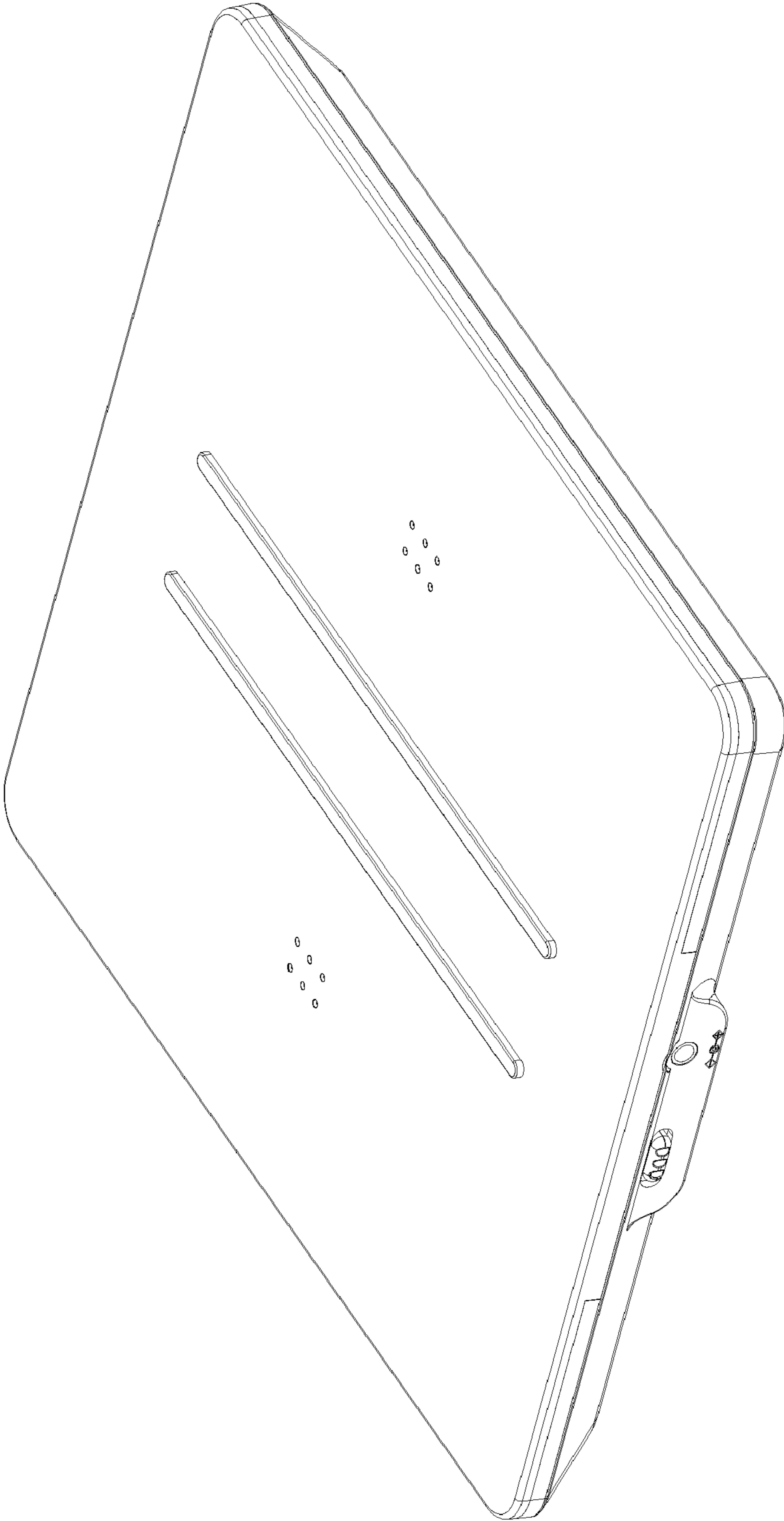


FIG. 2

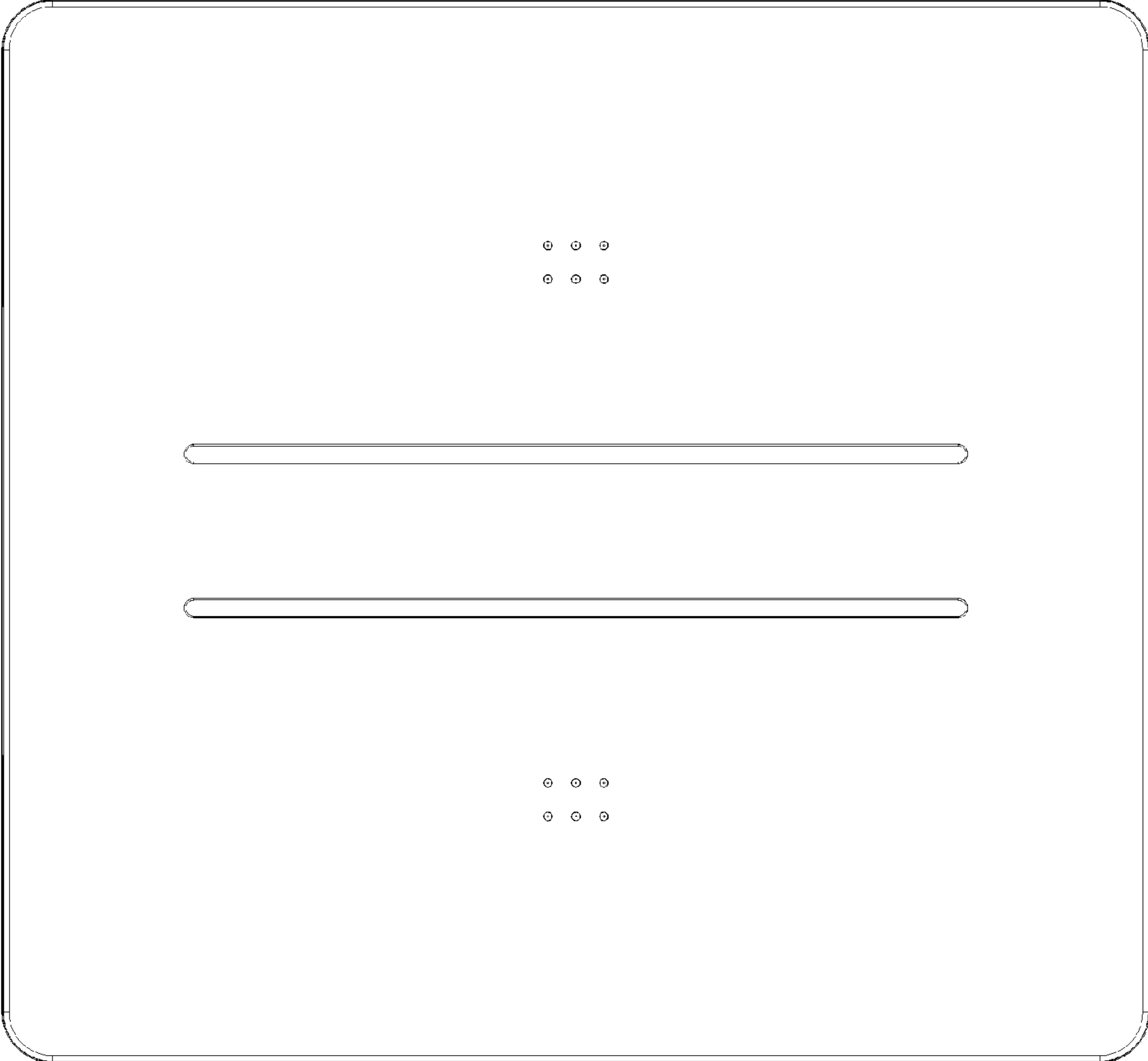
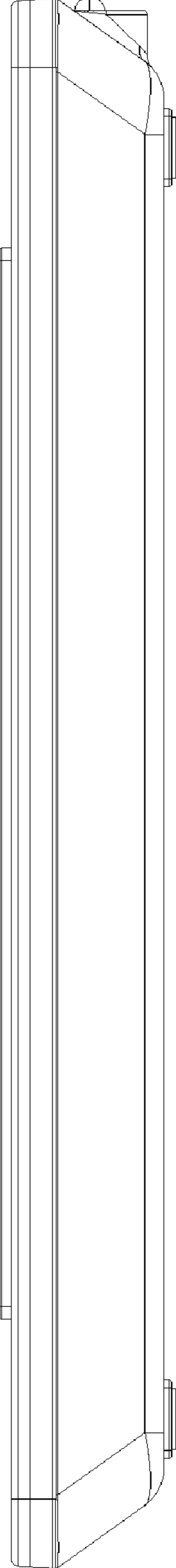


FIG. 3

FIG. 4



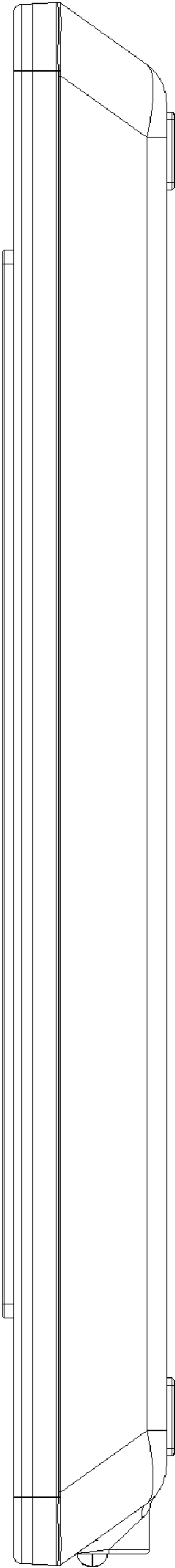


FIG. 5

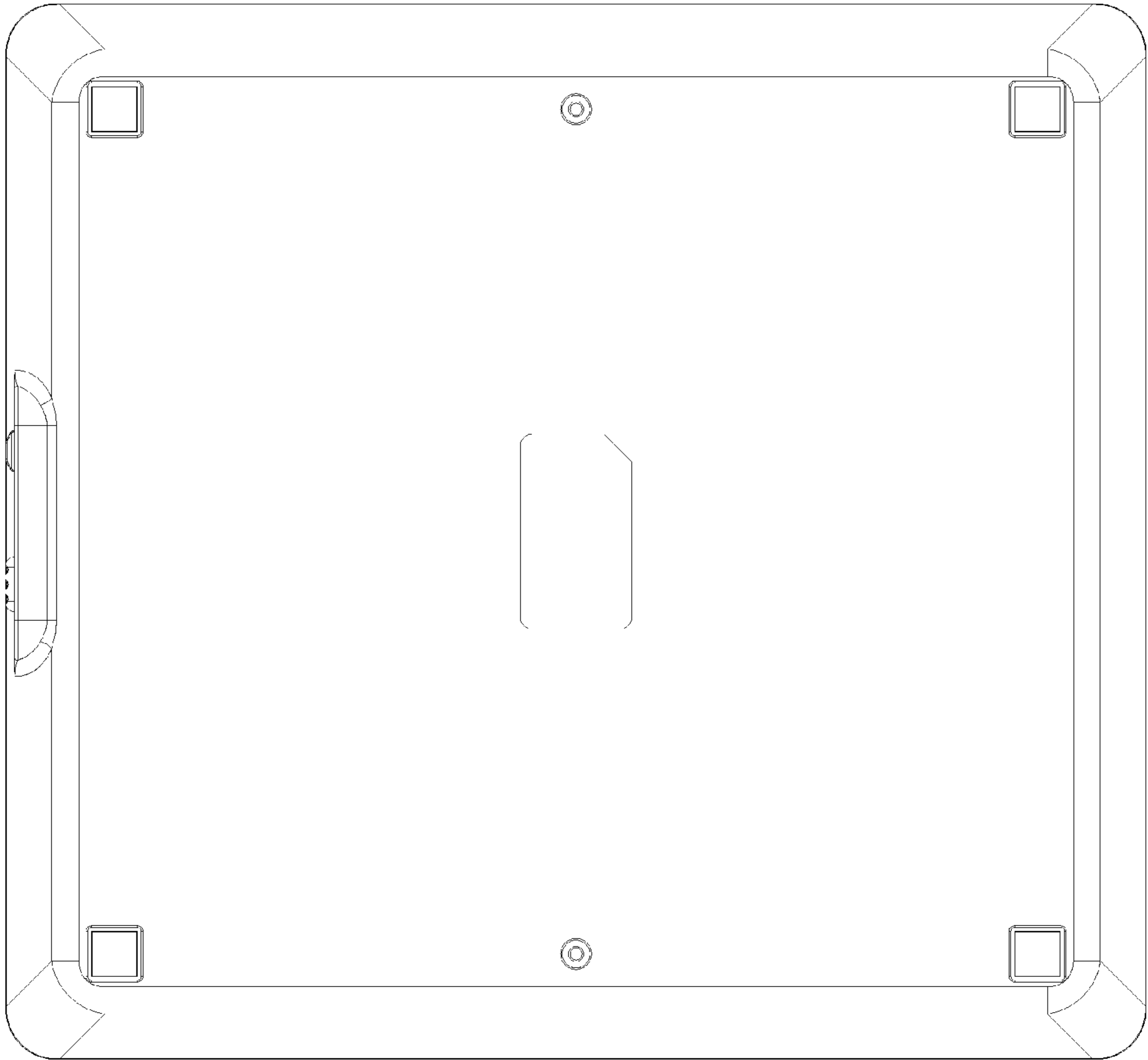


FIG. 6

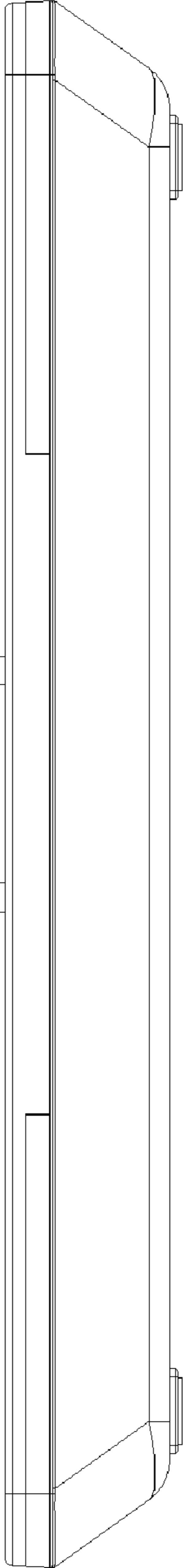


FIG. 7

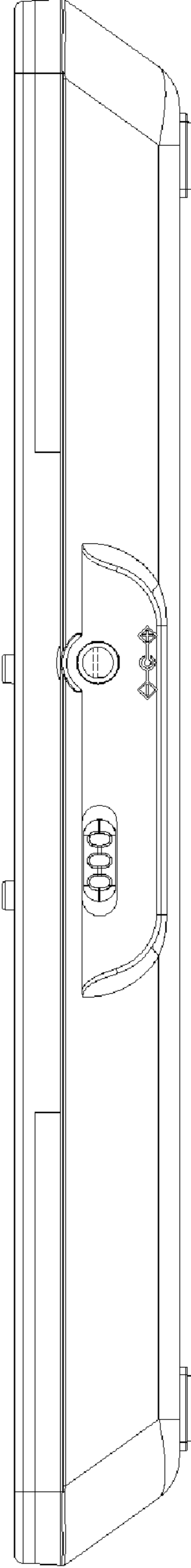


FIG. 8