



US00D937397S

(12) **United States Design Patent**
Choi et al.

(10) **Patent No.:** **US D937,397 S**

(45) **Date of Patent:** **** Nov. 30, 2021**

(54) **AIR PURIFIER**

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

(21) Appl. No.: **29/697,061**

(22) Filed: **Jul. 3, 2019**

(30) **Foreign Application Priority Data**

Jan. 7, 2019 (KR) 30-2019-0000820

(51) **LOC (13) 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; D25/60, 58, 138,
D25/140, 156, 691; D7/624.1, 388;
422/120, 122; 55/356, 473, 504; 96/97;
D14/188, 170, 171, 172; 261/DIG. 17,
261/DIG. 65, 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
2001/0096

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,452,252 A * 6/1969 Mapham H01R 31/00
361/55

3,655,456 A * 4/1972 Hamel H01M 50/50
429/65

3,779,851 A * 12/1973 Hertz B32B 5/12
156/182

4,615,955 A * 10/1986 Amakawa H01M 8/08
429/416

4,856,715 A * 8/1989 Fordyce A47J 43/255
241/5

(Continued)

FOREIGN PATENT DOCUMENTS

AT 00010063-0001 2/1994

AT 00010064-0001 2/1994

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 29/419,584.

(Continued)

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(57) **CLAIM**

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

DESCRIPTION

FIG. 1 illustrates a front perspective view of the air purifier showing our new design;

FIG. 2 illustrates a front elevational view thereof;

FIG. 3 illustrates a rear elevational view thereof;

FIG. 4 illustrates a left side elevational view thereof;

FIG. 5 illustrates a right side elevational view thereof;

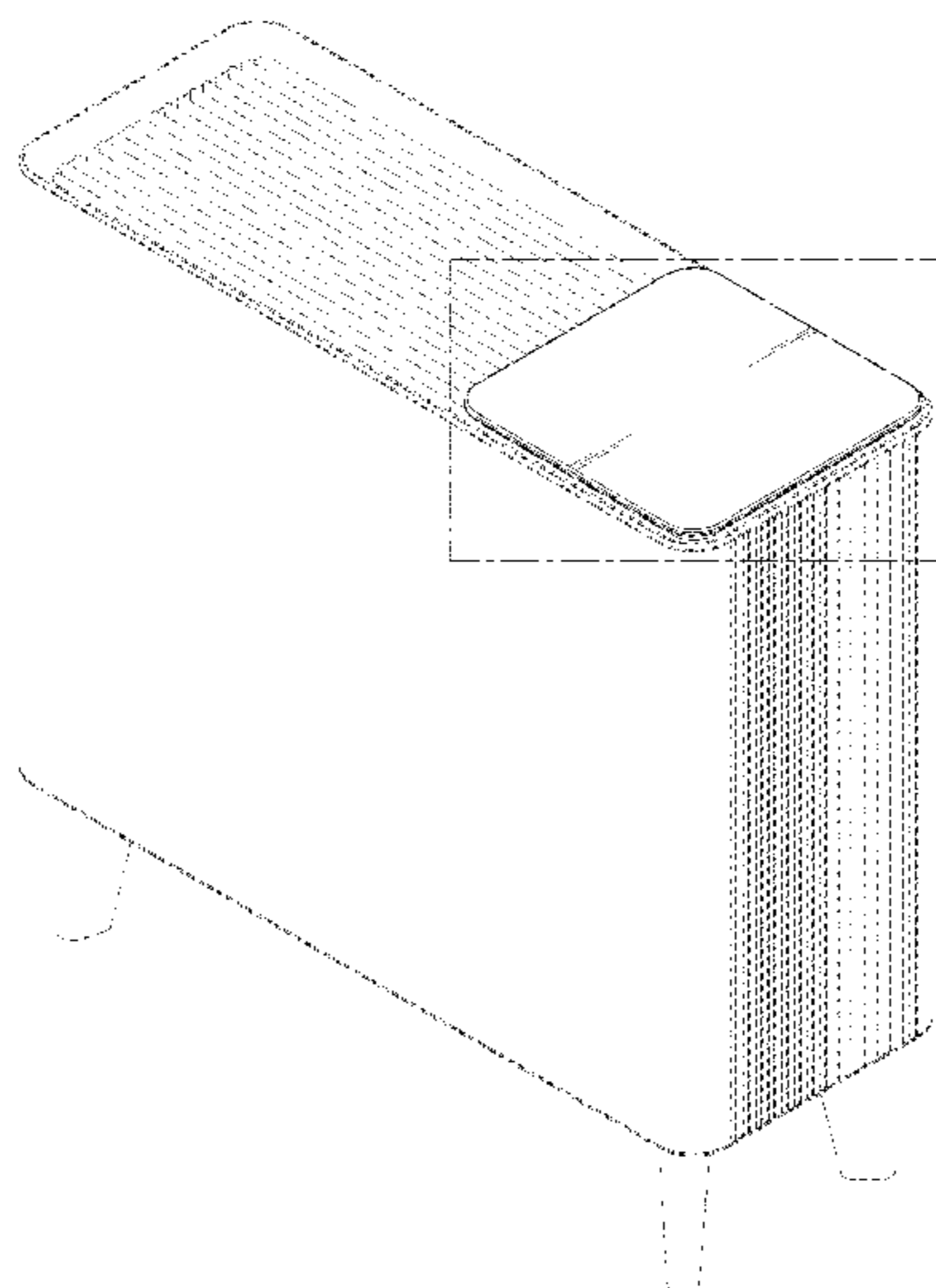
FIG. 6 illustrates a top plan view thereof;

FIG. 7 illustrates a bottom plan view thereof; and,

FIG. 8 illustrates an enlarged view of the portion indicated by the dot-dash boundary lines in FIG. 1.

The broken lines in the figures show portions of the air purifier that form no part of the claimed design.

1 Claim, 8 Drawing Sheets



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References Cited

U.S. PATENT DOCUMENTS

D305,929 S 2/1990 Ikeda et al.
D307,936 S 5/1990 Hirano et al.
D319,132 S * 8/1991 Marquardt D34/23
D323,210 S 1/1992 Wortham
D324,419 S 3/1992 Kanazawa
5,102,129 A * 4/1992 Roberts A63B 5/22
273/239
5,242,732 A * 9/1993 Bahakel B44C 7/02
428/81
D361,373 S 8/1995 Muller
D361,374 S 8/1995 Muller
D374,279 S 10/1996 Chiu et al.
D379,219 S 5/1997 Ellwood
D379,220 S 5/1997 Ellewood
D394,100 S 5/1998 Promseeda
D399,693 S * 10/1998 Vreeland D6/580
D402,022 S 12/1998 Termeer et al.
D402,745 S 12/1998 Termeer et al.
D402,746 S 12/1998 Clark et al.
D410,683 S * 6/1999 Carter D19/113
D411,880 S 7/1999 Cappadona et al.
D414,854 S 10/1999 Omaki et al.
D416,614 S 11/1999 Bellil et al.
D422,270 S 4/2000 Wong
D430,928 S 9/2000 Lafond et al.
D431,074 S 9/2000 Deros
D431,910 S * 10/2000 Glass D6/310
D433,493 S 11/2000 Runyan et al.
D437,037 S 1/2001 Deras et al.
D440,292 S 4/2001 Kip
D444,634 S * 7/2001 Dodson D6/312
D450,825 S 11/2001 Nakamura et al.
D451,181 S 11/2001 Miwa
D451,182 S 11/2001 Tsuji
D468,820 S 1/2003 Smith et al.
D472,626 S 4/2003 Nakamura
D476,068 S 6/2003 Carey et al.
D488,854 S 4/2004 Stauffer
D489,800 S 5/2004 Tokunaga
D529,161 S 9/2006 De'Longhi
D573,704 S 7/2008 Chen
D585,536 S 1/2009 Wang
D597,188 S 7/2009 Chen
D601,687 S 10/2009 Chan
D603,496 S 11/2009 Murai et al.
D608,433 S 1/2010 Murai et al.
D635,655 S 4/2011 Chent et al.
D635,829 S * 4/2011 Morrish D7/624.1
D644,312 S 8/2011 Tsuji
D690,803 S 10/2013 Koivisto et al.
D750,209 S 2/2016 Satou
D760,883 S 7/2016 Mann
D783,793 S 4/2017 Satou et al.
D797,914 S 9/2017 Nygren et al.
D802,112 S 11/2017 Jeon et al.
D803,368 S 11/2017 Priester
D807,997 S 1/2018 Seo
D810,259 S 2/2018 You et al.
D810,906 S 2/2018 Yoon
D810,907 S 2/2018 Yoon
D819,797 S 6/2018 Mann
D834,165 S 11/2018 Maeng
D844,766 S 4/2019 Miao et al.
D860,425 S 9/2019 Lobdell et al.
D895,851 S * 9/2020 Mussini D25/138

FOREIGN PATENT DOCUMENTS

AT 00010065-0001 2/1994
AT 00010066-0001 2/1994
AT 00037933-0001 12/1999
AT 00037934-0001 12/1999
AT 00037936-0001 12/1999
CN 302830701 S 5/2014

CN 302954277 S 10/2014
CN 302967982 S 10/2014
CN 303000885 S 11/2014
CN 304206664 S 7/2017
CN 304415863 S 7/2017
CN 304589581 S 4/2018
CN 304999491 S 1/2019
CN 305063406 S 3/2019
DE 9601057-0002 9/1996
DE 49601057-0001 9/1996
DE 49802066-0001 10/1998
DE 49802066-0002 10/1998
DE 49806837-0001 3/1999
DE 40005320-0001 9/2000
DE 40103977-0001 9/2001
DE 40107924-0002 1/2002
DE 40108734-0001 3/2002
EM 00055843-0002 11/2003
EM 00065305-0001 11/2003
EM 00065339-0001 11/2003
EM 00069554-0001 12/2003
EM 00087341-0001 1/2004
EM 00084413-0002 2/2004
EM 00211578-0001 10/2004
EM 00211578-0002 10/2004
EM 00215918-0001 10/2004
EM 00244009-0001 1/2005
EM 00244009-0002 1/2005
EM 00275698-0001 3/2005
EM 00351598-0001 8/2005
EM 00351598-0002 8/2005
EM 00351598-0003 8/2005
EM 00485255-0001 3/2006
EM 00485255-0002 3/2006
EM 00480991-0001 4/2006
EM 00480991-0002 4/2006
EM 00769732-0002 1/2008
EM 00800842-0002 1/2008
EM 00887849-0002 4/2008
EM 00887849-0003 4/2008
EM 00887849-0004 4/2008
EM 00887849-0005 4/2008
EM 00887849-0006 4/2008
EM 00887849-0007 4/2008
EM 00887849-0008 4/2008
EM 00887849-0009 4/2008
EM 00887849-0010 4/2008
EM 00899653-0001 4/2008
EM 00896881-0002 5/2008
EM 01112817-0004 6/2009
EM 01658998-0001 1/2010
EM 01201743-0001 3/2010
EM 01204606-0006 4/2010
EM 01306310-0001 1/2012
EM 01339337-0001 8/2012
EM 02532887-0001 9/2014
EM 02532887-0002 9/2014
EM 02532887-0003 9/2014
EM 04069383-0001 6/2017
EM 04120913-0002 7/2017
EM 06592630-0001 6/2019
EM 06592630-0002 6/2019
EM 06607412-0001 7/2019
GB 02068280-0001 11/1997
GB 02072118-0001 5/1998
GB 02072119-0001 5/1998
GB 02072341-0001 5/1998
GB 02072633-0001 6/1998
GB 02072634-0001 6/1998
GB 02075642-0001 9/1998
GB 02092977-0001 5/2000
GB 02095188-0001 9/2000
GB 02104445-0001 6/2002
GB 03008197-0001 11/2002
GB 03008198-0001 11/2002
IR 00092057-0001 1/2017
IR 00092057-0002 1/2017
IR 00092057-0004 1/2017
JP 1277724 10/2005

(56)

References Cited

FOREIGN PATENT DOCUMENTS

JP	1281699	8/2006
JP	1349314	12/2008
JP	1380668	1/2010
JP	1392539	9/2011
JP	1425295	9/2011
KR	3004387970000	1/2007
KR	3006265910000	12/2011
KR	3006971120000	5/2013
KR	3007477840000	6/2014
KR	3010105040000	6/2019
KR	3010158140000	7/2019

OTHER PUBLICATIONS

U.S. Appl. No. 29/502,181.
U.S. Appl. No. 29/124,239.
U.S. Appl. No. 29/511,691.
U.S. Appl. No. 29/351,644.

* cited by examiner

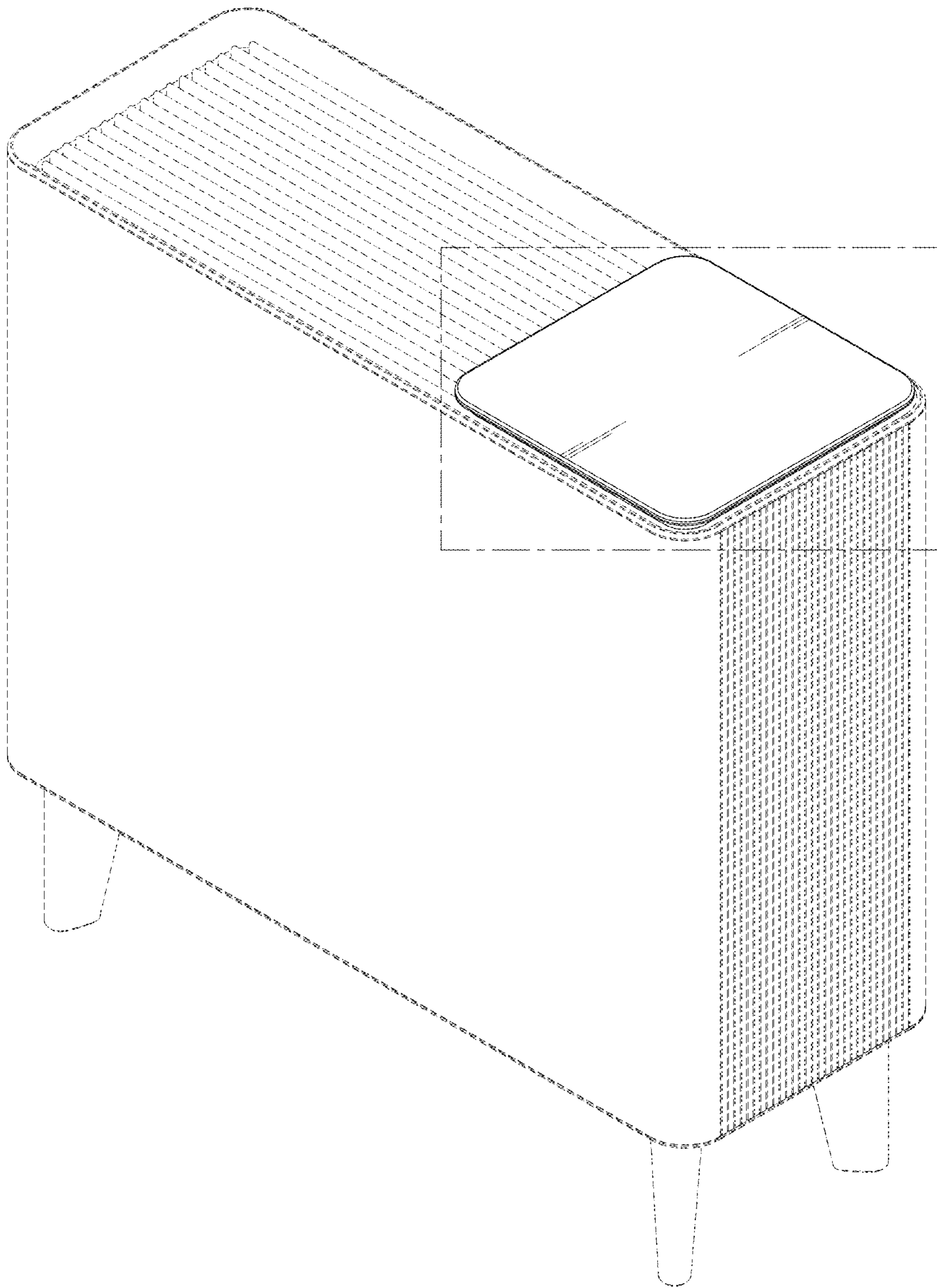


FIG. 1

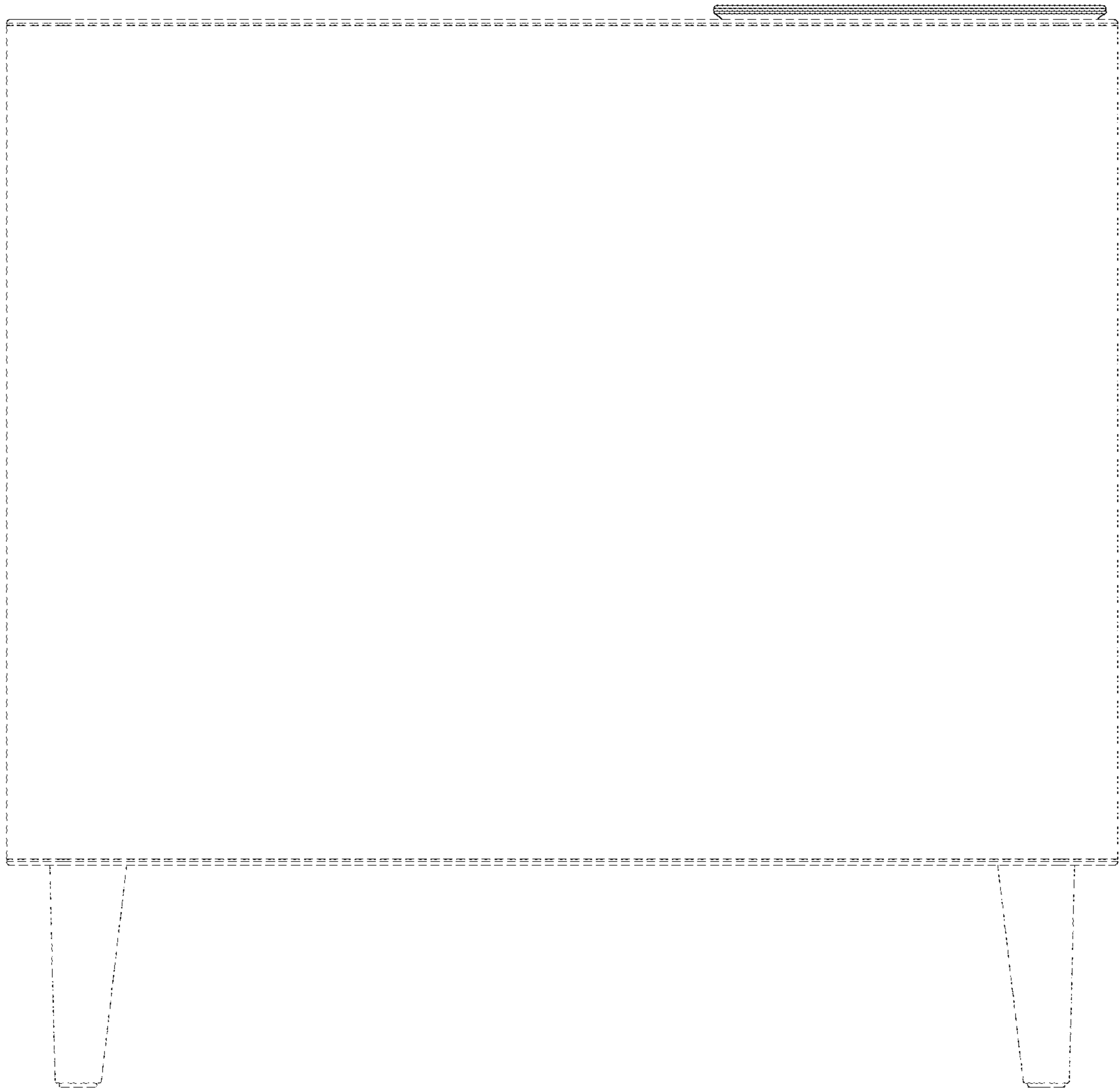


FIG. 2

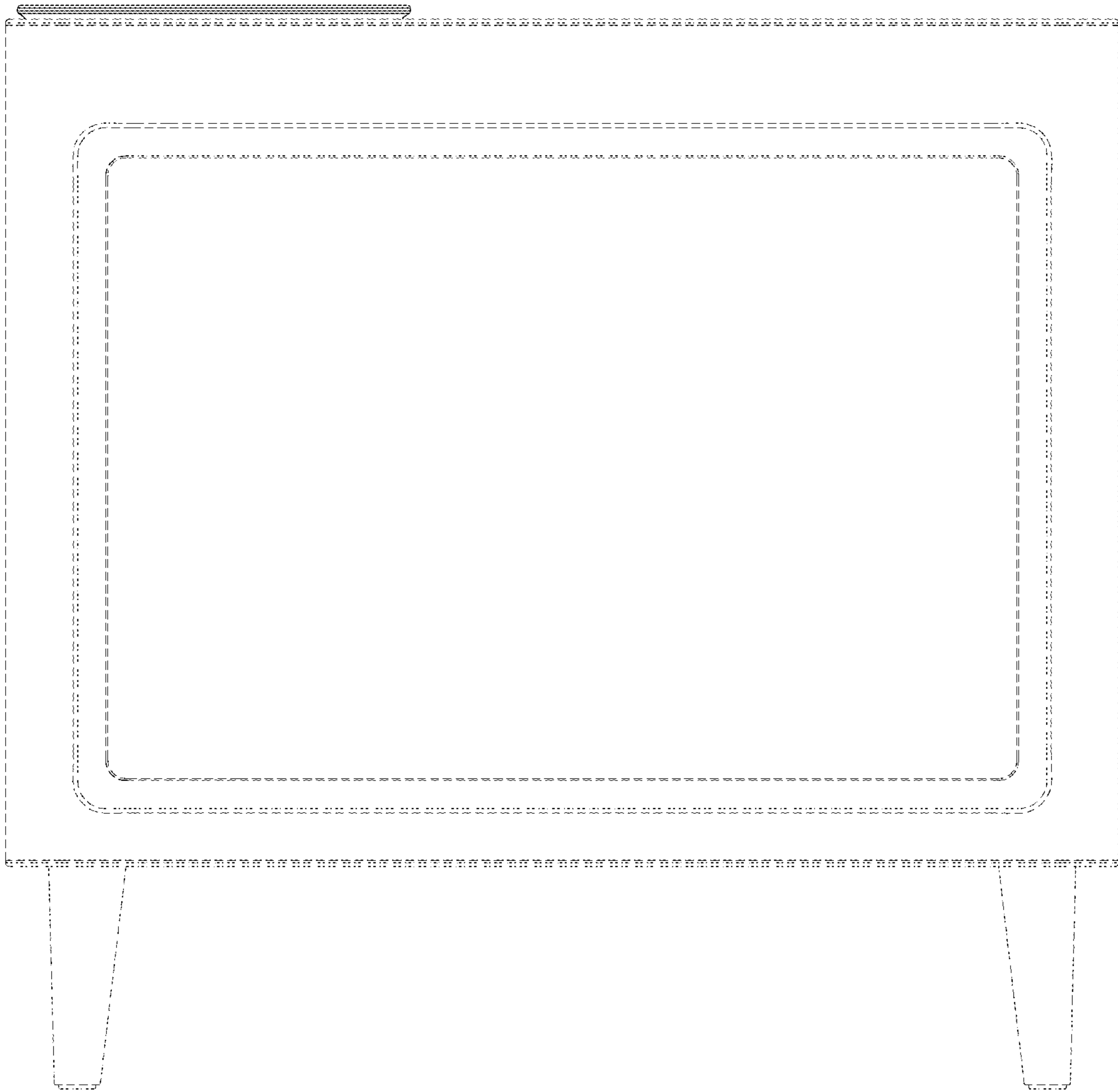


FIG. 3

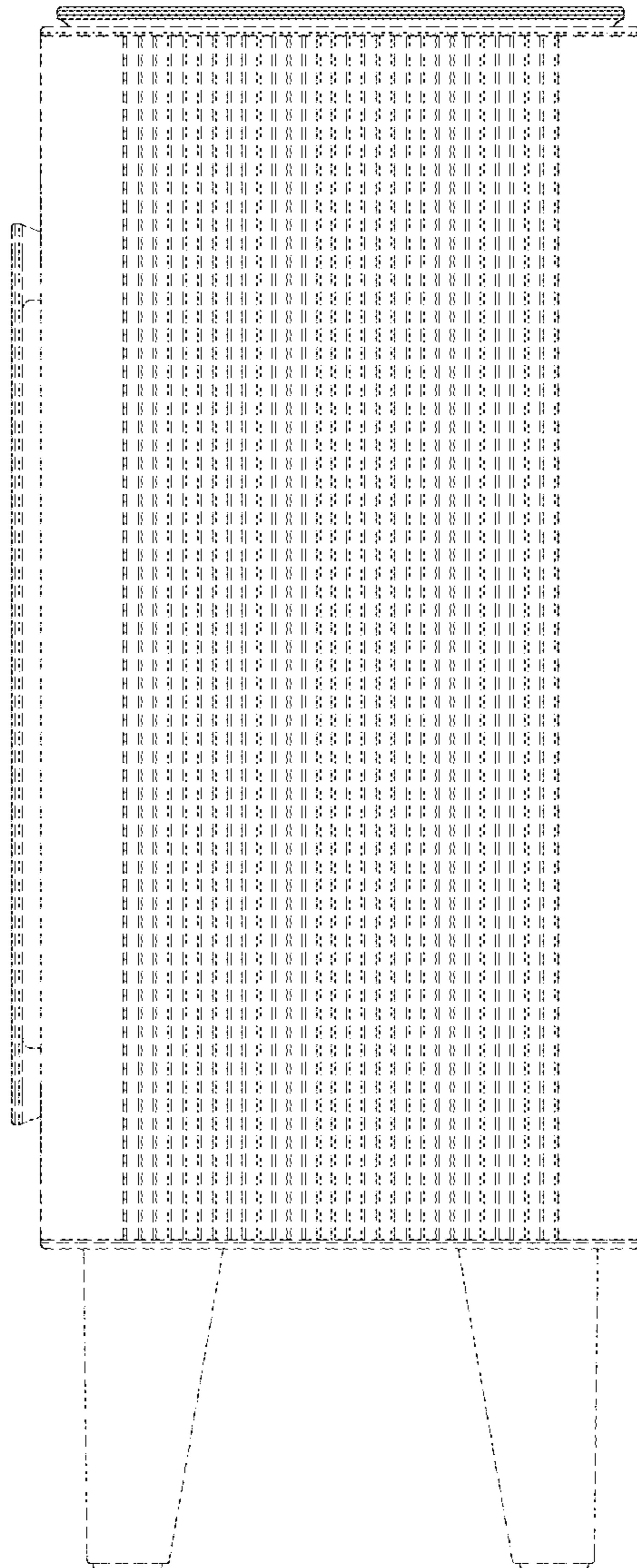


FIG. 4

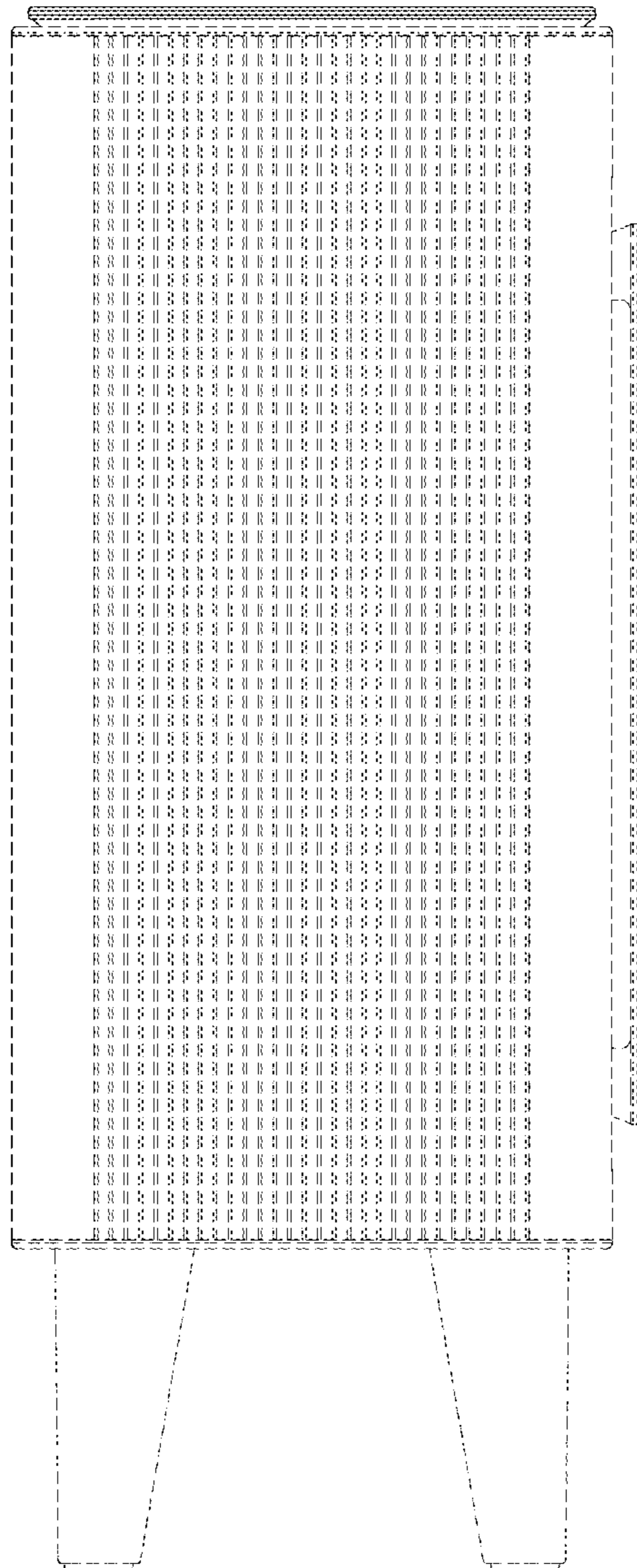


FIG. 5

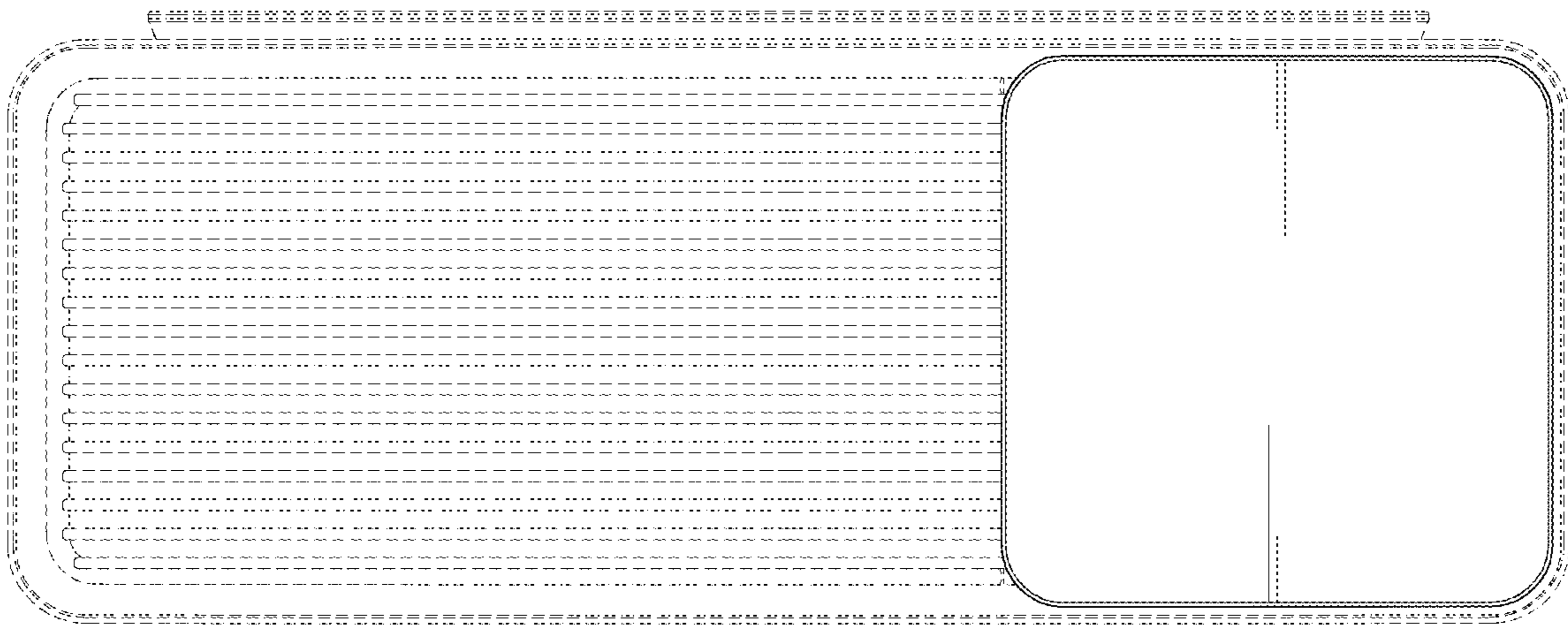


FIG. 6

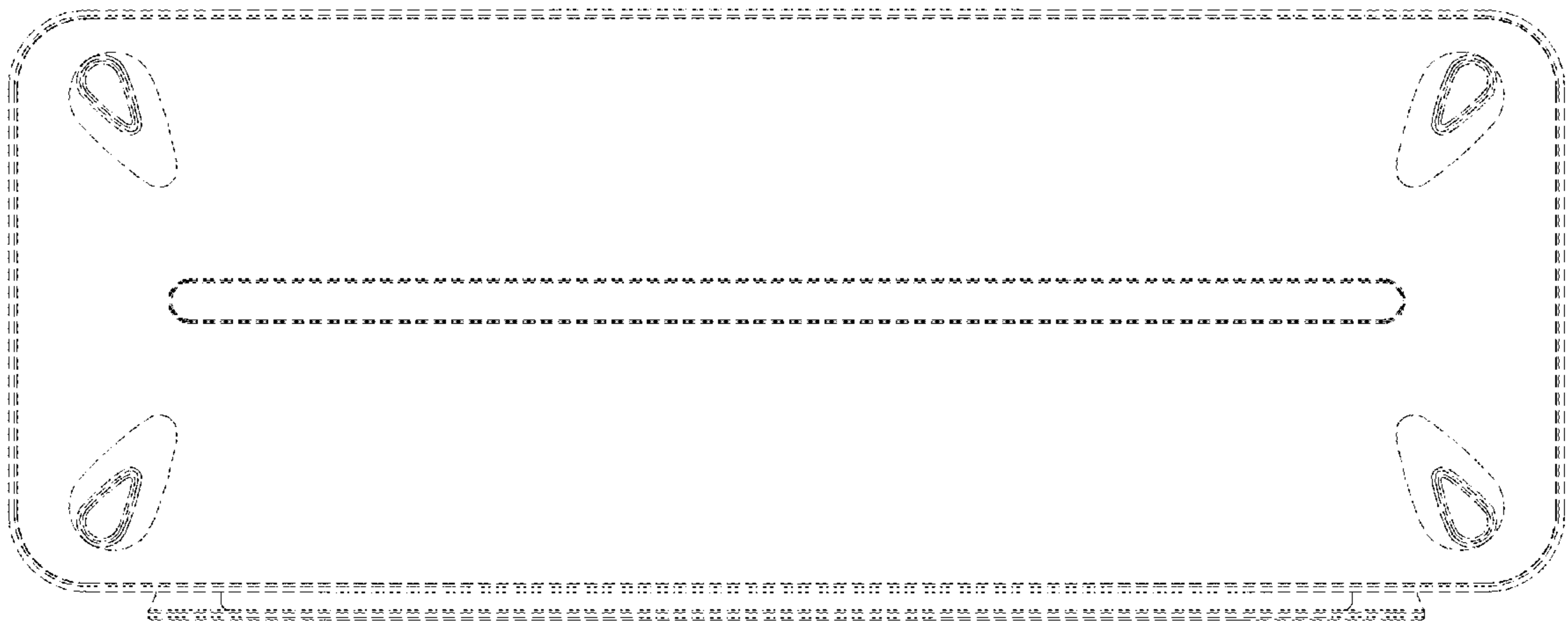


FIG. 7

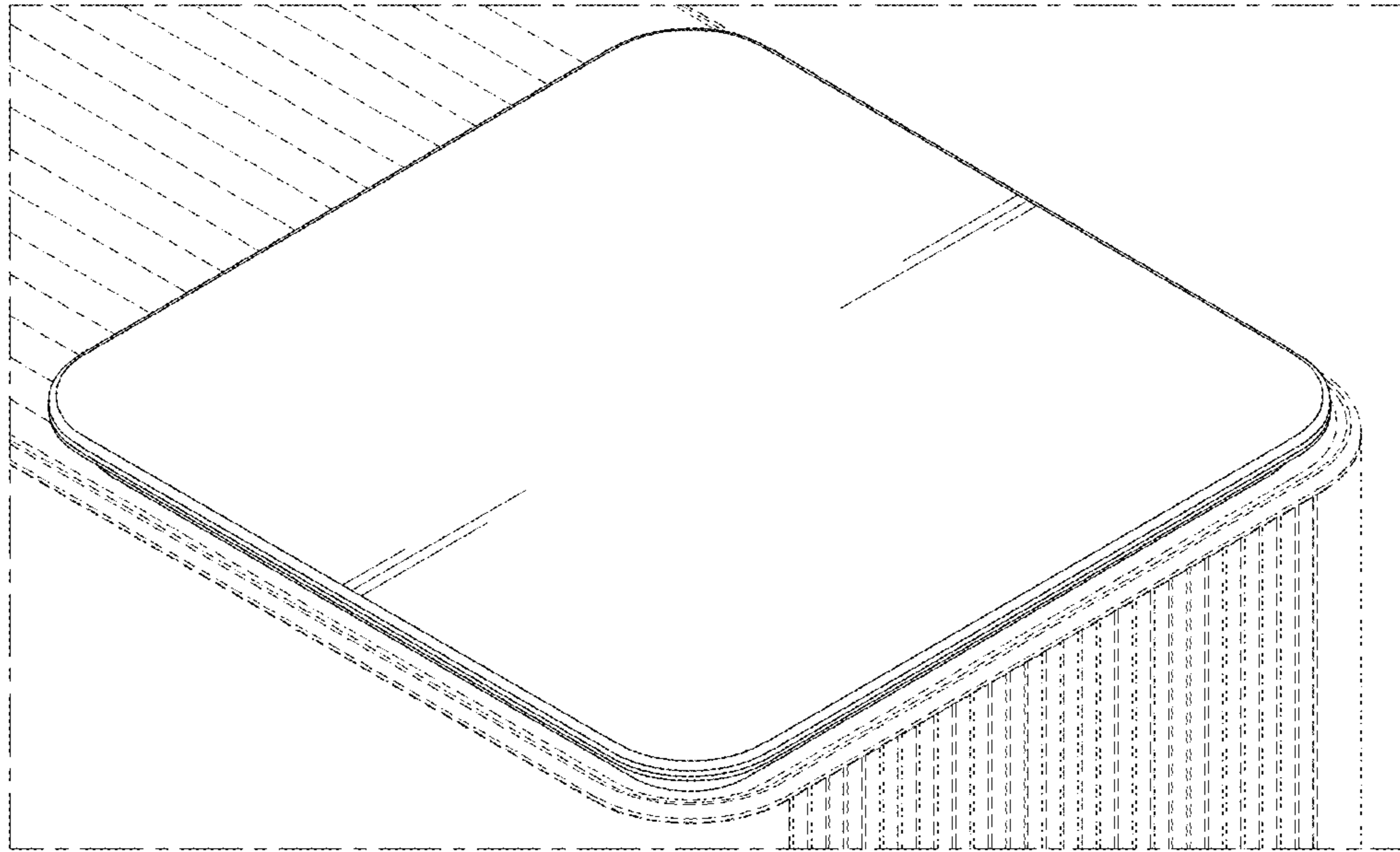


FIG. 8