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(12) **United States Design Patent** (10) **Patent No.:** **US D943,158 S**  
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(54) **VAPORIZER CARTRIDGE**

FOREIGN PATENT DOCUMENTS

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AU 2017202891 B2 5/2019  
CN 1122213 A 5/1996

(Continued)

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OTHER PUBLICATIONS

Breland, Alison, et al. "Electronic cigarettes: what are they and what do they do?." *Annals of the New York Academy of Sciences* 1394.1 (2017): 5-30.

(Continued)

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(57) **CLAIM**

The ornamental design for a vaporizer cartridge, as shown and described.

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

(21) Appl. No.: **29/713,288**

**DESCRIPTION**

(22) Filed: **Nov. 14, 2019**

(51) **LOC (13) Cl.** ..... **27-02**

(52) **U.S. Cl.**  
USPC ..... **D27/162**

(58) **Field of Classification Search**  
USPC ..... D27/162, 100, 101, 163–165, 172, D27/174–176, 183, 185–194; D24/110, D24/110.5

(Continued)

(56) **References Cited**

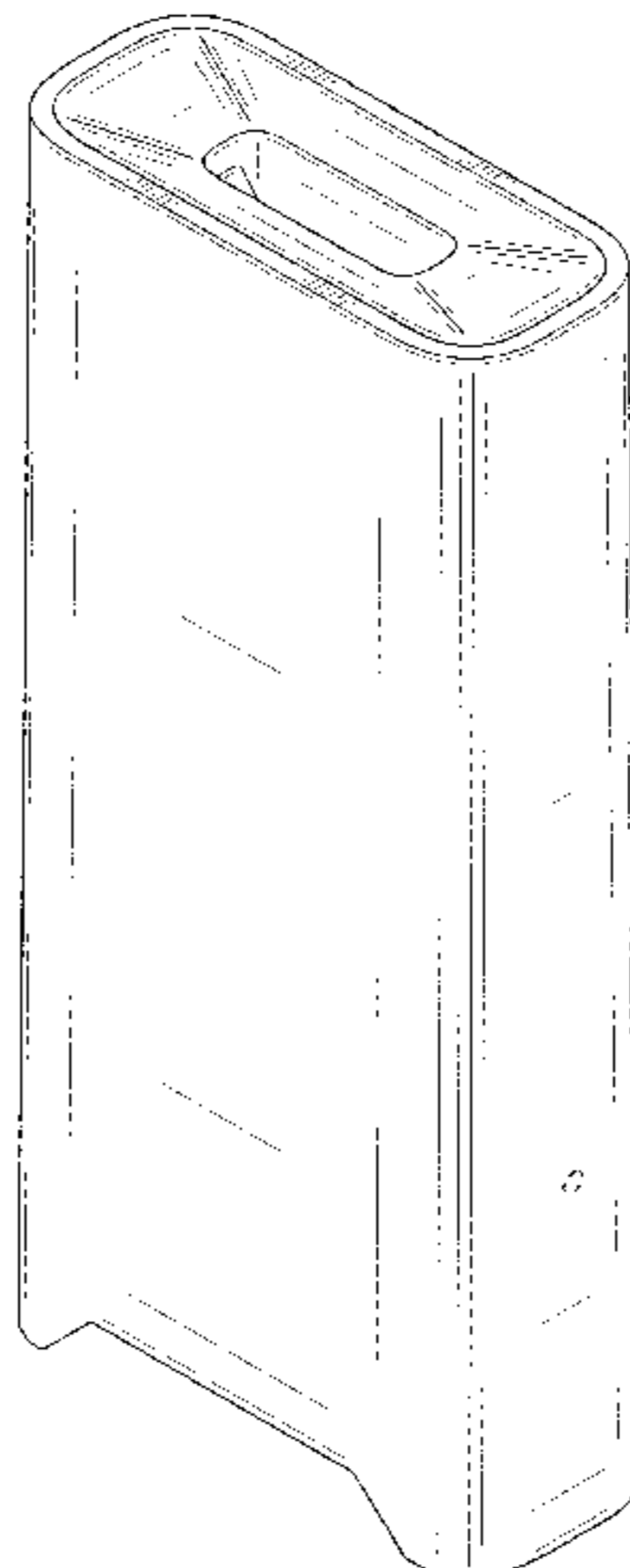
U.S. PATENT DOCUMENTS

595,070 A 12/1897 Oldenbusch  
D143,295 S 12/1945 Fisher

(Continued)

FIG. 1 is a top, front, and right side perspective view of a vaporizer cartridge of our design;  
FIG. 2 is a bottom, rear, and left side perspective view thereof;  
FIG. 3 is a top, front, and right side perspective view thereof;  
FIG. 4 is a bottom, rear, and left side perspective view thereof;  
FIG. 5 is a front view thereof;  
FIG. 6 is a rear view thereof;  
FIG. 7 is a left side view thereof;  
FIG. 8 is a right side view thereof;  
FIG. 9 is a top view thereof; and,  
FIG. 10 is a bottom view thereof.  
The broken lines illustrate portions of the vaporizer cartridge that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



(58) **Field of Classification Search**  
 CPC .... A24F 47/002; A24F 47/006; A24F 47/008;  
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 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,897,958 A 8/1959 Tarleton et al.  
 2,956,569 A 10/1960 Adams  
 3,723,048 A 3/1973 Russell  
 3,918,451 A 11/1975 Steil  
 D260,690 S 9/1981 Stutzer  
 D267,590 S 1/1983 Varma  
 D271,255 S 11/1983 Rousseau  
 D280,494 S 9/1985 Abel  
 D299,066 S 12/1988 Newell et al.  
 4,811,731 A 3/1989 Newell et al.  
 D310,349 S 9/1990 Rowen  
 D336,346 S 6/1993 Miller et al.  
 H1271 H 1/1994 Shouse  
 5,479,948 A 1/1996 Counts et al.  
 D379,810 S 6/1997 Giordano, Jr. et al.  
 5,746,587 A 5/1998 Racine et al.  
 D397,504 S 8/1998 Zelenik  
 D405,007 S 2/1999 Naas, Sr.  
 D422,884 S 4/2000 Lafond  
 D450,313 S 11/2001 Koinuma  
 D450,662 S 11/2001 Kwok  
 D478,569 S 8/2003 Hussaini et al.  
 D478,897 S 8/2003 Tsuge  
 6,743,030 B2 6/2004 Lin et al.  
 D500,301 S 12/2004 Deguchi  
 D500,302 S 12/2004 Deguchi  
 D505,922 S 6/2005 Mayo et al.  
 D506,447 S 6/2005 Mayo et al.  
 D506,731 S 6/2005 Mayo et al.  
 D507,244 S 7/2005 Mayo et al.  
 D514,741 S 2/2006 Cohen  
 7,000,775 B2 2/2006 Gelardi et al.  
 D523,171 S 6/2006 Mitten et al.  
 D525,948 S 8/2006 Blair et al.  
 D528,992 S 9/2006 Hobart et al.  
 D529,044 S 9/2006 Andre et al.  
 D530,340 S 10/2006 Andre et al.  
 D531,190 S 10/2006 Lee et al.  
 D532,927 S 11/2006 Sann  
 D534,921 S 1/2007 Andre et al.  
 D535,261 S 1/2007 Daniels  
 D535,308 S 1/2007 Andre et al.  
 D539,813 S 4/2007 Chen  
 D540,749 S 4/2007 Kaule  
 7,214,075 B2 5/2007 He et al.  
 D545,303 S 6/2007 Chang  
 D545,490 S 6/2007 Tai  
 D545,904 S 7/2007 Chen et al.  
 D546,782 S 7/2007 Poulet et al.  
 7,275,941 B1 10/2007 Bushby  
 D556,154 S 11/2007 Poulet et al.  
 D558,060 S 12/2007 Sir et al.  
 7,318,435 B2 1/2008 Pentafragas  
 D566,709 S 4/2008 Kim et al.  
 D568,298 S 5/2008 Lundgren et al.  
 D571,556 S 6/2008 Raile  
 D573,464 S 7/2008 Kogure et al.  
 D576,619 S 9/2008 Udagawa et al.  
 D577,019 S 9/2008 Udagawa et al.  
 D585,077 S 1/2009 Sheba et al.  
 D589,941 S 4/2009 Maier et al.  
 D591,758 S 5/2009 Lee  
 7,644,823 B2 1/2010 Gelardi et al.  
 D610,588 S 2/2010 Chen  
 D616,753 S 6/2010 Beam et al.  
 D624,880 S 10/2010 Felegy, Jr. et al.  
 D627,962 S 11/2010 Mudrick  
 D631,055 S 1/2011 Gilbert et al.  
 D631,458 S 1/2011 Liao et al.

D634,735 S 3/2011 Maier  
 D639,303 S 6/2011 Ni et al.  
 D639,782 S 6/2011 Kim  
 D641,718 S 7/2011 Sakai  
 D645,817 S 9/2011 Sasada et al.  
 D647,101 S 10/2011 Huang  
 D654,160 S \* 2/2012 Yomtov ..... D23/360  
 D656,496 S 3/2012 Andre et al.  
 D664,636 S 7/2012 Robinson et al.  
 D669,530 S 10/2012 Hung  
 D670,659 S 11/2012 Ishikawa et al.  
 D675,777 S 2/2013 Wu  
 D676,741 S 2/2013 van Landsveld et al.  
 8,371,709 B2 2/2013 Cheng  
 D681,445 S 5/2013 van Landsveld et al.  
 D682,841 S 5/2013 Suetake et al.  
 D686,987 S 7/2013 Vanstone et al.  
 D687,042 S 7/2013 Yoneta et al.  
 D688,415 S 8/2013 Kim  
 8,522,776 B2 9/2013 Wright et al.  
 D703,679 S 4/2014 Chen  
 D703,680 S 4/2014 Lin  
 8,695,794 B2 4/2014 Scatterday  
 8,707,965 B2 4/2014 Newton  
 D704,629 S 5/2014 Liu  
 D707,688 S 6/2014 Wu  
 D708,727 S \* 7/2014 Postma ..... D23/360  
 D711,389 S 8/2014 Sun et al.  
 D711,891 S 8/2014 Emami et al.  
 8,794,231 B2 8/2014 Thorens et al.  
 D718,492 S 11/2014 Albanese  
 D718,723 S 12/2014 Clymer et al.  
 D718,933 S 12/2014 Brown, Jr.  
 D721,202 S 1/2015 Liu  
 8,955,522 B1 2/2015 Bowen et al.  
 D723,735 S 3/2015 Liu  
 D723,736 S 3/2015 Liu  
 D723,737 S 3/2015 Liu  
 D724,037 S 3/2015 Yoshioka  
 D724,782 S 3/2015 Wu  
 D726,727 S 4/2015 Holz et al.  
 D729,277 S 5/2015 Uchida  
 D729,441 S 5/2015 Hua  
 D737,508 S 8/2015 Liu  
 D738,038 S 9/2015 Smith  
 D739,973 S 9/2015 Chao  
 D742,063 S 10/2015 Recio  
 9,167,849 B2 10/2015 Adamic  
 D745,004 S 12/2015 Kim  
 D745,388 S 12/2015 Taylor  
 D748,325 S \* 1/2016 Leidel ..... D27/163  
 D749,261 S 2/2016 Chen  
 D749,510 S 2/2016 Liu  
 D750,320 S 2/2016 Verleur et al.  
 D751,756 S \* 3/2016 Hearn ..... D27/189  
 D752,278 S 3/2016 Verleur et al.  
 D752,280 S 3/2016 Verleur et al.  
 D752,282 S 3/2016 Doster  
 D752,284 S 3/2016 Doster  
 D753,090 S 4/2016 Langhammer et al.  
 D755,733 S 5/2016 Ikegaya et al.  
 D755,735 S 5/2016 Kashimoto  
 D756,032 S 5/2016 Chen  
 D757,690 S 5/2016 Lee et al.  
 D758,650 S 6/2016 Wu  
 D759,031 S 6/2016 Ozolins et al.  
 D760,431 S 6/2016 Liu  
 D762,001 S 7/2016 Liu  
 D763,203 S 8/2016 Ikegaya et al.  
 D763,204 S 8/2016 Ikegaya et al.  
 D764,703 S 8/2016 Liu  
 D766,873 S 9/2016 Washio  
 D768,920 S 10/2016 Jones et al.  
 D769,520 S \* 10/2016 Hua ..... D27/167  
 D769,830 S 10/2016 Clymer et al.  
 D770,395 S 11/2016 Clymer et al.  
 D772,478 S 11/2016 Liu  
 D773,114 S 11/2016 Leidel et al.  
 D773,391 S 12/2016 Haarbuerger et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

D773,727 S	12/2016	Eksouzian		2006/0196518 A1	9/2006	Hon
D774,247 S	12/2016	Chen		2007/0089757 A1	4/2007	Bryman
D774,514 S	12/2016	Turksu et al.		2007/0229025 A1	10/2007	Tsai et al.
D774,693 S	12/2016	Liu		2008/0023003 A1	1/2008	Rosenthal
D775,413 S	12/2016	Liu		2009/0151717 A1	6/2009	Bowen et al.
D776,051 S *	1/2017	Wang .....	D13/103	2009/0260641 A1	10/2009	Monsees et al.
D776,338 S	1/2017	Lomeli		2009/0260642 A1	10/2009	Monsees et al.
9,549,573 B2	1/2017	Monsees et al.		2009/0272379 A1	11/2009	Thorens et al.
D778,492 S	2/2017	Liu		2010/0307116 A1	12/2010	Fisher
D779,677 S	2/2017	Chen		2010/0313901 A1	12/2010	Fernando et al.
D779,719 S	2/2017	Qiu		2011/0125146 A1	5/2011	Greeley et al.
D780,179 S	2/2017	Bae et al.		2011/0265806 A1	11/2011	Alarcon et al.
9,596,887 B2	3/2017	Newton		2012/0018529 A1	1/2012	Gammon et al.
9,603,390 B2	3/2017	Li et al.		2012/0325227 A1	12/2012	Robinson et al.
D784,609 S	4/2017	Liu		2013/0042865 A1	2/2013	Monsees et al.
D792,021 S	7/2017	Beer et al.		2013/0220847 A1	8/2013	Fisher et al.
D793,004 S	7/2017	Liu		2013/0228191 A1	9/2013	Newton
D793,620 S	8/2017	Bennett et al.		2013/0312742 A1	11/2013	Monsees et al.
9,723,877 B2	8/2017	Wong et al.		2014/0021190 A1	1/2014	Sardar
D799,746 S	10/2017	Leidel et al.		2015/0034104 A1	2/2015	Zhou
D802,206 S	11/2017	Huang et al.		2015/0034507 A1	2/2015	Liu
D806,311 S	12/2017	Smith		2015/0053217 A1	2/2015	Steingraber et al.
D811,003 S	2/2018	Folyan		2015/0102777 A1	4/2015	Cooper
D815,346 S	4/2018	Bagai		2015/0114410 A1	4/2015	Doster
9,956,357 B2	5/2018	Chen		2015/0122252 A1	5/2015	Frija
D819,881 S	6/2018	Qiu		2015/0128967 A1	5/2015	Robinson et al.
D822,896 S	7/2018	Durand		2015/0128971 A1	5/2015	Verleur et al.
D825,102 S	8/2018	Bowen et al.		2015/0128972 A1	5/2015	Verleur et al.
10,045,568 B2	8/2018	Monsees et al.		2015/0128976 A1	5/2015	Verleur et al.
10,058,124 B2	8/2018	Monsees et al.		2015/0157056 A1	6/2015	Bowen et al.
10,058,129 B2	8/2018	Monsees et al.		2015/0189919 A1	7/2015	Liu
D829,371 S	9/2018	Durand		2015/0208729 A1	7/2015	Monsees et al.
D829,980 S	10/2018	Qiu		2015/0245654 A1	9/2015	Memari et al.
D832,499 S	10/2018	Qiu		2015/0282530 A1	10/2015	Johnson et al.
D832,500 S	10/2018	Qiu		2015/0305409 A1	10/2015	Verleur et al.
D834,702 S	11/2018	Evans et al.		2015/0313287 A1	11/2015	Verleur et al.
D836,190 S	12/2018	Evans et al.		2015/0327596 A1	11/2015	Alarcon et al.
D836,831 S	12/2018	Cividi		2015/0328415 A1	11/2015	Minskoff et al.
D836,834 S	12/2018	Cividi		2015/0374039 A1	12/2015	Zhu
D837,446 S	1/2019	Durand		2016/0007654 A1	1/2016	Zhu
D842,237 S	3/2019	Qiu et al.		2016/0095355 A1	4/2016	Hearn
D842,536 S	3/2019	Bowen et al.		2016/0095356 A1	4/2016	Chan
D843,644 S	3/2019	Qiu		2016/0113323 A1	4/2016	Liu
D844,235 S	3/2019	Cividi		2016/0121058 A1	5/2016	Chen
D845,964 S	4/2019	Kim et al.		2016/0134143 A1	5/2016	Liu
D853,022 S *	7/2019	Srouf .....	D27/183	2016/0143358 A1	5/2016	Zhu
D855,251 S	7/2019	Qiu et al.		2016/0150824 A1	6/2016	Memari et al.
D858,868 S	9/2019	Bowen et al.		2016/0166564 A1	6/2016	Myers et al.
D858,869 S	9/2019	Bowen et al.		2016/0167846 A1	6/2016	Zahr et al.
D858,870 S	9/2019	Bowen et al.		2016/0174611 A1	6/2016	Monsees et al.
D859,735 S	9/2019	Qiu et al.		2016/0192707 A1	7/2016	Li et al.
D860,519 S	9/2019	Cividi		2016/0227841 A1	8/2016	Li et al.
D860,520 S	9/2019	Cividi		2016/0270446 A1	9/2016	Shenkal et al.
D861,975 S	10/2019	Bowen et al.		2016/0278436 A1	9/2016	Verleur et al.
D865,276 S	10/2019	Pino et al.		2016/0295913 A1	10/2016	Guo et al.
D866,852 S	11/2019	Cividi		2016/0324211 A1	11/2016	Yankelevich
D870,034 S *	12/2019	Lai .....	D13/103	2016/0331912 A1	11/2016	Trzeciecki
D877,971 S	3/2020	Bowen et al.		2016/0345626 A1	12/2016	Wong et al.
D878,672 S *	3/2020	Beer .....	D27/162	2016/0353805 A1	12/2016	Hawes et al.
D881,459 S *	4/2020	Ouyang .....	D27/162	2016/0360789 A1	12/2016	Hawes et al.
D885,332 S *	5/2020	Han .....	D13/108	2016/0366943 A1	12/2016	Li et al.
D889,740 S *	7/2020	Beer .....	D27/194	2016/0366947 A1	12/2016	Monsees et al.
D894,479 S	8/2020	Cheung et al.		2016/0374399 A1	12/2016	Monsees et al.
D895,197 S	9/2020	Cheung et al.		2017/0000190 A1	1/2017	Wu
D898,278 S *	10/2020	Carlberg .....	D27/162	2017/0013875 A1	1/2017	Schennum et al.
D903,192 S *	11/2020	Chang .....	D27/162	2017/0035115 A1	2/2017	Monsees et al.
D904,301 S *	12/2020	Smalley .....	D13/110	2017/0042246 A1	2/2017	Lau et al.
2001/0032643 A1	10/2001	Hochrainer et al.		2017/0049153 A1	2/2017	Guo et al.
2002/0043262 A1	4/2002	Langford et al.		2017/0065001 A1	3/2017	Li et al.
2004/0200488 A1	10/2004	Felter et al.		2017/0071256 A1	3/2017	Verleur et al.
2005/0016533 A1	1/2005	Schuler et al.		2017/0095005 A1	4/2017	Monsees et al.
2005/0029137 A1	2/2005	Wang		2017/0119044 A1	5/2017	Oligschlaeger et al.
2005/0118545 A1	6/2005	Wong		2017/0119060 A1	5/2017	Li et al.
2005/0252511 A1	11/2005	Pentafragas		2017/0150754 A1	6/2017	Lin
2005/0268911 A1	12/2005	Cross et al.		2017/0181471 A1	6/2017	Phillips et al.
				2017/0196264 A1	7/2017	Liu
				2017/0197046 A1	7/2017	Buchberger
				2017/0202265 A1	7/2017	Hawes et al.
				2017/0208863 A1	7/2017	Davis et al.

(56)

## References Cited

## U.S. PATENT DOCUMENTS

2017/0215478 A1 8/2017 Harrison et al.  
 2017/0231280 A1 8/2017 Anton  
 2017/0231281 A1 8/2017 Hatton et al.  
 2017/0231282 A1 8/2017 Bowen et al.  
 2017/0233114 A1 8/2017 Christensen et al.  
 2017/0258142 A1 9/2017 Hatton et al.  
 2017/0259170 A1 9/2017 Bowen et al.  
 2017/0302324 A1 10/2017 Stanimirovic et al.  
 2017/0360092 A1 12/2017 Althorpe et al.  
 2018/0070649 A1 3/2018 Monsees et al.  
 2018/0103686 A1 4/2018 Monsees et al.  
 2018/0140005 A1 5/2018 Lin et al.  
 2018/0140015 A1 5/2018 Carroll et al.  
 2018/0177234 A1 6/2018 Lee

## FOREIGN PATENT DOCUMENTS

CN 101869356 A 10/2010  
 CN 301485739 3/2011  
 CN 301547686 5/2011  
 CN 301753038 12/2011  
 CN 301797114 1/2012  
 CN 301955679 6/2012  
 CN 301970169 6/2012  
 CN 202890462 U 4/2013  
 CN 302396126 4/2013  
 CN 103141944 A 6/2013  
 CN 302485056 6/2013  
 CN 203087525 U 7/2013  
 CN 302799554 4/2014  
 CN 302810246 4/2014  
 CN 302859209 6/2014  
 CN 302884434 8/2014  
 CN 302926289 8/2014  
 CN 302950830 9/2014  
 CN 303044212 12/2014  
 CN 303091330 1/2015  
 CN 303091331 1/2015  
 CN 303103390 2/2015  
 CN 303103391 2/2015  
 CN 303210086 5/2015  
 CN 204466899 U 7/2015  
 CN 303332720 8/2015  
 CN 104983076 A 10/2015  
 CN 303103389 11/2015  
 CN 303457556 11/2015  
 CN 303568163 1/2016  
 CN 303574274 1/2016  
 CN 303686002 5/2016  
 CN 303721535 6/2016  
 CN 205390306 U 7/2016  
 CN 304067430 3/2017  
 CN 305335803 9/2019  
 EM 002626416-001 4/2015  
 EM 002626416-002 4/2015  
 EP 3015010 A1 5/2016  
 EP 3031339 A1 6/2016  
 EP 3103356 A1 12/2016  
 EP 3111787 A1 1/2017  
 EP 3143882 A2 3/2017  
 EP 3158881 A1 4/2017  
 JP D1144098 6/2002  
 JP D1599406 3/2018  
 JP D1613382 9/2018  
 KR 30-0825216 11/2015  
 KR 3009753750000 10/2018  
 TW 201805033 A 2/2018  
 TW 201815301 A 5/2018  
 WO WO-D079112-0010 12/2012  
 WO WO-2013044537 A1 4/2013  
 WO WO-2013068100 A1 5/2013  
 WO WO-2013113612 A1 8/2013  
 WO WO-2014040915 A1 3/2014  
 WO WO-2015073564 A1 5/2015  
 WO WO-2015157900 A1 10/2015

WO WO-2015190810 A1 12/2015  
 WO WO-2016023173 A1 2/2016  
 WO WO-2016123779 A1 8/2016  
 WO WO-2016127839 A1 8/2016  
 WO WO-2016177604 A1 11/2016  
 WO WO-2016201606 A1 12/2016  
 WO WO-2017007252 A1 1/2017  
 WO WO-2017045132 A1 3/2017  
 WO WO-2017046247 A1 3/2017  
 WO WO-2017093452 A1 6/2017  
 WO WO-2017102633 A1 6/2017  
 WO WO-2017121156 A1 7/2017  
 WO WO-2017143865 A1 8/2017  
 WO WO-2017173951 A1 10/2017

## OTHER PUBLICATIONS

Cedar Board by the home depot. earliest review dated Sep. 7, 2016. found online [Mar. 19, 2019] <https://www.homedepot.com/p/1-in-x-4-in-x-8-ft-S1S2E-Cedar-Board-6-Pack-WRC148T6PK/300194383>.

Cloud pen vaporizer unboxing review by vaporizer blog // VaporizerBlog.com, <https://www.youtube.com/watch?v=ixHMkXoWKNg>, published on Dec. 12, 2013 (4 pages).

Electronic Vaporization Device with Cartridge 1JUUL Pod 1JUUL Vapor, Posted Jun. 3, 2015, Juulvapor.com <<http://Juulvapor.com>>, retrieved Nov. 24, 2015, <<https://www.juulvapor.shupjuul/>>

Electronic Vaporization Device/ Gizmodo Pax 2 Vaporizer/ Gizmodo; retrieved from <http://gizmodo.com/pax-2-vaporizer-reviews-its-like-smoking-in-the-future-1718310779>; posted Jul. 23, 2015, retrieved Oct. 17, 2016.

FC Vaporizer Review Forum; Pax Vaporizer by Ploom; retrieved from : <http://fuckcombtion.com/threads/pax-vaporizer-by-ploom.6223/>; pp. 2 & 11 (2 pp.); retrieval date: Nov. 16, 2015.

German Straight Razor box by rainbobeBayauctions on ebay. dated May 11, 2012. found online [Mar. 22, 2019] <https://www.bing.com/videos/search?q=straight+razor+cardboard+box&&view=detail&nnid=4EFBC9664DDFEA73A2974EFBC9664DDFEA73A297&&FORM=VRDGAR>.

iWand Rectangular Pen Shape Design Flat Short Mouth Holder 1.0ML Tank Atomizer LED Display 800mAh Rechargeable E—Cigarette Set—Colorful, tDIIUYIY,f,1,111111LcZnIII.tlf2ILgLiLrtllll12,111, accessed Jan. 25, 2019. (3 pages).

Joye eGo-Tank System XXL 1000mAh Starter Kit, htos://www\_rnyva Do mt.° re co rnieGo-Ta ri k-Syst(.

Making a box for my Straight Razor by Mr. Mars Experience. dated Jan 22, 2014. found online [Mar. 19, 2019] <https://www.youtube.com/watch?v=Z7iAx2QoKDO>.

Model lo iWand, httqfLily.LyagL.IDA2,lt.:22.,ajar.c.Z.21,2aLf25.:Q., published Dec. 28, 2012, (4 pages).

PAX Labs, Inc.; JUUL product information 2016; retrieved from <<https://www.juulvapor.com/shop-juul/>>;6 pgs.; retrieved Mar. 9, 2016.

Pentel Multi Color Led Refill by Pentel on Amazon. earliest review dated Nov. 7, 2014. found online [Mar. 22, 2019] [www.amazon.com/Pentel-Multi-Refill-Violet-CH2-V/product-reviews/BOOKQTBPCW/ref=cnn\\_cr\\_dp\\_d\\_show\\_all\\_btnn?ie=UTF8&reviewerType=all\\_reviews](https://www.amazon.com/Pentel-Multi-Refill-Violet-CH2-V/product-reviews/BOOKQTBPCW/ref=cnn_cr_dp_d_show_all_btnn?ie=UTF8&reviewerType=all_reviews).

Pierce, D. This Might It Be the First Great E-Cig. {online} Wired, Published on Apr. 21, 2015. Available at: [https://www.wired.com/2015/04/pax-juul-ecig/?mbid=social\\_twitter](https://www.wired.com/2015/04/pax-juul-ecig/?mbid=social_twitter).

Shapiro, "Following the Vapor Trail," <https://www.nytimes.com/2013/12/19/fashion/for-vaporizers-new-technology-and-product-design.html>, Dec. 18, 2013 (3 pages).

Super Strong Rare Earth Neodymium Magnet by besttoo12019. sale date Nov. 15, 2018. found online [Mar. 19, 2019] <https://www.ebay.com/itm/1-100pcs-Super-Strong-Cylinder-Round-Disc-Rare-Earth-Neodynniunn-Magnet-Recovery-/192735524770?oid=<https://www.ebay.com/itm/1-100pcs-Super-Strong-Cylinder-Round-Disc-Rare-Earth-Neodynniunn-Magnet-Recovery-/192735524770?oid=>282266850205>.

(56)

**References Cited**

## OTHER PUBLICATIONS

Tarantola, Andrew. "The Pax 2 vaporizer makes its predecessor look half-Baked." Engadget, Jul. 14, 2016, [www.engadget.com/2015/04/20/pax-2-vaporizer-review/](http://www.engadget.com/2015/04/20/pax-2-vaporizer-review/). Accessed Sep. 5, 2017.

The Verge. Startup behind the Lambo of vaporizers jt launched an intelligent e-cigarette. [online], published on Apr. 21, 2015. Available at: <https://www.theverge.com/2015/4/21/8458629/pax-labs-e-cigarette-j> <<https://www.theverge.com/2015/4/21/8458629/pax-labs-e-cigarette-j>> u u l.

VapeWorld; Original PAX Vaporizers for Portable and Home e; retrieved from: <<https://www.vapeworld.com/pax-vaporizer-by-ploom?gclid=CPCi1PKojskCFUO6gQodPr;>> 9 pgs.; retrieved Nov. 13, 2015.

Walnut and cocobolo razor coffin pics by scrapcan. dated Aug. 9, 2010. found online [Mar. 20, 2019] <https://sharprazorpalace.com/show-tell/57238-walnut-cocobolo-razor-coffin-pics.html>.

WSP Traditional Straight Razor Coffin by WSP. earliest review dated Jul. 7, 2015. found online [Mar. 18, 2019] [https://www.annazon.conn/VVSP-Traditional-Straight-Razor-Coffin/dp/BOOFL2R4BA/ref=sr](https://www.annazon.conn/VVSP-Traditional-Straight-Razor-Coffin/dp/BOOFL2R4BA/ref=sr?https://www.annazon.conn/VVSP-Traditional-Straight-Razor-Coffin/dp/BOOFL2R4BA/ref=sr)<<https://www.annazon.conn/VVSP-Traditional-Straight-Razor-Coffin/dp/BOOFL2R4BA/ref=sr>> 1 53?keywords=traditional+straight+razor+case&qid=1552936047&s=gateway&sr=8-53.

Youtube; Pax by Ploom Vaporizer Review; posted Aug. 14, 2013, retrieved Sep. 8, 2016, <https://www.youtube.com/watch?v=Jm06zW3-cxQ>.

\* cited by examiner

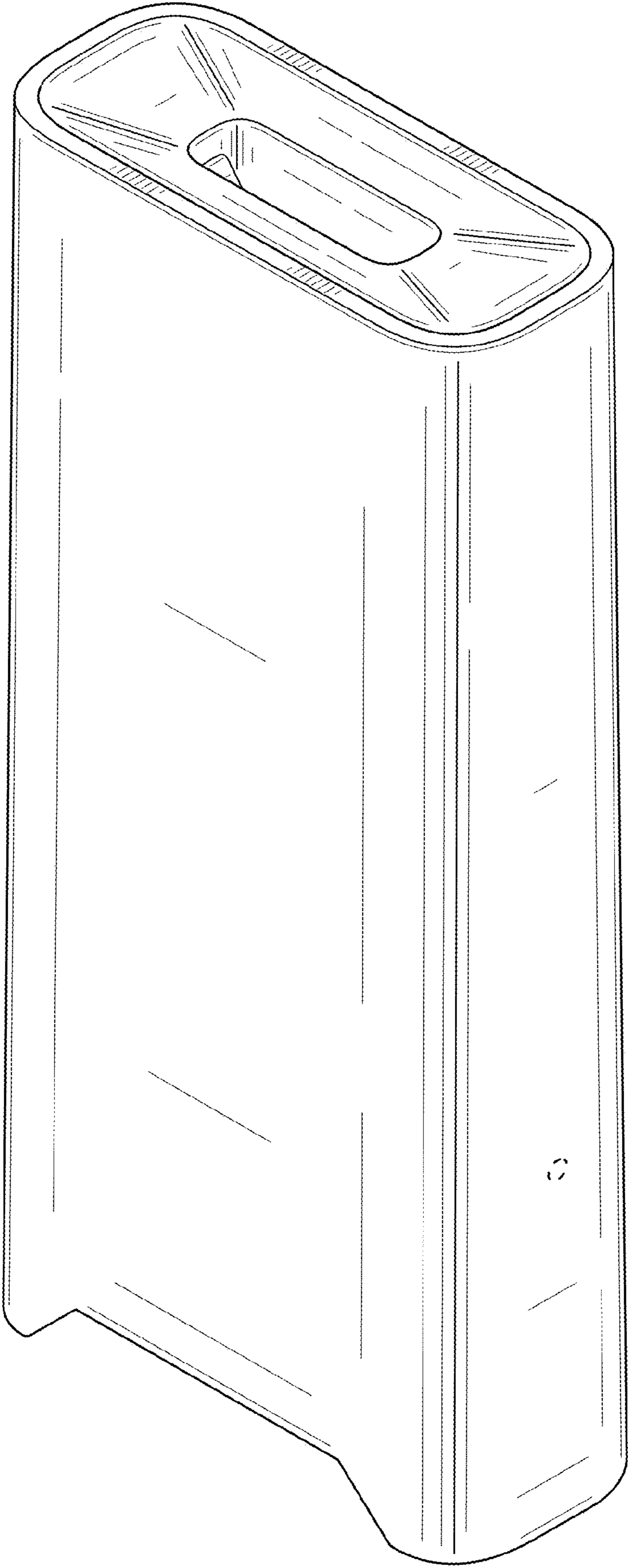


FIG. 1

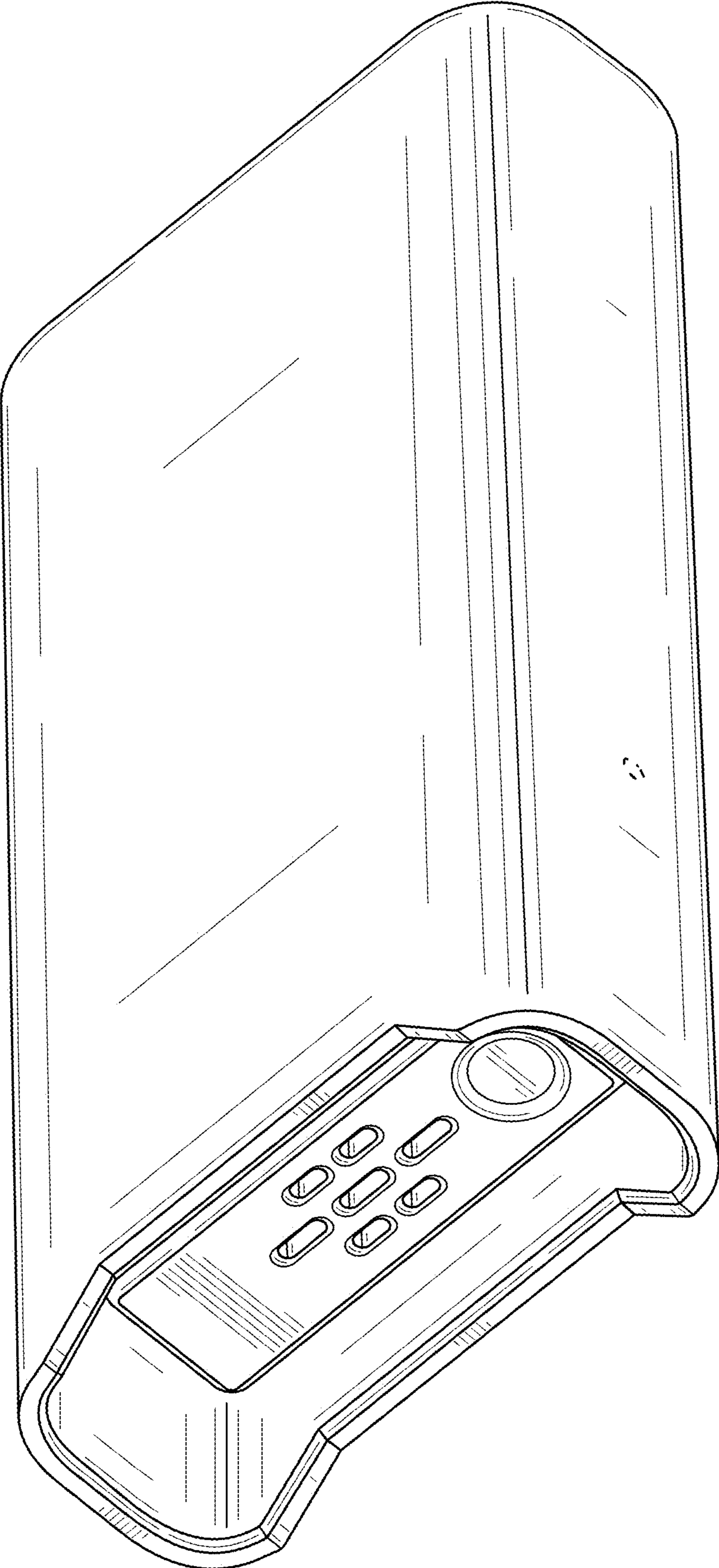


FIG. 2

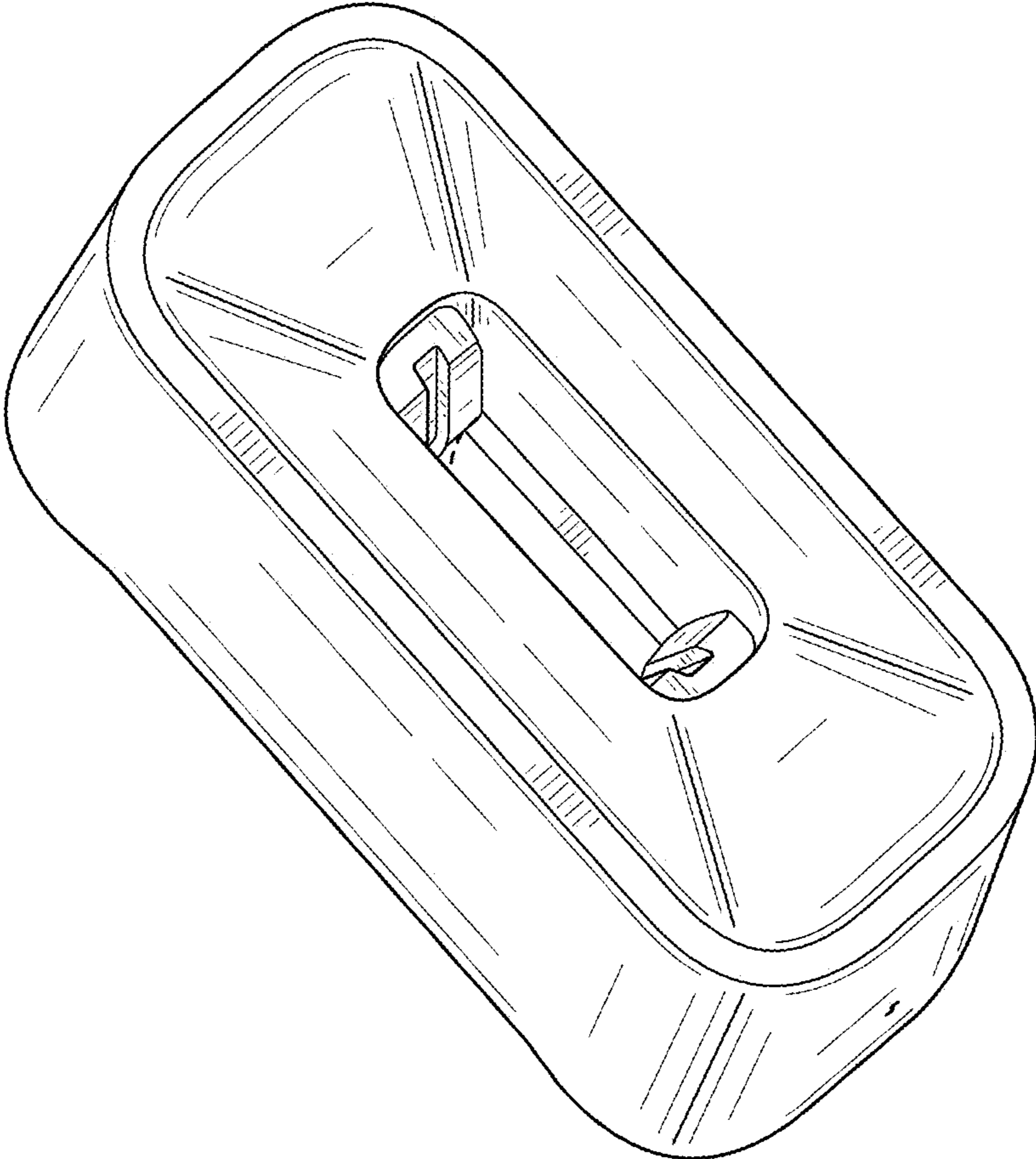


FIG. 3



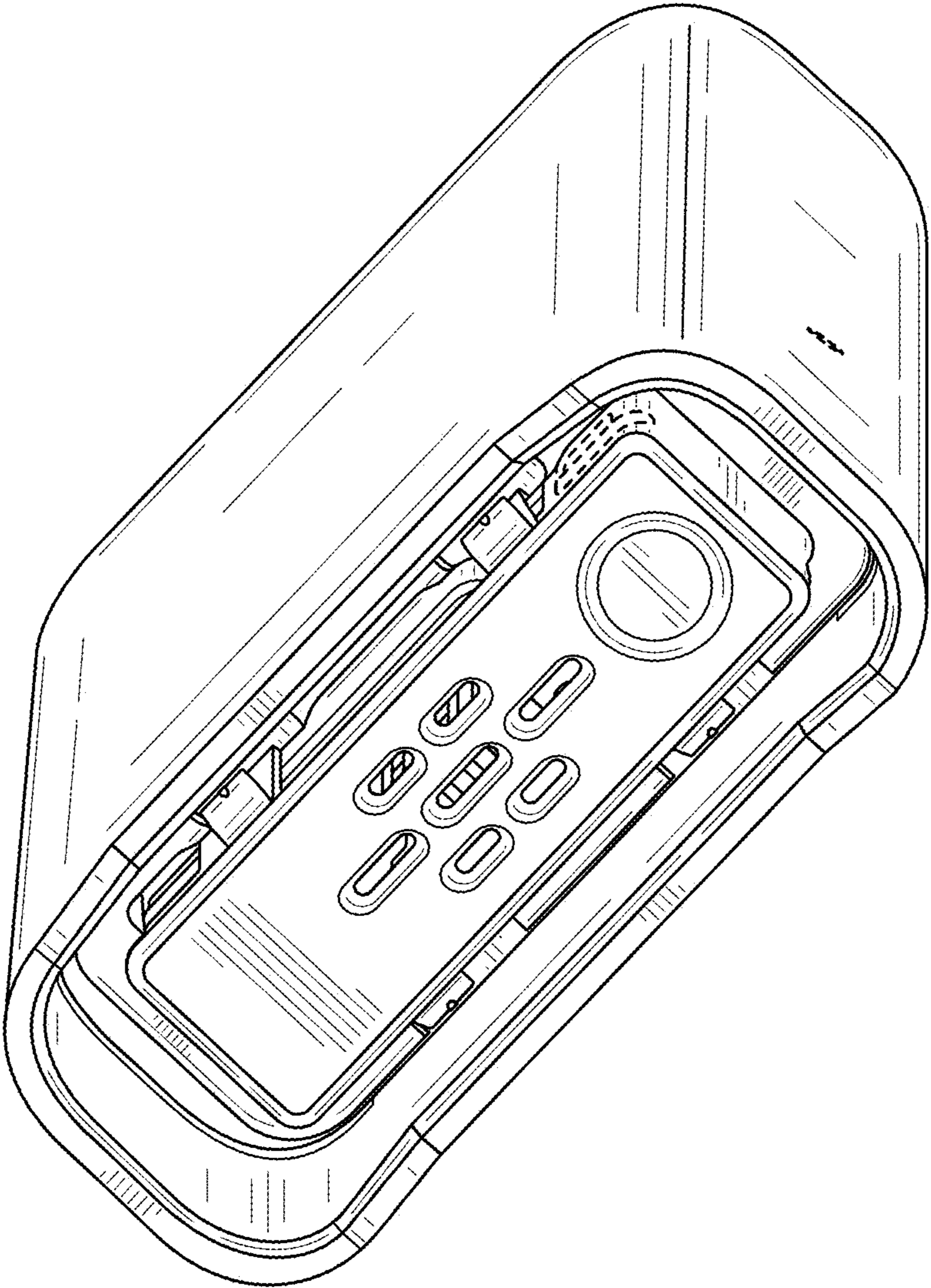


FIG. 4

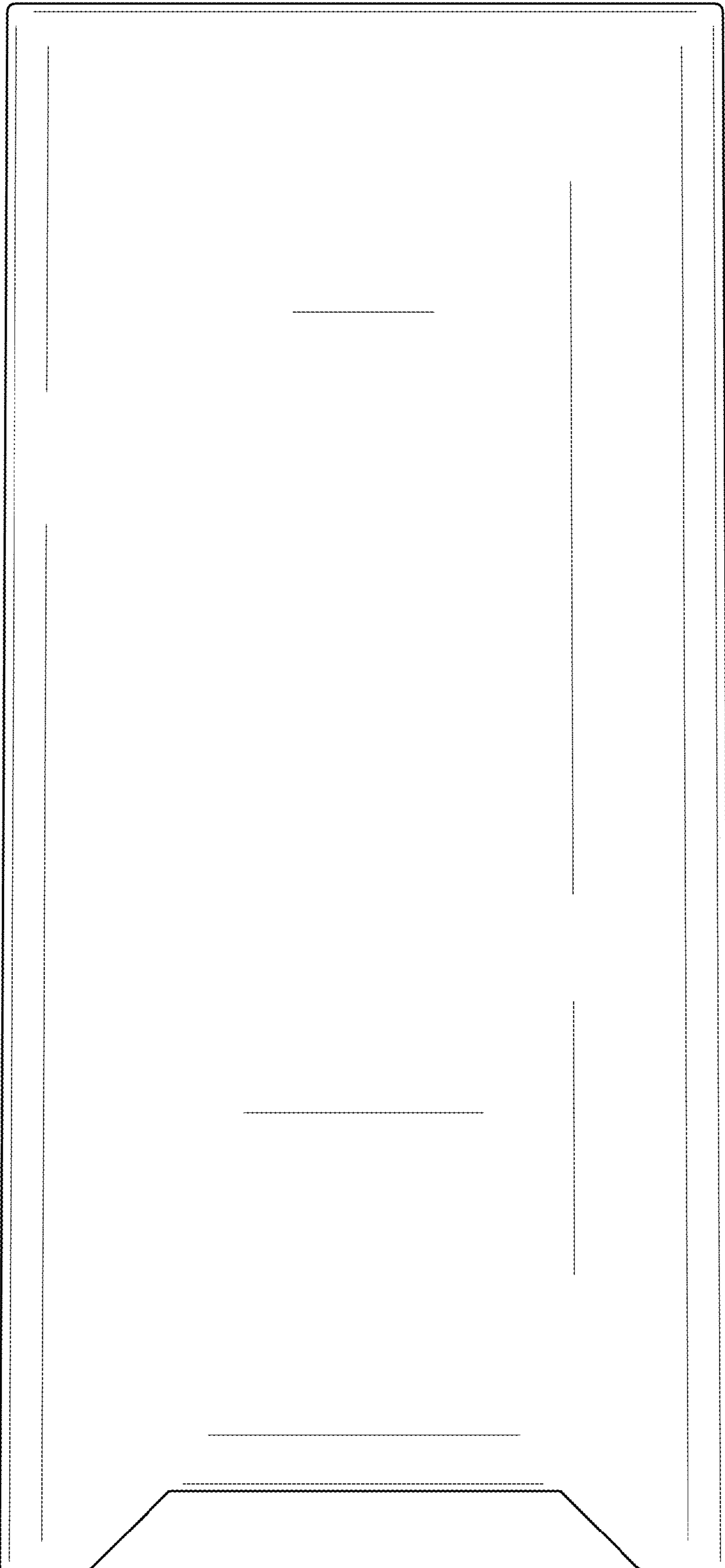


FIG. 5

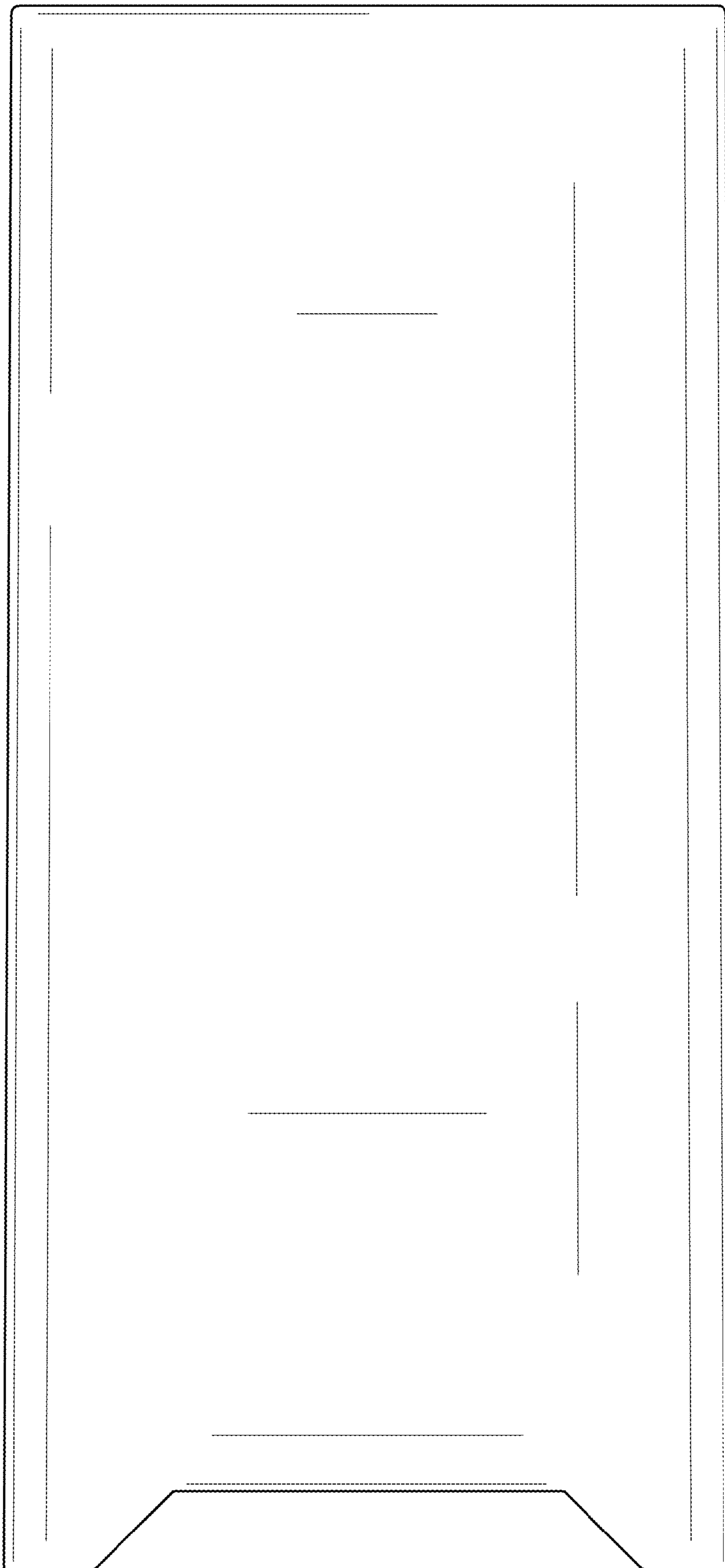


FIG. 6

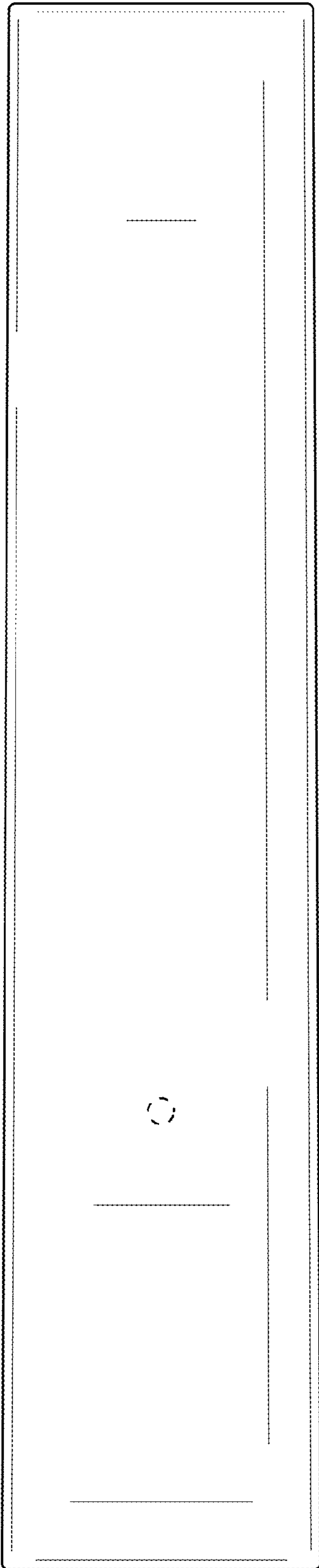


FIG. 7

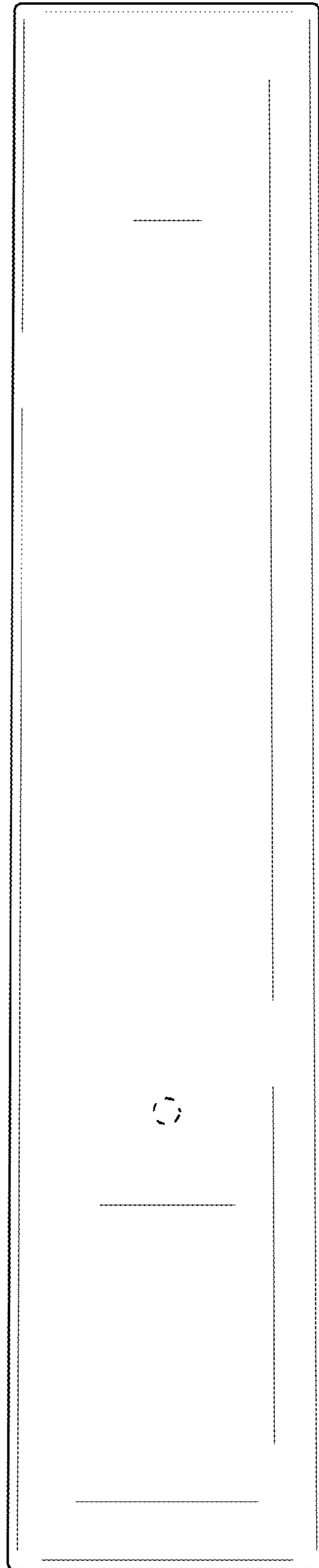


FIG. 8

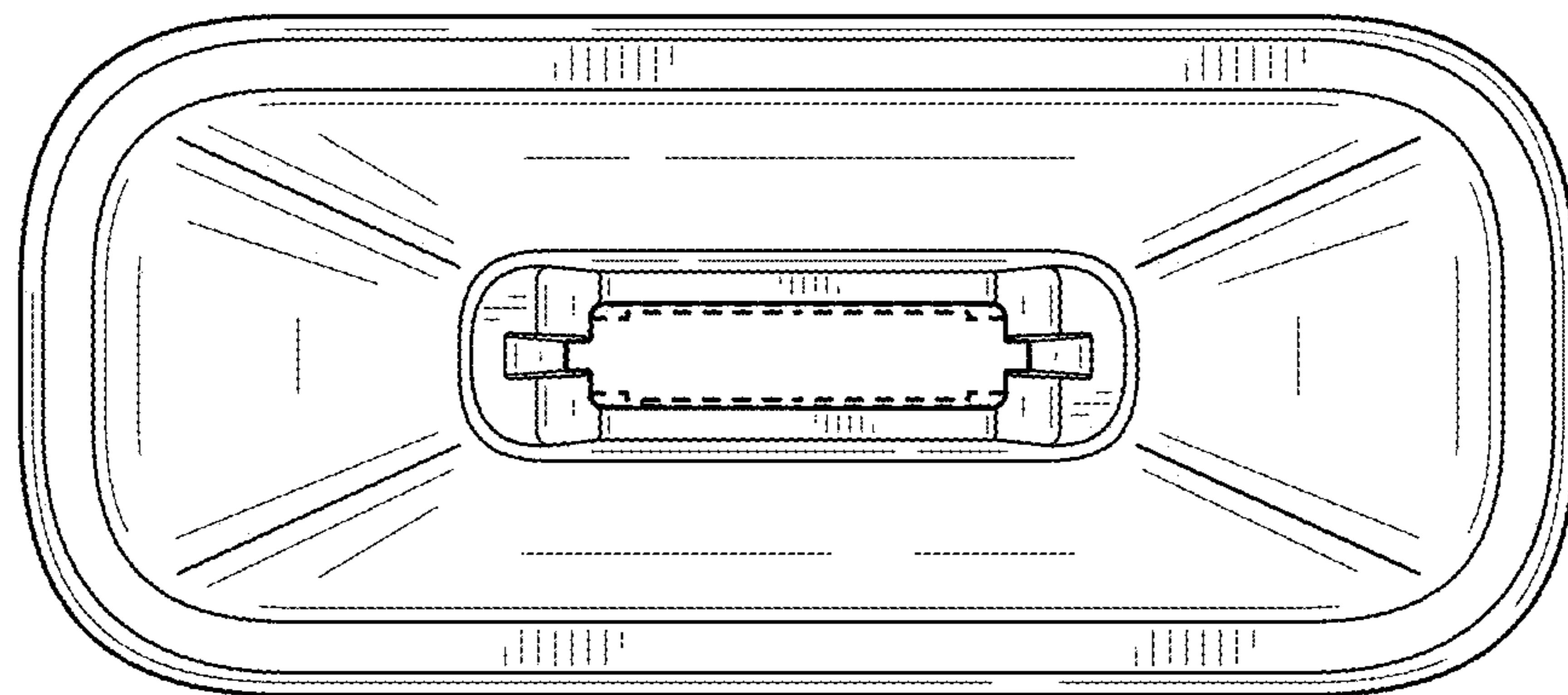


FIG. 9

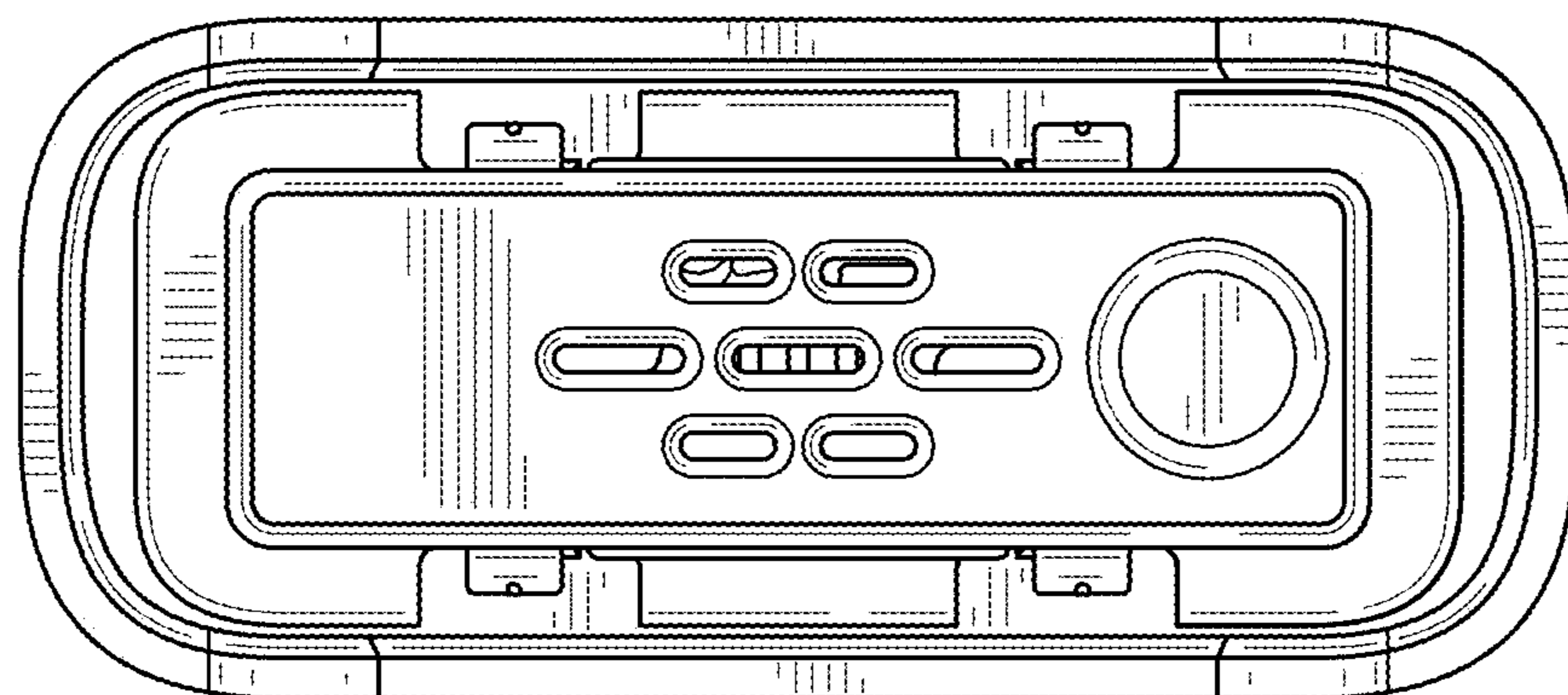


FIG. 10