



US00D916152S

(12) **United States Design Patent** (10) **Patent No.:** **US D916,152 S**
McLain et al. (45) **Date of Patent:** **** Apr. 13, 2021**

(54) **COMPRESSION LIMITER**
(71) Applicant: **APQ Development, LLC**, Jackson, MI (US)
(72) Inventors: **Lee McLain**, Jonesville, MI (US); **Justin Joughin**, Morenci, MI (US)
(73) Assignee: **APQ Development, LLC**, Jackson, MI (US)
(**) Term: **15 Years**
(21) Appl. No.: **29/747,583**
(22) Filed: **Aug. 24, 2020**
(51) **LOC (13) Cl.** **15-09**
(52) **U.S. Cl.**
USPC **D15/138; D15/150**
(58) **Field of Classification Search**
USPC 15/5, 138, 150, 151, 152; D23/262
CPC B22F 3/02; B22F 2003/031; B22F 2003/033; F16B 5/025; F16B 19/02; F16B 41/002
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
1,369,239 A 2/1921 Gulick
1,399,943 A 12/1921 Dunham
1,421,440 A 7/1922 Fisher
1,800,585 A 4/1931 Woolson
2,440,815 A 5/1948 Wharam et al.
D171,627 S * 3/1954 Weber D13/133
3,211,256 A 10/1965 Teutsch
3,504,769 A 4/1970 Mettig
3,509,861 A 5/1970 Deutschmann et al.
3,592,293 A 7/1971 Frincke
D221,758 S * 9/1971 Mullins D23/262
3,773,144 A 11/1973 Hummel
3,904,528 A 9/1975 Yocum

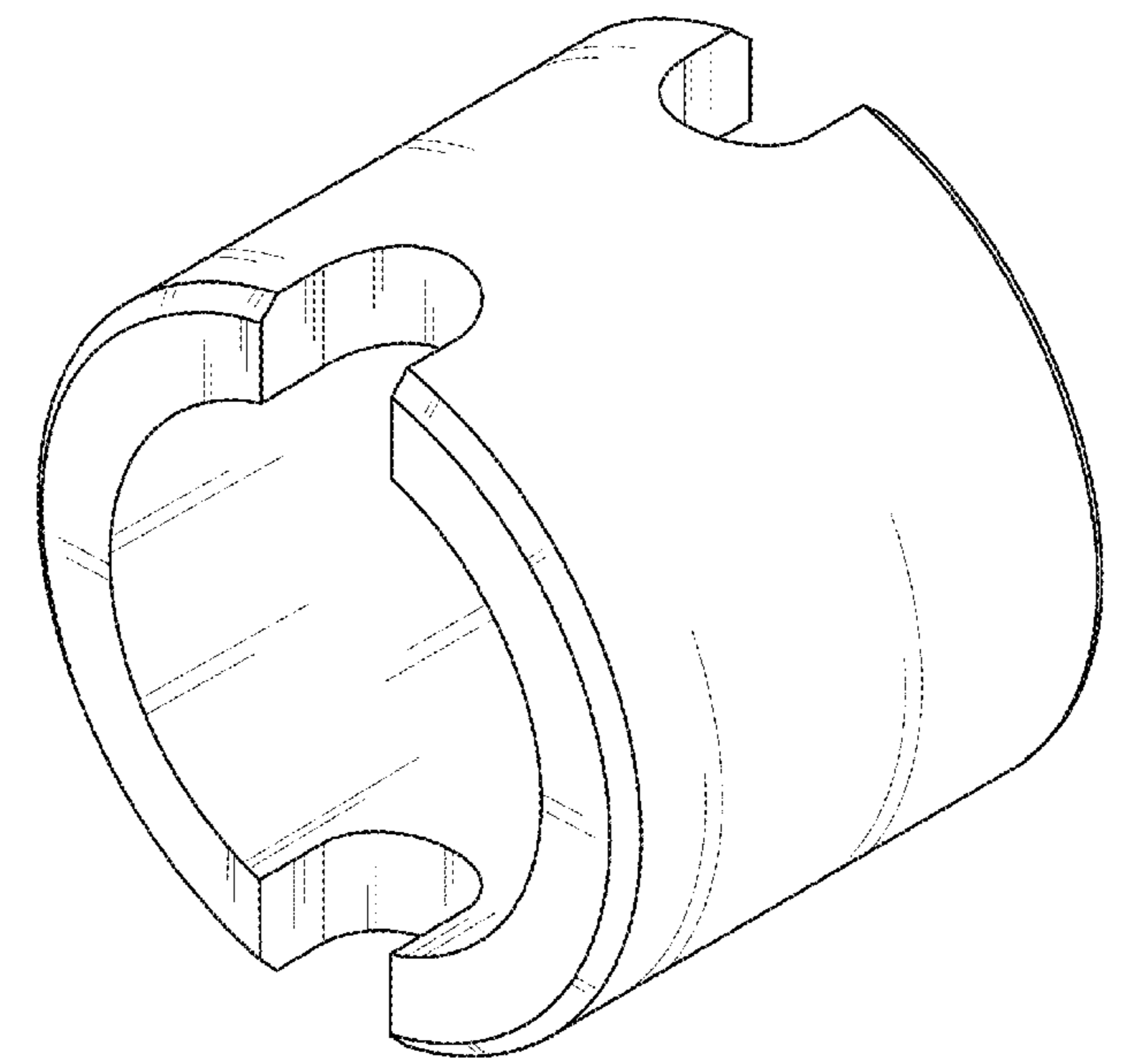
4,021,344 A 5/1977 Webb
4,056,168 A 11/1977 Bajohr
4,129,503 A 12/1978 Joseph
4,179,379 A 12/1979 Mitchell
4,224,161 A 9/1980 Anderson et al.
D258,526 S * 3/1981 Nederman 285/148.19
4,351,550 A 9/1982 Anderson et al.
D271,376 S * 11/1983 Baroody D8/382
4,417,383 A 11/1983 Anderson et al.
D276,531 S * 11/1984 Feinbloom D16/130
4,616,610 A 10/1986 Ishida
4,768,936 A 9/1988 Etemad et al.
4,804,466 A 2/1989 Cooper et al.
4,828,694 A 5/1989 Leason
4,930,469 A 6/1990 Kamprath et al.
5,049,274 A 9/1991 Leason et al.
5,088,579 A 2/1992 Kim et al.
5,099,954 A 3/1992 Kikuchi et al.
5,119,649 A * 6/1992 Spence B63B 32/80 70/14
5,130,014 A 7/1992 Volz
(Continued)

Primary Examiner — Patricia A Palasik
(74) *Attorney, Agent, or Firm* — Honigman LLP; Brett A. Krueger

(57) **CLAIM**
The ornamental design for a compression limiter, as shown and described.

DESCRIPTION
FIG. 1 is top-front perspective view of a compression limiter, showing my design;
FIG. 2 is a bottom-rear perspective view thereof;
FIG. 3 is a top view thereof;
FIG. 4 is a bottom view thereof;
FIG. 5 is a front view thereof;
FIG. 6 is a rear view thereof;
FIG. 7 is a right side view thereof; and,
FIG. 8 is a left side view thereof.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,176,174 A	1/1993	Toraason et al.	8,443,777 B2	5/2013	Enokida
5,327,752 A *	7/1994	Myers E05B 27/083	8,464,683 B2	6/2013	Hashimoto et al.
		248/553	8,635,983 B2	1/2014	Enokida
5,377,781 A	1/1995	Yun	8,673,141 B2	3/2014	Stausberg et al.
5,403,043 A *	4/1995	Smet F16L 37/2445	8,734,642 B2	5/2014	Fauchet
		285/148.21	8,893,896 B2	11/2014	Nishikawa
5,452,693 A	9/1995	Clark	9,028,221 B2	5/2015	Hritz
D363,778 S *	10/1995	Cane D24/129	D731,872 S *	6/2015	White D8/343
5,531,196 A	7/1996	Clark	9,353,851 B2	5/2016	Kubota et al.
5,538,633 A	7/1996	Kitajima et al.	9,376,942 B2	6/2016	Noguchi et al.
5,863,081 A	1/1999	Katayama et al.	9,441,746 B2	9/2016	Borlon et al.
5,988,134 A	11/1999	Smietanski	9,567,880 B2	2/2017	Shieh et al.
6,041,752 A	3/2000	Van Klompenburg	9,573,085 B2	2/2017	Beer et al.
6,142,257 A	11/2000	Bruener et al.	9,604,163 B2	3/2017	Hatae et al.
6,165,373 A	12/2000	Agner	9,677,436 B2	6/2017	Mordukhovich
6,190,546 B1	2/2001	Agner	9,719,460 B2	8/2017	Kong et al.
6,257,193 B1	7/2001	Alpan et al.	9,719,463 B2	8/2017	Oltmans et al.
6,260,534 B1	7/2001	Kampichler et al.	9,771,840 B2	9/2017	Zahdeh
6,289,865 B1	9/2001	Spix	9,784,149 B2	10/2017	Matsuda et al.
D453,815 S *	2/2002	Hoening D23/259	9,809,178 B1 *	11/2017	Huff B60R 13/07
6,457,925 B1 *	10/2002	Genick, II F16B 41/002	9,903,241 B2	2/2018	Hellman et al.
		411/339	9,944,374 B1	4/2018	Anderson et al.
6,478,114 B2	11/2002	Ito et al.	9,964,011 B2	5/2018	Mukohara
6,484,846 B1	11/2002	Parker	10,086,318 B2	10/2018	Eleftherakis et al.
6,520,293 B1	2/2003	Ogawa et al.	10,113,458 B2	10/2018	Takatsugi
6,523,561 B2	2/2003	Kapcoe et al.	10,132,215 B2	11/2018	Nagai et al.
6,524,476 B1	2/2003	Caiozza	10,167,753 B2	1/2019	Mukohara et al.
6,539,912 B1	4/2003	Beer	10,227,903 B2	3/2019	Viola et al.
6,584,950 B1	7/2003	Cunningham	10,247,065 B2	4/2019	Mercier
6,640,769 B2	11/2003	Nomura et al.	10,260,387 B2	4/2019	Kong et al.
6,742,490 B2	6/2004	Meisner	10,294,889 B2	5/2019	Oltmans et al.
6,796,283 B1	9/2004	Fleury et al.	D852,319 S	6/2019	Hellman et al.
6,811,383 B2	11/2004	Maier	10,344,640 B2	7/2019	Miyamura et al.
6,845,743 B1	1/2005	Bishop	10,359,015 B2	7/2019	Pinault
7,047,927 B2	5/2006	Hashimoto et al.	10,371,249 B1	8/2019	Bluhm et al.
7,096,845 B1	8/2006	Vaandrager et al.	10,385,741 B2	8/2019	Petridis et al.
7,124,730 B2	10/2006	Schwarzl et al.	D868,265 S *	11/2019	McCafferty D24/172
7,128,218 B2	10/2006	Rosendahl et al.	10,494,962 B2	12/2019	Yuki et al.
7,140,934 B2	11/2006	Hoi	10,494,964 B2	12/2019	Heckman et al.
7,171,937 B2	2/2007	Hada et al.	10,508,571 B2	12/2019	Blundy
7,210,562 B2	5/2007	Morii et al.	10,570,788 B2	2/2020	Bennett et al.
7,261,079 B2	8/2007	Gunji et al.	10,677,343 B2	6/2020	Howard et al.
7,270,104 B2	9/2007	Hashimoto et al.	10,695,883 B2	6/2020	Hugel
7,383,809 B2	6/2008	Rosendahl et al.	10,724,406 B2	7/2020	Hellman et al.
7,398,858 B2	7/2008	Bicker et al.	2002/0007984 A1	1/2002	Ito et al.
7,418,938 B2	9/2008	Hashimoto et al.	2002/0096221 A1	7/2002	Kapcoe et al.
7,422,021 B2	9/2008	Leaphart	2003/0037758 A1	2/2003	Nomura et al.
7,451,736 B2	11/2008	Migaud et al.	2003/0152464 A1	8/2003	Maier
7,478,618 B2	1/2009	Hashimoto et al.	2004/0007520 A1	1/2004	Rosendahl et al.
7,571,705 B2	8/2009	Inaba	2004/0060533 A1	4/2004	Meisner
7,655,078 B2	2/2010	Saito et al.	2004/0084250 A1	5/2004	Morii et al.
D612,020 S *	3/2010	Ward D23/262	2004/0141128 A1	7/2004	Kim et al.
7,681,890 B2	3/2010	Griffin et al.	2004/0231924 A1	11/2004	Schwarzl et al.
7,748,500 B2	7/2010	Nagano et al.	2005/0268877 A1	12/2005	Hashimoto et al.
7,757,656 B2	7/2010	Hoi et al.	2005/0279314 A1	12/2005	Hada et al.
7,767,084 B2	8/2010	Jinbo et al.	2005/0281693 A1	12/2005	Roberts
7,841,313 B2	11/2010	Hashimoto et al.	2006/0068656 A1	3/2006	Hoi
7,878,085 B2	2/2011	Keyaki et al.	2006/0137940 A1	6/2006	Gunji et al.
7,922,005 B2	4/2011	Haladyna	2006/0180116 A1	8/2006	Vaandrager et al.
7,958,861 B2	6/2011	Klumpp et al.	2006/0191506 A1	8/2006	Hashimoto et al.
7,992,534 B2	8/2011	Hashimoto et al.	2006/0219620 A1	10/2006	Suga
8,011,340 B2	9/2011	Bicker et al.	2007/0017745 A1	1/2007	Rosendahl et al.
8,011,342 B2	9/2011	Bluhm	2007/0062562 A1	3/2007	Leaphart
D646,145 S *	10/2011	Stuckey D8/331	2007/0163442 A1	7/2007	Saito et al.
8,038,877 B2	10/2011	Stausberg et al.	2007/0221447 A1	9/2007	Bicker et al.
8,066,100 B2	11/2011	Mori et al.	2007/0272194 A1	11/2007	Hoi et al.
8,075,772 B2	12/2011	Suga	2007/0272195 A1	11/2007	Keyaki et al.
8,113,167 B2	2/2012	Jessberger et al.	2007/0289569 A1	12/2007	Migaud et al.
8,125,601 B2	2/2012	Kim et al.	2008/0011260 A1	1/2008	Hashimoto et al.
8,146,561 B2	4/2012	Pryor et al.	2008/0017158 A1	1/2008	Hashimoto et al.
8,297,251 B2	10/2012	Asaya	2008/0047521 A1	2/2008	Koyama
8,297,407 B2	10/2012	Mori et al.	2008/0078352 A1	4/2008	Inaba
8,322,755 B2 *	12/2012	Kluss F16L 37/0915	2008/0210491 A1	9/2008	Mori et al.
		285/340	2008/0216789 A1	9/2008	Hashimoto et al.
8,336,515 B2	12/2012	Jainek et al.	2008/0237111 A1	10/2008	Haladyna
			2008/0264727 A1	10/2008	Nagano et al.
			2008/0283020 A1	11/2008	Bicker et al.
			2008/0290013 A1	11/2008	Stausberg et al.
			2009/0045129 A1	2/2009	Jinbo et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0139482 A1	6/2009	Bicker et al.	2015/0247431 A1	9/2015	Yuki et al.
2009/0230049 A1	9/2009	Stausberg et al.	2015/0300220 A1	10/2015	Mordukhovich
2009/0301954 A1	12/2009	Beer et al.	2016/0245135 A1	8/2016	Zandeh
2010/0012074 A1	1/2010	Asaya	2016/0245136 A1	8/2016	Takatsugi
2010/0012075 A1	1/2010	Bluhm	2016/0281555 A1	9/2016	Nagai et al.
2010/0037849 A1	2/2010	Jainek et al.	2016/0319714 A1	11/2016	Shieh et al.
2010/0108019 A1	5/2010	Klumpp et al.	2016/0319715 A1	11/2016	Shieh et al.
2010/0133164 A1	6/2010	Nishikawa	2017/0138232 A1	5/2017	Hellman et al.
2010/0162988 A1	7/2010	Enokida	2017/0218802 A1	8/2017	Takano
2010/0212623 A1	8/2010	Jessberger et al.	2017/0268393 A1	9/2017	Pekarsky et al.
2010/0224450 A1	9/2010	Dods et al.	2017/0276036 A1	9/2017	Mukohara et al.
2010/0300395 A1	12/2010	Enokida	2017/0276038 A1	9/2017	Mukohara
2011/0067666 A1	3/2011	Hashimoto et al.	2017/0362972 A1	12/2017	Mercier
2011/0253091 A1	10/2011	Hashimoto et al.	2017/0368656 A1	12/2017	Hugel
2012/0037456 A1	2/2012	Mori et al.	2017/0370336 A1	12/2017	Pinault
2012/0073527 A1	3/2012	Oltmans et al.	2018/0031107 A1	2/2018	Howard et al.
2012/0073537 A1	3/2012	Oltmans et al.	2018/0135477 A1	5/2018	Hellman et al.
2012/0085689 A1	4/2012	Fauchet	2018/0135478 A1	5/2018	Blundy
2012/0121362 A1*	5/2012	Taylor B22F 3/02 411/531	2018/0202330 A1	7/2018	Petridis et al.
2012/0210971 A1	8/2012	Noguchi et al.	2018/0283244 A1	10/2018	Fujinuma et al.
2012/0234741 A1	9/2012	Hritz	2018/0283245 A1	10/2018	Miyamura et al.
2012/0305469 A1	12/2012	Stausberg et al.	2018/0298797 A1	10/2018	Heckman et al.
2014/0116931 A1	5/2014	Beer et al.	2018/0334934 A1	11/2018	Hellman et al.
2014/0166401 A1	6/2014	Kubota et al.	2018/0347415 A9	12/2018	Mercier
2014/0197085 A1	7/2014	Stausberg et al.	2018/0347420 A1	12/2018	Bedi et al.
2014/0373939 A1	12/2014	Borlon et al.	2019/0024544 A1	1/2019	Viola et al.
2015/0028038 A1	1/2015	Franz	2019/0072014 A1	3/2019	Hutchins
2015/0090216 A1	4/2015	Hatae et al.	2019/0072015 A1	3/2019	Hutchins
2015/0096527 A1	4/2015	Kong et al.	2019/0128155 A1	5/2019	Bennett et al.
2015/0096840 A1	4/2015	Kong et al.	2019/0264589 A1	8/2019	Lechartier et al.
2015/0114897 A1	4/2015	Eleftherakis et al.	2019/0264635 A1	8/2019	Oltmans et al.
2015/0129471 A1	5/2015	Beer et al.	2019/0285161 A1	9/2019	Rosendahl et al.
2015/0129727 A1	5/2015	Marsar et al.	2020/0049035 A1	2/2020	Feng et al.
2015/0136064 A1	5/2015	Matsuda et al.	2020/0106255 A1*	4/2020	Platt H02G 15/02
			2020/0116052 A1	4/2020	Pekarsky et al.
			2020/0116053 A1	4/2020	Blundy
			2020/0149446 A1	5/2020	Owaki
			2020/0182109 A1	6/2020	Shen et al.

* cited by examiner

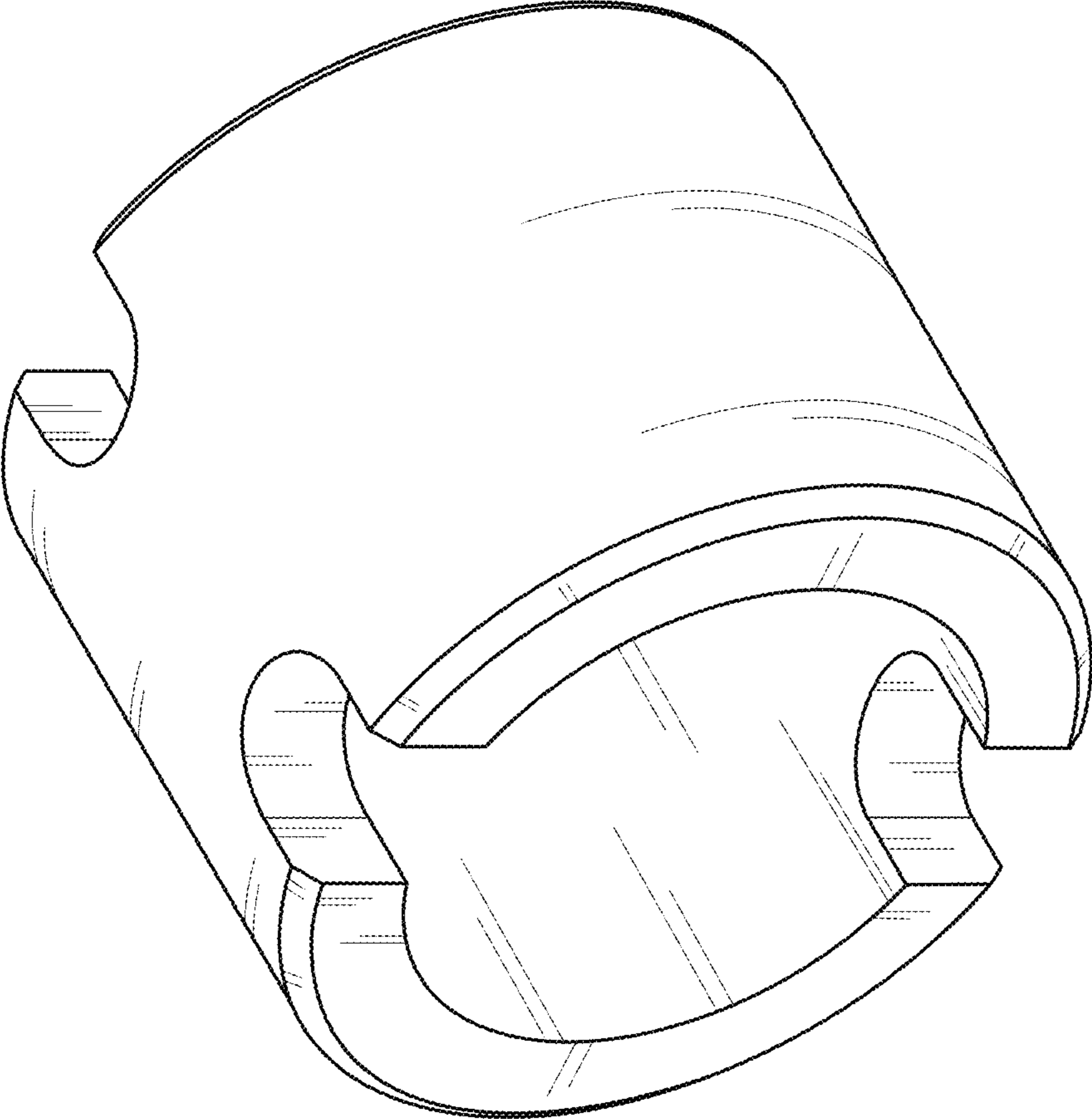


FIG. 1

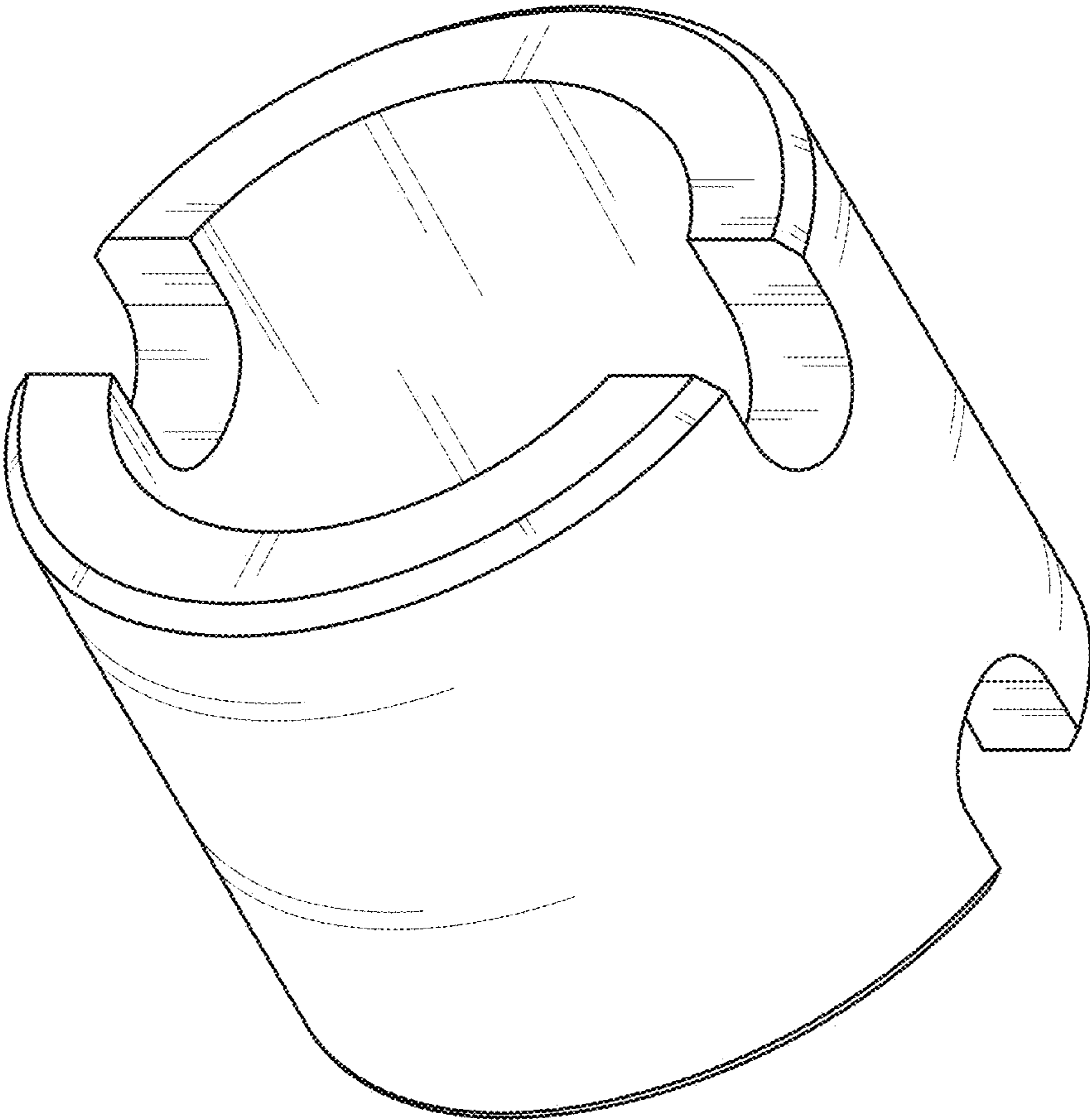


FIG. 2

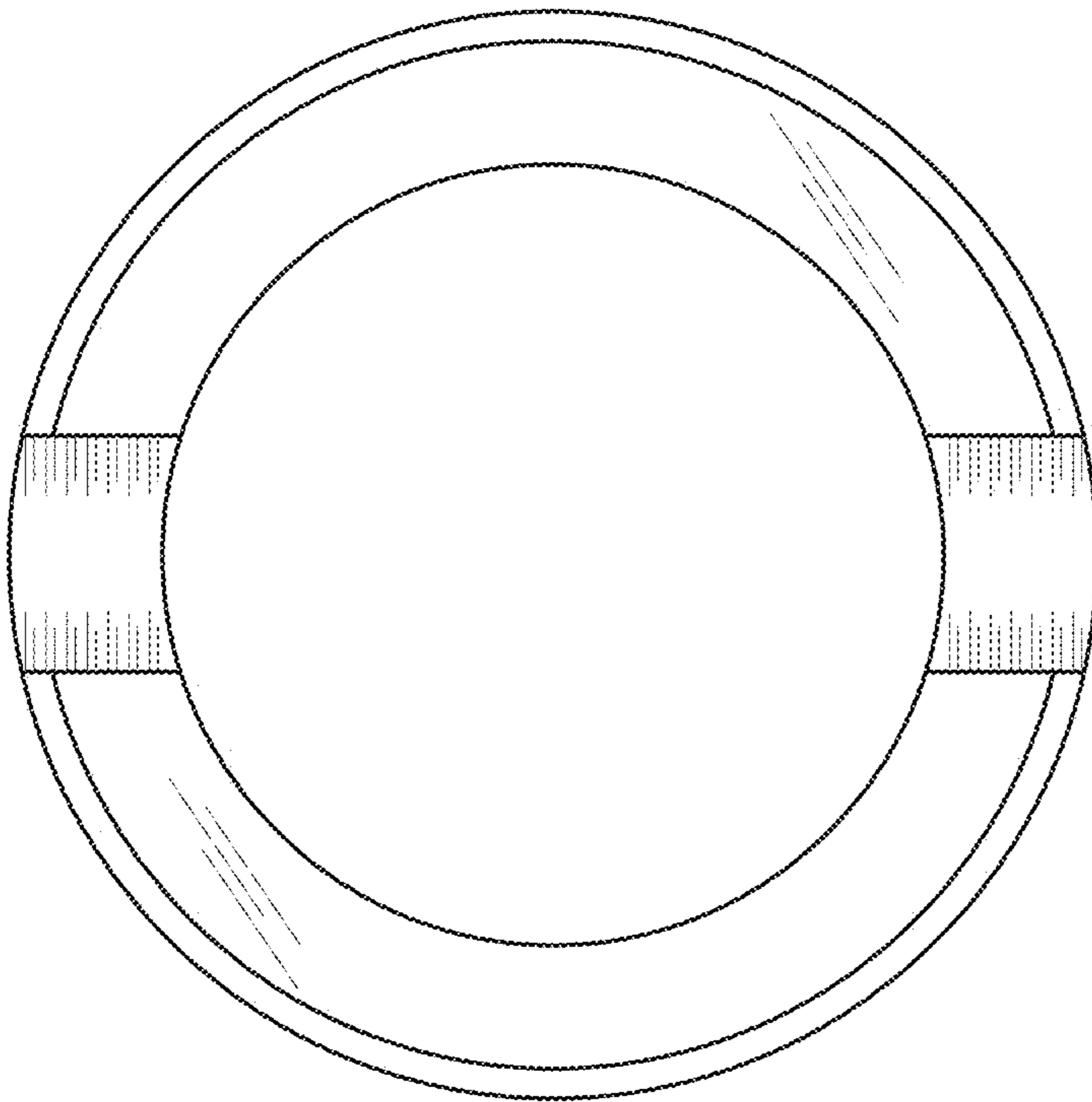


FIG. 3

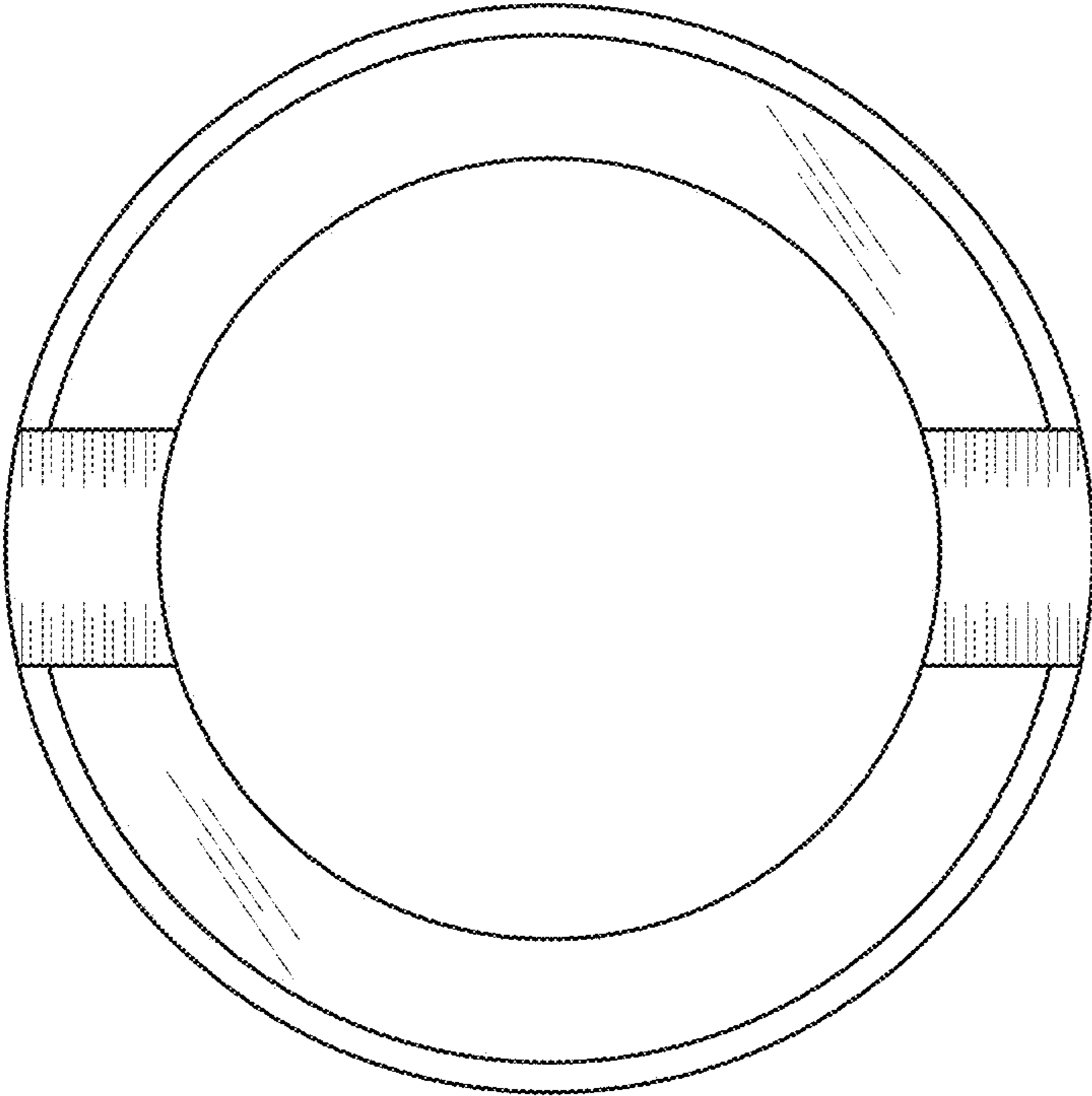


FIG. 4

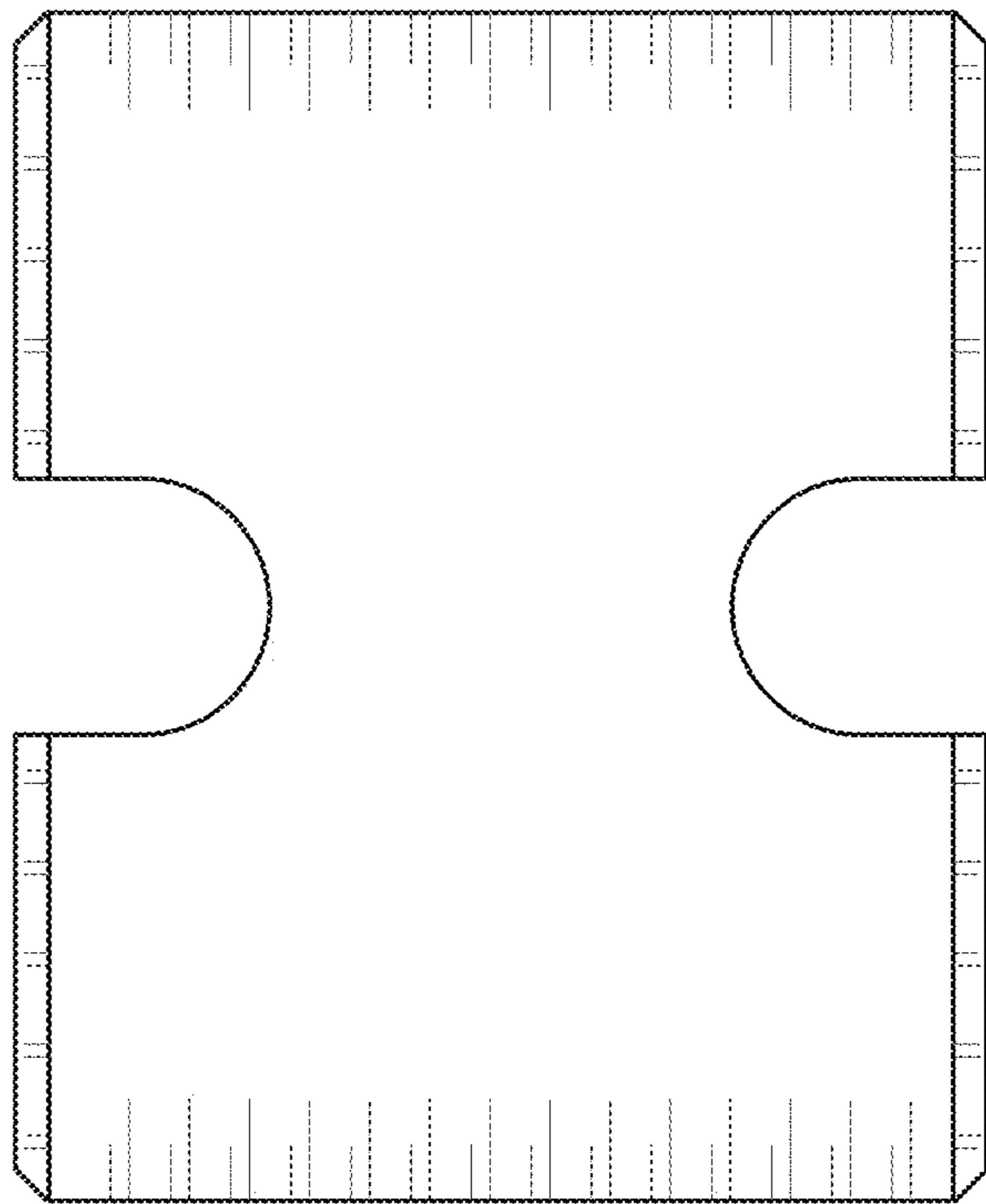


FIG. 5

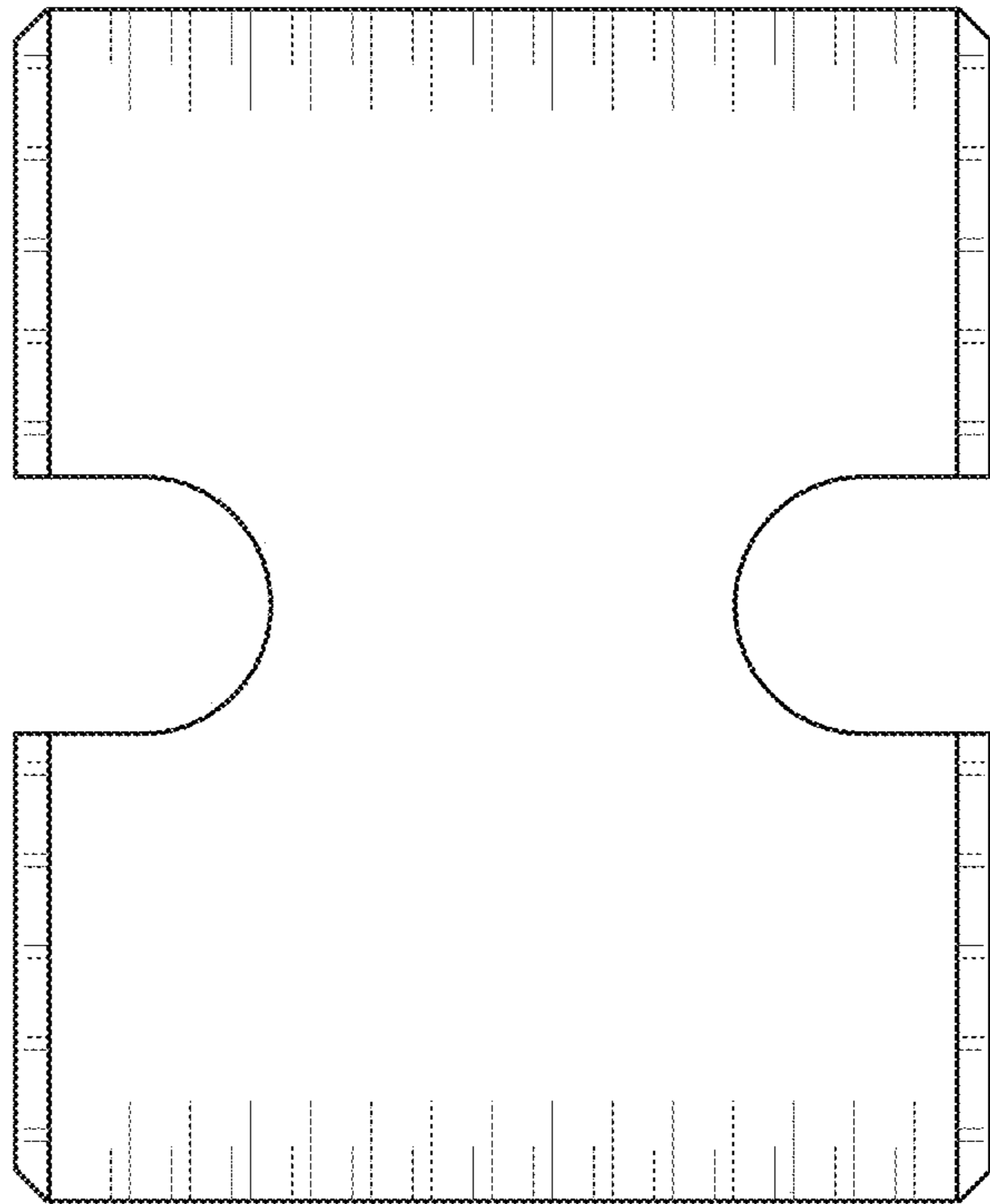


FIG. 6

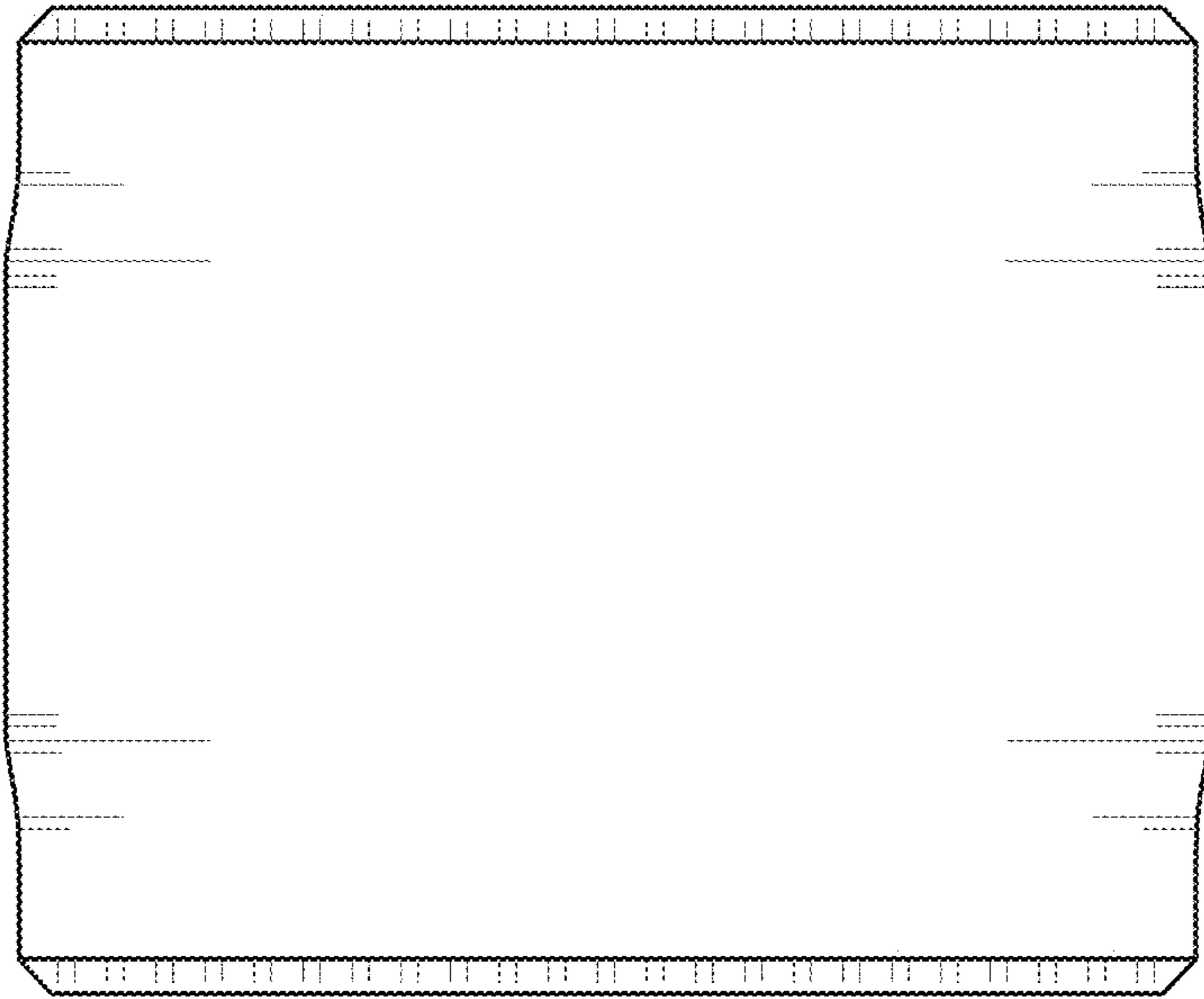


FIG. 7

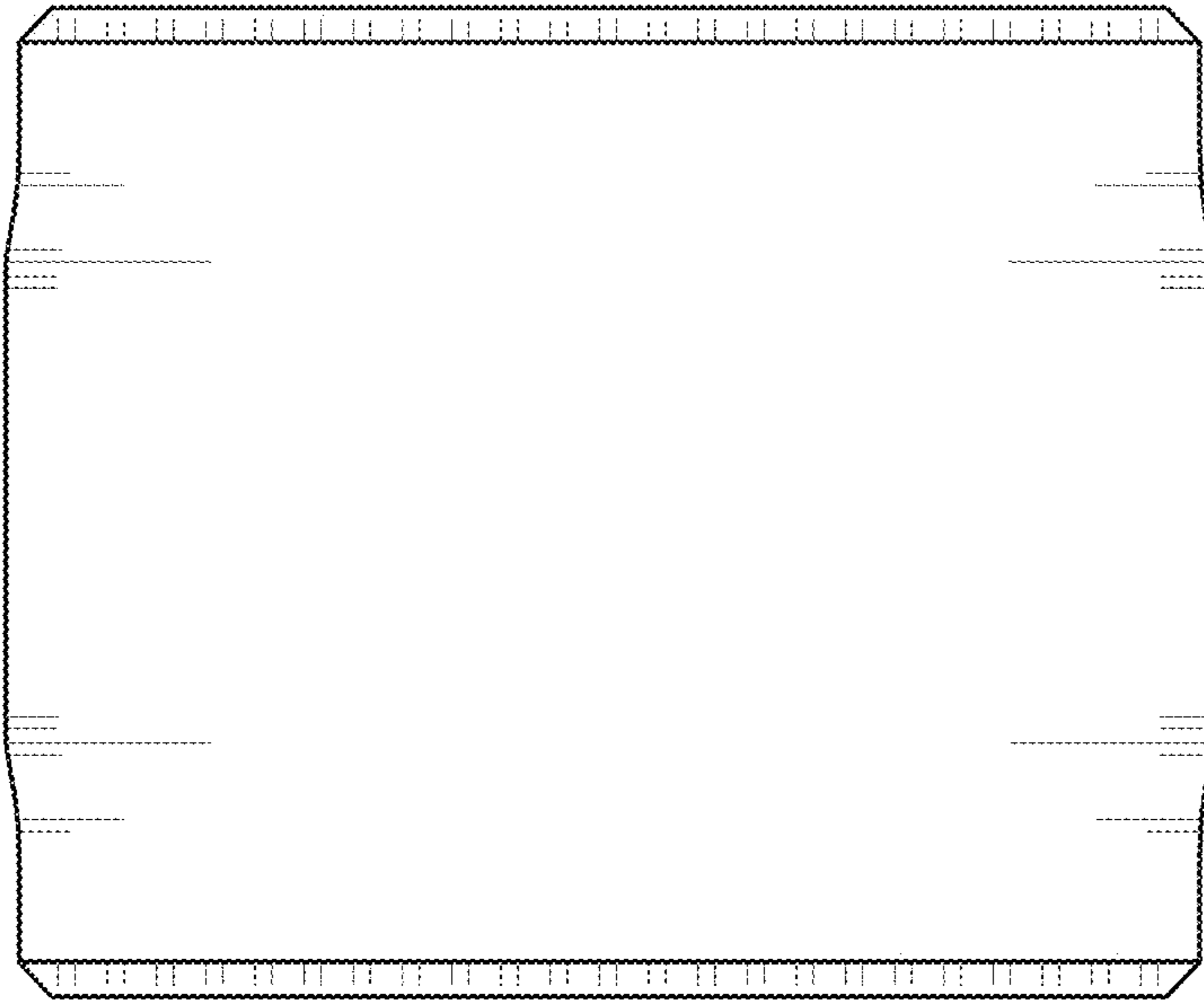


FIG. 8