



US00D948713S

(12) **United States Design Patent** (10) **Patent No.:** **US D948,713 S**  
**Banik** (45) **Date of Patent:** **\*\* Apr. 12, 2022**

(54) **ASYMMETRICAL SELF RIGHTING TIP CAP**  
(71) Applicant: **Robert Banik**, Hollywood, FL (US)  
(72) Inventor: **Robert Banik**, Hollywood, FL (US)  
(73) Assignee: **International Medical Industries, Inc.**,  
Pompano Beach (UZ)  
(\*\*) Term: **15 Years**

3,245,567 A 4/1966 Knight  
3,323,798 A 6/1967 Miller  
3,364,890 A 1/1968 Andersen  
3,368,673 A 2/1968 Johnson  
3,574,306 A 4/1971 Alden  
3,598,120 A 8/1971 Mass  
3,610,241 A 10/1971 LeMarie  
3,700,215 A 10/1972 Hardman et al.  
3,706,307 A 12/1972 Hasson  
3,712,749 A 1/1973 Roberts  
3,747,751 A 7/1973 Miller et al.  
3,872,867 A 3/1975 Killinger

(Continued)

(21) Appl. No.: **29/704,234**

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

(51) **LOC (13) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/130**

(58) **Field of Classification Search**  
USPC ..... D24/127-131, 112-114, 133, 186;  
606/181, 185; 604/264, 523-528, 272,  
604/187, 158, 164.01-164.11, 181, 184,  
604/227; 600/101, 139, 143;  
128/200.24, 207.14, 207.15; D9/453  
CPC ..... A61J 1/1412; A61J 1/1418; A61J 1/1425;  
A61J 1/1431

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

722,943 A 3/1903 Chappell  
732,662 A 6/1903 Smith  
1,678,991 A 7/1928 Marschalek  
1,970,631 A 8/1934 Sherman  
2,477,598 A 8/1949 Hain  
2,739,590 A 3/1956 Yochem  
2,823,674 A 2/1958 Yochem  
2,834,346 A 5/1958 Adams  
2,875,761 A 3/1959 Helmer et al.  
2,888,015 A 5/1959 Hunt  
2,952,255 A 9/1960 Hein, Jr.  
3,122,280 A 2/1964 Goda

**FOREIGN PATENT DOCUMENTS**

EP 0148116 A 7/1985  
GB 486367 6/1938

(Continued)

*Primary Examiner* — Nathan M Johnston

(74) *Attorney, Agent, or Firm* — Malloy and Malloy PL;  
Jennie S. Malloy

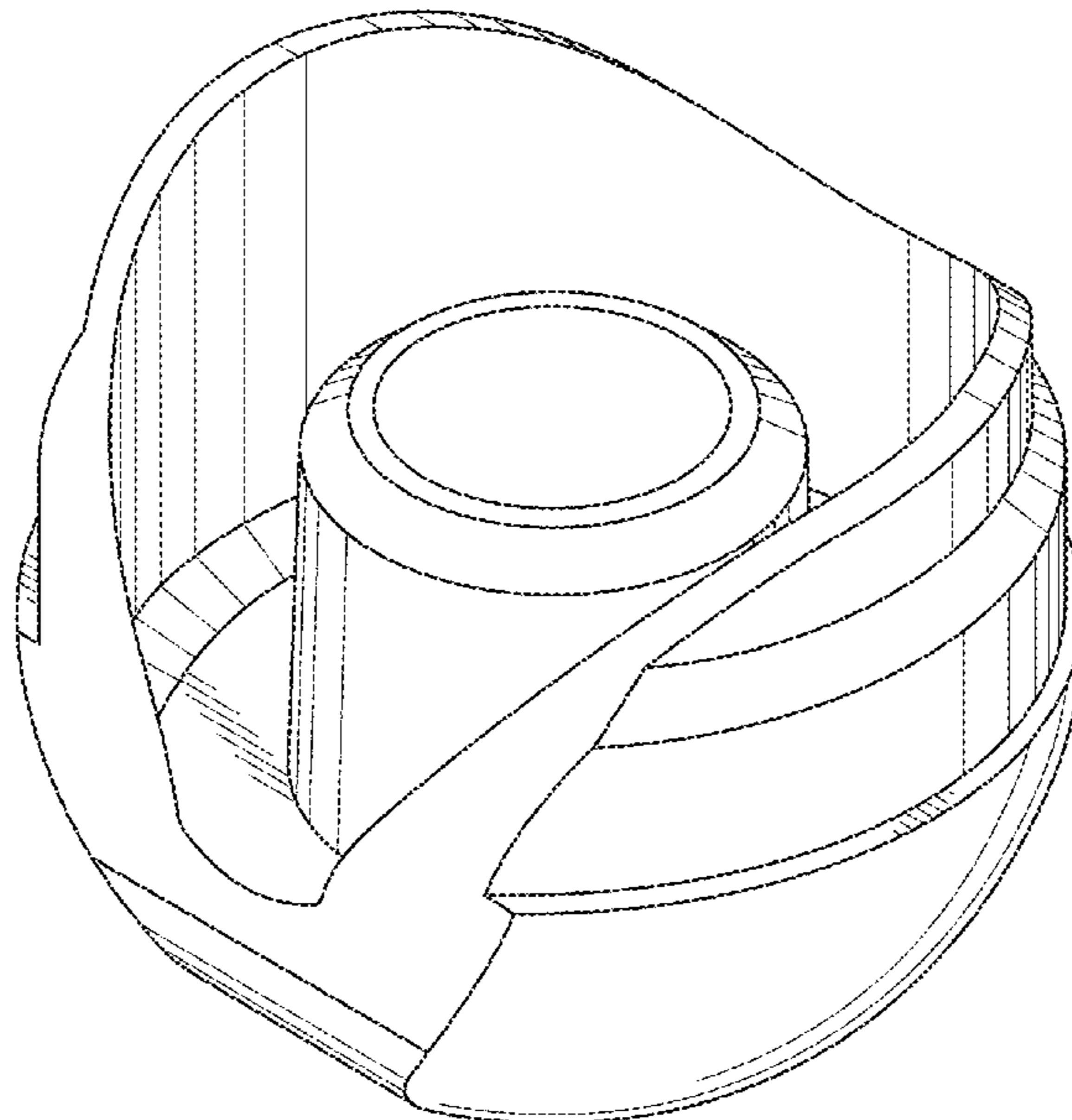
(57) **CLAIM**

The ornamental design for an asymmetrical self-righting tip cap, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view for an asymmetrical self-righting tip cap;  
FIG. 2 is a rear perspective view thereof;  
FIG. 3 is a front 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; and,  
FIG. 8 is a rear elevational view thereof.  
The broken lines show portions of the asymmetrical self righting tip cap that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

3,904,033 A	9/1975	Haerr	5,624,402 A	4/1997	Imbert
3,905,375 A	9/1975	Toyama	5,674,209 A	10/1997	Yarger
3,937,211 A	2/1976	Merten	5,695,470 A	12/1997	Roussigne et al.
3,987,930 A	10/1976	Fuson	5,700,247 A	12/1997	Grimard et al.
4,005,739 A	2/1977	Winchell	5,702,374 A	12/1997	Johnson
4,043,334 A	8/1977	Brown et al.	5,713,485 A	2/1998	Lift et al.
4,046,145 A	9/1977	Choksi et al.	5,776,124 A	7/1998	Wald
4,068,696 A	1/1978	Winchell	5,785,691 A	7/1998	Vetter et al.
4,216,585 A	8/1980	Hatter	5,797,885 A	8/1998	Rubin
4,216,872 A	8/1980	Bean	5,807,343 A	9/1998	Tucker et al.
4,244,366 A	1/1981	Raines	D402,766 S *	12/1998	Smith ..... D24/227
4,252,122 A	2/1981	Halvorsen	5,883,806 A	3/1999	Meador et al.
4,286,591 A	9/1981	Raines	5,884,457 A	3/1999	Ortiz et al.
4,286,640 A	9/1981	Knox et al.	5,902,269 A	5/1999	Jentzen
4,313,539 A	2/1982	Raines	5,951,522 A	9/1999	Rosato et al.
4,369,781 A	1/1983	Gilson et al.	5,951,525 A	9/1999	Thorne et al.
4,420,085 A	12/1983	Wilson et al.	5,954,657 A	9/1999	Rados
4,430,077 A	2/1984	Mittleman et al.	5,957,166 A	9/1999	Safabash
4,457,445 A	7/1984	Hanks et al.	5,957,314 A	9/1999	Nishida et al.
4,482,071 A	11/1984	Ishiwatari	5,963,163 A	10/1999	O'Brien
D277,783 S *	2/1985	Beck ..... D10/119.2	5,989,227 A	11/1999	Vetter et al.
4,521,237 A	6/1985	Logothetis	5,993,437 A	11/1999	Raoz
4,530,697 A	7/1985	Kuhlemann et al.	6,000,548 A	12/1999	Tsals
4,571,242 A	2/1986	Klein et al.	D419,671 S	1/2000	Jansen
4,589,171 A	5/1986	McGill	6,021,824 A	2/2000	Larsen et al.
4,664,259 A	5/1987	Landis	6,027,482 A	2/2000	Imbert
4,667,837 A	5/1987	Vitello et al.	6,068,614 A	5/2000	Kimber et al.
4,676,530 A	6/1987	Nordgren et al.	D430,293 S	8/2000	Jansen
4,693,707 A	9/1987	Dye	D431,864 S	10/2000	Jansen
4,726,483 A	2/1988	Drozd	6,126,640 A	10/2000	Tucker et al.
4,742,910 A	5/1988	Staebler	6,190,364 B1	2/2001	Imbert
4,743,229 A	5/1988	Chu	6,193,688 B1	2/2001	Balestracci et al.
4,743,231 A	5/1988	Kay et al.	6,196,593 B1	3/2001	Petrick et al.
4,760,847 A	8/1988	Vaillancourt	6,196,998 B1	3/2001	Jansen et al.
4,813,564 A	3/1989	Cooper et al.	6,279,746 B1	4/2001	Hussaini et al.
4,832,695 A	5/1989	Rosenberg et al.	6,235,376 B1	5/2001	Miyazaki et al.
4,834,706 A	5/1989	Beck et al.	6,280,418 B1	8/2001	Reinhard et al.
4,842,592 A	6/1989	Caggiani et al.	6,287,671 B1	9/2001	Bright et al.
4,844,906 A	7/1989	Hermelin et al.	6,322,543 B1	11/2001	Singh et al.
4,906,231 A	3/1990	Young	6,338,200 B1	1/2002	Baxa et al.
4,919,285 A	4/1990	Roof et al.	6,358,241 B1	3/2002	Shapeton et al.
4,936,445 A	6/1990	Grabenkort	6,375,640 B1	4/2002	Teraoka
5,009,323 A	4/1991	Montgomery et al.	6,394,983 B1	5/2002	Mayoral et al.
5,024,323 A	6/1991	Bolton	6,439,276 B1	8/2002	Wood et al.
5,049,129 A	9/1991	Zdeb et al.	6,485,460 B2	11/2002	Eakins et al.
5,057,093 A	10/1991	Clegg et al.	6,500,155 B2	12/2002	Sasso
D323,392 S *	1/1992	Byrne ..... D24/130	6,520,935 B1	2/2003	Jansen et al.
5,085,332 A	2/1992	Gettig et al.	6,540,697 B2	4/2003	Chen
5,090,564 A	2/1992	Chimienti	6,565,529 B1	5/2003	Kimber et al.
5,135,496 A	8/1992	Vetter et al.	6,581,792 B1	6/2003	Limanjaya
5,163,922 A	11/1992	McElveen, Jr. et al.	6,585,691 B1	7/2003	Vitello
5,165,560 A	11/1992	Enniss, III et al.	6,592,251 B2	7/2003	Edwards et al.
5,230,429 A	7/1993	Etheredge, III	6,666,852 B2	12/2003	Niedospial, Jr.
5,267,983 A	12/1993	Oilschlager et al.	6,682,798 B1	1/2004	Kiraly
5,292,308 A	3/1994	Ryan	6,726,652 B2	4/2004	Eakins et al.
5,293,993 A	3/1994	Yates, Jr. et al.	6,726,672 B1	4/2004	Hanley et al.
5,295,599 A	3/1994	Smith	6,755,220 B2	6/2004	Castellano et al.
5,312,367 A	5/1994	Nathan	6,764,469 B2	7/2004	Broselow
5,312,368 A	5/1994	Haynes	6,796,586 B2	9/2004	Werth
5,328,466 A	7/1994	Denmark	6,821,268 B2	11/2004	Balestracci
5,328,474 A	7/1994	Raines	D501,549 S	2/2005	McAllister et al.
5,356,380 A	10/1994	Hoekwater et al.	6,921,383 B2	7/2005	Vitello
5,370,226 A	12/1994	Gollobin et al.	6,935,560 B2	8/2005	Andreasson et al.
5,380,295 A	1/1995	Vacca	6,942,643 B2	9/2005	Eakins et al.
5,402,887 A	4/1995	Shillington	7,036,661 B2	5/2006	Anthony et al.
5,405,339 A	4/1995	Kohnen et al.	7,055,273 B2	6/2006	Roshkoff
5,456,668 A	10/1995	Ogle, II	7,125,397 B2	10/2006	Woehr et al.
5,458,580 A	10/1995	Hajishoreh	7,141,286 B1	11/2006	Kessler et al.
5,468,224 A	11/1995	Souryal	7,175,081 B2	2/2007	Andreasson et al.
5,531,695 A	7/1996	Swisher	7,182,256 B2	2/2007	Andreasson et al.
5,540,666 A	7/1996	Barta et al.	7,232,066 B2	6/2007	Andreasson et al.
5,549,571 A	8/1996	Sak	7,240,926 B2	7/2007	Dalle et al.
5,558,648 A	9/1996	Shields	7,299,981 B2	11/2007	Hickle et al.
5,584,817 A	12/1996	van den Haak	7,374,555 B2	5/2008	Heinz et al.
5,588,239 A	12/1996	Anderson	7,404,500 B2	7/2008	Marteau et al.
			7,410,803 B2	8/2008	Nollert et al.
			7,425,208 B1	9/2008	Vitello
			7,437,972 B2	10/2008	Yeager
			7,482,166 B2	1/2009	Nollert et al.



(56)

References Cited

U.S. PATENT DOCUMENTS

7,497,330 B2	3/2009	Anthony et al.	D777,903 S	3/2017	Schultz
7,503,453 B2	3/2009	Cronin et al.	9,662,456 B2	5/2017	Woehr
7,588,563 B2	9/2009	Guala	D789,529 S	6/2017	Davis et al.
7,594,681 B2	9/2009	DeCarlo	9,687,249 B2	6/2017	Hanlon et al.
7,608,057 B2	10/2009	Woehr et al.	9,744,304 B2	8/2017	Swift et al.
7,611,487 B2	11/2009	Woehr et al.	D797,928 S	9/2017	Davis et al.
7,632,244 B2	12/2009	Buehler et al.	D797,929 S	9/2017	Davis et al.
D608,900 S *	1/2010	Giraud ..... D24/216	9,764,098 B2	9/2017	Hund et al.
7,641,636 B2	1/2010	Moesli et al.	9,821,152 B1	11/2017	Vitello et al.
D612,939 S	3/2010	Boone, III et al.	D806,241 S *	12/2017	Swinney ..... D24/129
7,681,606 B2	3/2010	Khan et al.	D807,503 S *	1/2018	Davis ..... D24/130
7,698,180 B2	4/2010	Fago et al.	9,855,191 B1	1/2018	Vitello et al.
7,735,664 B1	6/2010	Peters et al.	D815,945 S	4/2018	Fischer
7,748,892 B2	7/2010	McCoy	9,987,438 B2	6/2018	Stillson
7,762,988 B1	7/2010	Vitello	D825,746 S	8/2018	Davis et al.
7,766,919 B2	8/2010	Delmotte	10,039,913 B2	8/2018	Yeh
7,802,313 B2	9/2010	Czajka	D831,201 S *	10/2018	Holtz ..... D24/129
7,918,830 B2	4/2011	Langan et al.	D820,187 S	11/2018	Ryan
7,922,213 B2	4/2011	Werth	10,124,122 B2	11/2018	Zenker
8,034,041 B2	10/2011	Domkowski	10,166,343 B1	1/2019	Hunt et al.
8,079,518 B2	12/2011	Turner et al.	10,166,347 B1	1/2019	Vitello
8,091,727 B2	1/2012	Domkowski	10,183,129 B1	1/2019	Vitello
8,118,788 B2	2/2012	Frezza	10,207,099 B1	2/2019	Vitello
8,137,324 B2	3/2012	Bobst	D842,464 S *	3/2019	Davis ..... D24/130
8,140,349 B2	3/2012	Hanson et al.	D847,373 S *	4/2019	Hurwit ..... D24/231
8,252,247 B2	8/2012	Ferlic	10,300,263 B1	5/2019	Hunt
8,257,286 B2	9/2012	Meyer et al.	10,307,548 B1	6/2019	Hunt et al.
8,328,082 B1	12/2012	Bochenko et al.	10,315,024 B1	6/2019	Vitello et al.
8,348,895 B1	1/2013	Vitello	10,315,808 B2	6/2019	Taylor et al.
8,353,869 B2	1/2013	Ranalletta et al.	10,376,655 B2	8/2019	Pupke et al.
8,413,811 B1	4/2013	Arendt	D859,125 S	9/2019	Weagle et al.
8,443,999 B1	5/2013	Reinders	10,758,684 B1	9/2020	Vitello et al.
D684,057 S	6/2013	Kwon	10,773,067 B2	9/2020	Davis et al.
8,512,277 B2	8/2013	Del Vecchio	10,898,659 B1	1/2021	Vitello et al.
8,528,757 B2	9/2013	Bisio	10,912,898 B1	2/2021	Vitello et al.
8,556,074 B2	10/2013	Turner et al.	10,933,202 B1	3/2021	Banik
8,579,116 B2	11/2013	Pether et al.	10,953,162 B1	3/2021	Hunt et al.
8,591,462 B1	11/2013	Vitello	11,040,149 B1	6/2021	Banik
8,597,255 B2	12/2013	Emmott et al.	11,040,154 B1	6/2021	Vitello et al.
8,597,271 B2	12/2013	Langan et al.	11,097,071 B1	8/2021	Hunt et al.
8,616,413 B2	12/2013	Koyama	2001/0003150 A1	6/2001	Imbert
D701,304 S	3/2014	Lair et al.	2001/0034506 A1	10/2001	Hirschman et al.
8,672,902 B2	3/2014	Ruan et al.	2001/0056258 A1	12/2001	Evans
8,702,674 B2	4/2014	Bochenko	2002/0007147 A1	1/2002	Capes et al.
8,777,910 B2	7/2014	Bauss et al.	2002/0023409 A1	2/2002	Py
8,777,930 B2	7/2014	Swisher et al.	2002/0046962 A1	4/2002	Vallans et al.
8,852,561 B2	10/2014	Wagner et al.	2002/0097396 A1	7/2002	Schafer
8,864,021 B1	10/2014	Vitello	2002/0099334 A1	7/2002	Hanson et al.
8,864,707 B1	10/2014	Vitello	2002/0101656 A1	8/2002	Blumenthal et al.
8,864,708 B1	10/2014	Vitello	2002/0104770 A1	8/2002	Shapeton et al.
8,911,424 B2	12/2014	Weadock et al.	2002/0133119 A1	9/2002	Eakins et al.
8,945,082 B2	2/2015	Geiger et al.	2003/0055685 A1	3/2003	Cobb et al.
9,016,473 B2	4/2015	Tamarindo	2003/0146617 A1	8/2003	Franko, Sr.
9,082,157 B2	7/2015	Gibson	2003/0183547 A1	10/2003	Heyman
9,101,534 B2	8/2015	Bochenko	2004/0008123 A1	1/2004	Carrender et al.
D738,495 S *	9/2015	Strong ..... D24/127	2004/0064095 A1	4/2004	Vitello
D743,019 S *	11/2015	Schultz ..... D24/108	2004/0116858 A1	6/2004	Heinz et al.
9,199,042 B2	12/2015	Farrar et al.	2004/0186437 A1	9/2004	Frenette et al.
9,199,749 B1	12/2015	Vitello	2004/0225258 A1	11/2004	Balestracci
9,220,486 B2	12/2015	Schweiss et al.	2005/0146081 A1	7/2005	MacLean et al.
9,220,577 B2	12/2015	Jessop et al.	2005/0148941 A1	7/2005	Farrar et al.
9,227,019 B2	1/2016	Swift et al.	2005/0209555 A1	9/2005	Middleton et al.
D750,228 S	2/2016	Strong et al.	2006/0084925 A1	4/2006	Ramsahoye
9,272,099 B2	3/2016	Limaye et al.	2006/0089601 A1	4/2006	Dionigi
9,311,592 B1	4/2016	Vitello et al.	2006/0173415 A1	8/2006	Cummins
D756,777 S	5/2016	Berge et al.	2006/0189933 A1	8/2006	Alheidt et al.
9,336,669 B2	5/2016	Bowden et al.	2007/0060898 A1	3/2007	Shaughnessy et al.
D759,486 S	6/2016	Ingram et al.	2007/0106234 A1	5/2007	Klein
D760,384 S *	6/2016	Niunoya ..... D24/127	2007/0142786 A1	6/2007	Lampropoulos et al.
D760,902 S *	7/2016	Persson ..... D24/162	2007/0191690 A1	8/2007	Hasse et al.
9,402,967 B1	8/2016	Vitello	2007/0219503 A1	9/2007	Loop et al.
9,427,715 B2	8/2016	Palazzolo et al.	2007/0257111 A1	11/2007	Ortenzi
9,433,768 B2	9/2016	Tekeste et al.	2008/0068178 A1	3/2008	Meyer
9,463,310 B1	10/2016	Vitello	2008/0097310 A1	4/2008	Buehler et al.
D773,043 S	11/2016	Insgram et al.	2008/0106388 A1	5/2008	Knight
			2008/0140020 A1	6/2008	Shirley
			2008/0243088 A1	10/2008	Evans
			2008/0303267 A1	12/2008	Schnell et al.
			2008/0306443 A1	12/2008	Neer

(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0084804 A1 4/2009 Caspary  
 2009/0099552 A1 4/2009 Levy et al.  
 2009/0149815 A1 6/2009 Kiel et al.  
 2009/0166311 A1 7/2009 Claessens  
 2009/0326481 A1 12/2009 Swisher et al.  
 2010/0084403 A1 4/2010 Popish et al.  
 2010/0126894 A1 5/2010 Koukol et al.  
 2010/0179822 A1 7/2010 Reppas  
 2010/0228226 A1 9/2010 Nielsen  
 2010/0252564 A1 10/2010 Martinez et al.  
 2010/0283238 A1 11/2010 Deighan et al.  
 2011/0044850 A1 2/2011 Solomon et al.  
 2011/0046550 A1 2/2011 Schiller et al.  
 2011/0046603 A1 2/2011 Felsovalyi et al.  
 2012/0064515 A2 3/2012 Knapp et al.  
 2012/0096957 A1 4/2012 Ochman  
 2012/0110950 A1 5/2012 Schraudolph  
 2013/0018356 A1 1/2013 Prince et al.  
 2013/0056130 A1 3/2013 Alpert et al.  
 2013/0088354 A1 4/2013 Thomas  
 2013/0237949 A1 9/2013 Miller  
 2013/0269592 A1 10/2013 Heacock et al.  
 2014/0000781 A1 1/2014 Franko, Jr.  
 2014/0034536 A1 2/2014 Reinhardt et al.  
 2014/0069202 A1 3/2014 Fisk  
 2014/0069829 A1 3/2014 Evans  
 2014/0135738 A1 5/2014 Panian  
 2014/0155868 A1 6/2014 Nelson et al.  
 2014/0163465 A1 6/2014 Bartlett, II et al.  
 2014/0257843 A1 9/2014 Adler et al.  
 2014/0326727 A1 11/2014 Jouin  
 2014/0353196 A1 12/2014 Key  
 2015/0182686 A1 7/2015 Okihara

2015/0191633 A1 7/2015 De Boer et al.  
 2015/0302232 A1 10/2015 Strassburger et al.  
 2015/0305982 A1 10/2015 Bochenko  
 2015/0310771 A1 10/2015 Atkinson et al.  
 2016/0067422 A1 3/2016 Davis et al.  
 2016/0090456 A1 3/2016 Ishimaru et al.  
 2016/0144119 A1 5/2016 Limaye et al.  
 2016/0158110 A1 6/2016 Swisher et al.  
 2016/0158449 A1 6/2016 Limaye et al.  
 2016/0176550 A1 6/2016 Vitello et al.  
 2016/0250420 A1 9/2016 Maritan et al.  
 2016/0279032 A1 9/2016 Davis  
 2016/0328586 A1 11/2016 Bowden et al.  
 2016/0361235 A1 12/2016 Swisher  
 2016/0367439 A1 12/2016 Davis et al.  
 2017/0007771 A1 1/2017 Duinat et al.  
 2017/0014310 A1 1/2017 Hyun et al.  
 2017/0124289 A1 5/2017 Hasan et al.  
 2017/0173321 A1 6/2017 Davis et al.  
 2017/0203086 A1 7/2017 Davis  
 2017/0225843 A1 8/2017 Glaser et al.  
 2017/0239141 A1 8/2017 Davis et al.  
 2017/0319438 A1 11/2017 Davis et al.  
 2017/0354792 A1 12/2017 Ward  
 2018/0001540 A1 1/2018 Byun  
 2018/0014998 A1 1/2018 Yuki et al.  
 2018/0078684 A1 3/2018 Peng et al.  
 2018/0089593 A1 3/2018 Patel et al.  
 2018/0098915 A1 4/2018 Rajagopal et al.

FOREIGN PATENT DOCUMENTS

WO WO2008/000279 1/2008  
 WO WO 2017086607 5/2015

\* cited by examiner



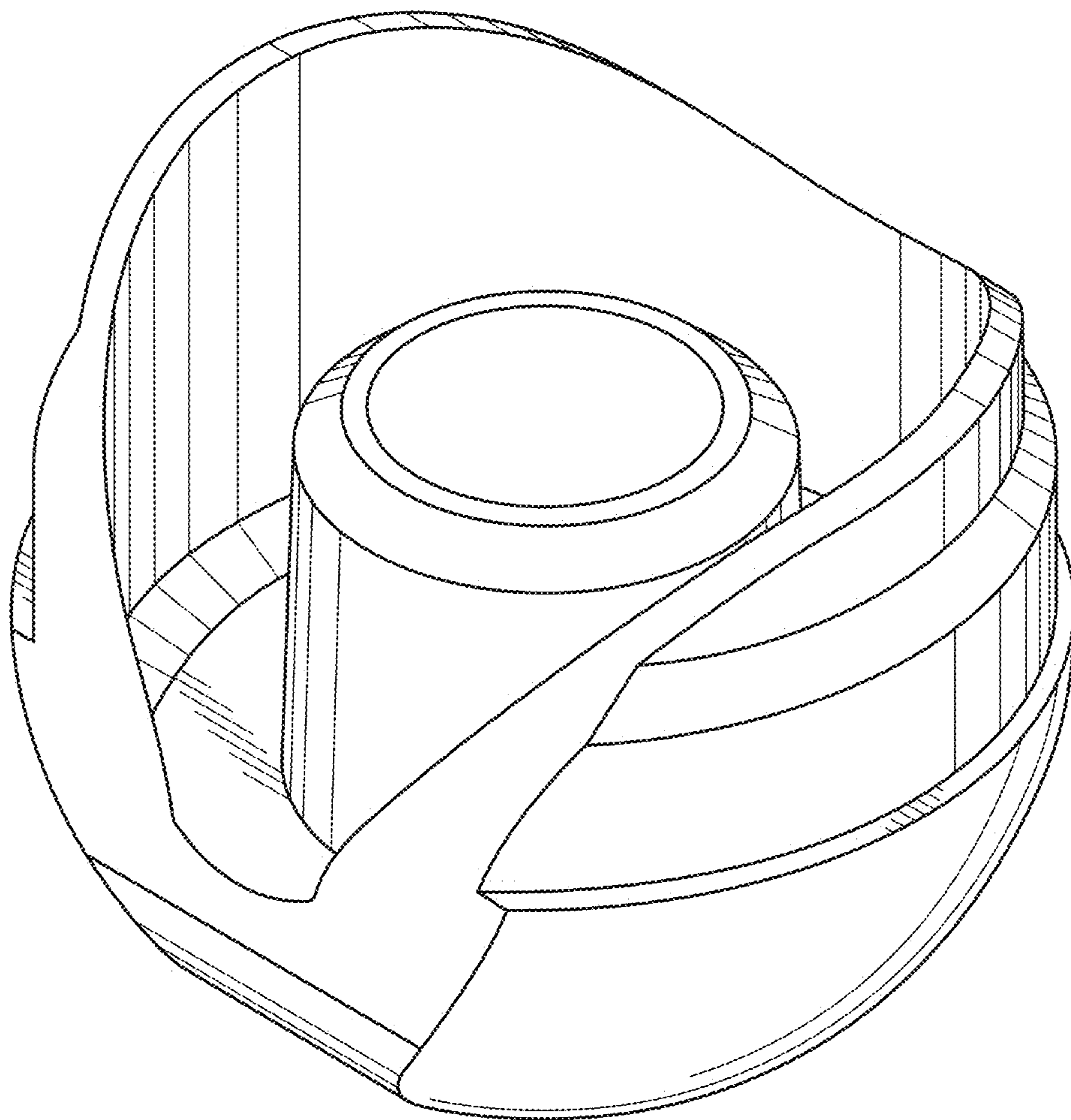


FIG. 1

Fig. 2

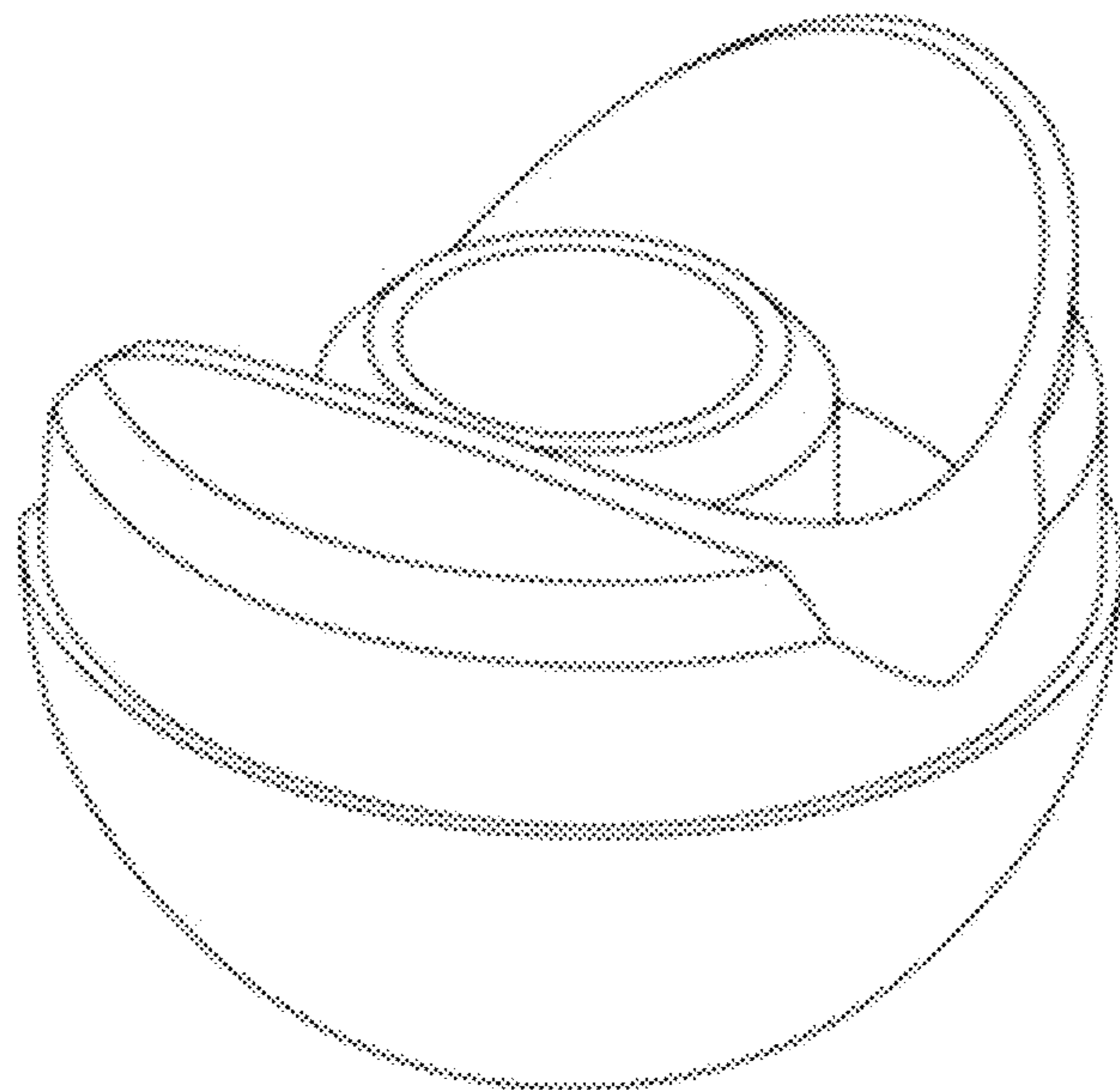


Fig. 3

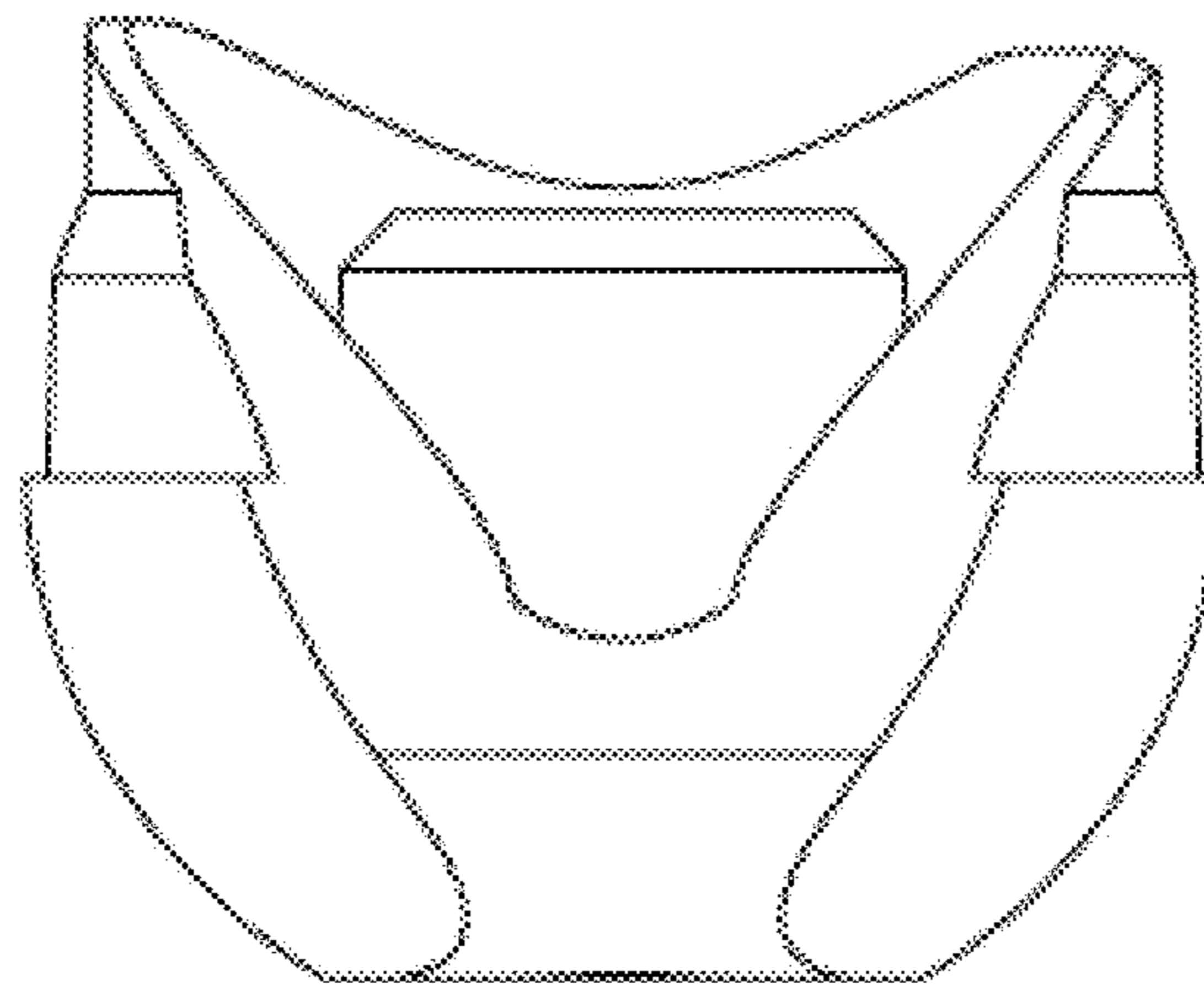


Fig. 4

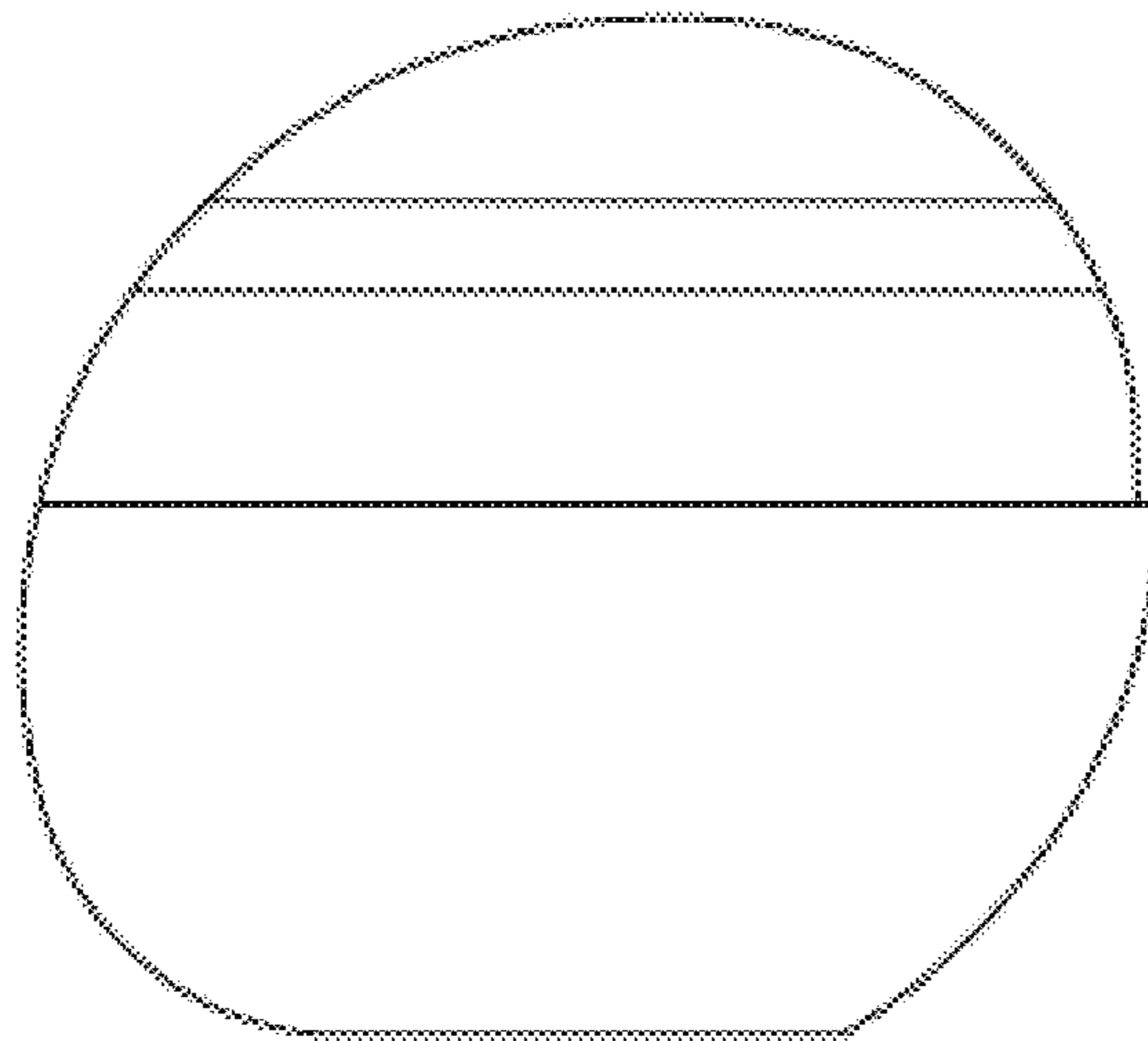
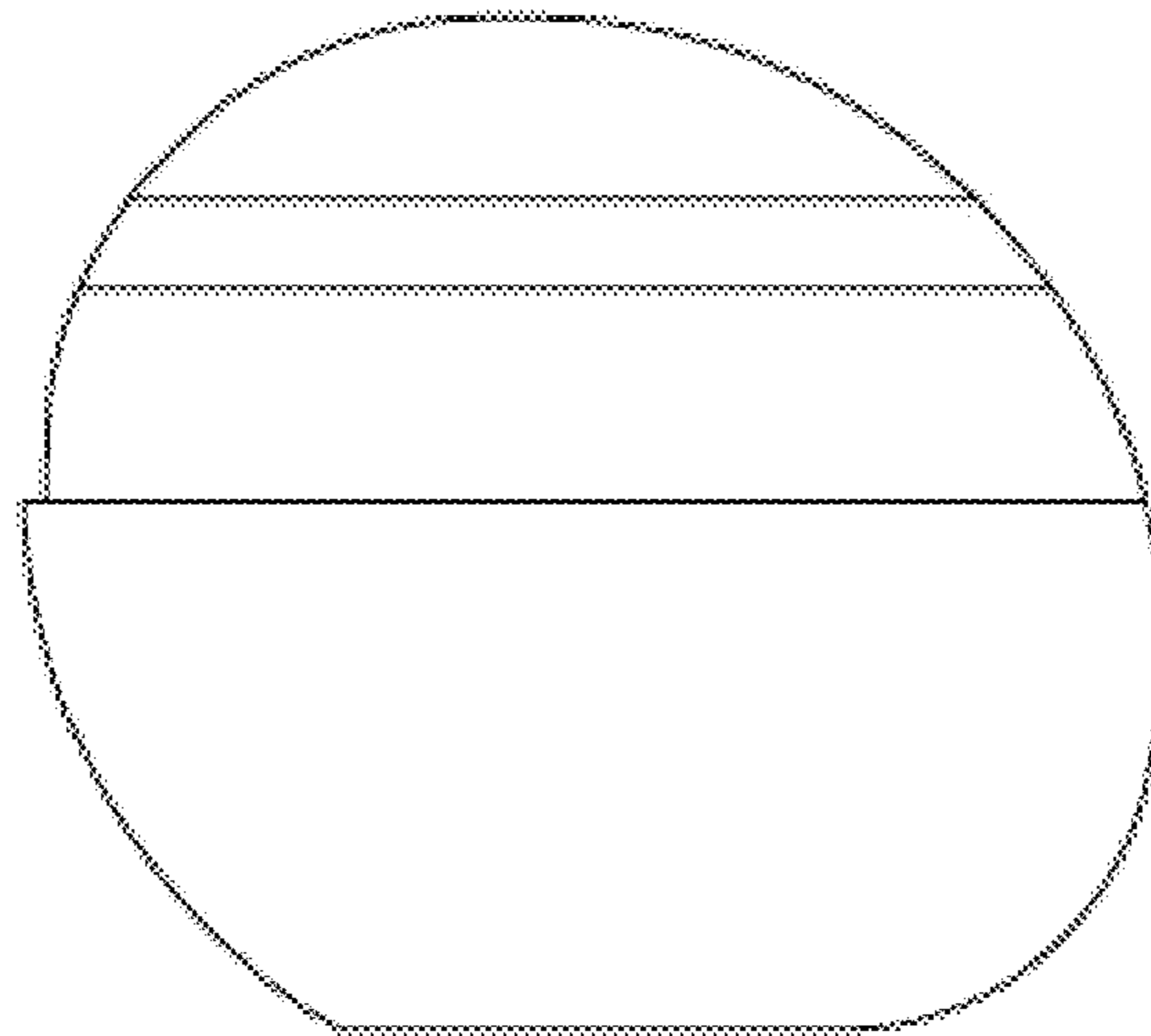




Fig. 5



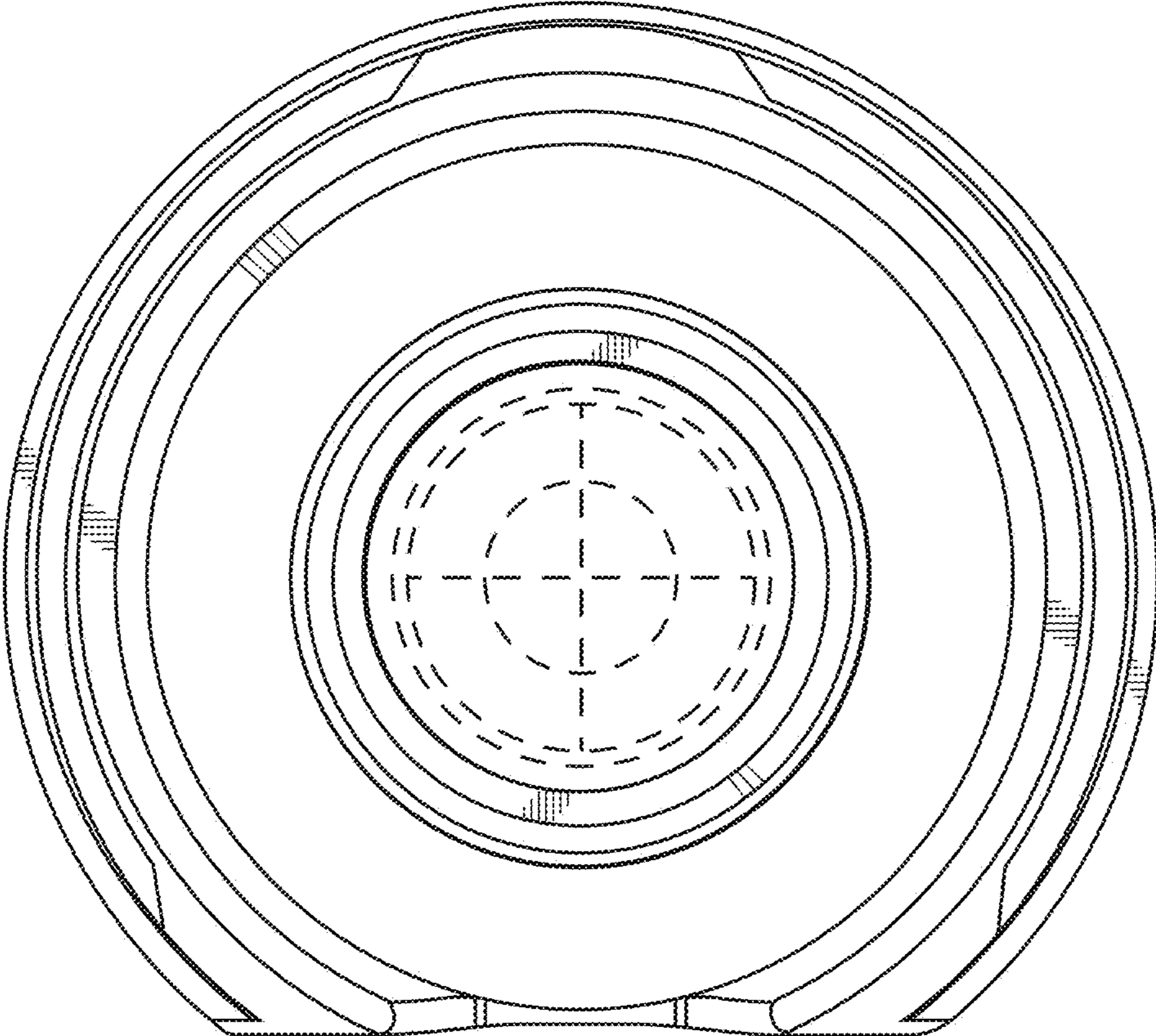


FIG. 6

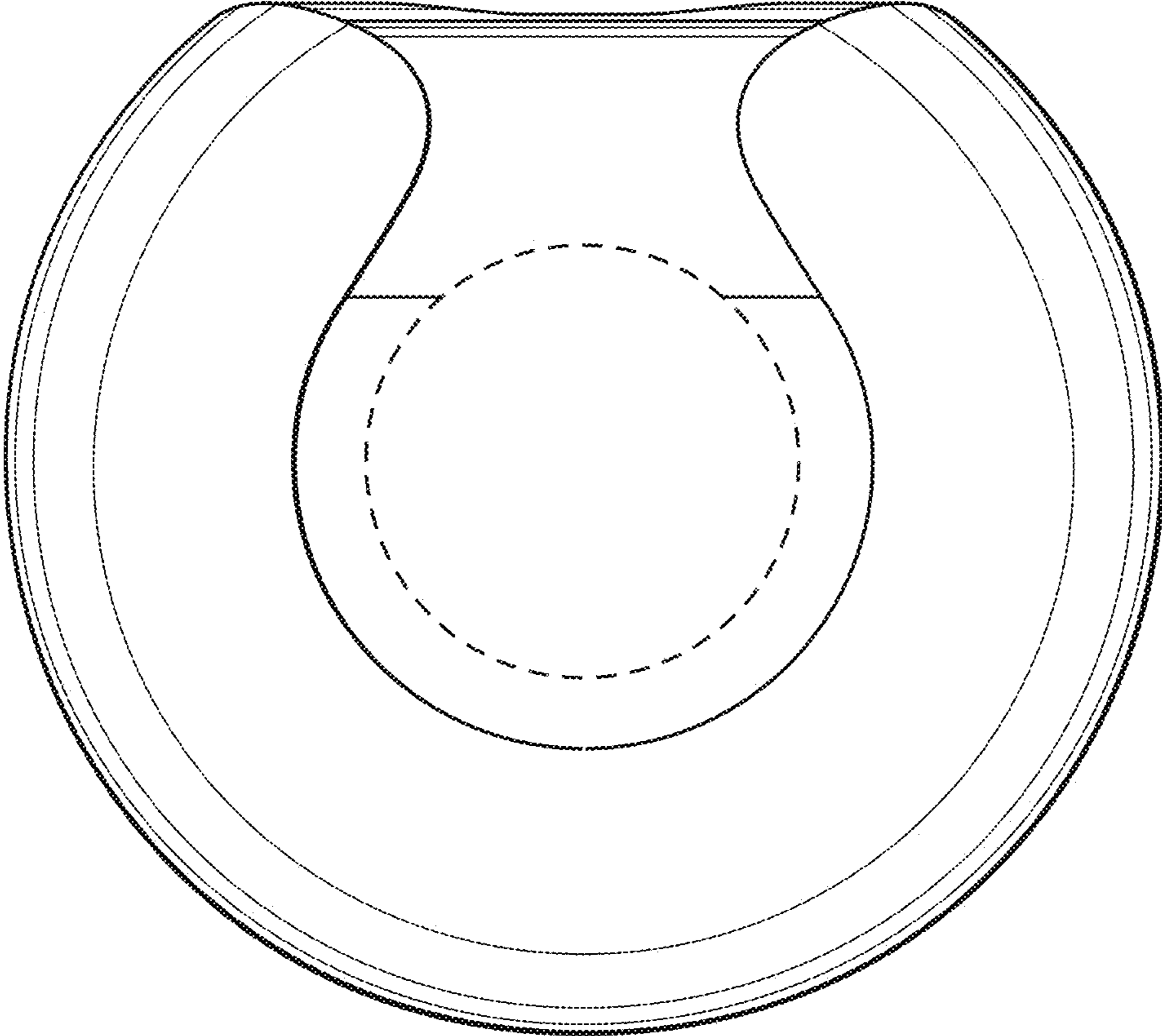


FIG. 7



Fig. 8

