

US00D564100S

(12) **United States Design Patent** (10) **Patent No.:** **US D564,100 S**
O'Banion et al. (45) **Date of Patent:** **** Mar. 11, 2008**

(54) **ELECTROPORATION VESSEL**

(75) Inventors: **Matthew O'Banion**, Vista, CA (US);
Adam Scott Henry, Oceanside, CA
(US); **Harry Yim**, Vista, CA (US); **Lisa**
Marie Olivier, San Diego, CA (US)

(73) Assignee: **Invitrogen Corporation**, Carlsbad, CA
(US)

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

(21) Appl. No.: **29/228,061**

(22) Filed: **Apr. 19, 2005**

(51) **LOC (8) Cl.** **24-02**

(52) **U.S. Cl.** **D24/216**

(58) **Field of Classification Search** D24/216-230,
D24/110, 121; D9/439, 440, 503, 521, 544,
D9/560; 422/99-102, 104; 435/288.1, 288.2,
435/294.1, 295.1; 356/246; 215/227, 296
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,981,797	A	1/1991	Jessee et al.	
5,186,800	A	2/1993	Dower	
5,422,272	A	6/1995	Papp et al.	
5,472,671	A	12/1995	Nilsson et al.	
D367,613	S *	3/1996	Weiler	D24/224
D372,090	S *	7/1996	MacCauley et al.	D24/121
D375,559	S *	11/1996	Baxter	D24/224
5,676,646	A	10/1997	Hofmann et al.	
D403,079	S *	12/1998	Pawlak et al.	D24/224
5,869,328	A	2/1999	Antoci et al.	
5,888,732	A	3/1999	Hartley et al.	
5,891,692	A	4/1999	Bloom et al.	
6,001,617	A	12/1999	Raptis	
6,096,020	A	8/2000	Hofmann	
6,103,084	A	8/2000	Uhen	
D431,193	S *	9/2000	Shanahan	D9/544
6,143,557	A	11/2000	Hartley et al.	

6,150,148	A	11/2000	Nanda et al.	
6,171,861	B1	1/2001	Hartley et al.	
6,258,592	B1	7/2001	Ragsdale et al.	
6,261,815	B1	7/2001	Meyer	
6,270,969	B1	8/2001	Hartley et al.	
6,277,608	B1	8/2001	Hartley et al.	
6,314,316	B1	11/2001	Gilbert et al.	
6,328,164	B1	12/2001	Riekkinen et al.	
D485,885	S *	1/2004	Bonelli et al.	D23/207
6,699,712	B2	3/2004	Kaste et al.	
6,713,292	B2	3/2004	Ragsdale	
D535,566	S *	1/2007	Lin	D9/560
2003/0129716	A1	7/2003	Ragsdale et al.	
2003/0139889	A1	7/2003	Ragsdale et al.	

OTHER PUBLICATIONS

"9080.1—1 MM Cuvette" [online]. Continental Laboratory Products, [retrieved on Mar. 3, 2004]. Retrieved from the Internet: <URL: www.clpdirect.com/go/*oPqAMrCn1WklsskzhooucblinBBSXGTXVKLVYERX=M...>, 1 page.

(Continued)

Primary Examiner—Joel A. Sincavage
Assistant Examiner—Anhdao Doan

(57) **CLAIM**

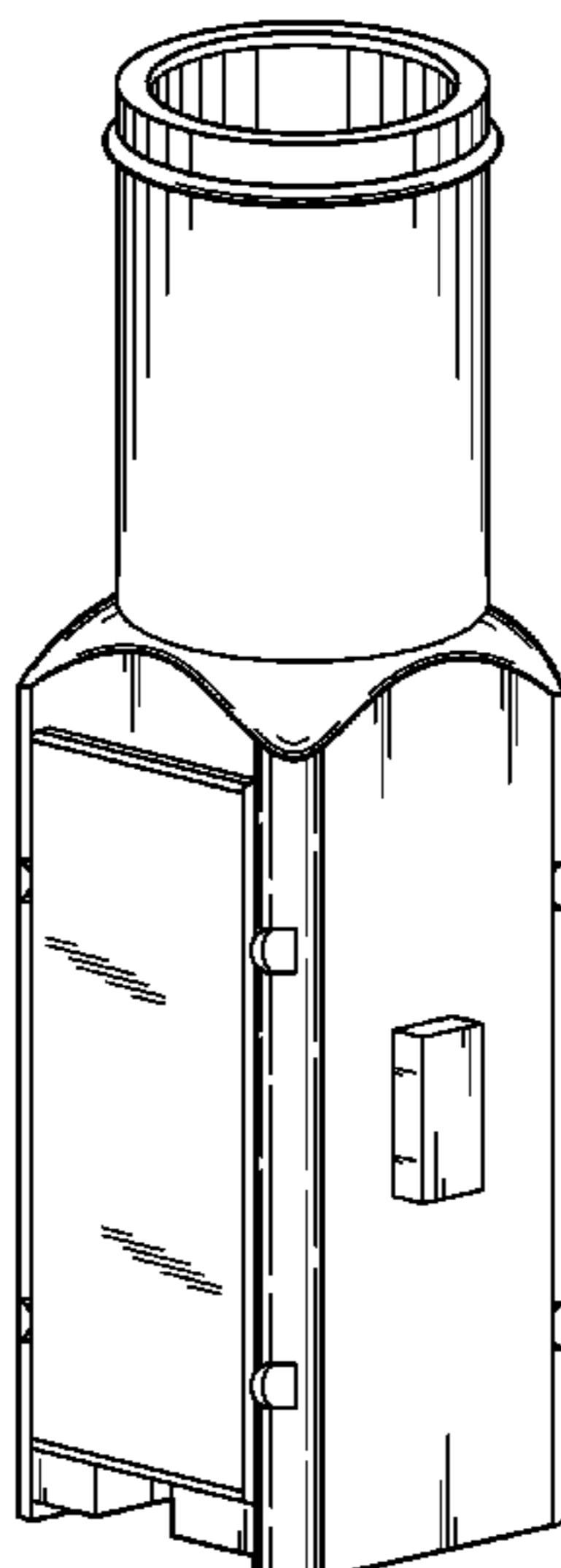
The ornamental design for an electroporation vessel, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an electroporation according to the present invention;
FIG. 2 is a side elevation view thereof;
FIG. 3 is a front elevation view thereof;
FIG. 4 is a bottom plan view thereof; and,
FIG. 5 is a top plan view thereof.

The broken lines in FIG. 5 illustrate portions of the electroporation vessel that form no part of the claimed design.

1 Claim, 3 Drawing Sheets



OTHER PUBLICATIONS

“BTX Electroporation Cuvettes Plus™” [online]. BTX Medical Delivery Systems, [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.btxonline.com/products/cuvettes/>, 2 pages.

“Electroporation Cuvettes” [online]. Bio-Rad, [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.bio-rad.com/B2B/BioRad/product/br_category.jsp?BV_SessionID=@@@@18309>, 2 pages.

“Electroporation Cuvettes” [online]. BioSmith, [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.biosmith.com/05_ec_xl.php>, 1 page.

“Electroporation Cuvettes” [online]. E&K Scientific, [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.eandkscientific.com/electroporation.htm>, 1 page.

“Electroporation Cuvettes” [online]. Eppendorf AG, [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.eppendorf.com/script/cat-prd.php?NNA=&l=25&styleid=cellxtechnology_xc...>, 1 page.

“Electroporation Cuvettes” [online]. L.M.I. Co., Ltd., [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.lmico.com.tw/usa_p2_6.htm>, 1 page.

“Electroporation Cuvettes” [online]. Spectrocell, [retrieved on Mar. 3, 2004]. Retrieved from the Internet: <URL: www.spectrocell.com/electro.htm>, 3 pages.

“Electroporation Cuvettes” Manual, Eppendorf AG, date unknown, 1 page.

“Electroporation Precision Universal Cuvettes,” Thermo Electron Corporation, Product Information www.thermo.com>, date unknown, 2 pages.

“Electroporators” [online]. Biocompare, Inc., [retrieved on Feb. 27, 2004]. Retrieved from the Internet: <URL: www.biocompare.com/matrix/16Electroporators.html>, 3 pages.

“Electroporation—Electroporation Cuvettes” [online]. Midwest Scientific, Inc., 1998, [retrieved on Mar. 3, 2004]. Retrieved from the Internet: <URL: www.midsci.com/docs/products/molbio/electro>, 2 pages.

“Eppendorf Electroporation Cuvettes” [online]. Eppendorf North America, [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.eppendorfna.com/products/ELEC_cuvettes_de.asp>, 1 page.

“Eppendorf™ Electroporation Cuvettes” [online]. Brinkmann An Eppendorf Company, [retrieved on Mar. 2, 2004]. Retrieved from the Internet: <URL: www.brinkmann.com/product.asp?path=155&ref=69>, 1 page.

“Eppendorf® Electroporator 2510” Brinkmann An Eppendorf Company, [retrieved on Mar. 2, 2004]. Retrieved from the Internet: <URL: www.brinkmann.com/product.asp?ref=70&path=154&tb=Description>, 1 page.

“Precision Universal Cuvettes,” [online]. Thermo Electron Corporation, [retrieved on Mar. 3, 2004]. Retrieved from the Internet: <URL: www.thermo.com/com/cda/product/detail/1,1055,17832,00.html>, 1 page.

Image [online]. Yorkshire Bioscience Ltd, [retrieved on Apr. 22, 2005]. Retrieved from the Internet: <URL: www.york-bio.com/Cuvette_Photo_large.jpg>, 1 page.

Gise and Blanchard, *Modern Semiconductor Fabrication Technology*, 1986, Ch. 8, Prentice-Hall, England Cliffs, NJ.

Printed Circuit Handbook, 1976, Ch. 1 and 8, Coombs, Jr., ed., McGraw-Hill, NY, NY.

Hanahan et al., “Plasmid Transformation of *Escherichia coli* and Other Bacteria,” *Meth. Enzymol.*, 1991, 204:63-113.

“Electroporation Cuvettes”, DiaMed Lab Supplies, Inc.; [Retrieved on Sep. 18, 2007], Retrieved from Internet: <URL: www.diamed.ca/index.php?cPath=265_60_60_255>, 2 pages.

“Electroporation Cuvettes”, DiaMed Lab Supplies, Inc.; [Retrieved on Sep. 18, 2007], Enlarged picture from reference A1, Retrieved from Internet: <URL: www.diamed.ca/images/Molcuv5520400.jpg>, 1 page.

“Electroporation Cuvettes”, DiaMed Lab Supplies, Inc.; [Retrieved on Sep. 18, 2007], Enlarged picture from reference A1, Retrieved from Internet: <URL: www.diamed.ca/images/Molcuv5510400.jpg>, 1 page.

“Electroporation Cuvettes”, DiaMed Lab Supplies, Inc.; [Retrieved on Sep. 18, 2007], Enlarged picture from reference A1, Retrieved from Internet: <URL: www.diamed.ca/images/Molcuv5540400.jpg>, 1 page.

“Electroporation cuvette 1mm gap—Red cap (Pk50)”, Web Scientific Ltd.; [Retrieved on Sep. 18, 2007], Retrieved from Internet: <URL: www.webscientific.co.uk/acatalog/Electroporation.html>, 2 pages.

“Electroporation Cuvettes”, Cambio Ltd.; [Retrieved on Sep. 18, 2007], Retrieved from Internet: <URL: www.cambio.co.uk/index.php?page=catalogue&chapter=13&product=210>, 3 pages.

* cited by examiner

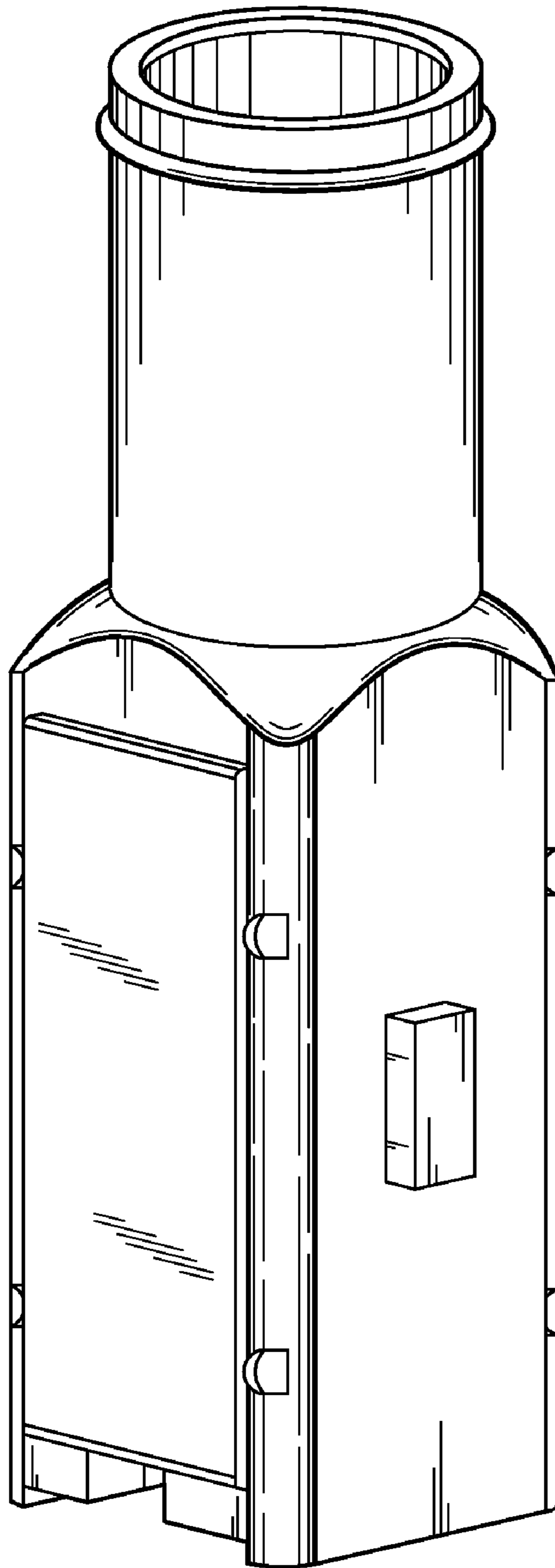


FIG. 1

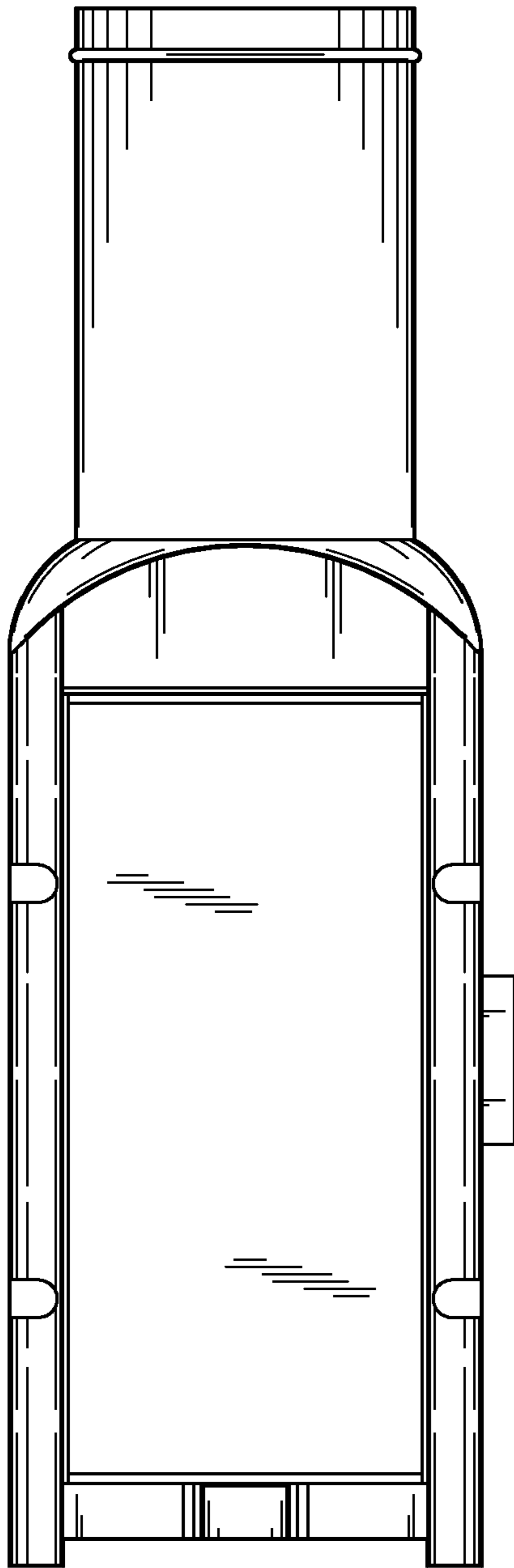


FIG. 2

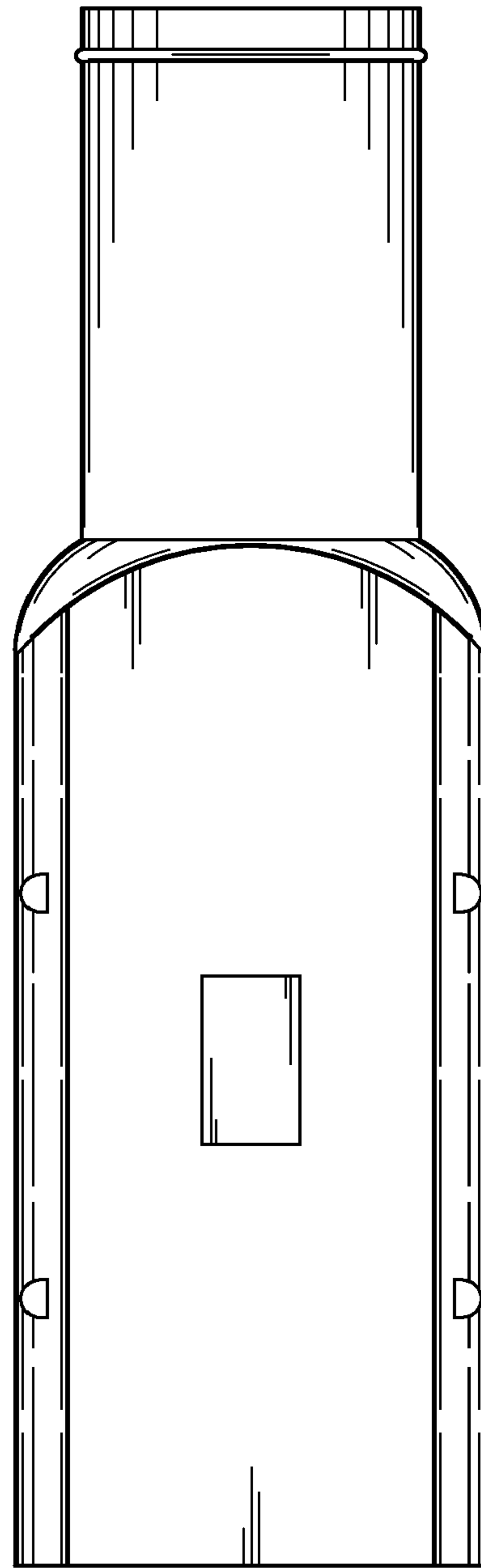


FIG. 3

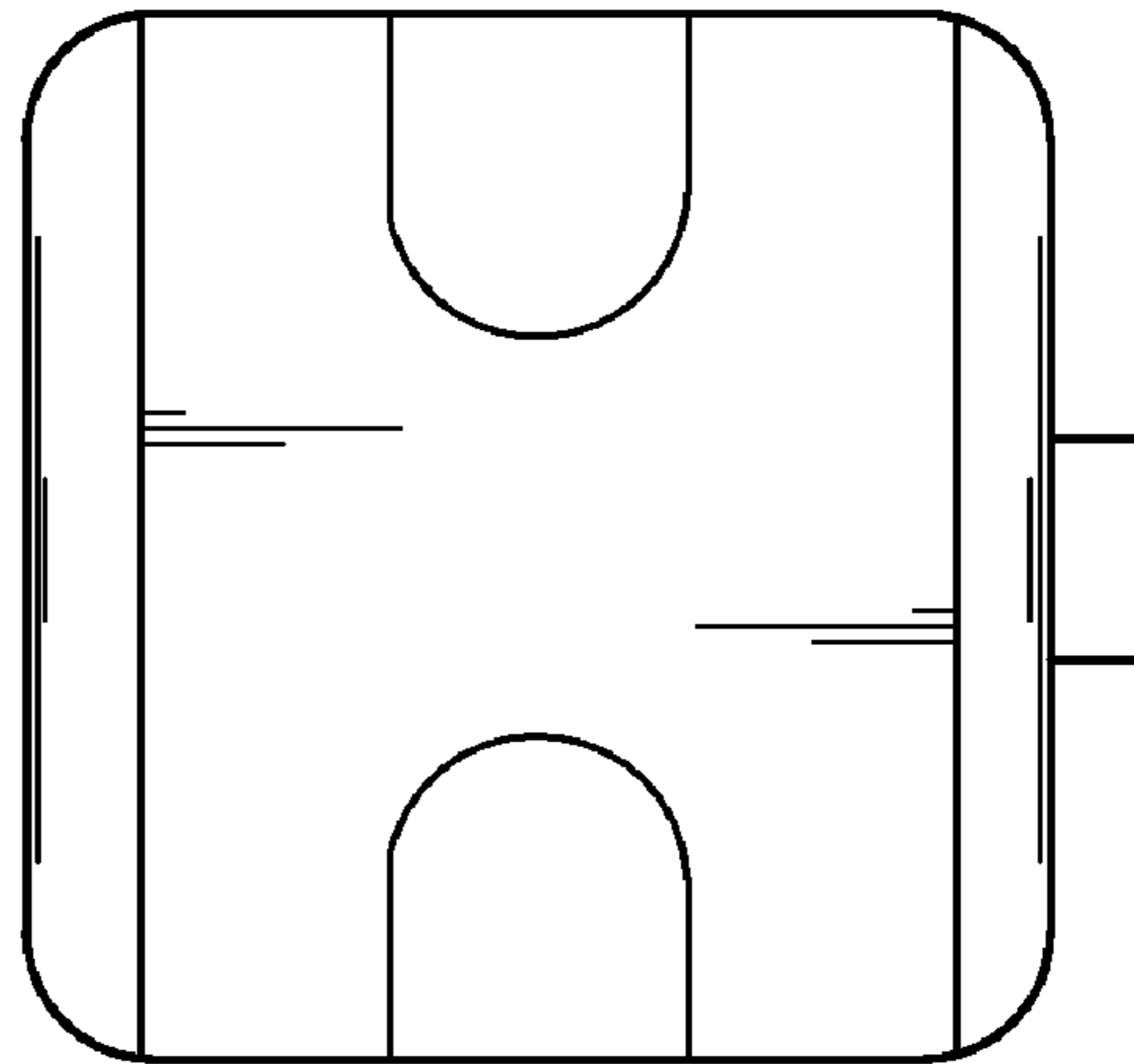


FIG. 4

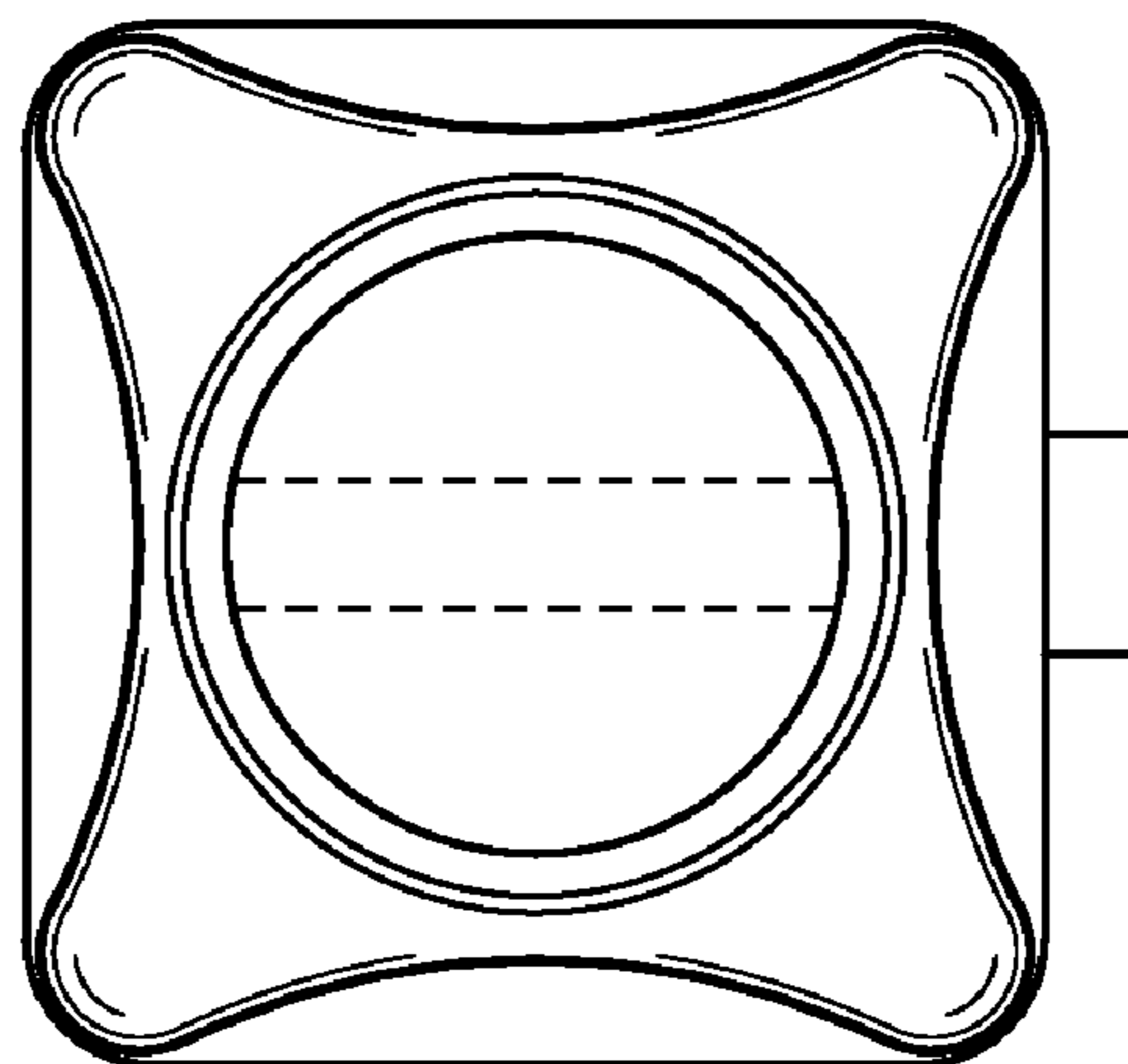


FIG. 5