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(12) **United States Design Patent** (10) **Patent No.:** **US D818,959 S**
Stockman (45) **Date of Patent:** **** *May 29, 2018**

(54) **CAPACITOR**

(56) **References Cited**

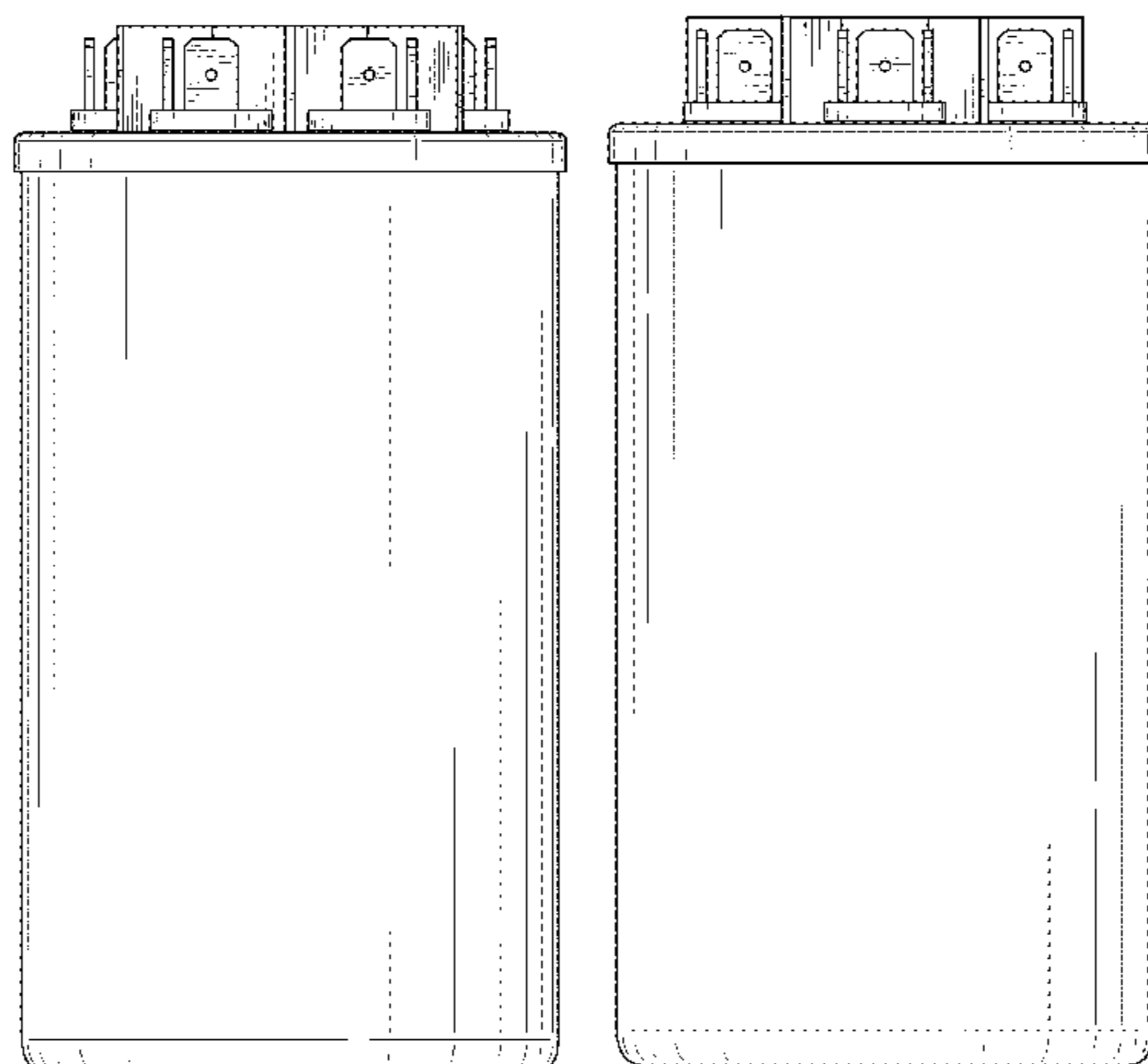
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Palm Coast, FL (US)
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Palm Coast, FL (US)
- (*) Notice: This patent is subject to a terminal dis-
claimer.
- (**) Term: **15 Years**
- (21) Appl. No.: **29/589,876**
- (22) Filed: **Jan. 5, 2017**

U.S. PATENT DOCUMENTS

1,665,499	A	4/1928	Hoch	
1,707,959	A	4/1929	Fried	
1,943,714	A	1/1934	Bailey	
2,202,166	A	11/1937	Peck	
D122,825	S *	10/1940	Peck	D13/125
D124,726	S *	1/1941	Shimer	D13/110
2,569,925	A	12/1948	Deeley	
2,896,008	A	12/1953	Putz	
3,015,687	A	11/1959	Ruscito	
3,302,081	A	1/1967	Grahame	
3,304,473	A	2/1967	Netherwood et al.	
D210,210	S *	2/1968	Braiman et al.	D13/125
3,377,510	A	4/1968	Rayno	
3,921,041	A	11/1975	Stockman	
3,988,650	A	10/1976	Fritze	
4,028,595	A	6/1977	Stockman	
4,095,902	A	6/1978	Florer et al.	
4,106,068	A	8/1978	Flanagan	
4,107,758	A	8/1978	Shirn et al.	
4,112,424	A	9/1978	Lapeyre	
4,209,815	A	6/1980	Rollins et al.	
4,240,126	A	12/1980	Sanvito	
4,263,638	A	4/1981	Stockman et al.	
4,312,027	A	1/1982	Stockman	
4,326,237	A	4/1982	Markarian et al.	
4,352,145	A	9/1982	Stockman	
4,363,078	A	12/1982	Dwyer	
4,398,782	A	8/1983	Markarian	
4,408,818	A	10/1983	Markarian	
4,447,854	A	5/1984	Markarian	
4,486,809	A	12/1984	Deak et al.	
4,558,394	A	12/1985	Stockman	
4,586,107	A	4/1986	Price	
4,631,631	A	12/1986	Hodges et al.	
4,633,365	A	12/1986	Stockman	
4,633,367	A	12/1986	Strange et al.	
4,633,369	A	12/1986	Lapp et al.	
4,639,828	A	1/1987	Strange et al.	
4,698,725	A	10/1987	MacDougall et al.	
4,754,361	A	6/1988	Venturini	
4,812,941	A	3/1989	Rice et al.	
4,897,760	A	1/1990	Bourbeau	
5,006,726	A	4/1991	Okumura	
5,019,934	A	5/1991	Bentley et al.	
5,138,519	A	8/1992	Stockman	
5,148,347	A	9/1992	Cox et al.	
5,313,360	A	5/1994	Stockman	
5,381,301	A	1/1995	Hudis	
5,673,168	A	9/1997	Efford et al.	

Related U.S. Application Data

- (63) Continuation of application No. 15/097,383, filed on
Apr. 13, 2016, which is a continuation of application
No. 13/601,205, filed on Aug. 31, 2012, now Pat. No.
9,343,238, which is a continuation of application No.
12/945,979, filed on Nov. 15, 2010, now Pat. No.
8,270,143, which is a continuation of application No.
12/246,676, filed on Oct. 7, 2008, now Pat. No.
7,835,133, which is a continuation of application No.
11/733,624, filed on Apr. 10, 2007, now Pat. No.
7,474,519, which is a continuation of application No.
11/317,700, filed on Dec. 23, 2005, now Pat. No.
7,203,053.
- (51) **LOC (11) Cl.** **13-03**
- (52) **U.S. Cl.**
USPC **D13/124**
- (58) **Field of Classification Search**
USPC D13/123-132, 154, 184, 199
CPC H01G 4/224; H01G 4/232; H01G 4/28;
H01G 4/385; H01G 4/40
See application file for complete search history.



US D818,959 S

5,921,820 A	7/1999	Dijkstra	9,343,238 B2	5/2016	Stockman	
5,940,263 A	8/1999	Jakoubovitch	9,378,893 B2	6/2016	Stockman	
6,009,348 A	12/1999	Rorvick et al.	9,412,521 B2	8/2016	Stockman	
6,014,308 A	1/2000	Stockman	9,424,995 B2	8/2016	Stockman	
6,031,713 A	2/2000	Takeisha et al.	9,466,429 B1 *	10/2016	Casanova	H01G 11/82
6,084,764 A	7/2000	Anderson	9,496,086 B2	11/2016	Stockman	
6,141,205 A	10/2000	Nutzman	9,536,670 B2	1/2017	Stockman	
6,147,856 A	11/2000	Karidis	9,859,060 B1	1/2018	Stockman et al.	
6,157,531 A	12/2000	Breyen et al.	2001/0025618 A1	10/2001	Kelling	
6,212,058 B1	4/2001	Huber	2006/0227495 A1	10/2006	Stockman	
6,222,270 B1	4/2001	Lee	2007/0025051 A1 *	2/2007	Stockman	H01G 2/24
6,282,078 B1	8/2001	Tsai				361/301.5
6,282,081 B1	8/2001	Takabayashi et al.	2007/0236860 A1	10/2007	Stockman	
6,310,756 B1	10/2001	Miura et al.	2007/0279015 A1	12/2007	Livingston et al.	
6,313,978 B1	11/2001	Stockman et al.	2008/0158780 A1	7/2008	Stockman	
6,373,720 B1	4/2002	Fechtig et al.	2009/0052109 A1	2/2009	Stockman et al.	
6,385,490 B1	5/2002	O'Phelan	2009/0219665 A1	9/2009	Stockman	
6,404,618 B1	6/2002	Beard et al.	2011/0063775 A1	3/2011	Stockman	
6,490,158 B1	12/2002	Ellyson et al.	2011/0134584 A1 *	6/2011	Stockman	H01G 5/38
6,697,249 B2	2/2004	Maletin et al.				361/328
6,798,677 B2	9/2004	Jakob et al.	2011/0157764 A1	6/2011	Stockman	
6,807,048 B1	10/2004	Nielsen	2011/0228446 A1	9/2011	Stockman	
6,819,545 B1	11/2004	Lobo et al.	2011/0317333 A1 *	12/2011	Chun	H01G 2/04
6,842,328 B2	1/2005	Schott				361/518
6,847,517 B2	1/2005	Iwaida et al.	2013/0003252 A1	1/2013	Stockman	
6,888,266 B2	5/2005	Burke et al.	2013/0214720 A1	8/2013	Stockman	
6,922,330 B2	7/2005	Nielson et al.	2013/0329342 A1	12/2013	Stockman	
6,930,874 B2	8/2005	Lobo	2013/0343029 A1	12/2013	Stockman	
6,982,539 B1	1/2006	Ward	2014/0049205 A1 *	2/2014	Curiel	H02P 1/44
6,995,971 B2	2/2006	Norton				318/785
7,031,139 B1	4/2006	Fayram	2014/0201018 A1	7/2014	Chassin	
7,046,498 B1	5/2006	Huang	2014/0285949 A1	9/2014	Stockman	
D522,456 S *	6/2006	Matsumoto	2014/0347784 A1	11/2014	Stockman et al.	D13/125
7,110,240 B2	9/2006	Breyen	2015/0016012 A1	1/2015	Stockman	
7,203,053 B2	4/2007	Stockman	2015/0022991 A1 *	1/2015	Stockman	H01G 4/385
7,251,123 B2	7/2007	O'Phelan				361/821
7,365,959 B1	4/2008	Ward	2015/0138690 A1	5/2015	Stockman	
7,423,861 B2	9/2008	Stockman	2015/0255218 A1	9/2015	Stockman et al.	
7,474,519 B2	1/2009	Stockman	2016/0203916 A1	7/2016	Stockman	
7,474,520 B2	1/2009	Kashihara	2016/0233030 A1	8/2016	Stockman	
7,492,574 B2	2/2009	Fresard et al.	2017/0011855 A1	1/2017	Stockman et al.	
7,511,941 B1	3/2009	Gallay	2017/0032898 A1	2/2017	Stockman	
7,547,233 B2	6/2009	Inoue et al.	2017/0110252 A1 *	4/2017	Stockman	H01G 4/385
7,667,954 B2	2/2010	Lessner	2017/0186554 A1	6/2017	Stockman	
7,710,713 B2	5/2010	Restorff	2017/0236646 A1 *	8/2017	Stockman	H01G 4/385
7,835,133 B2	11/2010	Stockman				
7,848,079 B1	12/2010	Gordin et al.				
7,867,290 B2	1/2011	Nielsen				
7,881,043 B2	2/2011	Hirose et al.				
7,911,762 B2	3/2011	Stockman				
7,911,766 B2	3/2011	Caumont et al.				
7,952,854 B2	5/2011	Stockman				
7,987,593 B1	8/2011	Gorst				
8,029,290 B2	10/2011	Johnson				
8,170,662 B2	5/2012	Bocek				
8,174,817 B2	5/2012	Georgopoulos et al.				
8,270,143 B2	9/2012	Stockman				
8,274,778 B2	9/2012	Yoshinaga et al.				
8,310,802 B2	11/2012	Fujii et al.				
8,331,076 B2	12/2012	Tuncer				
8,456,795 B2	6/2013	Stockman				
8,465,555 B2	6/2013	Sherwood				
8,514,547 B2	8/2013	Galvagni				
8,514,548 B2	8/2013	Miller et al.				
8,531,815 B2	9/2013	Stockman				
8,537,522 B2	9/2013	Stockman				
8,559,161 B2	10/2013	Takeoka et al.				
8,761,875 B2	6/2014	Sherwood				
8,842,411 B2	9/2014	Zhang				
8,853,318 B2	10/2014	Tielemans				
8,861,178 B2	10/2014	Terashima et al.				
8,861,184 B2	10/2014	Schmidt				
8,871,850 B2	10/2014	Koh et al.				
8,885,318 B2	11/2014	Stockman				
8,891,224 B2	11/2014	Stockman				
D729,164 S *	5/2015	Chen				D13/124
9,105,401 B2	8/2015	Dreissig				
9,318,261 B2	4/2016	Stockman				
9,324,501 B2	4/2016	Stockman				

FOREIGN PATENT DOCUMENTS

CA	2285721 A1 *	4/2000	H01G 4/221
EP	1115128 A2 *	7/2001	H01G 2/14
EP	2587503	5/2013	
FR	2343221	9/1977	
GB	517718	2/1940	
GB	2070861	9/1981	
GB	2169747	7/1986	

OTHER PUBLICATIONS

Grainger. <URL: https://www.grainger.com/product/5CMW3&AL!2966!3!166587674359!!!g!82128730437!?cm_mmc=PPC:+Google+PLA?campaignid=719691765&s_kwid=AL!2966!3!166587674359!!!82128730437!&ef_id=WRSnxQAAAILWhRlb:20170824174108:s>. Visited Aug. 24, 2017. Capacitor.*

“American Radionics—Home of the Turbo200 MultiUse Capacitor,” online archive of website captured at http://web.archive.org/web/20050309191805fw_/http://www.americanradionic.com/home, Mar. 9, 2005, (16 pages), (accessed May 29, 2014).

“AC Capacitors,” brochure by AmRad Engineering, Inc., undated (4 pages).

“American Radionic Co., Inc. Introduces A New Circuit Component The Patented Ultramet™ Capacitor,” poster by American Radionic Co., Inc., (poster undated, 1980 year date appears below one image), (one page).

“American Radionic Co., Inc. Introduces A New Circuit Component, The Patented Ultramet™ Capacitor,” poster by American Radionic Co., Inc., which is reprint from Electronic News dated Feb. 11, 1980, (one page).

“American Radionic Co., Inc. Introduces . . . The World’s First Multiple Metallized Film Dielectric Capacitor Produced from a Single Winding! The Patented Ultramet™ Capacitor,” poster by American Radionic Co., Inc. (undated) (one page).

“American Radionic Company’s Chronology of Patents, New Products and Technology Transfer Programs—From the Present, to the Past, a Thirty-Five Year Review,” online website having URL: <http://www.americanradionic.com/content/blogcategory/13/29/8/16>, accessed May 19, 2014 (undated) (3 pages).

“American Radionic Introduces Capacitors Without Compromise”, color brochure, 1989, (1 page).

“AmRad Engineering: Universal Capacitor,” *The Air Conditioning|Heating|Refrigeration News*, Jan. 29, 2005, Printout of website having URL: “<http://www.archrnews.com/articles/print/amrad-engineering-universal-capacitor>” (accessed Jun. 2, 2014) (1 page).

“Capacitors—Motor Run, Oil Filled Capacitors, AC Rated. AmRad.” Online archive of website captured at <http://web.archive.org/web/20041214091042/http://americanradionic.com>, Dec. 14, 2004, (13 pages) (accessed May 29, 2014).

“Capacitors—Motor Run, Oil Filled Capacitors, AC Rated. AmRad.” Online archive of website captured at <http://web.archive.org/web/20011126195819/http://www.americanradionic.com>, Nov. 26, 2001, (13 pages) (accessed May 29, 2014).

“Capacitors—Motor Run, Oil Filled Capacitors, AC Rated. AmRad.” Printout of website having URL: <http://amradcapacitors.com/index.htm>, Jan. 3, 2003(20 pages).

“Industrial Power Factor Correction Capacitors,” Cornell Dubilier, Undated (1 page).

“Product of the Year Awards,” *Electronic Products Magazine*, Jan. 1981, pp. 39-45.

“Super-Sized Show,” *ASHRAE Journal Show Daily*, 2005 International Air-Conditioning, Heating, Refrigerating Exposition, Tuesday, Feb. 8, 2005 (24 pages).

“The Patented Ultramet™ Capacitor,” poster by American Radionic Co., Inc., (undated) (three pages).

“The Patented Ultramet™ Capacitor. A product of years of American Radionic research & development,” poster by American Radionic Co., Inc. (undated) (one page).

Answer and affirmative defenses to Complaint by Cornell-Dubilier Electronics, Inc. (Allaman, Melissa) (Entered: Jan. 9, 2015).

Answer and affirmative defenses to Complaint by Packard Inc. (Allaman, Melissa) (Entered: Jan. 9, 2015).

Case Management and Scheduling Order: Amended Pleadings and Joinder of Parties due by Apr. 9, 2015. Discovery due by Feb. 16, 2016. Dispositive motions due by Apr. 7, 2016. Pretrial statement due by Aug. 11, 2016. All other motions due by Jul. 28, 2016. Plaintiff disclosure of expert report due by Dec. 10, 2015. Defendant disclosure of expert report due by Jan. 14, 2016. Final Pretrial Conference set for Aug. 18, 2016 at 01:15 PM in Orlando Courtroom 4 A before Judge Roy B. Dalton, Jr., Jury Trial Set for the trial team commencing Sep. 6, 2016 at 09:00 AM in Orlando Courtroom 4 A before Judge Roy B. Dalton Jr., Conduct mediation hearing by Mar. 29, 2016. Lead counsel to coordinate dates. Signed by Judge Roy B. Dalton, Jr. on Feb. 10, 2015. (VMF). (Entered: Feb. 10, 2015).

Complaint for Patent Infringement against Cornell-Dubilier Electronics, Inc., Packard Inc. with Jury Demand (Filing fee \$400 receipt No. ORL-38930) filed by American Radionic Company, Inc. (Attachments: #1 Civil Cover sheet, #2 Exhibit A)(LMM) Modified on Nov. 19, 2014 (LMM). (Entered: Nov. 19, 2014).

Declaration of Noah C. Graubart in Support of Plaintiff’s Claim Construction Brief by American Radionic Company, Inc. (Attachments: #1 Exhibit 1, #2 Exhibit 2, #3 Exhibit 3, #4 Exhibit 4, #5 Exhibit 5, #6 Exhibit 6) (Graubart, Noah) (Entered: Jun. 18, 2015). Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions *American Radionic, Inc., v. Packard, Inc., and Cornell-Dubilier Electronics, Inc.*, No. 6:14-cv-01881-RBD-KRS.

Document from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions that purported to be Standard for Safety UL 810 Capacitors, Underwriters Laboratories Inc. having multiple dates ranging from 1976 to 1988 (22 pages).

First Amended Answer and affirmative defenses to 1 Complaint by Cornell-Dubilier Electronics, Inc. (Allaman, Melissa) (Entered: Feb. 4, 2015).

First Amended Answer and affirmative defenses to 1 Complaint by Packard Inc. (Allaman, Melissa) (Entered: Jan. 9, 2015).

Hudis, Martin et al., “Motor-Run Capacitors,” *Motors & Motor Control*, undated (reprinted from Appliance Manufacturer, Oct. 1994) (3 pages).

Hudis, Martin, “Plastic Case Self-Protected Liquid Filled AC Capacitors for 70° Applications,” Presented at CAPTECH ’97, Mar. 1997, 7 pages.

Hudis, Martin, “Technology Evolution in Metallized Polymeric Film Capacitors over the Past 10 Years,” Presented at CARTS Symposium in Nice, France, Oct. 1996, 9 pages.

Joint Pre-Hearing Statement re: Claim Construction by American Radionic Company, Inc., Packard Inc., Cornell-Dubilier Electronics, Inc. (Attachments: #1 Exhibit 1, #2 Exhibit 2) (Graubart, Noah) Modified on Jul. 24, 2015.

Macomber, Laird L., et al., “New Solid Polymer Aluminum Capacitors Improve Reliability,” *Electro Power Electronics*, Oct. 1, 2001, 5 pages.

Macomber, Laird L., et al., “Solid Polymer Aluminum Capacitor Chips in DC-DC Converter Modules Reduce Cost and Size and Improve High-Frequency Performance,” *PCIM Power Electronics 2001 Proceeding for the PowerSystems World Conference*, Sep. 2001, 8 pages.

Mallory Distributor Products Co., 1967 Precision Electronic Components Catalog, 52 pages.

Minute Entry, Proceedings of Claim Construction Hearing held before Judge Roy B. Dalton, Jr. on Aug. 24, 2015. Court Report: Arnie First (VMF) (FMV). (Entered: Aug. 24, 2015).

Notice of Filing of Claim Construction Evidence by American Radionic Company, Inc. (Attachments: #1 Exhibit 1, #2 Exhibit 2, #3 Exhibit 3) (Graubart, Noah) Modified on Aug. 25, 2015 (EJS). (Entered: Aug. 25, 2015).

Order granting 69 Motion for Consent Judgment and Injunction, Signed by Judge Roy B. Dalton, Jr. on Nov. 5, 2015. (CAC) (Entered Nov. 5, 2015).

Parente, Audrey, “Can-sized device the right fit,” *The Daytona Beach News-Journal*, Jan. 3, 2005 (2 pages).

Photograph 1 from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions, undated (1 page).

Photograph 10, undated (1 page).

Photograph 11, undated (1 page).

Photograph 12, undated (1 page).

Photograph 13, undated (1 page).

Photograph 14, undated (1 page).

Photograph 15, undated (1 page).

Photograph 16, undated (1 page).

Photograph 17, undated (1 page).

Photograph 18, undated (1 page).

Photograph 19, undated (1 page).

Photograph 2 from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions, undated (1 page).

Photograph 20, undated (1 page).

Photograph 3 from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions, undated (1 page).

Photograph 4 from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions, undated (1 page).

Photograph 5 from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions, undated (1 page).

Photograph 6 from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions, undated (1 page).

Photograph 7 from Defendants’ First Supplemental Disclosure of Non-Infringement and Invalidity Contentions, undated (1 page).

Photograph 8, undated (1 page).

Photograph 9, undated (1 page).

Plaintiff’s Brief re 59 Declaration Plaintiff’s Claim Construction Brief filed by American Radionic Company, Inc. (Graubart, Noah) (Entered May 18, 2015).

Response to Plaintiff's Claim Construction Brief re 60 Brief—
Plaintiff filed by Cornell-Dubliner Electronics, Inc., Packard Inc.
(Killen, Craig) Modified on Jul. 17, 2015 (EJS). (Entered Jul. 16,
2015).

Status report Joint Claim Construction Statement by American
Radionic Company, Inc., Packard Inc., and Cornell-Dubliner Elec-
tronics, Inc. (Attachments: #1 Exhibit 1, #2 Exhibit 2) (Graubart,
Noah) Modified on May 29, 2015 (SWT). (Entered: May 28, 2015).
Transcript of Markman Hearing held on Aug. 24, 2015 before Judge
Roy B. Dalton, Jr., Court Reporter Arnie R. First, DRD, CCC<
ArnieFirst.CourtReporter@gmail.com. Transcript may be viewed at
the court public terminal or purchased through the Court Reporter
before the deadline for Release of Transcript Restriction. After that
date it may be obtained through PACER or purchased through the
court Reporter, Redaction Request due Oct. 22, 2015. Redacted
Transcript Deadline set for Nov. 2, 2015. Release of Transcript
Restriction set for Dec. 30, 2015. (ARF) (Entered: Oct. 1, 2015).
International Search Report and Written Opinion, PCT/US2014/
39003, dated Oct. 2, 2014, 12 pages.

* cited by examiner

Primary Examiner — Thomas Johannes

Assistant Examiner — Lauren McVey

(74) *Attorney, Agent, or Firm* — Fish & Richardson P.C.

(57) **CLAIM**

The ornamental design for a capacitor, as shown and
described.

DESCRIPTION

FIG. 1 is a front top-left perspective view of a capacitor
showing my new design, taken at line 1 in FIG. 6;

FIG. 2 is a front elevation view thereof, taken at line 2 in
FIG. 1;

FIG. 3 is a rear elevation view thereof, taken at line 3 in FIG.
1;

FIG. 4 is a left side elevation view thereof, taken at line 4 in
FIG. 1;

FIG. 5 is a right side elevation view thereof, taken at line 5
in FIG. 1;

FIG. 6 is a top plan view thereof; and,

FIG. 7 is a bottom plan view thereof.

The dot-dash broken lines in FIGS. 1 and 6 are for reference
purposes only; the broken lines form no part of the claimed
design.

1 Claim, 4 Drawing Sheets

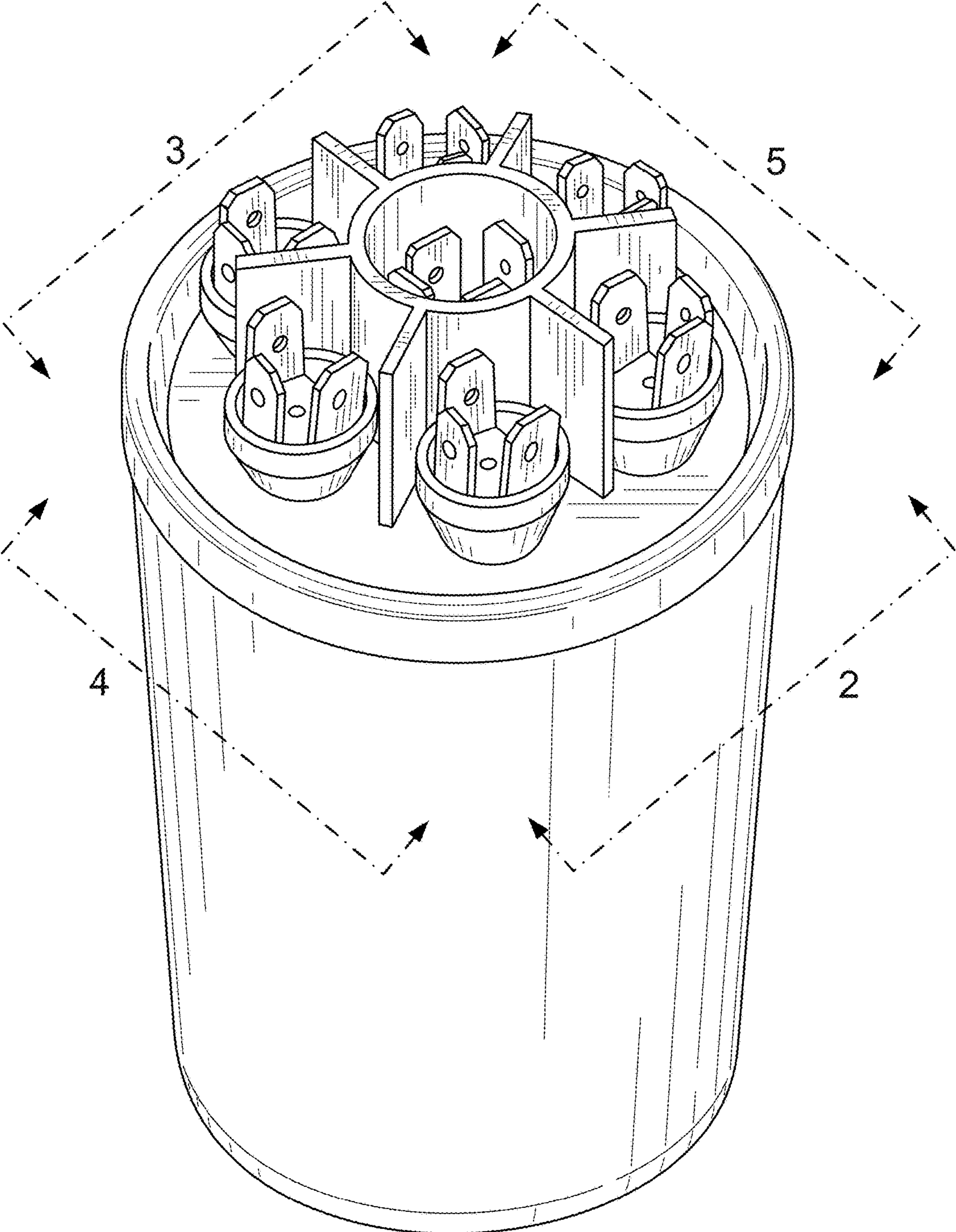


FIG. 1

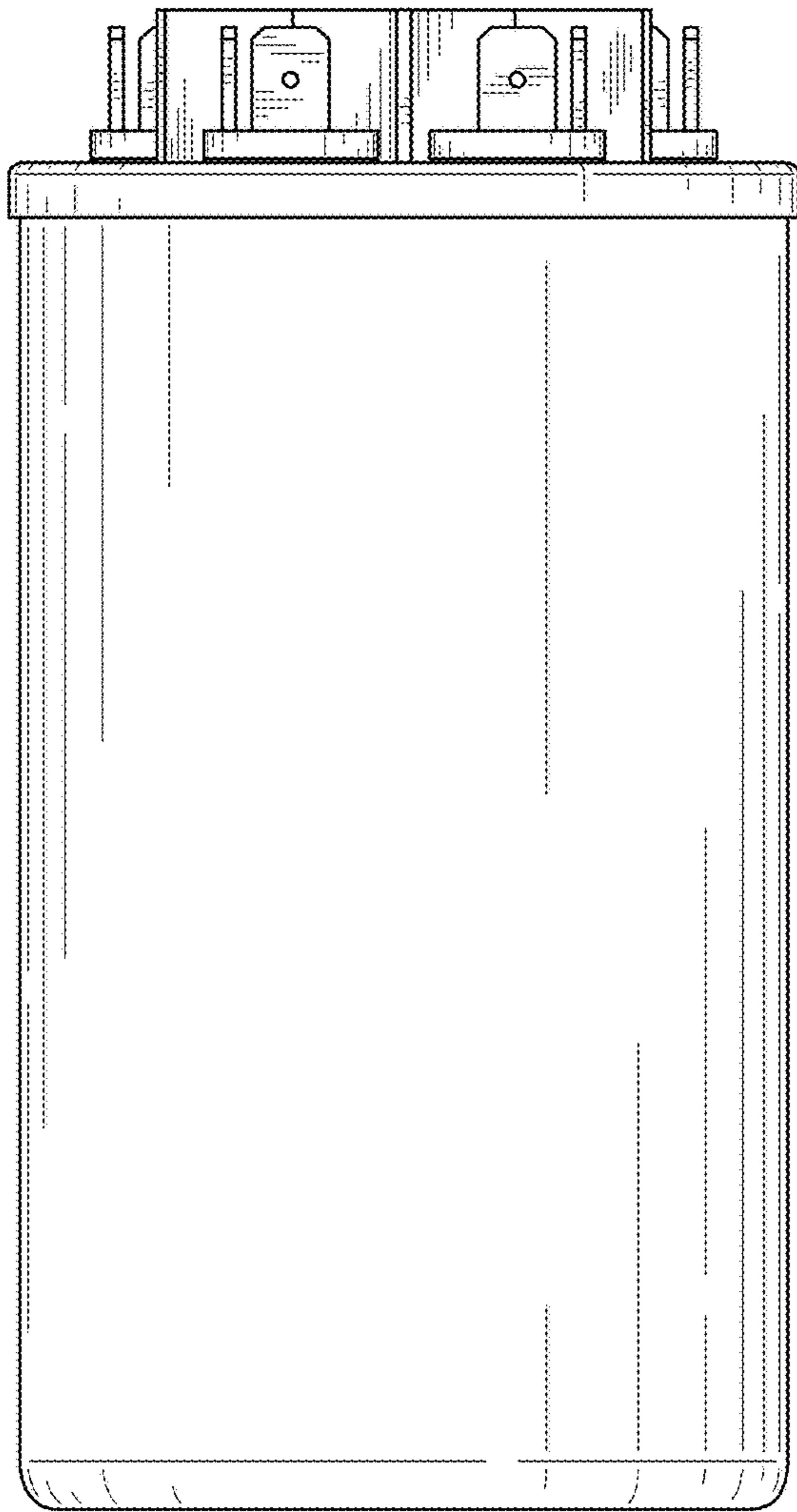


FIG. 2

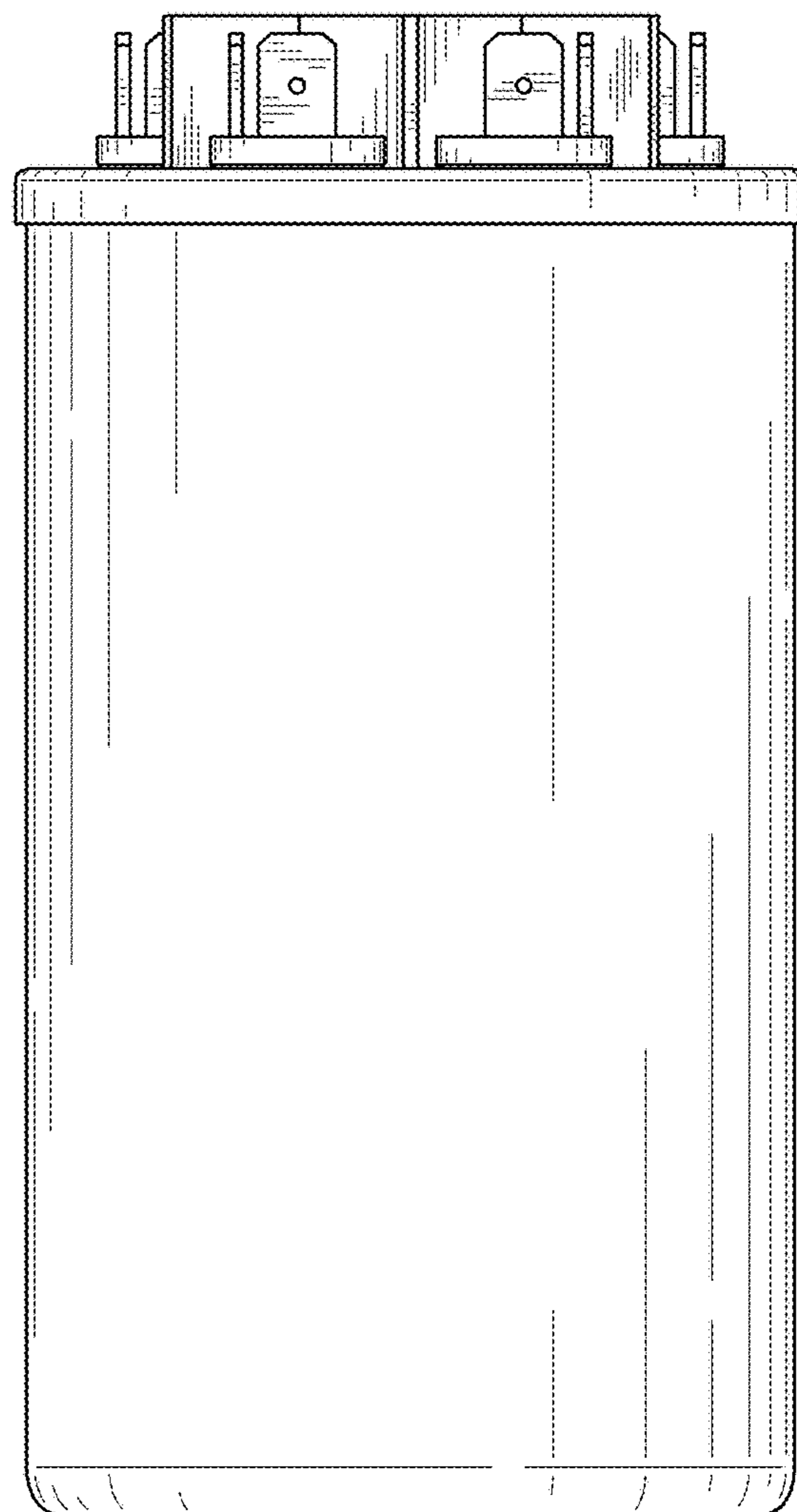


FIG. 3

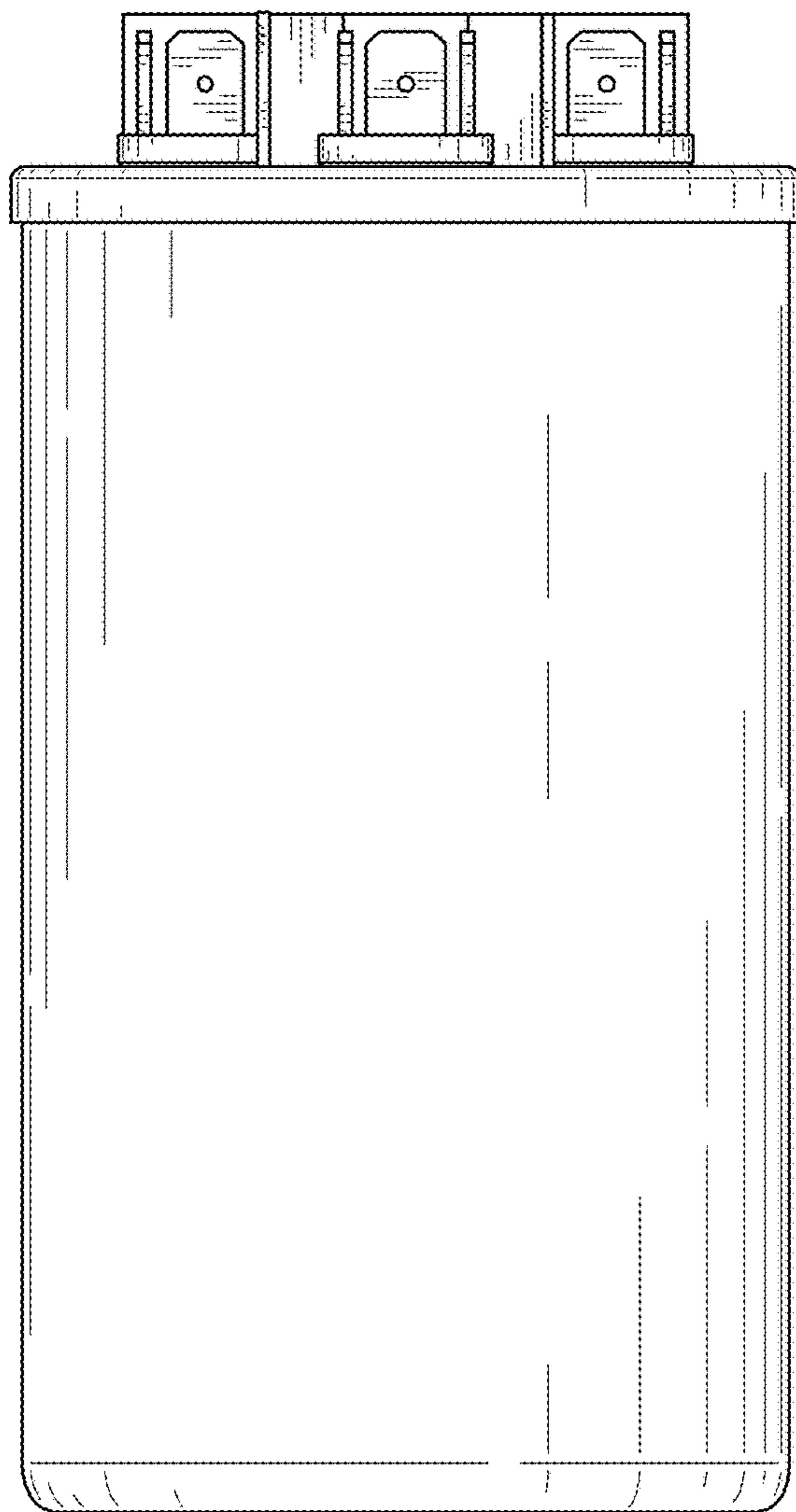


FIG. 4

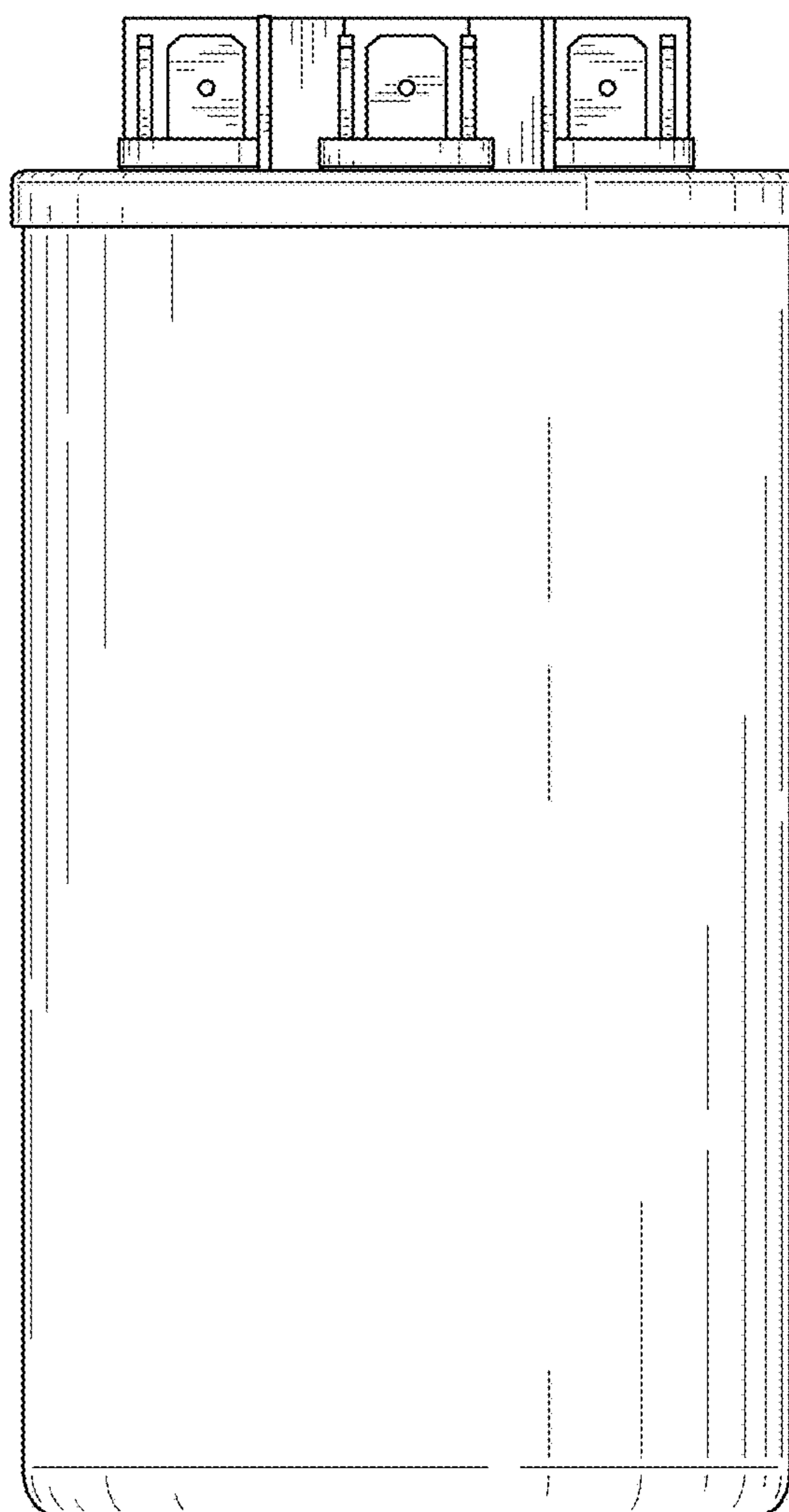


FIG. 5

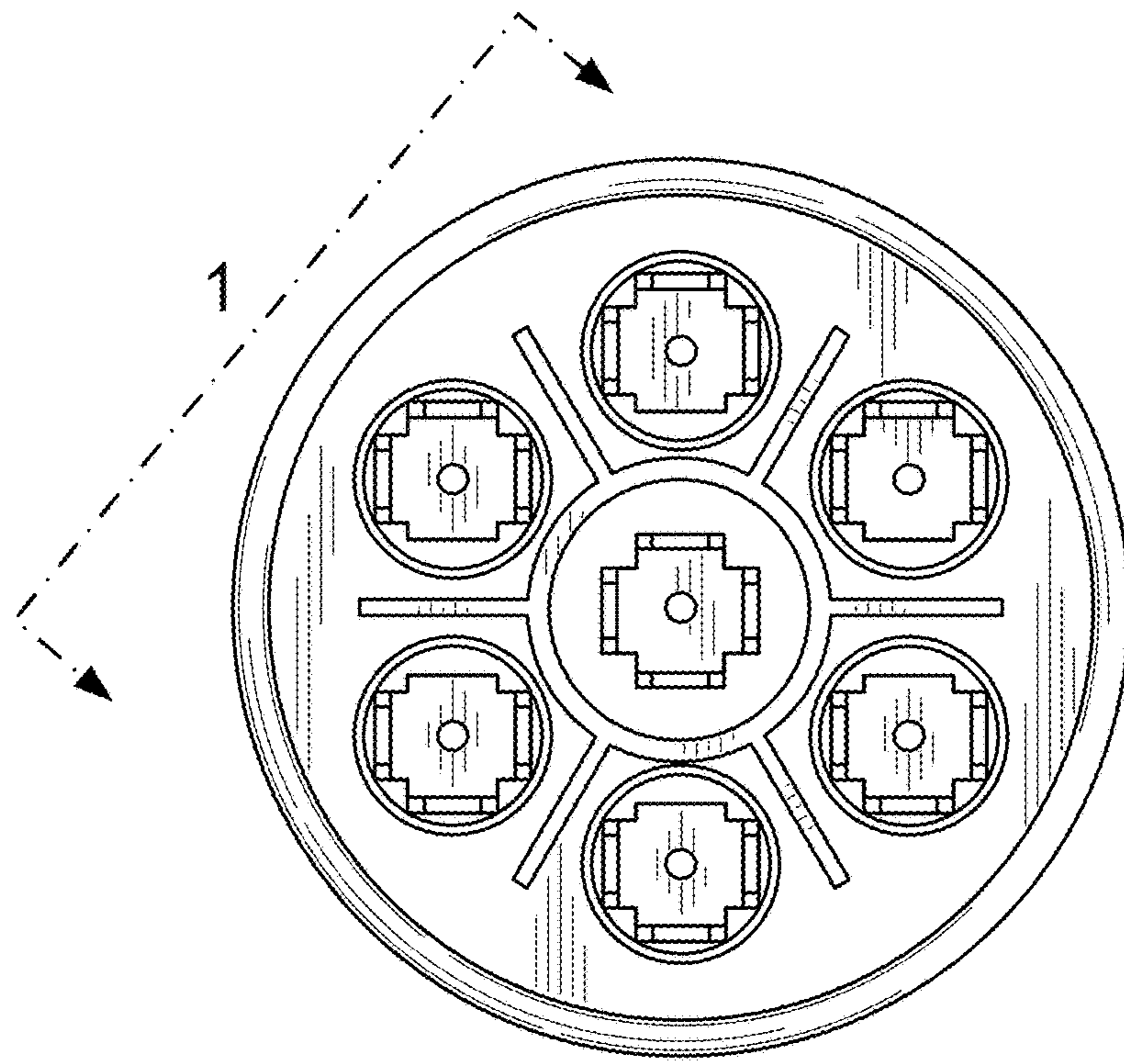


FIG. 6

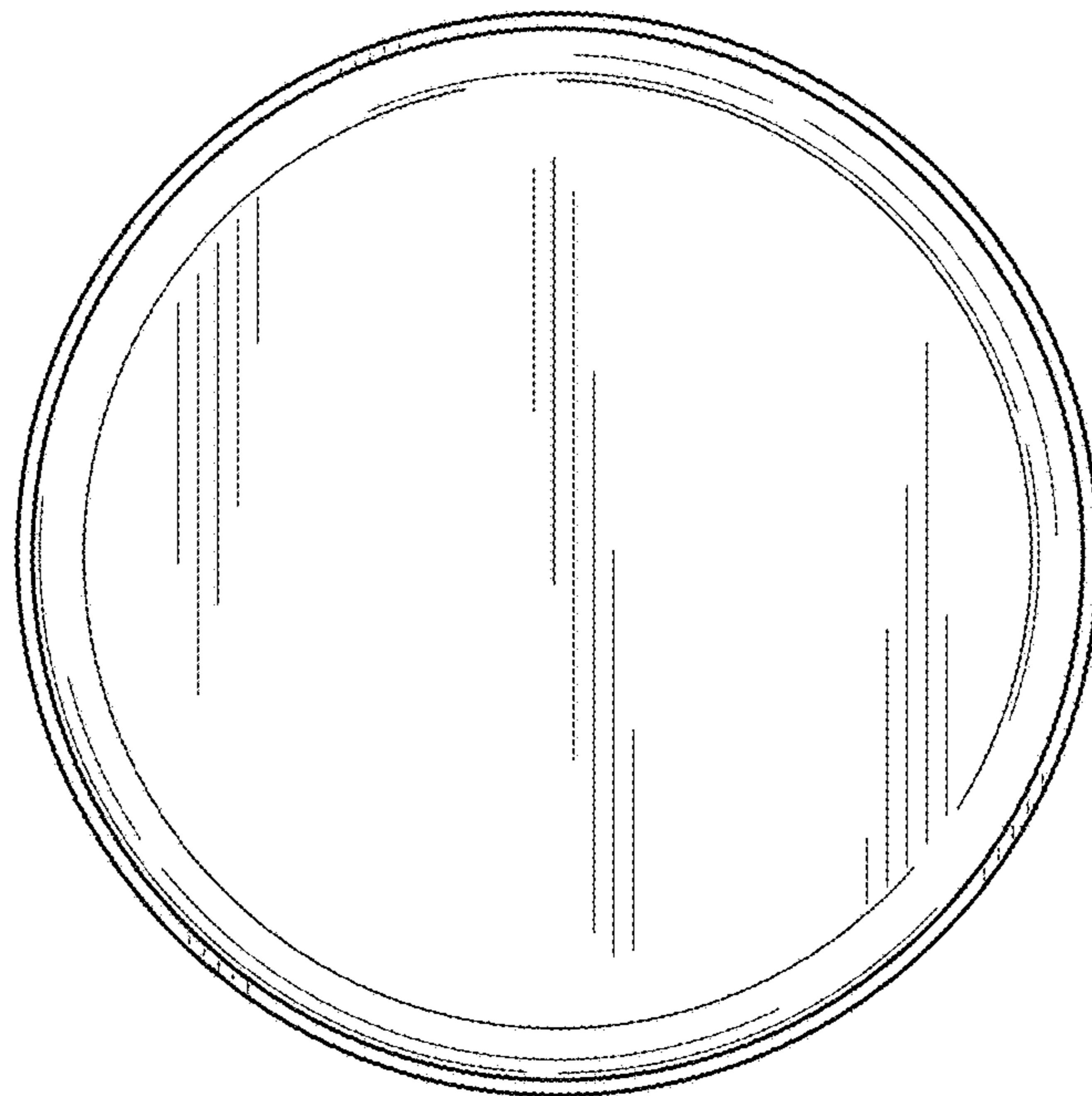


FIG. 7