



US00D863237S

(12) **United States Design Patent** (10) **Patent No.:** **US D863,237 S**
Ayers et al. (45) **Date of Patent:** **** Oct. 15, 2019**

(54) **PUSH BUTTON KNOB WITH ILLUMINATION CAPABILITIES FOR A LAUNDRY TREATING APPLIANCE**

(71) Applicant: **WHIRLPOOL CORPORATION**,
Benton Harbor, MI (US)

(72) Inventors: **Kevin B. Ayers**, Saint Joseph, MI (US);
Andrew C. Kubasiak, Saint Joseph,
MI (US); **Todd W. Lambkin**,
Stevensville, MI (US); **Daniel
Polonsky**, Stevensville, MI (US); **Anna
C. Schelling**, Stevensville, MI (US)

(73) Assignee: **Whirlpool Corporation**, Benton
Harbor, MI (US)

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

(21) Appl. No.: **29/618,656**

(22) Filed: **Sep. 22, 2017**

(51) **LOC (12) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/174**

(58) **Field of Classification Search**
USPC D13/158, 171, 174; D8/310; D32/3, 6,
D32/25

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,813,526 A 5/1974 Watson et al.
4,373,405 A * 2/1983 Geil G05G 1/08
188/67

(Continued)

FOREIGN PATENT DOCUMENTS

DE 10236935 A1 2/2004
DE 102007024437 A1 11/2008

(Continued)

OTHER PUBLICATIONS

Metal Flat Ring Illuminated Blue LED Push Button Self-Locking
Switch 16MM by Hexie Electronic Technology Co., Ltd., [https://
www.alibaba.com/product-detail/Metal-Flat-Ring-illuminated-Blue-
Led_60587240876.html](https://www.alibaba.com/product-detail/Metal-Flat-Ring-illuminated-Blue-Led_60587240876.html), Accessed May 10, 2018.

(Continued)

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — McGarry Bair PC

(57) **CLAIM**

The ornamental design for a push button knob with illumi-
nation capabilities for a laundry treating appliance, as shown
and described.

DESCRIPTION

FIG. 1 is a front perspective view of a push button knob with
illumination capabilities for a laundry treating appliance
showing our new design with the illuminated region in an
illuminated state;

FIG. 2 is a front view of the push button knob of FIG. 1;
FIG. 3 is a top view of the push button knob of FIG. 1;
FIG. 4 is a rear view of the push button knob of FIG. 1;
FIG. 5 is a right side view of the push button knob of FIG.
1;

FIG. 6 is a left side view of the push button knob of FIG. 1;
FIG. 7 is a front perspective view of a push button knob of
FIG. 1 wherein the stippled shaded area depicts the region
of illumination;

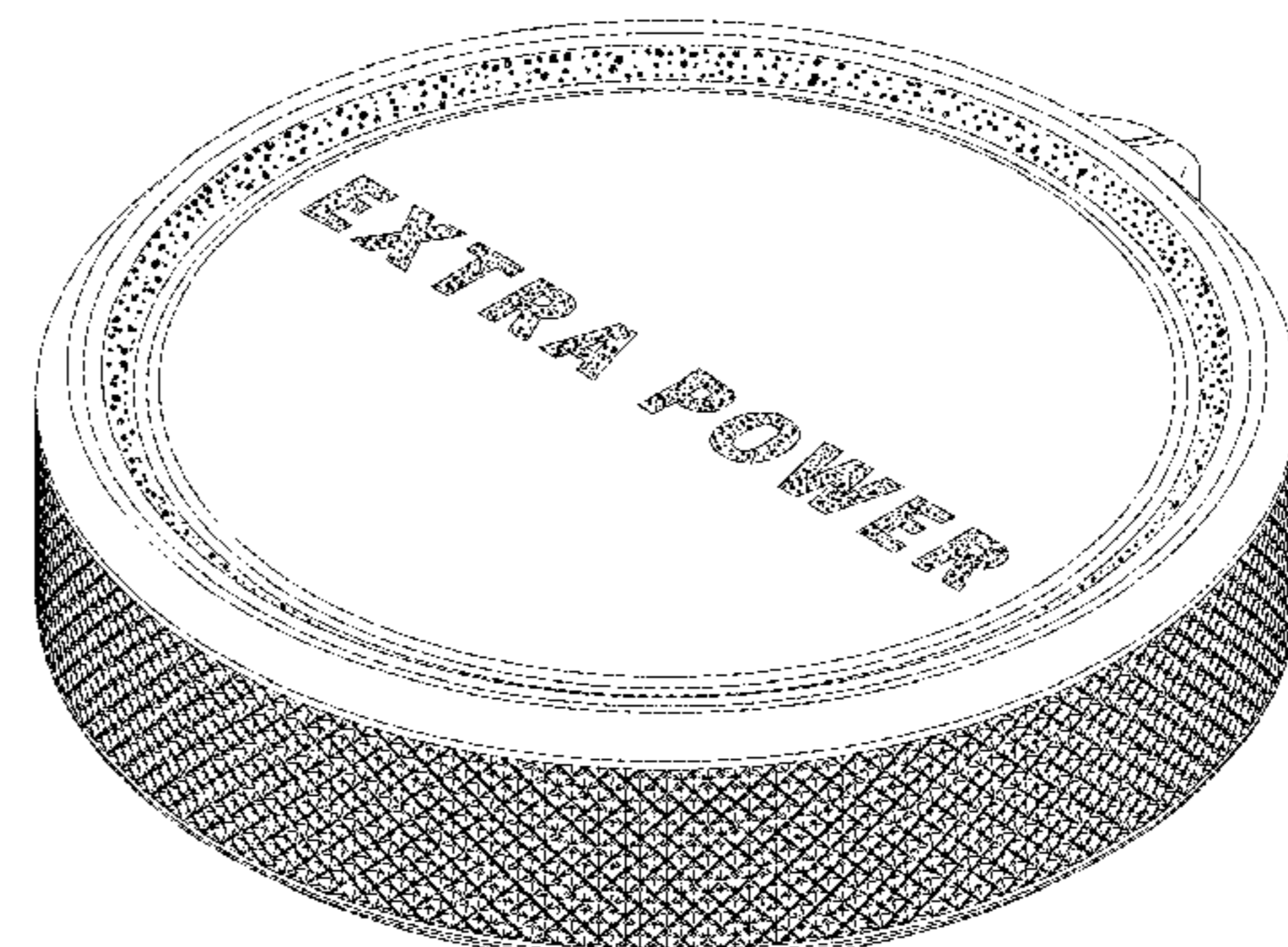
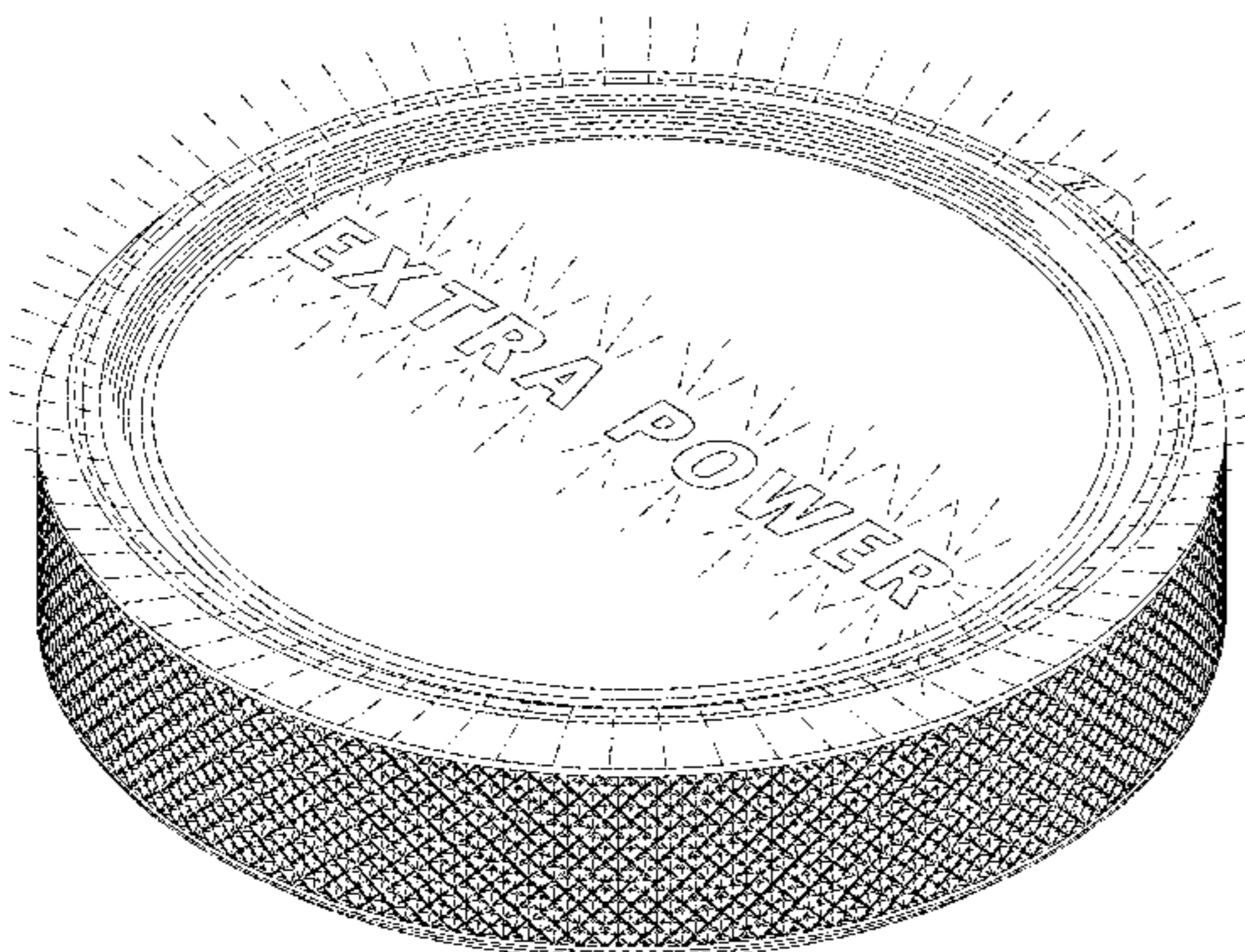
FIG. 8 is a front view of the push button knob of FIG. 7;
FIG. 9 is a top view of the push button knob of FIG. 7;
FIG. 10 is a rear side view of the push button knob of FIG.
7;

FIG. 11 is a right side view of the push button knob of FIG.
7; and

FIG. 12 is a left side view of the push button knob of FIG.
7; and,

FIG. 13 is a cross-section of the push button knob of FIG.
1-12.

(Continued)



The radiating lines in FIGS. 1-6 indicate illumination only and form no part of the claimed design. The broken lines in the figures illustrate the portions of the design that form no part of the claimed design.

1 Claim, 7 Drawing Sheets

(58) Field of Classification Search

CPC H01H 71/58; H01H 13/02; H01H 13/50; H01H 19/02; H01H 19/025; H01H 19/46; H01H 9/161; F21V 33/0044

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

D362,841	S *	10/1995	Roza	.....	D13/171
D377,337	S *	1/1997	Schaeffer	.....	D13/171
D441,346	S *	5/2001	Bonn	.....	D13/174
6,434,977	B1	8/2002	Hapke et al.		
7,005,596	B2 *	2/2006	Maeda	.....	H01H 25/041 200/314
7,222,979	B1 *	5/2007	Popowich	.....	H01H 19/025 200/316
D558,010	S *	12/2007	Uglum	.....	D8/40
D558,692	S *	1/2008	Neveu	.....	D13/174
7,339,128	B2 *	3/2008	Yen	.....	H05B 33/0842 200/313
D570,300	S *	6/2008	Weinberg	.....	D13/174
7,501,722	B2 *	3/2009	Shitanaka	.....	G09F 13/04 116/284
7,784,310	B1	8/2010	Bradford et al.		
7,884,299	B2 *	2/2011	Glew	.....	H03K 17/955 200/310
7,900,486	B2	3/2011	Richman et al.		
7,941,885	B2	5/2011	Wong et al.		
7,950,088	B2	5/2011	Dalton et al.		
7,977,295	B2	7/2011	Classen		
8,101,562	B2	1/2012	Classen		
D654,880	S *	2/2012	Lam	.....	D13/174
8,196,441	B2	6/2012	Hendrickson et al.		
8,286,288	B2	10/2012	McAllister et al.		
8,388,695	B2	3/2013	Hendrickson et al.		
8,397,328	B2	3/2013	Hendrickson et al.		
8,438,881	B2	5/2013	Ihne et al.		
8,615,834	B2	12/2013	McAllister et al.		
8,650,917	B2	2/2014	McAllister et al.		
8,752,405	B2 *	6/2014	Kim	.....	D06F 39/005 68/212
8,813,676	B2 *	8/2014	Fuller	.....	D06F 39/005 116/286
D713,236	S *	9/2014	Park	.....	D8/310
8,950,882	B2	2/2015	Park		
D725,612	S *	3/2015	Schlegel	.....	D13/174
8,997,289	B2	4/2015	Bang et al.		
9,003,588	B2	4/2015	Amos et al.		
9,086,216	B2	7/2015	Park		
9,093,233	B2	7/2015	Kim et al.		
9,127,390	B2	9/2015	Kim et al.		
9,271,627	B2	3/2016	Alexander et al.		
9,340,918	B2	5/2016	Lv et al.		
9,416,482	B2	8/2016	Alexander et al.		
D766,844	S *	9/2016	Turksu	.....	D10/104.1
9,445,704	B2	9/2016	McAllister et al.		
9,663,891	B2 *	5/2017	Park	.....	F21V 33/0044
9,851,620	B2 *	12/2017	Song	.....	G03B 17/06
D807,308	S *	1/2018	Johnson	.....	D13/174
D808,092	S *	1/2018	Kim	.....	D32/6
9,976,244	B2 *	5/2018	Yang	.....	D06F 39/005
10,022,035	B2 *	7/2018	Dabade	.....	A47L 15/4246
10,090,123	B2 *	10/2018	Neese	.....	H01H 19/14
10,162,436	B2 *	12/2018	Goss	.....	G05G 1/015

D837,168	S *	1/2019	Altonen	.....	D13/174
2004/0227408	A1 *	11/2004	Tran	.....	H01H 19/005 307/115
2006/0237294	A1 *	10/2006	Greer	.....	H01H 1/5805 200/313
2007/0057922	A1 *	3/2007	Schultz	.....	G06F 3/03547 345/173
2007/0084000	A1	4/2007	Bernardino et al.		
2008/0289940	A1 *	11/2008	Kim	.....	D06F 39/005 200/336
2010/0000022	A1	1/2010	Hendrickson et al.		
2010/0175971	A1 *	7/2010	Kim	.....	B60R 25/04 200/313
2011/0048912	A1 *	3/2011	Yasuda	.....	H03K 17/968 200/5 A
2011/0145999	A1	6/2011	Motamedi		
2012/0186951	A1 *	7/2012	Wu	.....	H01H 25/008 200/4
2012/0311794	A1	12/2012	Hettinger et al.		
2013/0113465	A1 *	5/2013	Padilla	.....	G05G 1/02 324/207.2
2013/0232700	A1	9/2013	Smith et al.		
2013/0235000	A1	9/2013	Lee et al.		
2014/0042002	A1 *	2/2014	Chu	.....	H03K 17/9622 200/313
2014/0259441	A1	9/2014	Fulmer et al.		
2014/0259442	A1	9/2014	Fulmer et al.		
2014/0259443	A1	9/2014	Fulmer et al.		
2014/0259444	A1	9/2014	Fulmer et al.		
2014/0259445	A1	9/2014	Fulmer et al.		
2014/0259446	A1	9/2014	Ghosh et al.		
2014/0259447	A1	9/2014	Alexander et al.		
2014/0259448	A1	9/2014	Alexander et al.		
2014/0259450	A1	9/2014	Alexander et al.		
2014/0274868	A1	9/2014	Ghosh et al.		
2014/0277751	A1	9/2014	Fulmer et al.		
2015/0128358	A1	5/2015	Wells et al.		
2015/0299929	A1	10/2015	Yang et al.		
2016/0060800	A1	3/2016	Ghosh et al.		
2017/0139490	A1 *	5/2017	Morandini	.....	G06F 3/0482
2017/0235383	A1 *	8/2017	Goss	.....	G05G 1/015 345/184
2018/0245795	A1 *	8/2018	Serabatir	.....	F24C 3/124
2018/0259188	A1 *	9/2018	Bach	.....	F24C 7/082

FOREIGN PATENT DOCUMENTS

DE	102008033793	A1	1/2010
DE	102009046785	A1	6/2010
DE	102010063995	A1	6/2012
EP	1995751	A2	11/2008
EP	1332204	B1	12/2008
EP	2140795	A1	1/2010
EP	2298978	A2	3/2011
EP	2508667	A1	10/2012
EP	2639676	A2	9/2013
EP	2933369	A1	10/2015
IN	01349DE2008		12/2009
KR	100675796	B1	2/2007
WO	0234873	A1	5/2002
WO	2010007076	A1	1/2010
WO	11066805	A1	6/2011
WO	2012084627	A1	6/2012
WO	15067965	A1	5/2015
WO	2015101424	A1	7/2015

OTHER PUBLICATIONS

LED Illuminated Doorbell Button, Bronze, Amber Illumination, <https://www.houzz.com/product/17483071-led-illuminated-doorbell-button-bronze-amber-illumination-modern-doorbells-and-chimes>, Accessed May 10, 2018.
European Search Report for EP18179693.9, dated Oct. 4, 2018.

* cited by examiner

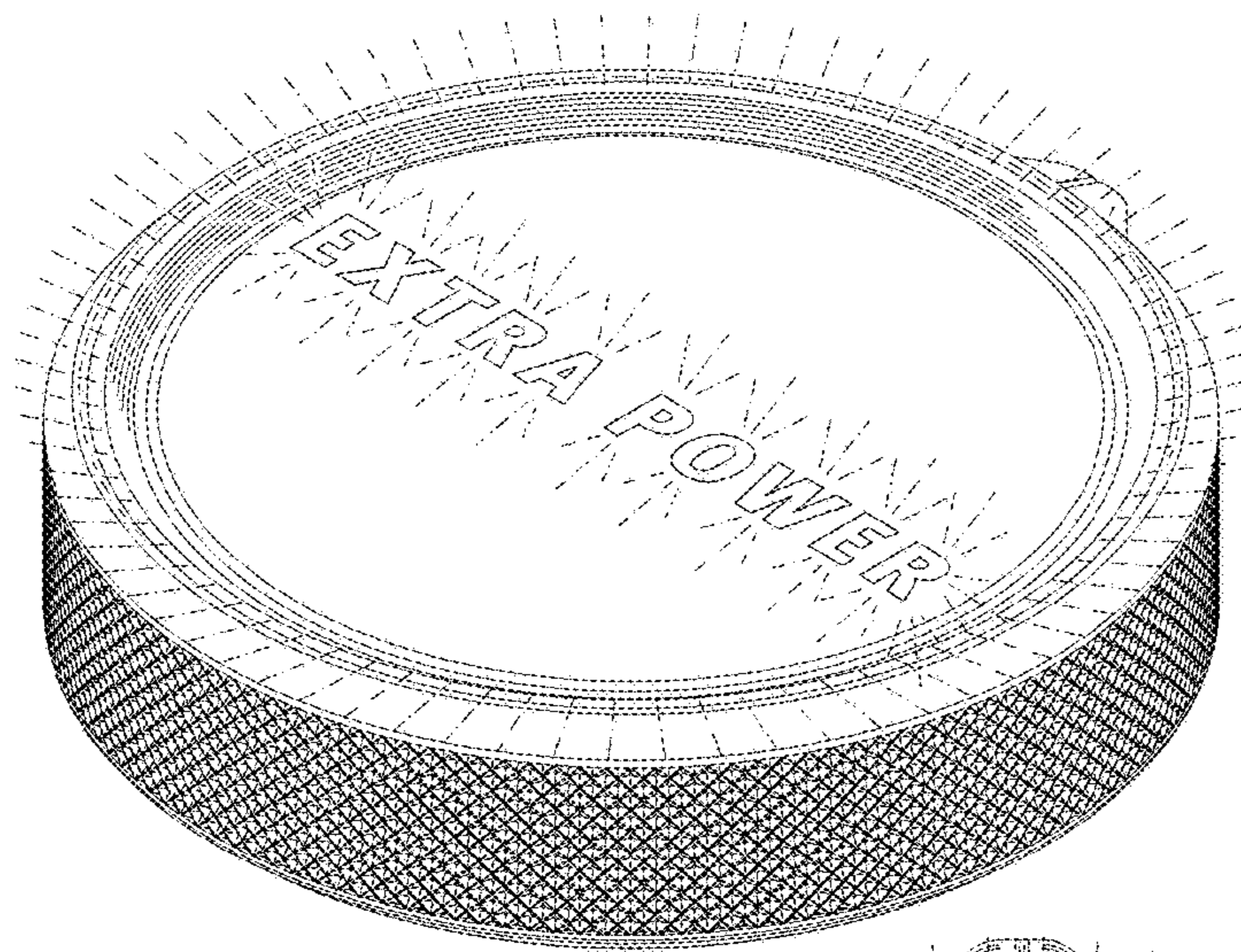


FIG. 1

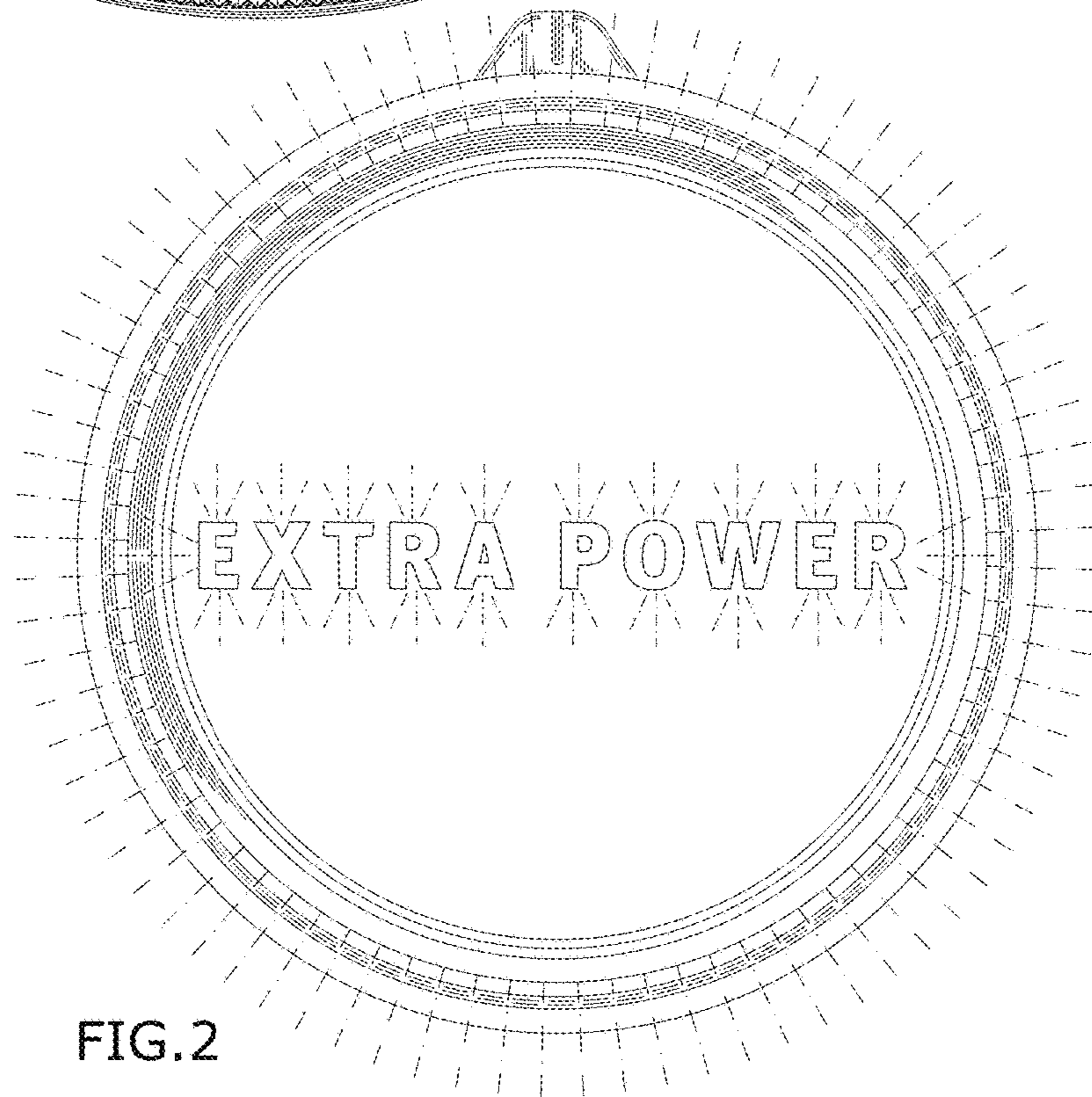


FIG. 2

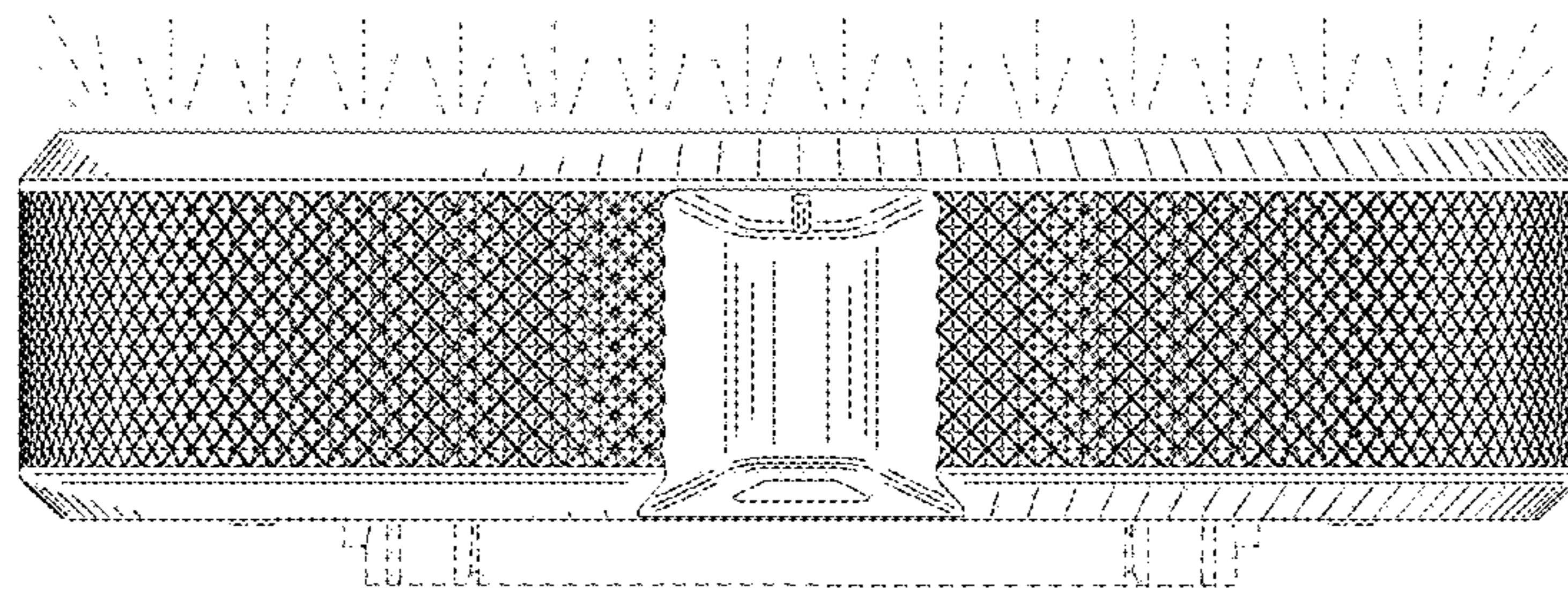


FIG. 3

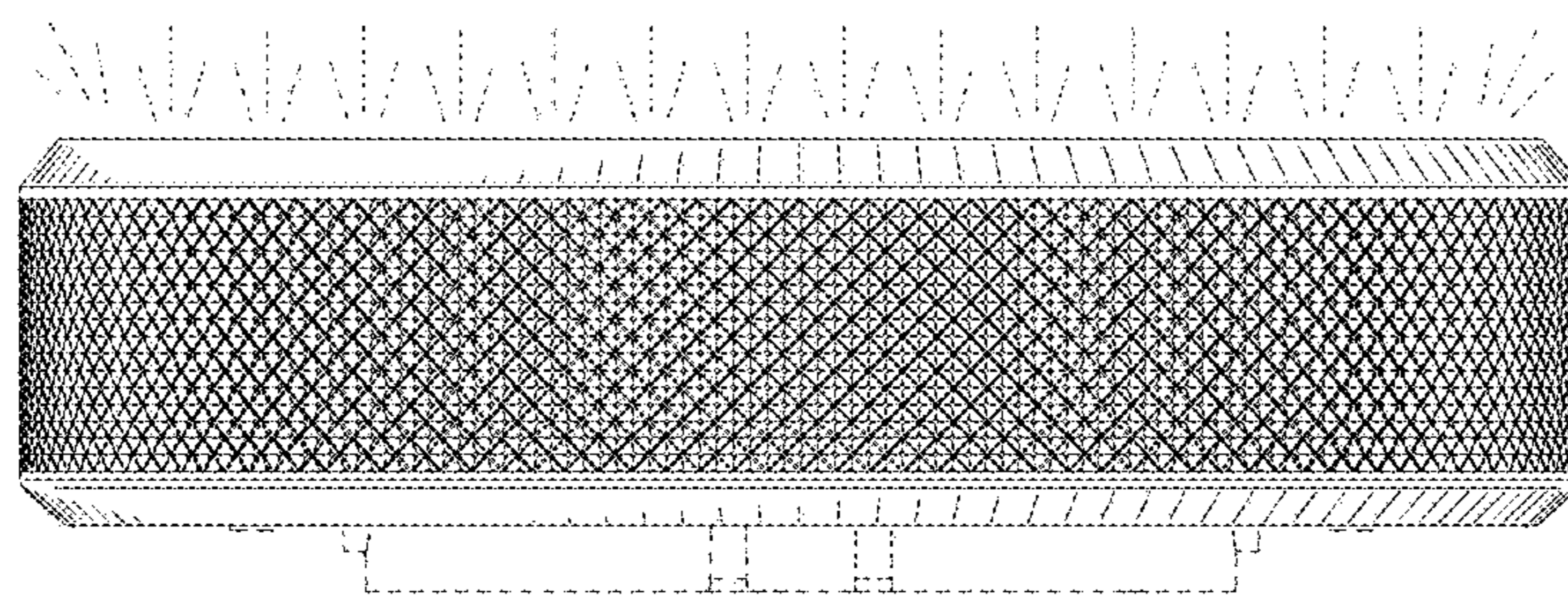


FIG. 4

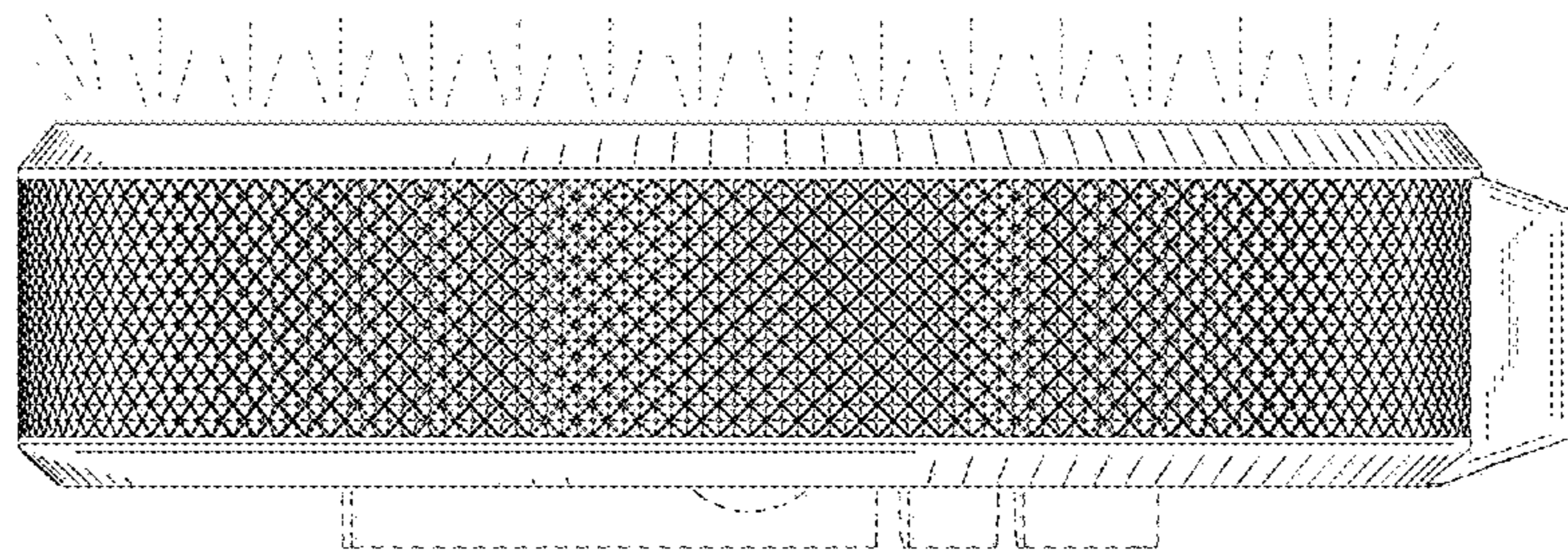


FIG. 5

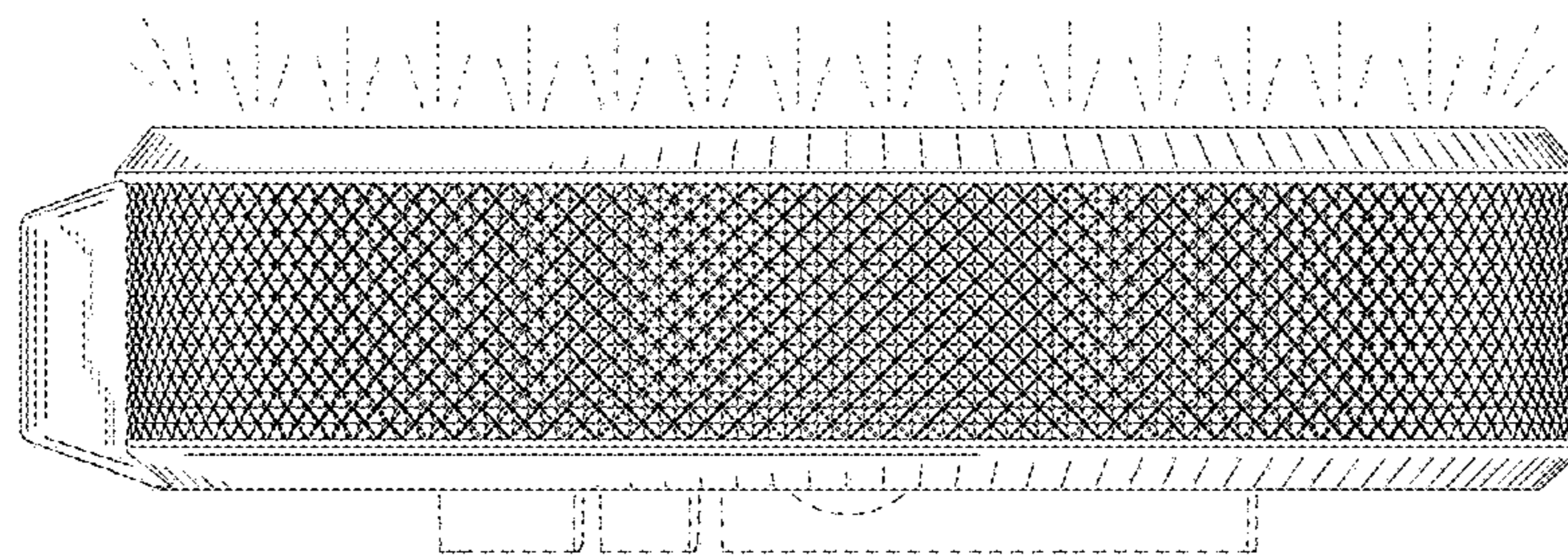


FIG. 6

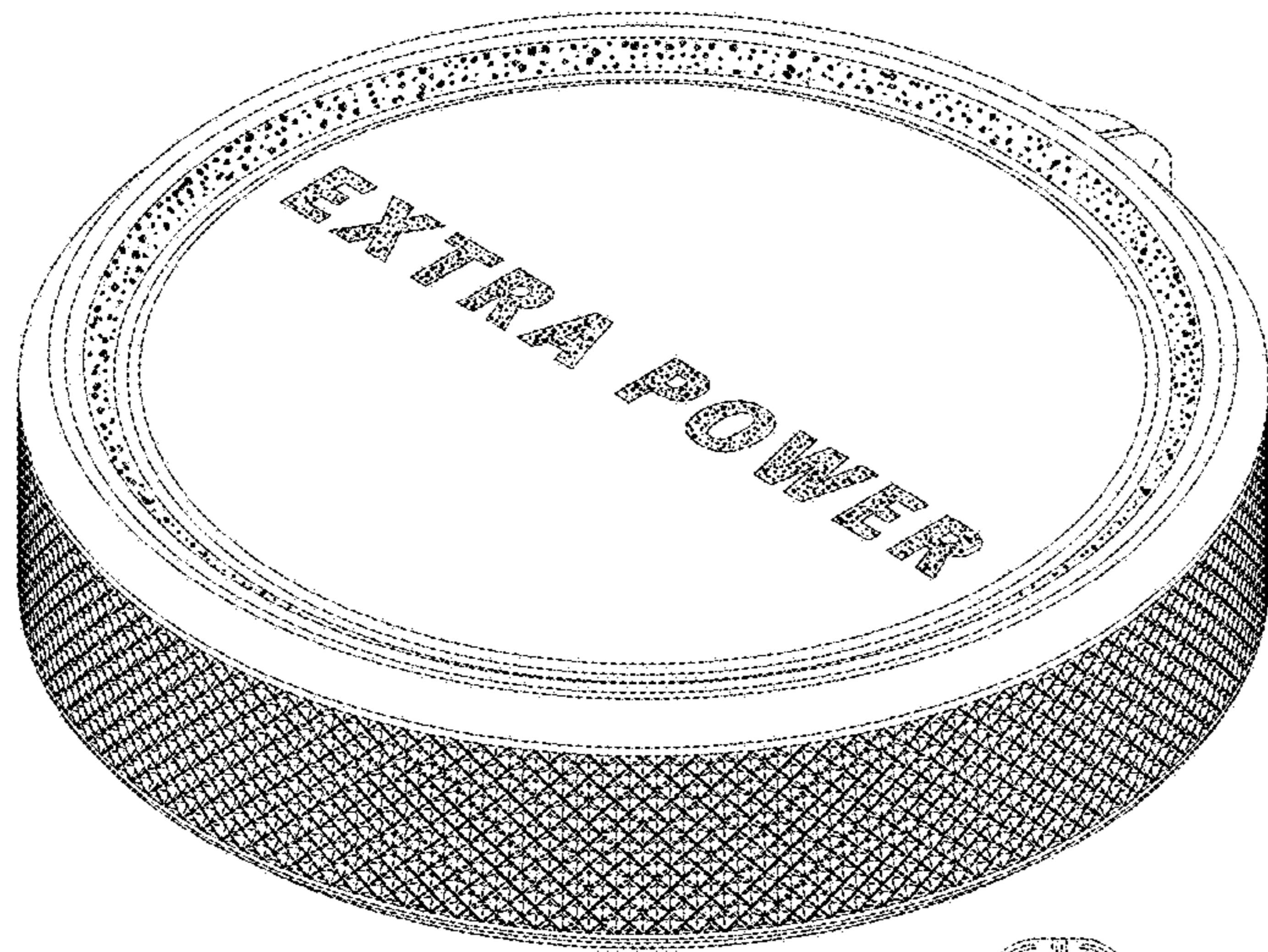


FIG. 7

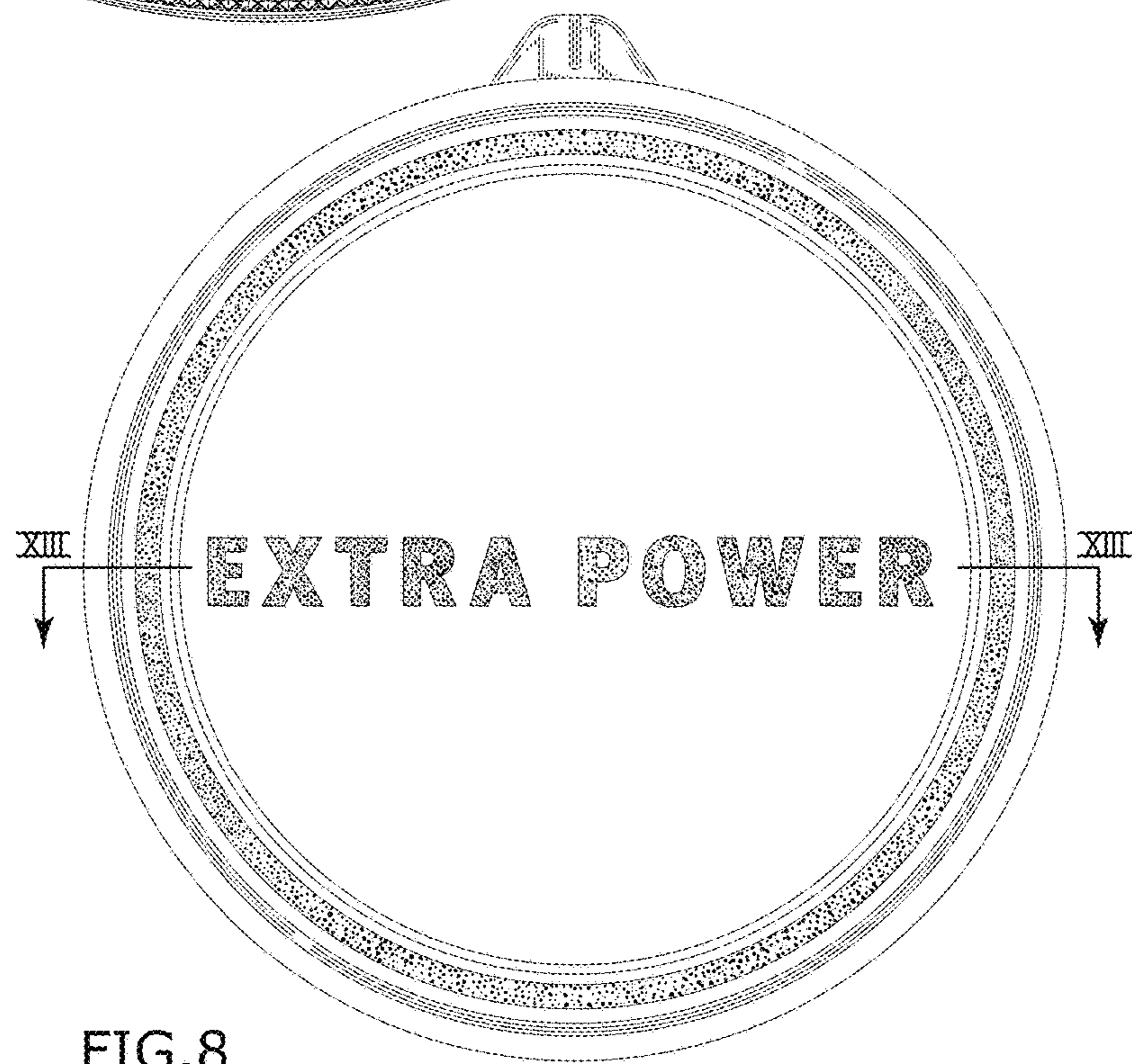


FIG. 8

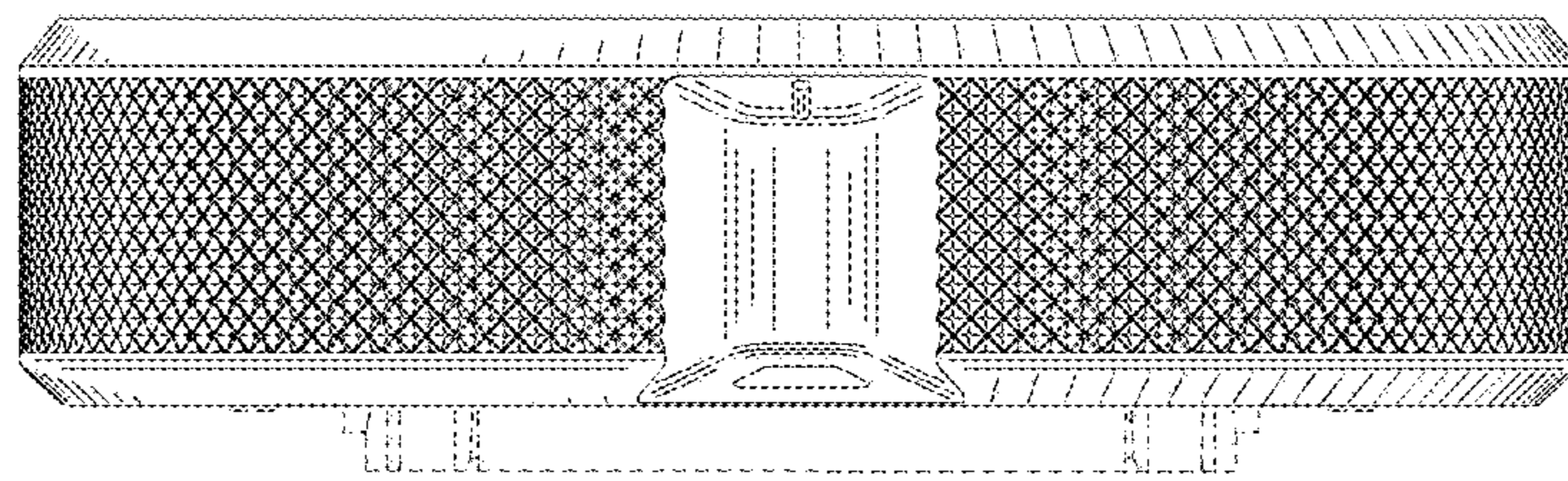


FIG. 9

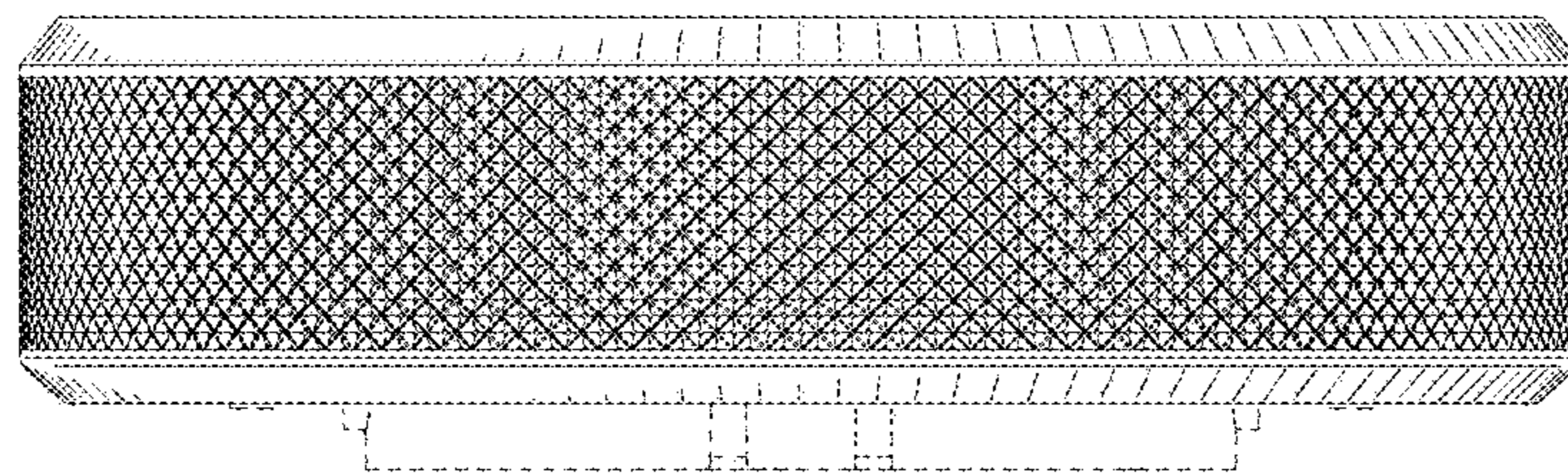


FIG. 10

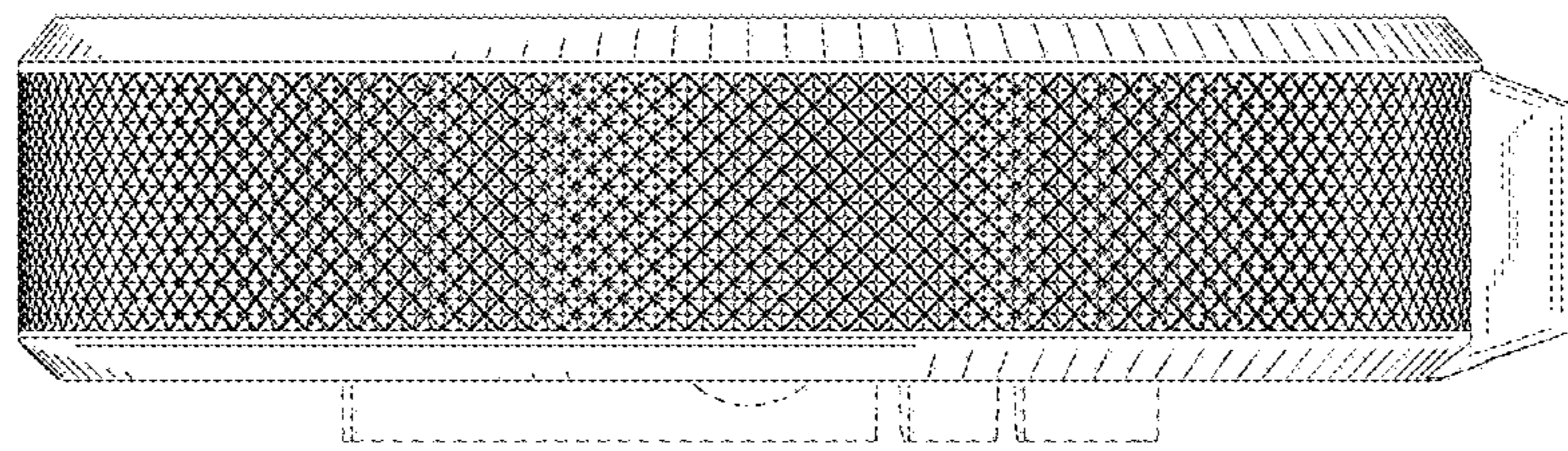


FIG. 11

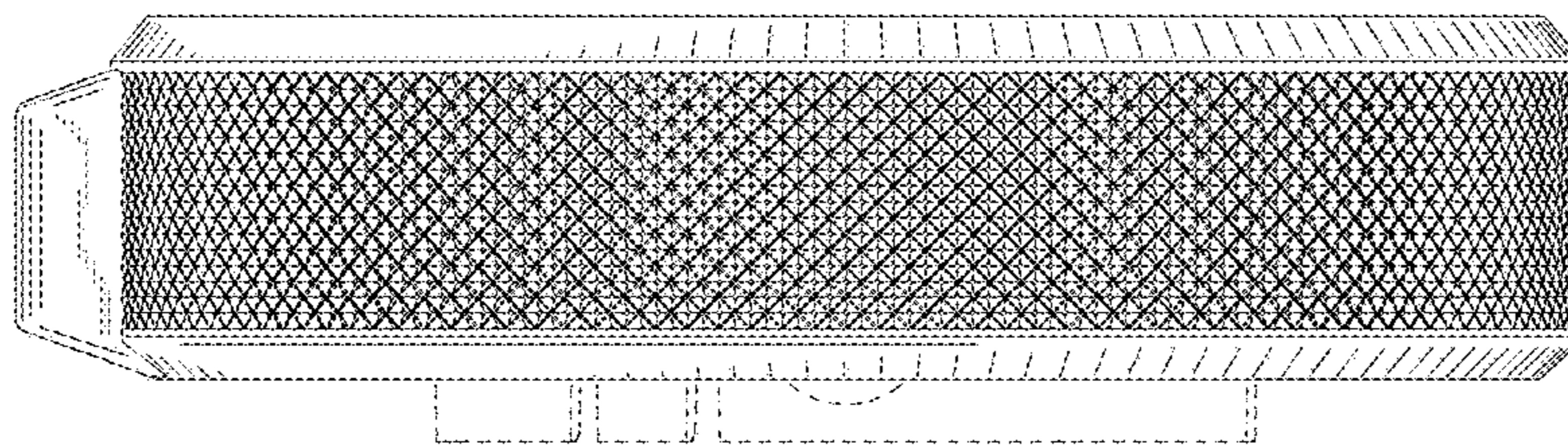


FIG. 12

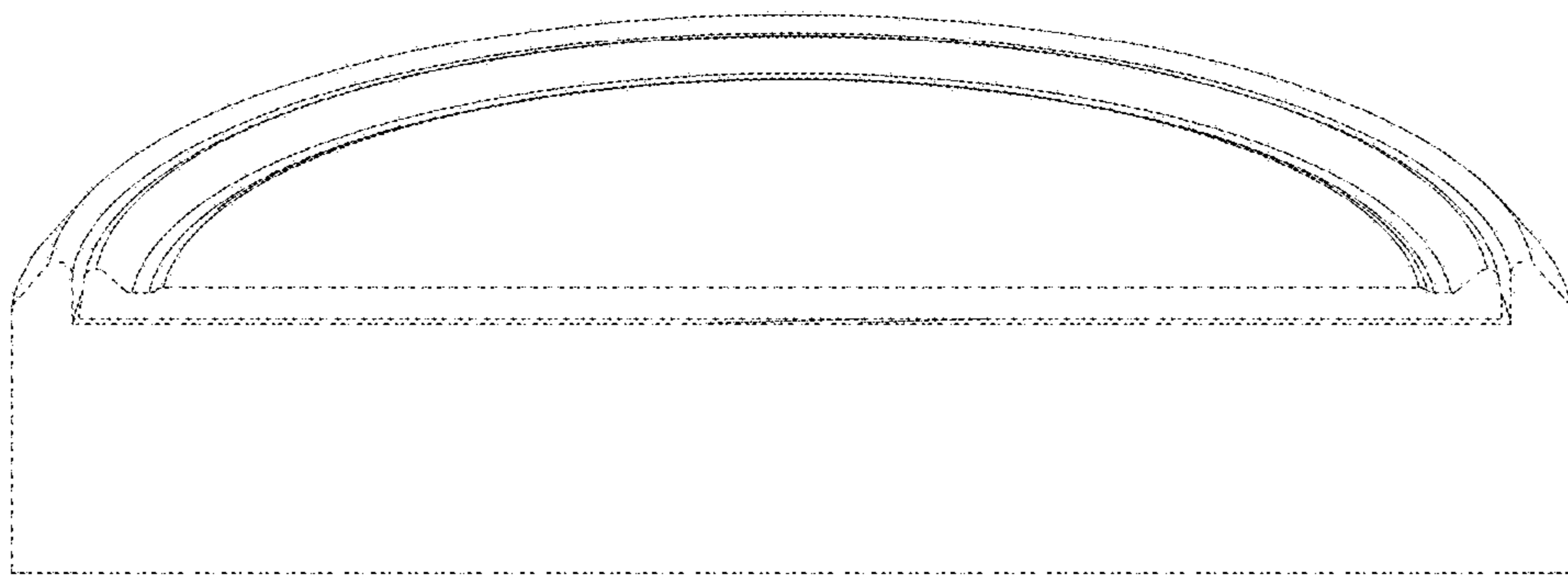


FIG. 13