



US0D1018811S

(12) **United States Design Patent** (10) **Patent No.:** **US D1,018,811 S**  
**Weilert et al.** (45) **Date of Patent:** **\*\* Mar. 19, 2024**

(54) **HEAT REFLECTOR**

(71) Applicant: **SOLO BRANDS, LLC**, Grapevine, TX (US)

(72) Inventors: **Jeffrey R. Weilert**, Southlake, TX (US); **Alexander K. Maghsadi**, Lewisville, TX (US)

(73) Assignee: **SOLO BRANDS, LLC**, Grapevine, TX (US)

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

(21) Appl. No.: **29/865,801**

(22) Filed: **Aug. 12, 2022**

(51) **LOC (14) Cl.** ..... **23-03**

(52) **U.S. Cl.**  
USPC ..... **D23/341**

(58) **Field of Classification Search**  
USPC ..... D23/314, 317, 329, 332, 334, 335, 336,  
D23/337, 338, 339, 340, 342, 343, 341,  
D23/347

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,892,084 A \* 1/1990 Fletcher ..... F24C 3/042  
126/92 R

D429,324 S 8/2000 Olson et al.  
(Continued)

**FOREIGN PATENT DOCUMENTS**

DE 102010007478 A1 8/2011  
DE 102013100971 A1 7/2014

(Continued)

**OTHER PUBLICATIONS**

Wood Pellet Products, Web page <https://woodpelletproducts.com/product/wood-pellet-patio-heater/>, 1 page, retrieved from Internet on Aug. 12, 2022.

(Continued)

*Primary Examiner* — Ania Aman

(74) *Attorney, Agent, or Firm* — HAYNES AND BOONE, LLP

(57) **CLAIM**

The ornamental design for a heat reflector, as shown and described.

**DESCRIPTION**

This application is related to U.S. Design patent application Ser. No. 29/865,797, filed Aug. 12, 2022, entitled Heater, the entire disclosure of which is hereby incorporated herein by reference.

This application is also related to U.S. Design patent application Ser. No. 29/865,800, filed Aug. 12, 2022, entitled Combustor, the entire disclosure of which is hereby incorporated herein by reference.

This application is also related to U.S. patent application Ser. No. 17/887,190, filed Aug. 12, 2022, entitled Outdoor Heater, the entire disclosure of which is hereby incorporated herein by reference.

FIG. 1 is a top-front-right perspective view of a heat reflector showing our new design;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a right side view thereof;

FIG. 5 is a left side view thereof;

FIG. 6 is a top view thereof;

FIG. 7 is a bottom view thereof; and

FIG. 8 is a bottom-rear-left perspective view thereof.

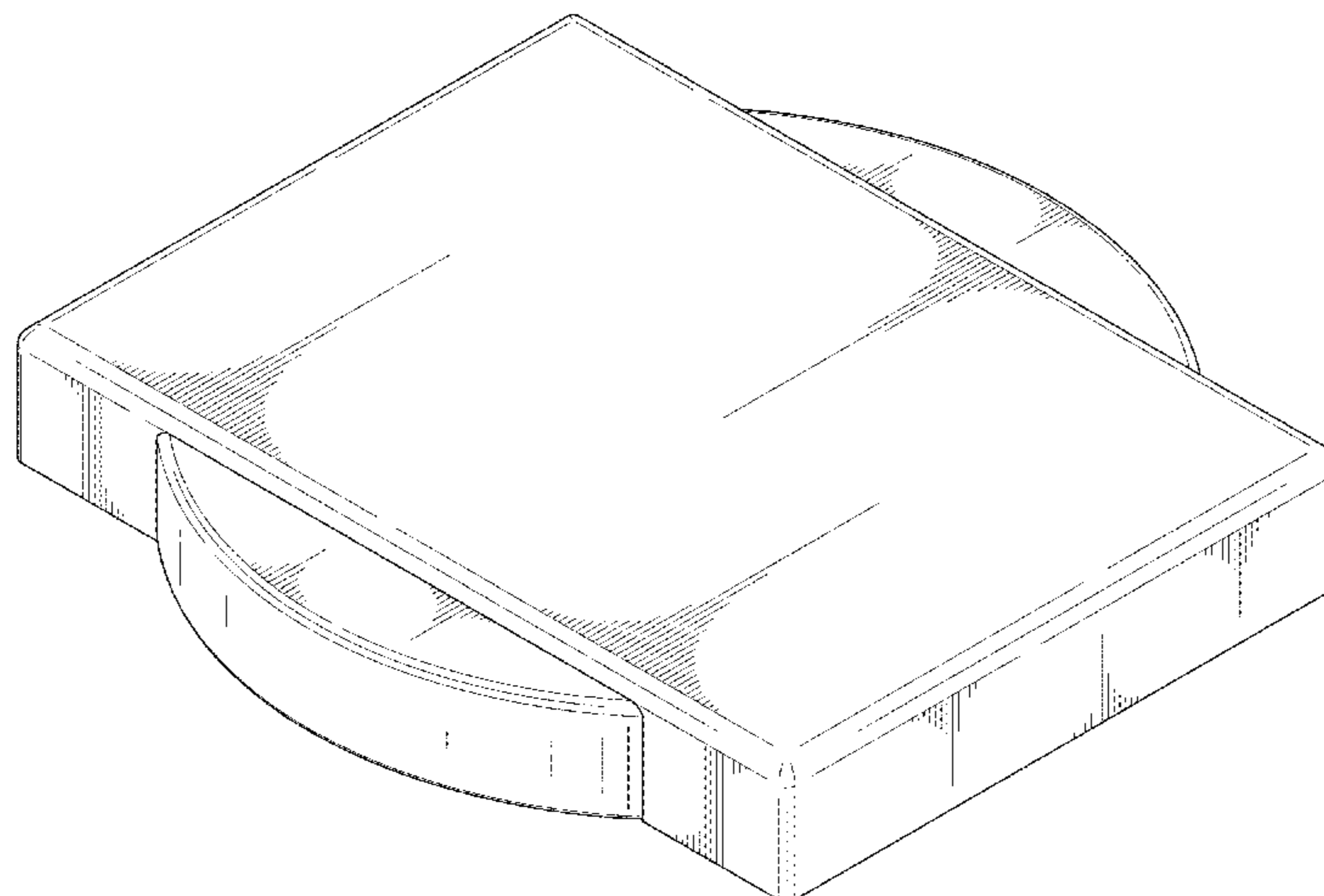
FIG. 9 is a view similar to FIG. 1 but also illustrating unclaimed environmental structure; and,

FIG. 10 is a view similar to FIG. 8 but also illustrating unclaimed environmental structure.

The equally-dashed broken lines shown in FIGS. 7, 8, and 10 are included for the purpose of illustrating portions of the heat reflector that form no part of the claimed design.

The additional equally-dashed broken lines shown in each of FIGS. 9 and 10, but not also shown in FIGS. 7 and 8, are included for the purpose of illustrating unclaimed environmental structure that forms no part of the claimed design.

(Continued)



The surface shadings and contour lines shown in FIGS. 1-10 represent the three-dimensional character and contour of the heat reflector.

**1 Claim, 10 Drawing Sheets**

(58) **Field of Classification Search**

CPC .... F24C 7/105; F24C 1/10; F24C 3/04; F24C 7/065; F24C 1/16; F24C 1/08; F23D 14/12; F24H 3/00; F24B 13/04  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,102,031	A	8/2000	Waters	
6,164,273	A	12/2000	Waters	
6,192,878	B1	2/2001	Waters	
D445,889	S	7/2001	Resmo et al.	
D447,796	S	9/2001	Resmo et al.	
D450,816	S	11/2001	Bilotti	
6,446,623	B1	9/2002	Resmo et al.	
6,470,877	B1	10/2002	Waters	
D466,993	S	12/2002	Chang	
D471,967	S	3/2003	Bossler	
D472,623	S	4/2003	Bossler	
D474,532	S	5/2003	Chan et al.	
6,619,281	B2	9/2003	Resmo et al.	
6,651,647	B2	11/2003	Waters	
6,668,818	B2	12/2003	Bossler	
D486,211	S	2/2004	Chan et al.	
D486,567	S	2/2004	Sakai	
D489,439	S	5/2004	Brunner et al.	
6,742,814	B2	6/2004	Resmo et al.	
6,745,759	B2	6/2004	Bossler	
6,792,937	B2	9/2004	Resmo et al.	
6,907,875	B1	6/2005	Eastman, II et al.	
7,086,396	B2	8/2006	Waters	
D532,500	S	11/2006	Yeung	
D532,501	S	11/2006	Giovino	
7,175,424	B2	2/2007	Frink et al.	
D594,949	S	6/2009	Wang	
7,631,640	B2	12/2009	Hofbauer et al.	
D619,231	S	7/2010	Yeung	
D634,412	S	3/2011	Boldsen	
8,011,329	B2	9/2011	Hardy	
8,047,197	B1	11/2011	Zernich	
8,176,910	B2	5/2012	O'Connell et al.	
8,734,928	B1	5/2014	LaVigna et al.	
D718,850	S	12/2014	Stokke	
D727,484	S	4/2015	Yang	
D754,309	S	4/2016	Yang	
D770,605	S *	11/2016	Wu ..... D23/332	
D812,205	S	3/2018	Inovero et al.	
D813,362	S	3/2018	Anthony et al.	
D813,999	S	3/2018	Inovero et al.	

10,015,655	B2	7/2018	Doorandish	
10,030,889	B2	7/2018	Merritt	
D841,789	S	2/2019	Inovero et al.	
10,222,068	B2	3/2019	Bechtold	
10,222,092	B1	3/2019	Traeger	
D850,591	S	6/2019	Inovero et al.	
10,371,386	B2	8/2019	Yang	
D865,142	S *	10/2019	Wu ..... D23/332	
10,488,052	B2	11/2019	Kalyanaraman et al.	
10,495,300	B2	12/2019	Huddleston et al.	
D886,257	S	6/2020	Pontillas et al.	
D890,315	S	7/2020	Inovero et al.	
10,982,880	B1	4/2021	Traeger	
11,022,323	B2	6/2021	Mushnick	
D953,499	S *	5/2022	Scott ..... D23/318	
2003/0029439	A1	2/2003	Bossler	
2004/0011346	A1	1/2004	Sakai	
2004/0177843	A1	9/2004	Bernini et al.	
2007/0101983	A1	5/2007	Yao	
2008/0202502	A1	8/2008	Eckhardt	
2009/0053664	A1	2/2009	Staller et al.	
2009/0223512	A1 *	9/2009	Konkle ..... F24C 1/10 126/92 AC	
2010/0288268	A1 *	11/2010	O'Connell ..... F24C 1/10 126/92 AC	
2011/0073095	A1	3/2011	Bechtold	
2015/0345828	A1 *	12/2015	Clark ..... F24C 1/10 126/90 R	
2016/0370011	A1	12/2016	David et al.	
2018/0180291	A1	6/2018	Wei	
2019/0301740	A1	10/2019	Daniels	
2019/0368742	A1	12/2019	Yang	
2020/0386412	A1	12/2020	Silverman	
2021/0140649	A1	5/2021	Dadoyan	
2021/0140679	A1 *	5/2021	Grove ..... F24B 1/181	
2021/0207810	A1	7/2021	Vlock	
2021/0356132	A1	11/2021	Yang	

FOREIGN PATENT DOCUMENTS

DE	202017101003	U1	6/2017
DE	202021102442	U1	6/2021
EP	3029393	A1	6/2016
EP	3112756	A1	4/2017
EP	3614047	A1	2/2020
EP	3279569	B1	10/2020
EP	3936764	A1	1/2022
ES	2557413	A1	1/2016
KR	101527682	B1	6/2015
WO	2014118419	A1	8/2014

OTHER PUBLICATIONS

Even Embers, Web page <https://evenembers.com/products/outdoor-heating/>, 1 page, retrieved from Internet on Aug. 12, 2022.  
Q-Stoves, Web page <https://qstoves.com/collections/outdoor-patio-heater/>, 1 page, retrieved from Internet on Aug. 12, 2022.

\* cited by examiner

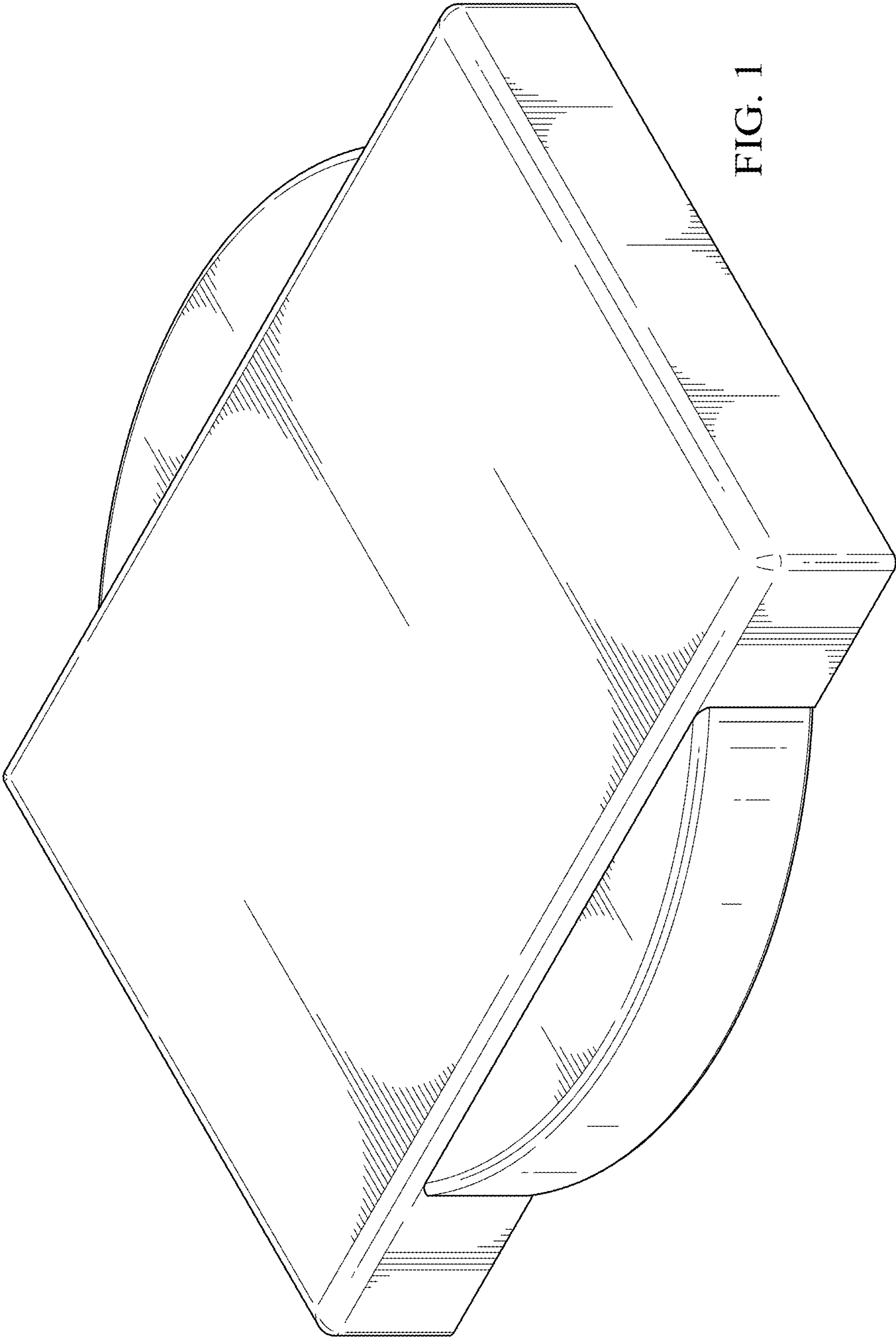


FIG. 1

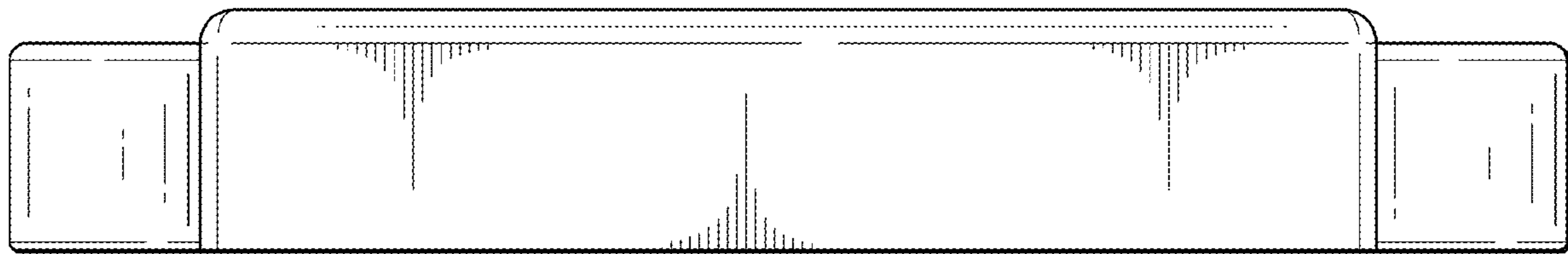


FIG. 2

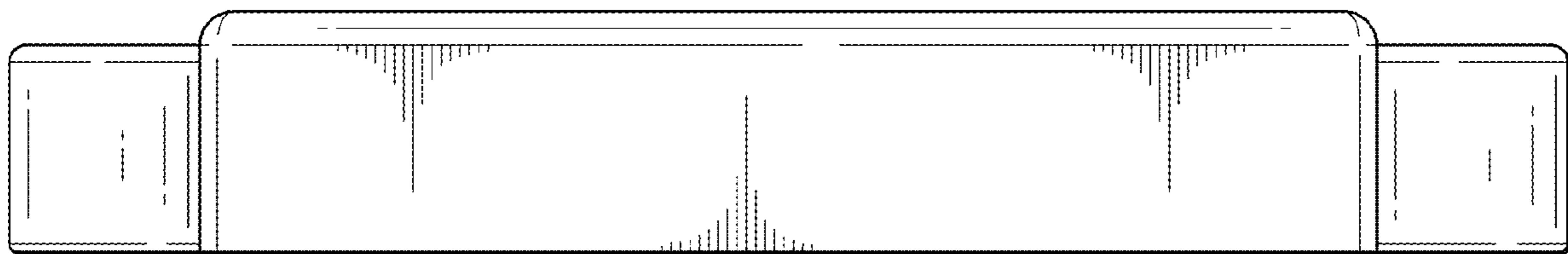


FIG. 3

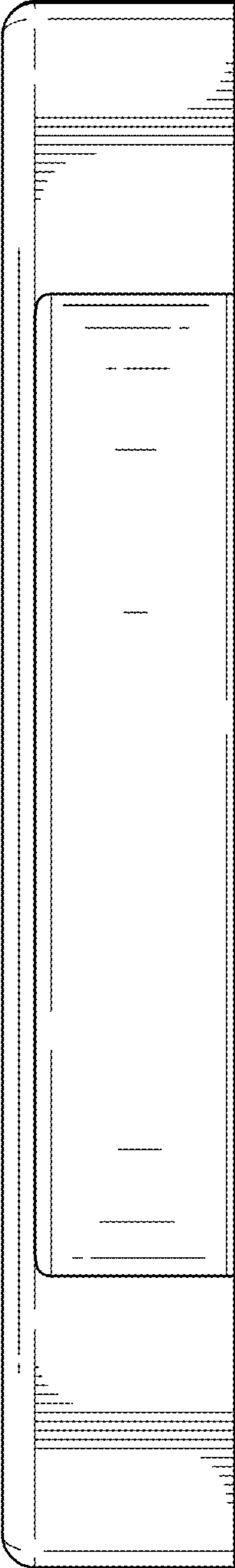


FIG. 4

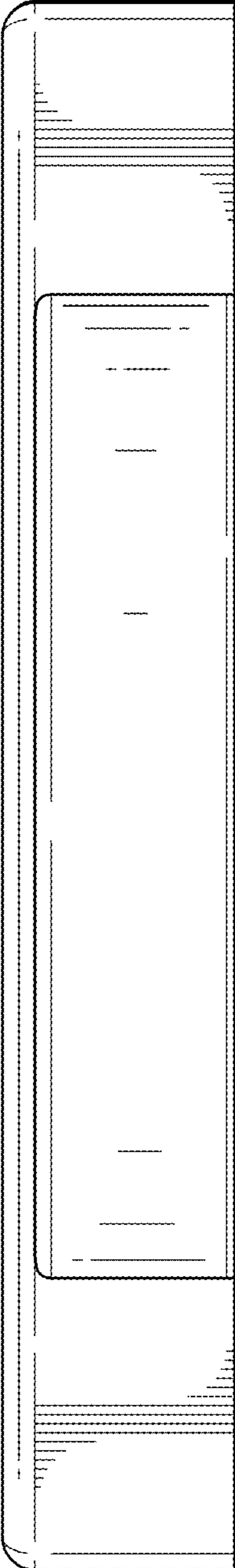


FIG. 5

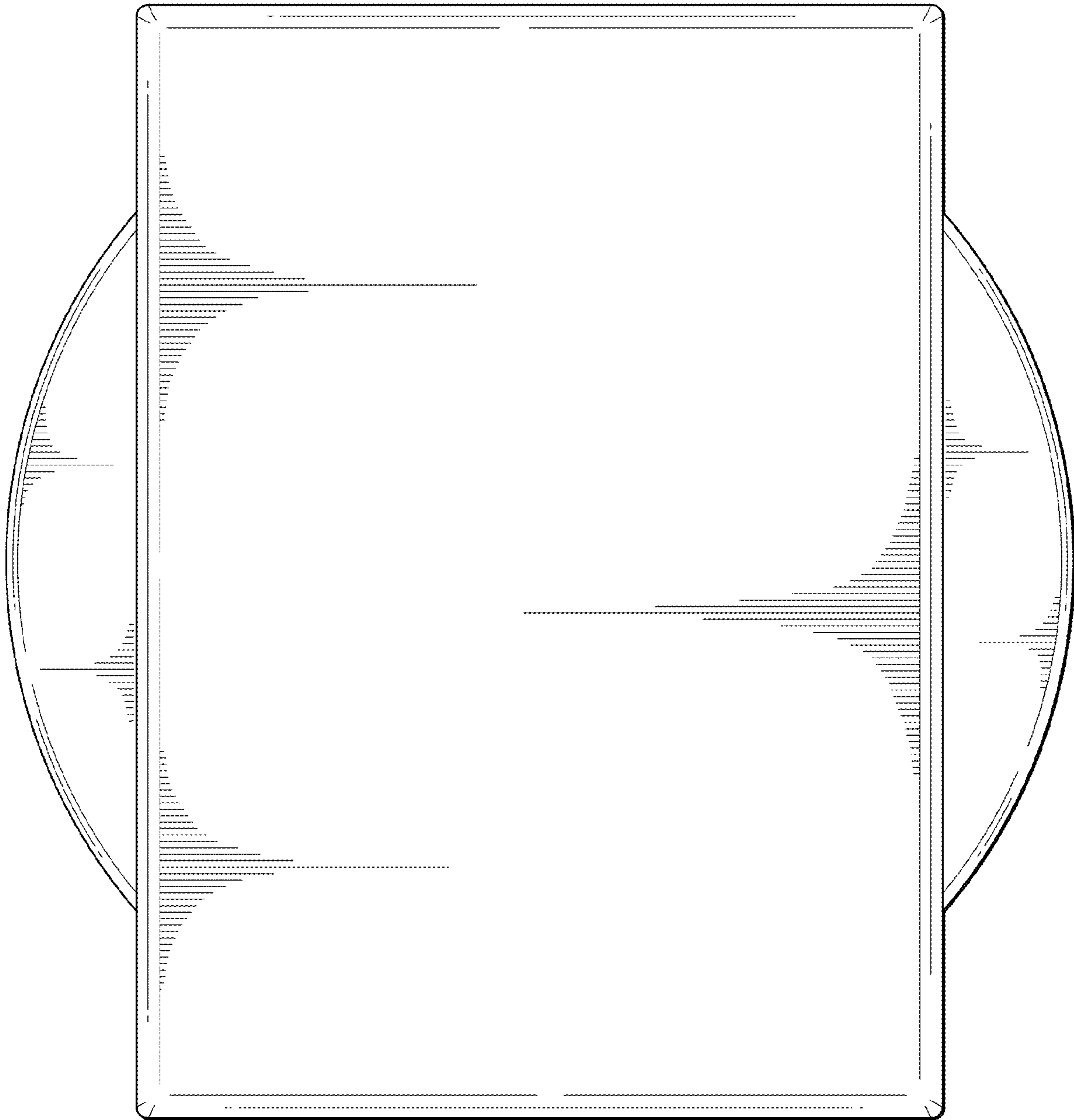


FIG. 6



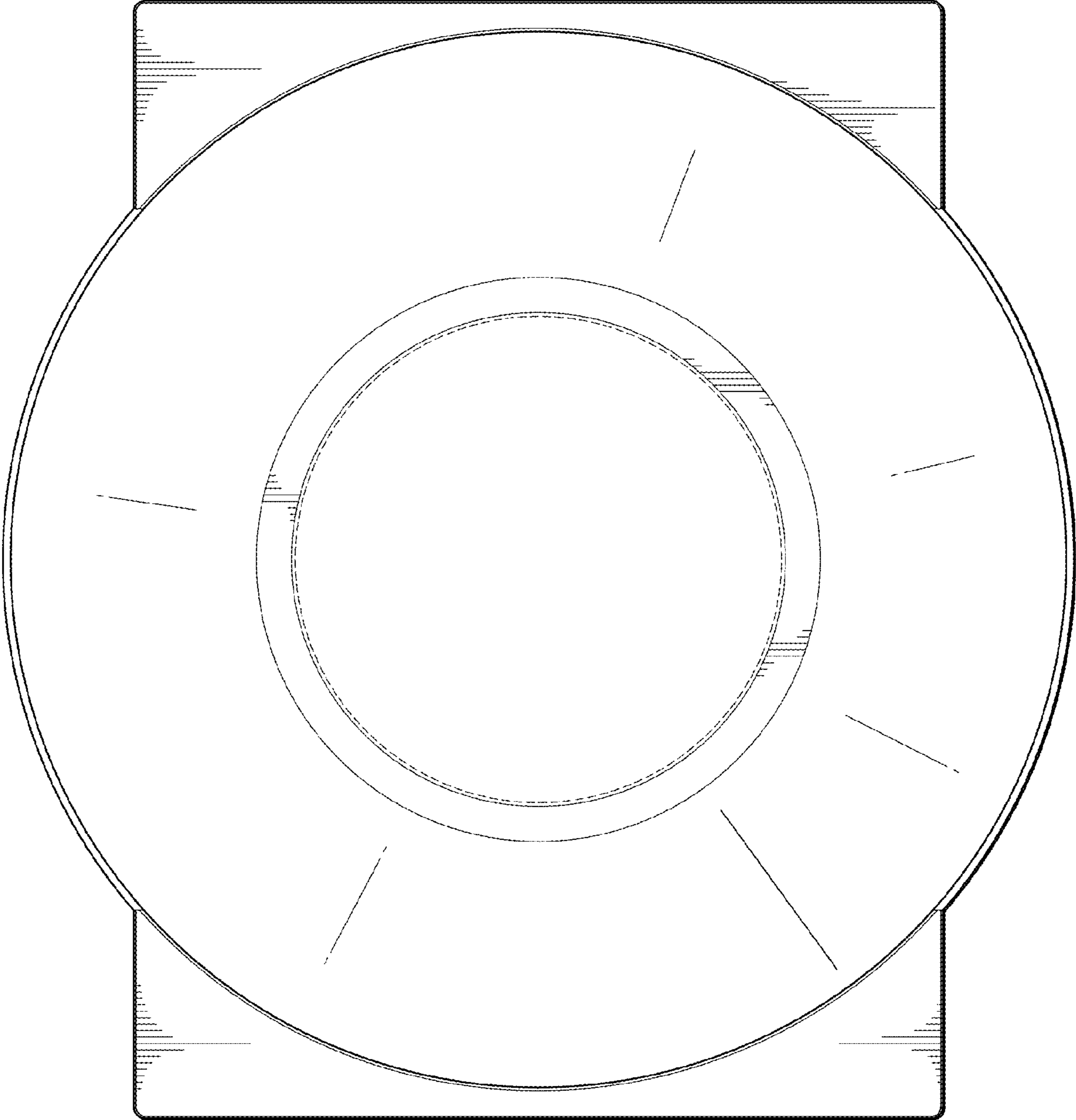


FIG. 7

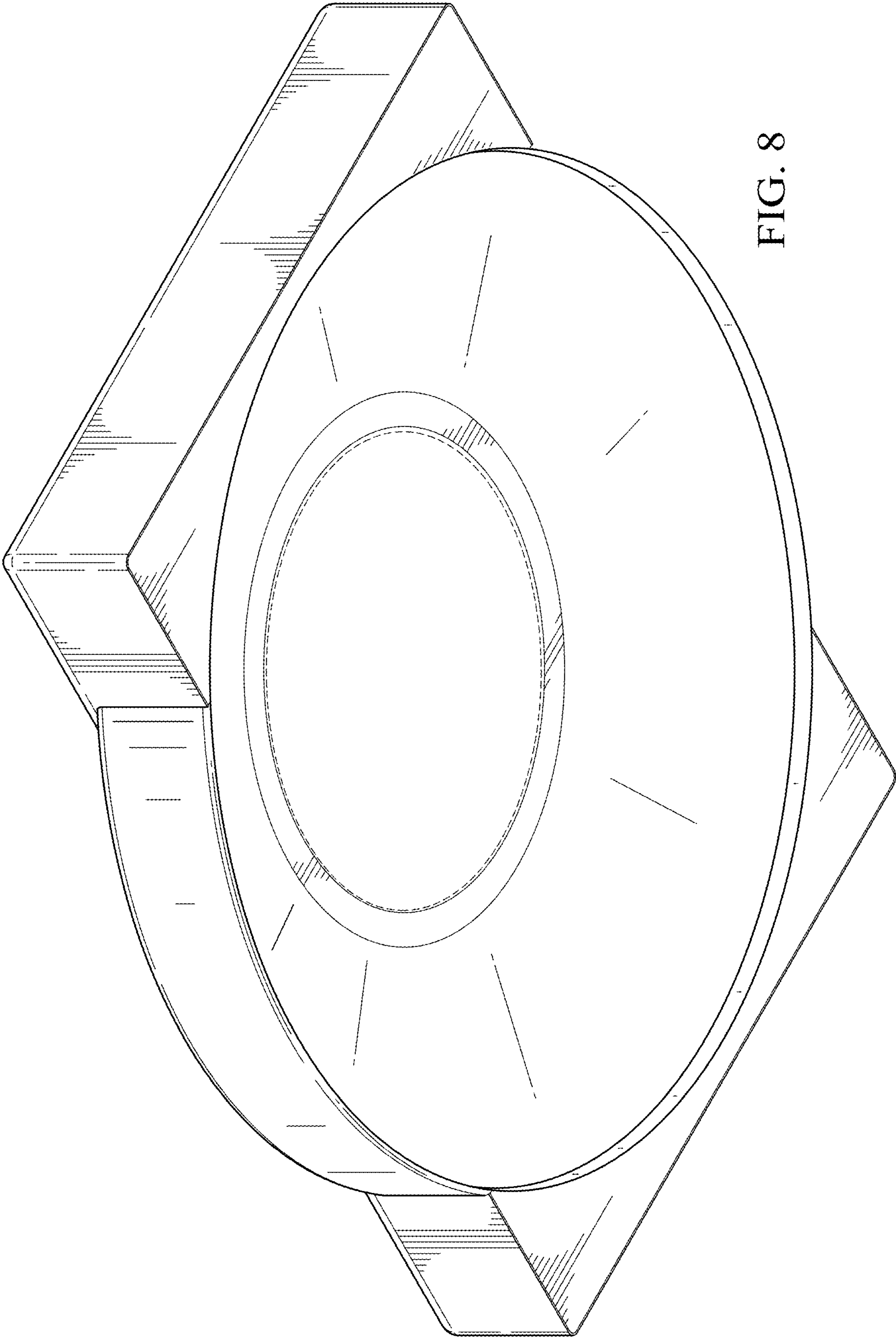


FIG. 8

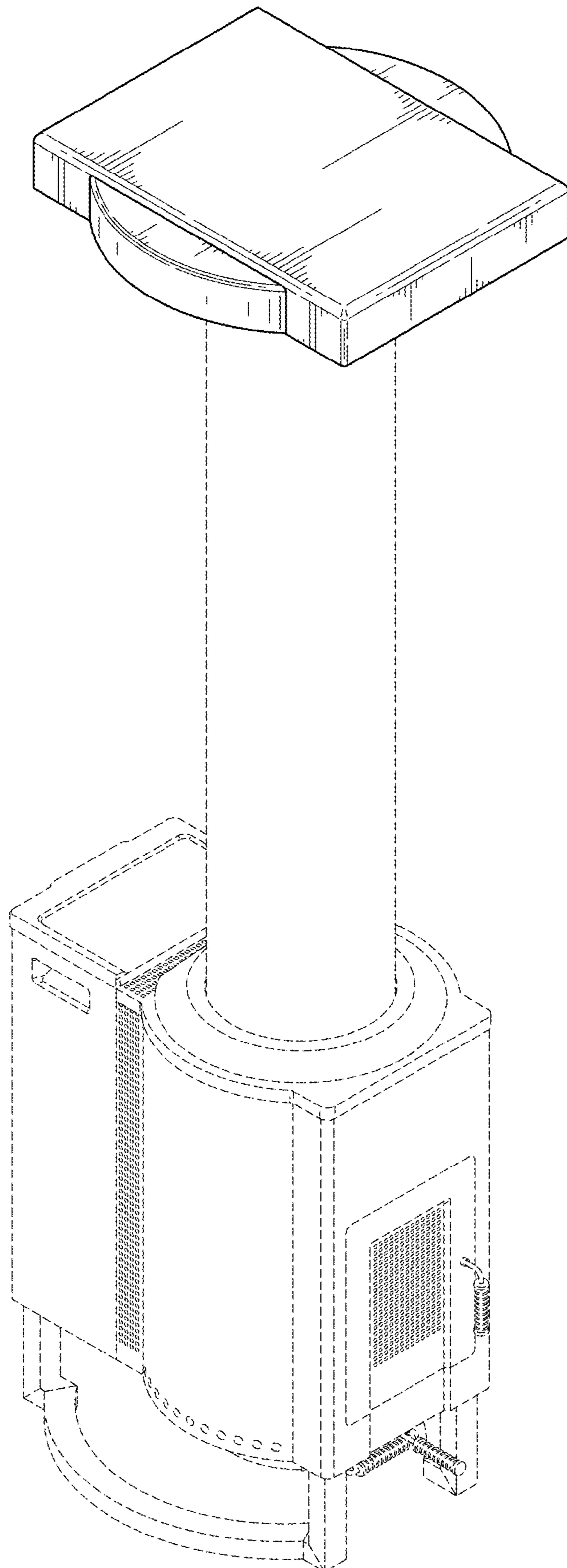


FIG. 9

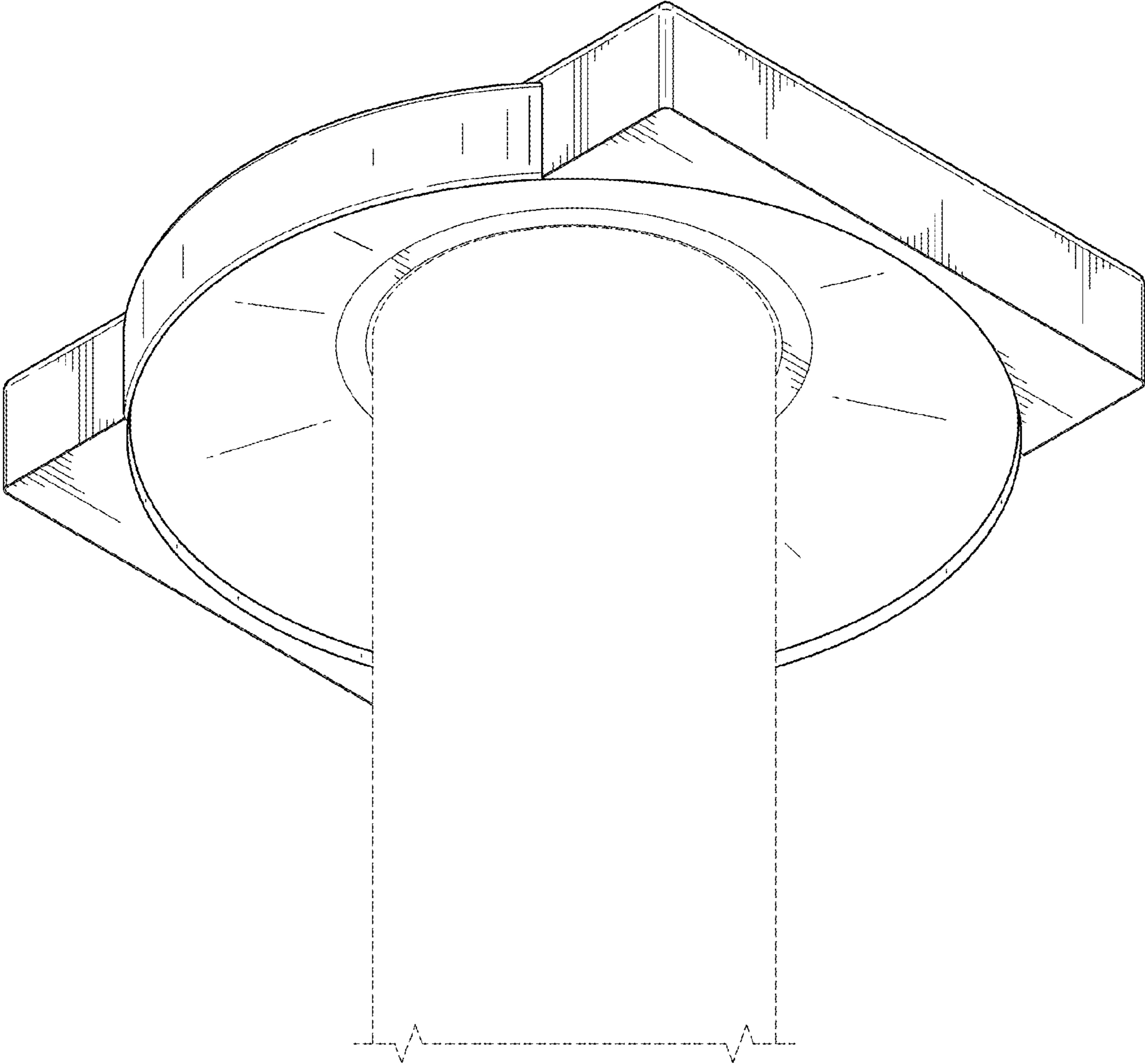


FIG. 10