



US00D822882S

(12) **United States Design Patent**
Reynolds

(10) **Patent No.:** **US D822,882 S**
(45) **Date of Patent:** **** Jul. 10, 2018**

(54) **HORTICULTURE GROW LIGHT**

(71) Applicant: **IP Holdings, LLC**, Vancouver, WA
(US)
(72) Inventor: **Christopher Reynolds**, Vancouver, WA
(US)

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

(21) Appl. No.: **29/604,376**

(22) Filed: **May 17, 2017**

(51) **LOC (11) Cl.** **26-99**

(52) **U.S. Cl.**
USPC **D26/118**

(58) **Field of Classification Search**
USPC ... D26/9, 10, 12, 13, 15, 16, 24, 51, 61, 72,
D26/76, 80, 81, 85, 86, 88, 90, 113, 118,
D26/119, 120, 122, 128, 129, 138, 143,
D26/144

CPC B60Q 1/04; B60Q 1/26; F21S 8/026; F21S
8/04; F21V 29/004; F21V 21/02; F21V
21/04; F21V 29/2212; F21V 7/22; F21V
29/83; F21V 37/002; F21V 7/00; F21Y
2101/02; A61L 9/037; F21L 19/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

32,722 A	7/1861	Schmidlin
D46,253 S	8/1914	Kopp
1,410,945 A	3/1922	Walker Mayfield
1,547,026 A	7/1925	Canney
1,798,567 A	3/1931	Wagenhorst
D85,049 S	9/1931	Kopp
D85,382 S	10/1931	Guth
1,848,734 A	3/1932	Luce
1,873,310 A	8/1932	Doane
1,930,070 A	10/1933	Zecher
1,987,705 A	1/1935	Pedersen
D106,614 S	10/1937	Waterbury

(Continued)

FOREIGN PATENT DOCUMENTS

CA 2034710 8/1991
CA 1314529 3/1993

(Continued)

OTHER PUBLICATIONS

Power 600 wat HPS MH Grow Light Digital Dimm System Indoor Garden Set, image post date 2013, site visited Jul. 13, 2017, (online), <https://bidjapon.com/item_View.aspx?itemId=150928769289>.

(Continued)

Primary Examiner — Brian N. Vinson

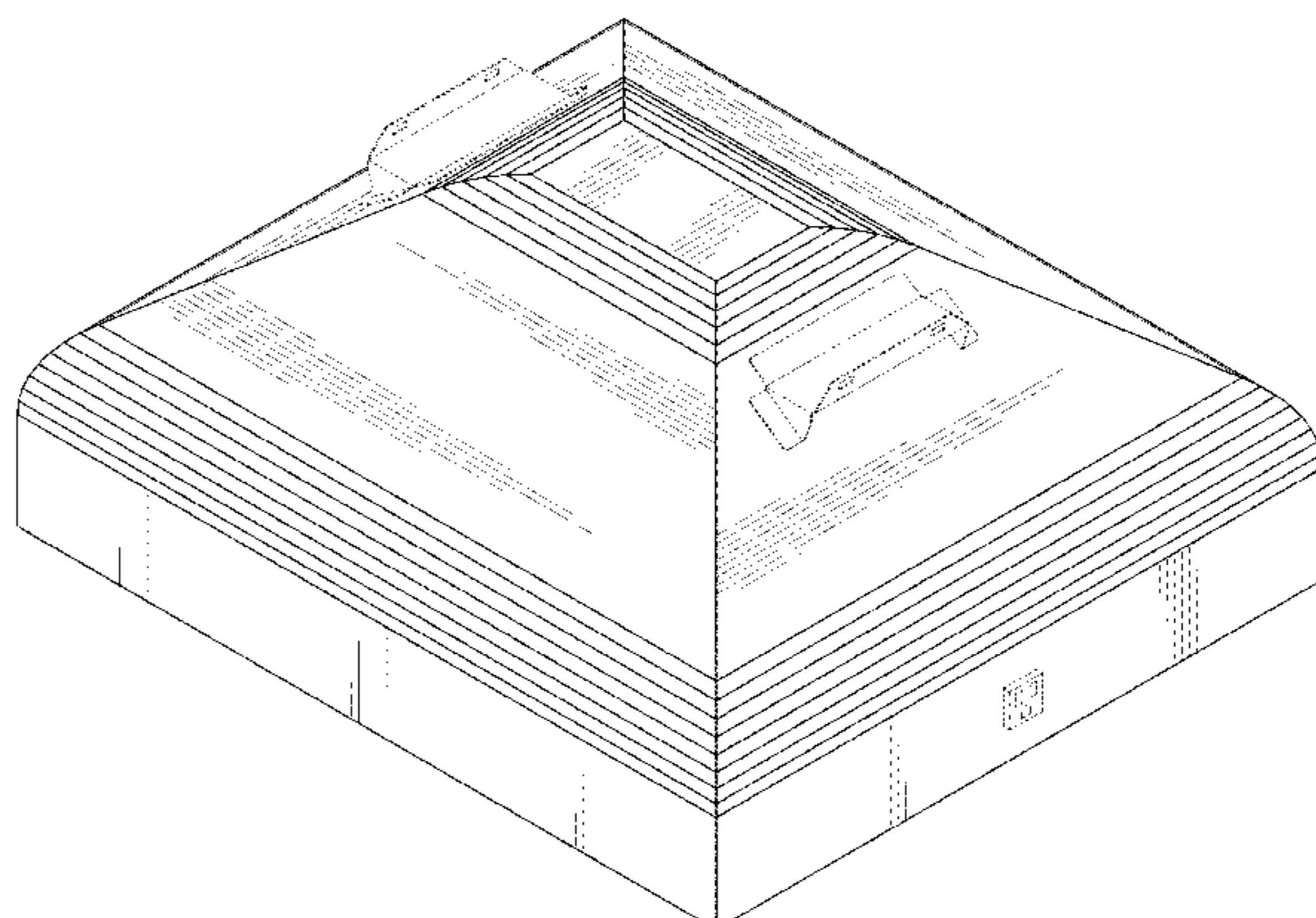
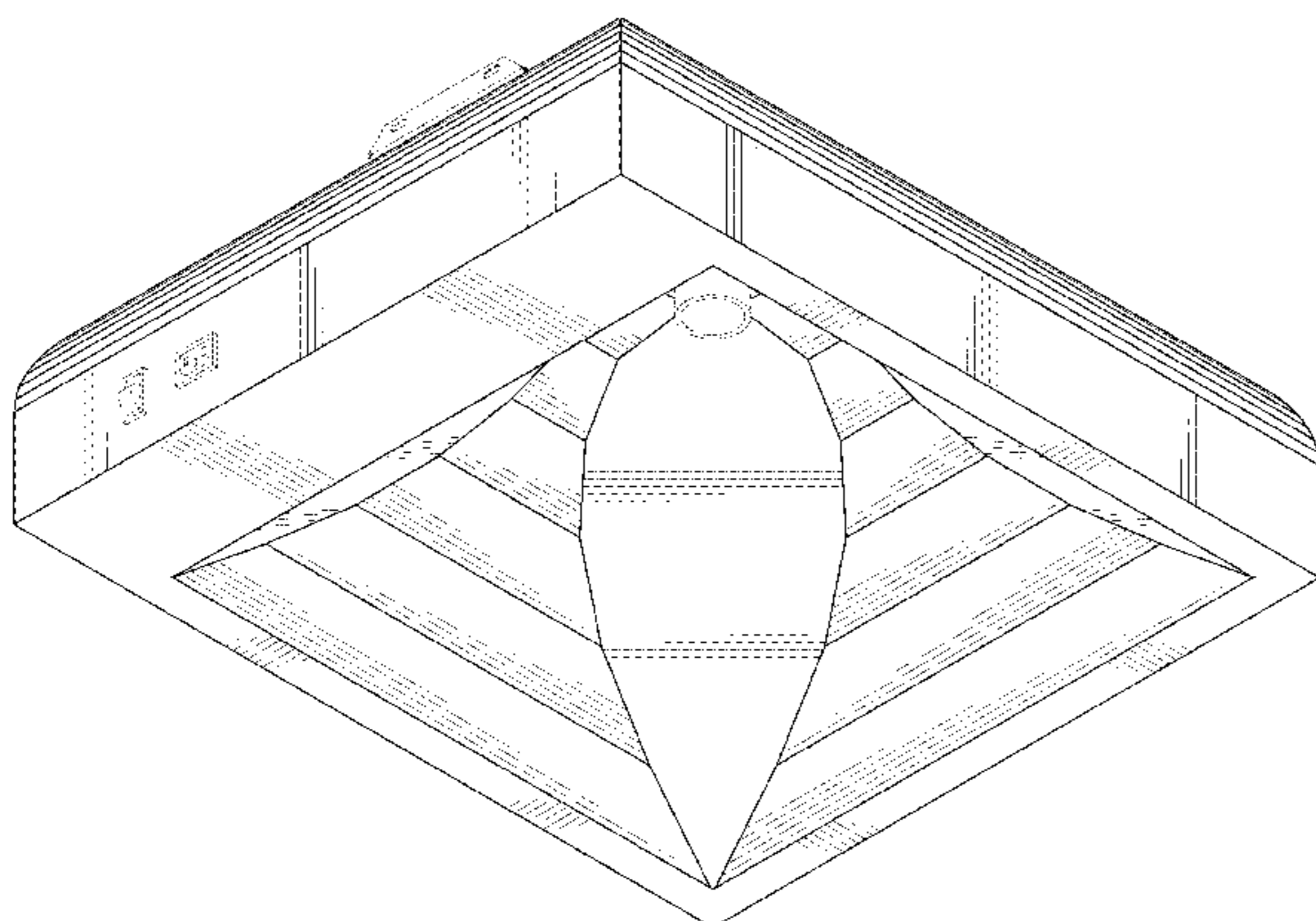
(57) **CLAIM**

The ornamental design for a horticulture grow light, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a horticulture grow light, as viewed from below, showing my new design;
FIG. 2 is a perspective view of the light shown in FIG. 1, as viewed from above;
FIG. 3 is a left side view of the light shown in FIG. 1;
FIG. 4 is a right side view of the light shown in FIG. 1;
FIG. 5 is a front elevation view of the light shown in FIG. 1;
FIG. 6 is a rear elevation view of the light shown in FIG. 1;
FIG. 7 is a bottom plan view of the light shown in FIG. 1; and,
FIG. 8 is a top plan view of the light shown in FIG. 1.
The broken-line disclosure shown in the views is understood to represent portions of the article in which the claimed design is embodied, but which form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2,194,841	A	3/1940	Welch	5,510,676	A	4/1996	Cottaar
D119,800	S	4/1940	Carter	D373,000	S	8/1996	Brady
D123,768	S	12/1940	Scribner	5,555,162	A	9/1996	Shemitz
D125,559	S	3/1941	Biller	D374,301	S	10/1996	Kleffman
2,242,590	A	5/1941	Marcel	D376,437	S	10/1996	Karlo
D128,049	S	7/1941	Kurtz	5,568,680	A	10/1996	Parker
D135,375	S	3/1943	Biller	5,570,947	A	11/1996	Felland
2,339,100	A	1/1944	Netting	D377,993	S	2/1997	Herst
2,348,617	A	5/1944	Furedy	5,621,267	A	4/1997	Shaffner
D156,014	S	11/1949	Lazerson	D383,243	S	9/1997	Fry
2,492,946	A	1/1950	Barber	5,698,947	A	12/1997	Choi
D174,221	S	3/1955	Hatch	5,702,179	A	12/1997	Sidwell
2,740,883	A	4/1956	Kruger	D391,632	S	3/1998	Thomas
2,741,694	A	4/1956	Wiig	D396,319	S	7/1998	Sutton
2,998,511	A	8/1961	Kingsley Chan	D397,481	S	8/1998	Schafer
3,025,391	A	3/1962	Golko	D399,328	S	10/1998	Compton
D193,802	S	10/1962	Thomsen	D399,329	S	10/1998	Compton
D195,012	S	4/1963	Hoyle	D399,587	S	10/1998	Compton
3,125,301	A	3/1964	Stotter	D400,289	S	10/1998	Wardenburg
3,263,071	A	7/1966	Fabbri	5,816,694	A	10/1998	Ideker
3,272,978	A	9/1966	Jackson	D401,006	S	11/1998	Edwards
3,322,946	A	5/1967	Cooper	D405,976	S	2/1999	Beall
3,420,995	A	1/1969	Dunckel	5,896,004	A	4/1999	Feldman
D213,391	S	2/1969	Bruno	5,924,789	A	7/1999	Thornton
3,433,941	A	3/1969	Hall	5,932,955	A	8/1999	Berger
3,675,008	A	7/1972	Hill	5,938,317	A	8/1999	Thornton
3,684,883	A	8/1972	Entwistle	D415,304	S	10/1999	Brown
3,701,898	A	10/1972	McNamara, Jr.	5,983,564	A	11/1999	Stragnola
3,755,667	A	8/1973	Price	5,987,697	A	11/1999	Song
3,829,677	A	8/1974	DeLlano	5,999,943	A	12/1999	Nori
3,902,059	A	8/1975	McNamara, Jr.	D418,626	S	1/2000	Herst
3,911,265	A	10/1975	Landrum	D419,248	S	1/2000	Lyons
4,028,542	A	6/1977	McReynolds, Jr.	6,024,468	A	2/2000	Kassay
D245,016	S	7/1977	Barr	6,042,250	A	3/2000	Stragnola
4,037,096	A	7/1977	Brengord	6,051,927	A	4/2000	Graser
4,078,169	A	3/1978	Armstrong	6,053,624	A	4/2000	Cronk
4,175,360	A	11/1979	Mulvey	D425,237	S	5/2000	Scott
4,229,782	A	10/1980	Ruud	D425,652	S	5/2000	Brok
D259,738	S	6/1981	Boschetti	D426,010	S	5/2000	Compton
4,308,473	A	12/1981	McNamara, Jr.	6,061,690	A	5/2000	Nori
D262,659	S	1/1982	Laltta	6,065,849	A	5/2000	Chen
D266,578	S	10/1982	Moshier	6,070,173	A	5/2000	Huber
D268,287	S	3/1983	Boschetti	6,076,944	A	6/2000	Maranon
D270,577	S	9/1983	DeVos	6,079,851	A	6/2000	Altman
4,446,506	A	5/1984	Larson	D428,516	S	7/2000	Reo
4,531,180	A	7/1985	Hernandez	6,094,919	A	8/2000	Bhatia
4,616,293	A	10/1986	Baliozian	6,111,739	A	8/2000	Wu
4,669,033	A	5/1987	Lee	6,152,579	A	11/2000	Reed
D290,662	S	7/1987	Basil	D439,008	S	3/2001	Kim
D300,877	S	4/1989	Cyr	D440,289	S	4/2001	Olson et al.
4,855,884	A	8/1989	Richardson	6,210,025	B1	4/2001	Schmidt
4,893,221	A	1/1990	Friedman	6,230,497	B1	5/2001	Morris
4,933,821	A	6/1990	Anderson	D443,198	S	6/2001	Snyder
4,939,629	A	7/1990	Glanton	D443,949	S	6/2001	Dimonte
D311,597	S	10/1990	Poot	6,247,830	B1	6/2001	Winnett
4,970,428	A	11/1990	Hayakawa	D445,943	S	7/2001	Littman
4,980,809	A	12/1990	Baldwin	6,257,735	B1	7/2001	Baar
D316,301	S	4/1991	Michael	6,267,483	B1	7/2001	Hembery
5,006,752	A	4/1991	Eggink	D447,272	S	8/2001	Smith
5,065,294	A	11/1991	Poot	6,279,012	B1	8/2001	Sexton
5,072,349	A	12/1991	Waniga	6,299,327	B1	10/2001	Camarota
D323,897	S	2/1992	Compton	D452,559	S	12/2001	Schonberger
5,088,015	A	2/1992	Baggio	6,343,984	B1	2/2002	Langdon
D329,104	S	9/1992	Dieperink	6,371,630	B1	4/2002	Unger
D330,438	S	10/1992	Herst	D456,927	S	5/2002	Russello
5,192,129	A	3/1993	Figueroa	D456,928	S	5/2002	Russello
5,199,784	A	4/1993	Hempleman	D456,938	S	5/2002	Wardenburg
5,253,152	A	10/1993	Yang	D457,450	S	5/2002	Lamond et al.
D349,358	S	4/1994	Herst	D459,825	S	7/2002	Field
5,353,746	A	10/1994	Del Rosario	6,488,387	B2	12/2002	Wardenburg
D352,126	S	11/1994	Ruud	D469,564	S	1/2003	Brok
5,440,470	A	8/1995	Ly	6,527,422	B1	3/2003	Hutchison
5,461,554	A	10/1995	Leonetti	6,548,948	B1	4/2003	Muessli
D365,159	S	12/1995	Tinen	6,595,662	B2	7/2003	Wardenburg
5,486,737	A	1/1996	Hrubowchak	6,601,972	B2	8/2003	Sei
				6,658,652	B1	12/2003	Alexander
				6,679,619	B2	1/2004	Saieva
				D486,593	S	2/2004	Griffin
				6,688,759	B1	2/2004	Hadjimichael

(56)

References Cited

U.S. PATENT DOCUMENTS

6,709,131	B1	3/2004	Herst	D637,752	S	5/2011	Mekhtarian	
6,729,383	B1	5/2004	Cannell	D640,404	S	6/2011	Chipperfield	
6,783,263	B1	8/2004	Cronk	7,959,331	B2	6/2011	Ho	
D496,121	S	9/2004	Santoro	D641,100	S	7/2011	Li	
D499,504	S	12/2004	Meyer	7,972,044	B2	7/2011	Burkhauser	
D499,505	S	12/2004	Benensohn	D644,185	S	8/2011	Hargreaves	
D504,343	S	4/2005	Ek	7,987,632	B2	8/2011	May	
6,885,134	B2	4/2005	Kurashima	8,018,630	B2	9/2011	Herloski	
6,908,212	B2	6/2005	Schultz	8,038,318	B2	10/2011	Plunk	
7,011,424	B1	3/2006	Poulson	D648,652	S	11/2011	Hawkins	
7,083,309	B2	8/2006	Chan	D649,685	S	11/2011	Trzesniowski	
7,101,060	B2	9/2006	Oppenheimer	D650,515	S	12/2011	Bradley	
7,131,753	B1	11/2006	Edwards, Jr.	D650,935	S	12/2011	Beghelli	
7,156,539	B2	1/2007	Cronk	8,113,696	B2	2/2012	Striebel	
7,175,309	B2	2/2007	Craw	D655,403	S	3/2012	Zakula	
D542,460	S	5/2007	Hargreaves	D657,748	S	4/2012	Hargreaves	
D543,652	S *	5/2007	Hargreaves	D660,252	S	5/2012	Hargreaves	
D543,654	S	5/2007	Hargreaves	D661,370	S	6/2012	Imajo	
D543,655	S	5/2007	Hargreaves	D661,833	S	6/2012	Imajo	
D544,982	S	5/2007	Hargreaves	8,209,912	B2	7/2012	Hargreaves	
7,213,948	B2	5/2007	Hein	8,215,799	B2	7/2012	Vanden Eynden	
D544,136	S	6/2007	Hargreaves	D667,584	S	9/2012	Beghelli	
D544,138	S	6/2007	Hargreaves	D668,370	S	10/2012	Guercio	
D544,139	S	6/2007	Hargreaves	D671,259	S	11/2012	Chen	
D544,626	S	6/2007	Hargreaves	D672,908	S	12/2012	Wilcox	
D544,980	S	6/2007	Hargreaves	D672,911	S	12/2012	Mayfield, III	
D544,981	S	6/2007	Hargreaves	D673,324	S	12/2012	Mayfield	
D544,983	S	6/2007	Hargreaves	8,334,640	B2	12/2012	Reed	
D544,984	S	6/2007	Hargreaves	D675,369	S *	1/2013	Michaud	
D544,985	S	6/2007	Hargreaves	8,348,481	B2	1/2013	Chang	
D544,987	S	6/2007	Hargreaves	D675,772	S	2/2013	Tran	
D544,994	S	6/2007	Hargreaves	8,371,726	B2	2/2013	Collins	
D544,995	S *	6/2007	Hargreaves	D678,597	S	3/2013	Lehman	
D545,460	S	6/2007	Mason, II	D678,599	S	3/2013	Boyer	
D545,484	S *	6/2007	Hargreaves	D679,848	S	4/2013	Pickard	
D545,485	S *	6/2007	Hargreaves	D683,064	S	5/2013	Tuck	
D545,990	S	7/2007	Hargreaves	D683,376	S	5/2013	Yokoi	
D545,994	S	7/2007	Hargreaves	8,505,224	B2	8/2013	Huang	
D545,996	S	7/2007	Hargreaves	D689,238	S	9/2013	Halsey	
D549,869	S	8/2007	Ward	D689,986	S	9/2013	Lord	
D553,781	S	10/2007	Pickard	D690,875	S	10/2013	McKenzie	
7,296,914	B1	11/2007	Russello	D693,959	S *	11/2013	Boyer	
7,360,927	B2	4/2008	Oka	D697,663	S	1/2014	Speier	
D569,024	S	5/2008	Redfern	D698,074	S	1/2014	Hargreaves	
D572,858	S	7/2008	Santoro	D698,075	S	1/2014	Klus	
7,445,363	B2	11/2008	Vanden Eynden	D698,986	S *	2/2014	Reynolds	
7,524,090	B2	4/2009	Hargreaves	D698,987	S	2/2014	Stanley	
7,534,011	B2	5/2009	Townsley	D699,386	S	2/2014	Park	
D595,894	S	7/2009	Verfuert	D702,827	S	4/2014	Mase	
D602,625	S	10/2009	Santoro	8,702,283	B2	4/2014	Bradley, Jr.	
D603,087	S	10/2009	Mo	D705,474	S	5/2014	Philips	
7,617,057	B2	11/2009	May	D705,974	S	5/2014	Blessitt	
D605,342	S	12/2009	Chung	8,723,086	B2	5/2014	McMahan	
D608,490	S	1/2010	Chung	D707,385	S *	6/2014	Wardenburg	D26/118
7,641,367	B2	1/2010	Hargreaves	D708,390	S	7/2014	Roos	
7,654,702	B1	2/2010	Ding	D710,528	S	8/2014	Wardenburg	
D611,183	S	3/2010	Duarte	8,801,235	B2	8/2014	Yurich	
D613,900	S	4/2010	Hargreaves	D713,953	S	9/2014	Jepson	
D614,801	S *	4/2010	Collins	D714,988	S	10/2014	Park	
7,722,228	B2	5/2010	Broer	D715,994	S	10/2014	Klus	
D617,028	S	6/2010	Verfuert	D716,995	S	11/2014	Zhu	
D620,190	S	7/2010	Chung	D717,487	S	11/2014	Guzzini	
D621,993	S	8/2010	Jong	D717,636	S	11/2014	Stanley	
7,771,086	B2	8/2010	Goverde	D720,488	S	12/2014	Toyohisa	
D628,335	S	11/2010	Hyland	D720,505	S	12/2014	Kersten	
7,854,534	B2	12/2010	Liu	8,905,575	B2 *	12/2014	Durkee	F21V 7/0008 362/218
D632,419	S	2/2011	Ng	D720,876	S	1/2015	Haverfield	
D633,247	S	2/2011	Kong	D721,844	S	1/2015	Lay	
D633,640	S	3/2011	Wauters	D722,654	S	2/2015	Martone	
D634,060	S *	3/2011	Wardenburg	D725,820	S	3/2015	Hargreaves	
D634,240	S	3/2011	Junkeer	8,967,821	B2	3/2015	Pickard	
D634,468	S	3/2011	Hargreaves	D726,359	S	4/2015	Grigore	
D634,469	S *	3/2011	Hargreaves	8,998,473	B1	4/2015	Anderson	
D637,162	S	5/2011	Bridgman	9,016,892	B1	4/2015	Scribante	
D637,341	S	5/2011	Wardenburg	9,016,907	B2	4/2015	Stanley	
				D728,848	S	5/2015	Reyes	
				D729,435	S	5/2015	Arndt	
				D730,556	S	5/2015	Toyohisa	

(56)

References Cited

U.S. PATENT DOCUMENTS

D725,819 S	6/2015	Reynolds	
D731,103 S	6/2015	Wilke	
D731,109 S	6/2015	Wardenburg	
D731,701 S *	6/2015	Hargreaves	D26/118
D732,233 S	6/2015	Reynolds	
D732,234 S	6/2015	Rashidi Doust	
D732,235 S *	6/2015	Reynolds	D26/118
D732,236 S *	6/2015	Reynolds	D26/118
D733,347 S	6/2015	Dungan	
9,052,075 B2	6/2015	Demuynck	
D733,952 S	7/2015	Lay	
D733,960 S	7/2015	Howe	
D734,534 S	7/2015	Howe	
D735,391 S	7/2015	Blessitt	
D735,401 S	7/2015	Clements	
D736,450 S *	8/2015	Reynolds	D26/118
D737,498 S	8/2015	Stanley	
9,110,209 B2	8/2015	Blessitt	
D738,031 S	9/2015	Martins	
D739,595 S	9/2015	Reynolds	
9,127,826 B2	9/2015	Boyer	
D740,486 S *	10/2015	Stanley	D26/118
D740,996 S	10/2015	Tragatschnig	
D745,993 S	12/2015	Reynolds	
D747,029 S *	1/2016	Reynolds	D26/118
D747,538 S	1/2016	Reynolds	
D747,825 S	1/2016	Reynolds	
D747,849 S	1/2016	Reynolds	
D747,923 S	1/2016	Cornu	
D748,319 S	1/2016	Johnson	
D748,320 S	1/2016	Johnson	
D748,847 S	1/2016	Johnson	
D748,850 S	1/2016	Johnson	
D748,849 S *	2/2016	Stanley	D26/118
D749,773 S	2/2016	Waible	
D750,312 S	2/2016	Reynolds	
D750,313 S	2/2016	Reynolds	
D750,316 S *	2/2016	Reynolds	D26/118
9,255,690 B2	2/2016	Dimitriadis	
D750,831 S	3/2016	Clements	
D751,244 S *	3/2016	Reynolds	D26/118
D751,245 S	3/2016	Stanley	
D751,247 S *	3/2016	Reynolds	D26/118
9,279,553 B1	3/2016	Scribante	
D753,654 S	4/2016	Eastwood	
9,310,037 B2	4/2016	Cercone	
D756,016 S	5/2016	Hargreaves	
D756,023 S	5/2016	Hoffer	
D756,026 S	5/2016	Reynolds	
D757,323 S	5/2016	Reynolds	
D757,326 S	5/2016	Reynolds	
D757,346 S	5/2016	Stanley	
9,335,038 B2	5/2016	Stanley	
9,366,947 B2	6/2016	Miyata	
D762,320 S	7/2016	Reynolds	
D765,306 S	8/2016	Wardenburg	
D766,756 S	9/2016	Franc	
9,451,743 B2	9/2016	Koerner	
D769,513 S	10/2016	Reynolds	
D769,514 S	10/2016	Reynolds	
D770,079 S	10/2016	Stanley	
D770,082 S	10/2016	Reynolds	
D770,670 S	11/2016	Reynolds	
D770,671 S	11/2016	Reynolds	
D771,301 S	11/2016	Stanley	
D771,304 S	11/2016	Goltche	
D773,107 S	11/2016	Stanley	
D774,234 S	12/2016	Plourde	
D775,406 S	12/2016	Hargreaves	
D775,760 S	1/2017	Reynolds	
9,551,482 B2	1/2017	Seward	
D780,985 S	3/2017	Stanley	
D780,986 S	3/2017	Reynolds	
D781,492 S	3/2017	Reynolds	
D783,887 S	4/2017	Stanley	
D783,888 S	4/2017	Reynolds	
D786,477 S	5/2017	Lauderdale	
D786,488 S	5/2017	Reynolds	
D786,489 S	5/2017	Stanley	
D786,490 S	5/2017	Stanley	
D786,491 S	5/2017	Reynolds	
D792,635 S	7/2017	Reynolds	
D793,616 S	8/2017	Reynolds	
D796,727 S	9/2017	Reynolds	
D796,728 S	9/2017	Reynolds	
D797,350 S	9/2017	Reynolds	
D797,353 S	9/2017	Stanley	
9,750,199 B2	9/2017	Stanley	
9,752,766 B2	9/2017	Stanley	
D802,826 S	11/2017	Stanley	
D802,828 S	11/2017	Stanley	
D802,829 S	11/2017	Stanley	
D802,830 S	11/2017	Stanley	
2002/0073285 A1	6/2002	Butterworth	
2002/0141195 A1	10/2002	Wardenburg	
2003/0031011 A1	2/2003	Miller	
2003/0191783 A1	10/2003	Wolczko	
2004/0240214 A1	12/2004	Whitlow	
2005/0117333 A1	6/2005	Yoshida	
2005/0160481 A1	7/2005	Todd	
2005/0233691 A1	10/2005	Horton	
2006/0231081 A1	10/2006	Kirakosyan	
2006/0232984 A1	10/2006	Schuknecht	
2006/0282457 A1	12/2006	Williams	
2007/0051321 A1	3/2007	Chang	
2007/0070633 A1	3/2007	Eynden	
2007/0228993 A1	10/2007	Stuer	
2007/0246631 A1	10/2007	Brown	
2007/0282806 A1	12/2007	Hoffman	
2008/0059799 A1	3/2008	Scarlata	
2008/0117617 A1	5/2008	Hargreaves	
2008/0130304 A1	6/2008	Rash	
2008/0205030 A1	8/2008	Hargreaves	
2008/0205071 A1	8/2008	Townsley	
2008/0212326 A1	9/2008	Chon	
2008/0178957 A1	11/2008	Pickard	
2008/0278950 A1	11/2008	Pickard	
2009/0166250 A1	5/2009	Hargreaves	
2009/0231840 A1	9/2009	Boehme	
2009/0262540 A1	10/2009	Hargreaves	
2009/0276478 A1	11/2009	Soman	
2009/0310373 A1	12/2009	Burkhauser	
2009/0316404 A1	12/2009	Mo	
2009/0323335 A1	12/2009	Yang	
2010/0214789 A1	8/2010	Hawkes	
2010/0238661 A1	9/2010	Pfund	
2010/0277908 A1	11/2010	Hu	
2010/0277929 A1	11/2010	Hargreaves	
2010/0295468 A1	11/2010	Pedersen	
2010/0302768 A1	12/2010	Collins	
2011/0169412 A1	7/2011	Yurich	
2011/0203096 A1	8/2011	Hargreaves	
2011/0259665 A1	10/2011	Morgan	
2012/0051041 A1	3/2012	Edmond	
2012/0092859 A1	4/2012	Gregoris	
2012/0145669 A1	6/2012	McMahan	
2012/0212883 A1	8/2012	Hargreaves	
2012/0230035 A1	9/2012	Bradley, Jr.	
2012/0302768 A1	11/2012	Janka et al.	
2013/0083539 A1	1/2013	Dimitriadis	
2013/0077329 A1	3/2013	Hessling	
2013/0155685 A1	6/2013	Stanley	
2013/0242573 A1	9/2013	Petrsoiki	
2013/0250567 A1	9/2013	Edmond	
2014/0378283 A1	12/2014	Qiu	
2015/0023022 A1	1/2015	Stanley	
2015/0098215 A1	4/2015	Torabifard	
2015/0252992 A1	9/2015	Stanley	
2015/0252993 A1	9/2015	Stanley	

(56)

References Cited

U.S. PATENT DOCUMENTS

2015/0252994 A1 9/2015 Stanley
 2015/0260381 A1 9/2015 Verfuierth
 2017/0211801 A1 7/2017 Stanely

FOREIGN PATENT DOCUMENTS

EP	0325003	7/1989
EP	0440274	8/1991
WO	2002063210	8/2002
WO	2003060379	7/2003
WO	2008018000	2/2008
WO	2009096775	8/2009
WO	2011119451	9/2011

OTHER PUBLICATIONS

AplusChoice-Hydroponics, image post date Dec. 2, 2014, site visited Jul. 13, 2017, (online), <https://www.tineye.com/search/6589596c8738268de70accceca20d64855d0f1d2/?sort=crawal_date&order=asc>.

Apollo Horticulture GLRCTAC 6" Air Cool Tube Grow Light Deluxe Glass Cylinder with Hood Reflector, image post date Oct. 15, 2010, site visted Oct. 3, 2014, (online), <http://www.amazon.com/apollo-horticulture-glrectac-cylinder-reflector/dp/b003qkvv04/ref=pd_sbs_lg_5?ie=utf8&refrid=1y9v9qhh4n5vnctjmftr>.

Apollo Horticulture GLRLS24 6" Air Cooled Hydroponic Grow Light Glass Reflector Hood, image post date Oct. 15, 2010, site visted Oct. 3, 2014, (online), <http://www.amazon.com/apollo-horticulture-GLRLS24-hydroponic-reflector/dp/B00BMVK8HG/ref=cm_cd_ql_qh_dp_i>.

Adjustable Reflector, image post date Apr. 23, 2012, site visited Sep. 23, 2015, http://web.archive.org/web/2012043260757/http://hydroponics-products.en.alibaba.com/product/519225678-213056444/adjustable_reflector_grow_light_hydroponics_greenhouse_horticulture_reflector_hood.html.

Agrotech Magnum Reflector, image post date Feb. 5, 2012, site visited Oct. 31, 2014, www.hydroponics.net/i/136580.

Cree CR22, image post date Apr. 28, 2011, site visited Nov. 15, 2014, <http://ledsmagazine.com/content/dam/leds/migrated/objects/news/8/4/19/cree204272011.jpg>.

ZR series High Efficacy Troffer, image post date Apr. 13, 2012, site visited Oct. 31, 2014, www.cree.com/lighting/products.

Grow Lights Home Depot: Find many types of grow lights for your plant, published Dec. 22, 2012, online. Site visited Jun. 25, 2014. [Http://besthomedecorfurniture.com/gardening-d%C3%A9cor/grow-lights-home-depot-few-things-to-consider-when-buying-grow-lighting-plants-online.html](http://besthomedecorfurniture.com/gardening-d%C3%A9cor/grow-lights-home-depot-few-things-to-consider-when-buying-grow-lighting-plants-online.html).

LED Grow Light Comparison Test Review, Youtube.com, published Jun. 29, 2012, online. Site visited Jun. 25, 2014. www.youtube.com/watch?v=f-8oy0qbgrs.

Illuminator Pro-Series Hybrid 350W, wordpress.com, published Dec. 22, 2010, online, site visited Jun. 25, 2014. <http://growsetup.wordpress.com/category/grow-lights/>.

California Lightworks NEW SolarStorm 440W LED Grow Light with UVB, hydrobuilder.com, online. Site visited Jun. 25, 2014. http://hydrobuilder.com/solarstorm-440w-led-grow-light-with-uvb.html?dzid=strands_CLW-SS-440.

2013 Sunlight Supply Cataog, Issuuu.com, published Aug. 1, 2013, online. Site visited Feb. 2, 2015. http://issuu.com/sunlightsupply/docs/2013_sunlightproductcatalog/49.

Pages 29 and 54 from 2014-2015 dealer catalog showing and describing Super Sun DE reflector published by Sunlight Supply, Inc. 2014.

Dominator XXXL Non AC Reflector pack of 3 Spec Sheet, GreenTreesHydroponics.com, date available Mar. 12, 2014, online. Site visited Feb. 3, 2015, <https://www.hydroponics.net/i/141477>.

Low Rider Air-Cooled Reflector—TinEye, image post date Oct. 11, 2012, site visited Oct. 1, 2015, www.tineye.com/search/1b0e187c5ed9e4e9cfb55d0472271385a2c0e88/?pluginver.

OG Air Cooled Parabolic Reflector Only—Make the Most of Your Grow Light, GroWell Hydroponics, <http://www.growell.co.uk/og-air-cooled-parabolic-reflector-only.html>, pp. 1-2, accessed Aug. 26, 2014.

Air Resistance: Distinguishing Between Laminar and Turbulent Flow, www.docstoc.com, Dec. 29, 2010, p. 1-6.

Sun Systems LEC 630 Light Emitting Ceramic Fixture, Spec Sheet for 906217—Sun System LEC 630 120 Volt w/ 3100 K Lamps, www.sunlightsupply.com/shop/bycategory/led-lighting/sun-system-lec-630-light-emitting-ceramic-fixture, online, updated Feb. 9, 2015. Site visited Mar. 30, 2015, p. 1.

Mohri, Mineko, International Preliminary Report on Patentability for PCT/US2014/014959, dated Jan. 19, 2016.

A3V Reflector, Titaness Light Shop, www.titanesslightshop.com/products-page/reflectors/a3v-reflector, online. Site visited Jan. 14, 2015.

G2V Grow Light Reflector, Titaness Light Shop, www.titanesslightshop.com/products-page/reflectors/g2v-grow-light-reflector, online. Site visited Jan. 14, 2015.

1000 Wall Galaxy Grow Amp Double Ended Grow Light Packages, image post date Jan. 30, 2014, sited visited Jul. 8, 2016, <<http://www.ehydroponics.com/100-watt-galaxy-grow-amp-double-ended-grow-light-package.html>>.

2009-10-watt-light-set—TinEye, image post date May 23, 2012, site visited Jul. 8, 2016, <<https://www.tineye.com/search/2de39cf51f7a031139a80ce555e2f30d0abd5216/>>.

Square 10 Watt LED Grow Light, image post date Aug. 1, 2011, site visited Jul. 8, 2016, <<http://www.dhgate.com/store/product/hydroponic-vegetable-10-watt-led-grow-light/216755031.html>>.

Sun System 630 Ceramic Metal Halide 120v Specifications, GrowersHouse.com, update on Sep. 9, 2014, Online. Site visited Feb. 3, 2015. <http://growershouse.com/aitdownloadablefiles/download/aitfile/aitfile_id/583/>.

Growlite HDE 600W-1000W Double Ended Lamp Concealed Vacuum Airflow Technology, Indoor Grow Science, site visited Aug. 3, 2016, <<http://www.indoorgrowscience.net/downloads/specs/hde.pdf>>.

Sun Systems LEC 315—Reviews?, rollitup.com forum, published Oct. 23, 2013, online. Visited Nov. 8, 2016. <<http://rollitup.org/t/sun-sytems-lec-315-reviews.742794>>.

Sun System LEC 315 120v Light Emitting Ceramic Metal Halide Fixture w/ Free Ratchet Light Hangers, Amazon.com, earliest review of Jul. 2, 2014, online. Visited Nov. 8, 2016| <<https://www.amazon.com/sun-system-emitting-ceramic-fixture/dp/B00HBCV8TM>>.

LEC 315 Watt Grow Light Great Yield Reports!, YouTube.com, published Mar. 31, 2014, online. Visited Nov. 8, 2016. <<https://www.youtube.com/watch?v=QqcoW19KnUk>>.

Air Cooled Grow Lights, greensteamhydroponics.com, published May 24, 2014, online. Site visited Nov. 16, 2016. <http://web.archive.org/web/20140524103407/http://www.greensteamhydroponics.com/aircooled-reflector-range-from-greenstream-hydroponics/prod_699.html>.

* cited by examiner

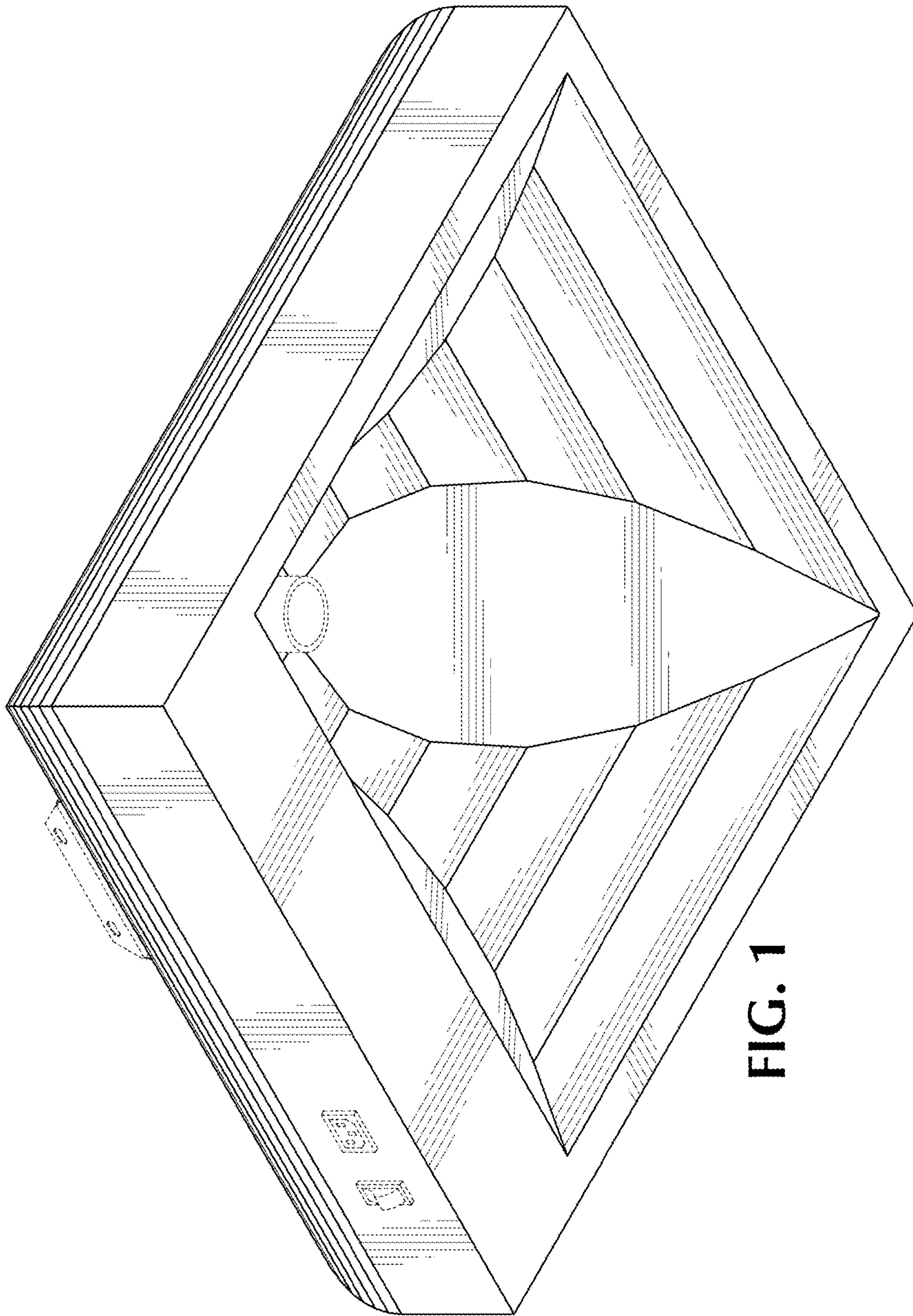


FIG. 1

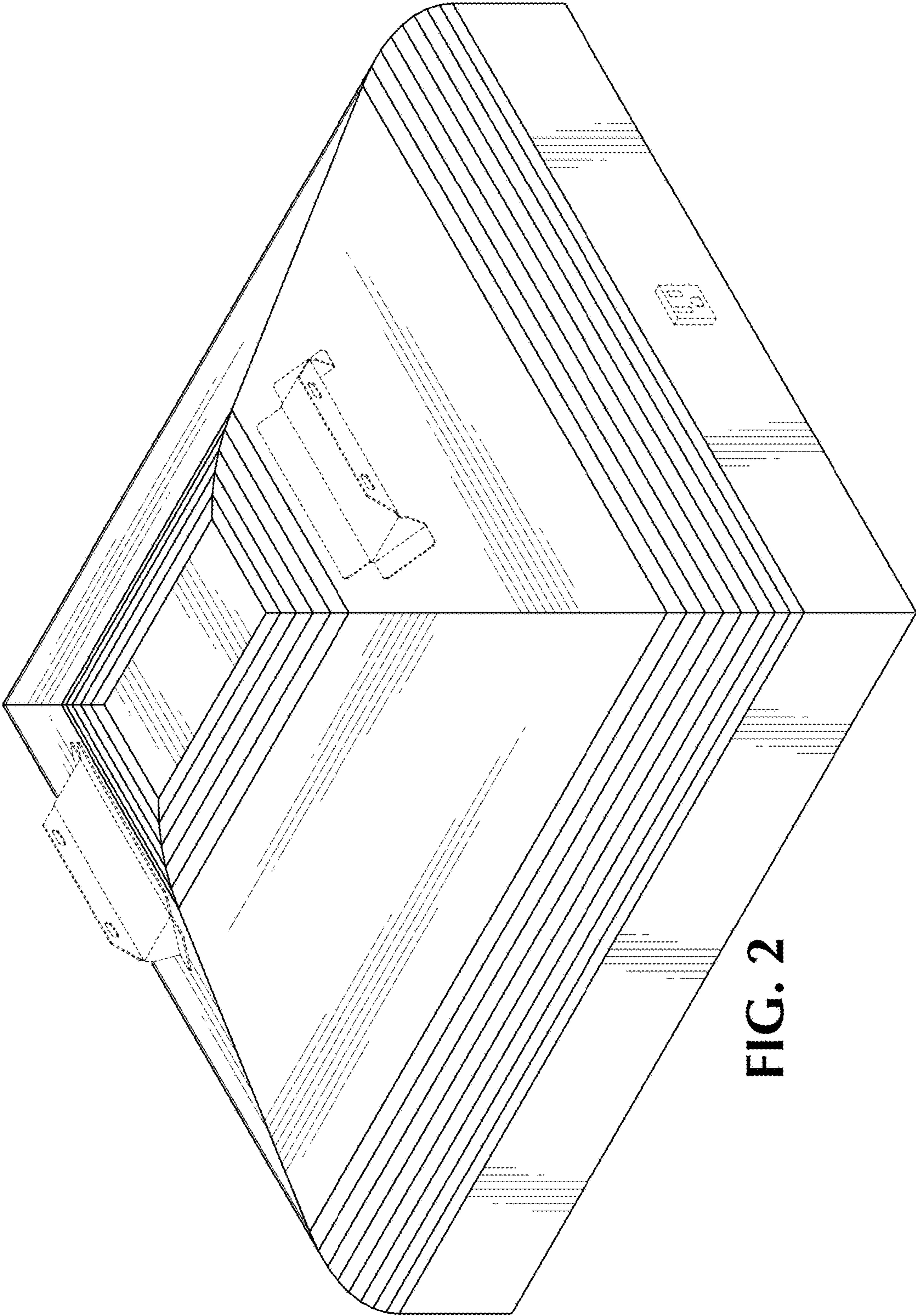


FIG. 2

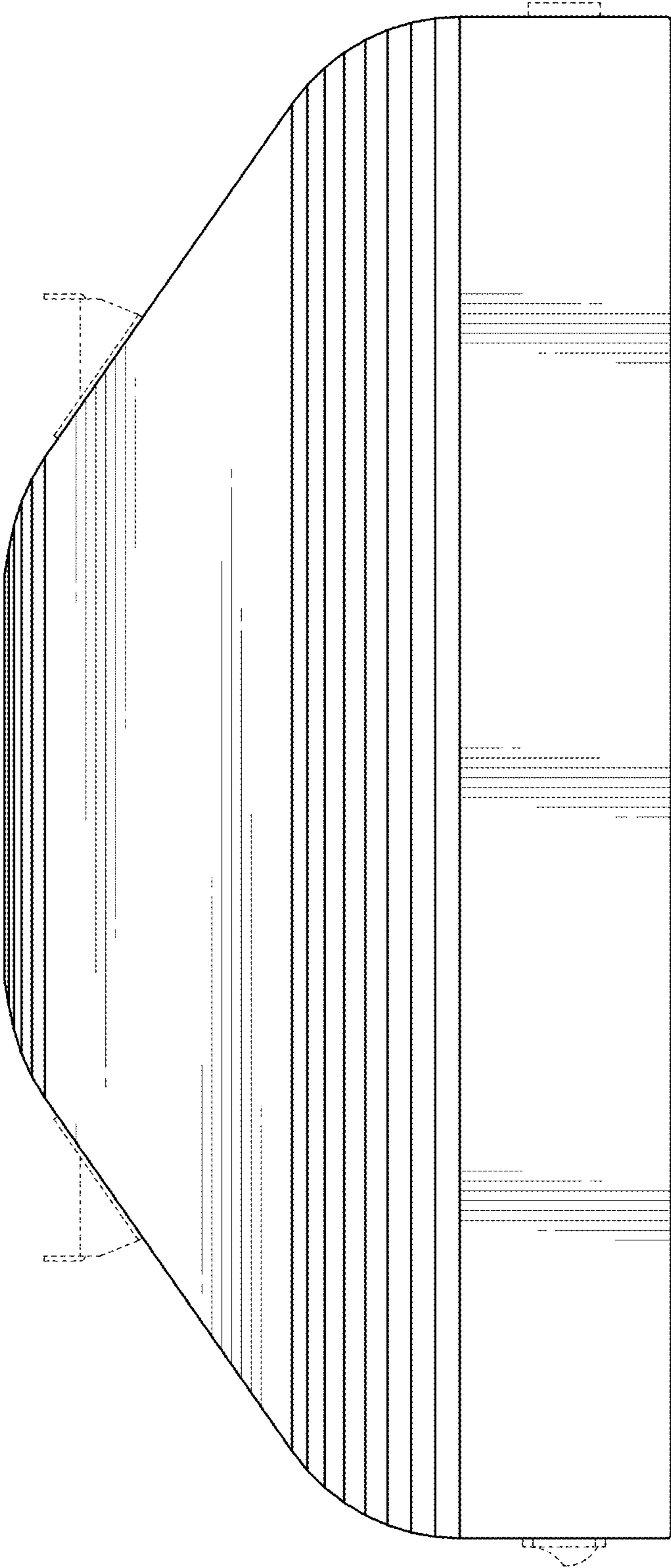


FIG. 3

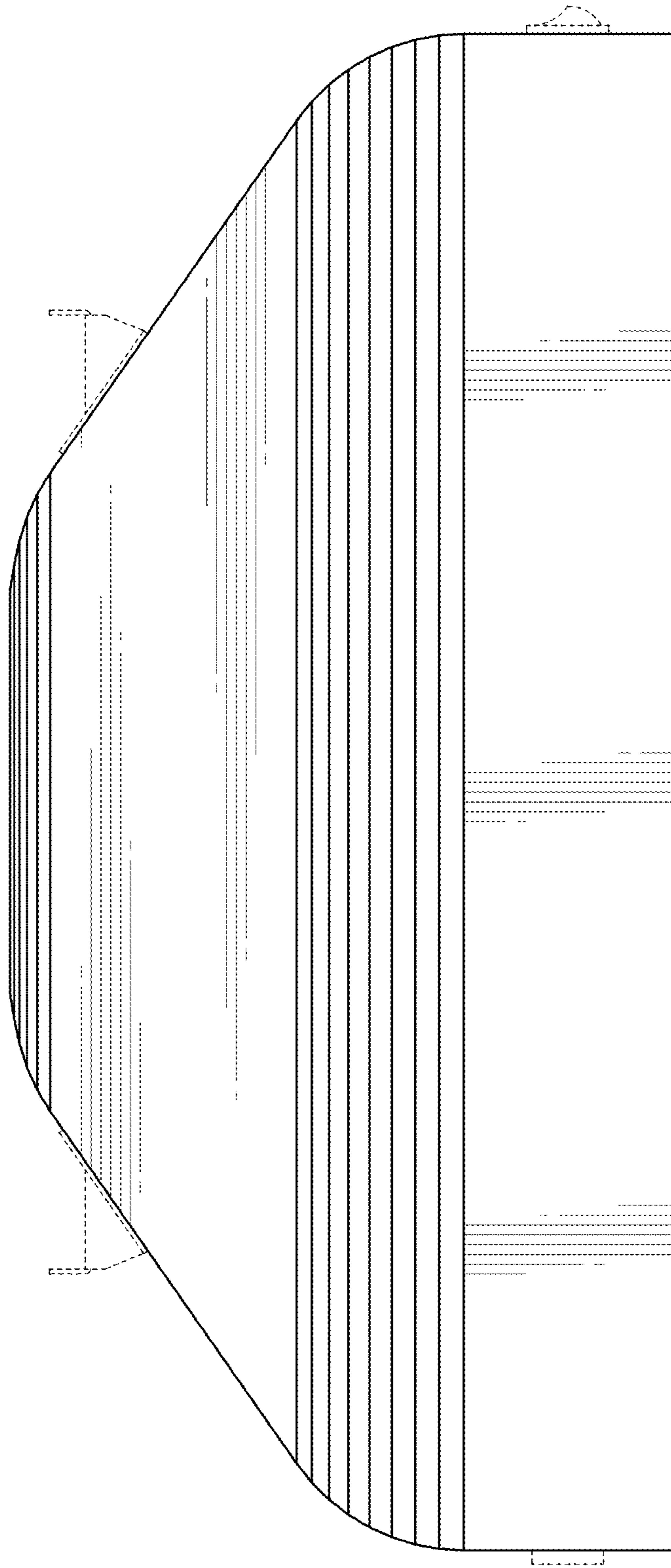


FIG. 4

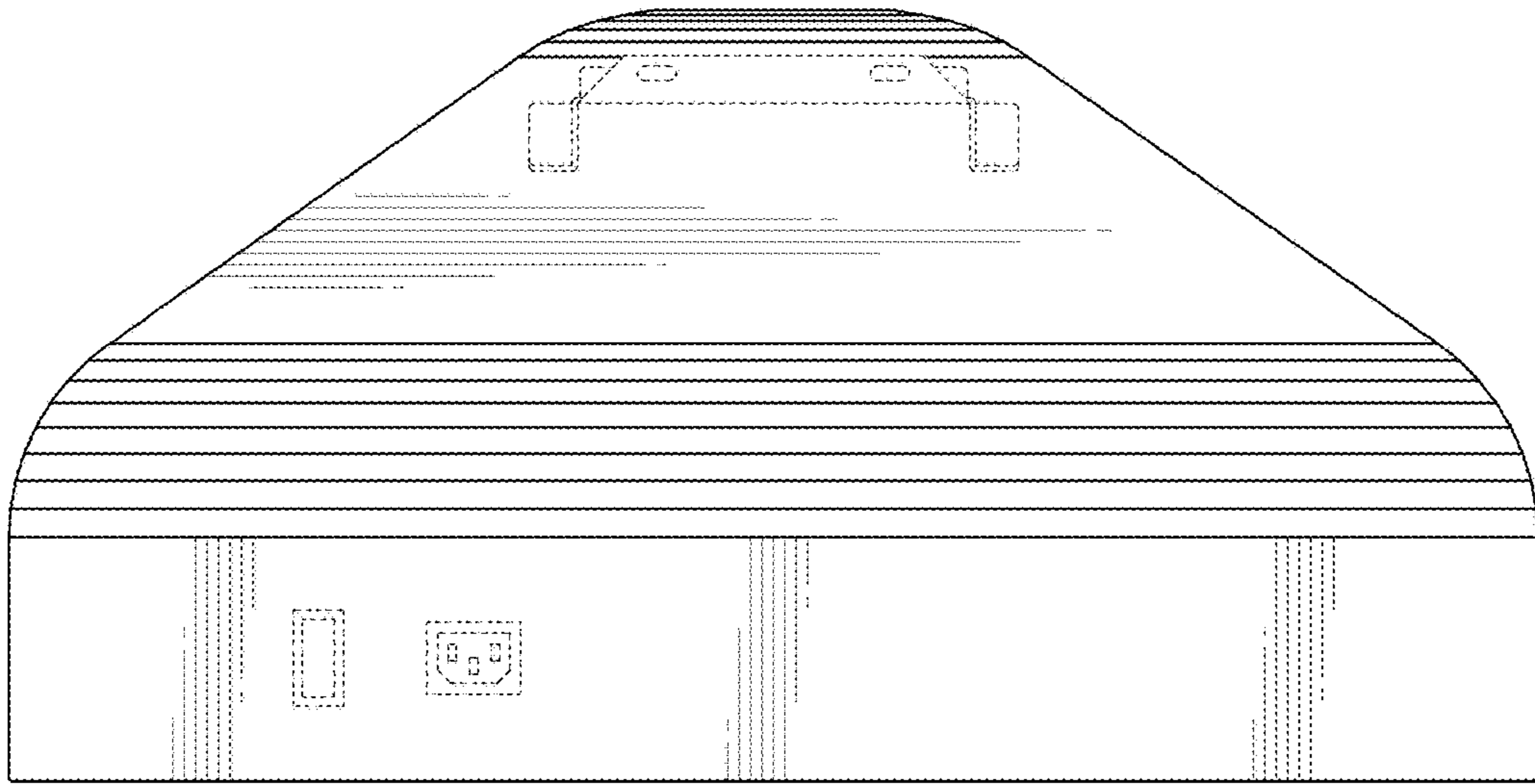


FIG. 5

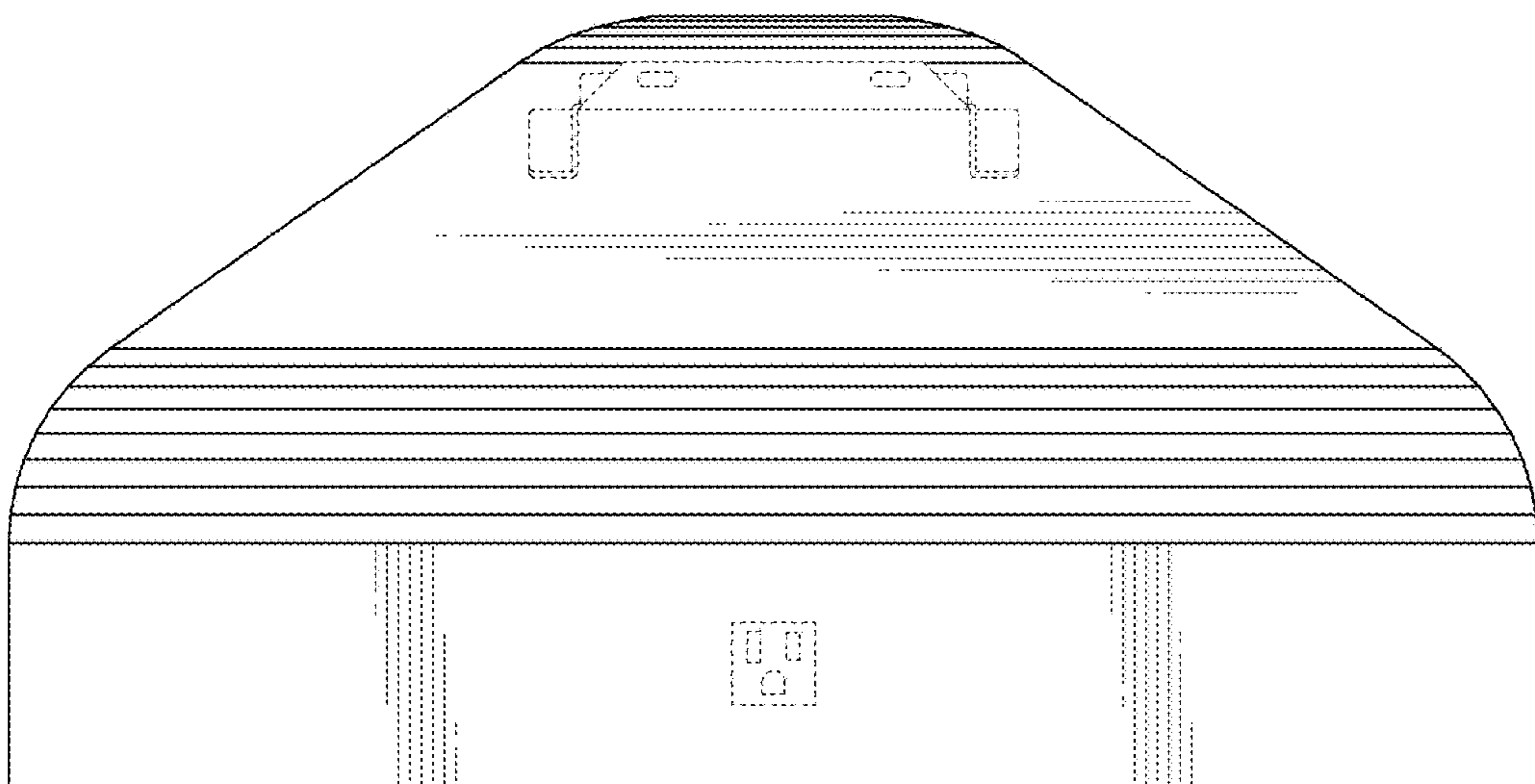


FIG. 6

FIG. 7

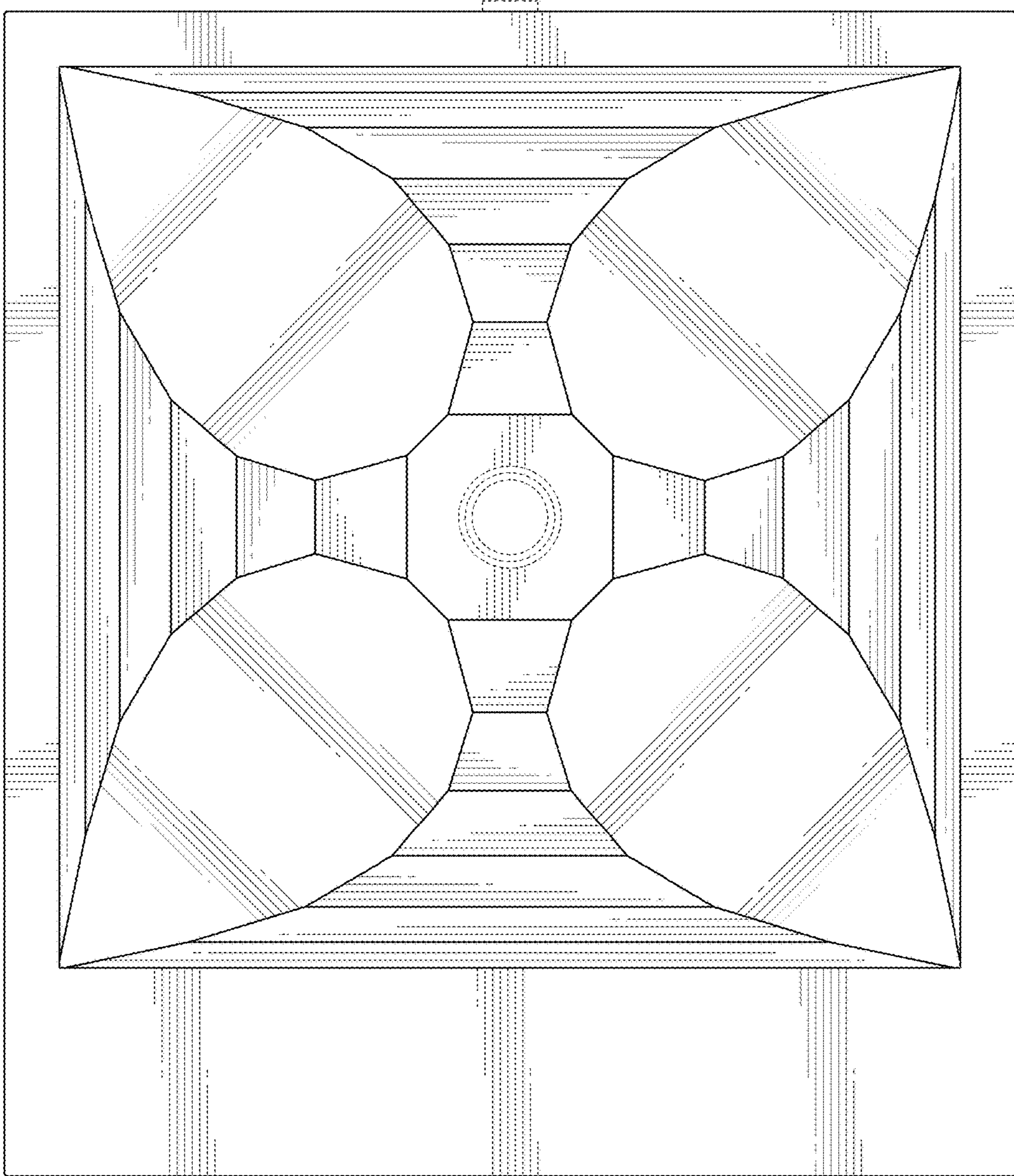


FIG. 8

