

US00D802826S

(12) **United States Design Patent** (10) **Patent No.:** **US D802,826 S**
Stanley (45) **Date of Patent:** **** Nov. 14, 2017**

(54) **SEALED OPTICS AIR COOLED GROW LIGHT**

(71) Applicant: **IP Holdings, LLC**, Vancouver, WA (US)

(72) Inventor: **John Stanley**, Vancouver, WA (US)

(73) Assignee: **IP Holdings, LLC**, Vancouver, WA (US)

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

(21) Appl. No.: **29/550,672**

(22) Filed: **Jan. 6, 2016**

Related U.S. Application Data

(62) Division of application No. 29/493,634, filed on Jun. 11, 2014, now Pat. No. Des. 748,849.

(51) **LOC (10) 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; F21L
19/00; F23D 11/443; F21Y 2101/02;
A61L 9/037

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D32,722 S 7/1861 Schmidlin
D46,253 S 8/1914 Kopp
1,410,945 A 3/1922 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

(Continued)

FOREIGN PATENT DOCUMENTS

CA 2034710 A1 8/1991
CA 1314529 C 3/1993

(Continued)

OTHER PUBLICATIONS

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=1y9v9qhh4n5vnctjmfr>.

(Continued)

Primary Examiner — Brian N Vinson

(74) *Attorney, Agent, or Firm* — J. Douglas Wells

(57) **CLAIM**

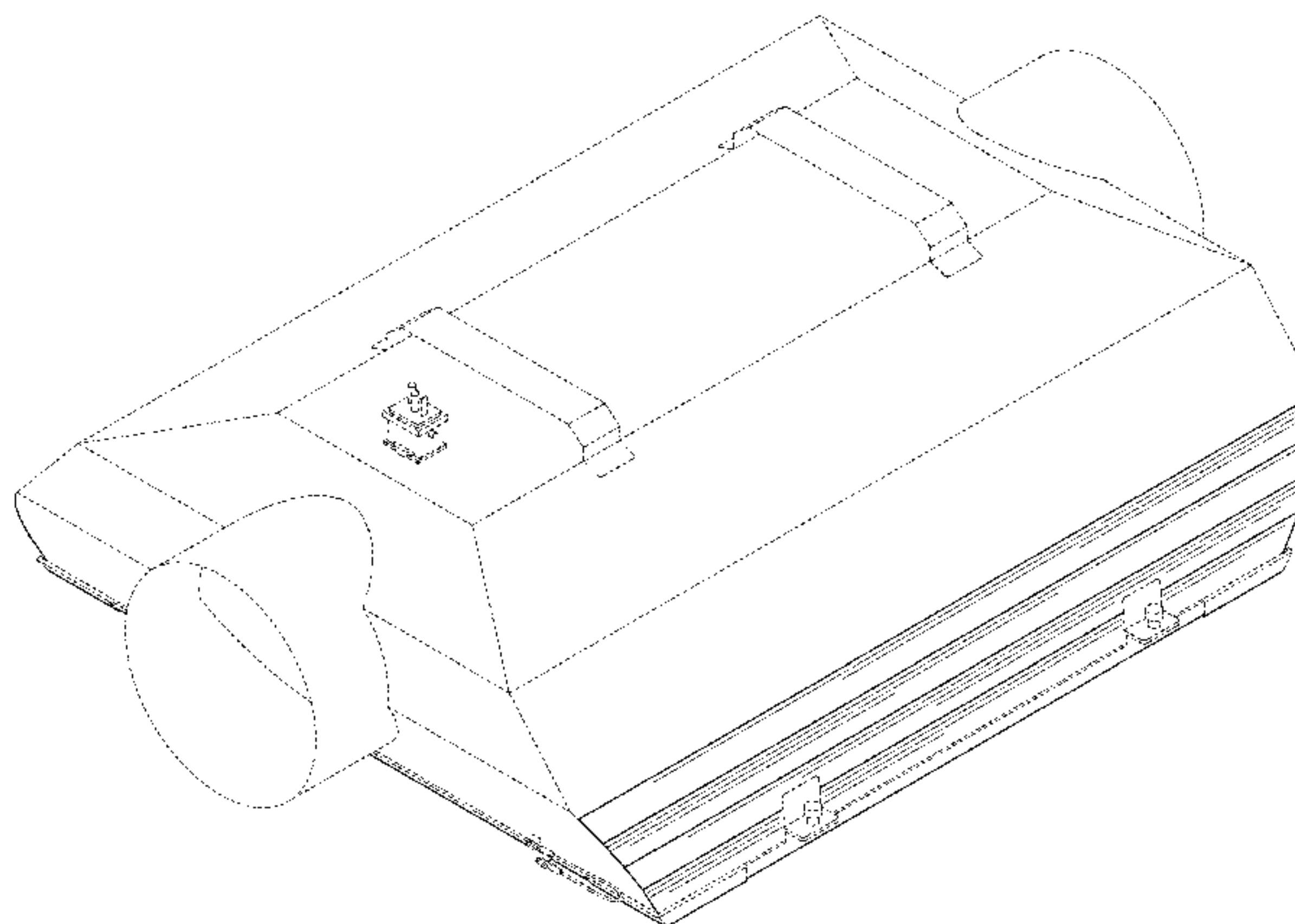
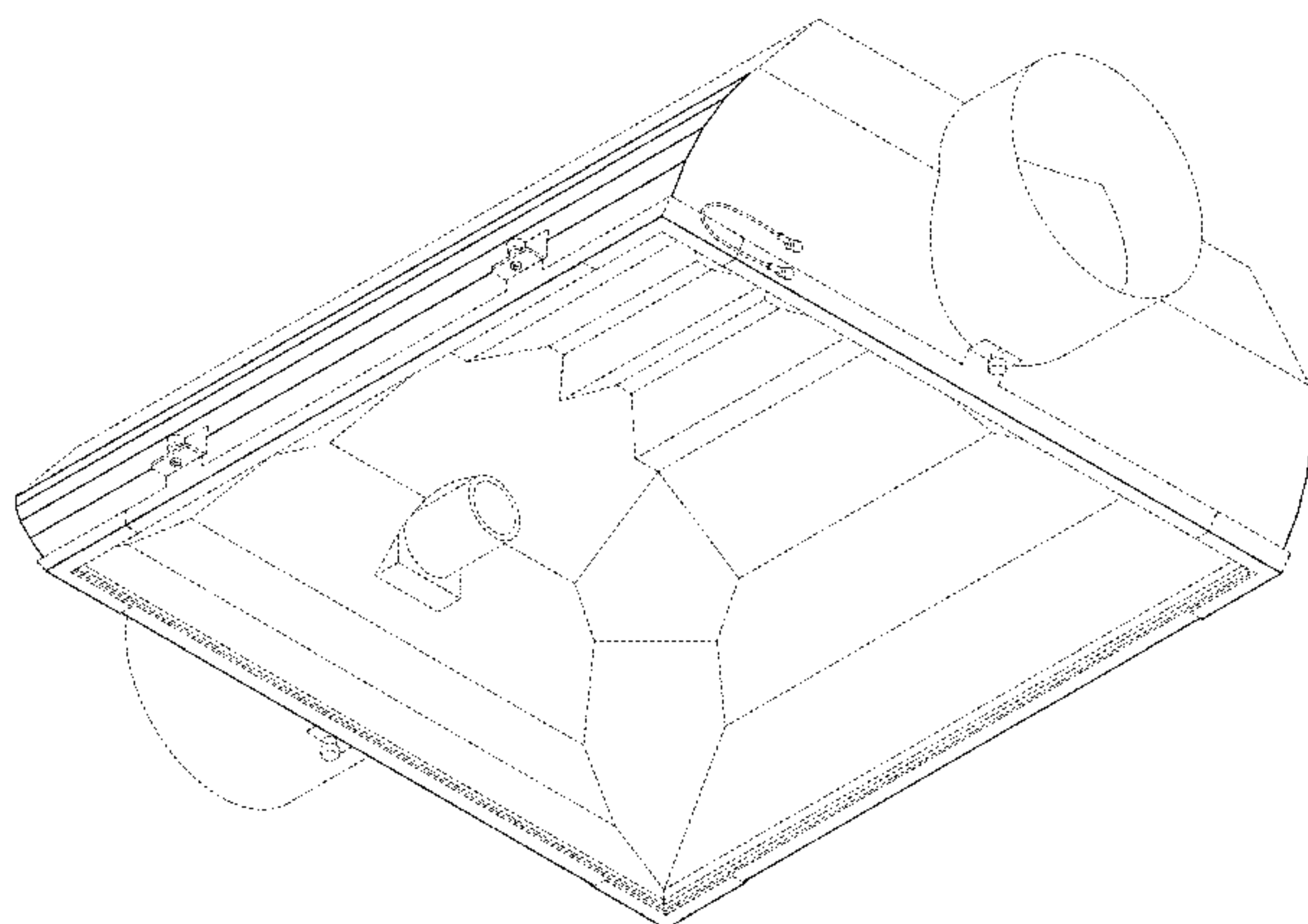
The ornamental design for a sealed optics air cooled grow light, as shown and described.

DESCRIPTION

FIG. 1 is a bottom perspective view of a sealed optics air cooled grow light showing my new design;
FIG. 2 is a top perspective view thereof;
FIG. 3 is a left side view thereof;
FIG. 4 is a right side view thereof;
FIG. 5 is a front elevation view thereof;
FIG. 6 is a rear elevation view thereof;
FIG. 7 is a top plan view thereof; and,
FIG. 8 is a bottom plan view thereof.

The broken lines shown in the drawings illustrate portions of the sealed optics air cooled grow light which form no part of the claimed design.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

1,848,734 A	3/1932	Luce	D352,126 S	11/1994	Ruud
1,873,310 A	8/1932	Doane	5,440,470 A	8/1995	Ly
1,930,070 A	10/1933	Zecher	5,457,450 A	10/1995	Deese
1,987,705 A	1/1935	Pedersen	5,461,554 A	10/1995	Leonetti
D106,614 S	10/1937	Waterbury	D365,159 S	12/1995	Tinen
2,194,841 A	3/1940	Welch	5,486,737 A	1/1996	Hrubowchak
D119,800 S	4/1940	Carter	5,510,676 A	4/1996	Cottaar
D123,768 S	12/1940	Scribner	D373,000 S	8/1996	Brady
D125,559 S	3/1941	Biller	5,555,162 A	9/1996	Shemitz
2,242,590 A	5/1941	Marcel	D374,301 S	10/1996	Kleffman
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	D376,437 S	12/1996	Karlo
2,348,617 A	5/1944	Furedy	D377,993 S	2/1997	Herst
D156,014 S	11/1949	Lazerson	5,621,267 A	4/1997	Shaffner
2,492,946 A	1/1950	Barber	D383,243 S	9/1997	Fry
D174,221 S	3/1955	Hatch	5,698,947 A	12/1997	Choi
2,740,883 A	4/1956	Kruger	5,702,179 A	12/1997	Sidwell
2,741,694 A	4/1956	Wiig	D391,632 S	3/1998	Thomas
2,998,511 A	8/1961	Chan	D396,319 S	7/1998	Sutton
3,025,391 A	3/1962	Golko	D397,481 S	8/1998	Schafer
D193,802 S	10/1962	Thomsen	D399,328 S	10/1998	Compton
D195,012 S	4/1963	Hoyle	D399,329 S	10/1998	Compton
3,125,301 A	3/1964	Stotter	D399,587 S	10/1998	Compton
3,263,071 A	7/1966	Fabbri	D400,289 S	10/1998	Wardenburg
3,272,978 A	9/1966	Jackson	5,816,694 A	10/1998	Ideker
3,322,946 A	5/1967	Cooper	D401,006 S	11/1998	Edwards
3,420,995 A	1/1969	Dunckel	D405,976 S	2/1999	Beall
D213,391 S	2/1969	Bruno	5,896,004 A	4/1999	Feldman
3,433,941 A	3/1969	Hall	5,924,789 A	7/1999	Thornton
3,675,008 A	7/1972	Hill	5,932,955 A	8/1999	Berger
3,684,883 A	8/1972	Entwistle	5,938,317 A	8/1999	Thornton
3,701,898 A	10/1972	McNamara, Jr.	D415,304 S	10/1999	Brown
3,755,667 A	8/1973	Price	5,983,564 A	11/1999	Stragnola
3,829,677 A	8/1974	DeLlano	5,987,697 A	11/1999	Song
3,902,059 A	8/1975	McNamara, Jr.	5,999,943 A	12/1999	Nori
3,911,265 A	10/1975	Landrum	D418,626 S	1/2000	Herst
4,028,542 A	6/1977	McReynolds, Jr.	D419,248 S	1/2000	Lyons
D245,016 S	7/1977	Barr	6,024,468 A	2/2000	Kassay
4,037,096 A	7/1977	Brendgord	6,042,250 A	3/2000	Stragnola
4,078,169 A	3/1978	Armstrong	6,051,927 A	4/2000	Graser
4,175,360 A	11/1979	Mulvey	6,053,624 A	4/2000	Cronk
4,229,782 A	10/1980	Ruud	D425,237 S	5/2000	Scott
D259,738 S	6/1981	Boschetti	D425,652 S	5/2000	Brok
4,308,473 A	12/1981	Carnes	D426,010 S	5/2000	Compton
D262,659 S	1/1982	Laltta	6,061,690 A	5/2000	Nori
D266,578 S	10/1982	Moshier	6,065,849 A	5/2000	Chen
D268,287 S	3/1983	Boschetti	6,070,173 A	5/2000	Huber
D270,577 S	9/1983	DeVos	6,076,944 A	5/2000	Maranon
4,446,506 A	5/1984	Larson	6,079,851 A	6/2000	Altman
4,531,180 A	7/1985	Hernandez	D428,516 S *	7/2000	Reo D26/118
4,616,293 A	10/1986	Baliozian	6,094,919 A	8/2000	Bhatia
4,669,033 A	5/1987	Lee	6,111,739 A	8/2000	Wu
D290,662 S	7/1987	Basil	6,152,579 A	11/2000	Reed
D300,877 S	4/1989	Cyr	D439,008 S	3/2001	Kim
4,855,884 A	8/1989	Richardson	D440,289 S	4/2001	Olson
4,893,221 A	1/1990	Friedman	6,210,025 B1	4/2001	Schmidt
4,933,821 A	6/1990	Anderson	6,230,497 B1	5/2001	Morris
4,939,629 A	7/1990	Glanton	D443,198 S	6/2001	Snyder
D311,597 S	10/1990	Poot	D443,949 S	6/2001	DiMonte
4,970,428 A	11/1990	Hayakawa	6,247,830 B1	6/2001	Winnett
4,980,809 A	12/1990	Baldwin	D445,943 S	7/2001	Littman
D316,301 S	4/1991	Michael	6,257,735 B1	7/2001	Baar
5,006,752 A	4/1991	Eggink	6,267,483 B1	7/2001	Hembery
5,065,294 A	11/1991	Poot	D447,272 S *	8/2001	Smith D26/118
5,072,349 A	12/1991	Waniga	6,279,012 B1	8/2001	Sexton
D323,897 S	2/1992	Compton	6,299,327 B1	10/2001	Camarota
5,088,015 A	2/1992	Baggio	D452,559 S	12/2001	Schonberger
D329,104 S	9/1992	Dieperink	6,343,984 B1	2/2002	Langdon
D330,438 S	10/1992	Herst	6,371,630 B1	4/2002	Unger
5,192,129 A	3/1993	Figuroa	D456,927 S	5/2002	Russello
5,199,784 A	4/1993	Hempleman	D456,928 S	5/2002	Russello
5,253,152 A	10/1993	Yang	D456,938 S *	5/2002	Wardenburg D26/118
D349,358 S	8/1994	Herst	D459,825 S	7/2002	Field
5,353,746 A	10/1994	Del Rosario	6,488,387 B2	12/2002	Wardenburg
			D469,564 S	1/2003	Brok
			6,527,422 B1	3/2003	Hutchison
			6,548,948 B1	4/2003	Muessli
			6,595,662 B2	7/2003	Wardenburg

(56)

References Cited

U.S. PATENT DOCUMENTS

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	
6,709,131 B1	3/2004	Herst	
6,729,383 B1	5/2004	Cannell	
6,783,263 B1	8/2004	Cronk	
D496,121 S	9/2004	Santoro	
D499,504 S	12/2004	Meyer	
D499,505 S	12/2004	Benensohn	
D504,343 S	4/2005	Ek	
6,885,134 B2	4/2005	Kurashima	
6,908,212 B2	6/2005	Schultz	
7,011,424 B1	3/2006	Poulson	
7,083,309 B2	8/2006	Chan	
7,101,060 B2	9/2006	Oppenheimer	
7,131,753 B1	11/2006	Edwards, Jr.	
7,156,539 B2	1/2007	Cronk	
7,175,309 B2	2/2007	Craw	
D542,460 S	5/2007	Hargreaves	
D543,652 S *	5/2007	Hargreaves	D26/118
D543,654 S	5/2007	Hargreaves	
D543,655 S	5/2007	Hargreaves	
7,213,948 B2	5/2007	Hein	
D544,136 S	6/2007	Hargreaves	
D544,138 S	6/2007	Hargreaves	
D544,139 S	6/2007	Hargreaves	
D544,626 S	6/2007	Hargreaves	
D544,980 S	6/2007	Hargreaves	
D544,981 S	6/2007	Hargreaves	
D544,982 S	6/2007	Hargreaves	
D544,983 S	6/2007	Hargreaves	
D544,984 S	6/2007	Hargreaves	
D544,985 S	6/2007	Hargreaves	
D544,987 S	6/2007	Hargreaves	
D544,994 S	6/2007	Hargreaves	
D544,995 S *	6/2007	Hargreaves	D26/118
D545,460 S	6/2007	Mason, II	
D545,484 S *	6/2007	Hargreaves	D26/118
D545,485 S *	6/2007	Hargreaves	D26/118
D545,990 S	7/2007	Hargreaves	
D545,994 S	7/2007	Hargreaves	
D545,996 S	7/2007	Hargreaves	
D549,869 S	8/2007	Ward	
7,296,914 B1	11/2007	Russello	
7,360,927 B2	4/2008	Oka	
D569,024 S	5/2008	Redfern	
D572,858 S	7/2008	Santoro	
7,445,363 B2	11/2008	Vanden Eynden	
7,524,090 B2	4/2009	Hargreaves	
7,534,011 B2	5/2009	Townsley	
D595,894 S	7/2009	Verfuertth	
D602,625 S	10/2009	Santoro	
D603,087 S	10/2009	Mo	
7,617,057 B2	11/2009	May	
D605,342 S	12/2009	Chung	
D608,490 S	1/2010	Chung	
7,641,367 B2	1/2010	Hargreaves	
7,654,702 B1	2/2010	Ding	
D613,900 S	4/2010	Hargreaves	
D614,801 S *	4/2010	Collins	D26/118
7,722,228 B2	5/2010	Broer	
D617,028 S	6/2010	Verfuertth	
D620,190 S	7/2010	Chung	
D621,993 S	8/2010	Jong	
7,771,086 B2	8/2010	Goverde	
D628,335 S	11/2010	Hyland	
7,854,534 B2	12/2010	Liu	
D632,419 S	2/2011	Ng	
D633,247 S	2/2011	Kong	
D633,640 S	3/2011	Wauters	
D634,060 S *	3/2011	Wardenburg	D26/118
D634,240 S	3/2011	Junkeer	
D634,468 S	3/2011	Hargreaves	
D634,469 S *	3/2011	Hargreaves	D26/118
D637,162 S	5/2011	Bridgman	
D637,341 S	5/2011	Wardenburg	
D637,752 S	5/2011	Mekhtarian	
D640,404 S	6/2011	Chipperfield	
7,959,331 B2	6/2011	Ho	
D641,100 S	7/2011	Li	
7,972,044 B2	7/2011	Burkhauser	
D644,185 S	8/2011	Hargreaves	
7,987,632 B2	8/2011	May	
8,018,630 B2	9/2011	Herloski	
8,038,318 B2	10/2011	Plunk	
D648,652 S	11/2011	Hawkins	
D649,685 S	11/2011	Trzesniowski	
D650,515 S	12/2011	Bradley	
D650,935 S	12/2011	Beghelli	
8,113,696 B2	2/2012	Striebel	
D655,403 S	3/2012	Zakula	
D657,748 S	4/2012	Hargreaves	
D660,252 S	5/2012	Hargreaves	
D661,833 S	6/2012	Imajo	
8,209,912 B2	7/2012	Hargreaves	
8,215,799 B2	7/2012	Vanden Eynden	
D667,584 S	9/2012	Beghelli	
D668,370 S	10/2012	Guercio	
D671,259 S	11/2012	Chen	
D672,908 S	12/2012	Wilcox	
D672,911 S	12/2012	Mayfield, III	
D673,324 S	12/2012	Mayfield	
8,334,640 B2	12/2012	Reed	
D675,369 S *	1/2013	Michaud	D26/118
8,348,481 B2	1/2013	Chang	
D675,772 S	2/2013	Tran	
8,371,726 B2	2/2013	Collins	
D678,597 S	3/2013	Lehman	
D678,599 S	3/2013	Boyer	
D679,848 S	4/2013	Pickard	
D683,064 S	5/2013	Tuck	
8,505,224 B2	8/2013	Huang	
D689,238 S	9/2013	Halsey	
D689,986 S	9/2013	Lord	
D690,875 S	10/2013	McKenzie	
D693,959 S *	11/2013	Boyer	D26/118
D697,663 S	1/2014	Speier	
D698,074 S	1/2014	Hargreaves	
D698,075 S	1/2014	Klus	
D698,986 S *	2/2014	Reynolds	D26/118
D698,987 S	2/2014	Stanley	
D699,386 S	2/2014	Park	
D702,827 S	4/2014	Mase	
8,702,283 B2	4/2014	Bradley, Jr.	
D705,474 S	5/2014	Philips	
D705,974 S	5/2014	Blessitt	
8,723,086 B2	5/2014	McMahan	
D707,385 S	6/2014	Wardenburg	
D708,390 S	7/2014	Roos	
D710,528 S	8/2014	Wardenburg	
8,801,235 B2	8/2014	Yurich	
D713,953 S	9/2014	Jepson	
D714,988 S	10/2014	Park	
D715,994 S	10/2014	Klus	
D716,995 S	11/2014	Zhu	
D717,487 S	11/2014	Guzzini	
D717,636 S	11/2014	Stanley	
D720,488 S	12/2014	Toyohisa	
D720,505 S	12/2014	Kersten	
8,905,575 B2 *	12/2014	Durkee	F21V 7/0008 362/218
D720,876 S	1/2015	Haverfield	
D721,844 S	1/2015	Lay	
D722,654 S	2/2015	Martone	
D725,819 S	3/2015	Reynolds	
D725,820 S	3/2015	Hargreaves	
8,967,821 B2	3/2015	Pickard	
D726,359 S	4/2015	Grigore	
8,998,473 B1	4/2015	Anderson	
9,016,892 B1	4/2015	Scribante	
9,016,907 B2	4/2015	Stanley	
D728,848 S	5/2015	Reyes	

(56)

References Cited**U.S. PATENT DOCUMENTS**

D729,435 S 5/2015 Arndt
 D730,556 S 5/2015 Toyohisa
 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
 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 Hargreaves
 D747,825 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 2/2016 Johnson
 D748,849 S * 2/2016 Stanley D26/118
 D748,850 S 2/2016 Johnson
 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
 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
 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
 D775,406 S 12/2016 Hargreaves
 D775,760 S 1/2017 Reynolds
 D780,985 S 3/2017 Stanley
 D780,986 S 3/2017 Reynolds
 D781,492 S 3/2017 Reynolds
 D783,887 S 4/2017 Stanley
 D786,488 S 5/2017 Reynolds
 D786,489 S 5/2017 Stanley
 D786,490 S 5/2017 Stanley
 2002/0073285 A1 6/2002 Butterworth
 2002/0141195 A1 10/2002 Peter

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 et al.
 2008/0205030 A1 8/2008 Hargreaves
 2008/0205071 A1 8/2008 Townsley
 2008/0212326 A1 9/2008 Chon
 2008/0278950 A1 11/2008 Pickard
 2008/0278957 A1 11/2008 Pickard
 2009/0116250 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 et al.
 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 et al.
 2012/0092859 A1 4/2012 Gregoris
 2012/0145699 A1 6/2012 McMahan
 2012/0212883 A1 8/2012 Hargreaves
 2012/0230035 A1 9/2012 Bradley, Jr.
 2013/0077332 A1 3/2013 Hessling
 2013/0083539 A1 4/2013 Dimitriadis
 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
 2015/0252994 A1 9/2015 Stanley
 2015/0260381 A1 9/2015 Verfuether et al.

FOREIGN PATENT DOCUMENTS

EP 0325003 A1 7/1989
 EP 0440274 A1 8/1991
 WO 02063210 A2 8/2002
 WO 03060379 7/2003
 WO 2008018000 A1 2/2008
 WO 2009096775 A2 8/2009
 WO 2011119451 A1 9/2011
 WO 2015009333 1/2015

OTHER PUBLICATIONS

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/>

(56)

References Cited

OTHER PUBLICATIONS

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  cor/grow-lights-home-depot-few-things-to-consider-when-buying-grow-lighting-plants-online.html](http://besthomedecorfurniture.com/gardening-d  cor/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. 11, 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-sys-

tem-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, 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 Watt Galaxy Grow Amp Double Ended Grow Light Packages, image post date Jan. 30, 2014, site 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.

greenstreamhydroponics.com/aircooled-reflector-range-from-greenstream-hydroponics/prod_699.html>.

* cited by examiner

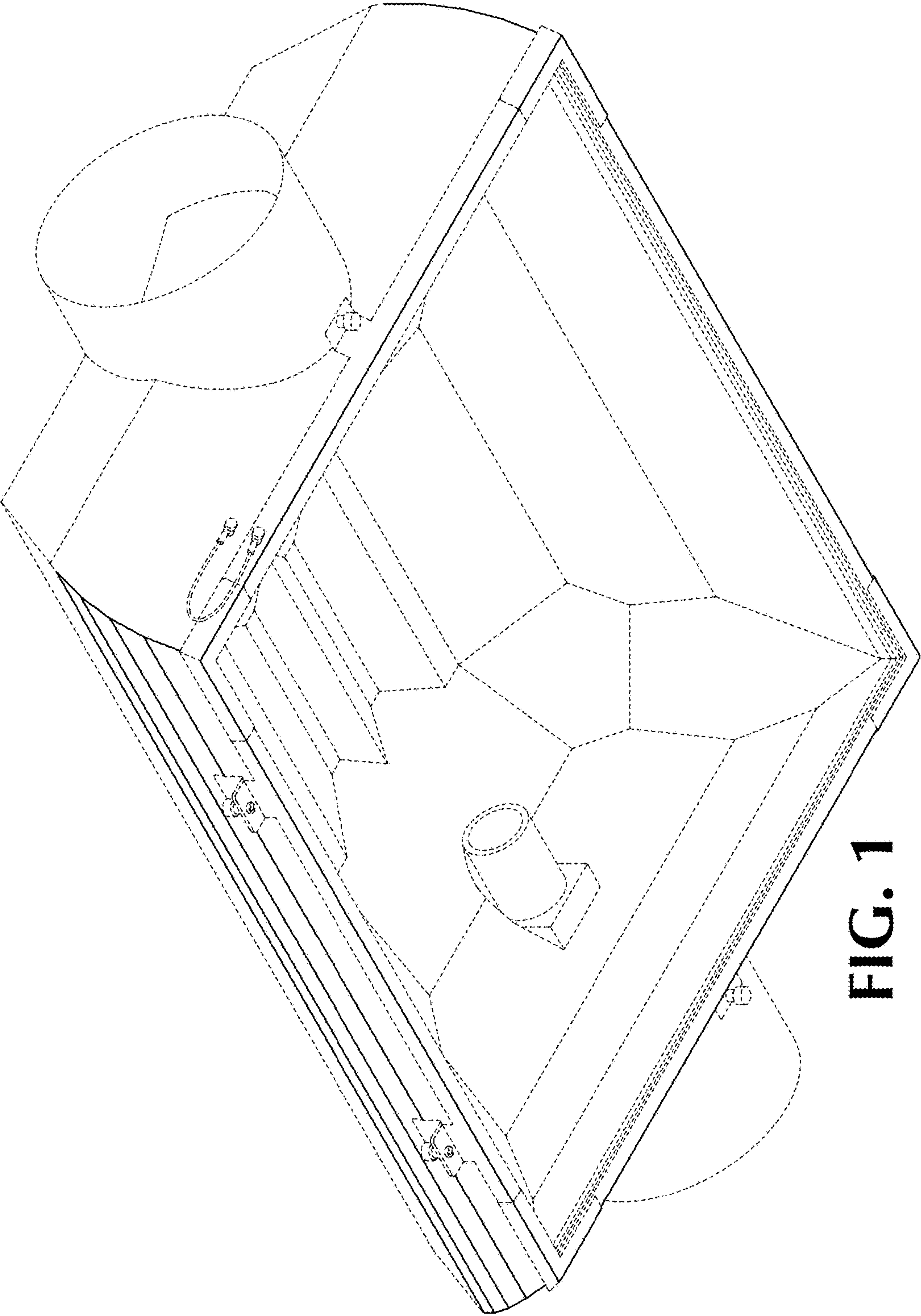


FIG. 1

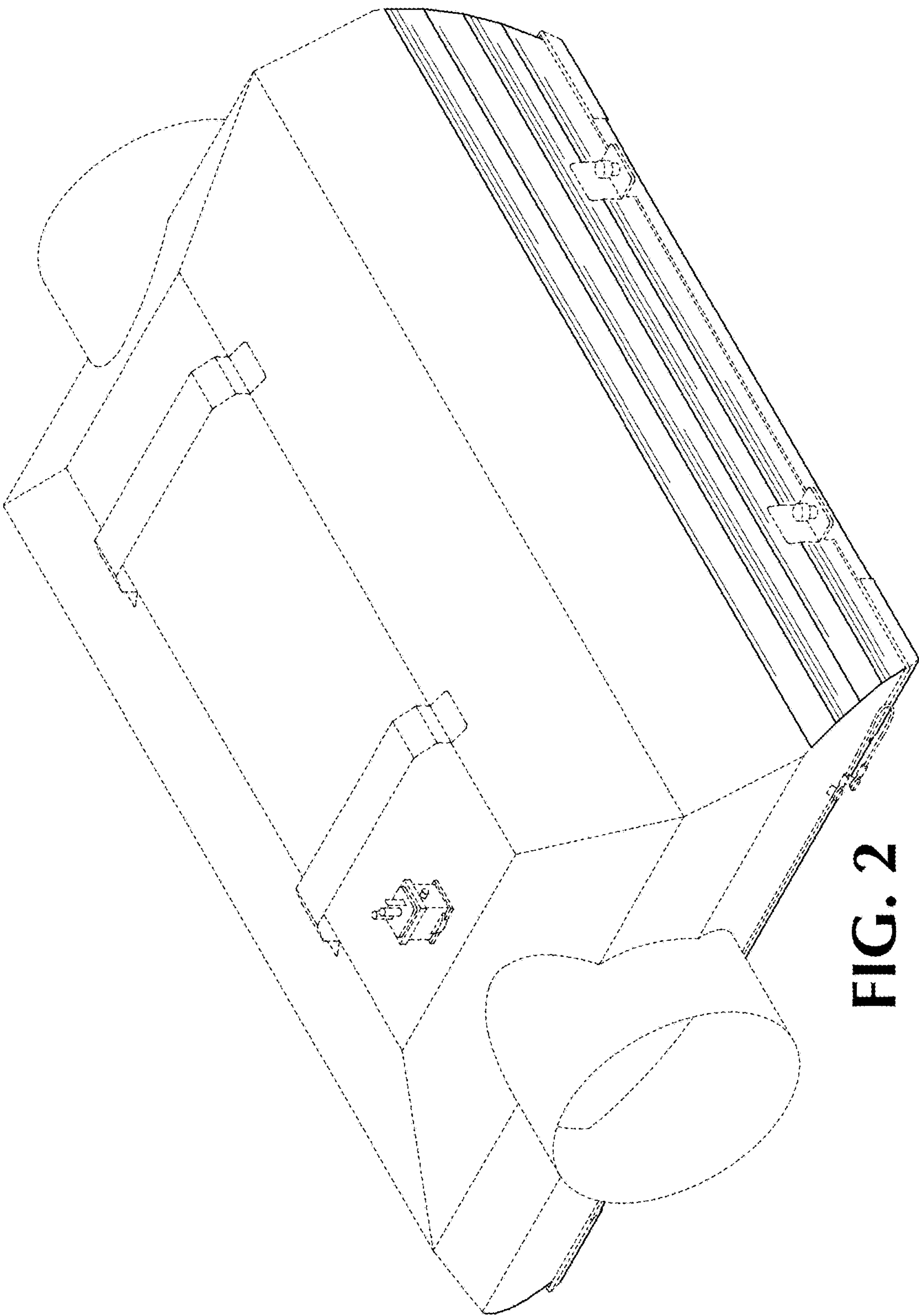


FIG. 2

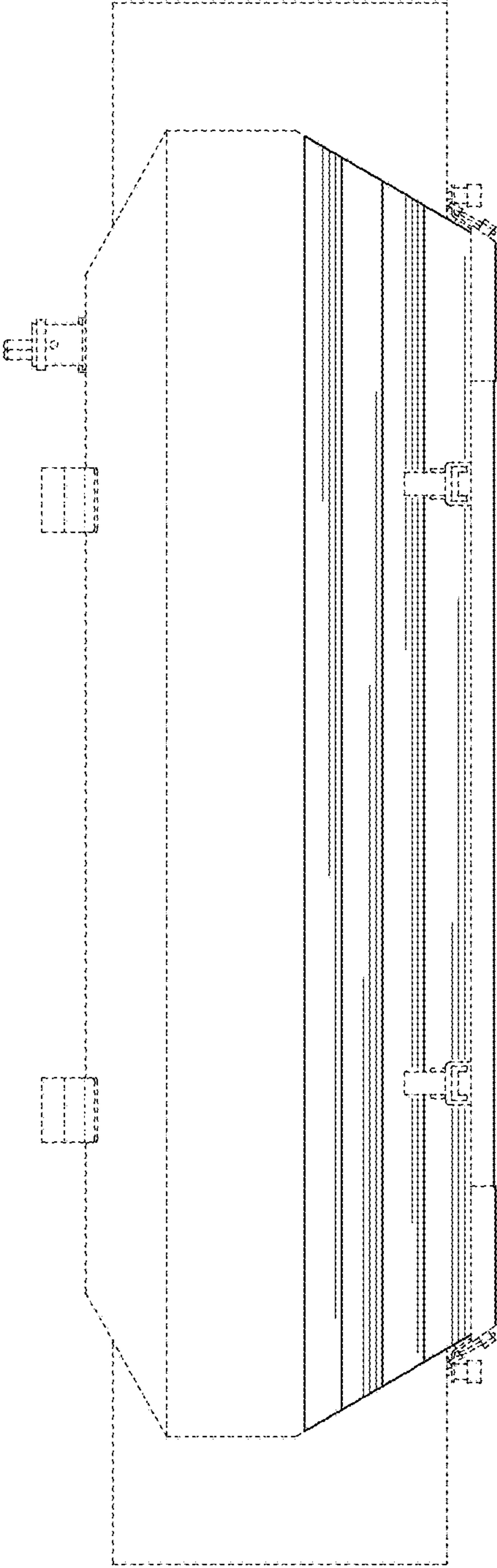


FIG. 3



FIG. 4

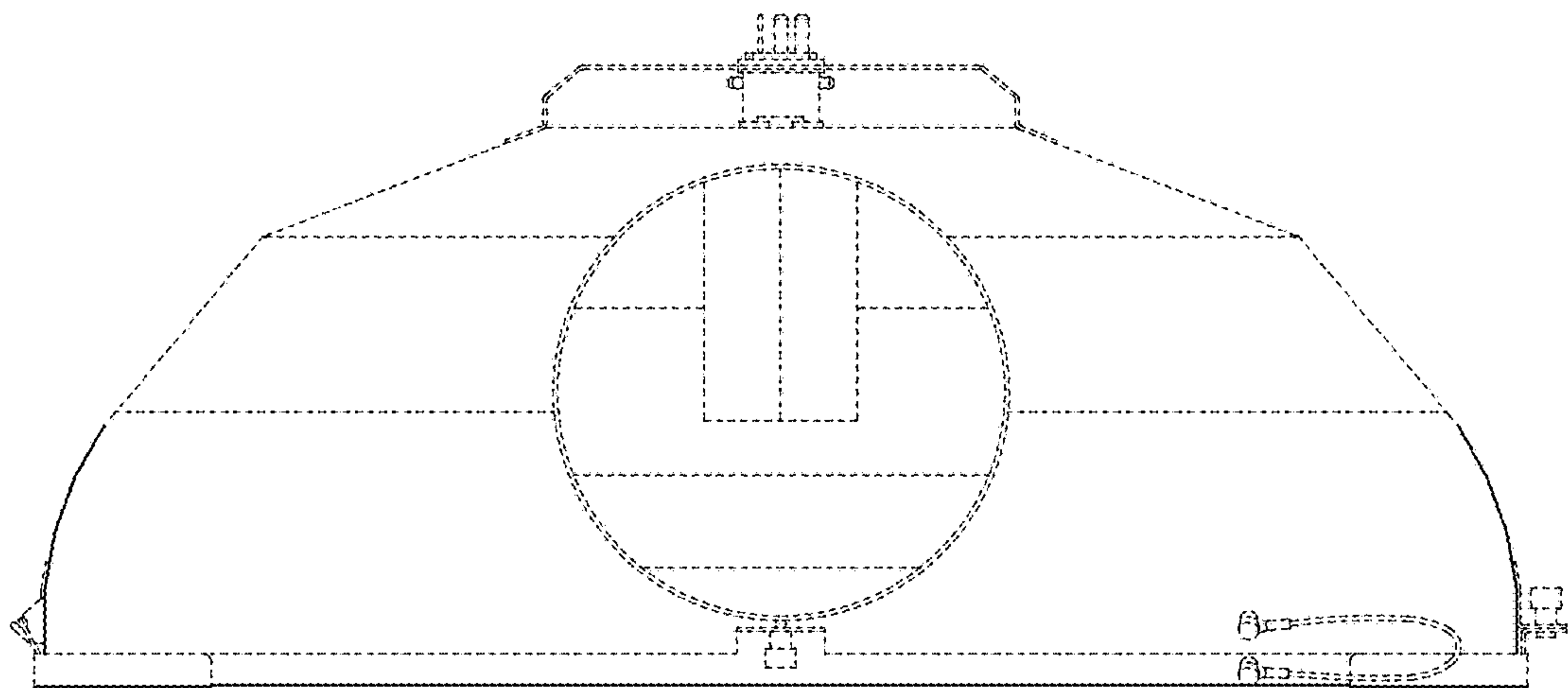


FIG. 5

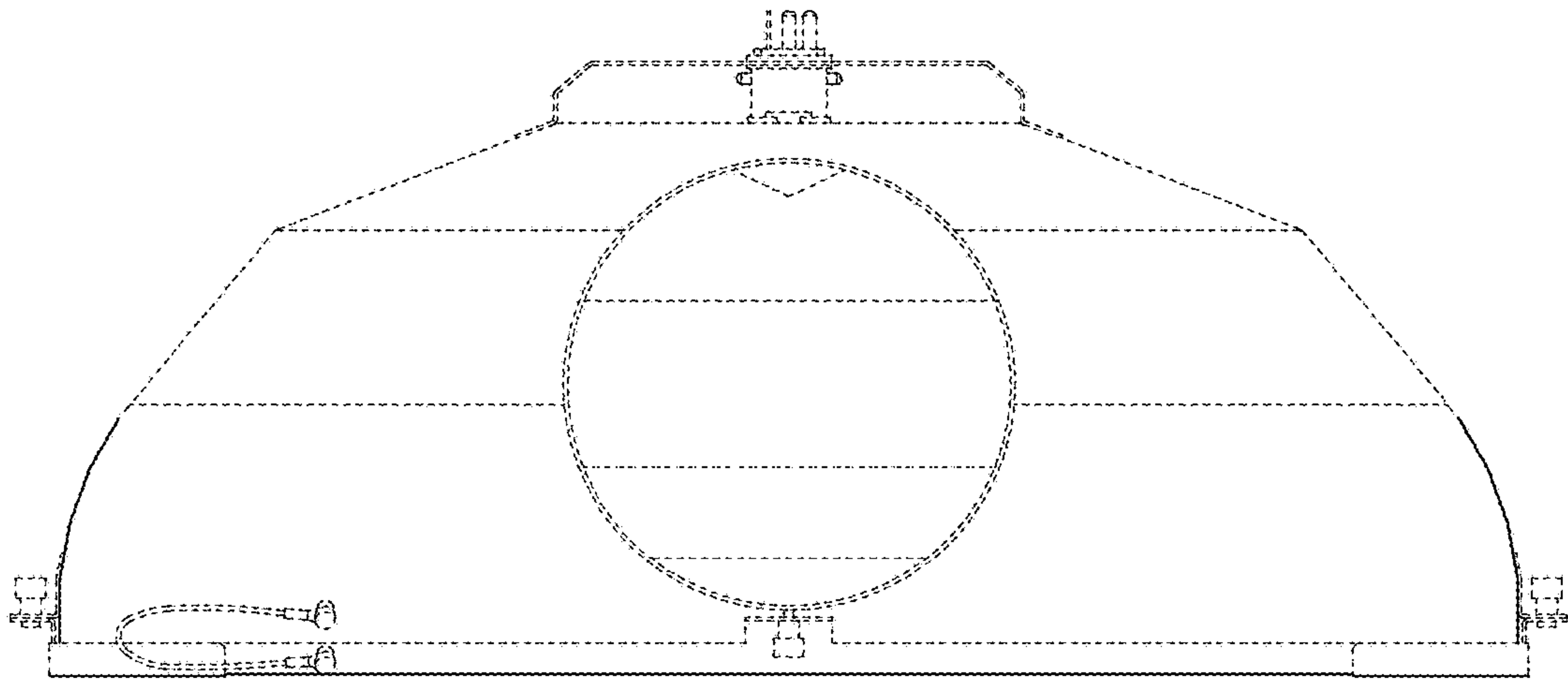


FIG. 6

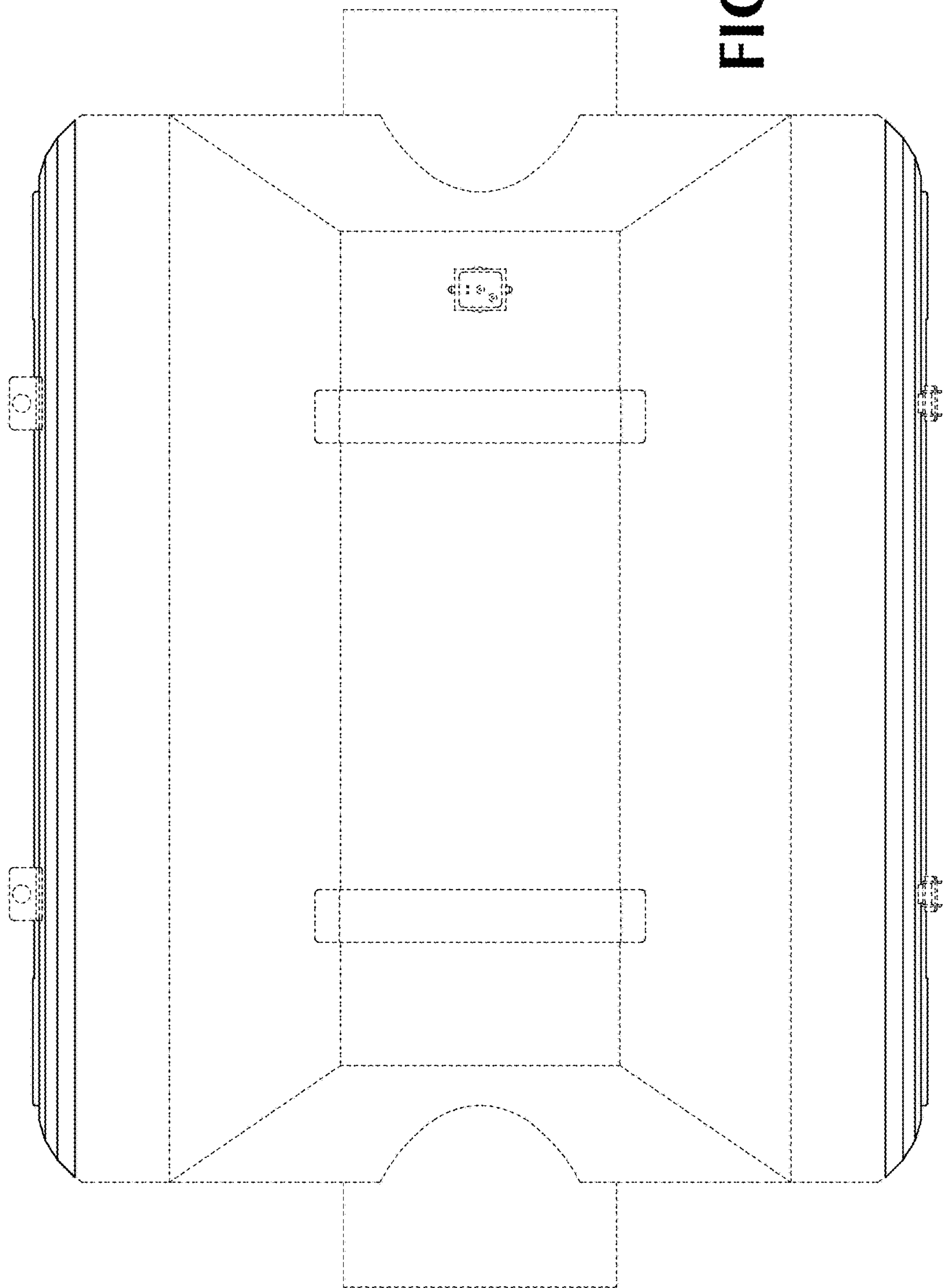


FIG. 7

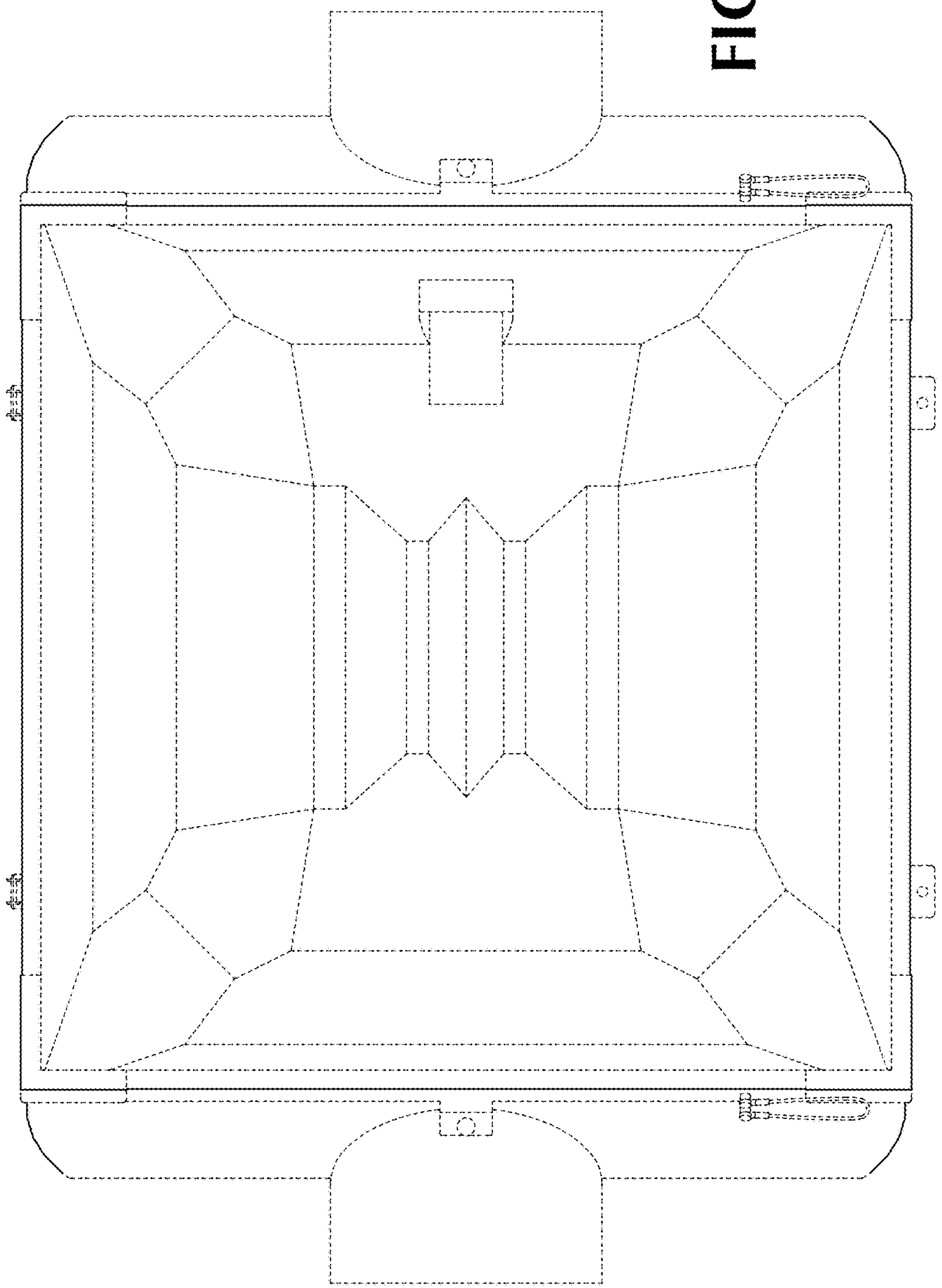


FIG. 8