



US00D854229S

(12) **United States Design Patent** (10) **Patent No.:** **US D854,229 S**
Stanley (45) **Date of Patent:** **** Jul. 16, 2019**

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

1,410,945 A 3/1922 Mayfield
1,547,026 A 7/1925 Canney
1,798,567 A 3/1931 Wagenhorst
(Continued)

(71) Applicant: **HGCI, Inc.**, Las Vegas, NV (US)

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

(73) Assignee: **HGCI, Inc.**, Las Vegas, NV (US)

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

(21) Appl. No.: **29/621,524**

(22) Filed: **Oct. 9, 2017**

Related U.S. Application Data

(60) Continuation of application No. 29/615,132, filed on Aug. 25, 2017, now Pat. No. Des. 825,826, which is a continuation of application No. 29/591,795, filed on Jan. 24, 2017, now Pat. No. Des. 797,353, which is a continuation of application No. 29/550,672, filed on Jan. 6, 2016, now Pat. No. Des. 802,826, which is a division of application No. 29/493,634, filed on Jun. 11, 2014, now Pat. No. Des. 748,849.

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

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

(58) **Field of Classification Search**

USPC D26/2, 28, 60, 72, 89, 104, 113, 118,
D26/119, 120, 122, 124, 128, 138, 142,
D26/143, 145

CPC A63H 30/04; F41C 33/0254; F41C 27/00;
F21Y 2103/00; F21Y 2101/02; F21V
29/006; F21V 27/00; F21V 21/14; F21V
21/005; F21V 15/015; B29D 21/04; F21S
8/04; F21S 2/005; F21S 2/00

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

FOREIGN PATENT DOCUMENTS

CA 2034710 8/1991
CA 1314529 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-glrcac-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

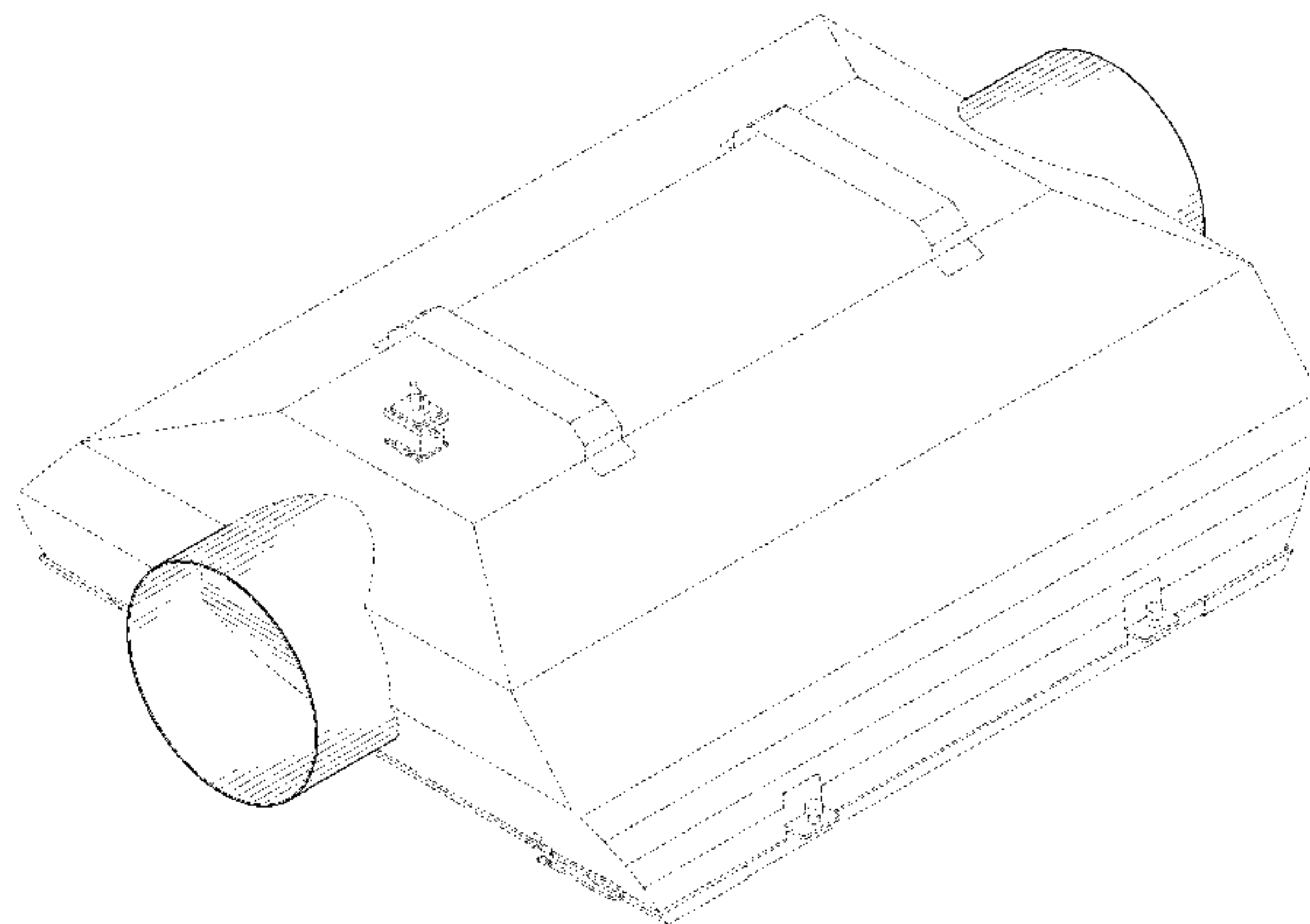
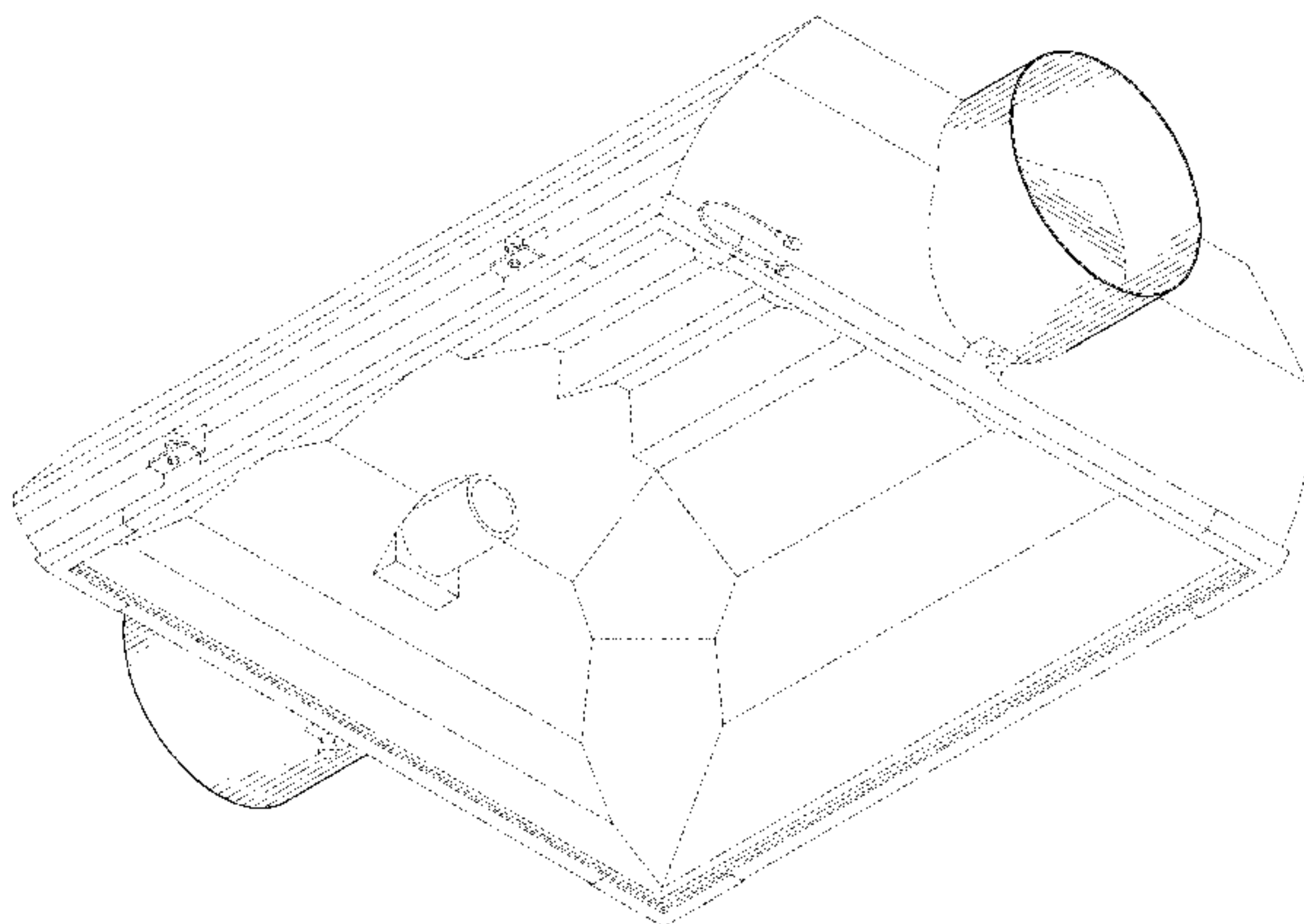
(57) **CLAIM**

The ornamental design for the 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



US D854,229 S

Page 2

(56)

References Cited

U.S. PATENT DOCUMENTS

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
2,194,841	A	3/1940	Welch
D119,800	S	4/1940	Carter
D123,768	S	12/1940	Scribner
D125,559	S	3/1941	Biller
2,242,590	A	5/1941	Marcel
D128,049	S	7/1941	Kurtz
D135,375	S	3/1943	Biller
2,339,100	A	1/1944	Netting
2,348,617	A	5/1944	Furedy
D156,014	S	11/1949	Lazerson
2,492,946	A	1/1950	Barber
D174,221	S	3/1955	Hatch
2,740,883	A	4/1956	Kruger
2,741,694	A	4/1956	Wiig
2,998,511	A	8/1961	Chan
3,025,391	A	3/1962	Golko
D193,802	S	10/1962	Thomsen
D195,012	S	4/1963	Hoyle
3,125,301	A	3/1964	Stotter
3,263,071	A	7/1966	Fabbri
3,272,978	A	9/1966	Jackson
3,322,946	A	5/1967	Cooper
3,420,995	A	1/1969	Dunckel
D213,391	S	2/1969	Bruno
3,433,941	A	* 3/1969	Hall F21V 7/09 362/294
3,675,008	A	7/1972	Hill
3,684,883	A	8/1972	Entwistle
3,701,898	A	10/1972	McNamara, Jr.
3,755,667	A	8/1973	Price
3,829,677	A	8/1974	DeLlano
3,902,059	A	8/1975	McNamara, Jr.
3,911,265	A	10/1975	Landrum
4,028,542	A	6/1977	McReynolds, Jr.
D245,016	S	7/1977	Barr
4,037,096	A	7/1977	Brengord
4,078,169	A	3/1978	Armstrong
4,175,360	A	11/1979	Mulvey
4,229,782	A	10/1980	Ruud
D259,738	S	6/1981	Boschetti
4,308,473	A	12/1981	McNamara, Jr.
D262,659	S	1/1982	Laltta
D266,578	S	10/1982	Moshier
D268,287	S	3/1983	Boschetti
D270,577	S	9/1983	DeVos
4,446,506	A	5/1984	Larson
4,531,180	A	7/1985	Hernandez
4,616,293	A	10/1986	Baliozian
4,669,033	A	5/1987	Lee
D290,662	S	7/1987	Basil
D300,877	S	4/1989	Cyr
4,855,884	A	8/1989	Richardson
4,893,221	A	1/1990	Friedman
4,933,821	A	6/1990	Anderson
4,939,629	A	7/1990	Glanton
D311,597	S	10/1990	Poot
4,970,428	A	11/1990	Hayakawa
4,980,809	A	12/1990	Baldwin
D316,301	S	4/1991	Michael
5,006,752	A	4/1991	Eggink
5,065,294	A	11/1991	Poot
5,072,349	A	12/1991	Waniga
D323,897	S	2/1992	Compton
5,088,015	A	2/1992	Baggio
D329,104	S	9/1992	Dieperink
D330,438	S	10/1992	Herst
5,192,129	A	3/1993	Figueroa
5,199,784	A	4/1993	Hempleman

5,253,152	A	10/1993	Yang
D349,358	S	4/1994	Herst
5,353,746	A	10/1994	Del Rosario
D352,126	S	11/1994	Ruud
5,440,470	A	8/1995	Ly
5,461,554	A	10/1995	Leonetti
D365,159	S	12/1995	Tinen
5,486,737	A	1/1996	Hrubowchak
5,510,676	A	4/1996	Cottaar
D373,000	S	8/1996	Brady
5,555,162	A	9/1996	Shemitz
D374,301	S	10/1996	Kleffman
D376,437	S	10/1996	Karlo
5,568,680	A	* 10/1996	Parker B21D 53/883 29/557
5,570,947	A	11/1996	Felland
D377,993	S	2/1997	Herst
5,621,267	A	4/1997	Shaffner
D383,243	S	9/1997	Fry
5,698,947	A	12/1997	Choi
5,702,179	A	12/1997	Sidwell
D391,632	S	3/1998	Thomas
D396,319	S	7/1998	Sutton
D397,481	S	8/1998	Schafer
D399,328	S	10/1998	Compton
D399,329	S	10/1998	Compton
D399,587	S	10/1998	Compton
D400,289	S	10/1998	Wardenburg
5,816,694	A	10/1998	Ideker
D401,006	S	11/1998	Edwards
D405,976	S	2/1999	Beall
5,896,004	A	4/1999	Feldman
5,924,789	A	7/1999	Thornton
5,932,955	A	8/1999	Berger
5,938,317	A	8/1999	Thornton
D415,304	S	10/1999	Brown
5,983,564	A	11/1999	Stragnola
5,987,697	A	11/1999	Song
5,999,943	A	12/1999	Nori
D418,626	S	1/2000	Herst
D419,248	S	1/2000	Lyons
6,024,468	A	2/2000	Kassay
6,042,250	A	3/2000	Stragnola
6,051,927	A	4/2000	Graser
6,053,624	A	4/2000	Cronk
D425,237	S	5/2000	Scott
D425,652	S	5/2000	Brok
D426,010	S	5/2000	Compton
6,061,690	A	5/2000	Nori
6,065,849	A	5/2000	Chen
6,070,173	A	5/2000	Huber
6,076,944	A	6/2000	Maranon
6,079,851	A	6/2000	Altman
D428,516	S	7/2000	Reo
6,094,919	A	8/2000	Bhatia
6,111,739	A	8/2000	Wu
6,152,579	A	11/2000	Reed
D439,008	S	3/2001	Kim
D440,289	S	4/2001	Olson et al.
6,210,025	B1	4/2001	Schmidt
6,230,497	B1	5/2001	Morris
D443,198	S	6/2001	Snyder
D443,949	S	6/2001	DiMonte
6,247,830	B1	6/2001	Winnett
D445,943	S	7/2001	Littman
6,257,735	B1	7/2001	Baar
6,267,483	B1	7/2001	Hembery
D447,272	S	8/2001	Smith
6,279,012	B1	8/2001	Sexton
6,299,327	B1	10/2001	Camarota
D452,559	S	12/2001	Schonberger
6,343,984	B1	2/2002	Langdon
6,371,630	B1	4/2002	Unger
D456,927	S	5/2002	Russello
D456,928	S	5/2002	Russello
D456,938	S	5/2002	Wardenburg
D457,450	S	5/2002	Lamond et al.
D459,825	S	7/2002	Field
6,488,387	B2	12/2002	Wardenburg

(56)

References Cited

U.S. PATENT DOCUMENTS

D469,564 S	1/2003	Brok	D628,335 S	11/2010	Hyland
6,527,422 B1	3/2003	Hutchison	7,854,534 B2	12/2010	Liu
6,548,948 B1	4/2003	Muessli	D632,419 S	2/2011	Ng
6,595,662 B2	7/2003	Wardenburg	D633,247 S	2/2011	Kong
6,601,972 B2	8/2003	Sei	D633,640 S	3/2011	Wauters
6,658,652 B1	12/2003	Alexander	D634,060 S	3/2011	Wardenburg
6,679,619 B2	1/2004	Saieva	D634,240 S	3/2011	Junkeer
D486,593 S	2/2004	Griffin	D634,468 S	3/2011	Hargreaves
6,688,759 B1	2/2004	Hadjimichael	D634,469 S	3/2011	Hargreaves
6,709,131 B1	3/2004	Herst	D637,162 S	5/2011	Bridgman
6,729,383 B1	5/2004	Cannell	D637,341 S	5/2011	Wardenburg
6,783,263 B1	8/2004	Cronk	D637,752 S	5/2011	Mekhtarian
D496,121 S	9/2004	Santoro	D640,404 S	6/2011	Chipperfield
D499,504 S	12/2004	Meyer	7,959,331 B2	6/2011	Ho
D499,505 S	12/2004	Benensohn	D641,100 S	7/2011	Li
D504,343 S	4/2005	Ek	7,972,044 B2	7/2011	Burkhauser
6,885,134 B2	4/2005	Kurashima	D644,185 S	8/2011	Hargreaves
6,908,212 B2	6/2005	Schultz	7,987,632 B2	8/2011	May
7,011,424 B1	3/2006	Poulson	8,018,630 B2	9/2011	Herloski
7,083,309 B2	8/2006	Chan	8,038,318 B2	10/2011	Plunk
7,101,060 B2	9/2006	Oppenheimer	D648,652 S	11/2011	Hawkins
7,131,753 B1	11/2006	Edwards, Jr.	D649,685 S	11/2011	Trzesniowski
7,156,539 B2	1/2007	Cronk	D650,515 S	12/2011	Bradley
7,175,309 B2 *	2/2007	Craw	D650,935 S	12/2011	Beghelli
		F21V 29/02	D653,376 S	1/2012	Kong
		362/149	8,113,696 B2	2/2012	Striebel
D542,460 S	5/2007	Hargreaves	D655,403 S	3/2012	Zakula
D543,652 S	5/2007	Hargreaves	D657,748 S	4/2012	Hargreaves
D543,654 S	5/2007	Hargreaves	D660,252 S	5/2012	Hargreaves
D543,655 S	5/2007	Hargreaves	D661,370 S	6/2012	Imajo
D544,982 S	5/2007	Hargreaves	D661,833 S	6/2012	Imajo
7,213,948 B2	5/2007	Hein	8,209,912 B2	7/2012	Hargreaves
D544,136 S	6/2007	Hargreaves	8,215,799 B2	7/2012	Vanden Eynden
D544,138 S	6/2007	Hargreaves	D667,584 S	9/2012	Beghelli
D544,139 S	6/2007	Hargreaves	D668,370 S	10/2012	Guercio
D544,626 S	6/2007	Hargreaves	D671,259 S	11/2012	Chen
D544,980 S	6/2007	Hargreaves	D672,908 S	12/2012	Wilcox
D544,981 S	6/2007	Hargreaves	D672,911 S	12/2012	Mayfield, III
D544,983 S	6/2007	Hargreaves	D673,324 S	12/2012	Mayfield
D544,984 S	6/2007	Hargreaves	8,334,640 B2	12/2012	Reed
D544,985 S	6/2007	Hargreaves	D675,369 S	1/2013	Michaud
D544,987 S	6/2007	Hargreaves	8,348,481 B2	1/2013	Chang
D544,994 S	6/2007	Hargreaves	D675,772 S	2/2013	Tran
D544,995 S	6/2007	Hargreaves	8,371,726 B2 *	2/2013	Collins
D545,460 S	6/2007	Mason, II			F21V 7/0025
D545,484 S	6/2007	Hargreaves			362/296.01
D545,485 S	6/2007	Hargreaves	D678,597 S	3/2013	Lehman
D545,990 S	7/2007	Hargreaves	D678,599 S	3/2013	Boyer
D545,994 S	7/2007	Hargreaves	D679,848 S	4/2013	Pickard
D545,996 S	7/2007	Hargreaves	D683,064 S	5/2013	Tuck
D549,869 S	8/2007	Ward	8,505,224 B2	8/2013	Huang
D553,781 S	10/2007	Pickard	D689,238 S	9/2013	Halsey
7,296,914 B1	11/2007	Russello	D689,986 S	9/2013	Lord
7,360,927 B2	4/2008	Oka	D690,875 S	10/2013	McKenzie
D569,024 S	5/2008	Redfern	D693,959 S	11/2013	Boyer
D572,858 S	7/2008	Santoro	D697,663 S	1/2014	Speier
7,445,363 B2	11/2008	Vanden Eynden	D698,074 S	1/2014	Hargreaves
7,524,090 B2	4/2009	Hargreaves	D698,075 S	1/2014	Klus
7,534,011 B2 *	5/2009	Townsley	D698,986 S	2/2014	Reynolds
		A01G 9/26	D698,987 S	2/2014	Stanley
		362/264	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
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
			D720,505 S	12/2014	Kersten
			8,905,575 B2	12/2014	Durkee
			D720,876 S	1/2015	Haverfield

(56)

References Cited

U.S. PATENT DOCUMENTS

D721,844 S	1/2015	Lay	
D722,654 S	2/2015	Martone	
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	
D729,435 S	5/2015	Arndt	
D730,556 S	5/2015	Toyohisa	
D725,819 S	6/2015	Reynolds	
D731,103 S	6/2015	Wilke	
D731,109 S	6/2015	Wardenburg	
D731,701 S	6/2015	Hargreaves	
D732,233 S	6/2015	Reynolds	
D732,234 S	6/2015	Rashidi Doust	
D732,235 S	6/2015	Reynolds	
D732,236 S	6/2015	Reynolds	
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	
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	Reynolds	
D740,996 S	10/2015	Tragatschnig	
D745,993 S	12/2015	Reynolds	
D747,029 S	1/2016	Reynolds	
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	
D748,849 S	2/2016	Stanley	
D748,850 S *	2/2016	Johnson	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	
9,255,690 B2	2/2016	Dimitriadis	
D750,831 S	3/2016	Clements	
D751,244 S	3/2016	Reynolds	
D751,245 S	3/2016	Stanley	
D751,247 S	3/2016	Reynolds	
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	D26/118
D766,756 S	9/2016	Franc	
9,451,743 B2 *	9/2016	Koerner	F21V 23/02
D769,513 S	10/2016	Reynolds	
D769,514 S *	10/2016	Reynolds	D26/118
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	D26/118
D771,304 S	11/2016	Goltche	
D773,107 S	11/2016	Stanley	
D774,234 S	12/2016	Plourde	
D775,406 S *	12/2016	Hargreaves	D26/118
D775,760 S	1/2017	Reynolds	
9,551,482 B2	1/2017	Seward	
D780,985 S *	3/2017	Stanley	D26/118
D780,986 S	3/2017	Reynolds	
D781,492 S	3/2017	Reynolds	
D783,887 S	4/2017	Stanley	
D783,888 S *	4/2017	Reynolds	D26/118
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	
2012/0145699 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	

(56)

References Cited

U.S. PATENT DOCUMENTS

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	Verfuerth
2017/0211801	A1	7/2017	Stanley

FOREIGN PATENT DOCUMENTS

EP	0325003	7/1989
EP	0040274	8/1991
WO	2002063210	8/2002
WO	2003060379	7/2003
WO	2008018000	2/2008
WO	2009096775	8/2009
WO	2011119451	9/2011

OTHER PUBLICATIONS

Apollo Horticulture GLRLS24 6" Air Cooled Hydroponic Grow Light Glass Reflector Hood, image post date Oct. 15, 2010, site visited 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/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 Grow Lights Home Depot: Find many types of grow lights for your plant, published Dec. 22, 2012, online. Site visited Jun. 25, 2014. <http://besthomedecorandfurniture.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 Catalog, Issuu.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 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-systems-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>.

AplusChoice-Hydroponics, image post date Dec. 2, 2014, site visited Jul. 13, 2017, (online), <https://www.tineye.com/search/6589596c8738268de70acceca20d64855d0f1d2/?sort=crawl_date&order=asc>.

Power 600 watt 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>.

* cited by examiner

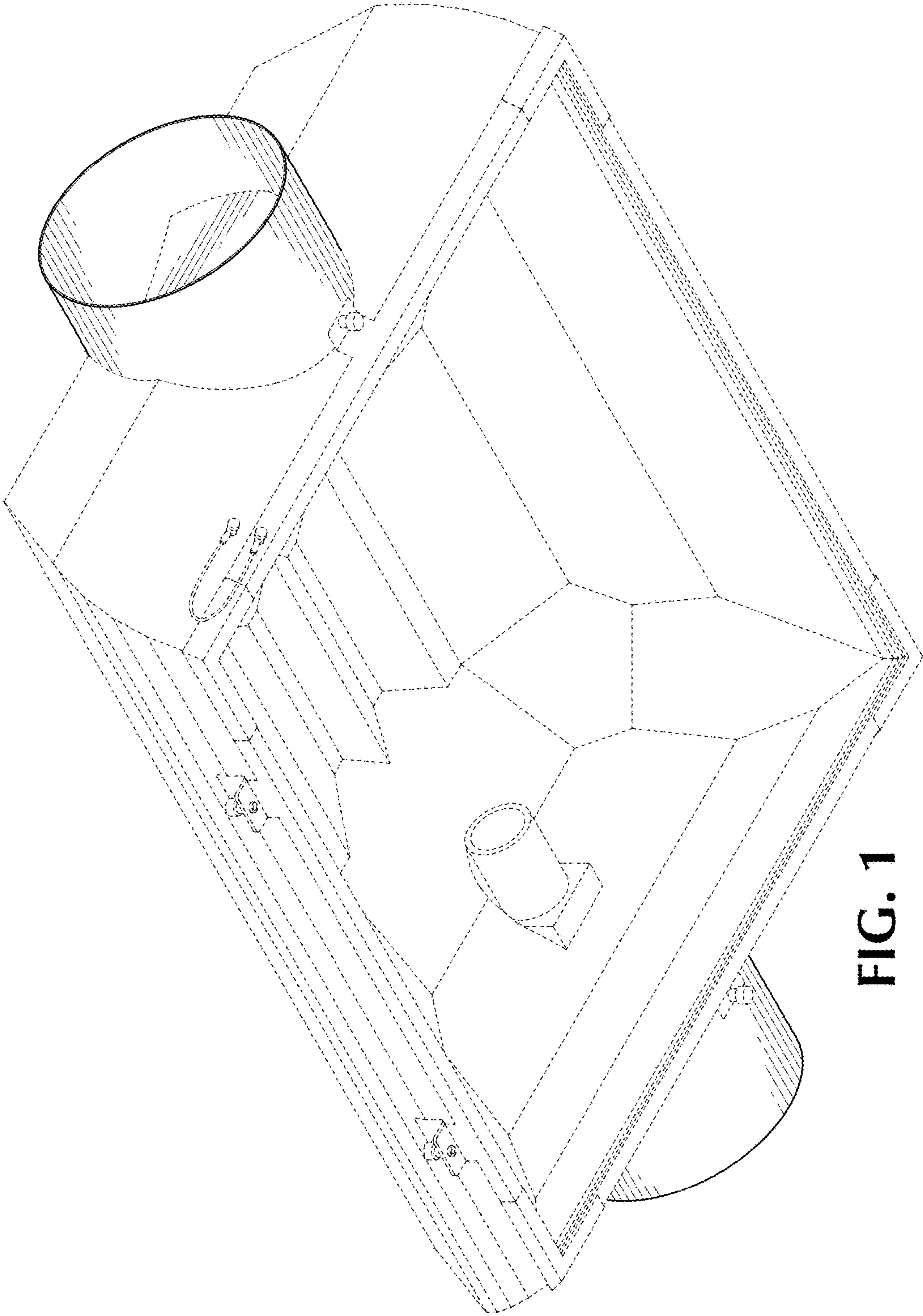


FIG. 1

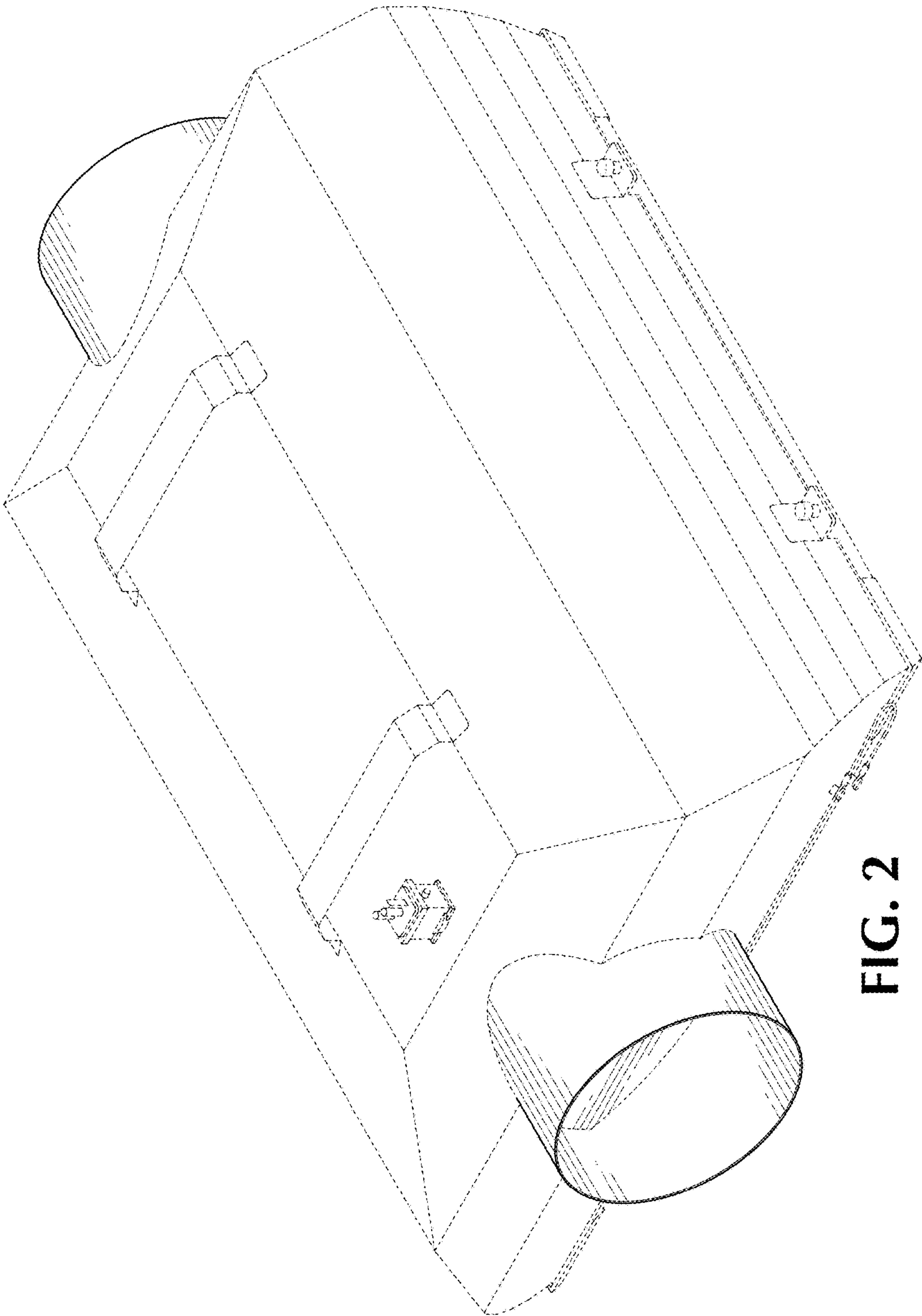


FIG. 2

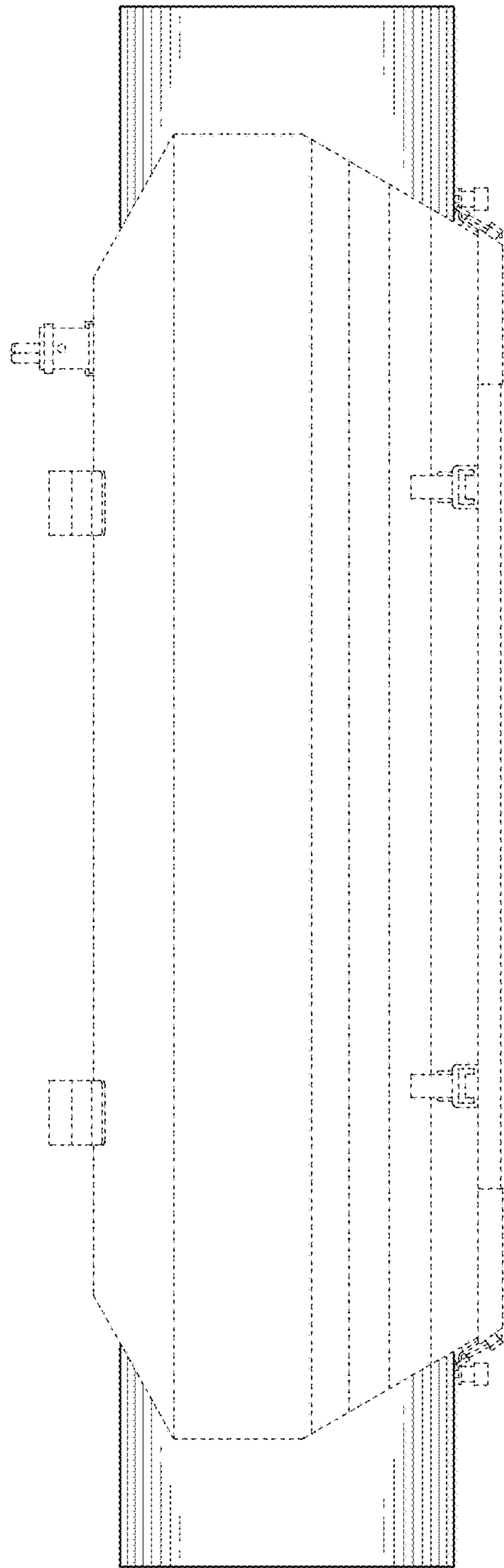


FIG. 3



FIG. 4

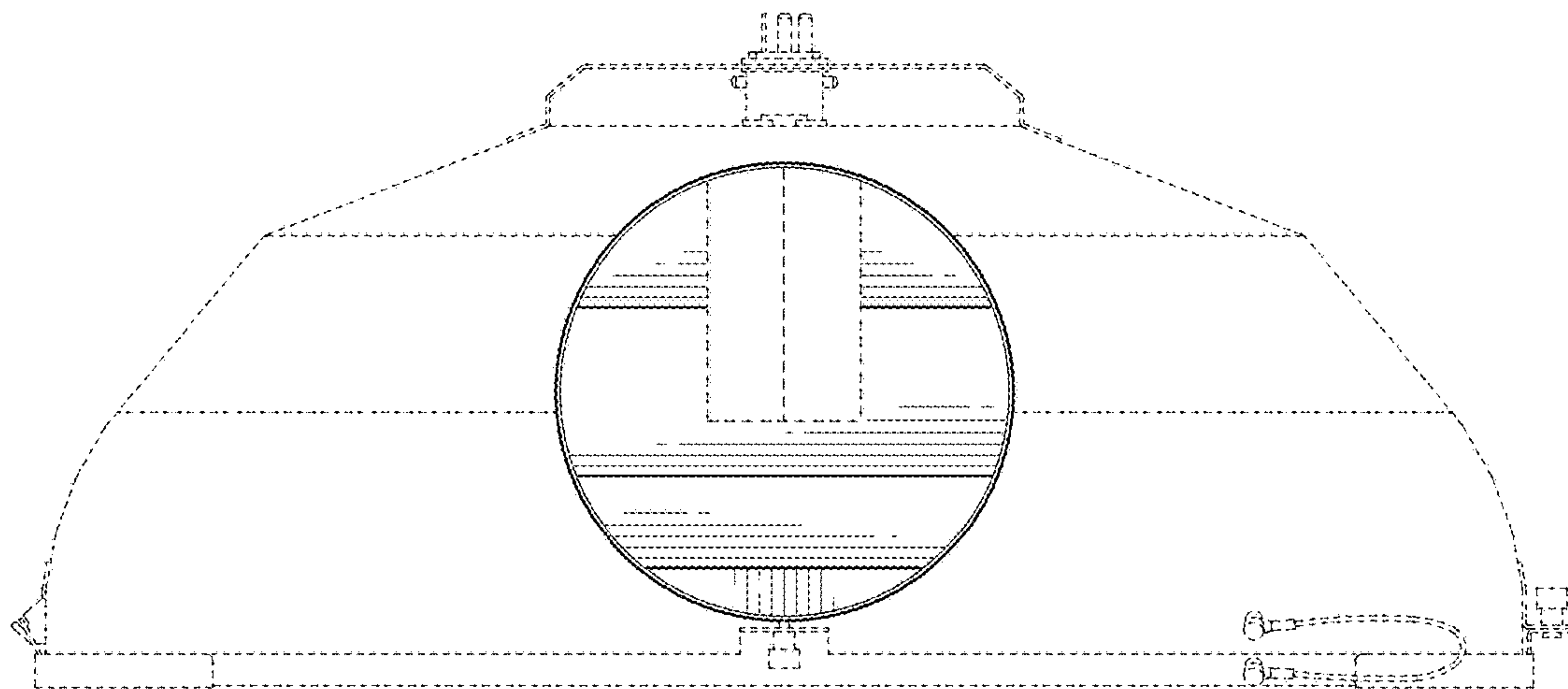


FIG. 5

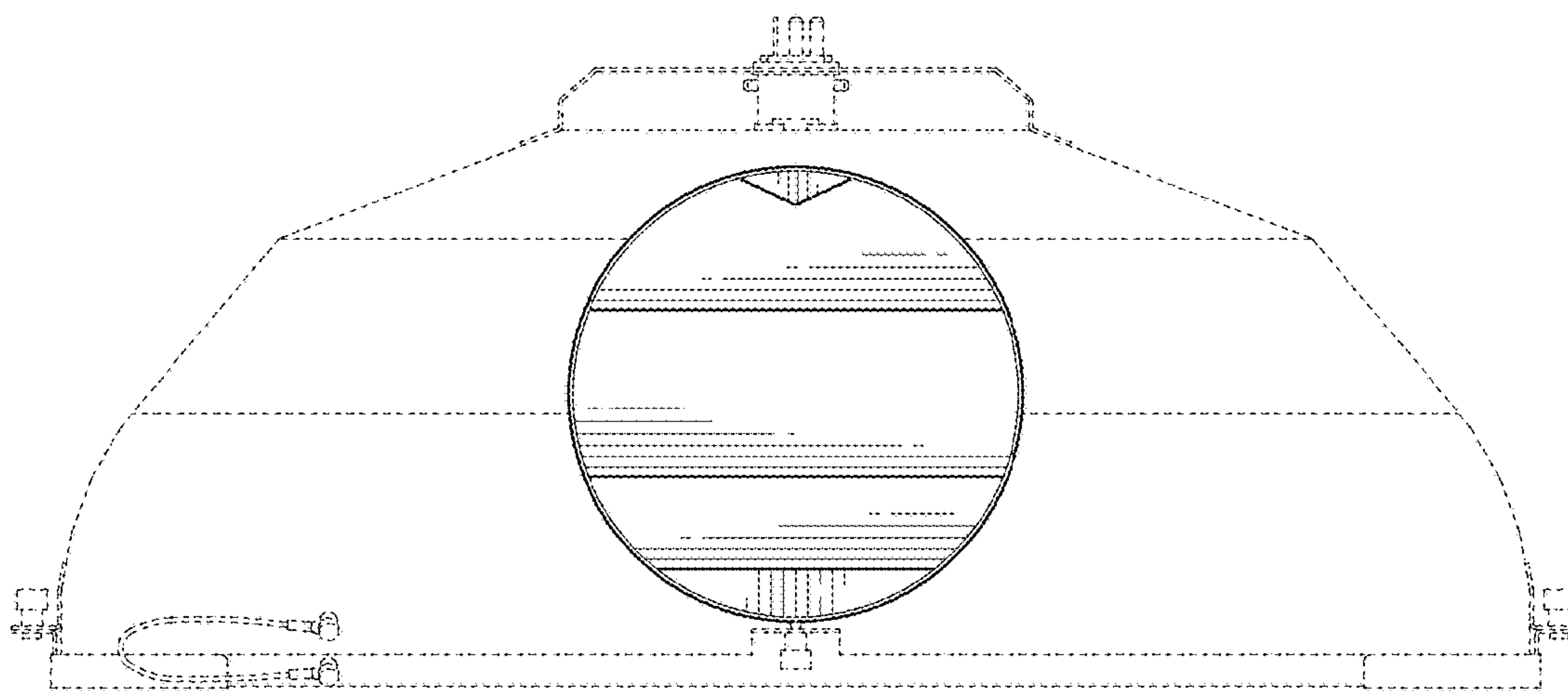


FIG. 6

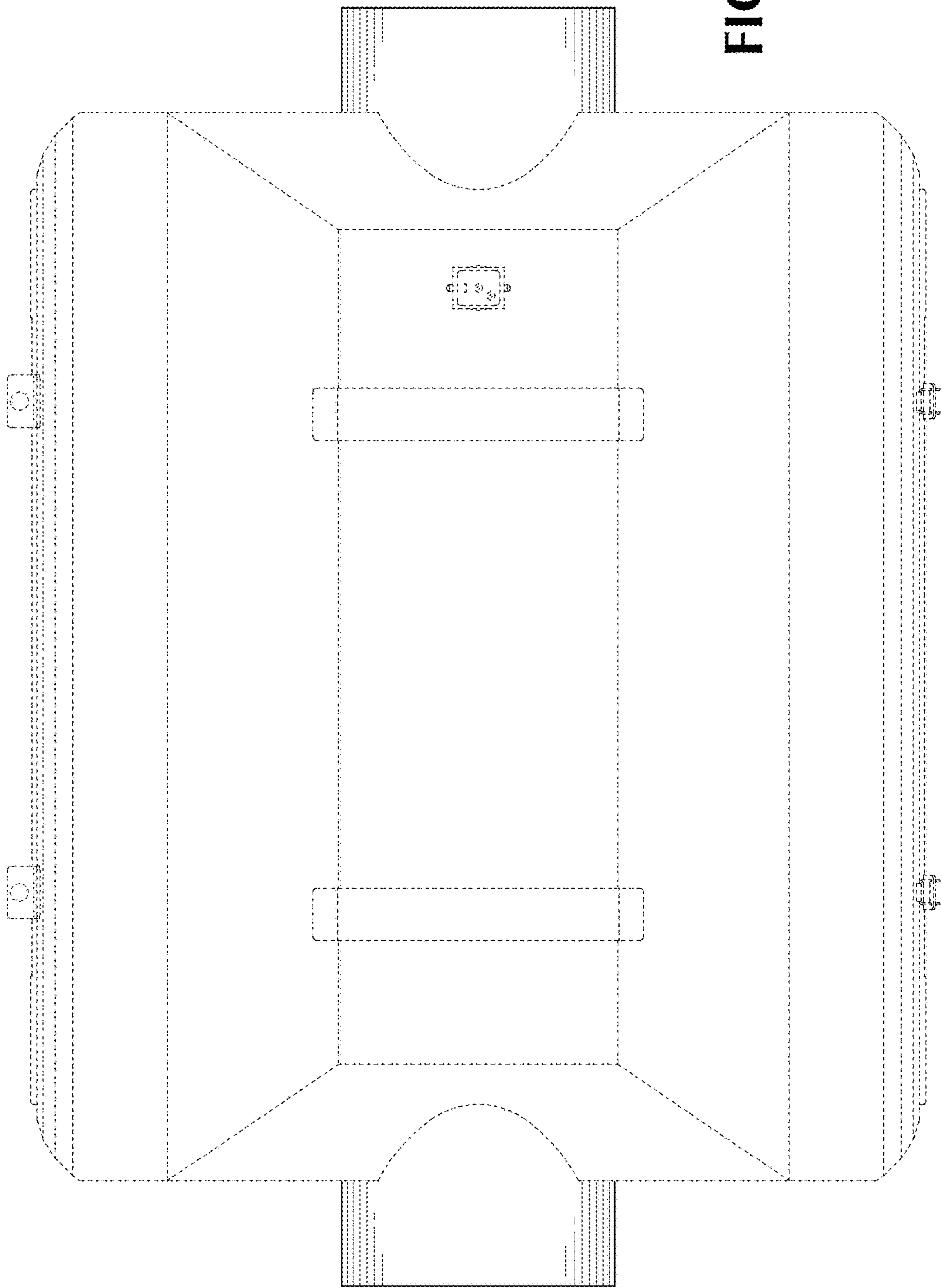


FIG. 7

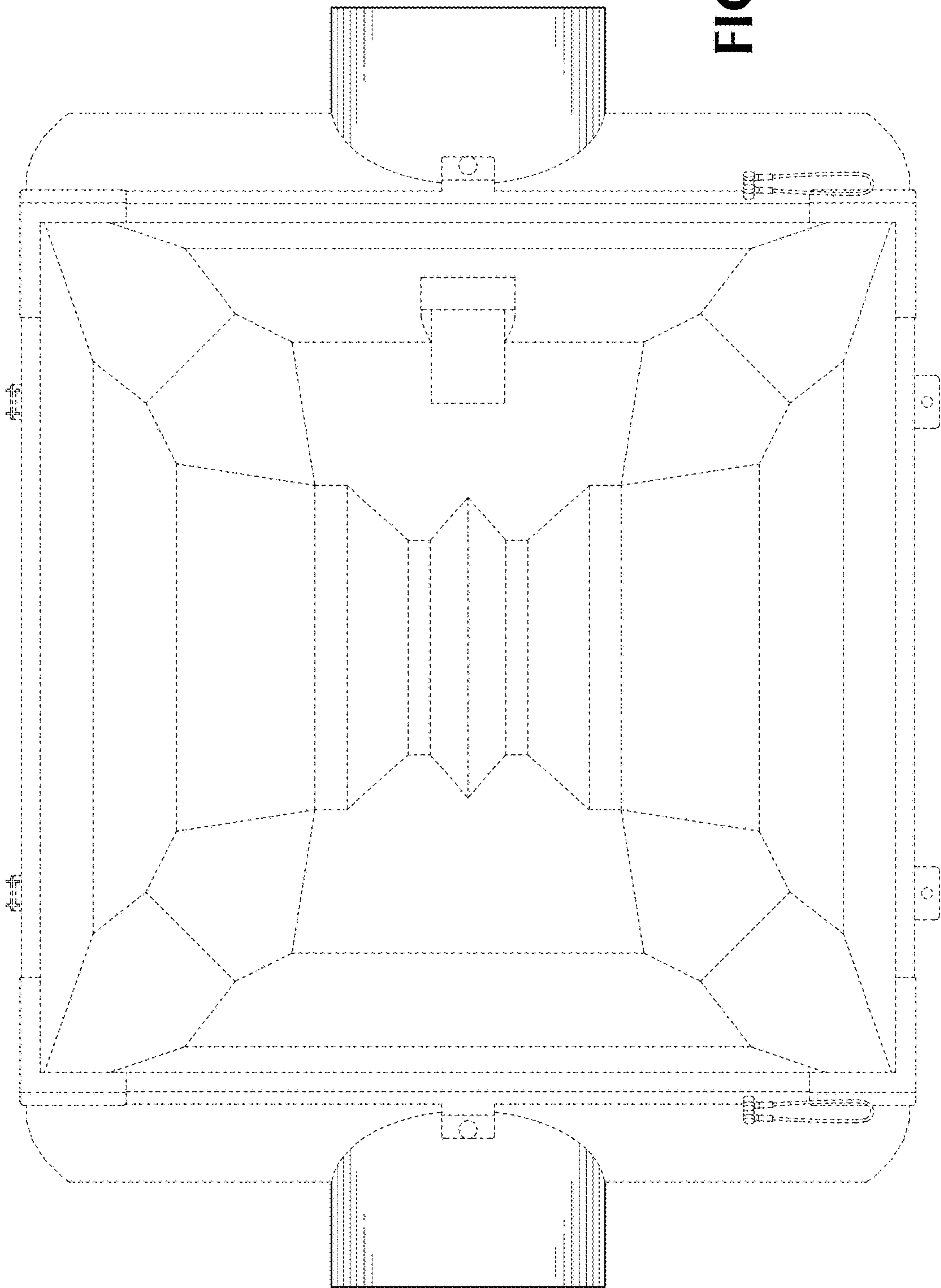


FIG. 8