



US00D583294S

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

(10) **Patent No.:** **US D583,294 S**

(45) **Date of Patent:** **** Dec. 23, 2008**

(54) **AIRSHIP**

5,096,141 A 3/1992 Schley
5,170,963 A 12/1992 Beck, Jr.

(75) Inventor: **Pierre Balaskovic**, Verrières les Buisson
(FR)

(Continued)

(73) Assignee: **LTA Corporation**, New York, NY (US)

FOREIGN PATENT DOCUMENTS

(**) Term: **14 Years**

DE 210003 5/1909

(21) Appl. No.: **29/273,494**

(Continued)

(22) Filed: **Mar. 7, 2007**

OTHER PUBLICATIONS

(51) **LOC (8) Cl.** **12-07**

(52) **U.S. Cl.** **D12/319**

(58) **Field of Classification Search** D12/319,
D12/320, 323, 325; 244/23 C, 24, 26, 29,
244/34 R; D21/430, 436, 443, 447, 451,
D21/453; 446/36, 85, 88, 93, 94, 108, 116,
446/118, 120, 220, 225, 230, 232

21st Century Airships Web Site, accessed Jun. 22, 2007, <http://www.21stcenturyairships.com> (1 page).

(Continued)

See application file for complete search history.

Primary Examiner—Ian Simmons
Assistant Examiner—Maurice Stevens

(74) *Attorney, Agent, or Firm*—Finnegan, Henderson,
Farabow, Garrett & Dunner, L.L.P.

(56) **References Cited**

(57) **CLAIM**

U.S. PATENT DOCUMENTS

The ornamental design for the airship, as shown and described.

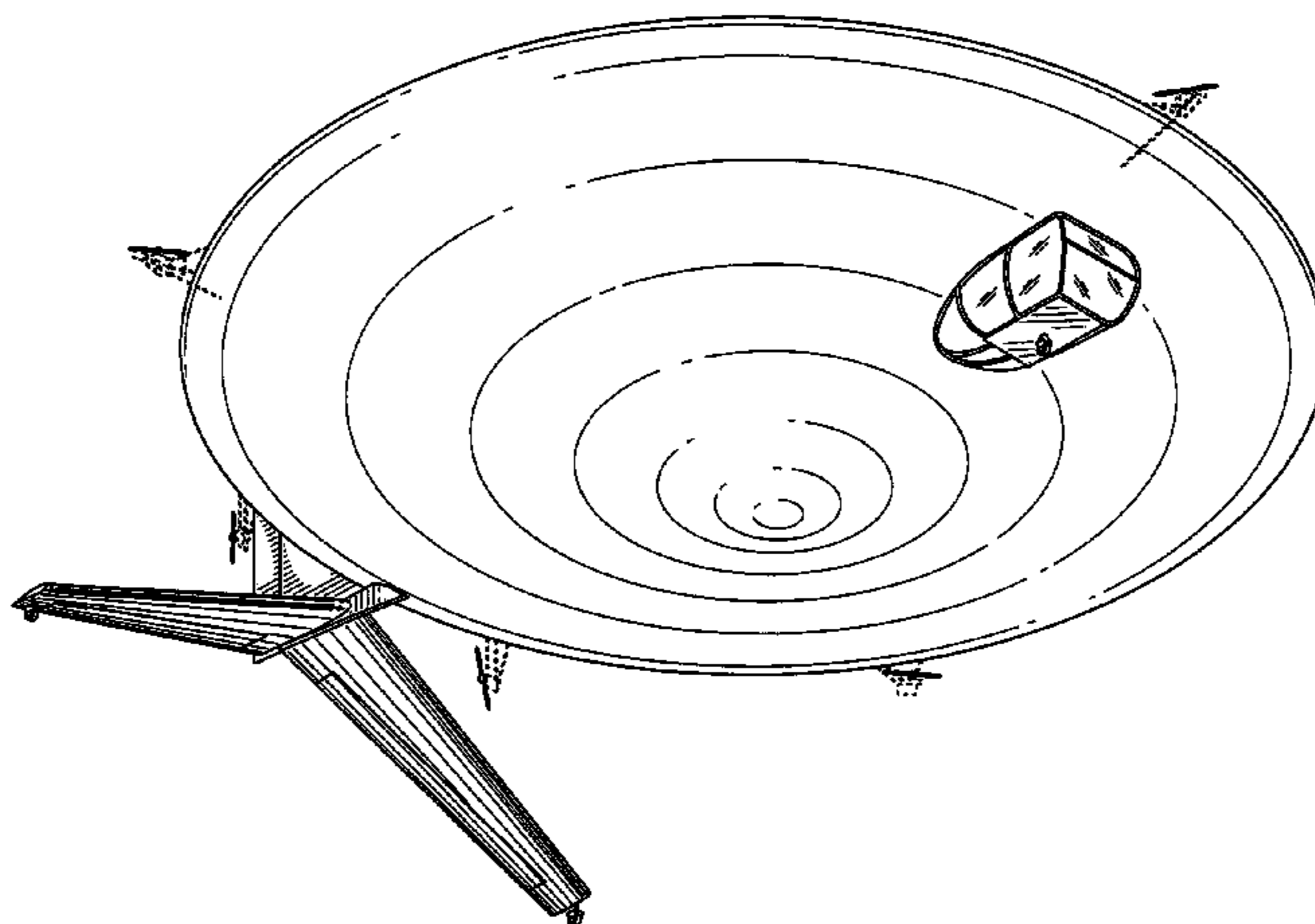
- 1,027,590 A 5/1912 Bucher
- 1,944,467 A 1/1934 Sabin
- 2,935,275 A * 5/1960 Grayson 244/23 C
- 3,432,120 A 3/1969 Guerrero
- D213,731 S * 4/1969 Hsi D12/323
- 3,477,168 A * 11/1969 Trodglan, Jr. 446/37
- RE28,454 E 6/1975 Fitzpatrick et al.
- 3,970,270 A 7/1976 Pittet, Jr.
- 3,971,533 A 7/1976 Slater
- 3,976,265 A 8/1976 Doolittle
- 4,085,912 A 4/1978 Slater
- 4,326,681 A 4/1982 Eshoo
- 4,461,436 A * 7/1984 Messina 244/23 C
- D274,999 S 8/1984 Reeves
- D280,194 S 8/1985 Bothe
- 4,685,640 A * 8/1987 Warrington et al. 244/29
- D305,418 S 1/1990 Blake
- 4,901,948 A 2/1990 Panos
- D307,131 S 4/1990 Kramer
- D307,884 S * 5/1990 Ninkovich D12/325
- D309,887 S 8/1990 Ninkovich

DESCRIPTION

FIG. 1 is a lower right perspective view of an airship of my new design;
FIG. 2 is the top view thereof;
FIG. 3 is the bottom view thereof;
FIG. 4 is a front view thereof;
FIG. 5 is a rear view thereof;
FIG. 6 is a right side view thereof;
FIG. 7 is a left side view thereof; and,
FIG. 8 is a close up perspective view of the gondola portion of the airship.

The elements of the airship depicted in broken lines form no part of the claimed design.

1 Claim, 8 Drawing Sheets



US D583,294 S

U.S. PATENT DOCUMENTS

5,240,206	A	8/1993	Omiya
5,348,251	A	9/1994	Ferguson
5,351,911	A	10/1994	Neumayr
5,368,256	A	11/1994	Kalisz et al.
5,516,060	A	5/1996	McDonnell
5,755,402	A	5/1998	Henry
5,823,468	A	10/1998	Bothe
D418,804	S	1/2000	Glasgow et al.
6,010,093	A	1/2000	Paulson
D424,508	S	5/2000	Hankinson et al.
6,164,589	A	12/2000	Kalisz
6,196,498	B1	3/2001	Eichstedt et al.
6,231,007	B1	5/2001	Schafer
6,286,783	B1	9/2001	Kuenkler
6,293,493	B1	9/2001	Eichstedt et al.
6,302,357	B1	10/2001	Kalisz
6,311,925	B1	11/2001	Rist
6,315,242	B1	11/2001	Eichstedt et al.
6,328,257	B1	12/2001	Schafer
6,565,037	B1	5/2003	Tonkovich
6,659,838	B1	12/2003	Anderson
6,880,783	B2	4/2005	Munk
6,966,523	B2	11/2005	Colting
7,040,572	B2	5/2006	Munk
7,055,777	B2	6/2006	Colting
7,108,228	B1	9/2006	Marshall
7,137,592	B2	11/2006	Barocela et al.
7,156,342	B2	1/2007	Heaven, Jr. et al.
7,159,817	B2	1/2007	VanderMey et al.
2002/0003189	A1	1/2002	Kuenkler
2002/0109045	A1	8/2002	Beach et al.
2003/0001044	A1	1/2003	Munk
2003/0234320	A1	12/2003	Colting
2004/0162000	A1	8/2004	Anderson
2005/0277359	A1	12/2005	Anderson
2006/0016930	A1	1/2006	Pak
2006/0060695	A1	3/2006	Walden et al.
2006/0065777	A1	3/2006	Walden et al.
2006/0151666	A1	7/2006	VanderMey et al.
2006/0261213	A1	11/2006	Lavan
2006/0284002	A1*	12/2006	Stephens et al. 244/12.4
2007/0295859	A1*	12/2007	Colvin 244/24

FOREIGN PATENT DOCUMENTS

DE	3508101	A1	9/1986
DE	10011319	A1	9/2001
DE	20116152	U1	2/2002
DE	10058072	A1	6/2002
DE	20204023	U1	7/2002
DE	10120232	A1	10/2002
DE	10121854	C1	11/2002
DE	10139877	A1	2/2003
DE	10148589	A1	4/2003
DE	10148590	A1	4/2003
DE	10201133	A1	7/2003
DE	10210541	A1	9/2003
DE	10210542	A1	9/2003
DE	10216480	A1	10/2003
DE	10226868	A1	12/2003
DE	10228048	A1	1/2004
DE	10252895	A1	5/2004
DE	10252896	A1	5/2004
DE	10252908	A1	5/2004
DE	10252909	A1	5/2004
DE	10252910	A1	5/2004
DE	10252911	A1	5/2004
EP	0 282 425	A1	9/1988
EP	0 291 355	A2	11/1988
EP	0 503 801	A2	9/1992
EP	0 619 792	B1	10/1994

EP	0 714 362	B1	6/1996
EP	0 729 423	B1	9/1996
EP	0 745 045	B1	12/1996
EP	1 070 008	B1	1/2001
EP	1 292 474	B1	3/2003
EP	1 294 608	B1	3/2003
EP	1 451 063	B1	9/2004
EP	1 529 726	A2	5/2005
EP	1 770 009	A2	4/2007
FR	2830838	B1	4/2003
GB	2 197 276	A	5/1988
GB	2 250 007	A	5/1992
GB	2 275 036	A	8/1994
GB	2 278 815	A	12/1994
GB	2 300 010	A	10/1996
GB	2 359 534	A	8/2001
GB	2359534	A	8/2001
GB	2 366 274	A	3/2002
RU	37568	SO	10/1993
RU	2009073	C1	3/1994
RU	40882	S	1/1995
RU	2028249	C1	2/1995
RU	2070136	C1	12/1996
RU	2098318	C1	12/1997
RU	2111146	C1	5/1998
RU	2111147	D1	5/1998
RU	2111027	C1	6/1998
RU	2114027	C1	6/1998
RU	2092381	C1	10/1999
RU	2141911	C1	11/1999
RU	2196703	C2	1/2003
RU	2249536	C1	4/2005
RU	2250122	C1	4/2005
SU	1799335	A3	2/1993
UA	10870	A	12/1996
UA	32397	A	12/2000
UA	55928	A	4/2003
WO	WO 92/06002	A1	4/1992
WO	WO 93/13979	A1	7/1993
WO	WO 93/24364	A2	12/1993
WO	WO 95/05307	A1	2/1995
WO	WO 95/14607	A1	6/1995
WO	WO 95/22486	A1	8/1995
WO	WO 95/27652	A1	10/1995
WO	WO 95/32893	A1	12/1995
WO	WO 95/32894	A1	12/1995
WO	WO 96/28340	A1	12/1996
WO	WO-97/49606	A1	12/1997
WO	WO 98/28188	A1	7/1998
WO	WO 98/29303	A2	7/1998
WO	WO 98/31589	A1	7/1998
WO	WO 99/67131	A1	12/1999
WO	WO 00/48902	A1	8/2000
WO	WO 00/73142	A2	12/2000
WO	WO 01/42082	A1	6/2001
WO	WO 01/68447	A2	9/2001
WO	WO 01/94172	A2	12/2001
WO	WO 03/047967	A1	6/2003
WO	WO 03/055745	A1	7/2003
WO	WO 03/055746	A1	7/2003
WO	WO 03/074356	A3	9/2003
WO	WO 03/097450	A1	11/2003
WO	WO 03/097451	A1	11/2003
WO	WO 2004/000642	A1	12/2003
WO	WO 2004/074091	A2	9/2004
WO	WO 2004/087499	A2	10/2004
WO	WO 2005/002960	A1	1/2005
WO	WO 2005/007508	A1	1/2005
WO	WO 2006/061617	A1	6/2006
WO	WO 2006/085919	A2	8/2006
WO	WO 2006/137880	A2	12/2006
WO	WO 2007/036038	A1	4/2007
WO	WO 2007/037932	A2	4/2007

WO WO 2007/045091 A1 4/2007
 WO WO 2007/065649 A2 6/2007

OTHER PUBLICATIONS

ALA-40 proof-of-concept—Thermoplane, Photos from “Janes—All the World’s Aircraft,” 1997 (2 pages).
 Ben Ionnta, “Spy Blimps and Heavy Lifters: The Latest Thing in Airships,” Air & Space Smithsonian, Sep. 2007 (2 pages).
 Blimp Europa N2A Web Site, accessed Oct. 11, 2006, machine translated Jun. 25, 2007, <http://www.blimp-n2a.com/cl5alpha.htm> (3 pages).
 CargoLifter Web Site, accessed Jun. 19, 2007, <http://cargolifter.info> (2 pages).
 Daniel P. Raymer, “Aircraft Design: A Conceptual Approach,” 4th Ed., 2006, pp. 652-69, American Institute of Aeronautics and Astronautics, Inc., Reston, Virginia (11 pages).
 Demonstrator Alpha, Lenticular Aircraft of Air Photography, accessed Oct. 11, 2006, machine translated Jun. 25, 2007, <http://perso.orange.fr/balaskovic/actu-texte.html> (2 pages).
 Dynalifter Web Site, accessed Jun. 22, 2007, <http://www.dynalifter.com> (7 pages).
 “Lift Equations,” derived from “The Non-Rigid Airship Test And Evaluation Manual,” U.S. Navy, 1940 (2 pages).
 Michael A. Dornheim, “Skunks Working,” Aviation Week, Feb. 6, 2006, accessed Jun. 22, 2007, http://www.aviationweek.com/aw/generic/story_generic.jsp?channel=awst&id=news/020606p2.xml (2 pages).
 Gabriel A. Khoury and J. David Gillett, “Lenticular Mathematics,” an excerpt from “Airship Technology,” Cambridge University Press, 1999 (6 pages).
 Lord Ventry and Eugene Kolesnik, Excerpt from “Jane’s Pocket Book of Airships,” Collier Books, 1977, pp. 94-96.
 Edwin Mowforth, “Lenticular History,” an excerpt from “An Introduction to the Airship,” Second Edition (6 pages).
 Operation—LTA Web Site, accessed Oct. 11, 2006, <http://web.archive.org/web/2004040405173243/www.operation-Ita.com> (5 pages).
 Stephane Donceiux and Jean-Arcady Meyer, “Evolving Neural Networks for the Control of a Lenticular Blimp,” AnimatLab—LIP6, 2003 France, <http://animatlab.lip6.fr> (12 pages).
 Thomas F. Norton, “Now There’s a ‘Personal Blimp.’ Unique Foldable Frame Makes it Practical as a Second Century Aircraft,” General Aviation News, Jan. 19, 2007, p. 18-19, 59th year, No. 2, Flyer Media, Inc., Lakewood, WA (2 pages).
 Worldwide Aeros Corporation Web Site, accessed Jun. 22, 2007, <http://www.aerosml.com> (4 pages).
 Yu. Boiko and V.A. Turian, “Dreamboat of Centuries,” Moscow, Machine Building, p. 52, Jun. 13, 1991 (2 pages).

U.S. Army Advanced Material Concepts Agency, “Aerial Very Heavy Lift Concepts for the 1990 Army vol. I”, Basic Report, Nov. 1969 (41 pages).
 U.S. Army Advanced Material Concepts Agency, “Aerial Very Heavy Lift Concepts for the 1990 Army vol. III”, Academic and Industrial Presentations, Nov. 1, 1969 (200 pages).
 Boeing Vertol Company for NASA Ames., “Feasibility Study of Modern Airships”, Final Report, vol. 1, May 1975 (478 pages).
 P.A. Mackrodt, “Further Studies in the Concept of Delta-Winged Hybrid Airships”, J. Aircraft, Oct. 1, 1980, pp. 734-740.
 Mark D. Ardema, “Missions and Vehicle Concepts for Modern, Propelled, Lighter-Than-Air Vehicles”, AGARD, NATO, Feb. 1985 (50 pages).
 Dr. R.S. Ross et al., “New Air Transport for Heavy Bulky Cargo” (Advanced Copy), Apr. 20, 1962 (35 pages).
 W.L. Marcy, “Parametric Design Study of Fully-Buoyant Naval Air Vehicles”, NADC, Nov. 30, 1976 (85 pages).
 Stepler, Richard M., “Return to Lighter Than Air Transportation for Military and Civilian Application”, Defense Systems Management School, Fort Belvoir, VA, Nov. 1973 (56 pages).
 L. Balis et al., “Some Trends in Airship Technology Developments”, NATO, Oct. 25, 1983 (14 pages).
 “Types of Lighter-Than-Air Aircraft,” Author unknown, Publication date unknown (34 pages).
 Mark D. Ardema, “Vehicle Concepts and Technology Requirements for Buoyant Heavy-Lift Systems”, NASA, 1979 (36 pages).
 Mark D. Ardema, “Vehicle Concepts and Technology Requirements for Buoyant Heavy-Lift Systems”, NASA Technical Paper, 1981 (18 pages).
 David Bailey and William Mueller, “North Warning Airship Program, Final Overview,” Naval Air Development Center, Apr. 6, 1987 (223 pages).
 “Preliminary Design Investigation for Payload and Ground Handling Concepts for Airships Operating in Remote Arctic Regions, Final Report,” Naval Air Development Center, Mar. 31, 1986 (224 pages).
 Capt. J. Arvi et al., “North Warning Program Airship Feasibility Tests, Final Report,” Naval Air Development Center, Feb. 20, 1987 (41 pages).
 Capt. J. Arvi et al., “North Warning System Familiarisation, Feasibility and Operational Demonstration, Final Report,” Naval Air Development Center, Apr. 19, 1986 (126 pages).
 Douglas Botting, “The Giant Airships,” Time-Life Books, Alexandria, VA 1980 (186 pages).
 E. Udartsev and E. Tyan, “Dirigible of a New Generation in Kiev,” available at <http://www.aviajournal.com/sections/journal/arh/magazine/200112/index.html>, (9 pages).
 Edwin Mowforth, “An Introduction to the Airship,” Third Edition, The Airship Association Sep. 2007 (158 pages).

* cited by examiner

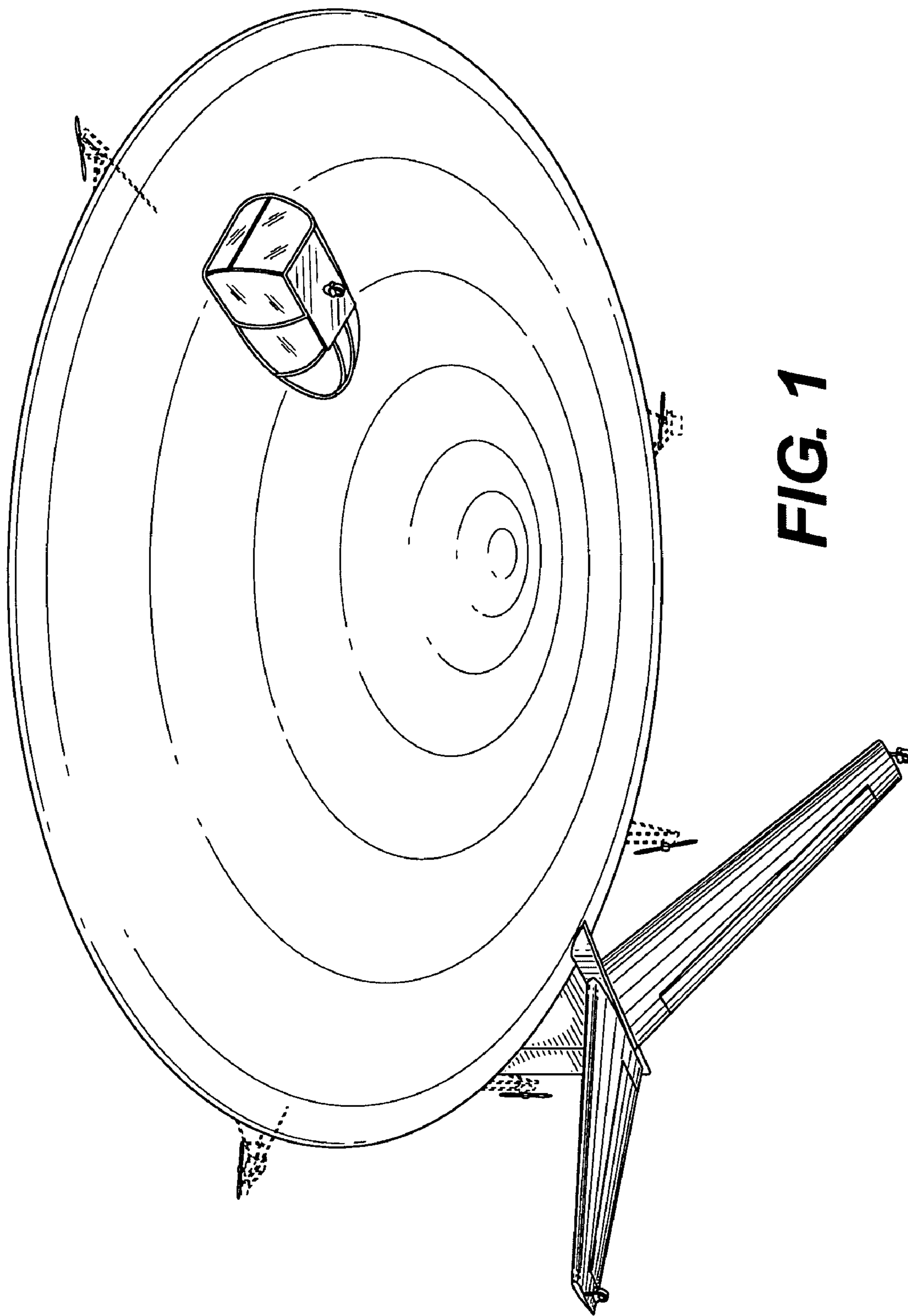


FIG. 1

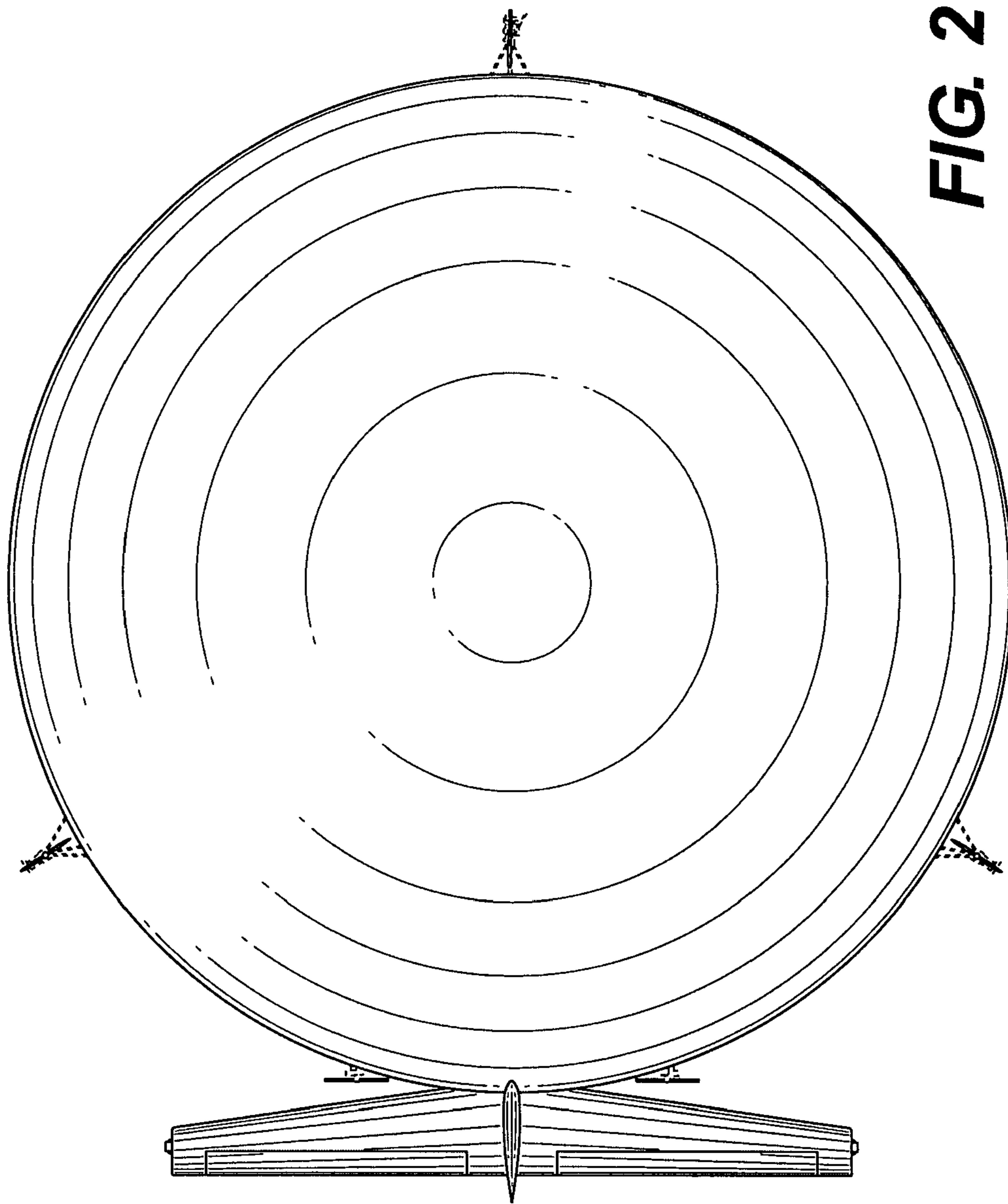


FIG. 2

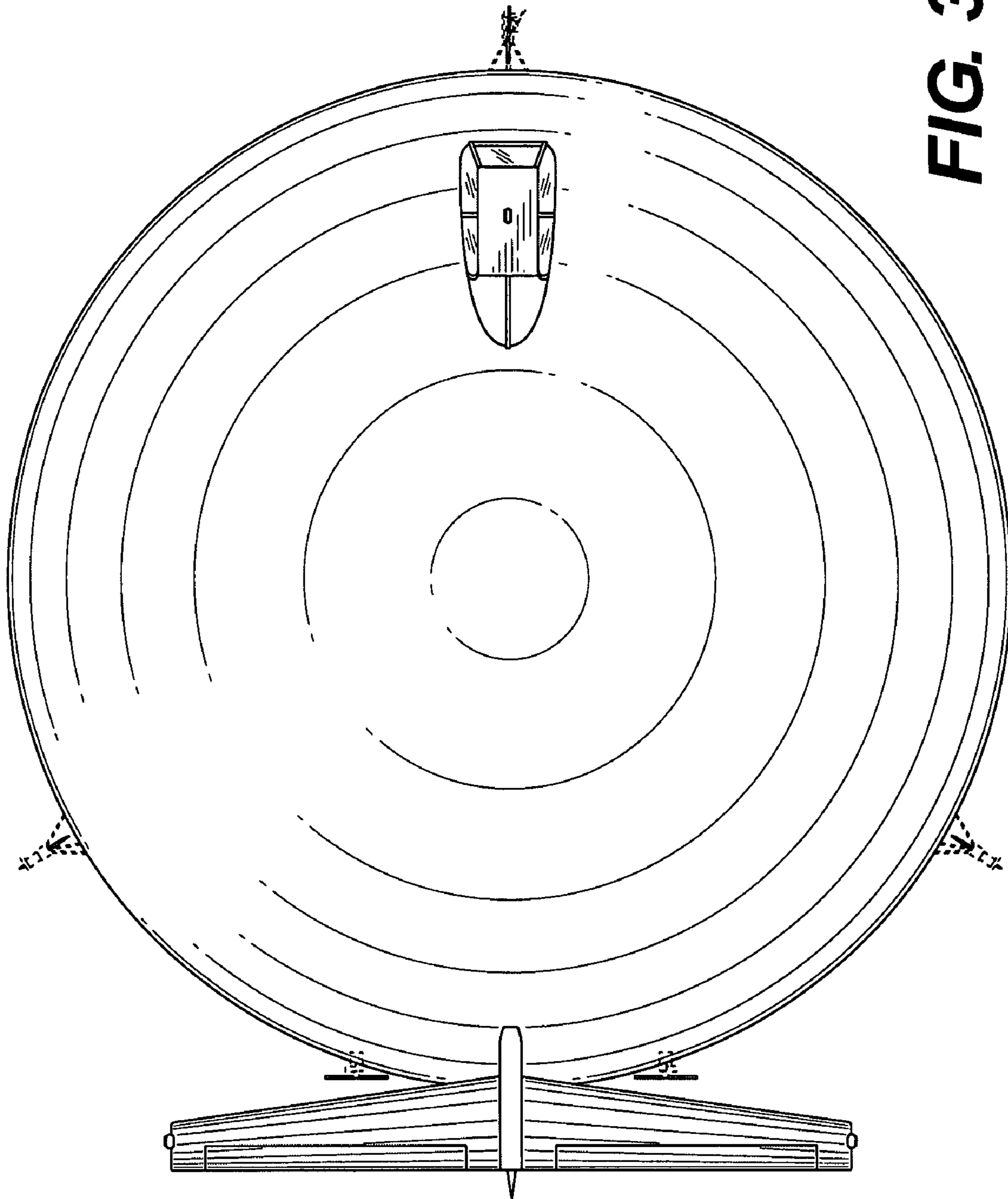


FIG. 3

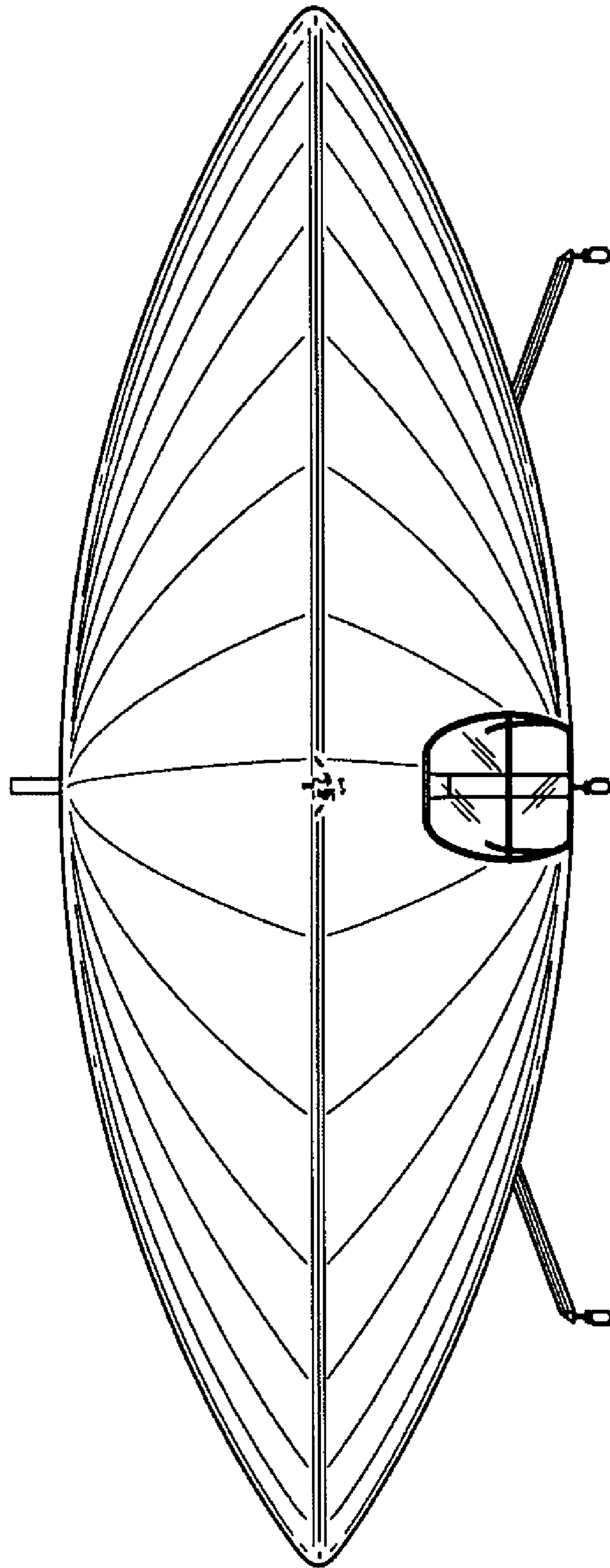


FIG. 4

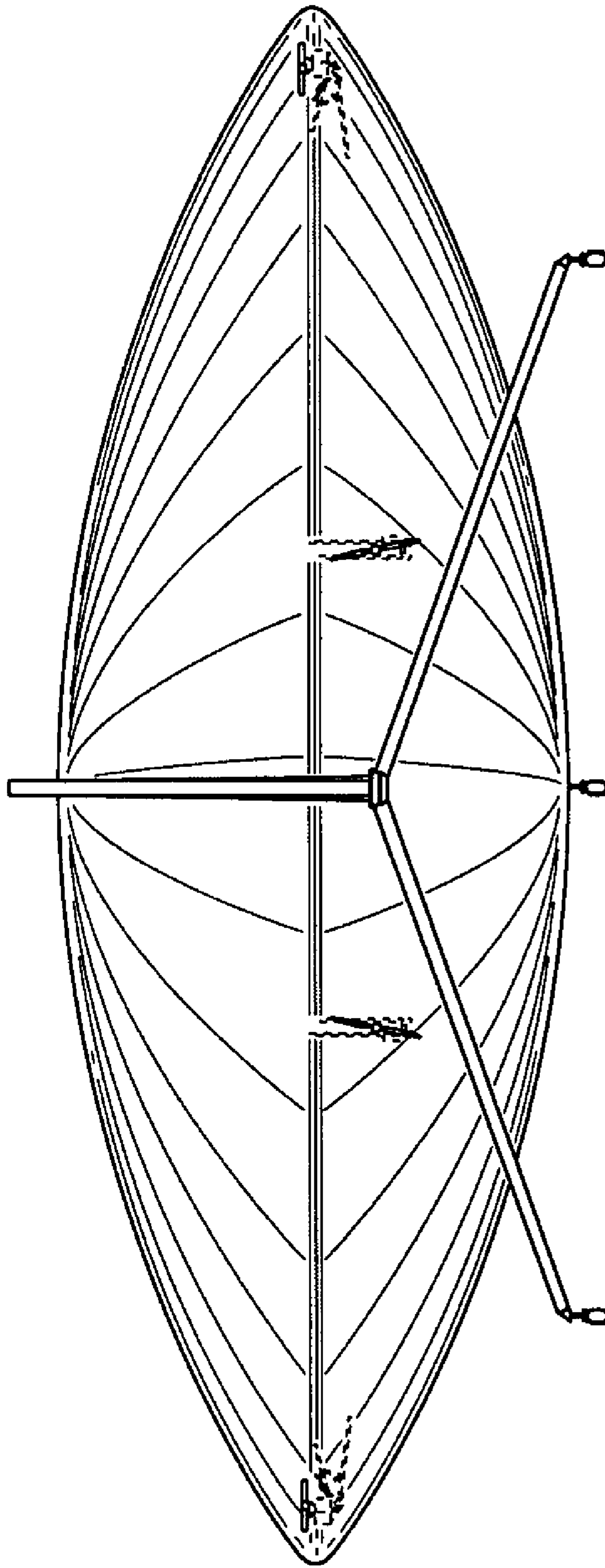


FIG. 5

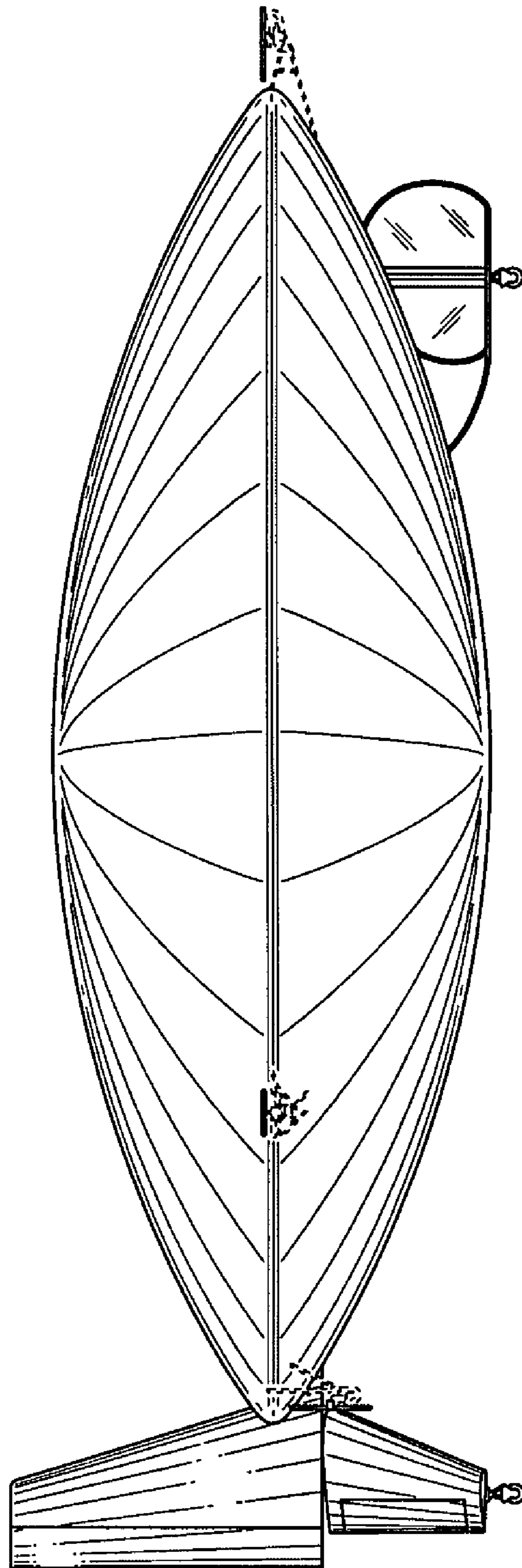


FIG. 6

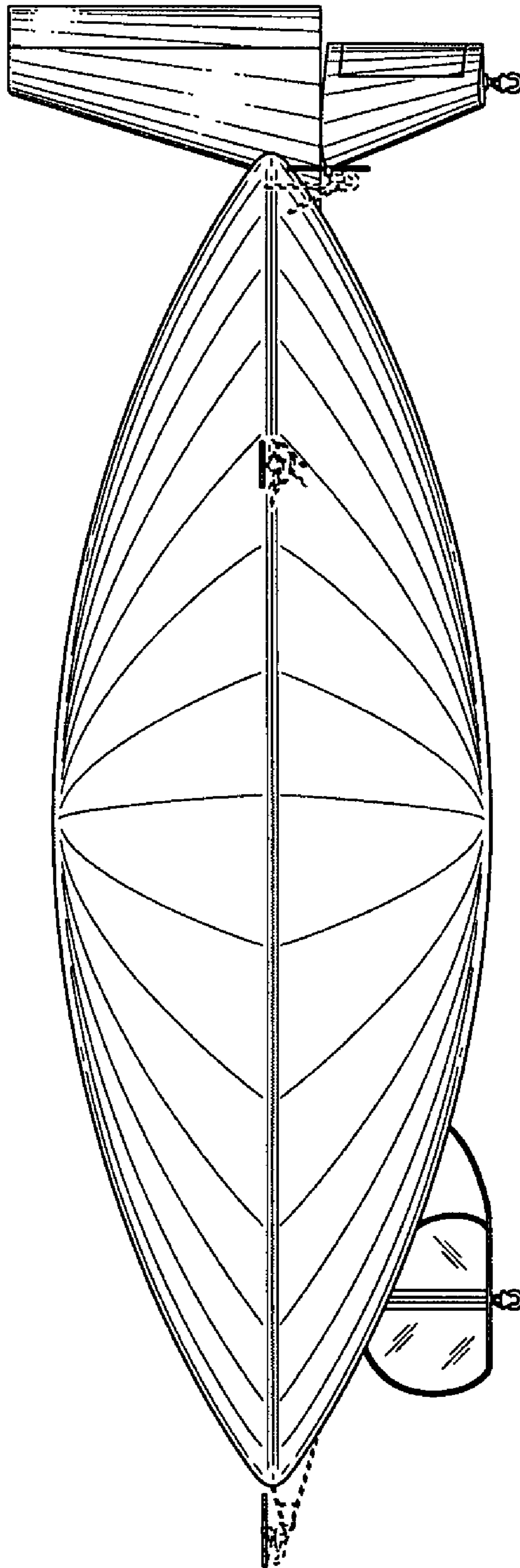


FIG. 7

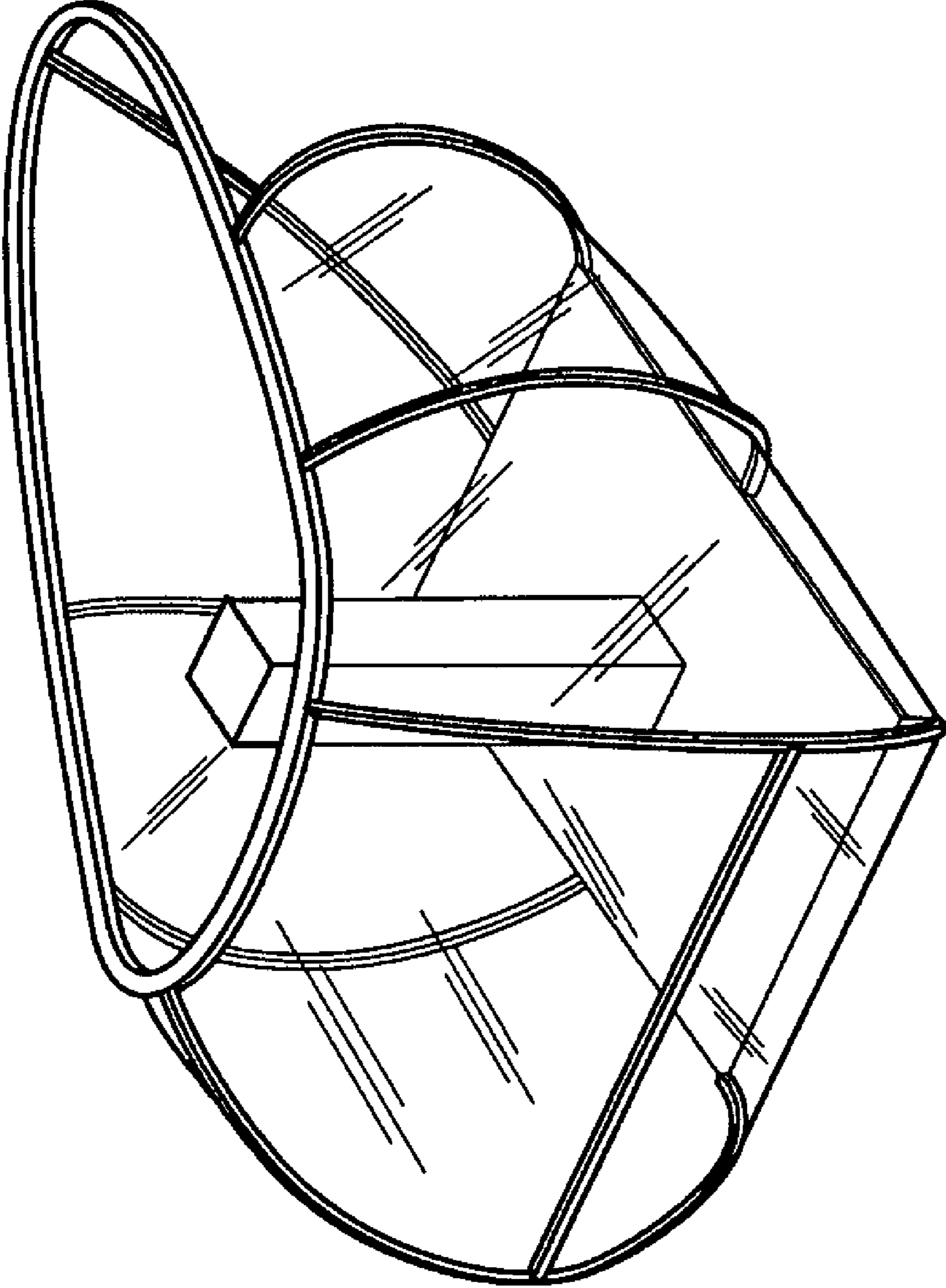


FIG. 8