



US00D776571S

(12) **United States Design Patent** (10) **Patent No.:** **US D776,571 S**  
**Barrett et al.** (45) **Date of Patent:** **\*\* Jan. 17, 2017**

(54) **AERIAL VEHICLE** 3,063,375 A \* 11/1962 Hawley ..... F42B 10/14  
244/3.27  
(71) Applicant: **University of Kansas**, Lawrence, KS 3,578,263 A 5/1971 Gunter et al.  
(US) 3,884,431 A 5/1975 Burrell  
(72) Inventors: **Ronald M. Barrett**, Lawrence, KS D250,966 S \* 1/1979 Spore ..... D21/442  
(US); **Robert B. Honea**, Lenoir City, 5,060,886 A 10/1991 Davis et al.  
TN (US); **Richard B. Bramlette**, Little  
Rock, AR (US) (Continued)

**FOREIGN PATENT DOCUMENTS**

(73) Assignee: **University of Kansas**, Lawrence, KS  
(US) CN 10205022 5/2011  
WO WO 2013/048339 4/2013  
WO WO 2014/055899 4/2014

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

(21) Appl. No.: **29/529,811** U.S. Appl. No. 14/120,446, filed Jun. 10, 2014, Barrett et al.  
(22) Filed: **Jun. 10, 2015** (Continued)

**Related U.S. Application Data**

(63) Continuation of application No. 14/734,864, filed on Jun. 9, 2015, which is a continuation-in-part of application No. 14/120,446, filed on Jun. 10, 2014, now abandoned, which is a continuation-in-part of application No. 14/120,447, filed on Jun. 20, 2014, now abandoned.  
(74) *Attorney, Agent, or Firm* — Workman Nydegger

(51) **LOC (10) Cl.** ..... **12-07**

(52) **U.S. Cl.**  
USPC ..... **D12/16.1**

(58) **Field of Classification Search**  
USPC ..... D12/16.1, 319-345; D21/436, 438, 440, D21/442, 443, 446-451, 453  
CPC .. B64C 39/024; B64C 27/32; B64C 2201/024; B64C 27/12; B64C 39/00; B64C 27/08  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

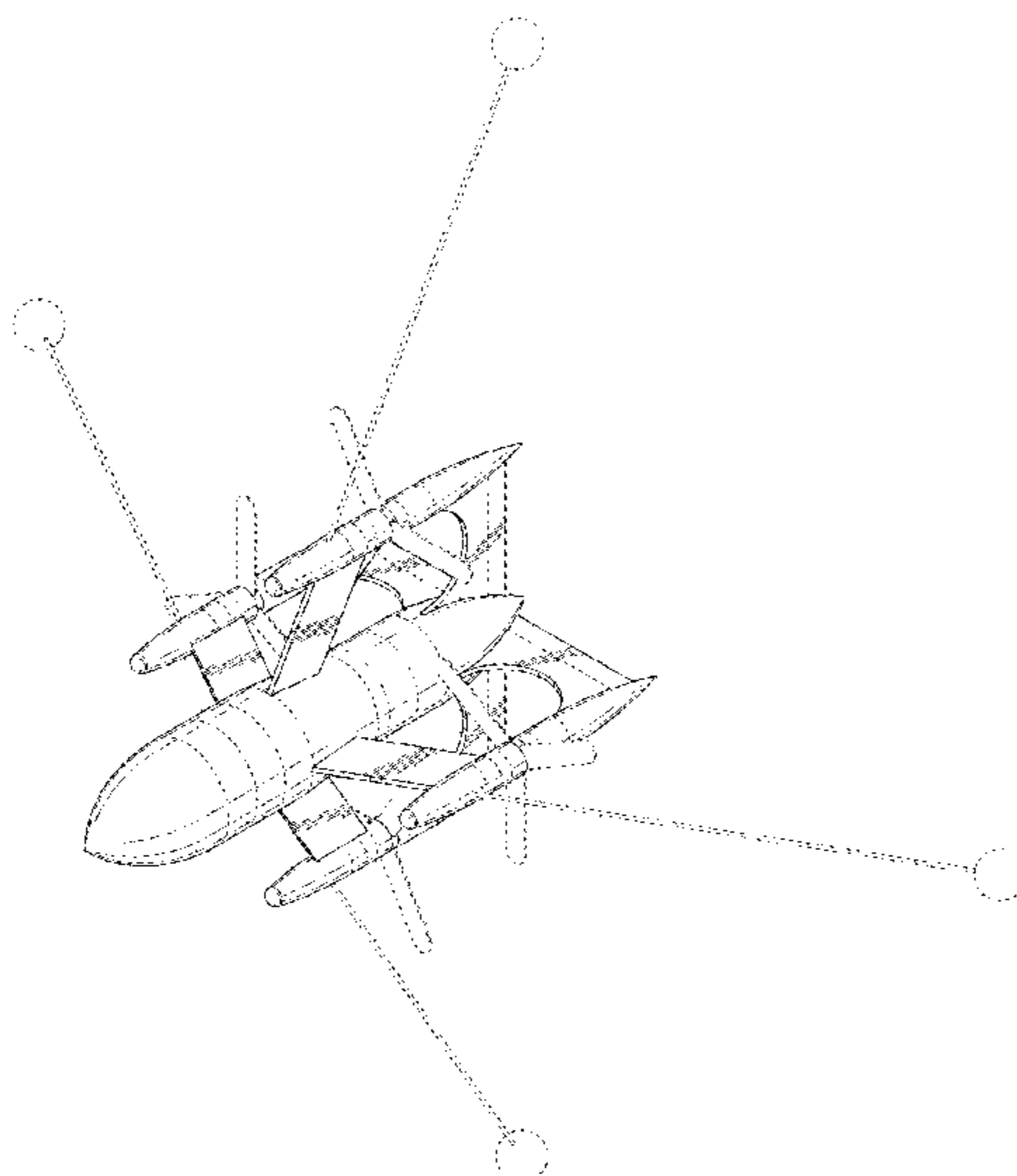
2,678,783 A 5/1954 Myers  
2,845,746 A 8/1958 McKinney

**CLAIM**  
(57) The ornamental design for an aerial vehicle, as shown and described.

**DESCRIPTION**

FIG. 1 is a top perspective view of an aerial vehicle;  
FIG. 2 is a bottom perspective view thereof;  
FIG. 3 is a top plan view thereof;  
FIG. 4 is a bottom plan view thereof;  
FIG. 5 is a right elevational view thereof;  
FIG. 6 is a left elevational view thereof; and  
FIG. 7 is a front elevational view thereof; and,  
FIG. 8 is a rear elevational view thereof.  
The broken lines depicted in the Figures illustrate portions of the aerial vehicles that form no part of the claimed design.

**1 Claim, 6 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

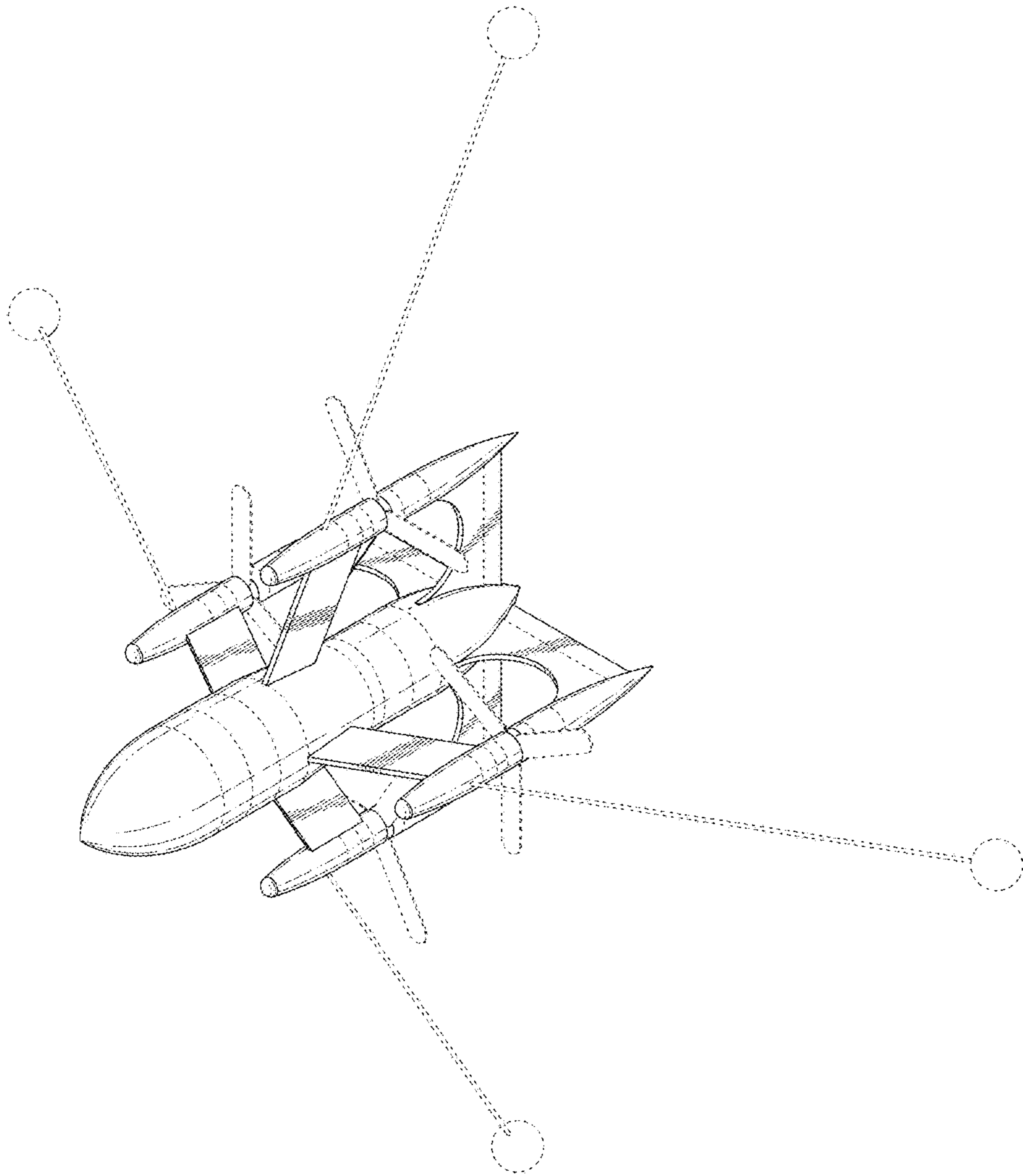
5,082,079 A 1/1992 Lissaman et al.  
 5,289,994 A 3/1994 Del Campo Aguilera  
 D377,326 S \* 1/1997 Grossman ..... D12/16.1  
 6,260,796 B1 7/2001 Klingensmith  
 6,502,787 B1 \* 1/2003 Barrett ..... A63H 27/12  
 244/23 A  
 D500,809 S 1/2005 Mc Kenna et al.  
 7,416,466 B2 \* 8/2008 Isawa ..... A63H 27/12  
 446/37  
 D589,868 S \* 4/2009 Matharan ..... D12/343  
 7,874,513 B1 1/2011 Smith  
 D697,145 S \* 1/2014 Wong ..... D21/436  
 2002/0030142 A1 3/2002 James  
 2006/0038061 A1 2/2006 Blevio, Sr.  
 2010/0152933 A1 6/2010 Smoot et al.  
 2010/0252690 A1 10/2010 Hothi et al.  
 2011/0001020 A1 1/2011 Forgac  
 2011/0042509 A1 2/2011 Bevirt et al.  
 2011/0168835 A1 7/2011 Oliver  
 2011/0226892 A1 \* 9/2011 Crowther ..... B64C 1/30  
 244/17.23  
 2012/0286102 A1 11/2012 Sinha et al.

2014/0117149 A1 5/2014 Zhou et al.  
 2014/0131507 A1 5/2014 Kalantari et al.  
 2014/0131510 A1 5/2014 Wang et al.  
 2014/0319266 A1 \* 10/2014 Moschetta ..... B64C 25/36  
 244/13  
 2015/0191246 A1 \* 7/2015 Kalantari ..... A63H 27/12  
 244/2  
 2016/0009381 A1 \* 1/2016 Benatar ..... B64C 39/024  
 244/103 R

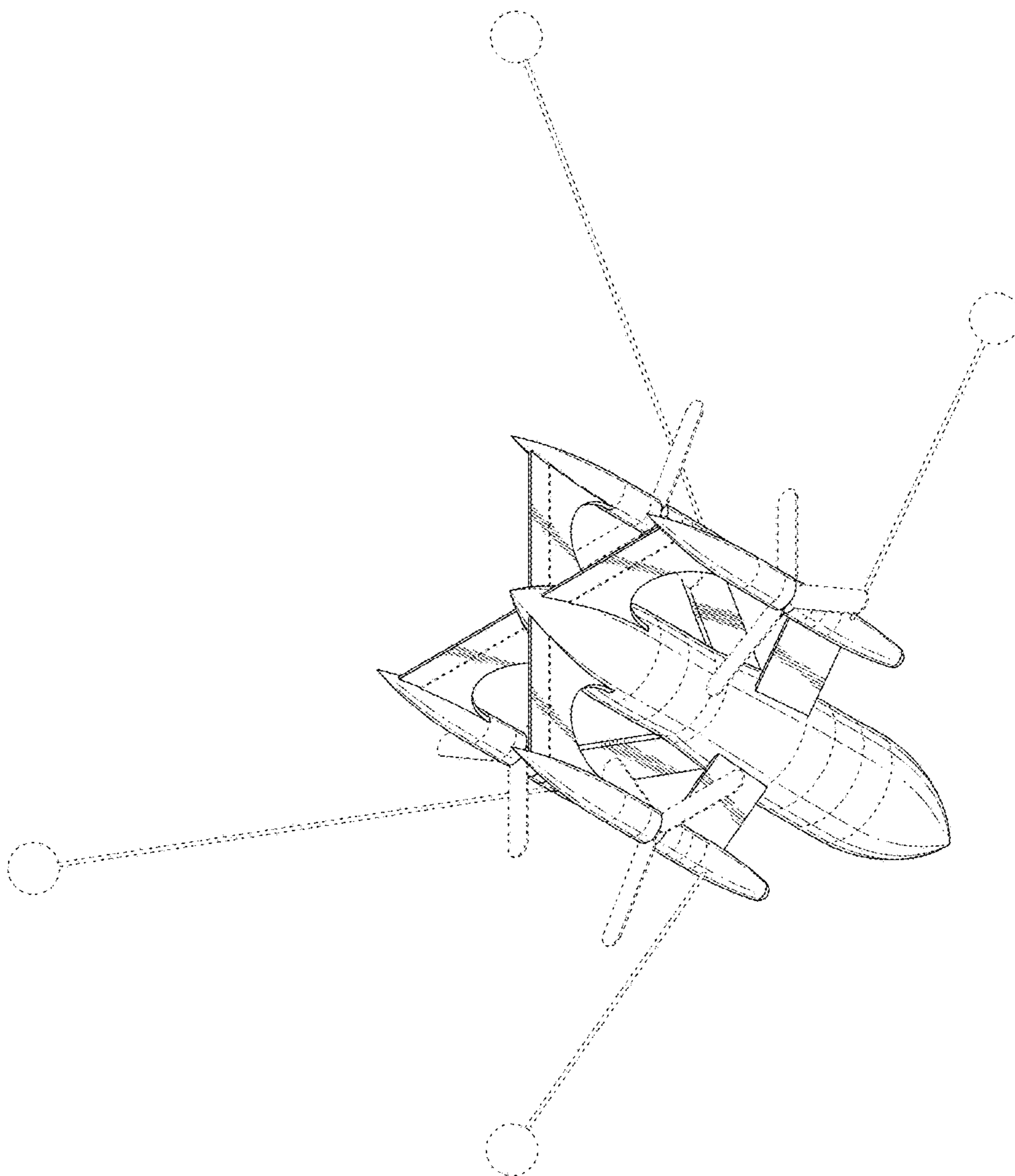
OTHER PUBLICATIONS

U.S. Appl. No. 14/120,447, filed Jun. 20, 2014, Barrett et al.  
 U.S. Appl. No. 14/120,448, filed Jun. 24, 2014, Barrett et al.  
 U.S. Appl. No. 14/120,449, filed Jul. 25, 2014, Barrett et al.  
 U.S. Appl. No. 14/734,864, filed Jun. 9, 2015, Barrett et al.  
 U.S. Appl. No. 14/734,885, filed Jun. 9, 2015, Barrett et al.  
 U.S. Appl. No. 14/810,090, filed Jul. 27, 2015, Barrett et al.  
 U.S. Appl. No. 29/529,831, filed Jun. 10, 2015, Barrett et al.  
 U.S. Appl. No. 29/546,239, filed Nov. 20, 2015, Barrett et al.  
 Leishman, J. G., "Principles of Helicopter Aerodynamics," Cambridge University Press, New York, NY, USA 2000.

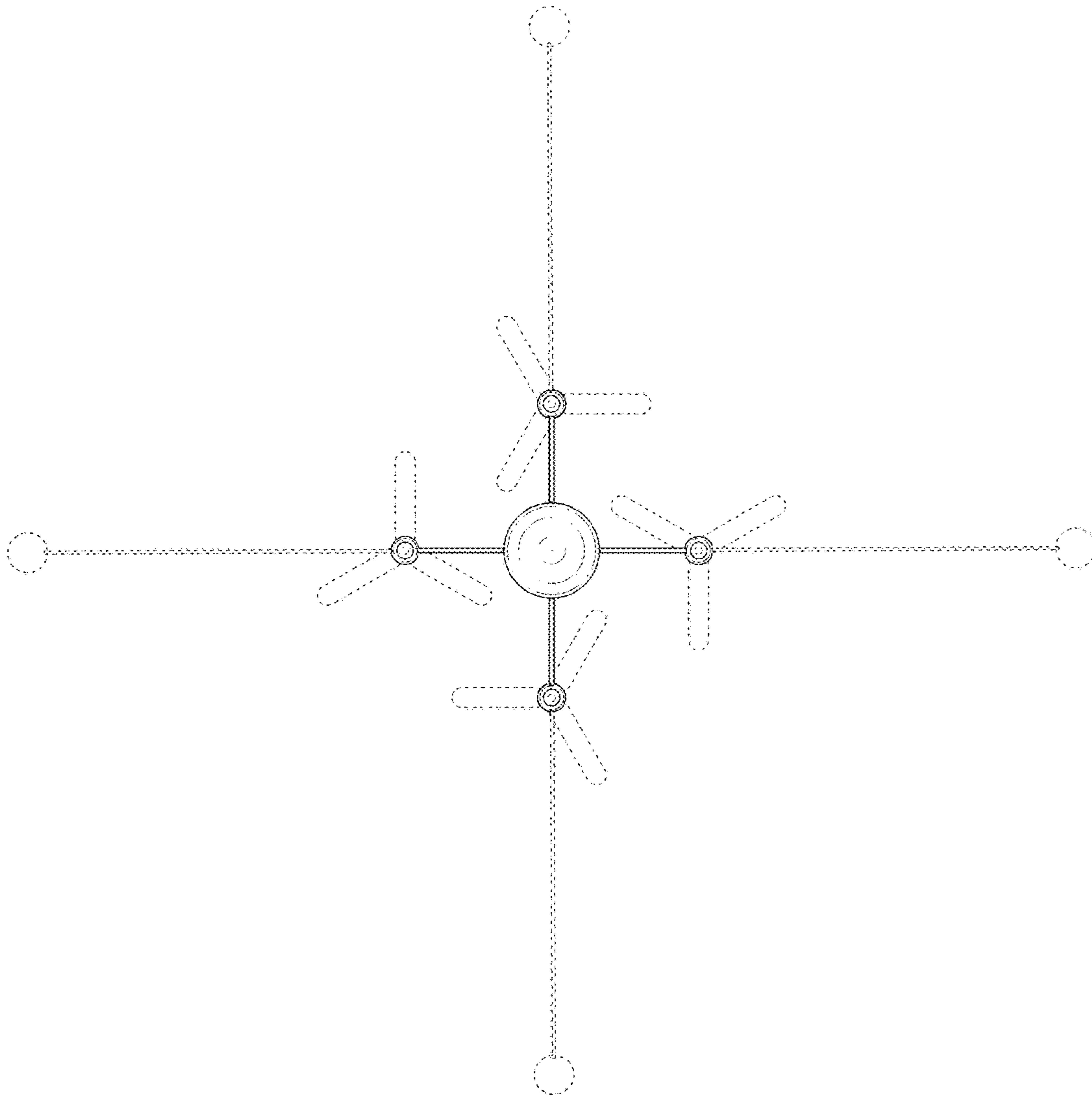
\* cited by examiner



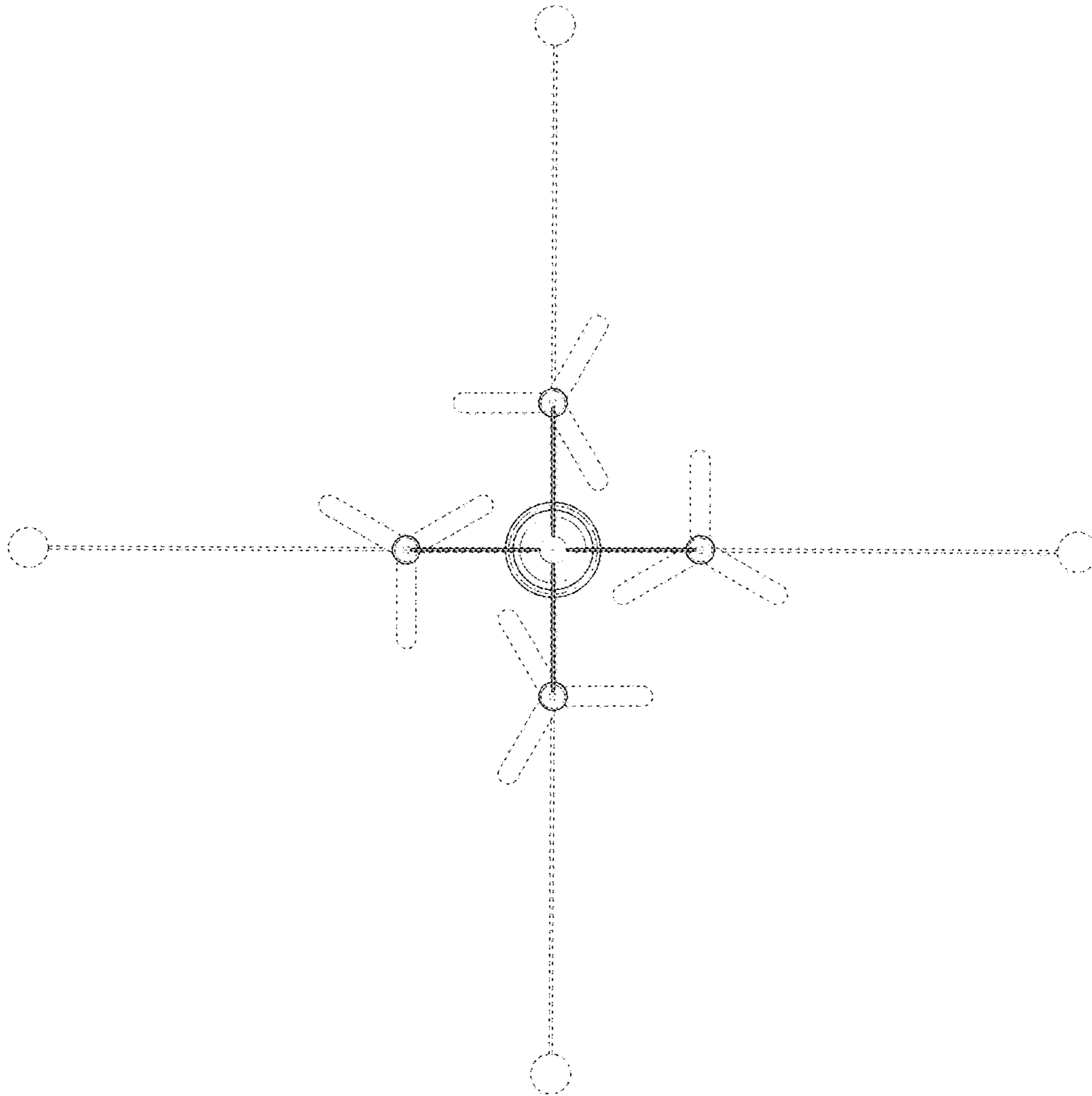
**FIG. 1**



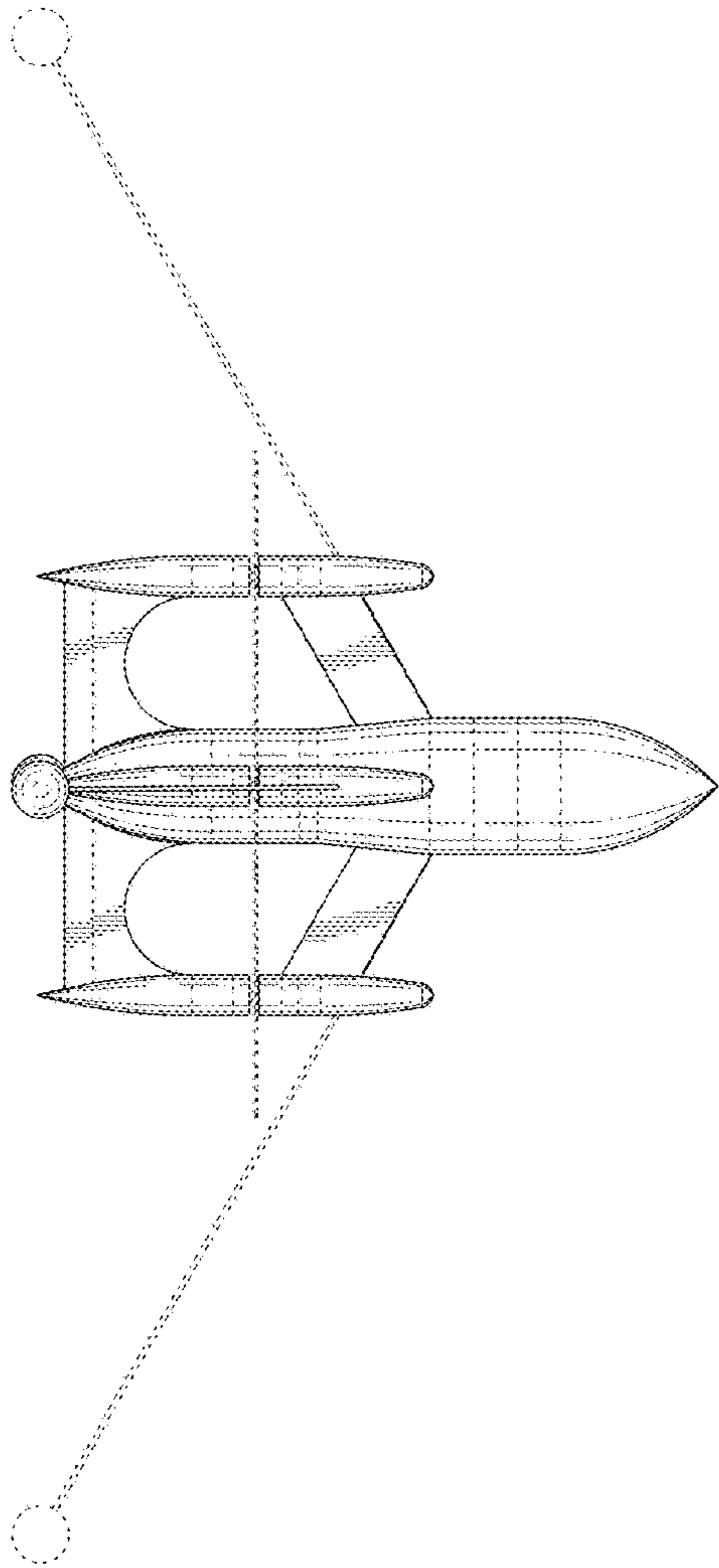
**FIG. 2**



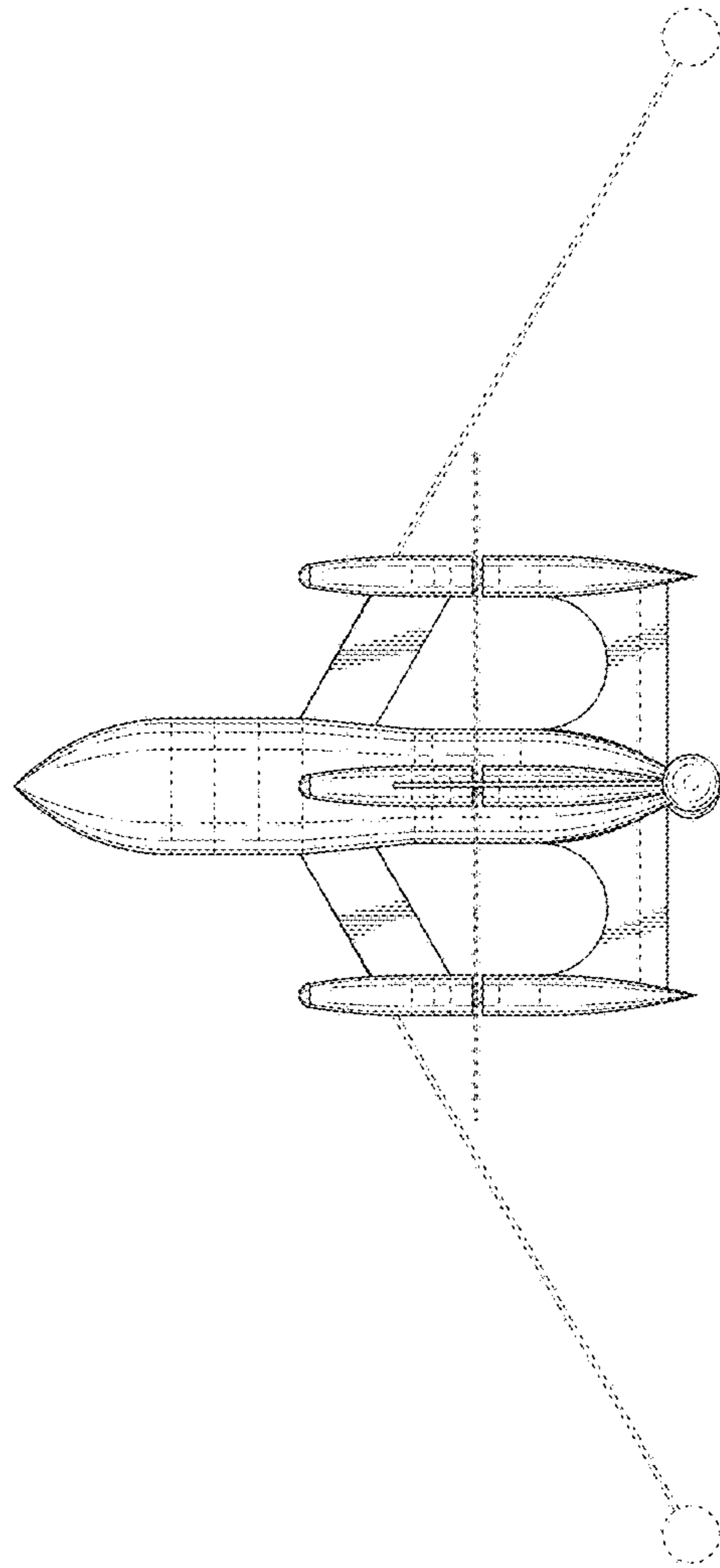
**FIG. 3**



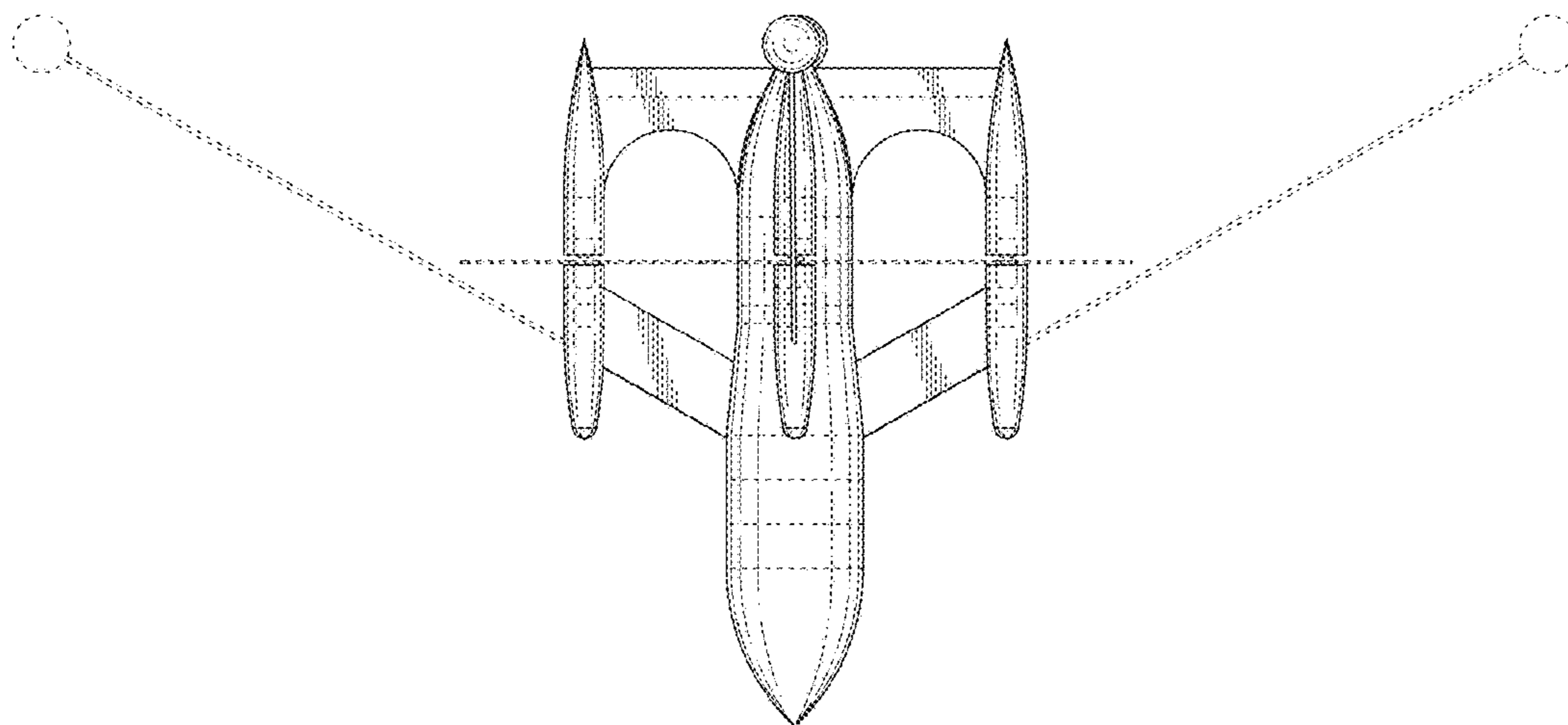
**FIG. 4**



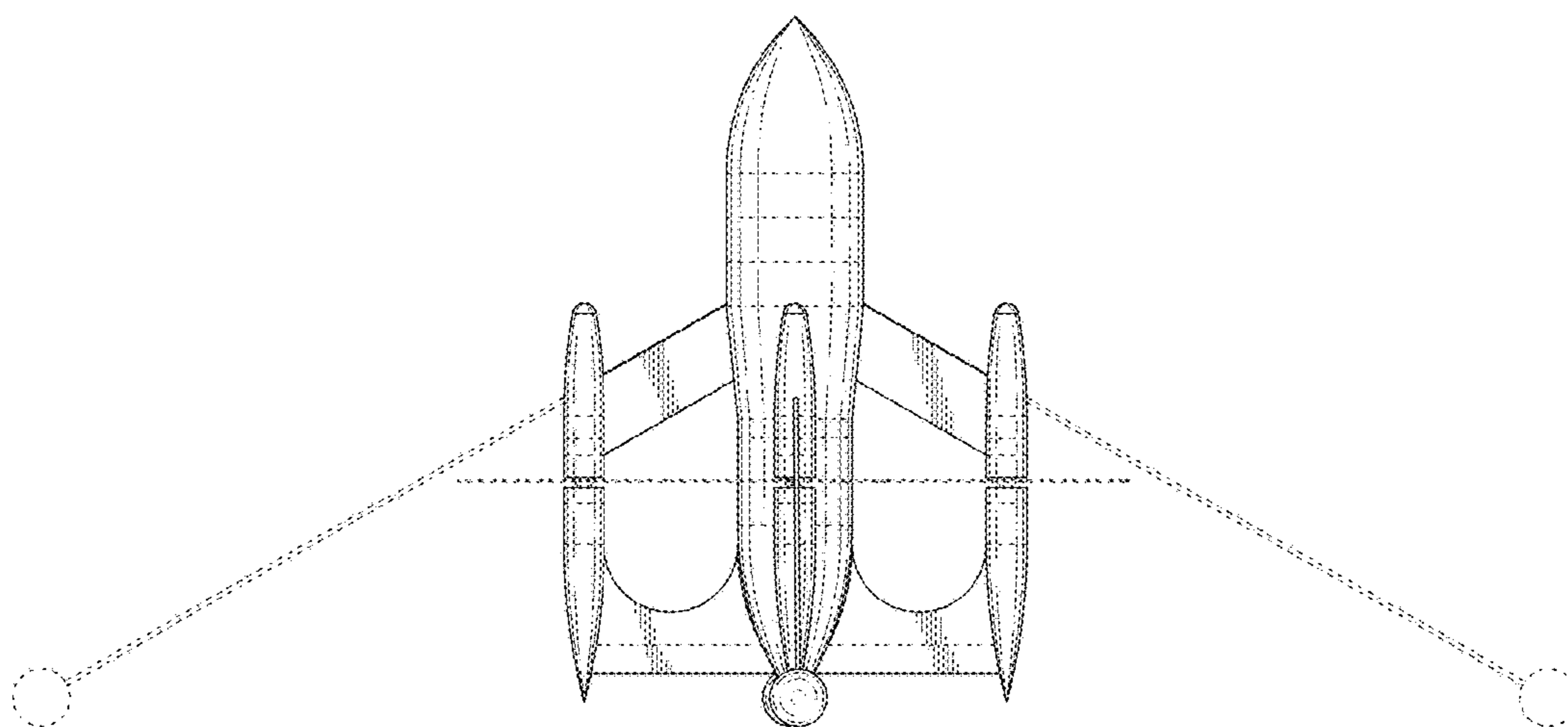
**FIG. 5**



**FIG. 6**



**FIG. 7**



**FIG. 8**



UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : D776,571 S  
APPLICATION NO. : 29/529811  
DATED : January 17, 2017  
INVENTOR(S) : Ronald M. Barrett et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

Column 2, prior to the claim, after (74) include the following paragraph:

STATEMENT OF GOVERNMENT INTEREST

This invention was made with government support under DTOS59-06-G-00047 awarded by the Department of Transportation. The government has certain rights in the invention.

Signed and Sealed this  
Eighteenth Day of September, 2018



Andrei Iancu  
*Director of the United States Patent and Trademark Office*