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(12) **United States Design Patent** (10) **Patent No.:** **US D974,276 S**  
**Kooiman et al.** (45) **Date of Patent:** **\*\* Jan. 3, 2023**

- (54) **AIRCRAFT SPINNER**
- (71) Applicant: **Bell Helicopter Textron Inc.**, Fort Worth, TX (US)
- (72) Inventors: **James E. Kooiman**, Fort Worth, TX (US); **Lynn F. Eschete**, Arlington, TX (US); **Kyle T. Cravener**, Watauga, TX (US)
- (73) Assignee: **Textron Innovations, Inc.**, Providence, RI (US)
- (\*\*) Term: **15 Years**
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- (51) **LOC (14) Cl.** ..... **12-07**
- (52) **U.S. Cl.**  
USPC ..... **D12/345**
- (58) **Field of Classification Search**  
USPC ..... D12/1-4, 16.1, 319-345, 400, 159, 160, D12/190, 196, 203; D21/436-453  
CPC ..... B64C 27/20; B64C 2201/024; B64C 2201/104; B64C 2201/021; B64C 2201/141  
See application file for complete search history.

D388,392 S 12/1997 McGinnis  
D394,422 S 5/1998 Magee  
D399,816 S 10/1998 Peacock  
(Continued)

OTHER PUBLICATIONS

Bill Carey, "Bell Unveils 'Vigilant' Unmanned Tiltrotor for U.S. Marine Corps;" Sep. 22, 2016.  
(Continued)

*Primary Examiner* — Marissa J Cash  
(74) *Attorney, Agent, or Firm* — Timmer Law Group, PLLC

(57) **CLAIM**

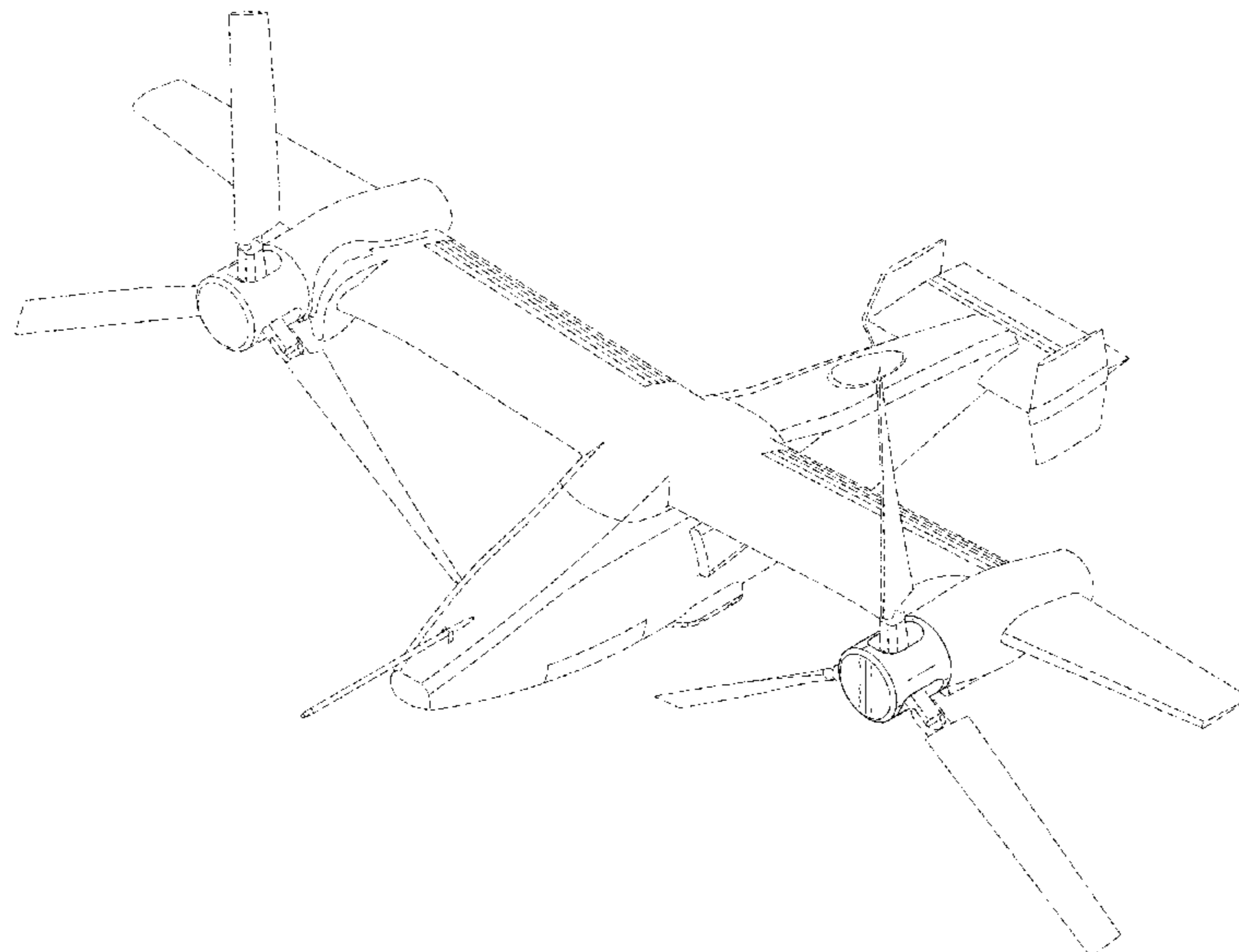
The ornamental design for an aircraft spinner, substantially as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of an aircraft spinner shown with the environmental rotor nacelles facing forward; FIG. 2 is a front elevational view of the aircraft spinner in FIG. 1; FIG. 3 is a rear elevational view thereof; FIG. 4 is a right side view thereof; FIG. 5 is a left side view thereof; FIG. 6 is a top view thereof; FIG. 7 is a bottom view thereof; FIG. 8 is a front perspective view of the aircraft spinner in FIG. 1 shown with the environmental rotor nacelles facing upward; FIG. 9 is a front elevational view of the aircraft spinner in FIG. 8; FIG. 10 is a rear elevational view thereof; FIG. 11 is a right side view thereof; FIG. 12 is a left side view thereof; FIG. 13 is a top view thereof; and, FIG. 14 is a bottom view thereof.  
The broken lines illustrate environmental subject matter only and form no part of the claimed design.

**1 Claim, 14 Drawing Sheets**

- (56) **References Cited**  
U.S. PATENT DOCUMENTS
- |             |         |            |
|-------------|---------|------------|
| D128,173 S  | 7/1941  | Oliver     |
| D140,130 S  | 1/1945  | Walter     |
| D195,794 S  | 7/1963  | Dancik     |
| D203,523 S  | 1/1966  | Girard     |
| D311,719 S  | 10/1990 | Haga       |
| D317,287 S  | 6/1991  | Haga       |
| D317,897 S  | 7/1991  | Antonov    |
| 5,031,858 A | 7/1991  | Schellhase |
| 5,054,716 A | 10/1991 | Wilson     |



(56)

References Cited

U.S. PATENT DOCUMENTS

D428,072 S \* 7/2000 Wang ..... D21/445  
 D443,902 S \* 6/2001 Wang ..... D21/445  
 D456,337 S 4/2002 Sankrithi  
 D459,406 S \* 6/2002 Wang ..... D21/445  
 D459,407 S \* 6/2002 Wang ..... D21/445  
 D460,126 S \* 7/2002 Zweiback ..... D21/398  
 D462,728 S \* 9/2002 Wang ..... D21/445  
 D597,148 S 7/2009 Lin  
 7,604,202 B2 10/2009 Froman  
 D624,001 S 9/2010 Saint-Jalmes  
 D628,528 S 12/2010 Cabezas Carrasco  
 D635,083 S 3/2011 DeLaurier  
 D691,547 S 10/2013 Hall  
 8,626,363 B2 1/2014 Kisor  
 D706,678 S 6/2014 Earon  
 D708,563 S 7/2014 Colten  
 D713,774 S 9/2014 Tritschler  
 D725,548 S 3/2015 Herald  
 D725,576 S 3/2015 Vickers  
 D725,577 S 3/2015 Vickers  
 D731,394 S \* 6/2015 Ivans ..... D12/345  
 9,051,046 B2 6/2015 Ivans  
 D739,335 S 9/2015 Robertson  
 D739,807 S 9/2015 Strand  
 D743,868 S 11/2015 Cummings  
 D755,702 S 5/2016 Hall  
 9,376,206 B2 6/2016 Ross  
 D763,733 S 8/2016 Gattelli  
 9,650,128 B2 5/2017 Fenny  
 9,657,816 B2 \* 5/2017 Burnett ..... F16C 27/063  
 9,663,225 B1 5/2017 Kooiman  
 D797,641 S 9/2017 Cummings  
 D799,402 S 10/2017 Cummings  
 D807,273 S 1/2018 Koppenwallner  
 D808,328 S \* 1/2018 Ivans ..... D12/328  
 D809,970 S 2/2018 Zhou  
 D810,621 S \* 2/2018 Sadek ..... D12/16.1  
 D813,143 S 3/2018 Belik  
 D824,320 S 7/2018 Ivans  
 D824,321 S 7/2018 Ivans  
 D909,949 S \* 2/2021 Williams ..... D12/326  
 D913,905 S \* 3/2021 Zhang ..... D12/327  
 D913,906 S \* 3/2021 Zhang ..... D12/327  
 11,077,937 B1 \* 8/2021 Bruell ..... B64C 3/385  
 2010/0209242 A1 \* 8/2010 Popelka ..... F16F 15/14  
 416/1  
 2012/0043413 A1 2/2012 Smith

2012/0199699 A1 8/2012 Isaac  
 2012/0292456 A1 11/2012 Hollimon  
 2013/0153708 A1 6/2013 Brunken  
 2014/0084080 A1 3/2014 Robertson  
 2014/0263855 A1 9/2014 Ross  
 2014/0322010 A1 10/2014 Rauber  
 2015/0048213 A1 2/2015 Ross  
 2016/0023752 A1 1/2016 Foskey  
 2016/0122039 A1 5/2016 Ehinger  
 2016/0152329 A1 6/2016 Tzeng  
 2016/0207611 A1 7/2016 Fenny  
 2016/0229531 A1 8/2016 Robertson  
 2016/0333797 A1 11/2016 Laramee  
 2016/0340038 A1 11/2016 Chavez  
 2016/0347479 A1 12/2016 O'Neil  
 2017/0036753 A1 2/2017 Shue  
 2017/0121029 A1 5/2017 Blyth  
 2017/0137122 A1 5/2017 Kooiman  
 2017/0190443 A1 7/2017 Fisher  
 2017/0291719 A1 10/2017 Lavine  
 2017/0355460 A1 12/2017 Shannon  
 2018/0079482 A1 3/2018 Ivans  
 2018/0079484 A1 3/2018 Ross  
 2018/0079503 A1 \* 3/2018 Ivans ..... B64D 27/02

OTHER PUBLICATIONS

Richard Whittle, "Month After Use, Bell Unveils V-247 Vigilant Tiltrotor Drone;" Sep. 22, 2016.  
 Notice of Allowance, dated Jun. 21, 2017, by the USPTO, re Design U.S. Appl. No. 29/577,578.  
 Notice of Allowance, dated Sep. 20, 2017, by the USPTO, re Design U.S. Appl. No. 29/577,578.  
 Notice of Allowance, dated Jun. 8, 2018, by the USPTO, re Design U.S. Appl. No. 29/628,801.  
 Notice of Allowance, dated Jun. 8, 2018, by the USPTO, re Design U.S. Appl. No. 29/628,827.  
 Office Action, dated Sep. 7, 2018, by the USPTO, re Design U.S. Appl. No. 29/628,792.  
 Final Rejection, dated Feb. 25, 2019, by the USPTO, re Design U.S. Appl. No. 29/628,792.  
 DefenseNews; Video: Check out Bell's V-247 Vigilant at Modern Day Marine; Sep. 15, 2018; <https://www.defensenews.com/video/2018/09/25/check-out-bells-v-247-vigilant-at-modern-day-marine/>.

\* cited by examiner

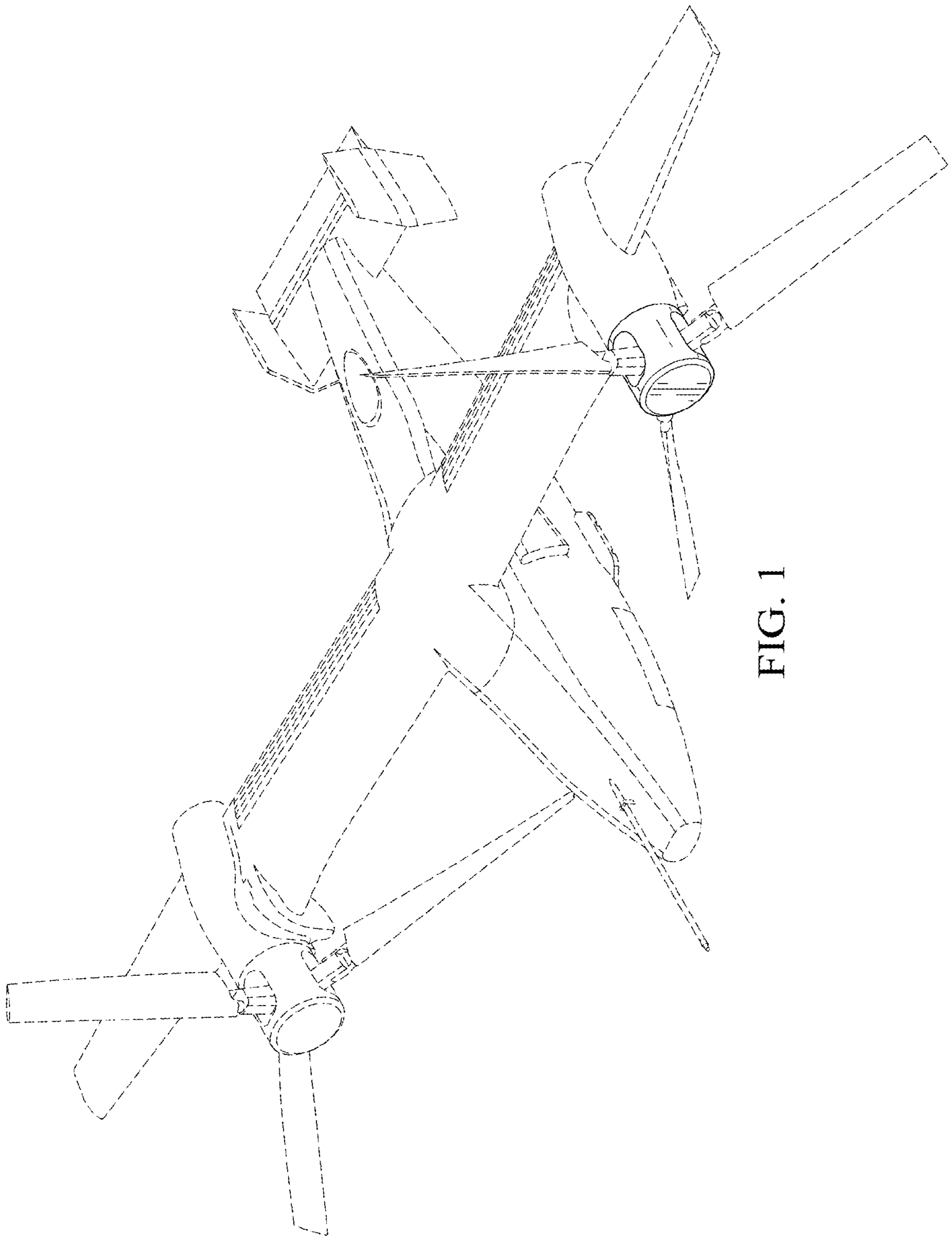


FIG. 1

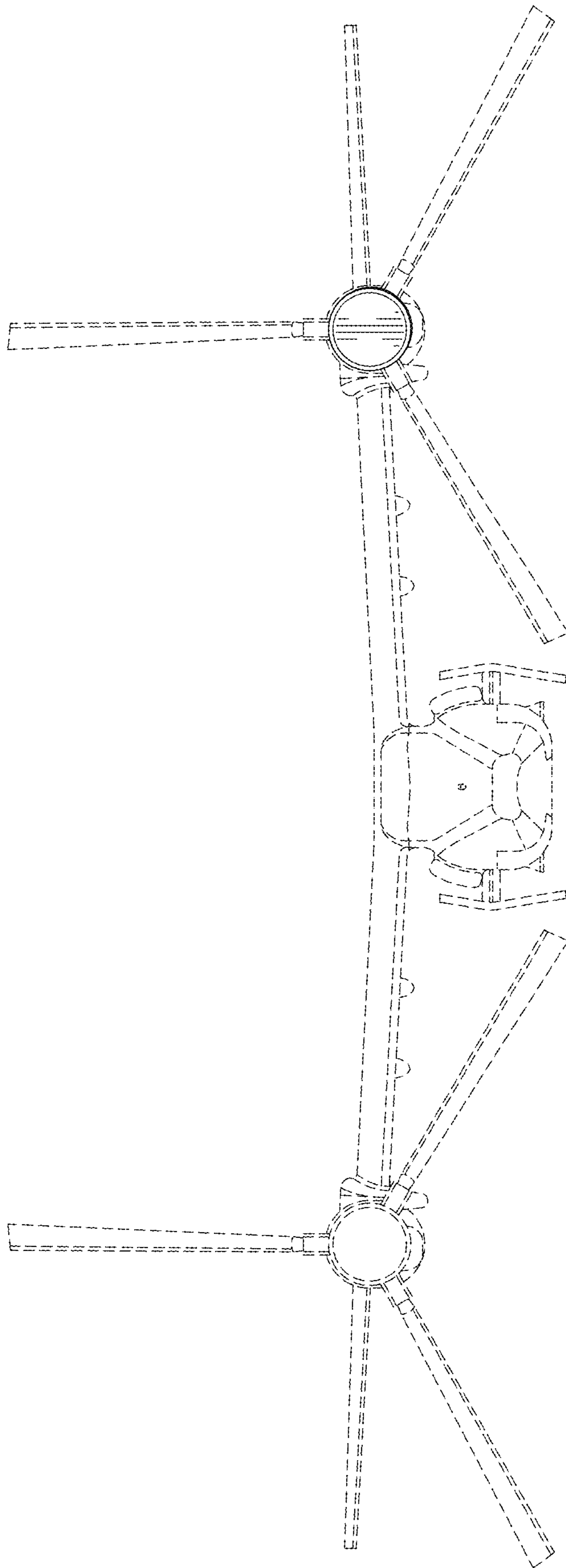


FIG. 2

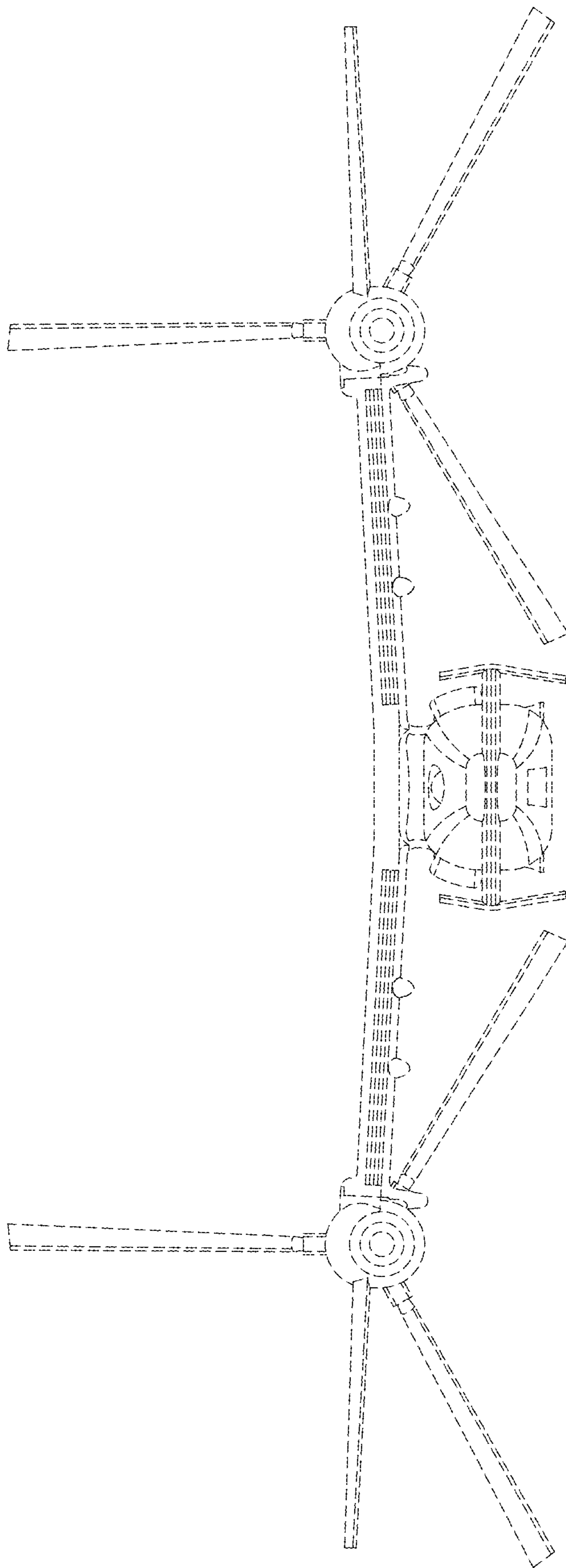


FIG. 3

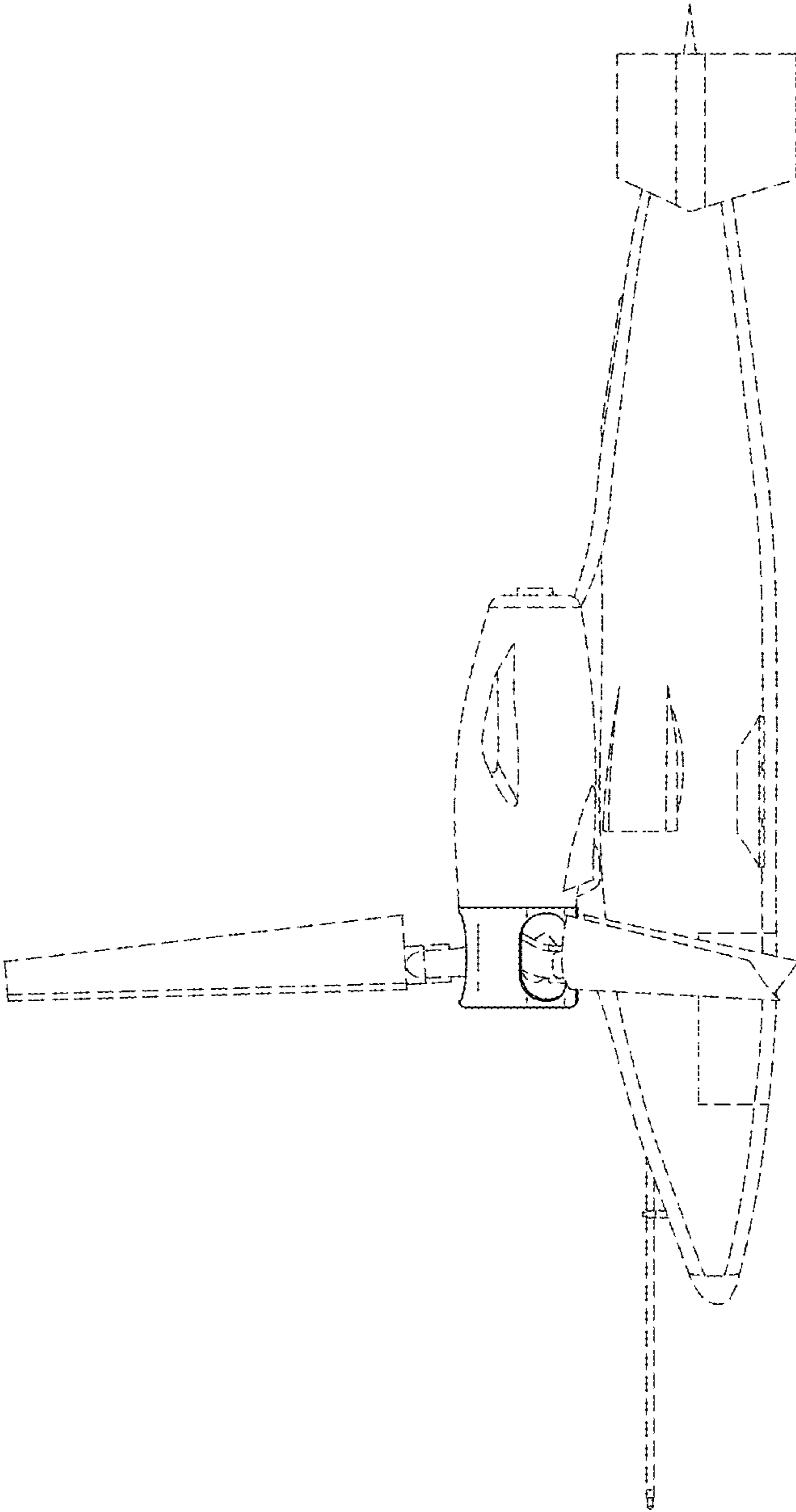


FIG. 4

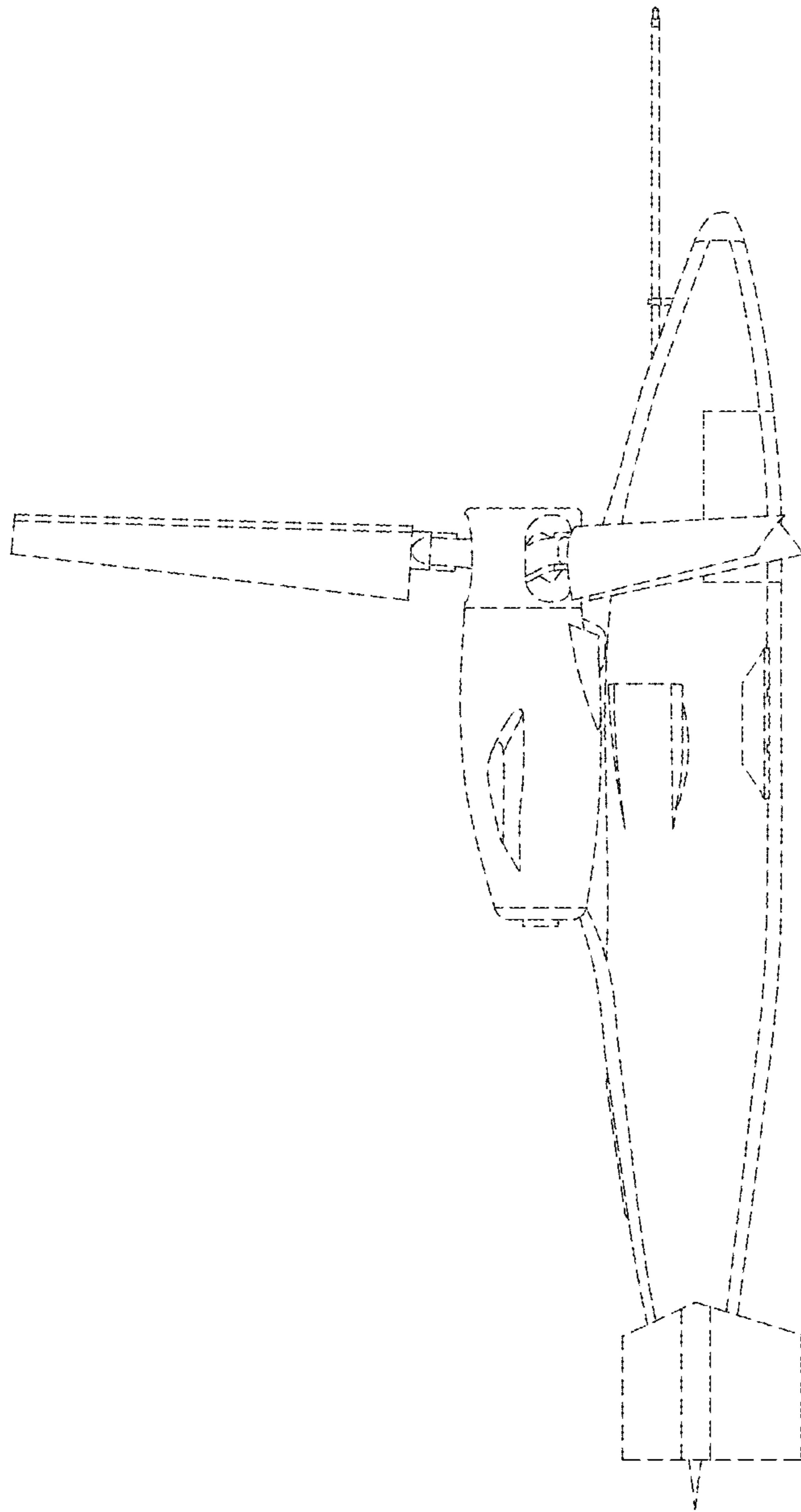


FIG. 5

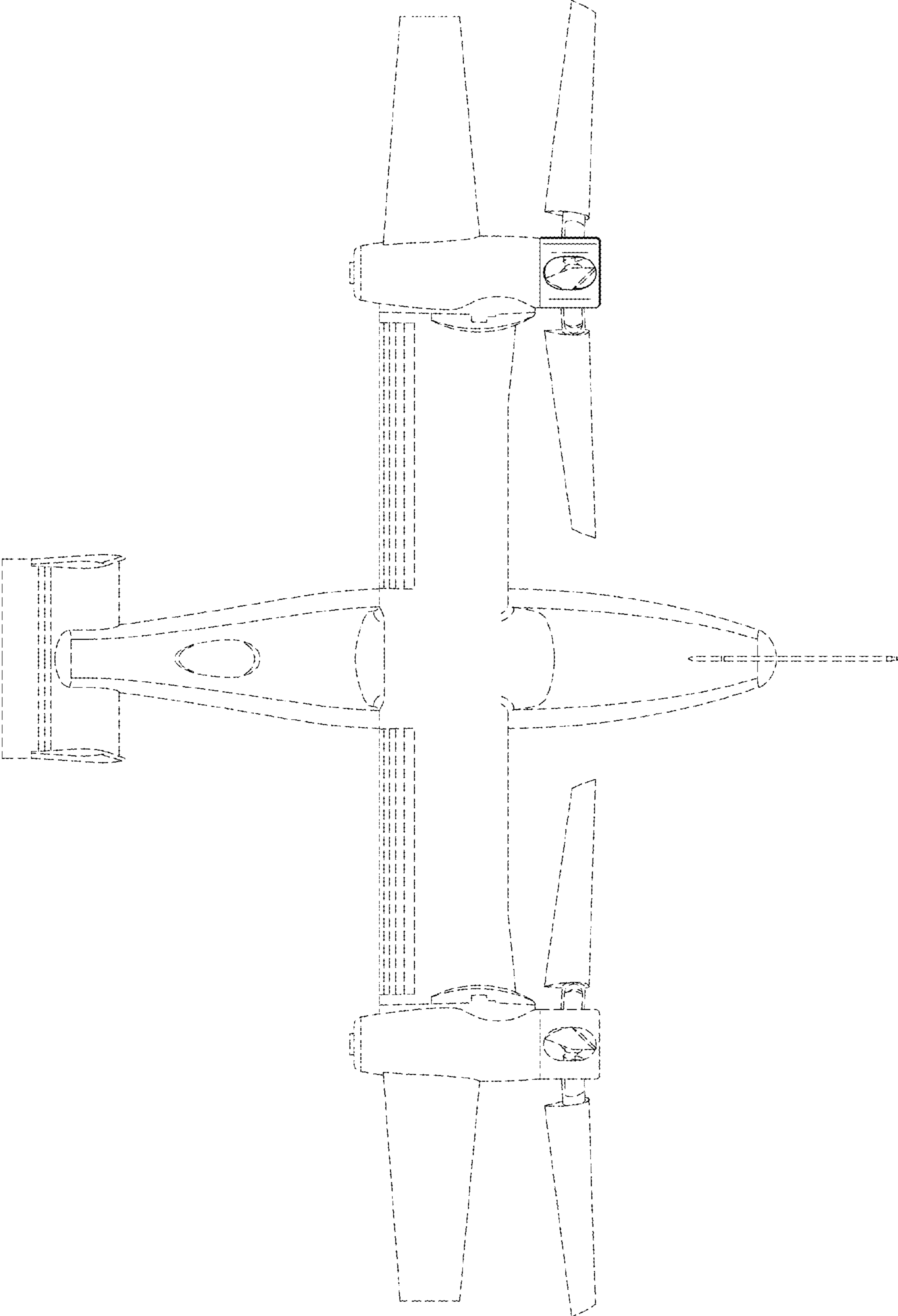


FIG. 6



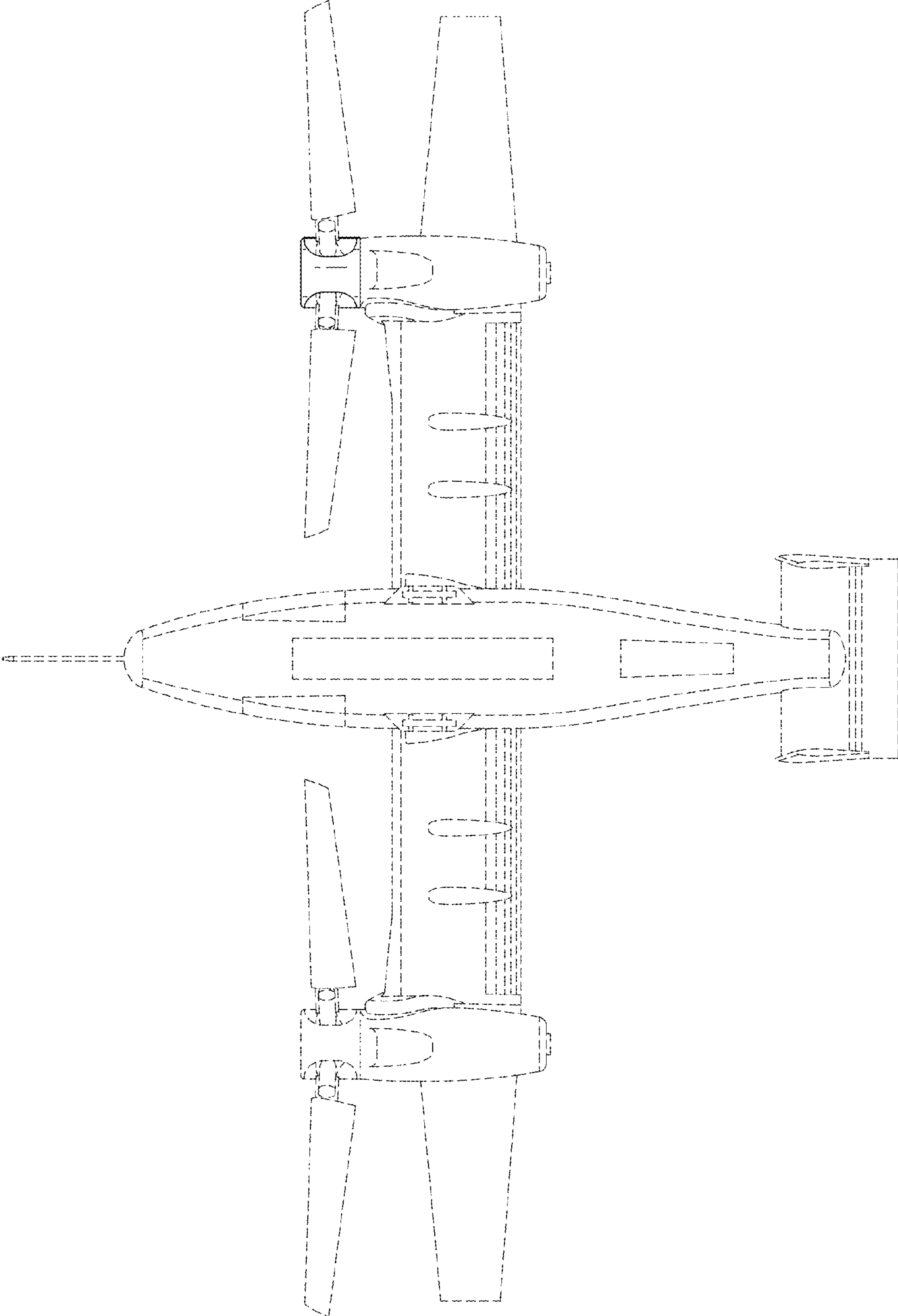


FIG. 7

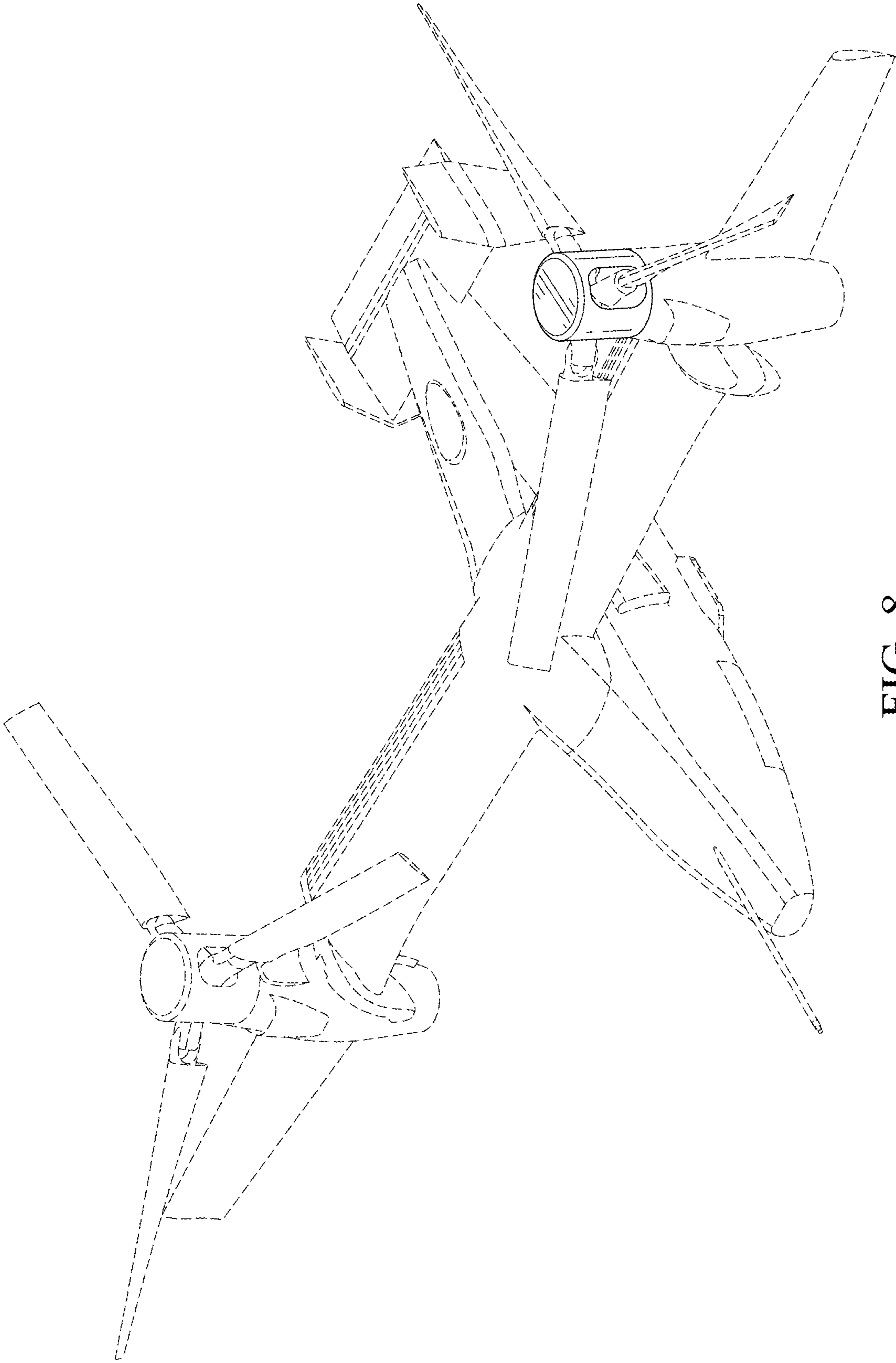


FIG. 8

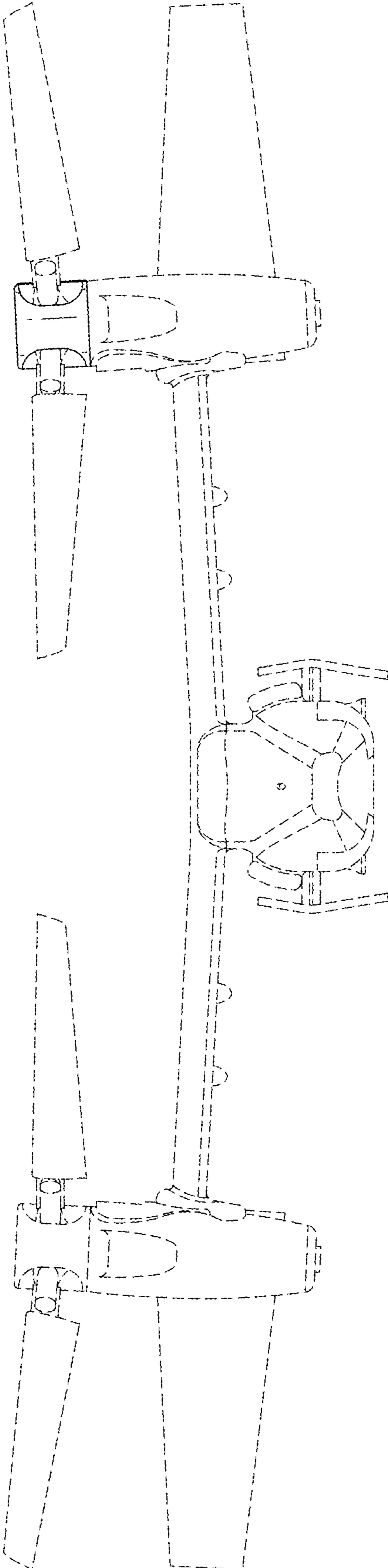


FIG. 9

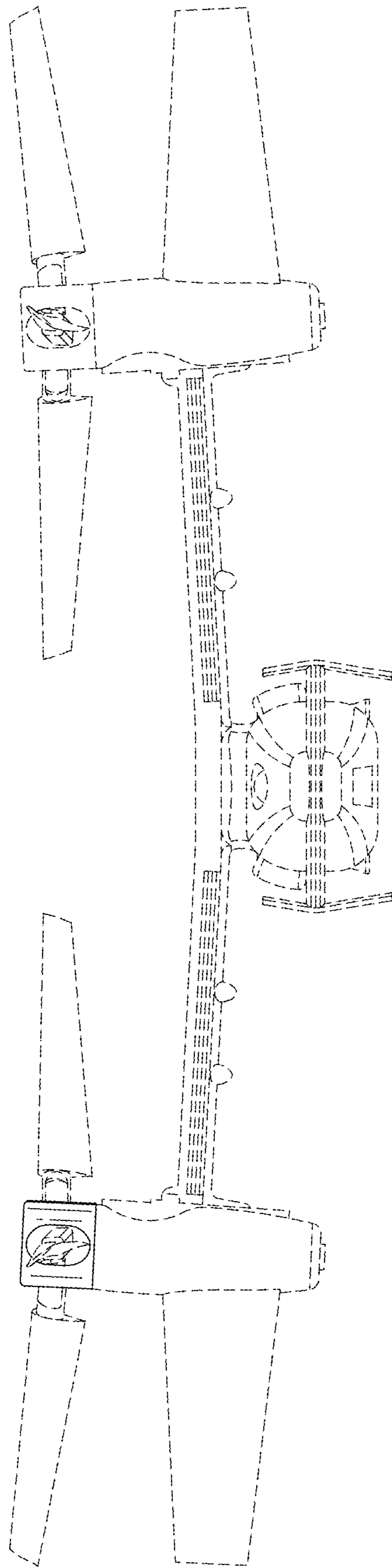


FIG. 10

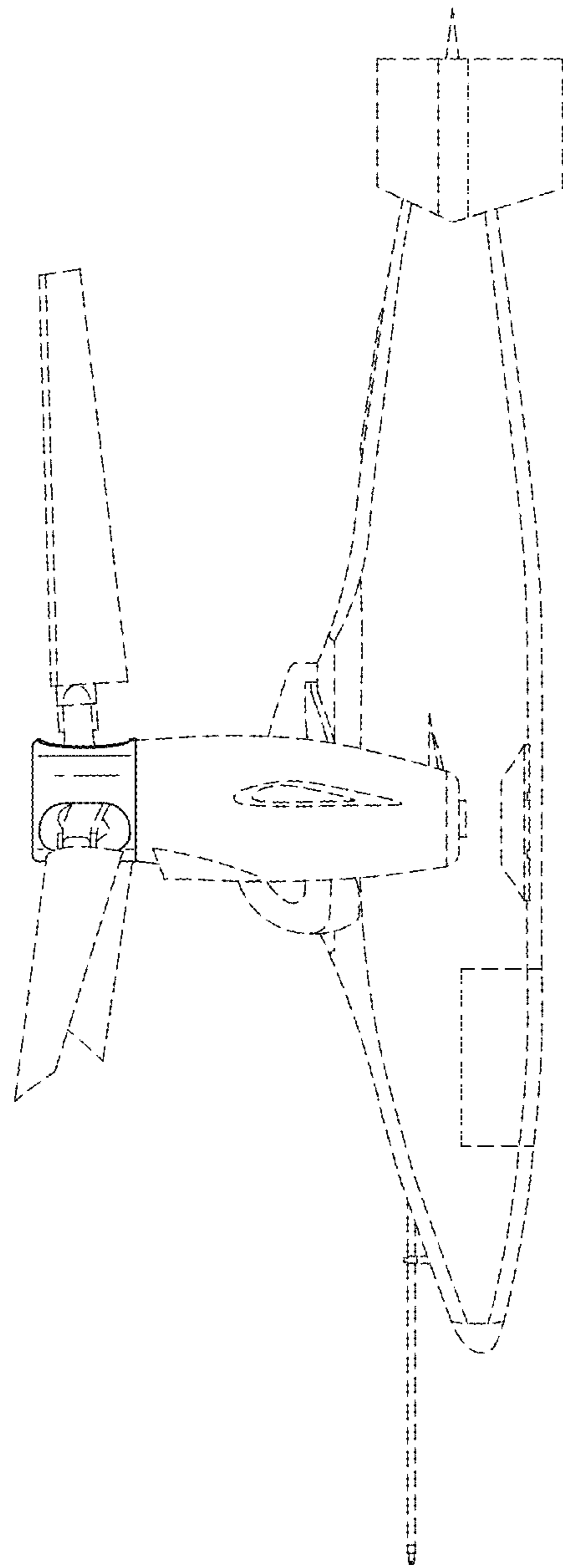


FIG. 11

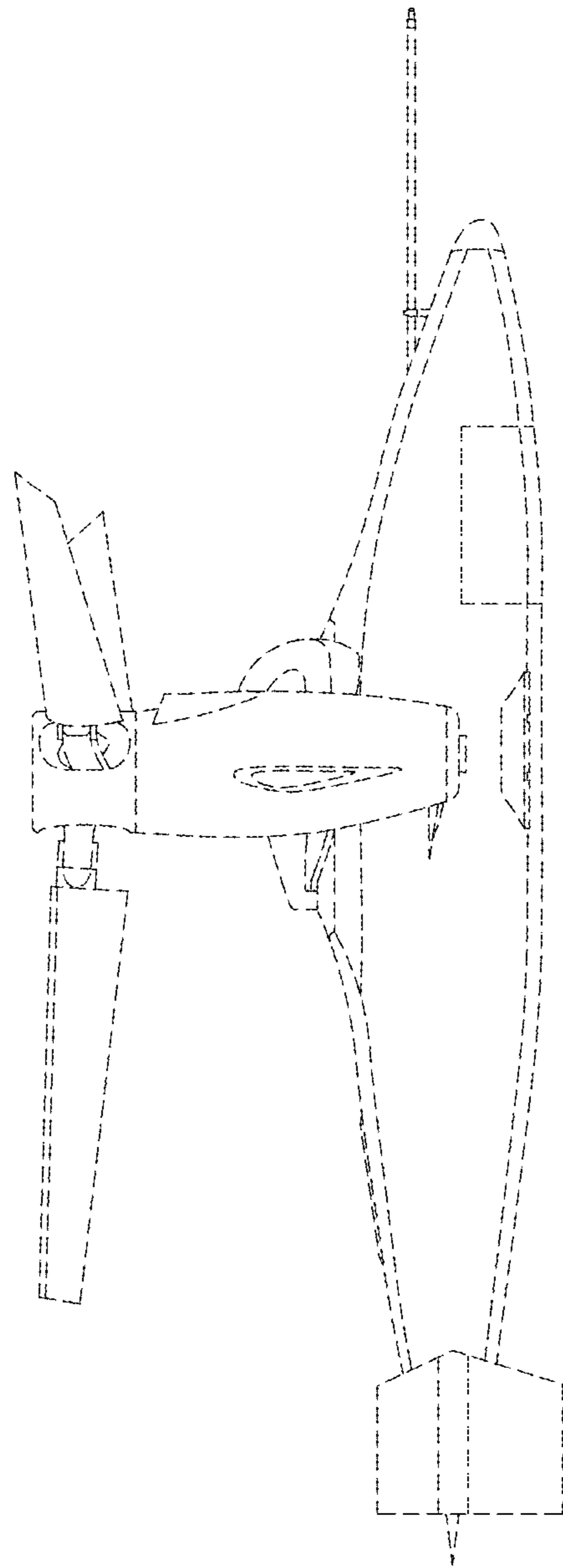


FIG. 12

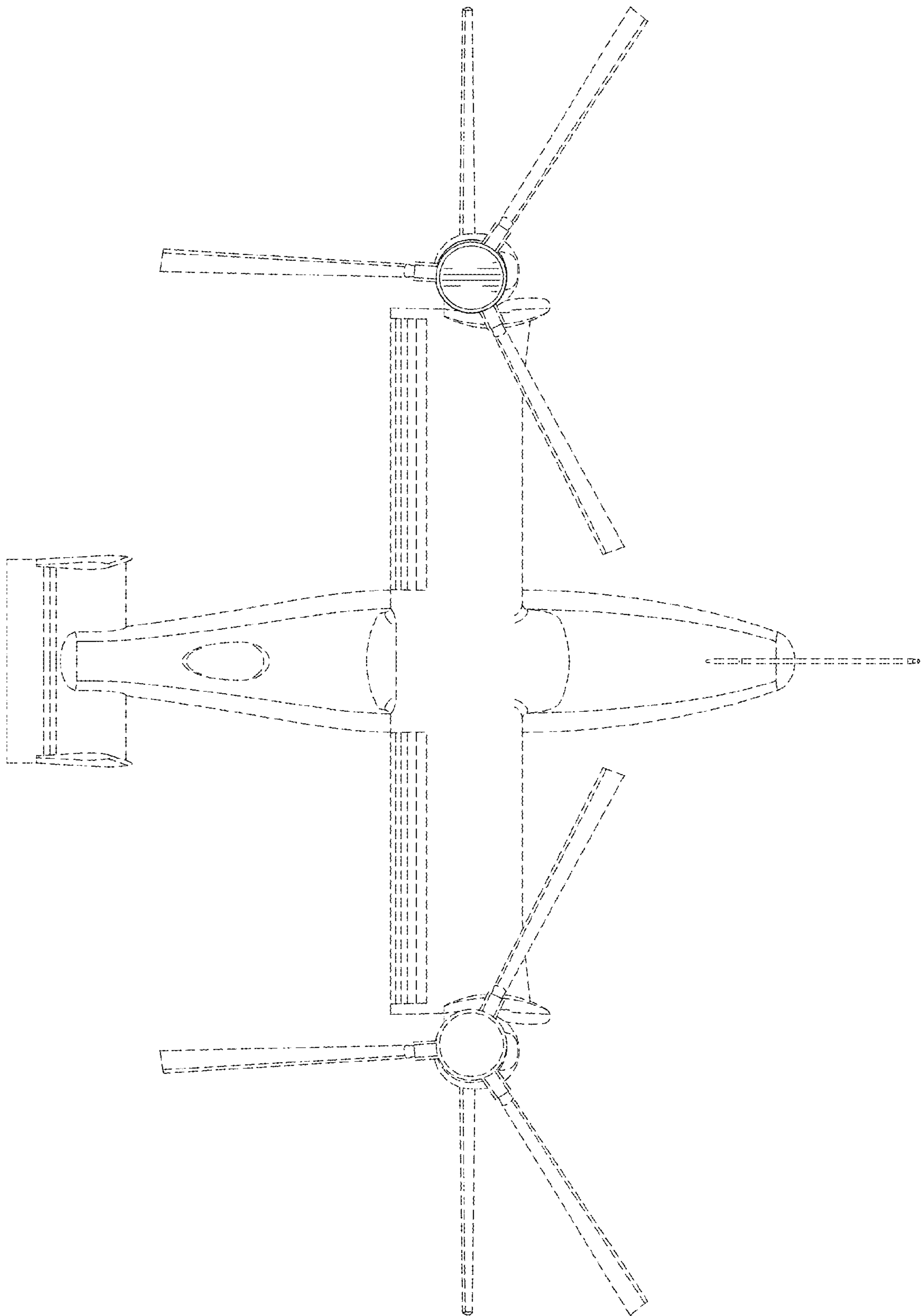


FIG. 13

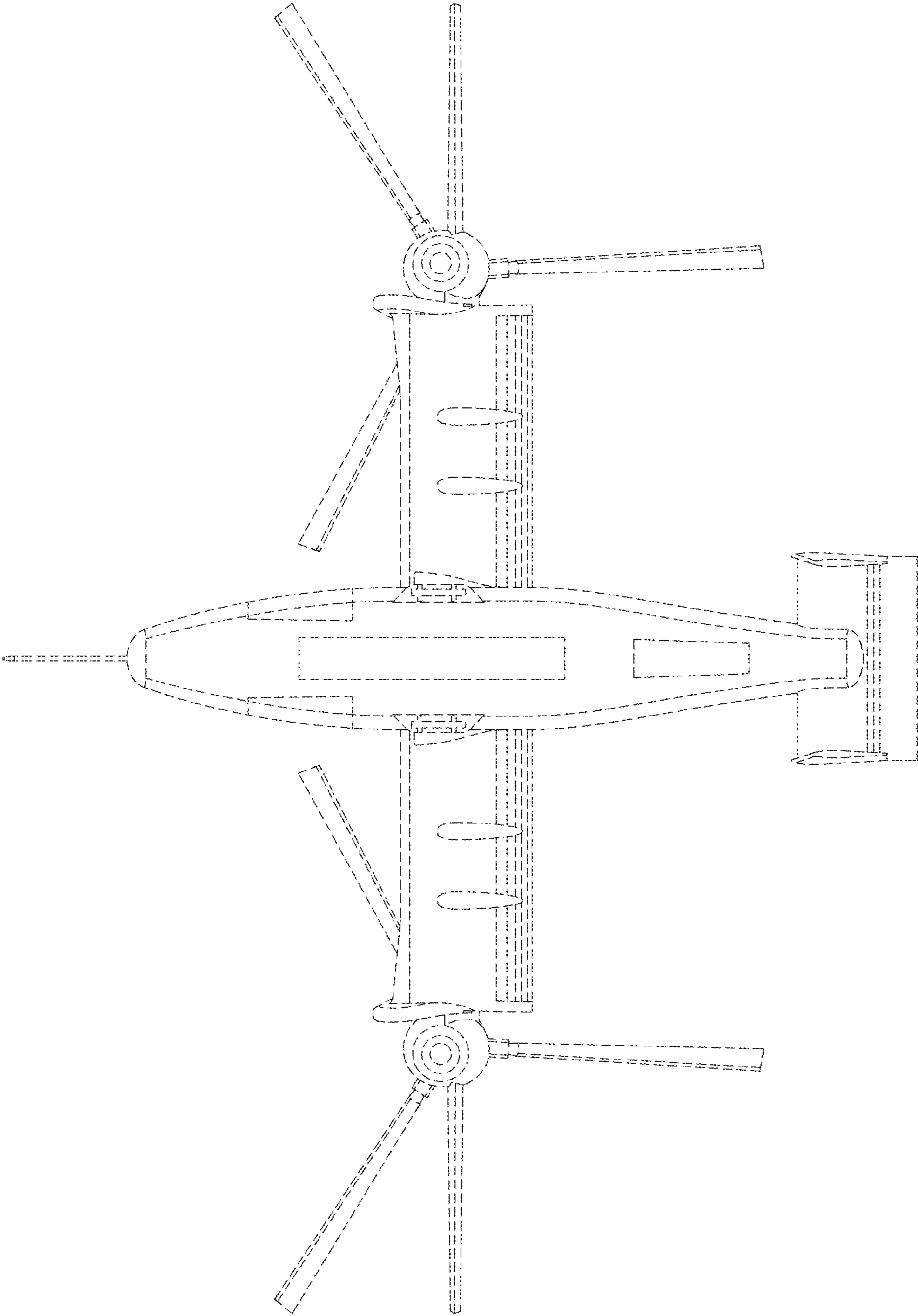


FIG. 14