



US00D458892S

(12) **United States Design Patent**  
**DeTore et al.**

(10) **Patent No.:** **US D458,892 S**

(45) **Date of Patent:** **\*\* Jun. 18, 2002**

(54) **QUAD TILTROTOR**

(75) Inventors: **John A. DeTore**, Arlington; **Richard F. Spivey**; **Malcolm P. Foster**, both of Fort Worth; **Tom L. Wood**, Arlington, all of TX (US)

(73) Assignee: **Bell Helicopter TREXTRON Inc.**, Hurst, TX (US)

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

(21) Appl. No.: **29/133,526**

(22) Filed: **Dec. 1, 2000**

(51) **LOC (7) Cl.** ..... **12-07**

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

(58) **Field of Search** ..... D12/319; 416/34, 416/35, 61; 244/6, 7 C, 7 R, 12.4, 17.23, 56, 66, 69

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 5,352,090 A \* 10/1994 Churchill et al. .... D12/319
- 5,381,985 A \* 1/1995 Wechsler et al. .... D12/319

\* cited by examiner

*Primary Examiner*—Marcus A. Jackson  
(74) *Attorney, Agent, or Firm*—Gardere Wynne Sewell, LLP; Sanford E. Warren, Jr.

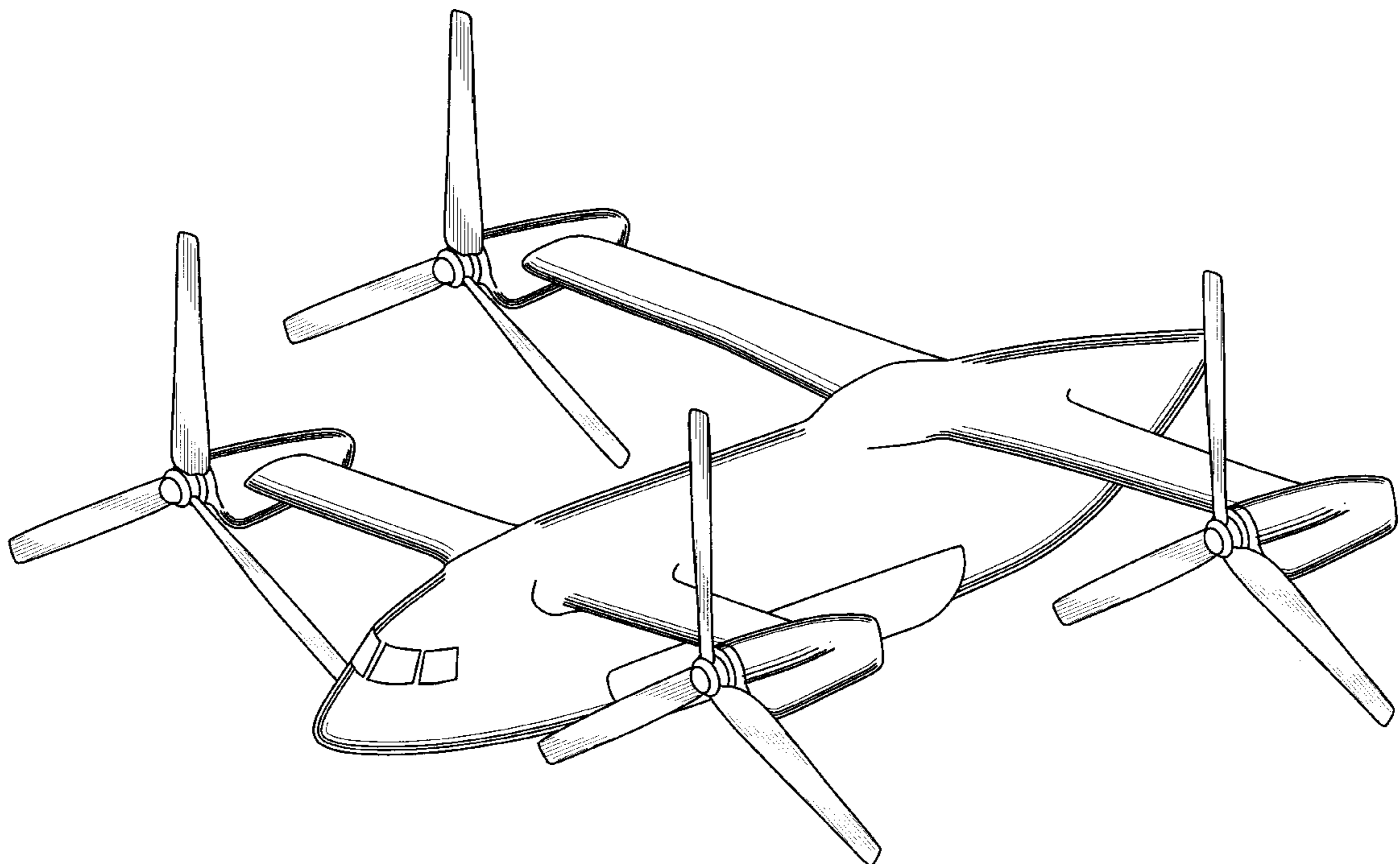
(57) **CLAIM**

The ornamental design for the quad tiltrotor, as shown and described.

**DESCRIPTION**

FIG. 1 is a top view of a quad tiltrotor of our new design having rotors in the takeoff/landing/hovering position; FIG. 2 is a bottom view thereof; FIG. 3 is a port side elevation view thereof; FIG. 4 is a starboard side elevation view thereof; FIG. 5 is a front elevation view thereof; FIG. 6 is a rear elevation view thereof; FIG. 7 is a top view of a quad tiltrotor of our new design having rotors in a flight position; FIG. 8 is a bottom view thereof; FIG. 9 is a port side elevation view thereof; FIG. 10 is a starboard side elevation view thereof; FIG. 11 is a front elevation view thereof; FIG. 12 is a rear elevation view thereof; and, FIG. 13 is a perspective view thereof.

**1 Claim, 7 Drawing Sheets**



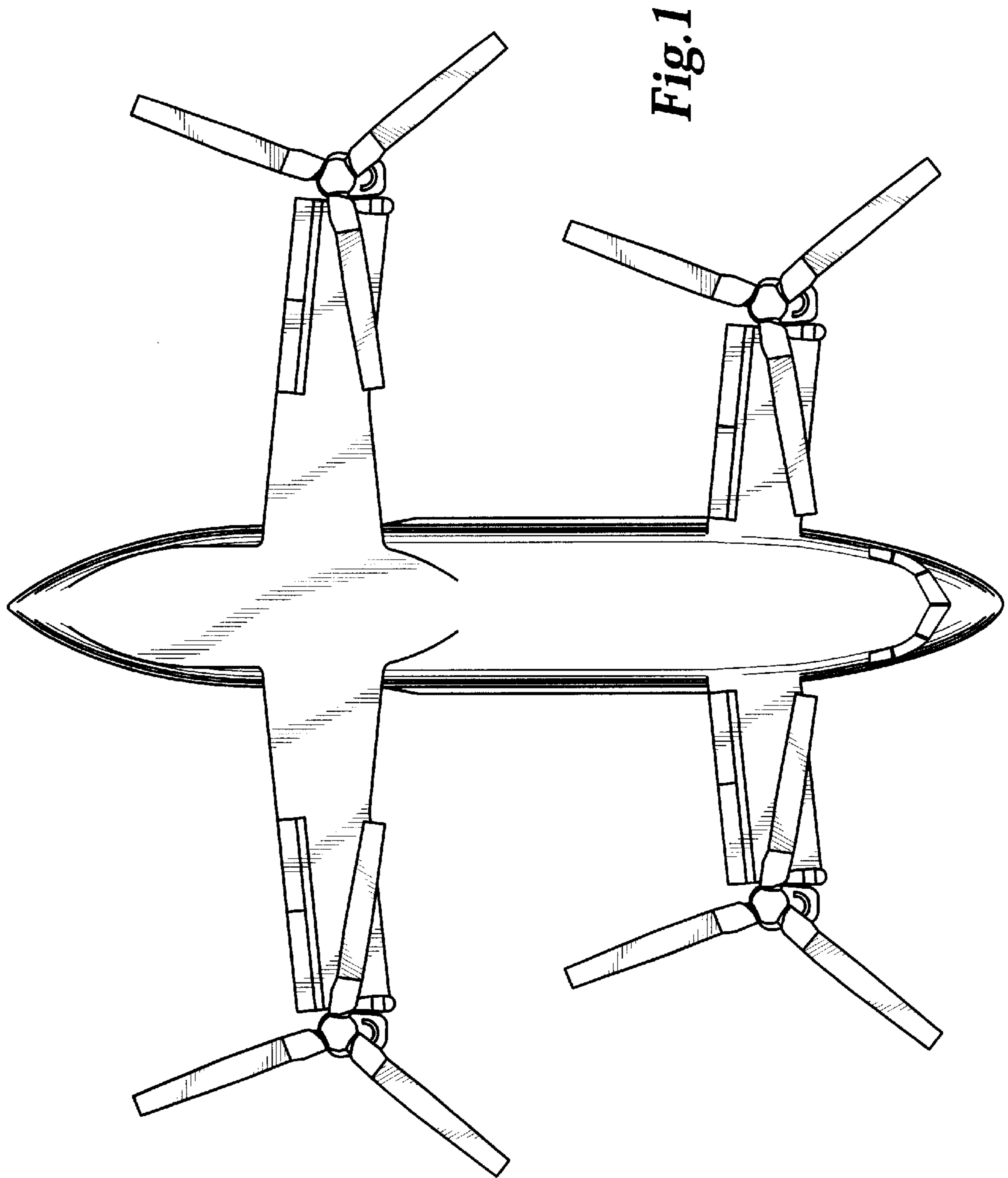
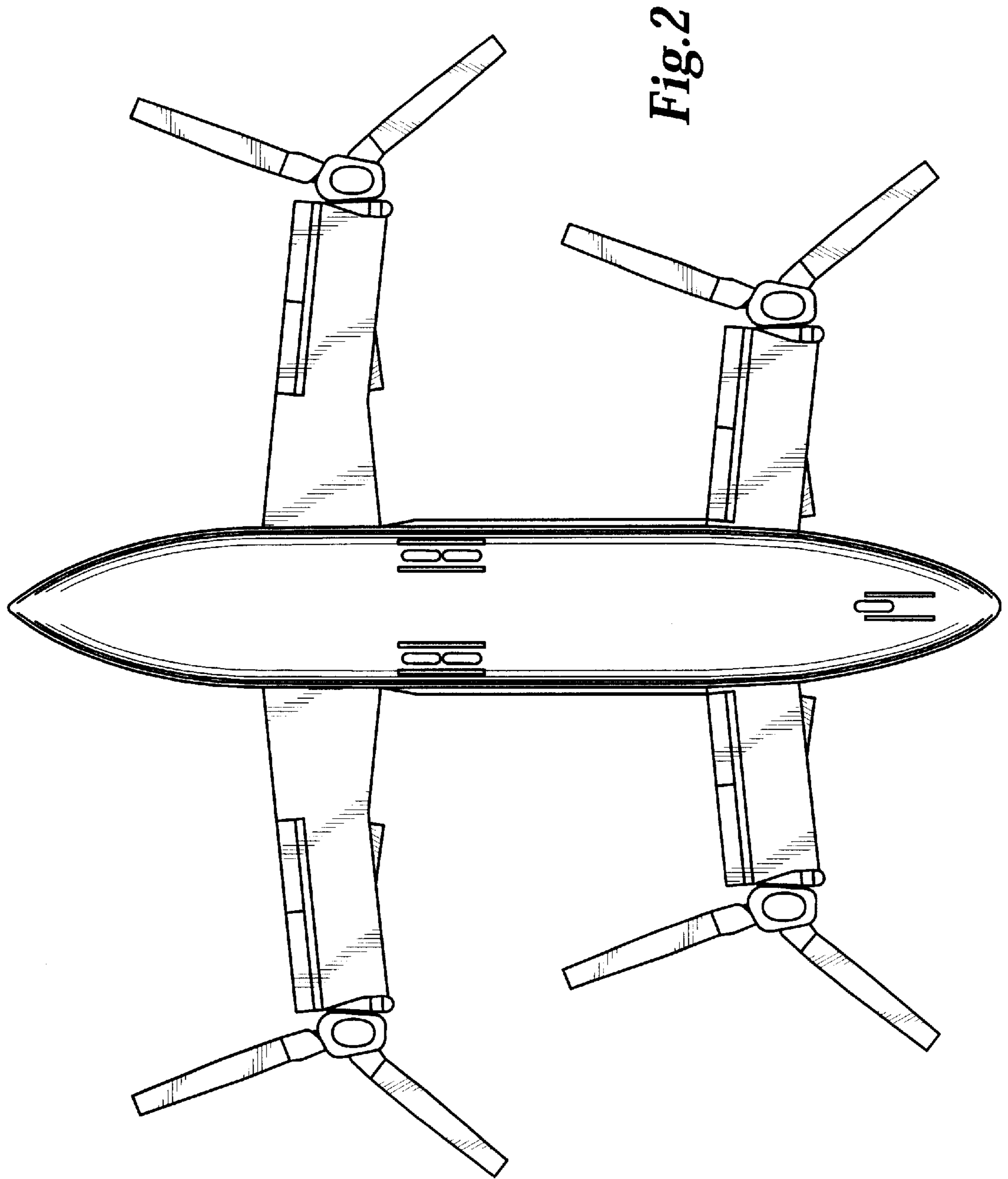
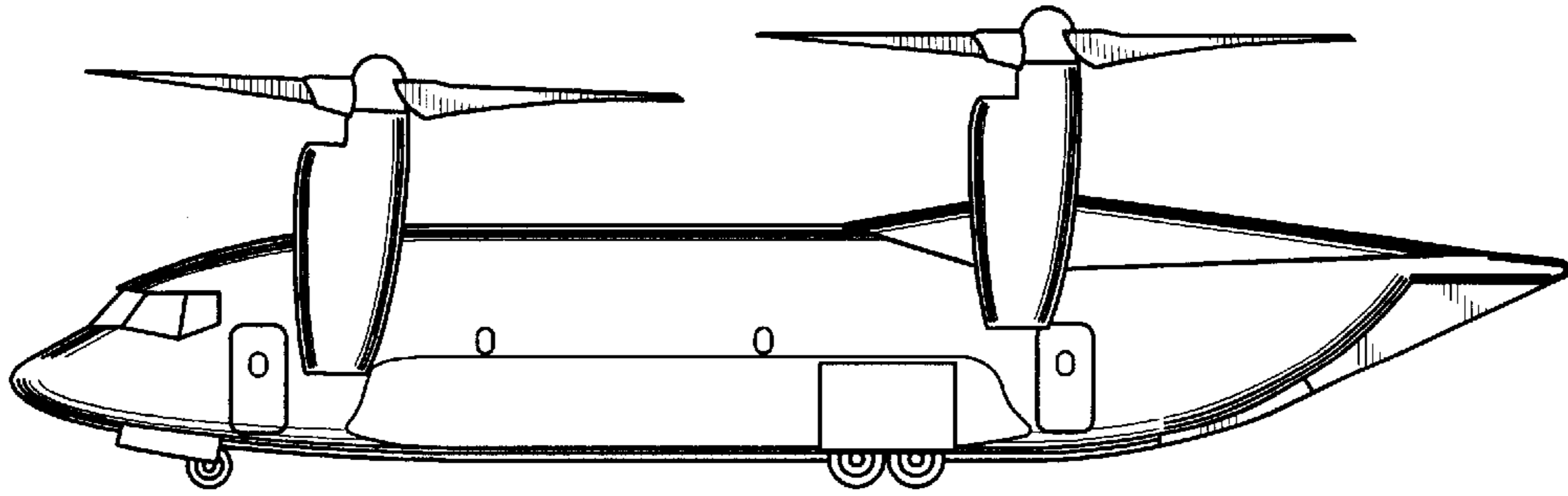
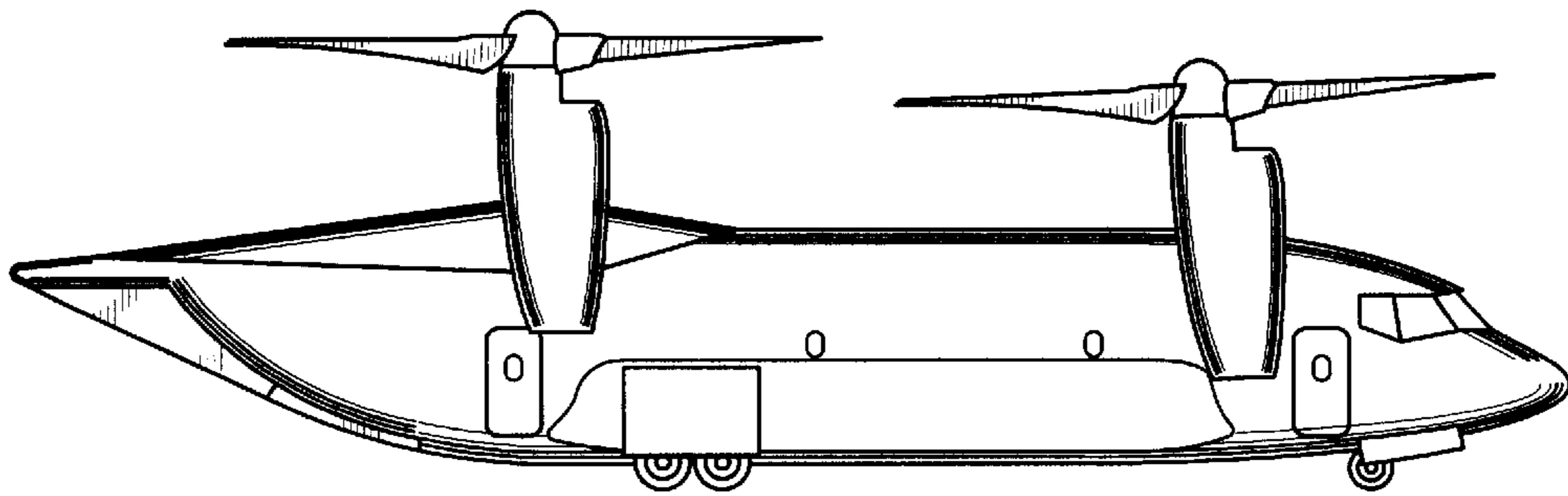


Fig. 1

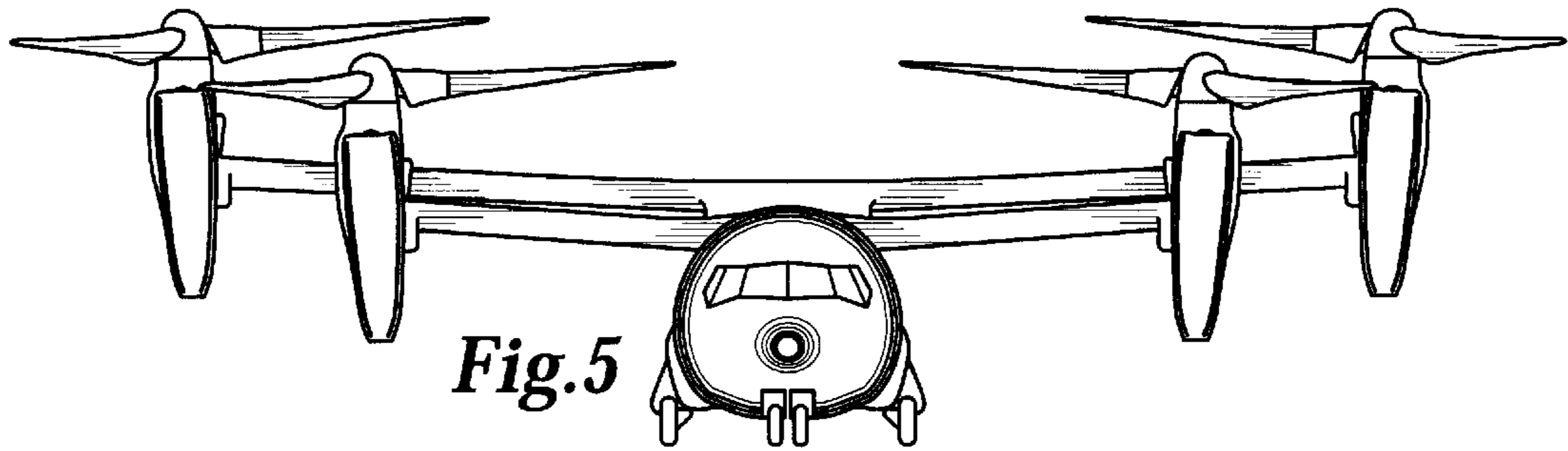




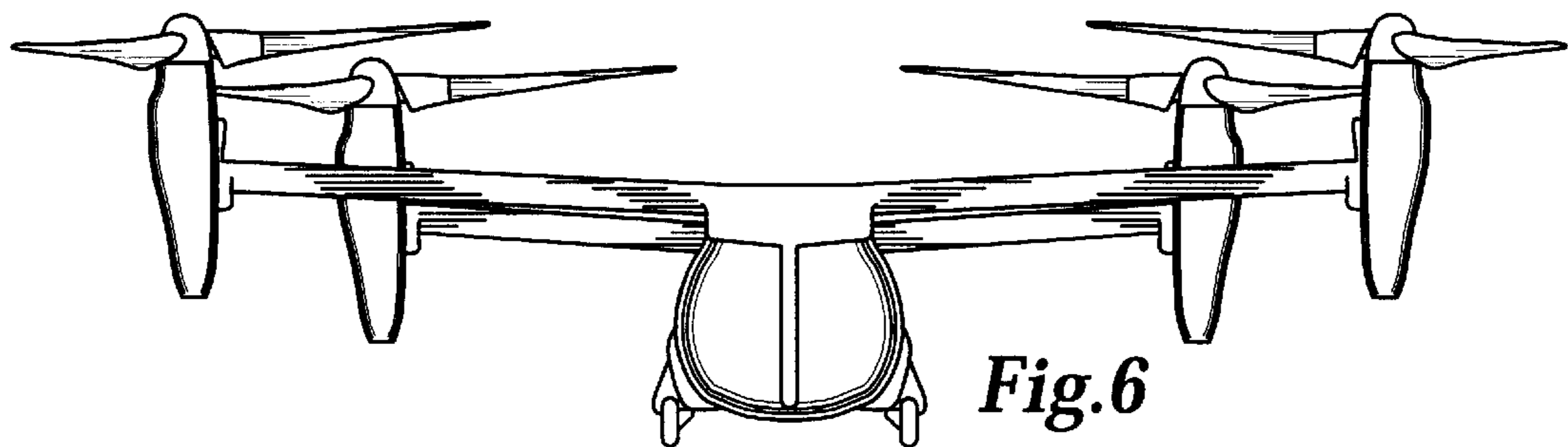
*Fig.3*



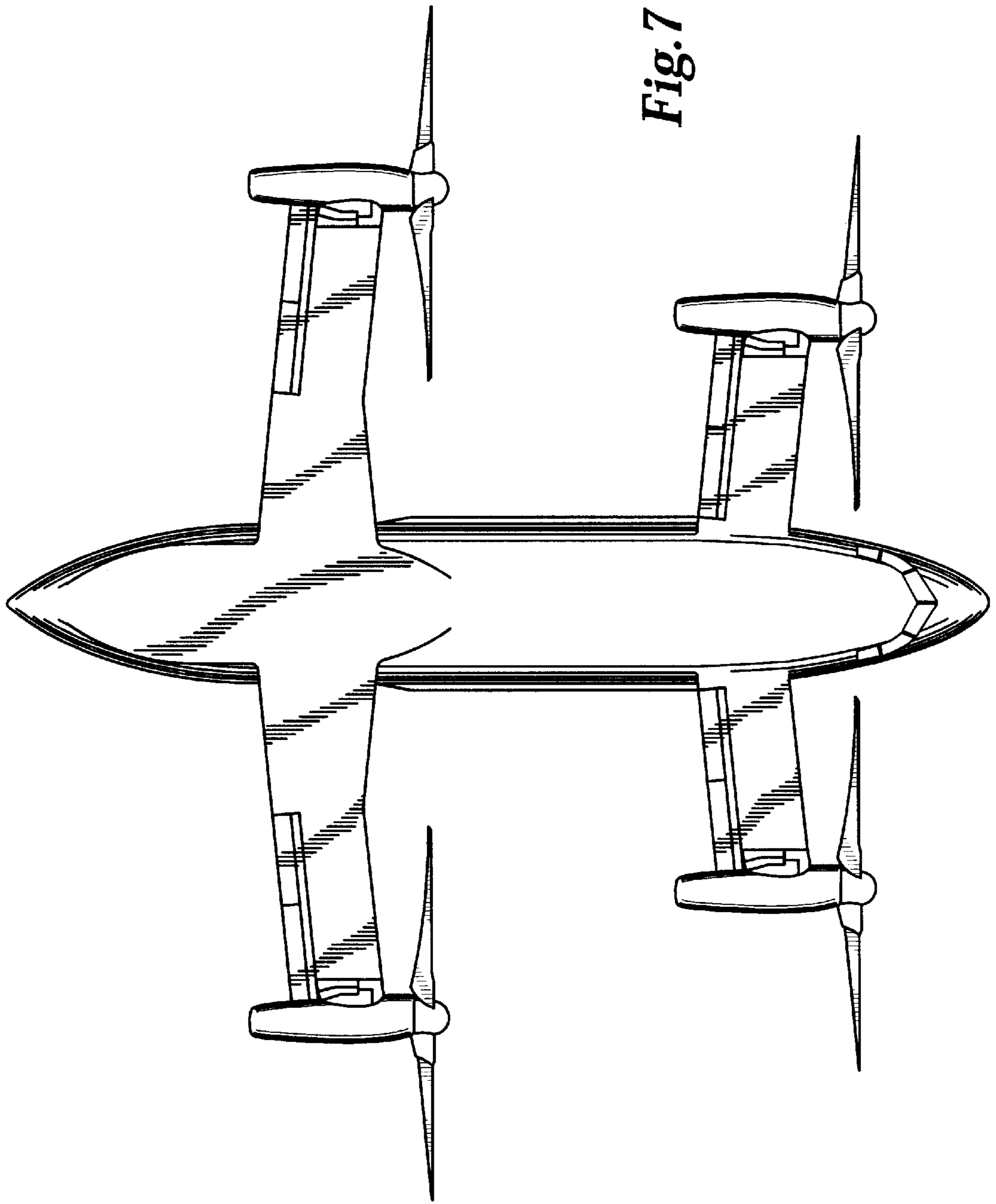
*Fig.4*



*Fig.5*



*Fig.6*



*Fig. 7*

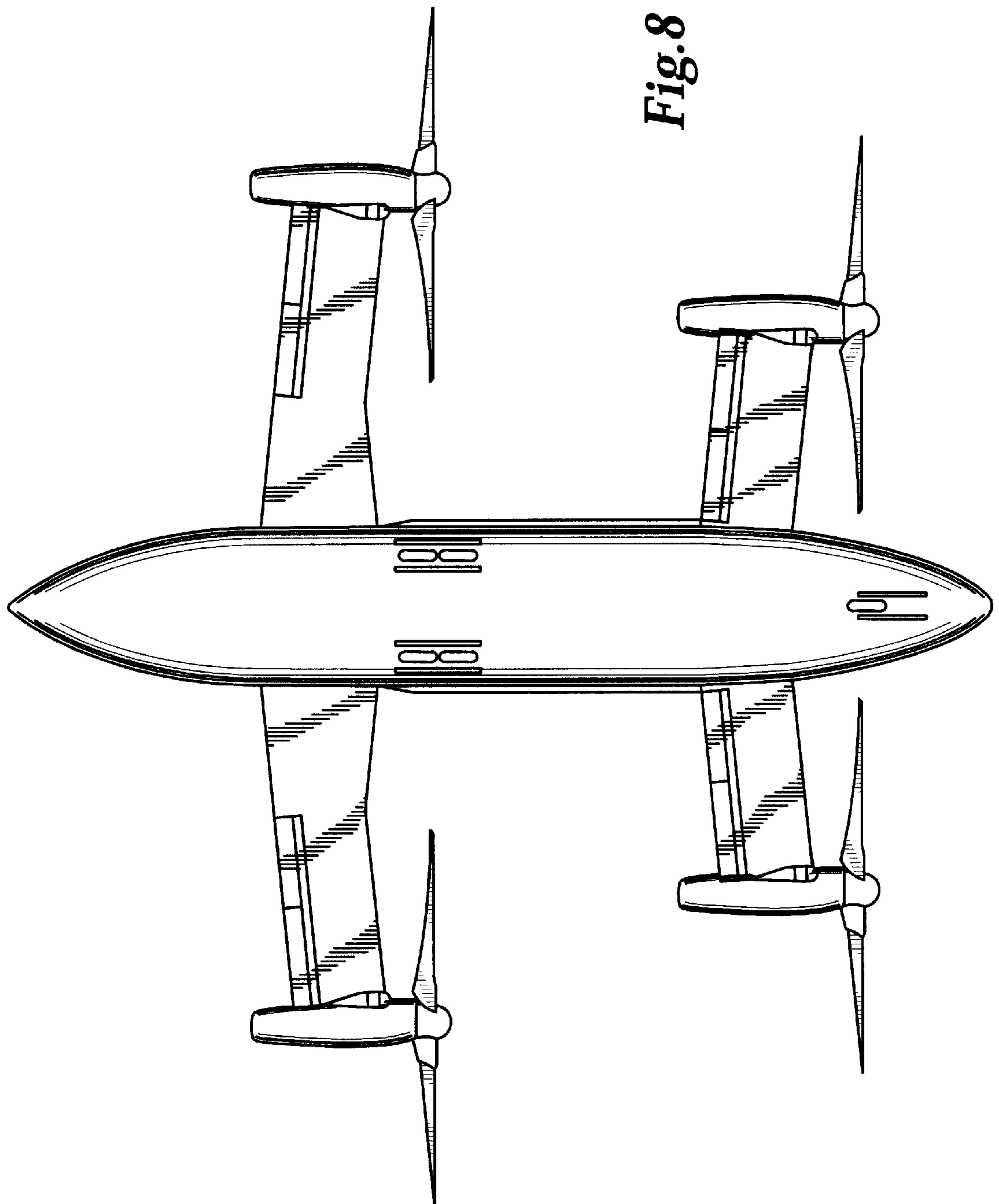
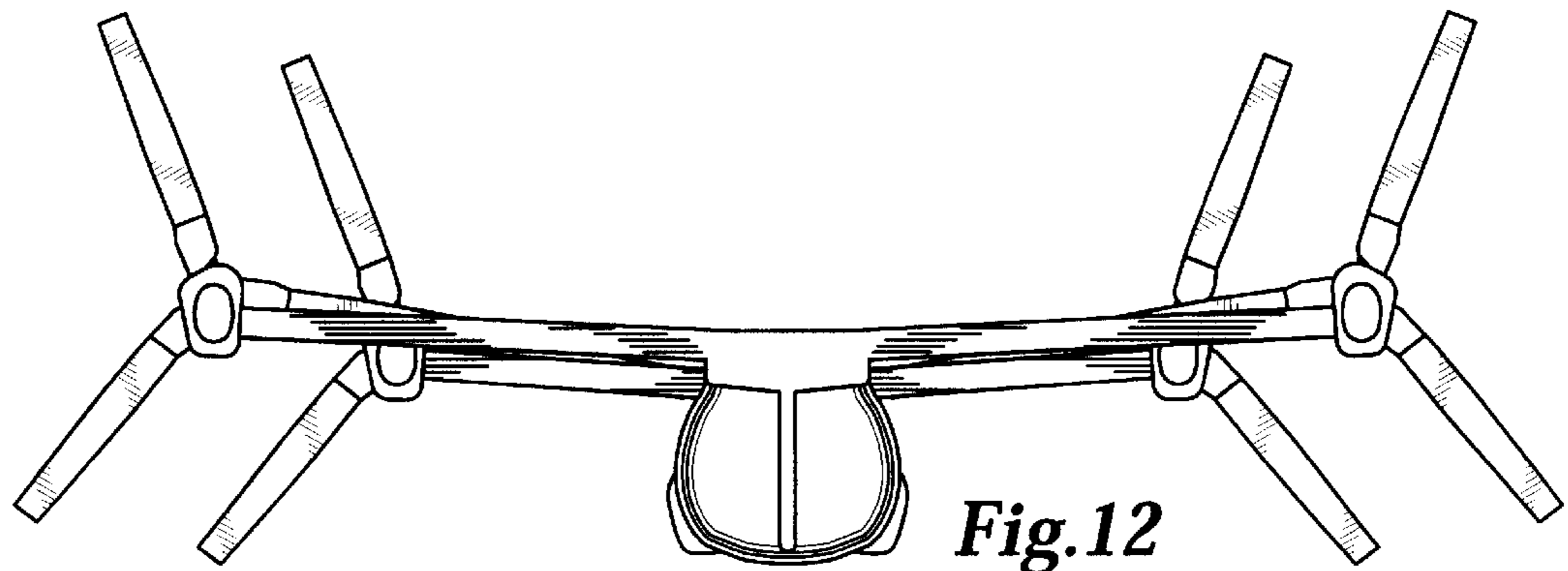
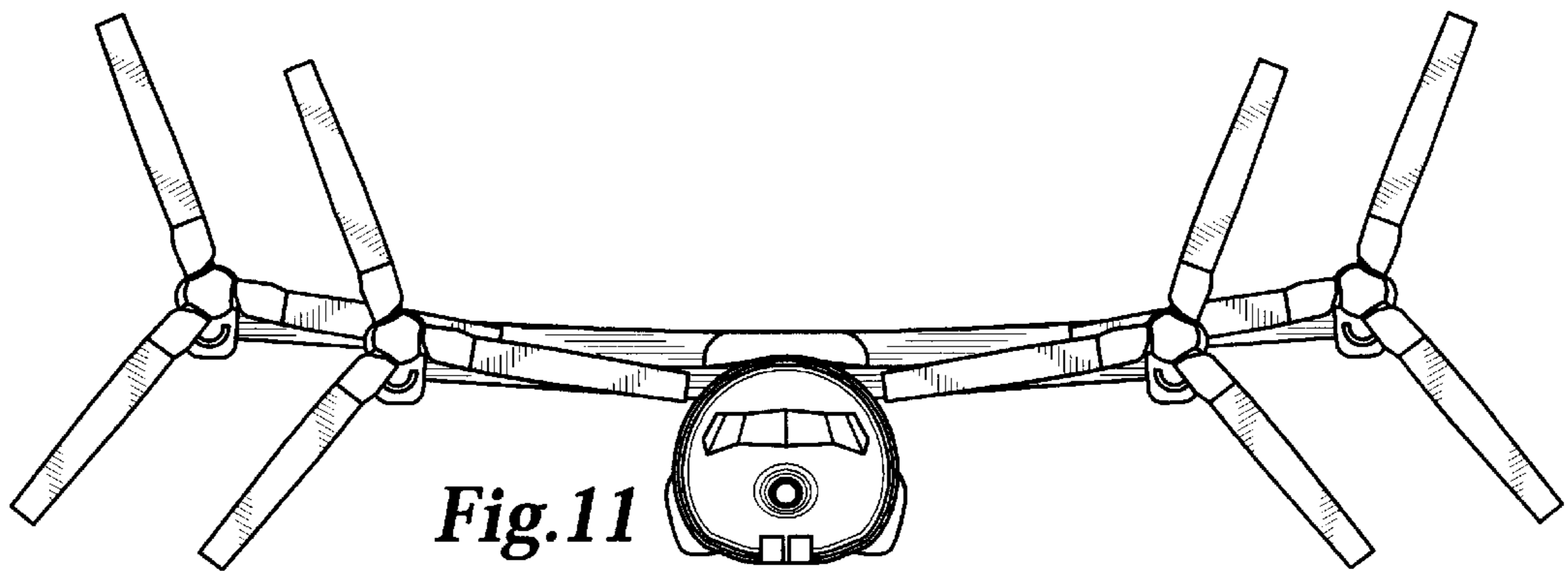
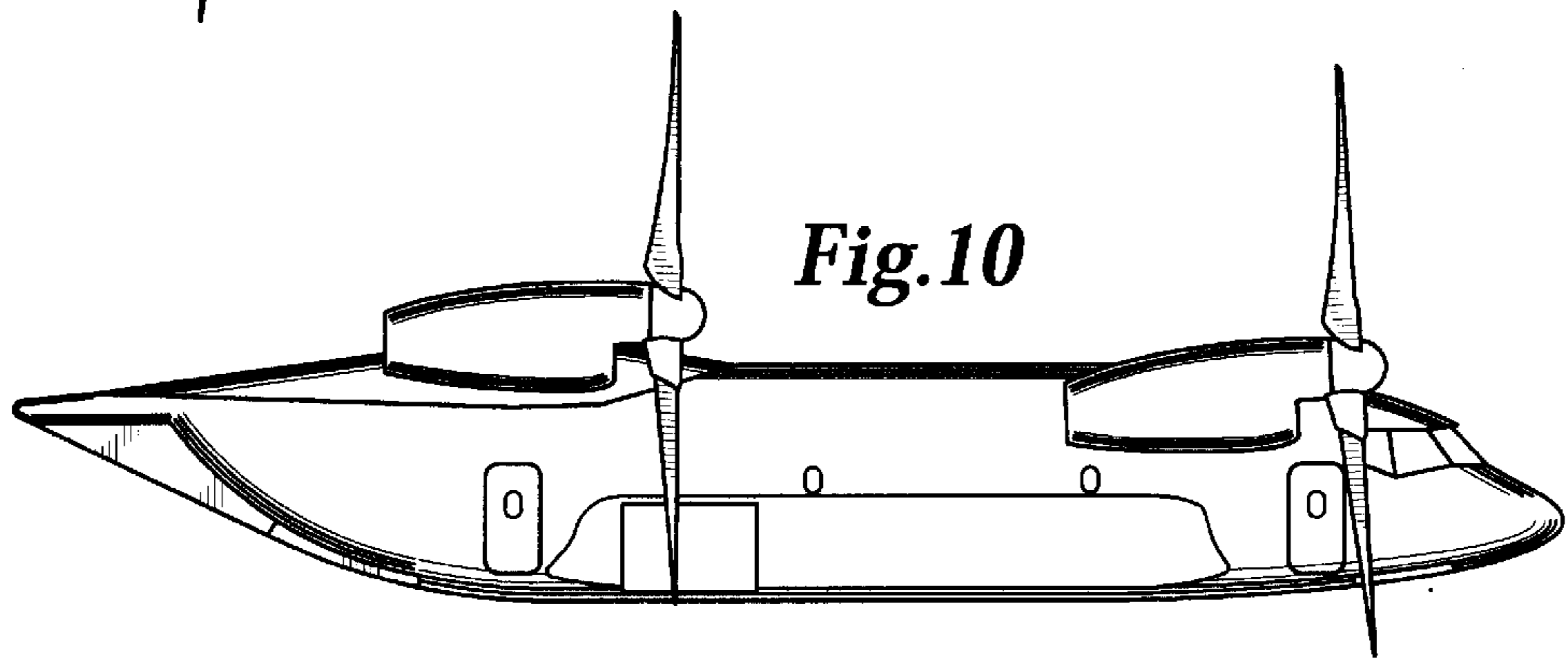
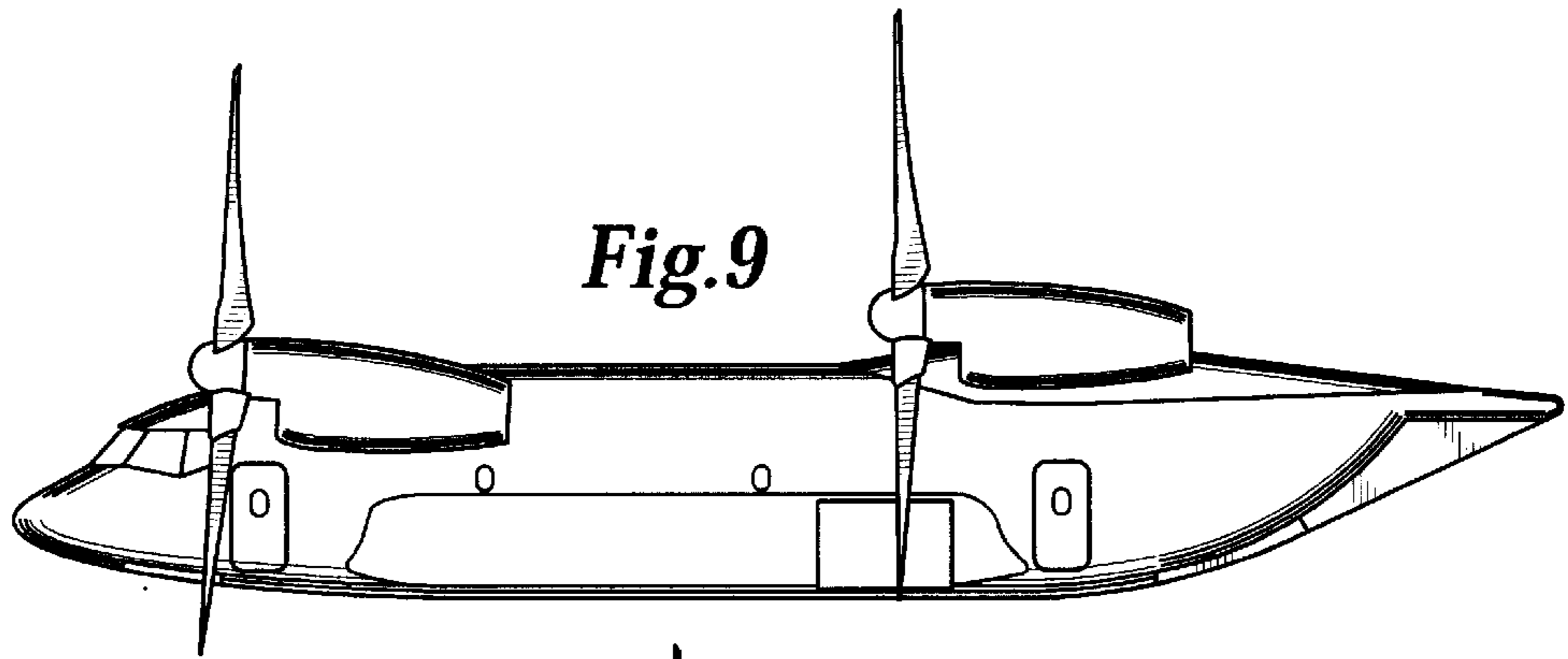
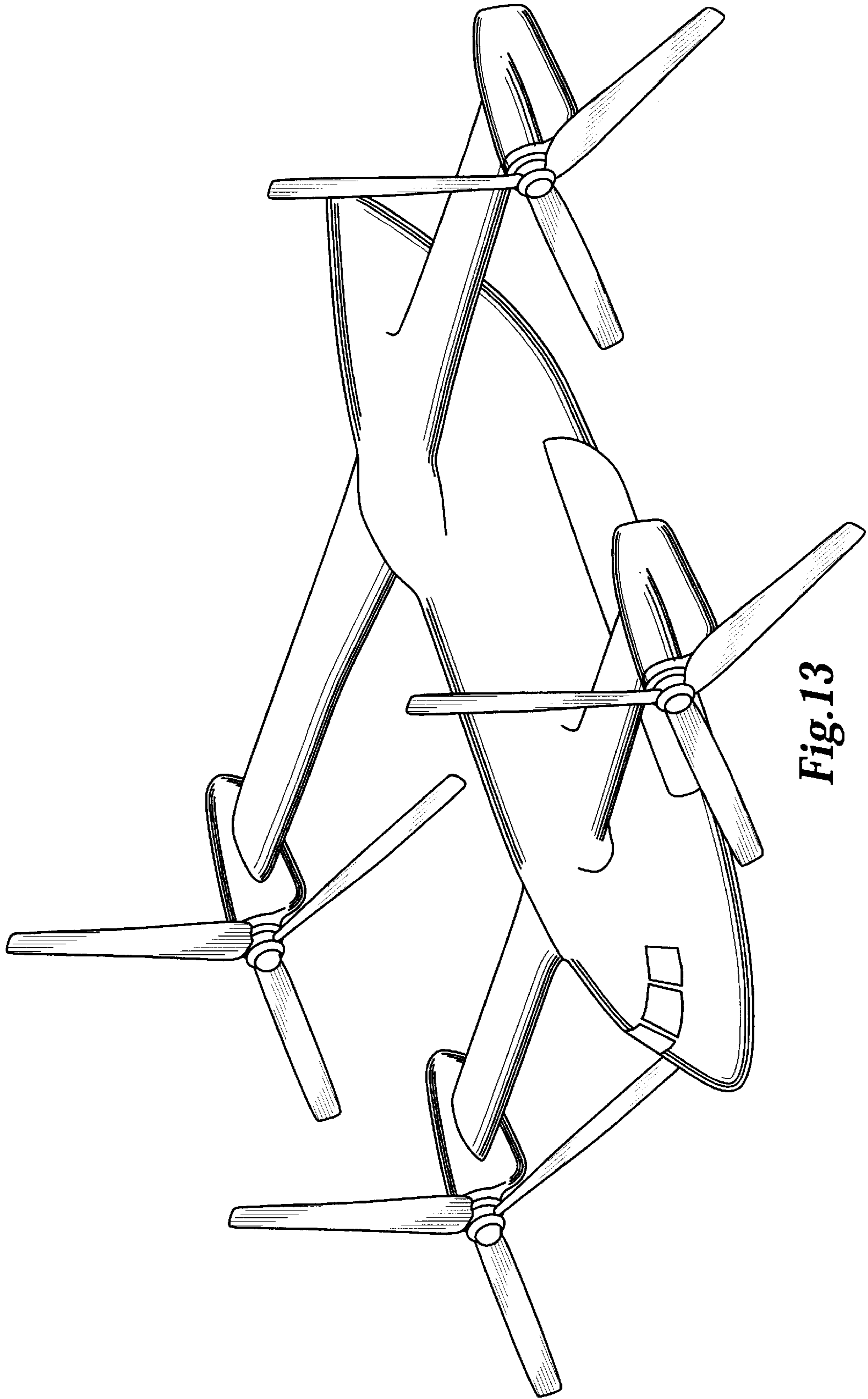


Fig. 8





**Fig. 13**



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

PATENT NO. : Des. 458,892 S  
DATED : June 18, 2002  
INVENTOR(S) : DeTore 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:

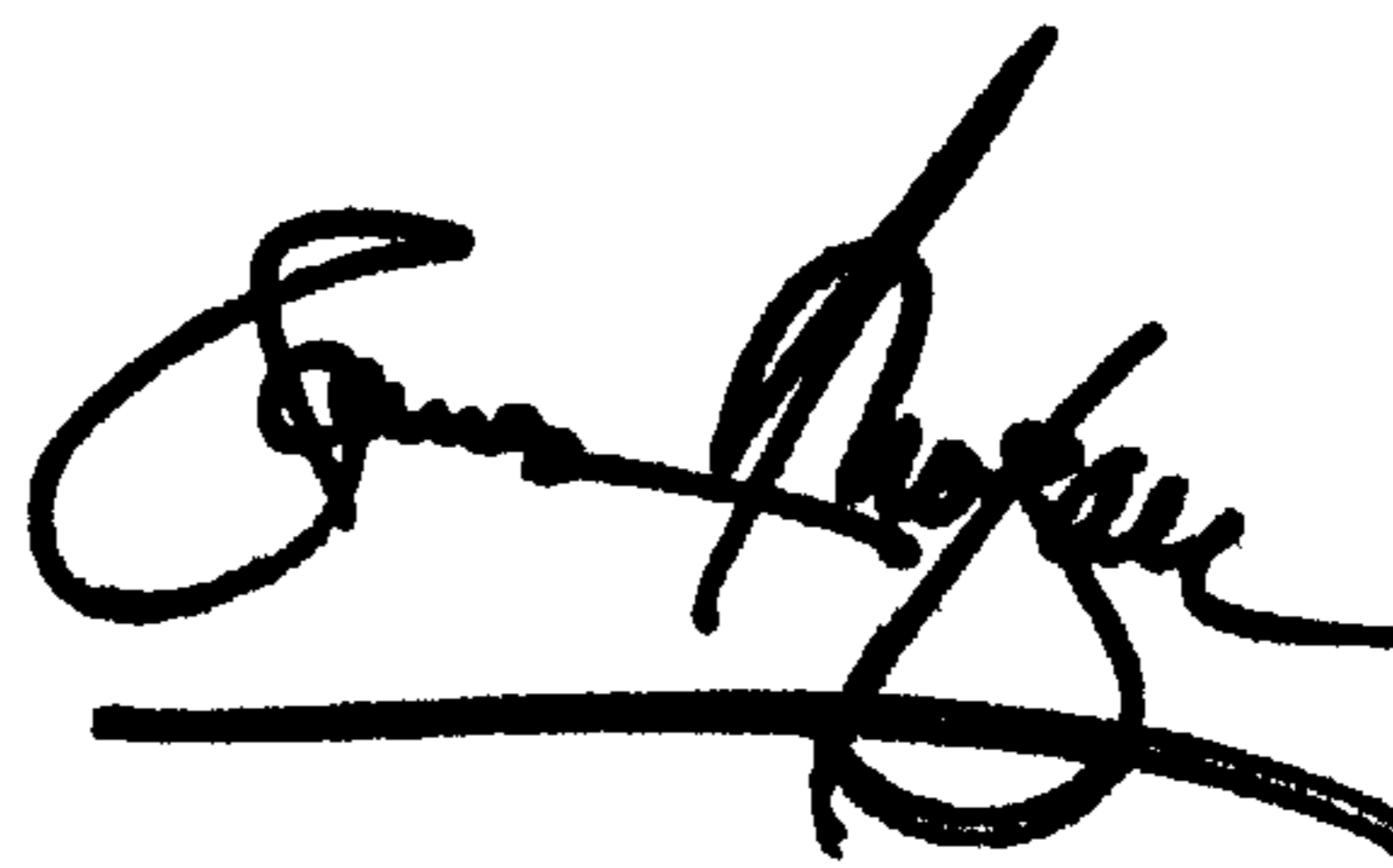
Title page,

Item [73], please change:

“[73] Assignee: **Bell Helicopter TREXTRON Inc.,**” to -- [73] Assignee: **Bell Helicopter TEXTRON Inc.,** --

Signed and Sealed this

Second Day of September, 2003

A handwritten signature in black ink, appearing to read "James E. Rogan", written over a horizontal line.

JAMES E. ROGAN  
*Director of the United States Patent and Trademark Office*