



US00D401898S

# United States Patent [19]

[11] **Patent Number: Des. 401,898**

**Lauder et al.**

[45] **Date of Patent: \*\*Dec. 1, 1998**

[54] **VARIABLE DIAMETER TILT ROTOR AIRCRAFT**

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Attorney, Agent, or Firm—Brian A. Collins*

[75] Inventors: **Timothy F. Lauder**, Oxford; **David G. Matuska**, Huntington, both of Conn.

[57] **CLAIM**

We claim the ornamental design for a variable diameter tilt rotor aircraft, as shown and described.

[73] Assignee: **Sikorsky Aircraft Corporation**, Stratford, Conn.

**DESCRIPTION**

[\*\*] Term: **14 Years**

FIG. 1 is a top view of a variable diameter tilt rotor aircraft wherein the rotors thereof are oriented in a substantially horizontal plane for vertical take-off and landing flight;

[21] Appl. No.: **64,119**

FIG. 2 is a side view of the variable diameter tilt rotor aircraft of FIG. 1;

[22] Filed: **Dec. 23, 1996**

FIG. 3 is a front view of the variable diameter tilt rotor aircraft of FIG. 1;

[51] **LOC (6) Cl. .... 12-06**

[52] **U.S. Cl. .... D12/326; D12/327; D12/328**

[58] **Field of Search .... D12/319-345; 244/7 C, 48, 51, 69, 78**

FIG. 4 is a bottom view of the variable diameter tilt rotor aircraft of FIG. 1;

FIG. 5 is an aft view of the variable diameter tilt rotor aircraft of FIG. 1;

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

D. 226,826	5/1973	Wernicke	.....	D12/326
D. 323,315	1/1992	Haga	.....	D12/331
D. 332,079	12/1992	Haga et al.	.....	D12/331
5,096,140	3/1992	Dornier, Jr.	.....	244/7 C
5,236,149	8/1993	MacKay	.....	244/7 C
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FIG. 6 is a top view of a variable diameter tilt rotor aircraft wherein the rotors thereof are oriented in a substantially vertical plane for forward flight;

FIG. 7 is a side view of the variable diameter tilt rotor aircraft of FIG. 6;

FIG. 8 is a front view of the variable diameter tilt rotor aircraft of FIG. 6;

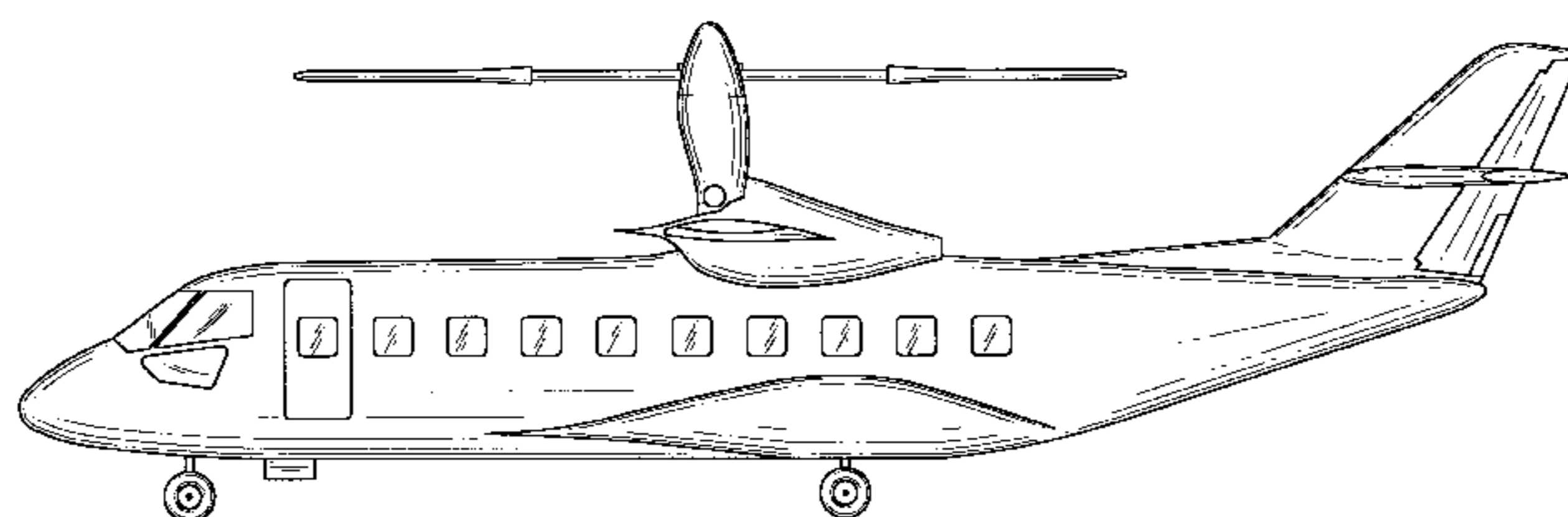
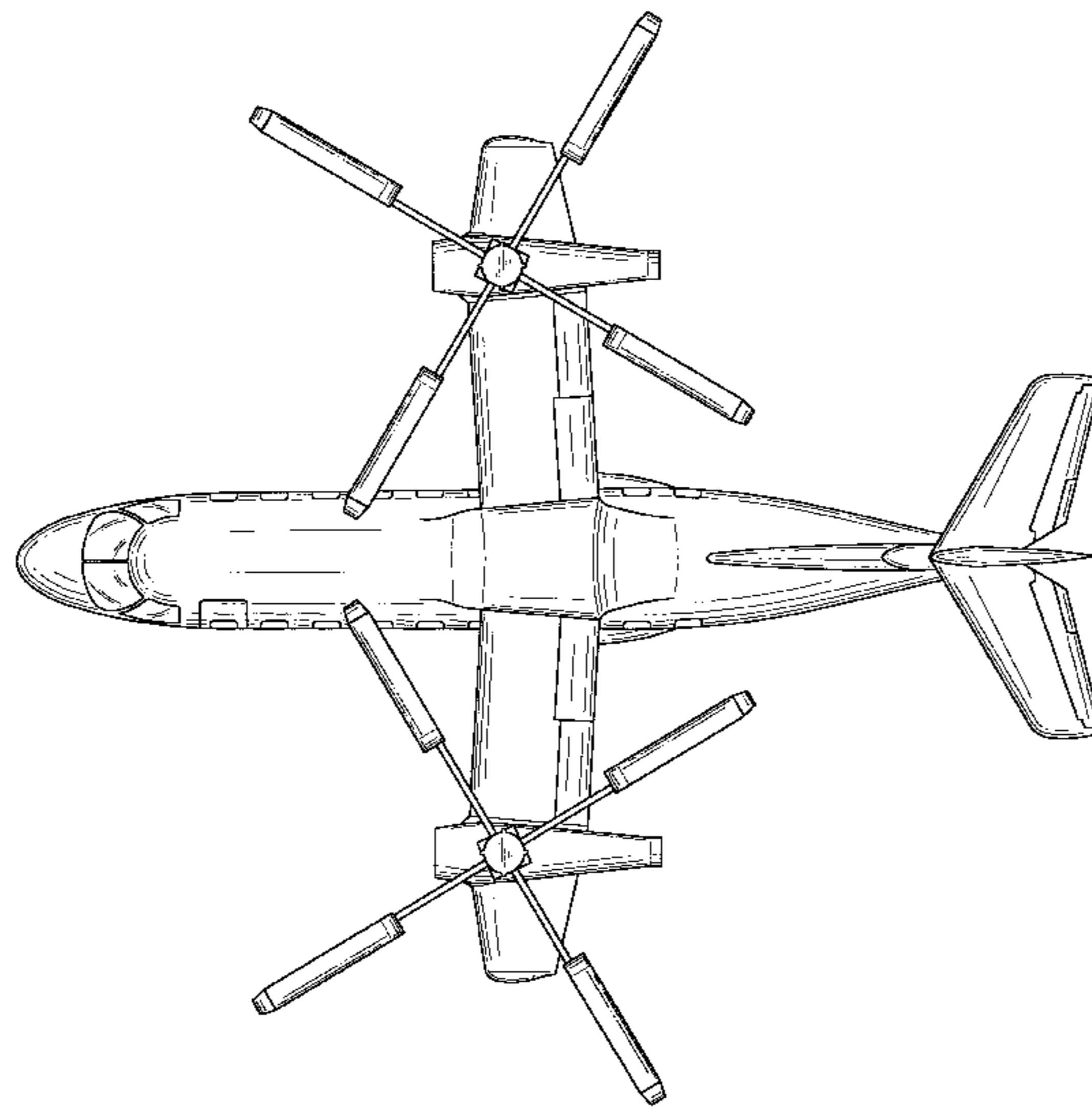
FIG. 9 is a bottom view of the variable diameter tilt rotor aircraft of FIG. 6; and,

FIG. 10 is an aft view of the variable diameter tilt rotor aircraft of FIG. 6.

**OTHER PUBLICATIONS**

American Helicopter Society, 49th Annual Forum, Variable Diameter Tilt rotor, by Studebaker & Matuska. 19-21 May 1993.

**1 Claim, 10 Drawing Sheets**



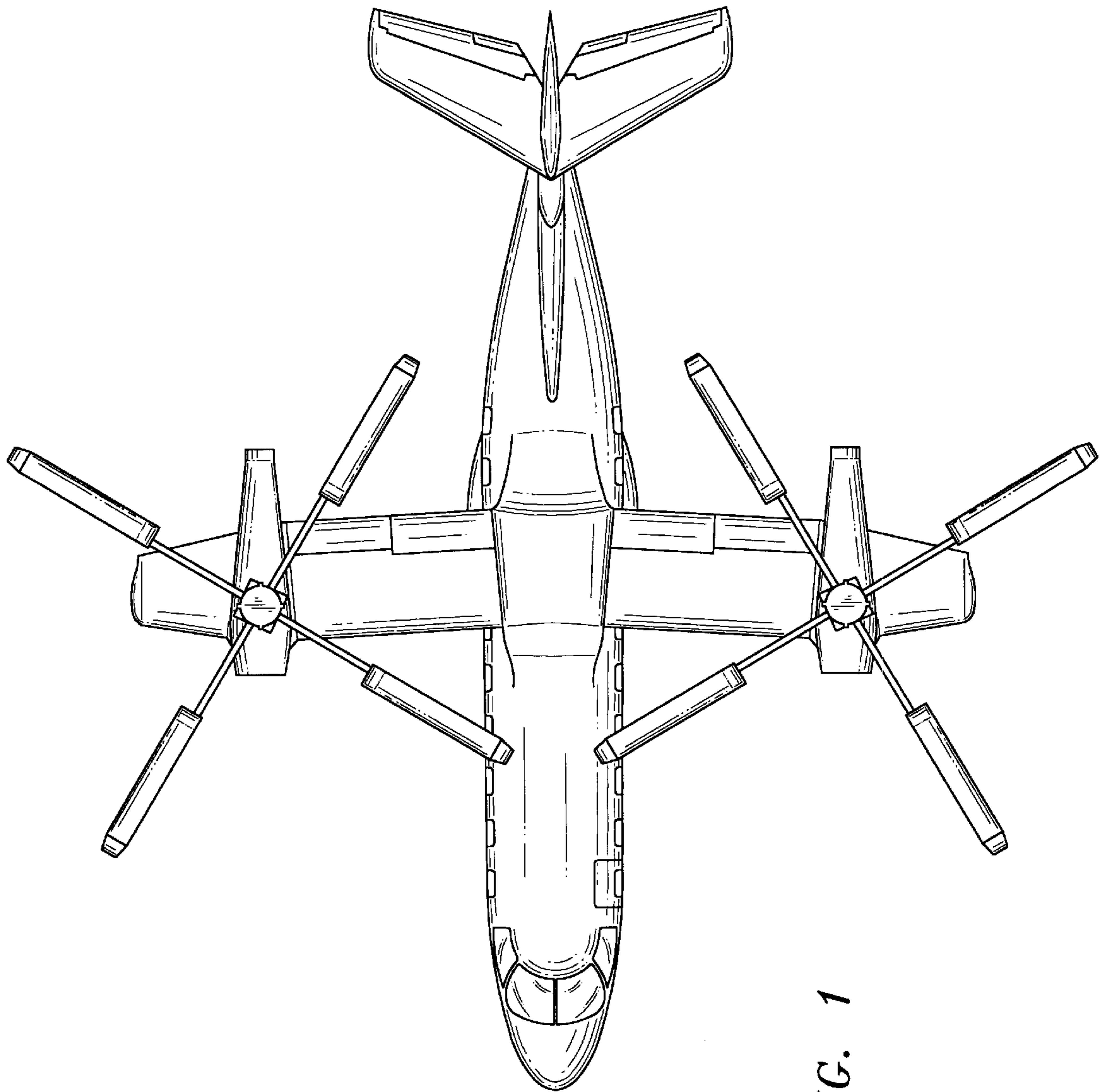


FIG. 1

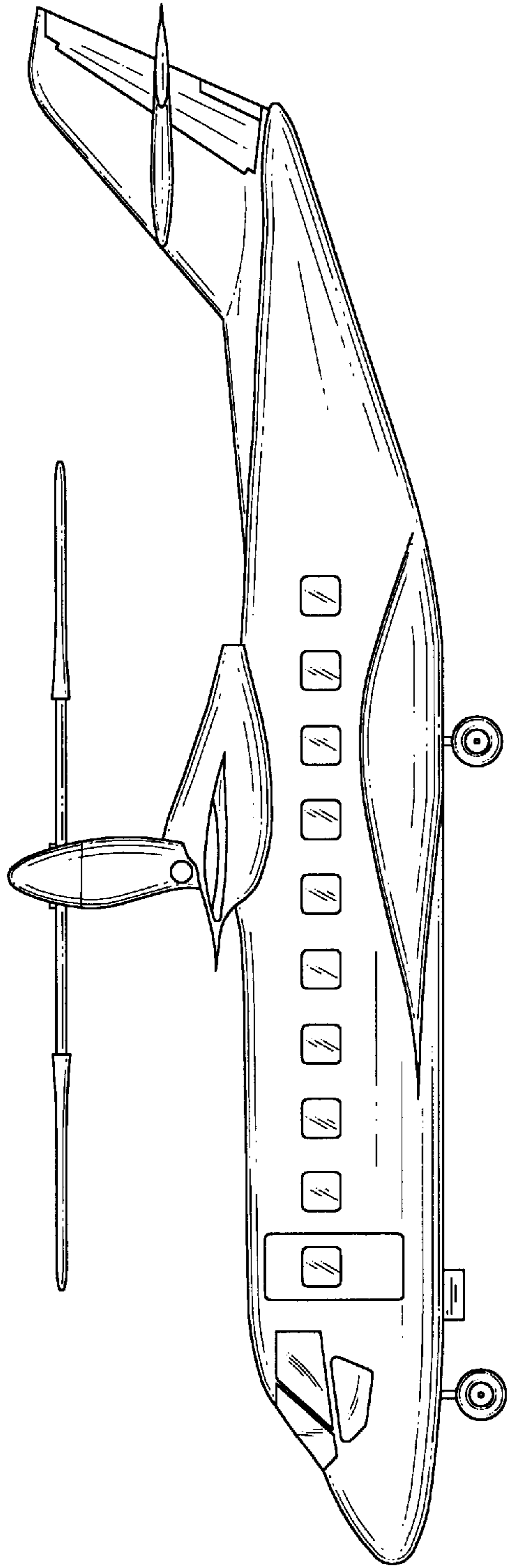


FIG. 2

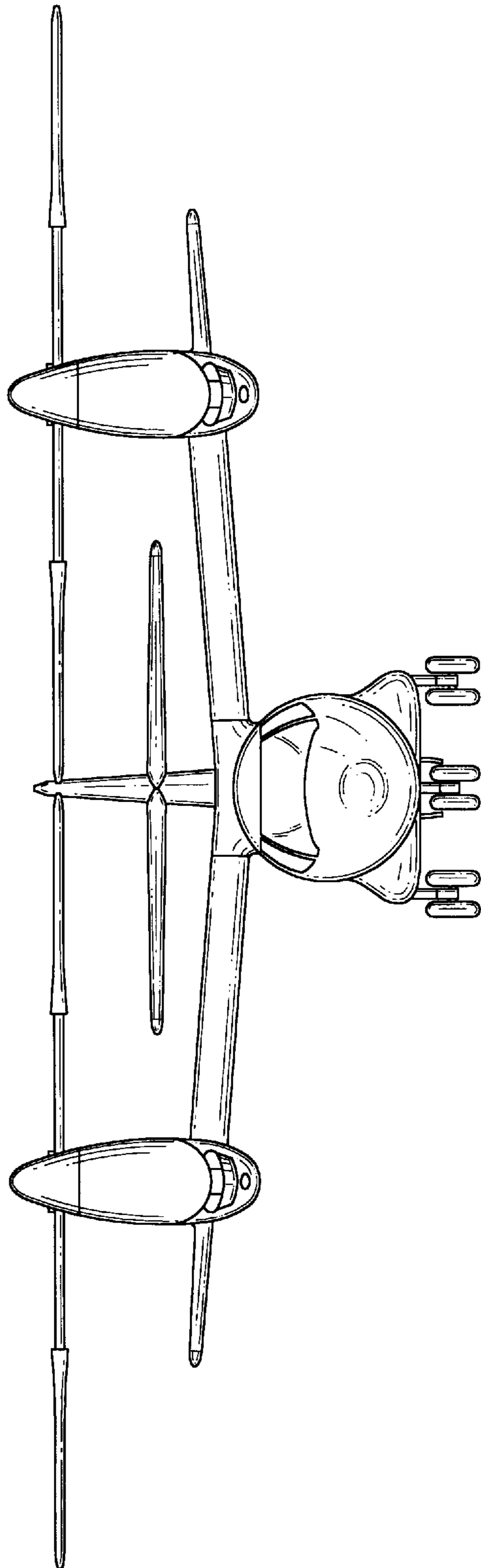


FIG. 3

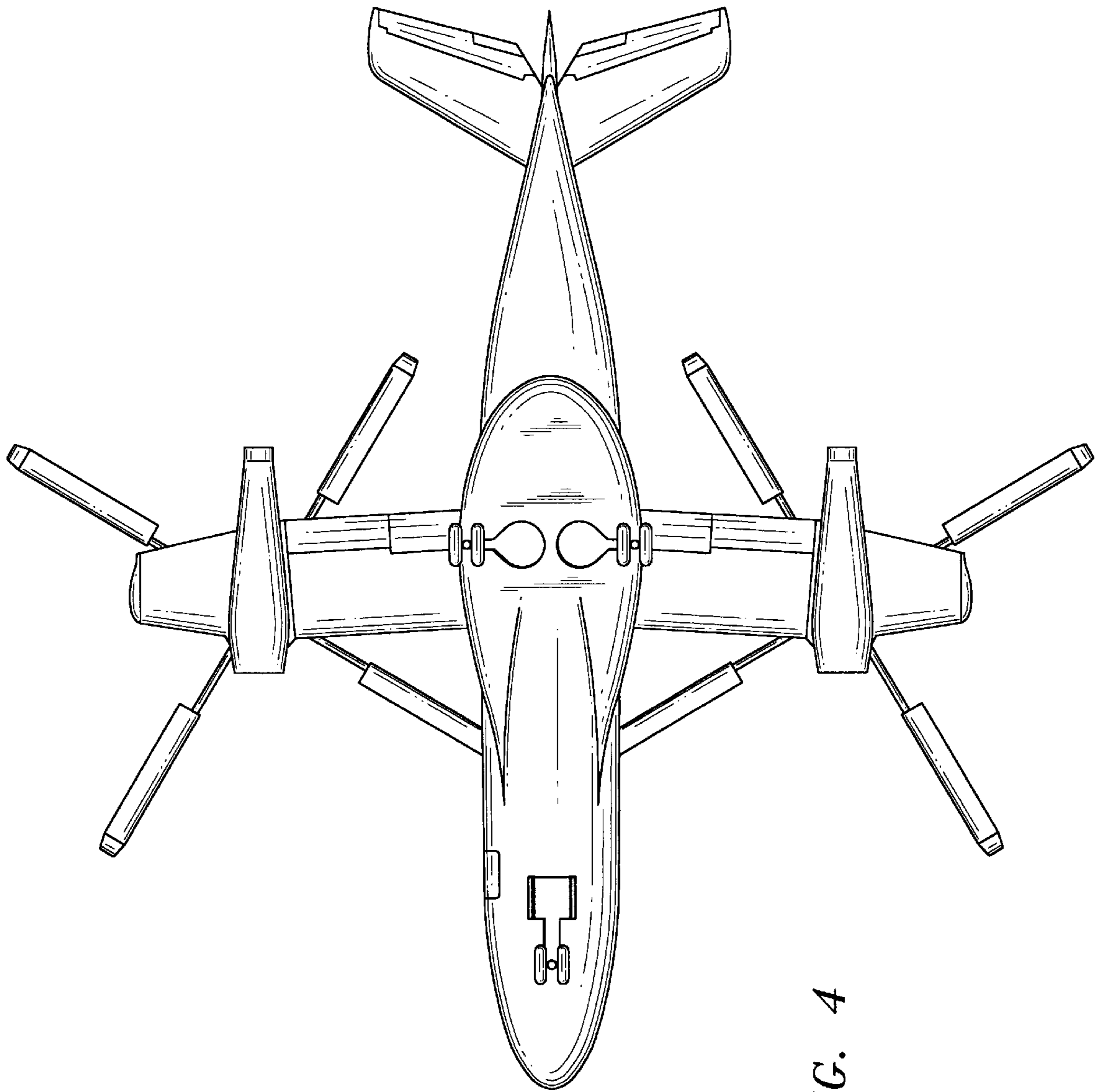


FIG. 4

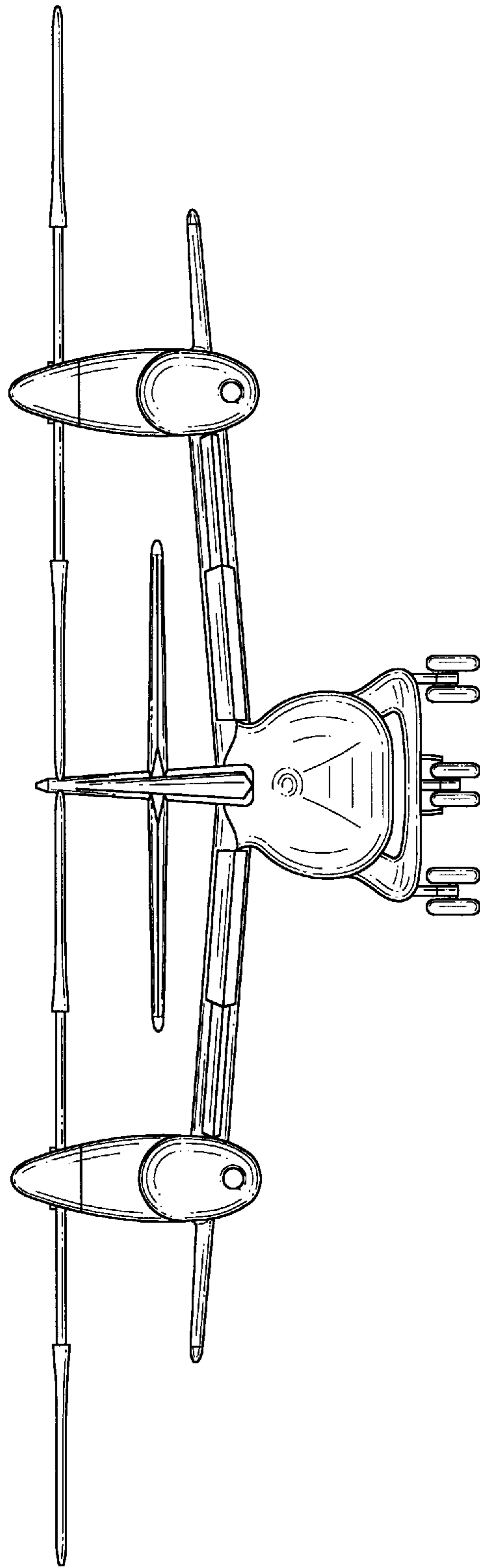


FIG. 5

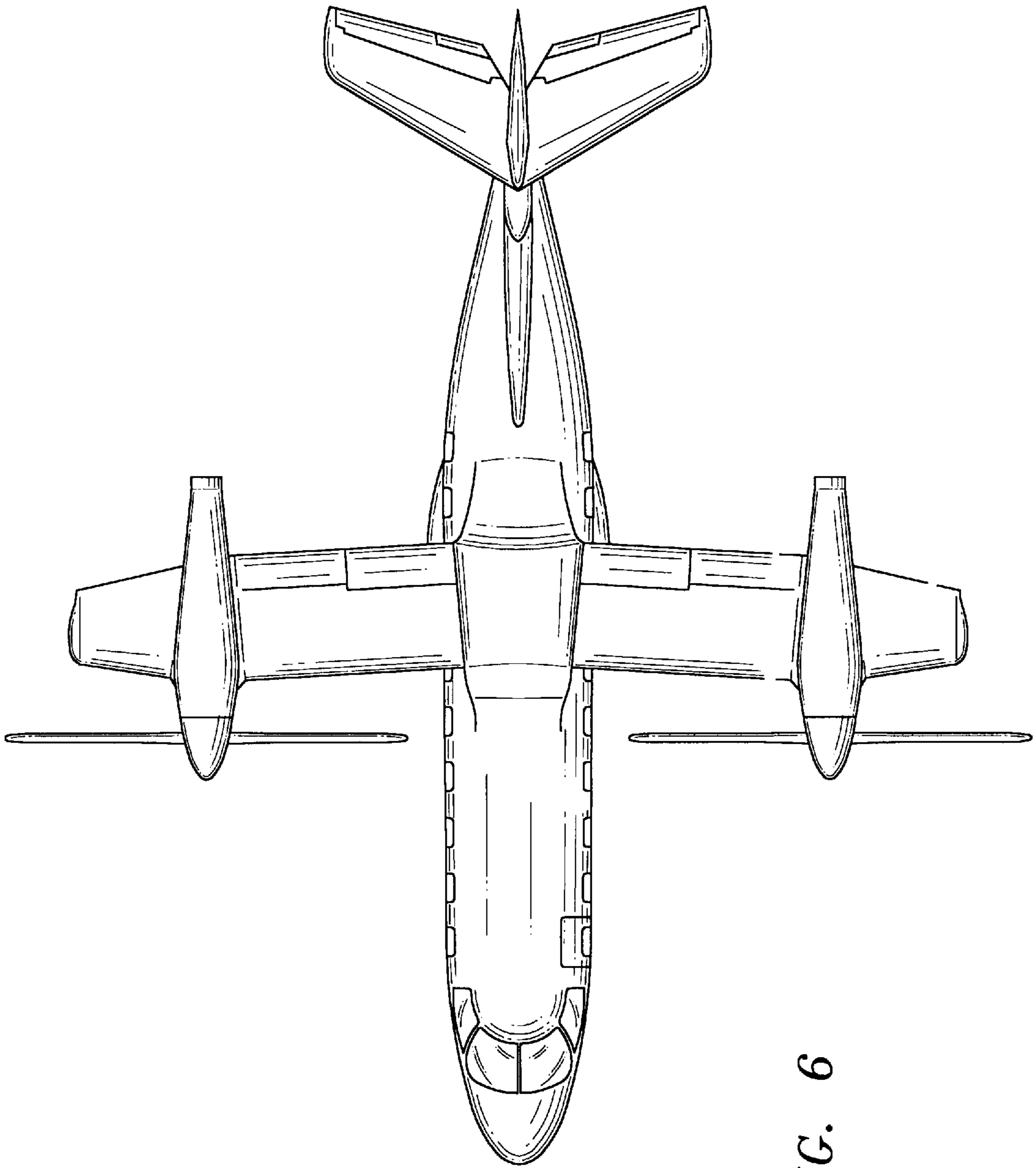


FIG. 6

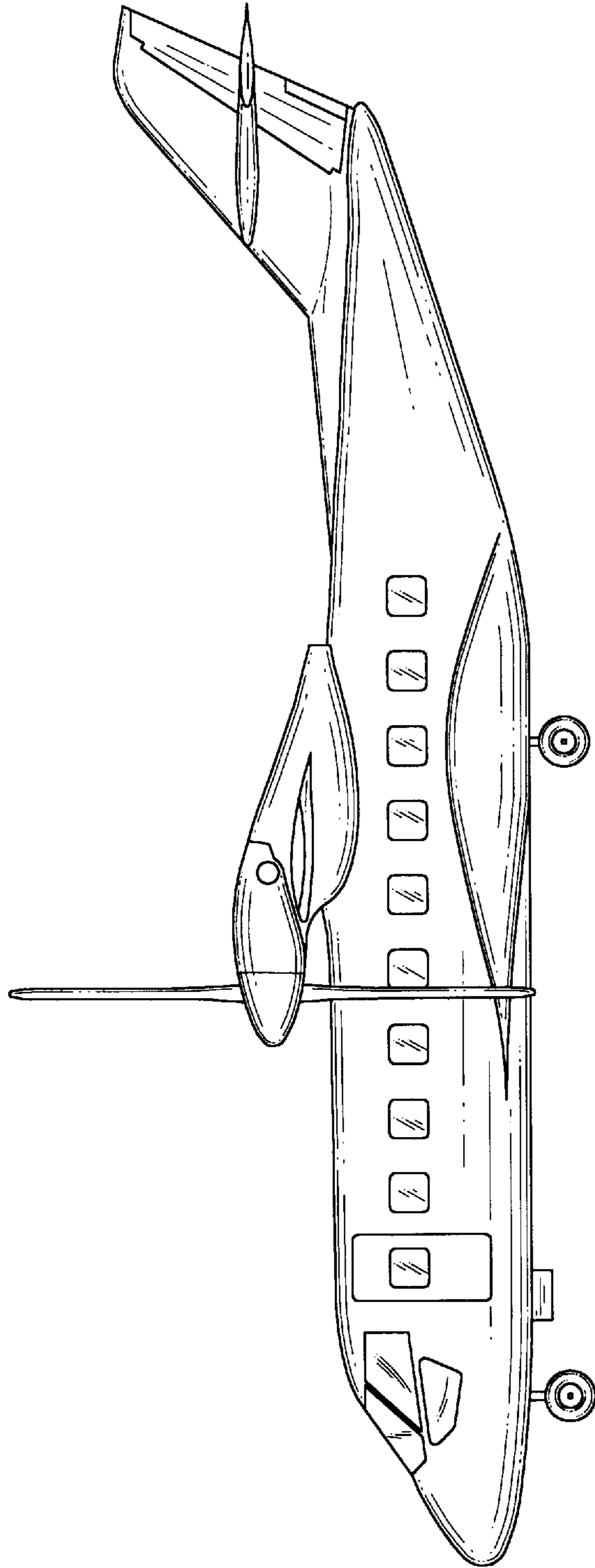


FIG. 7



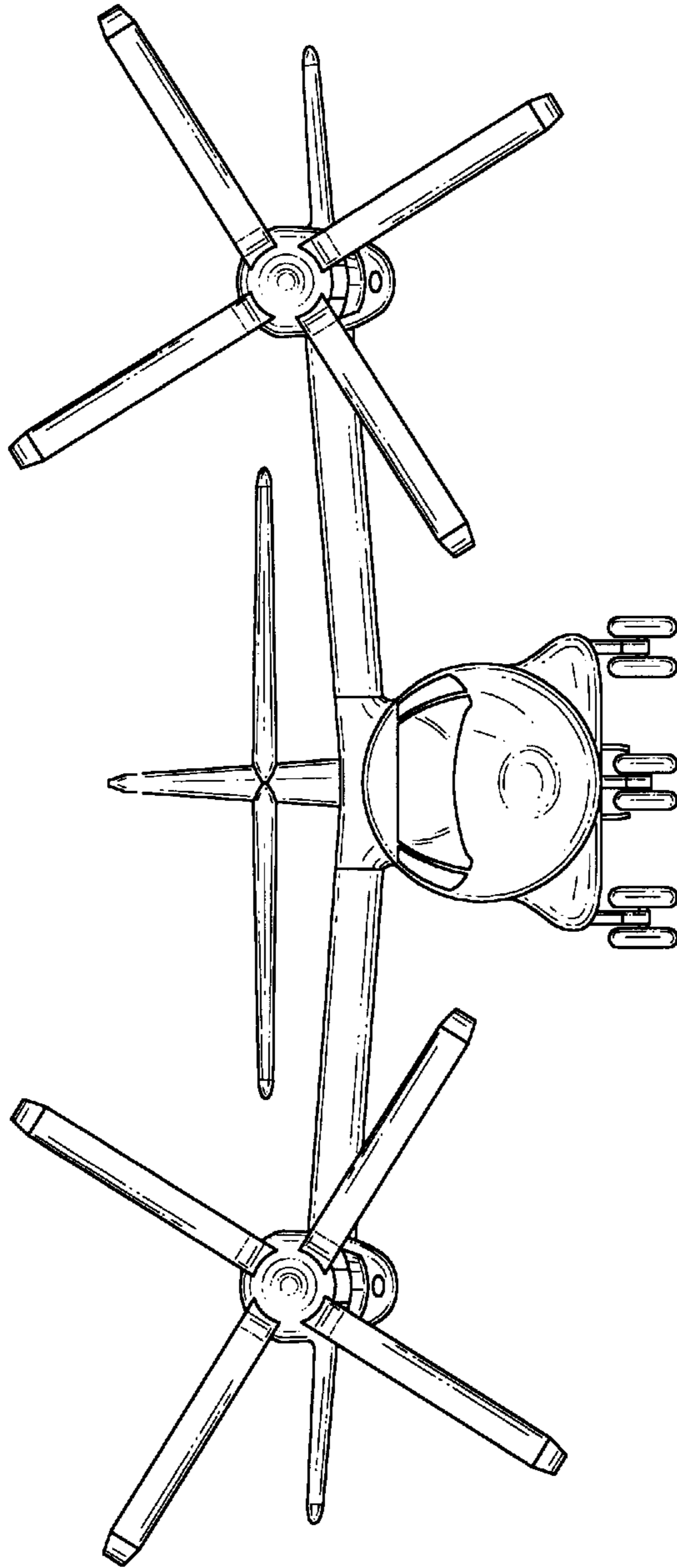


FIG. 8

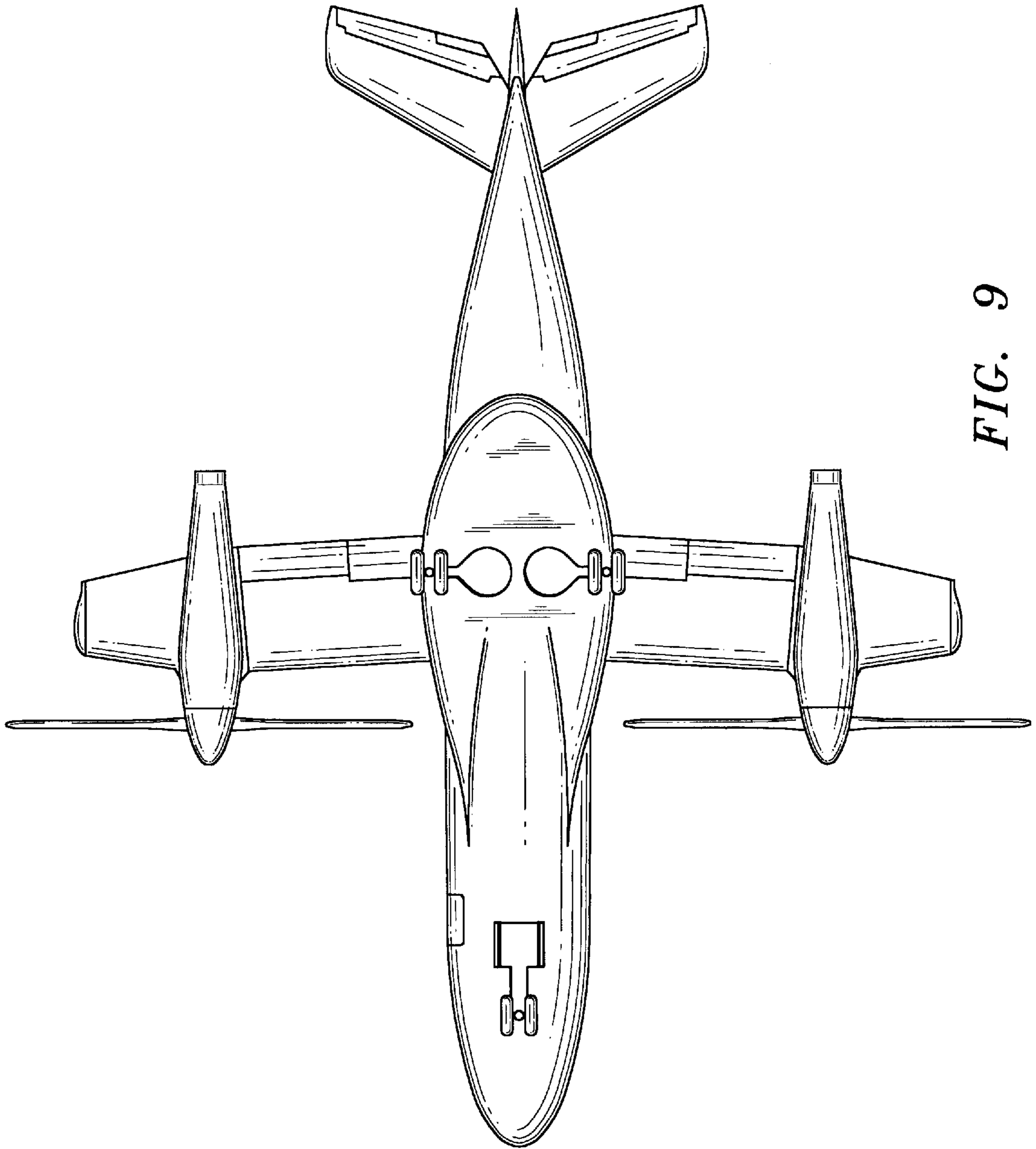


FIG. 9

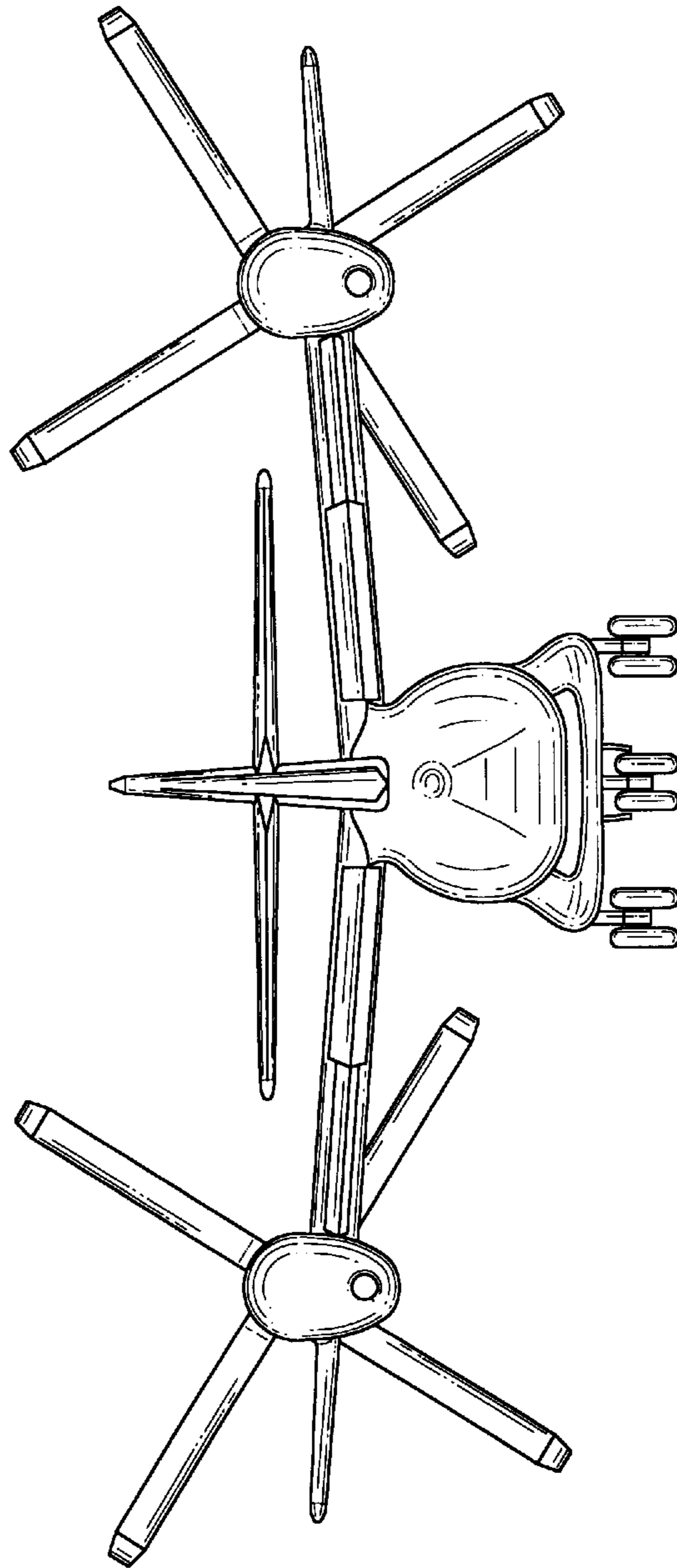


FIG. 10