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

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(45) **Date of Patent:** **\*\* Mar. 28, 2006**

(54) **WIND TURBINE AND ROTOR BLADE OF A WIND TURBINE**

(76) Inventor: **Aloys Wobben**, Argestrasse 19, Aurich (DE), D-26607

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

(21) Appl. No.: **29/172,137**

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(30) **Foreign Application Priority Data**

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Jun. 7, 2002 (DE) ..... 4 02 04 727

(51) **LOC (8) Cl.** ..... **13-01**

(52) **U.S. Cl.** ..... **D13/115**

(58) **Field of Classification Search** ..... D13/101, D13/112, 115; D15/1; 290/44; 415/4.1, 4.3, 415/4.5; 416/9, 12, 23, 24, 32, 44, 115, 117, 416/132 B, 132 R, 169, 196 A, 197 A  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D252,572 S \* 8/1979 Hanson ..... D15/1  
D271,303 S \* 11/1983 Ovelmen ..... D15/1  
4,692,095 A \* 9/1987 Lawson-Tancred ..... 416/23  
5,320,491 A \* 6/1994 Coleman et al. .... 416/24

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE 401 09 165.1 \* 11/2001

**OTHER PUBLICATIONS**

GE Wind Energy "GE Wind Energy 3.6 Offshore Multi-Megawatt Wind Turbine" brochure.  
3M Innovation *Erosionsschutzfolie für Windenergieanlagen 3M™ Polyurethanfilm 8671*, leaflet.

(Continued)

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(57) **CLAIM**

The ornamental design for a wind turbine and rotor blade of a wind turbine, substantially as shown and described.

**DESCRIPTION**

FIG. 1 is a front and left side perspective view of the first embodiment of a wind turbine and rotor blade of a wind turbine, showing my new design;

FIG. 2 is a front and right side perspective view thereof;

FIG. 3 is a rear and right side perspective view thereof;

FIG. 4 is another rear and right side perspective view thereof, with the rotor blades in an alternative position;

FIG. 5 is a portion of a left side perspective view thereof, in an enlarged scale;

FIGS. 6, 7, 8, 9, 10 and 11 are elevation views of a rotor blade thereof, in alternative positions and in an enlarged scale;

FIGS. 12 and 13 are elevation views of a portion of a rotor blade thereof, in alternative positions and in an enlarged scale;

FIG. 14 is a portion of a side elevation view of a wind turbine and rotor blade of a wind turbine, in a greater enlarged scale;

FIG. 15 is a portion of a front view of the second embodiment of a wind turbine and rotor blade of a wind turbine in an enlarged scale, showing my new design;

FIG. 16 is a portion of a left side perspective view thereof;

FIG. 17 is a portion of a right side perspective view thereof;

FIG. 18 is a portion of an elevation view of a rotor blade thereof, in an enlarged scale;

FIG. 19 is an end perspective view of a rotor blade thereof, in an enlarged scale;

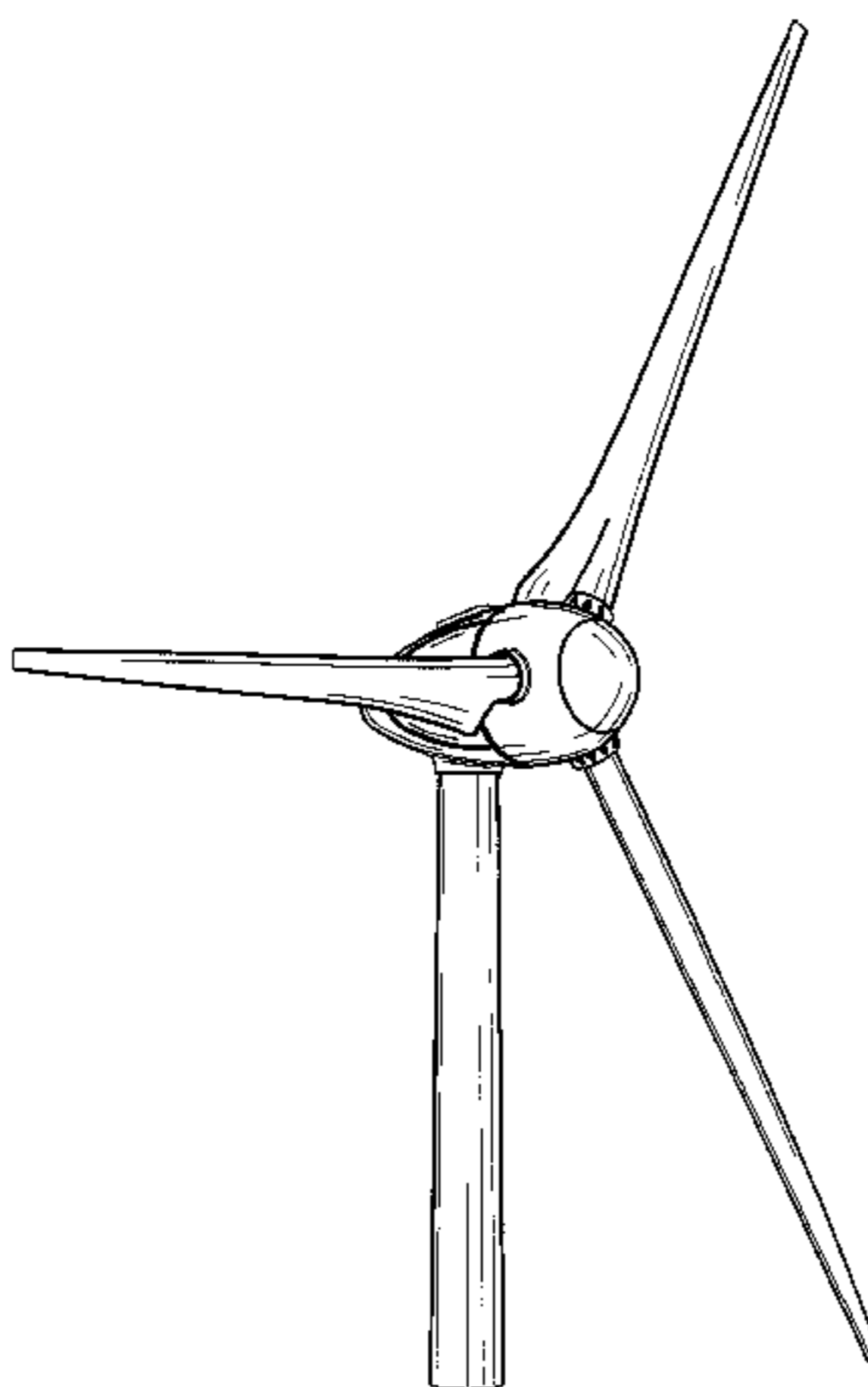
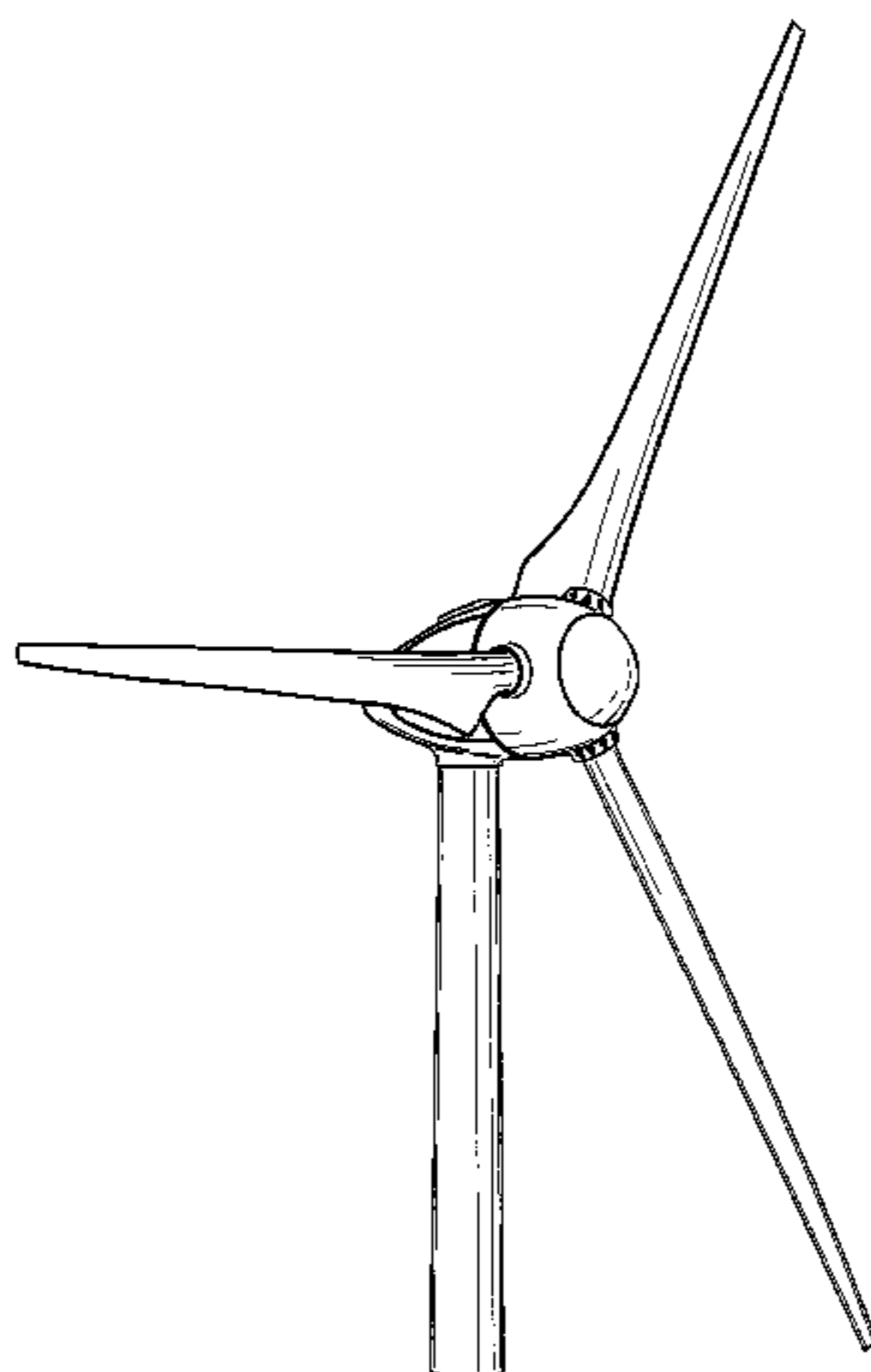
FIG. 20 is a front elevation view of a wind turbine and rotor blade of a wind turbine thereof;

FIG. 21 is a front and left side perspective view thereof; and,

FIG. 22 is a front and right side perspective view thereof.

FIGS. 6, 7, 8, 9, 10, 11, 12, 13, 18 and 19 show the rotor blades of the first and second embodiments of a wind turbine separately for convenience of illustration only.

**1 Claim, 18 Drawing Sheets**



U.S. PATENT DOCUMENTS

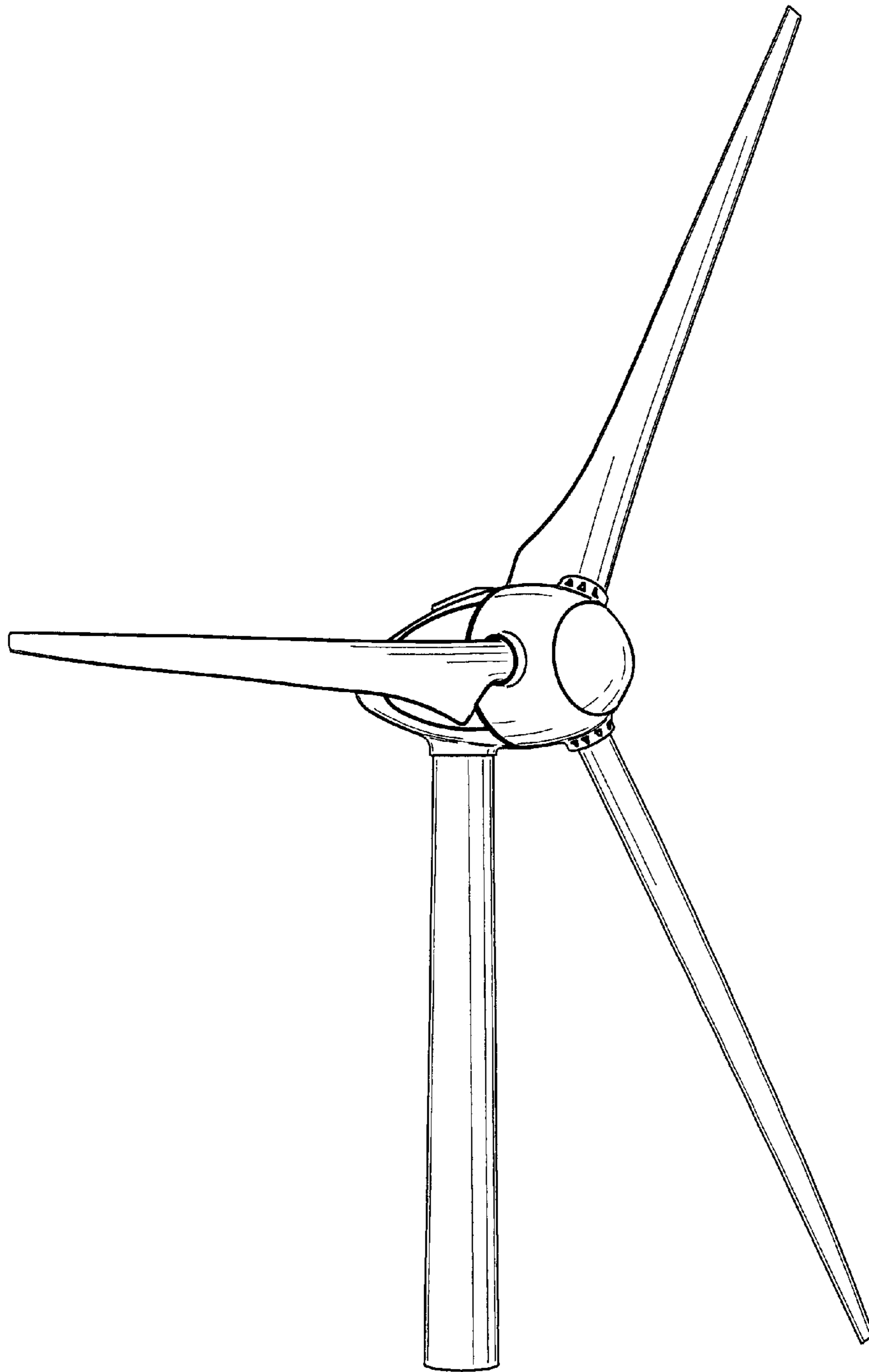
|              |      |         |                      |         |
|--------------|------|---------|----------------------|---------|
| 5,354,175    | A *  | 10/1994 | Coleman et al. ....  | 416/9   |
| 6,270,308    | B1 * | 8/2001  | Groppel .....        | 415/4.3 |
| D480,360     | S *  | 10/2003 | Bayly .....          | D13/115 |
| 2002/0153728 | A1 * | 10/2002 | Groppel .....        | 290/44  |
| 2003/0123973 | A1 * | 7/2003  | Murakami .....       | 415/4.1 |
| 2004/0057828 | A1 * | 3/2004  | Bosche .....         | 416/1   |
| 2004/0201220 | A1 * | 10/2004 | Andersen et al. .... | 290/44  |

OTHER PUBLICATIONS

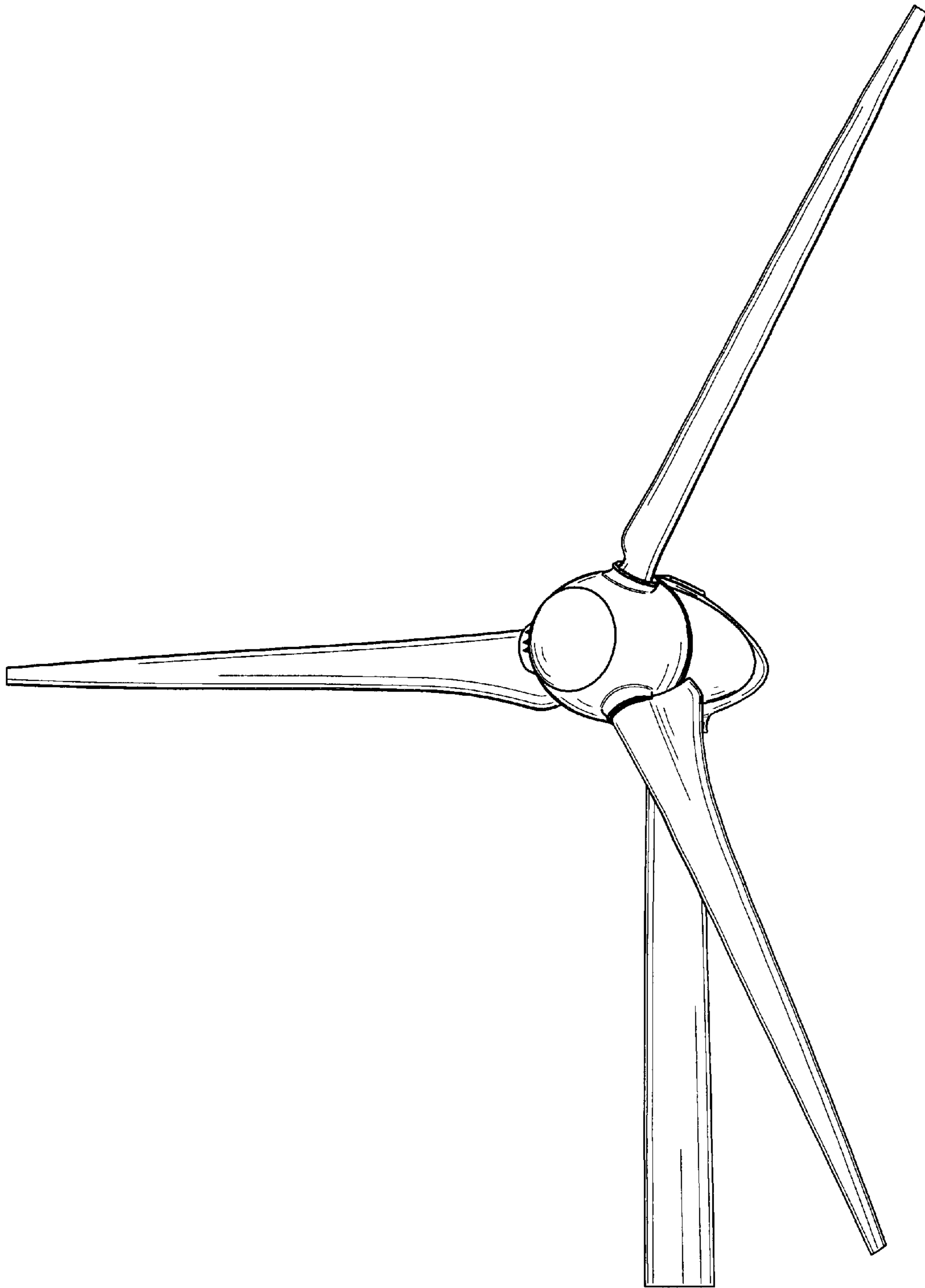
Suzlon "Powering a Greener Tomorrow" brochure.  
 Suzlon "Suzlon Wind Park Powering a Greener Tomorrow" brochure.  
 Suzlon "Suzlon Megapower Series" brochure.  
 Suzlon Suzlon "1000kW Megapower Powering a Greener Tomorrow" brochure.  
 N·E·G Micon "[Optimaler Auftrieb in jedem Klima][NM54/950 Power-Trim™]" brochure.  
 N·E·G Micon "WindMan® Express [Kontroll- und Überwachungssysteme für kleinere Windenergieanlagen][Die Verbindung zu Ihrer Windturbine]" brochure.  
 Nordex "S70/1500 kW S77/1500 kW The perfect technology for each location" Feb. 2002 brochure.

Nordex "S70/1500 kW S77/1500 kW Perfekte Technologie für jeden Standort" Feb. 2002 brochure.  
 Nordex "N50/800 kW Leading technology for first-class outputs" Feb. 2002 brochure.  
 Nordex "N80/2500 kW N90/2300 kW Mit Höchstleistung in die Zukunft" Feb. 2002 brochure.  
 Dehn + Söhne "DEHN Schützt Windenergieanlagen. DEHN protects Wind Turbines" 2002 brochure.  
 RWE Solutions "Komponenten, Netzinfrastrukturen und Managed Services für Windparks" brochure.  
 Dewind "elements Special Dewind magazine" Aug. 2002, pp. 1-48.  
 Scanvib "vibration engineering" 1 pg.  
 Jeumont Framatome Anp "J48 Innovative wind turbine" brochure.  
 Hau, E. "Windkraftanlagen" Grundlagen, Technik, Einsatz, Wirtschaftlichkeit - Verlag Berlin Heidelberg 1988 and 1996, Germany, pp. 8-9, 26-28, 31, 38-39, 48-49, 51, 511, 512-515, 579-580, and 600.  
 Luso "A10 New Concept Wind Power Generator."  
 Enercon, Dewind, Lagerwey and Suzlon, 1 pg.

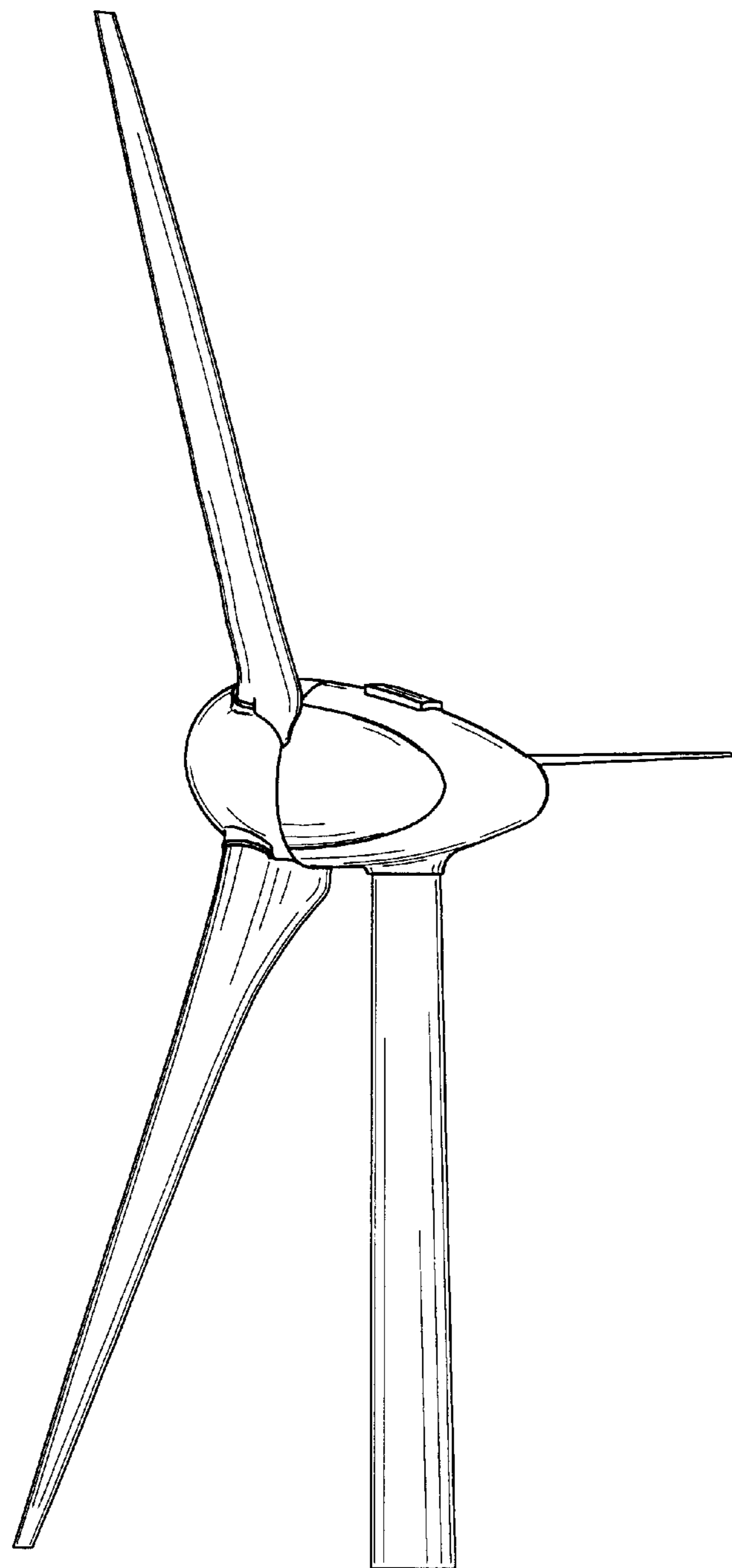
\* cited by examiner



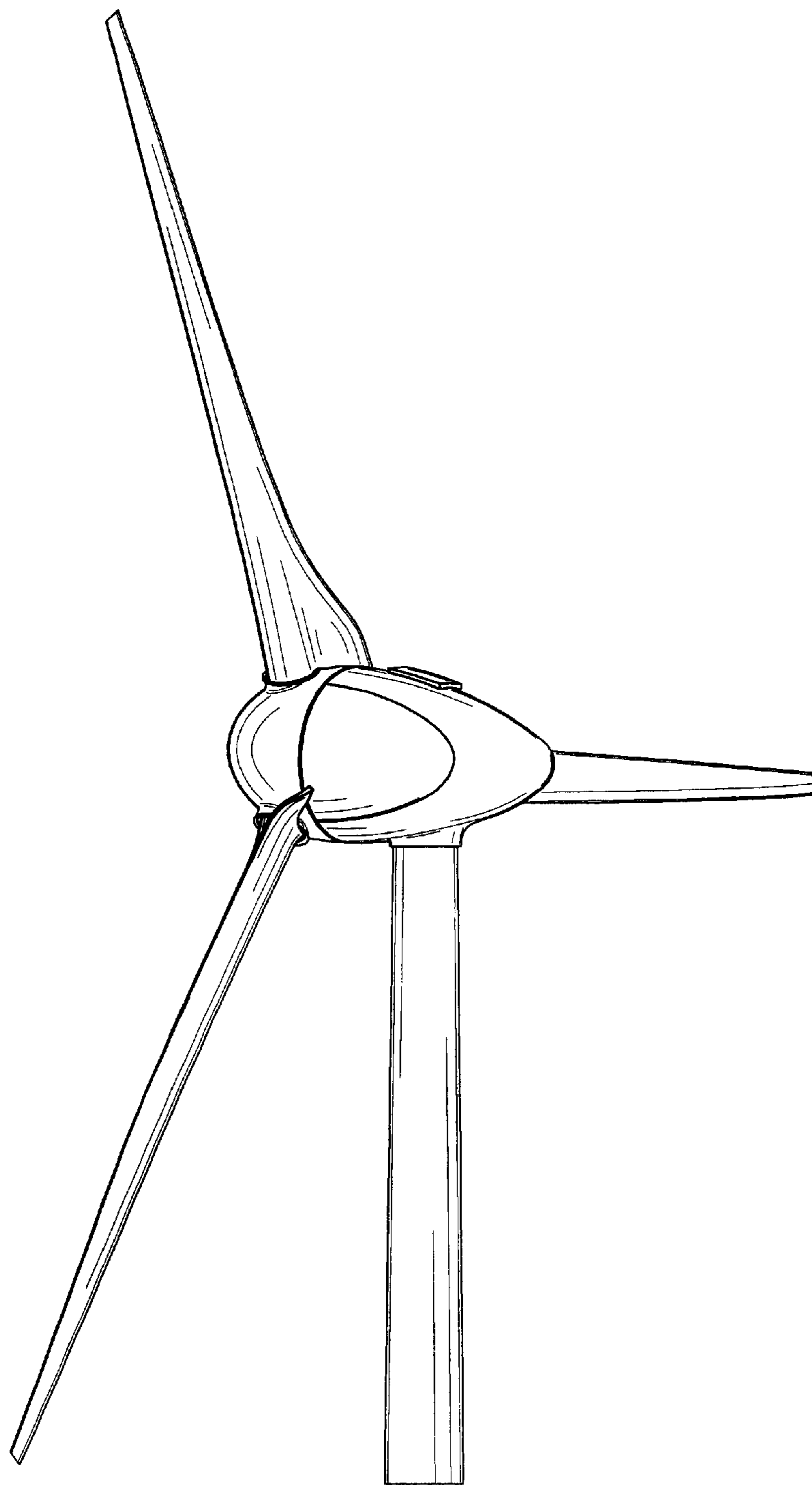
*FIG. 1*



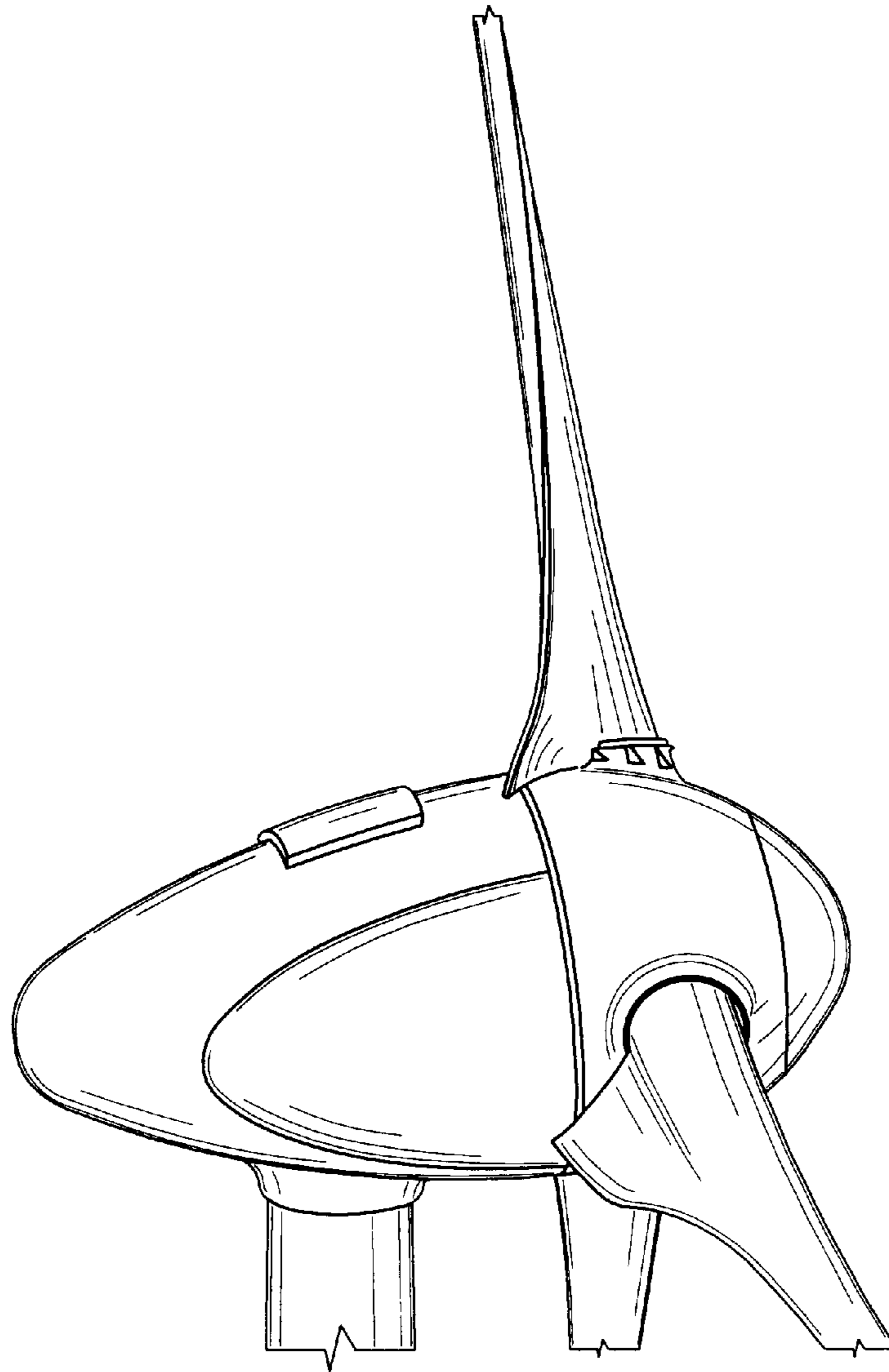
*FIG. 2*



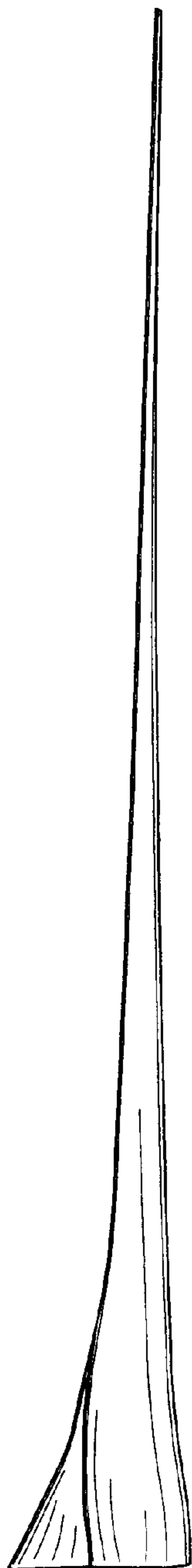
*FIG. 3*



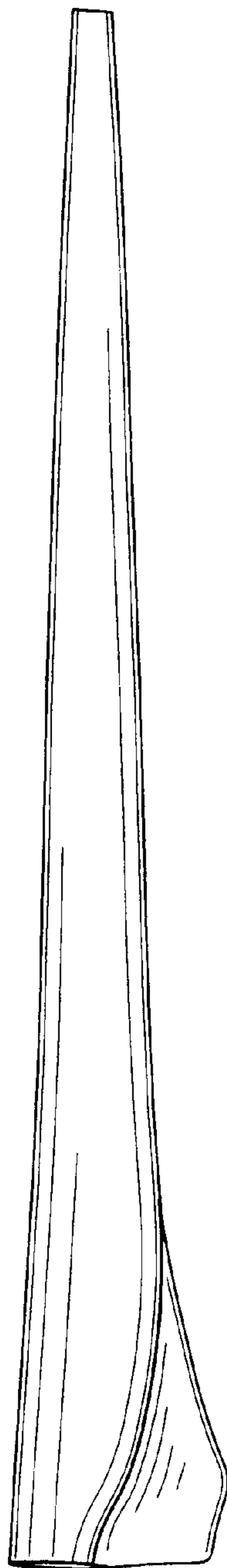
*FIG. 4*



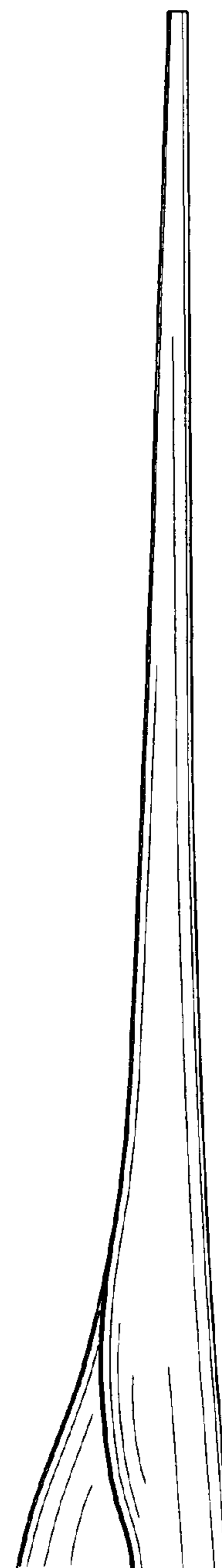
*FIG. 5*



*FIG. 6*



*FIG. 7*

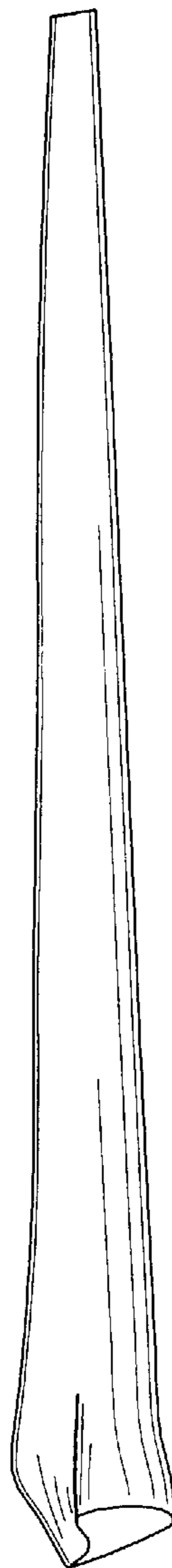


*FIG. 8*

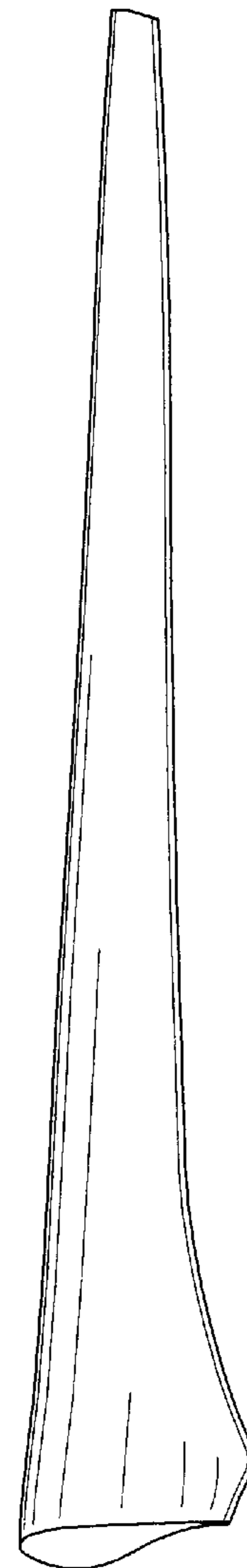




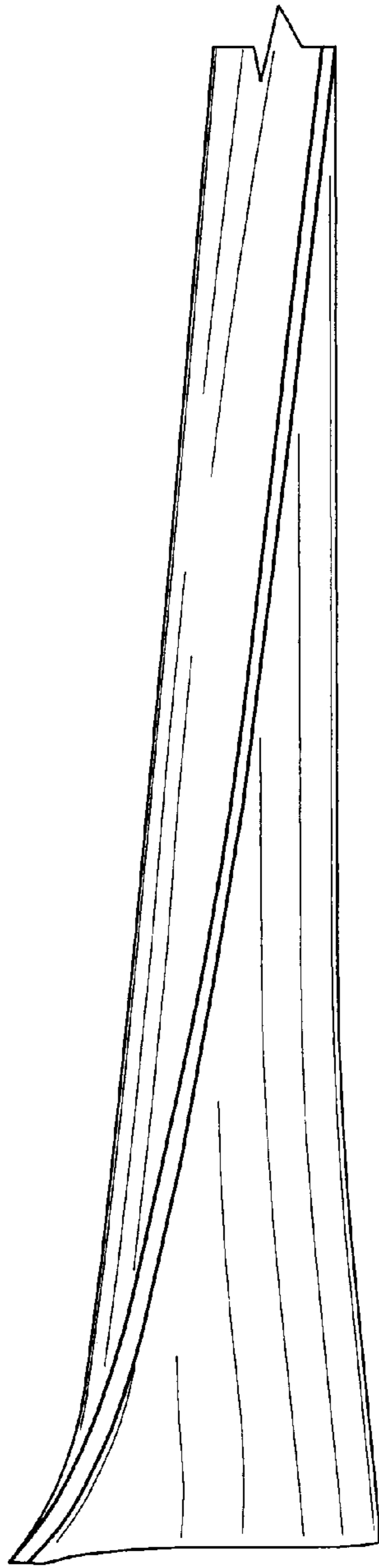
*FIG. 9*



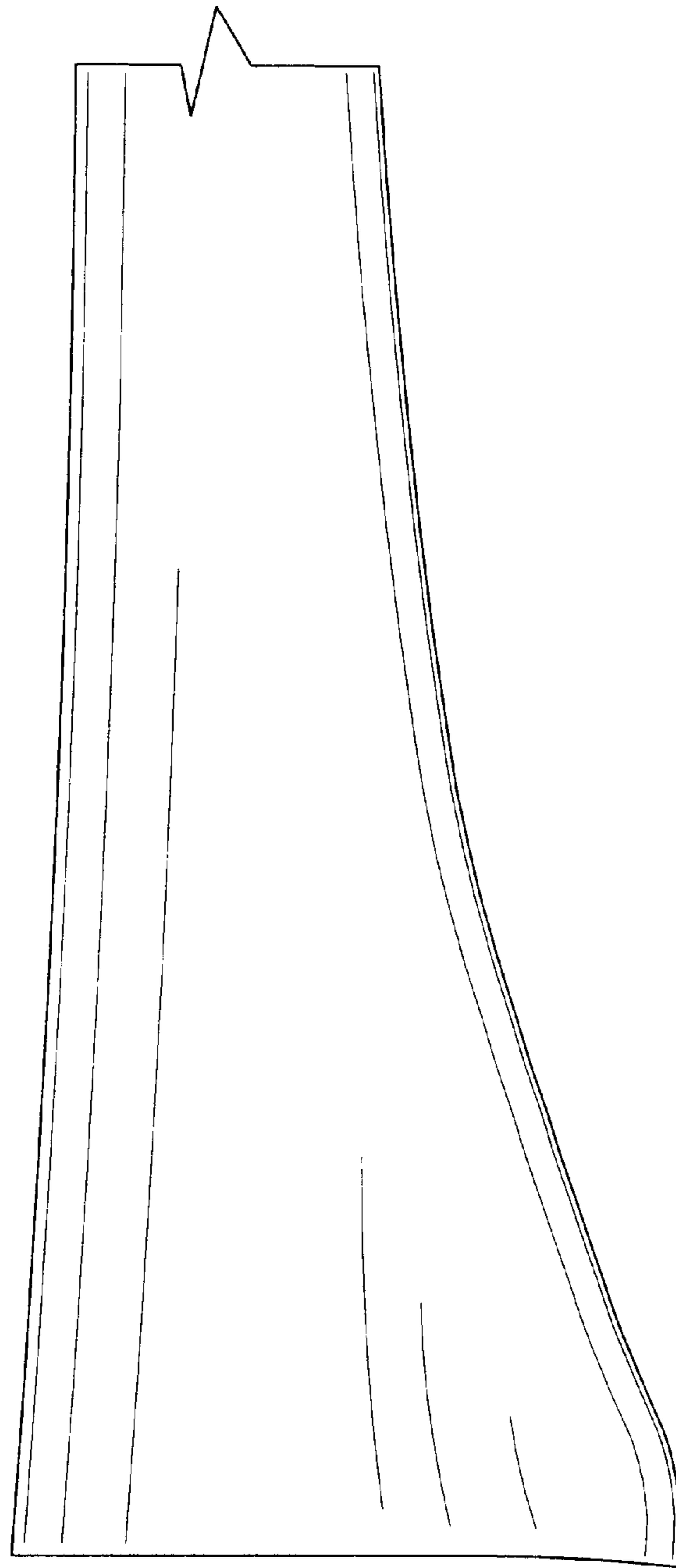
*FIG. 10*



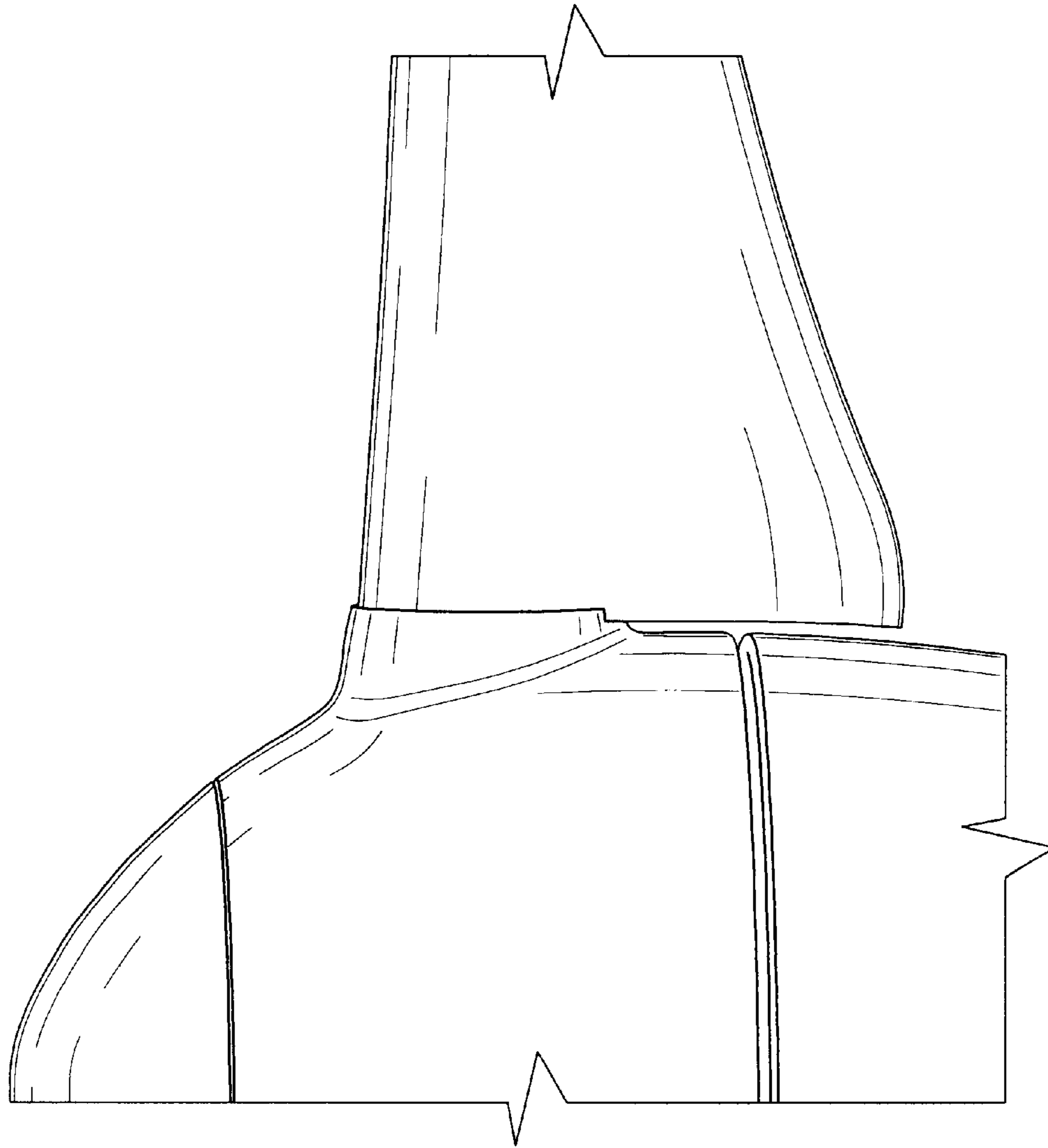
*FIG. 11*



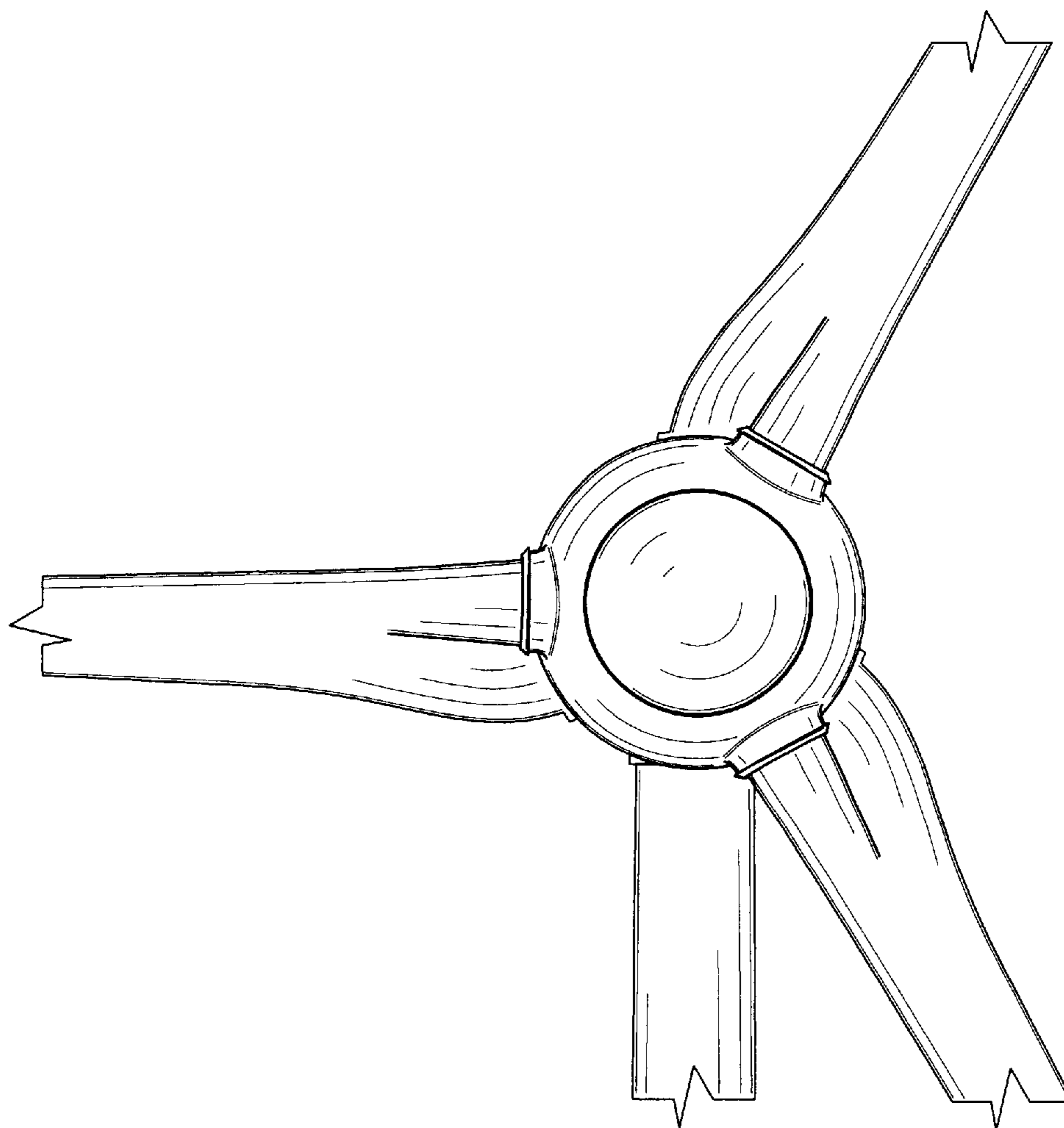
*FIG. 12*



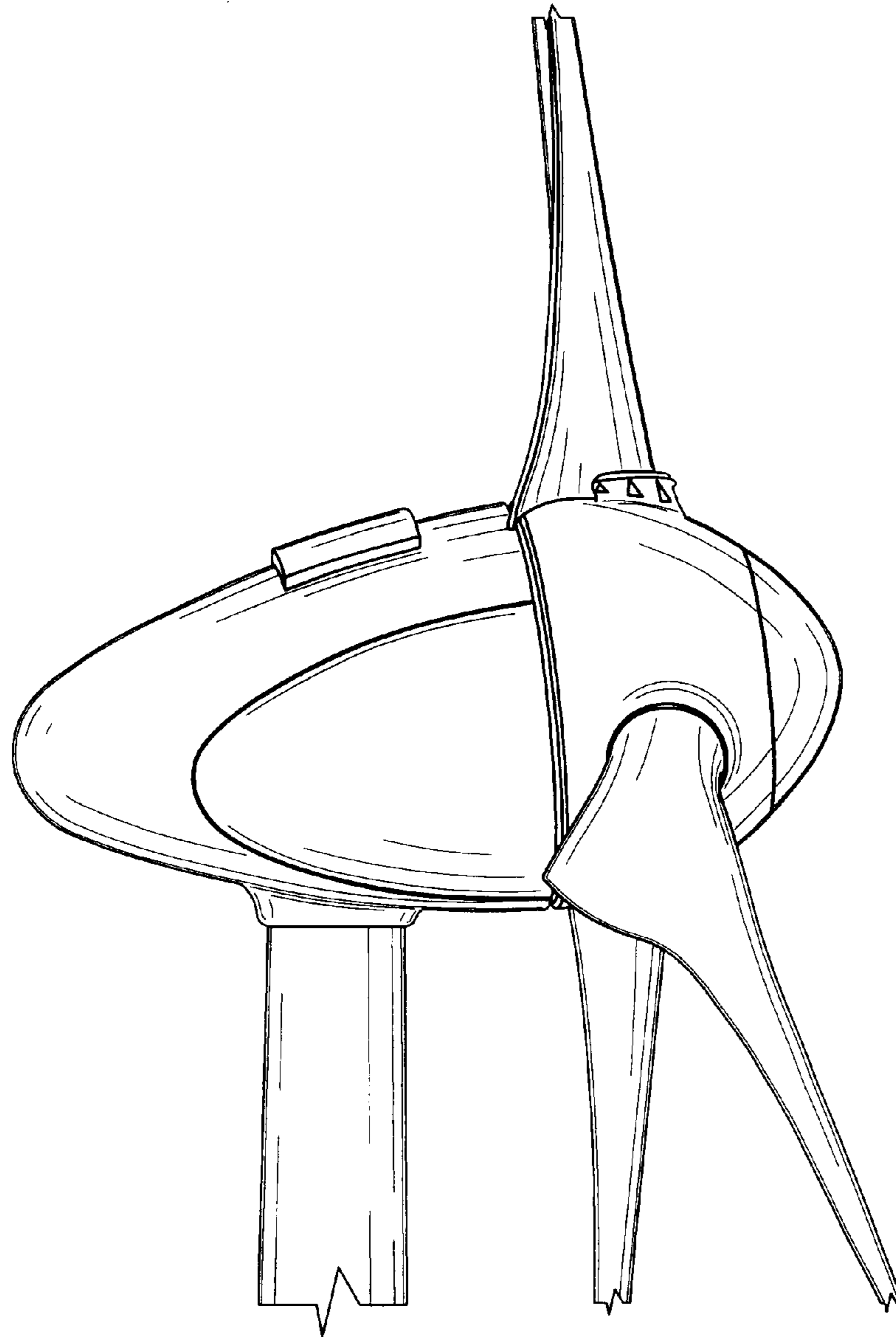
*FIG. 13*



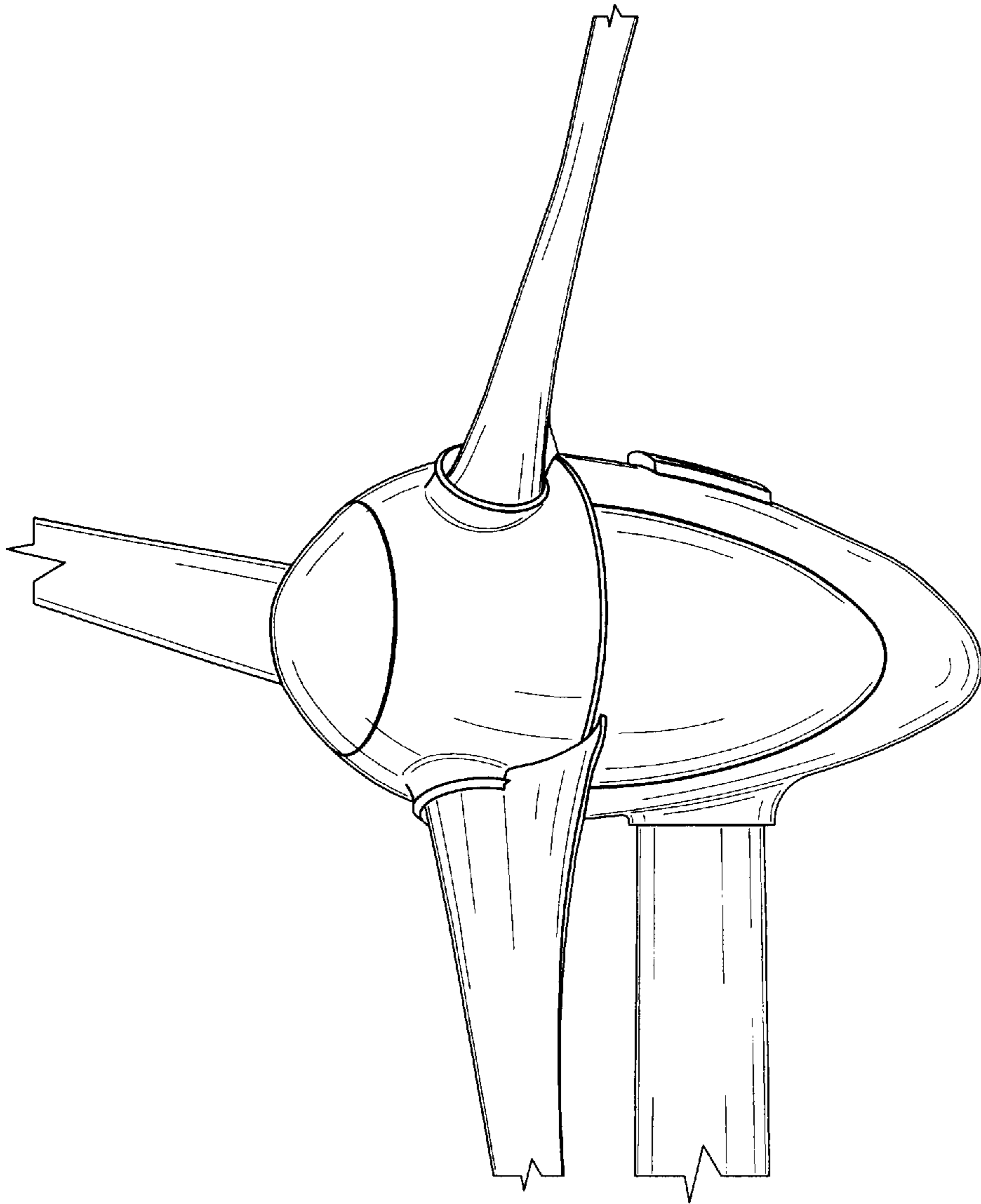
*FIG. 14*



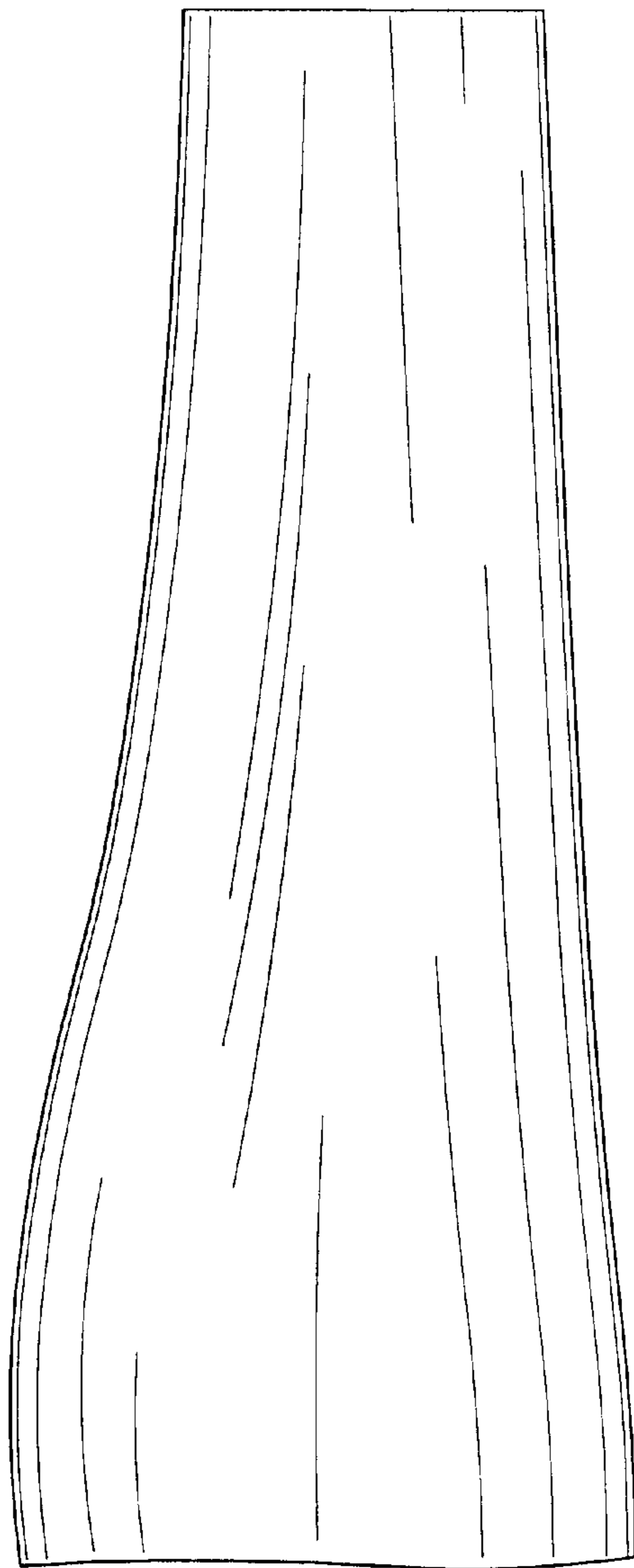
*FIG. 15*



*FIG. 16*



*FIG. 17*

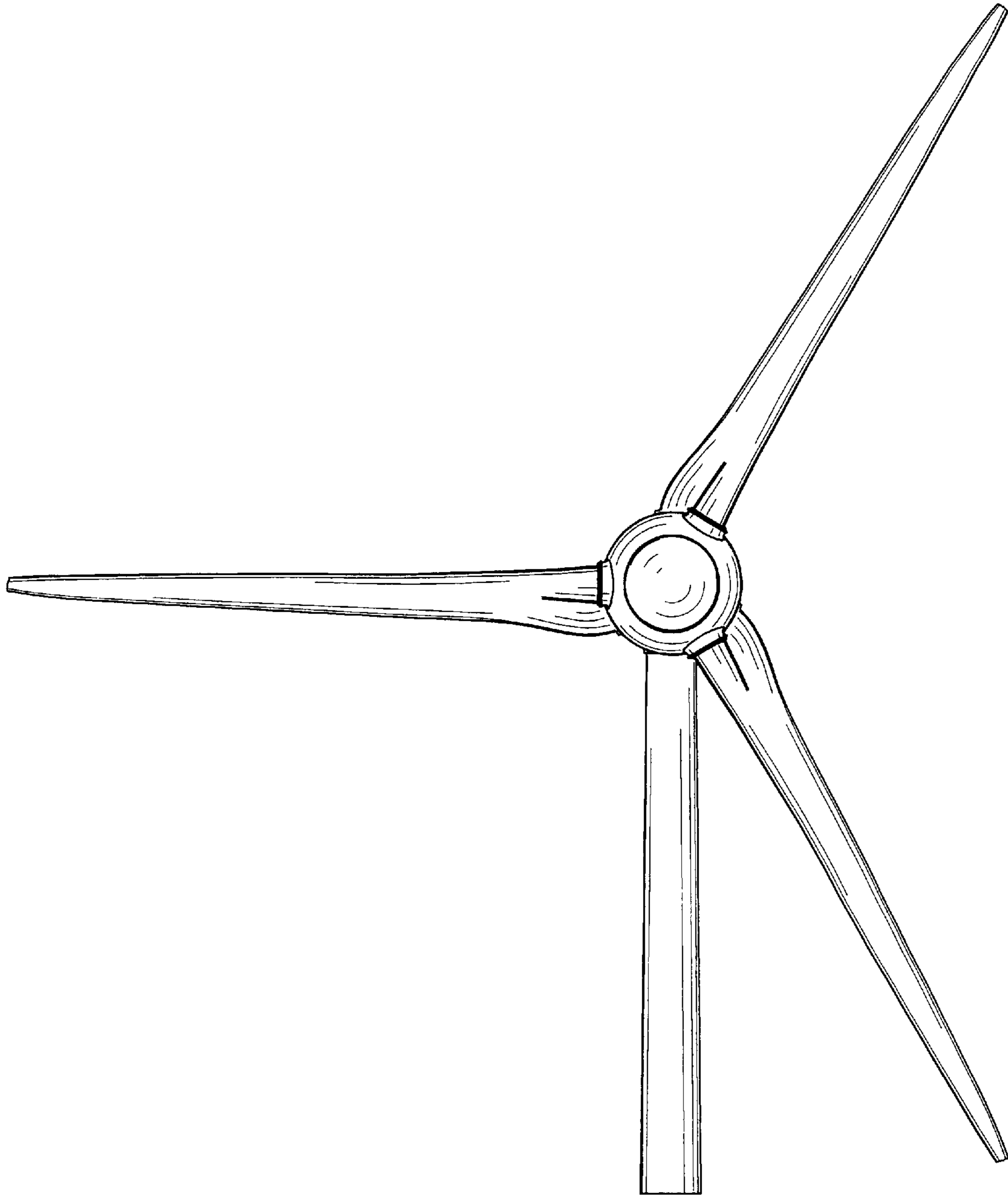


*FIG. 18*

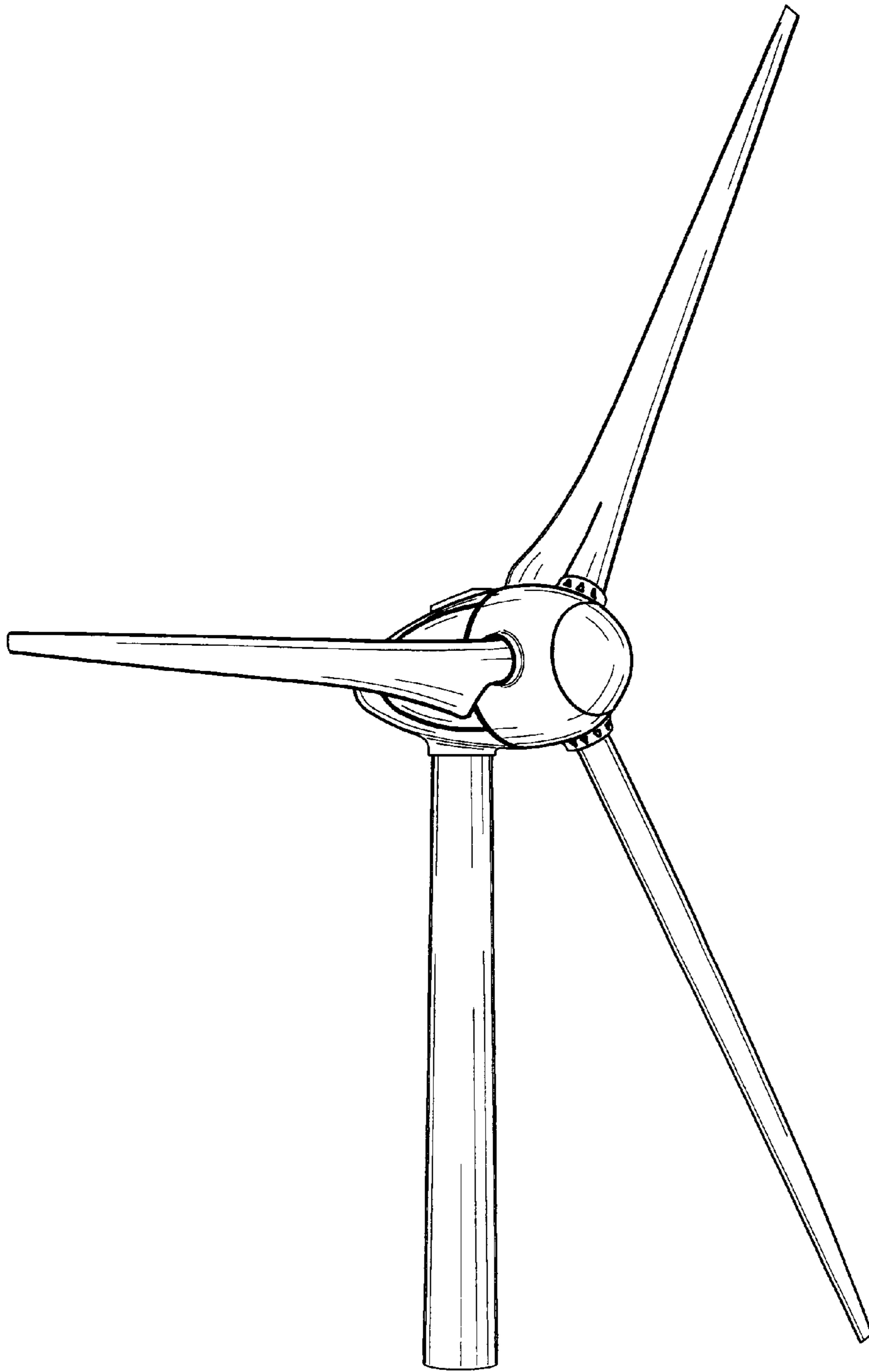




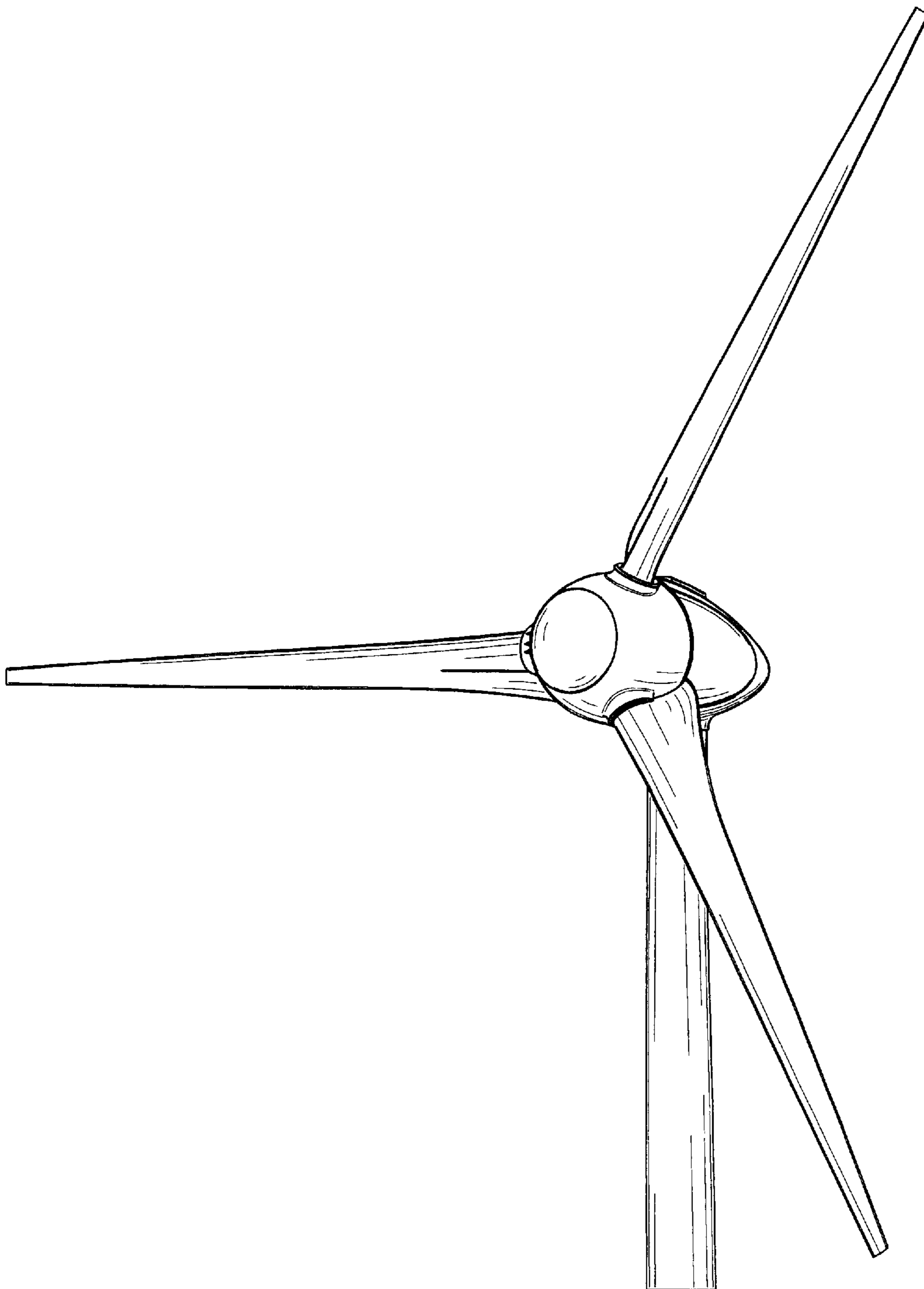
*FIG. 19*



*FIG. 20*



*FIG. 21*



*FIG. 22*