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(12) **United States Design Patent** (10) **Patent No.:** **US D803,378 S**
Hamada et al. (45) **Date of Patent:** **** Nov. 21, 2017**

(54) **PROPELLER FAN**

(56) **References Cited**

(71) Applicant: **mitsubishi electric CORPORATION**, Tokyo (JP)

U.S. PATENT DOCUMENTS

(72) Inventors: **Shingo Hamada**, Tokyo (JP); **Koji Sachimoto**, Tokyo (JP); **Yosuke Kikuchi**, Tokyo (JP); **Hajime Ikeda**, Tokyo (JP); **Takashi Kobayashi**, Tokyo (JP); **Seiji Hirakawa**, Tokyo (JP); **Hiroshi Yoshikawa**, Tokyo (JP); **Hidetomo Nakagawa**, Tokyo (JP); **Hiroaki Makino**, Tokyo (JP)

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(**) Term: **15 Years**

(57) **CLAIM**

The ornamental design for a propeller fan, as shown and described.

(21) Appl. No.: **29/588,716**

DESCRIPTION

(22) Filed: **Dec. 22, 2016**

Related U.S. Application Data

(62) Division of application No. 29/543,720, filed on Oct. 27, 2015, now Pat. No. Des. 782,639.

FIG. 1. is a front perspective view of the front, right, and bottom sides of a propeller fan showing a first embodiment of our new design;
FIG. 2. is a front view thereof;
FIG. 3. is a rear view thereof;
FIG. 4. is a left side view thereof;
FIG. 5. is a right side view thereof;
FIG. 6. is a top plan view thereof;
FIG. 7. is a bottom view thereof;
FIG. 8. is an enlarged view at a part 8 of FIG. 1;
FIG. 9. is a front perspective view of the front, right, and bottom sides of a propeller fan showing a second embodiment of our new design;
FIG. 10. is a front view thereof;
FIG. 11. is a rear view thereof;
FIG. 12. is a left side view thereof;
FIG. 13. is a right side view thereof;
FIG. 14. is a top plan view thereof;
FIG. 15. is a bottom view thereof; and,
FIG. 16. is an enlarged view at a part 16 of FIG. 9.

(30) **Foreign Application Priority Data**

Jun. 24, 2015 (JP) 2015-013870
Jun. 24, 2015 (JP) 2015-013871
Jun. 24, 2015 (JP) 2015-013873
Jun. 24, 2015 (JP) 2015-013874

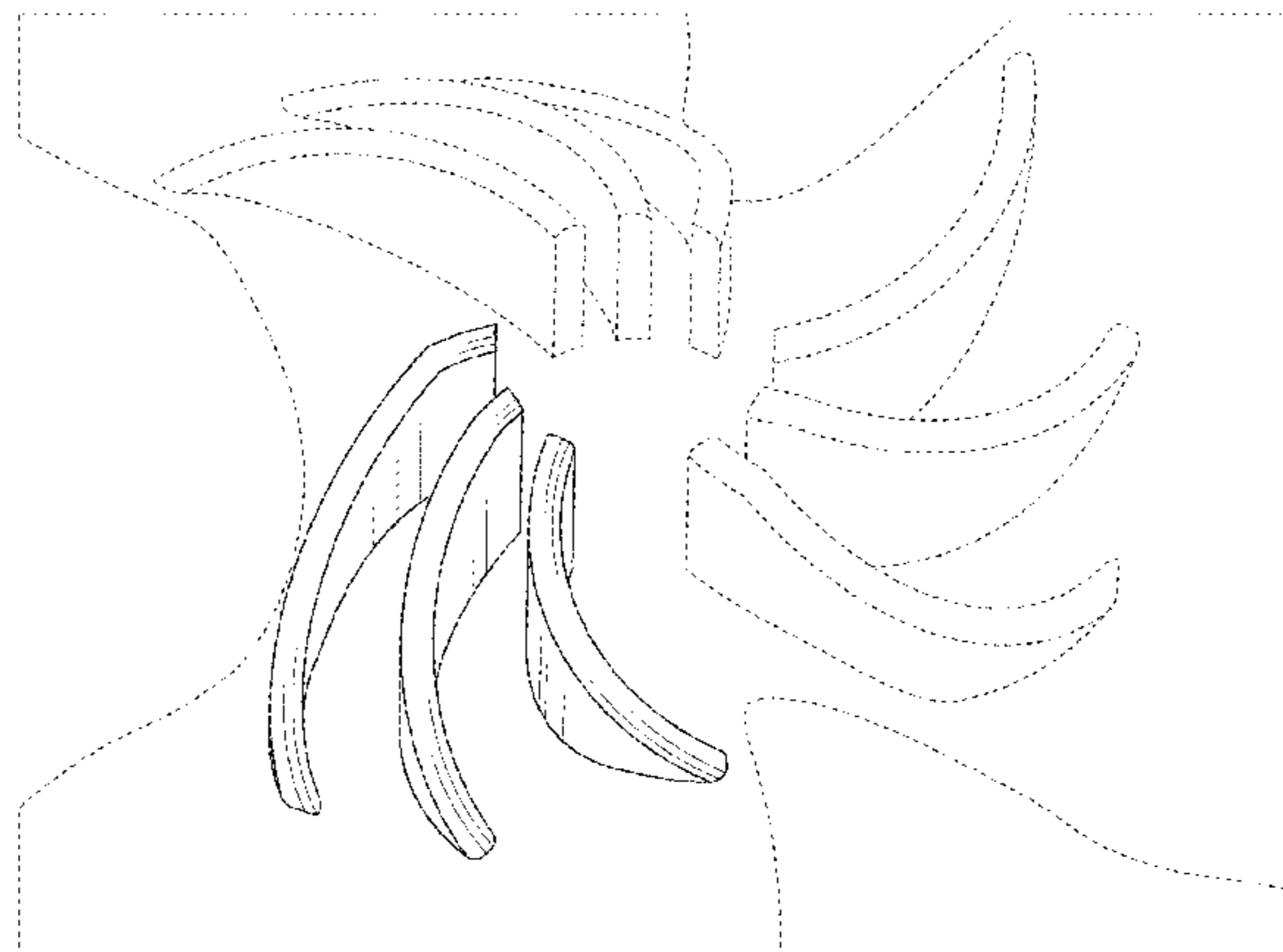
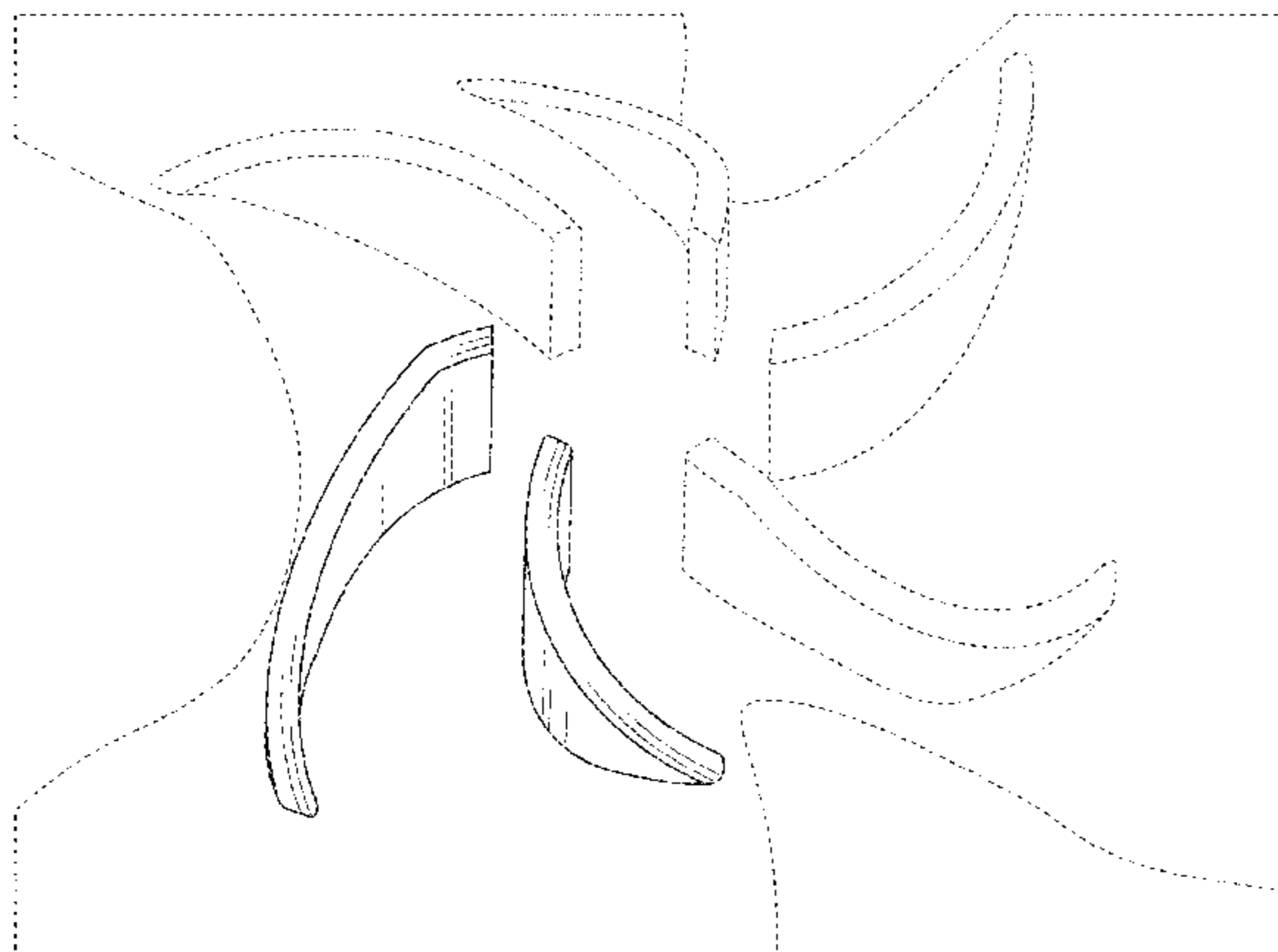
The broken lines shown represent unclaimed subject matter of the propeller fan and form no part of the claimed design. The dash-dot lines represent the boundary between the claimed design and unclaimed design.

(51) **LOC (10) Cl.** **23-04**
(52) **U.S. Cl.**
USPC **D23/370**

(58) **Field of Classification Search**
USPC D23/370, 355, 314, 371; 415/121.1
CPC F04D 29/329; F04D 29/526; F04D 25/082;
F04D 29/325; F04D 29/703; F04D 29/547;

(Continued)

1 Claim, 12 Drawing Sheets



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(58) **Field of Classification Search**

CPC B65D 90/36; F23L 17/02; F24F 13/1406;
F24F 1/02

See application file for complete search history.

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Fig. 1

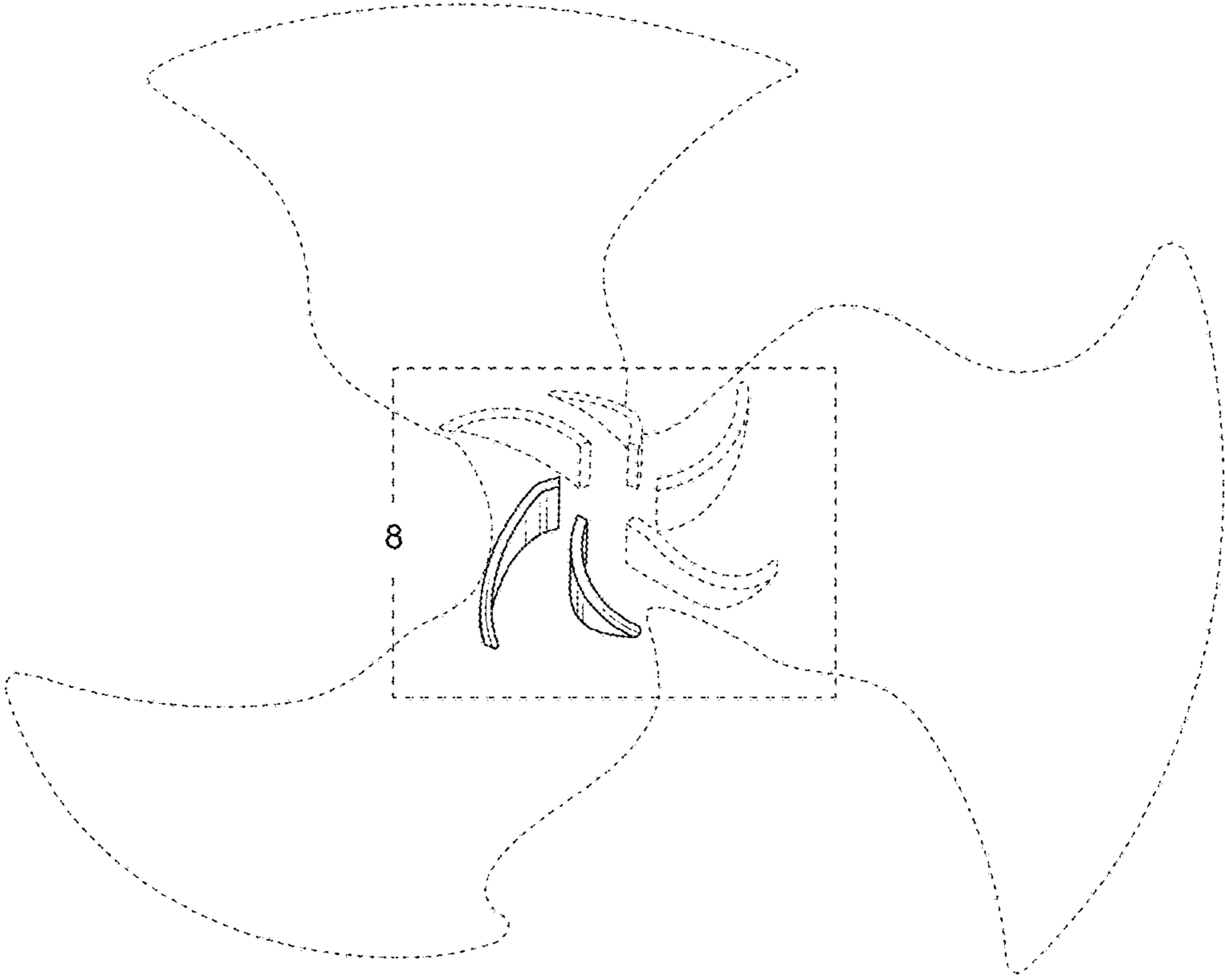


Fig. 2

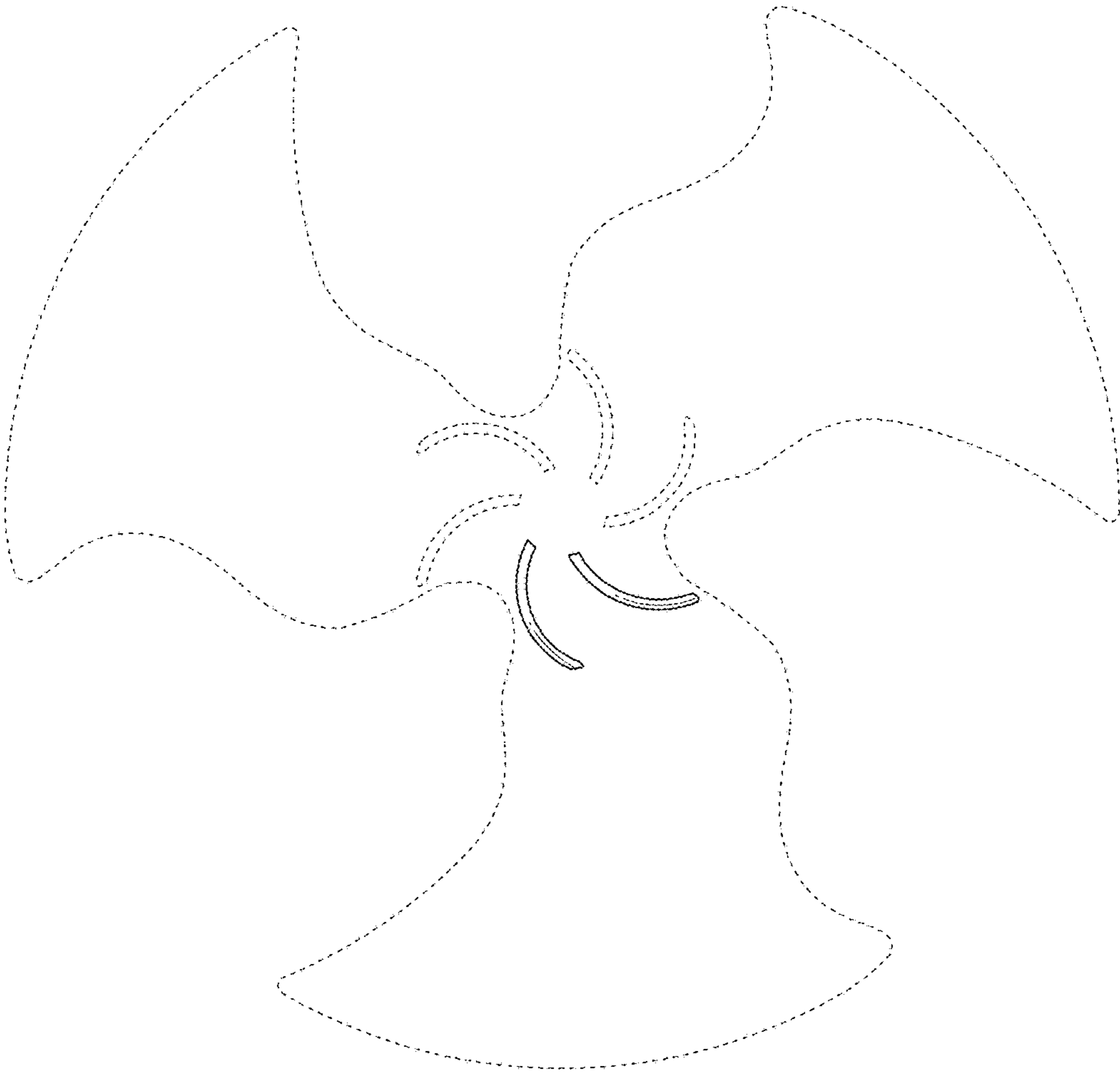


Fig. 3

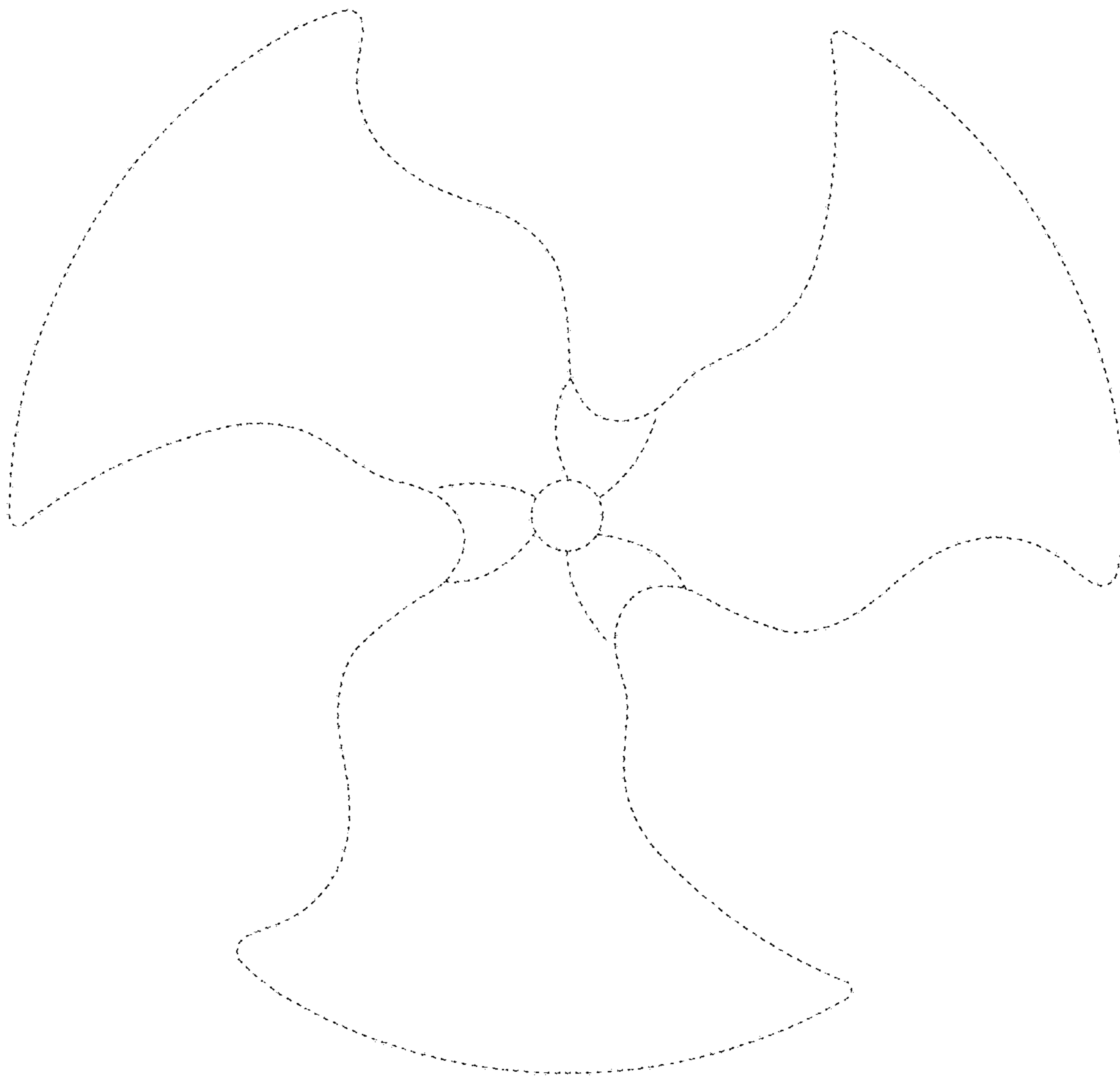


Fig. 4

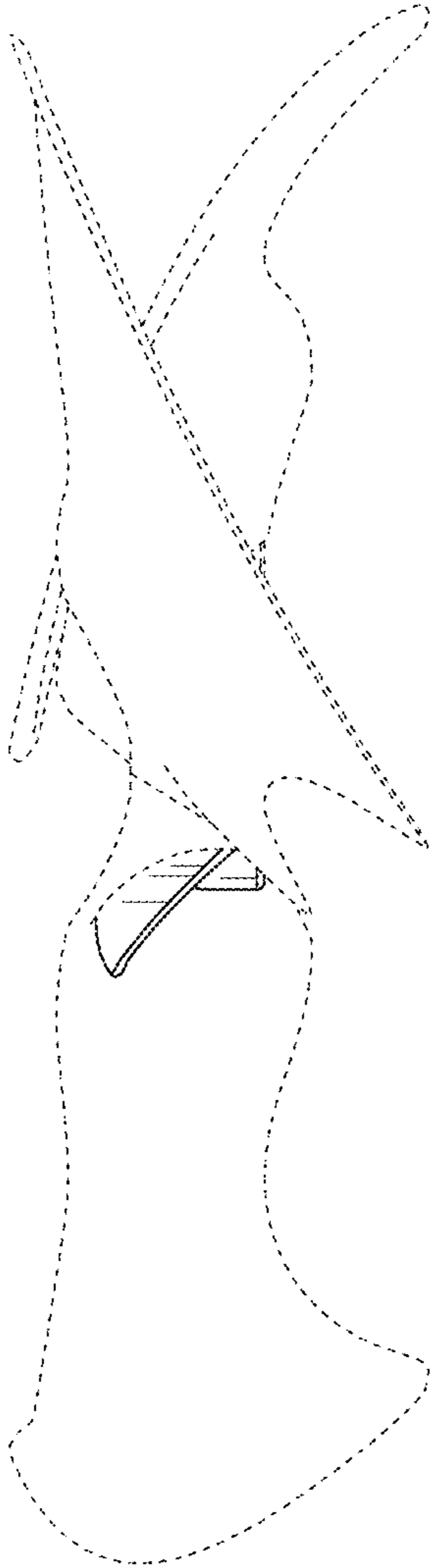


Fig. 5

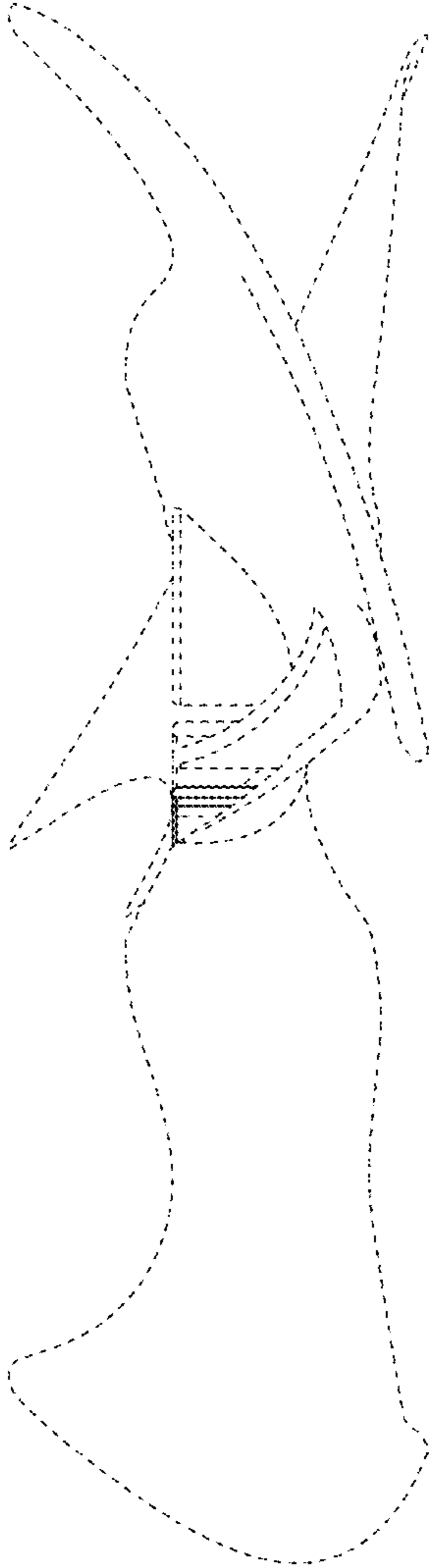


Fig. 6

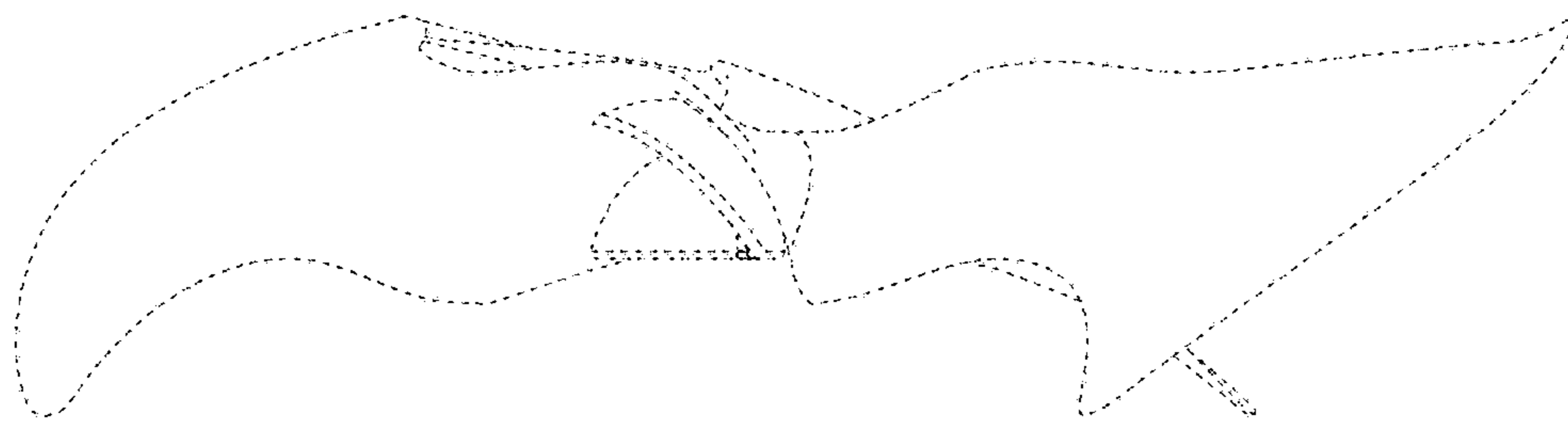


Fig. 7

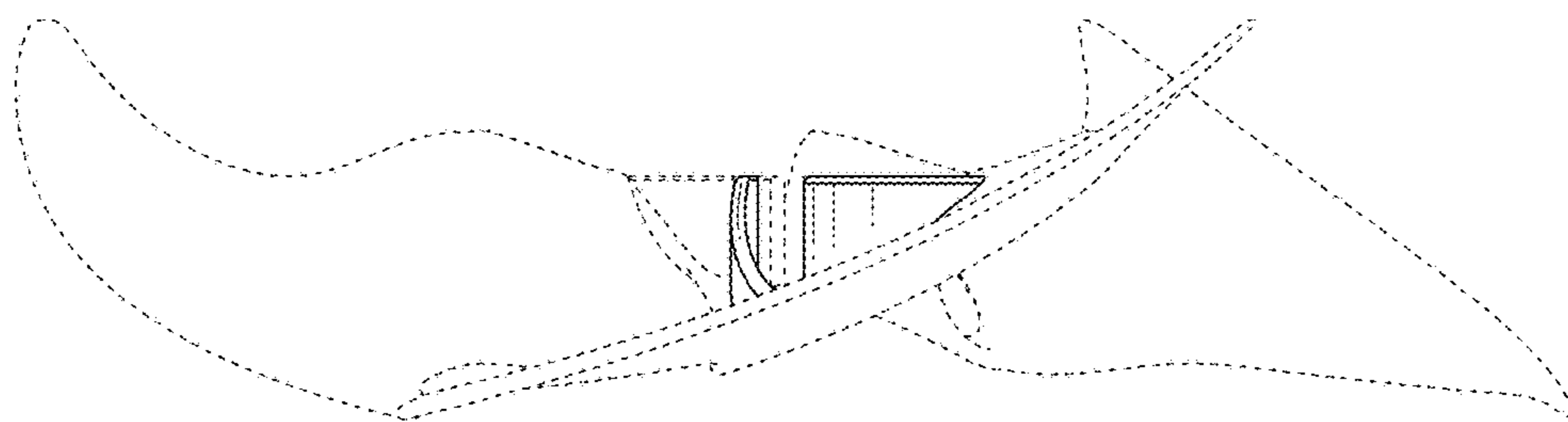


Fig. 8

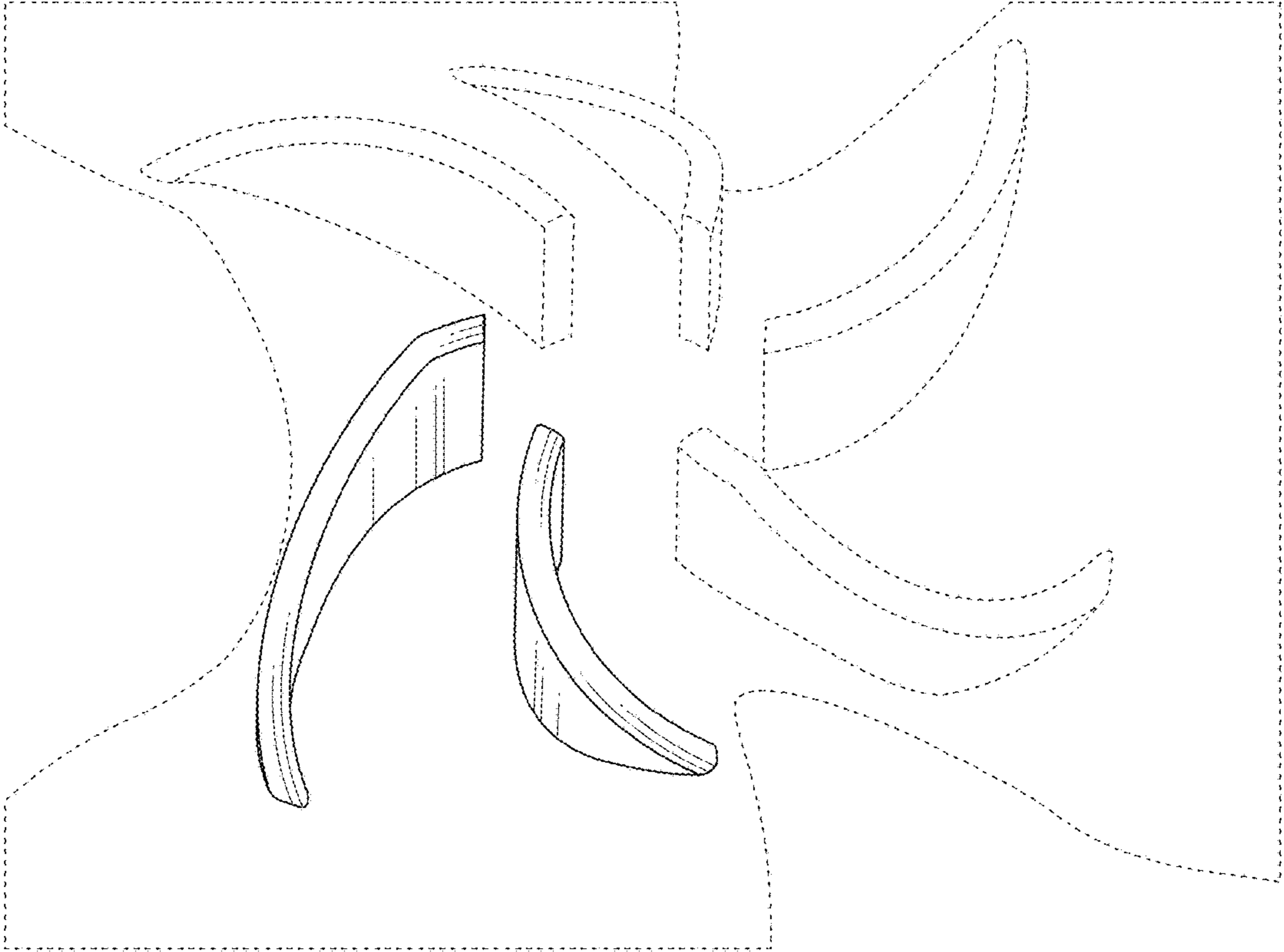


Fig. 9

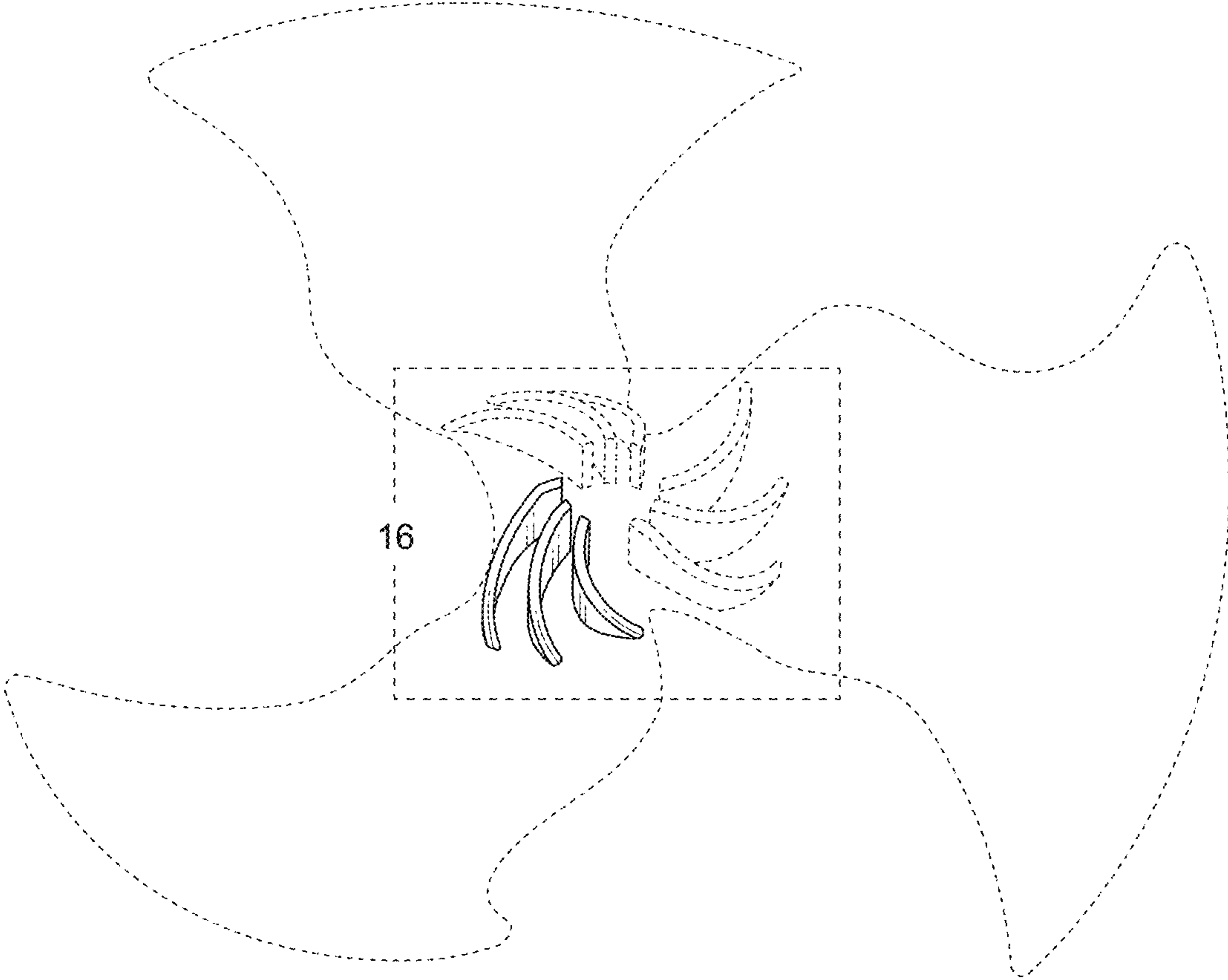


Fig. 10

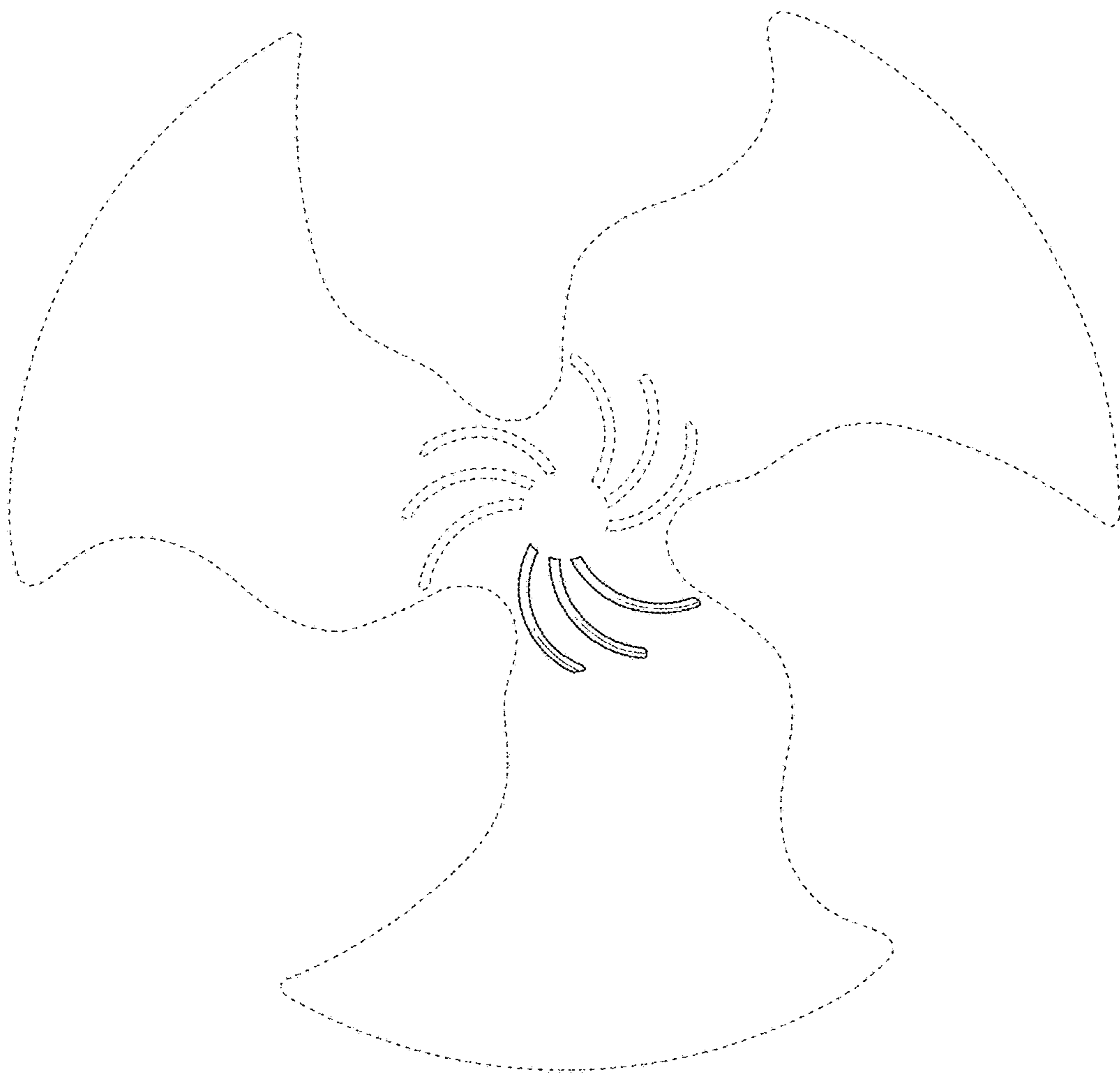


Fig. 11

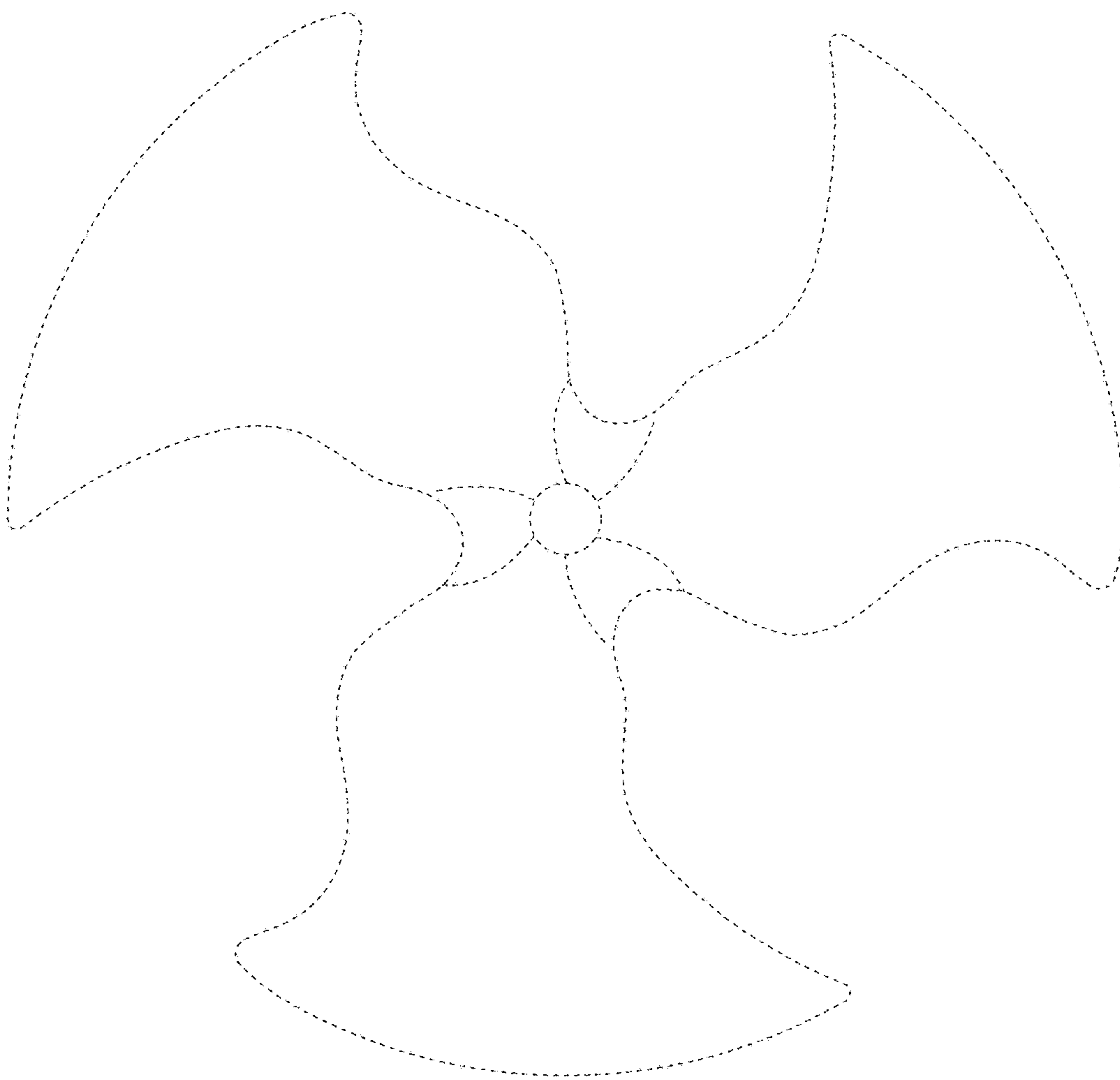


Fig. 12

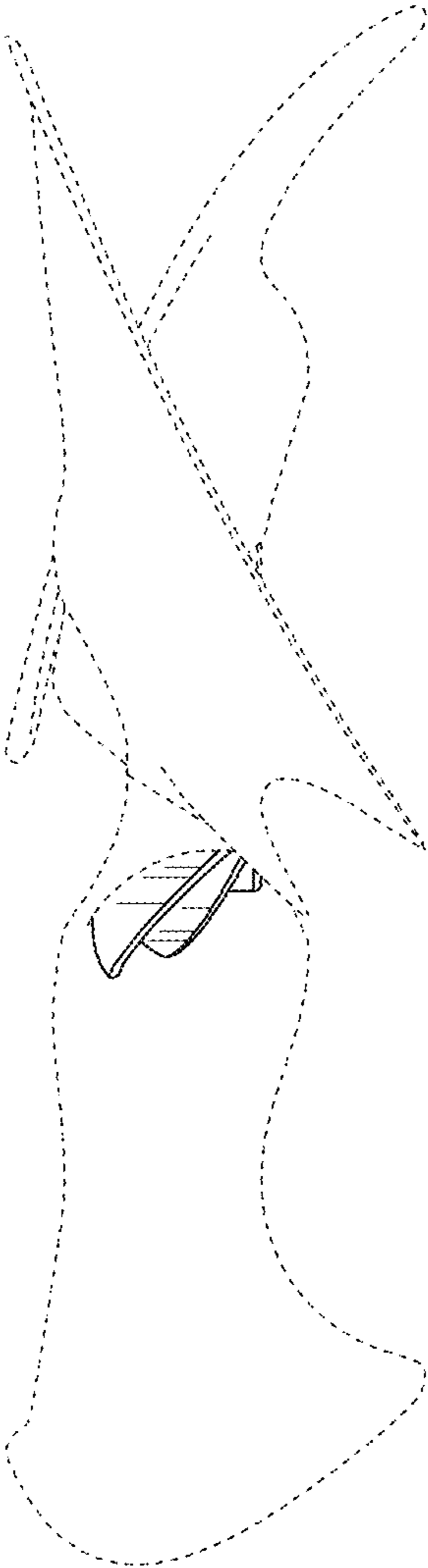


Fig. 13

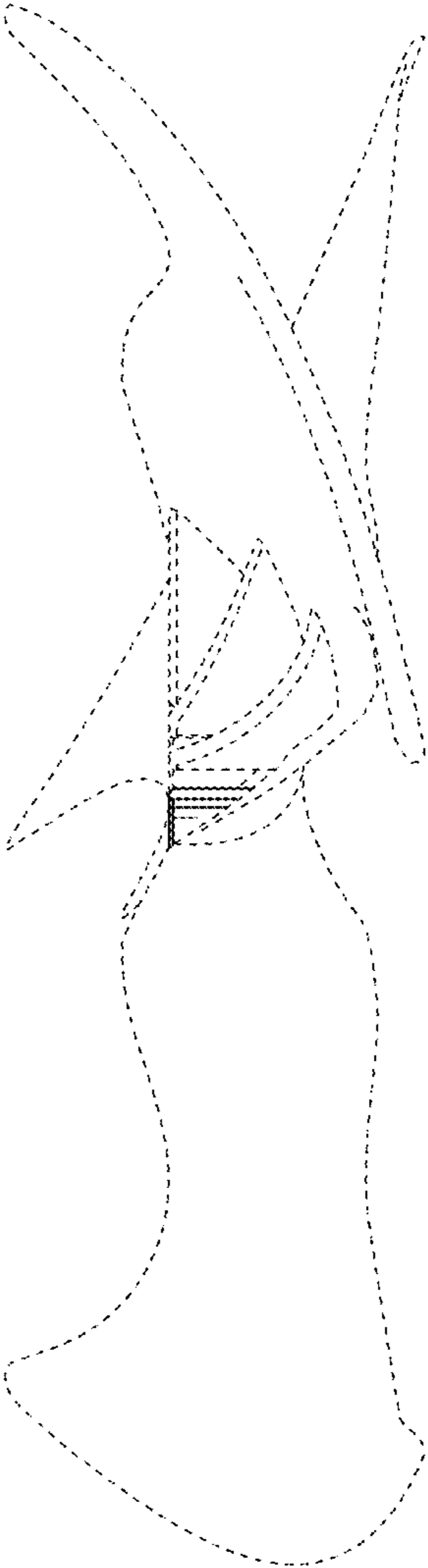


Fig. 14

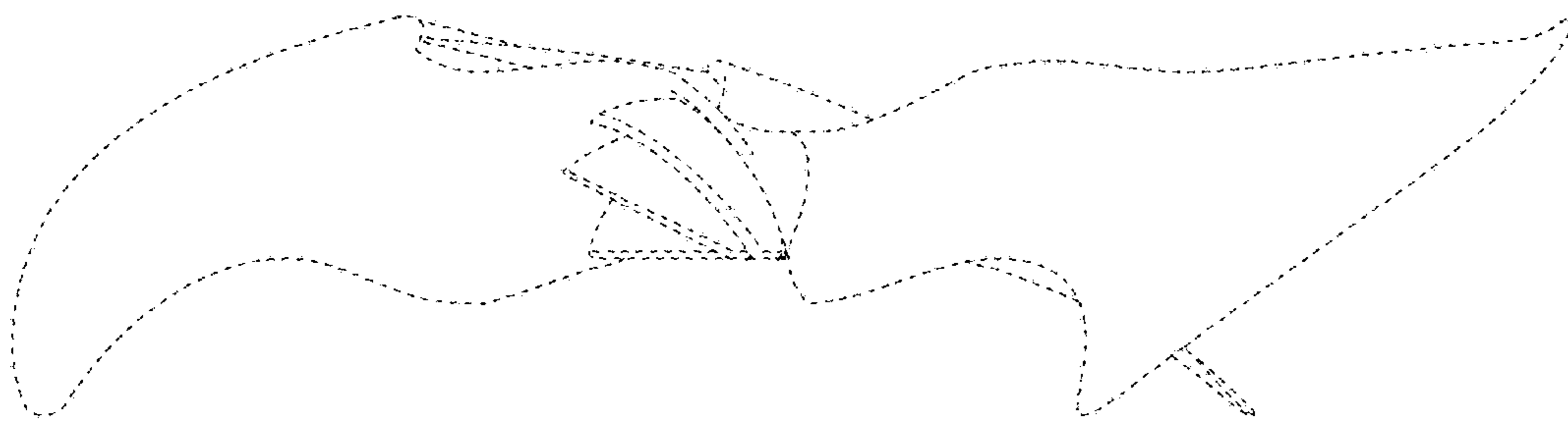


Fig. 15

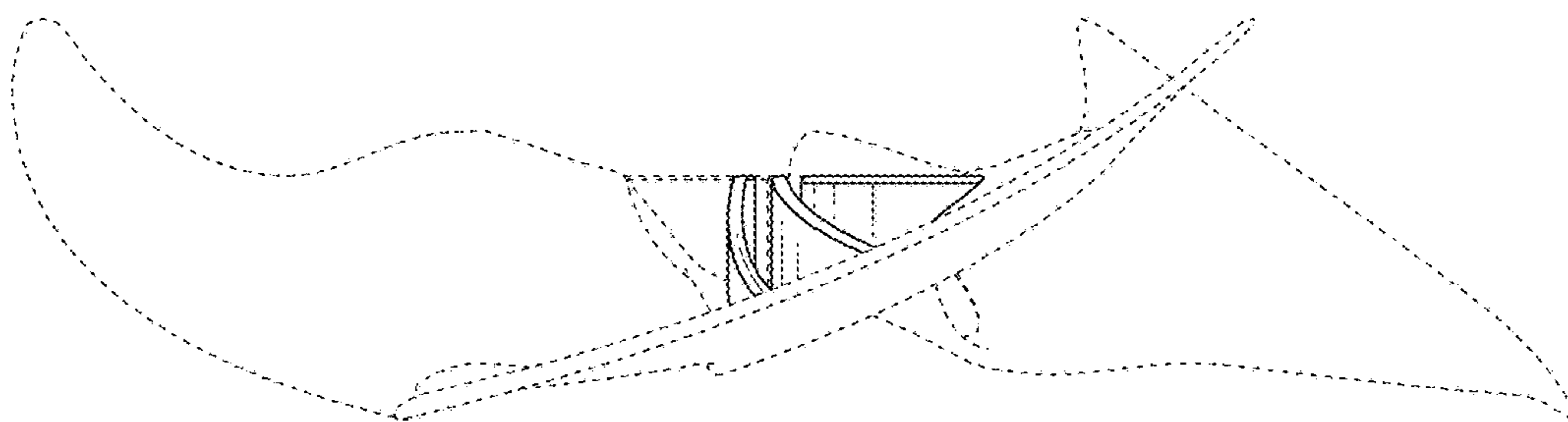


Fig. 16

