



US00D911289S

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

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(45) **Date of Patent:** **** Feb. 23, 2021**

(54) **CONNECTOR**

(71) Applicant: **ITOH DENKI CO., LTD.**, Kasai (JP)

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(73) Assignee: **ITOH DENKI CO., LTD.**, Kasai (JP)

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

(21) Appl. No.: **29/670,662**

(22) Filed: **Nov. 19, 2018**

(30) **Foreign Application Priority Data**

Jun. 14, 2018 (JP) 2018-013095 U

(51) **LOC (13) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/146**

(58) **Field of Classification Search**
USPC D13/107, 110, 118, 123, 133, 146, 147,
D13/153, 154, 173, 184, 199

(Continued)

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Primary Examiner — Shawn T Gingrich

(74) *Attorney, Agent, or Firm* — Alleman Hall Creasman & Tuttle LLP

(57) **CLAIM**

The ornamental design for a connector, as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of a connector having male and female portions.

FIG. 2 is a rear elevational view of the connector of FIG. 1.

FIG. 3 is a top plan view of the connector of FIG. 1.

FIG. 4 is a bottom plan view of the connector of FIG. 1.

FIG. 5 is a left side elevational view of the connector of FIG. 1.

FIG. 6 is a right side elevational view of the connector of FIG. 1.

FIG. 7 is a perspective view of the connector of FIG. 1.

FIG. 8 is a perspective view of the connector of FIG. 1 in use.

FIG. 9 is a section view of the connector of FIG. 1, taken along line 9-9 in FIG. 3.

FIG. 10 is a front elevational view of the male portion of the connector of FIG. 1, shown separately for clarity of illustration.

FIG. 11 is a rear elevational view of the male portion of the connector of FIG. 1.

FIG. 12 is a top plan view of the male portion of the connector of FIG. 1.

FIG. 13 is a bottom plan view of the male portion of the connector of FIG. 1.

FIG. 14 is a left side elevational view of the male portion of the connector of FIG. 1.

FIG. 15 is a right side elevational view of the male portion of the connector of FIG. 1.

FIG. 16 is a perspective view of the male portion of the connector of FIG. 1.

FIG. 17 is a perspective view of the male portion of the connector of FIG. 1 in use.

FIG. 18 is a section view of the male portion of the connector of FIG. 1, taken along line 18-18 in FIG. 12.

FIG. 19 is a front elevational view of the female portion of the connector of FIG. 1, shown separately for clarity of illustration.

FIG. 20 is a rear elevational view of the female portion of the connector of FIG. 1.

FIG. 21 is a top plan view of the female portion of the connector of FIG. 1.

FIG. 22 is a bottom plan view of the female portion of the connector of FIG. 1.

FIG. 23 is a left side elevational view of the female portion of the connector of FIG. 1.

FIG. 24 is a right side elevational view of the female portion of the connector of FIG. 1.

(Continued)

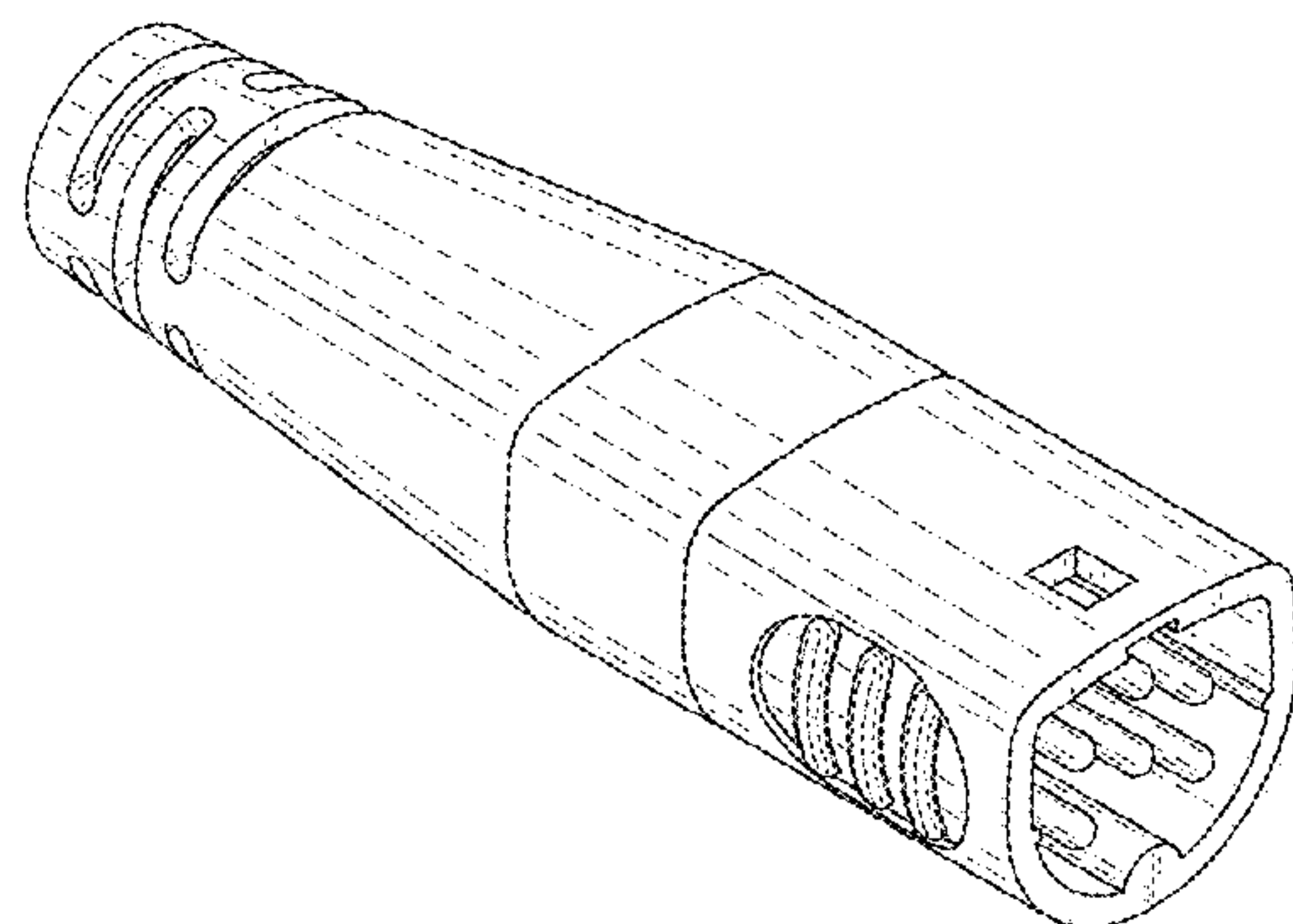
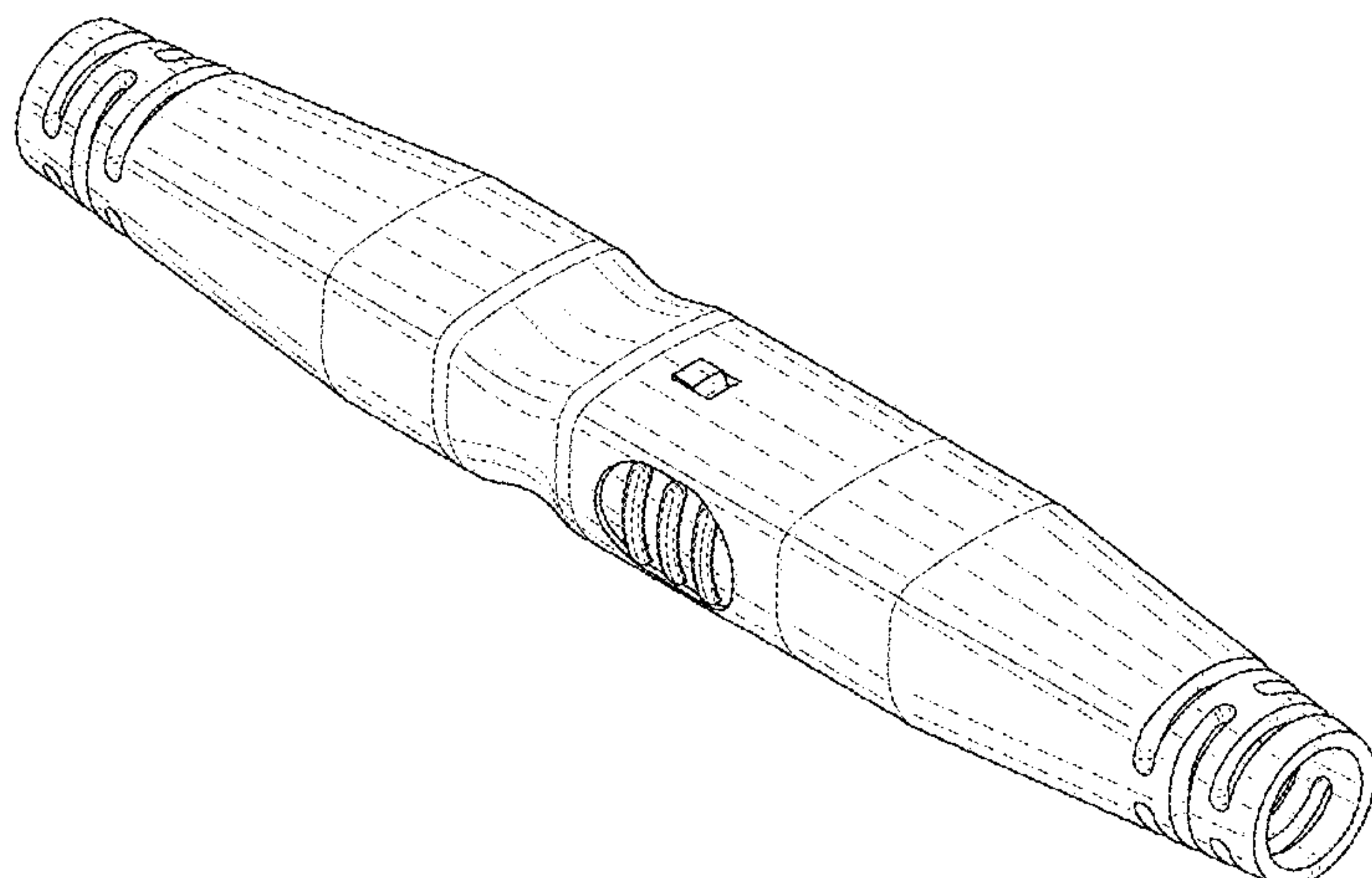


FIG. 25 is a perspective view of the female portion of the connector of FIG. 1.

FIG. 26 is a perspective view of the female portion of the connector of FIG. 1 in use; and,

FIG. 27 is a section view of the female portion of the connector of FIG. 1, taken along line 27-27 in FIG. 21.

The broken lines shown in the drawings illustrate portions of the connector that form no part of the claimed design. The wavy lines shown in FIGS. 8, 17, and 26 illustrate a symbolic break in a wire. Any portion of the wire not shown in the figure drawings forms no part of the claimed design.

1 Claim, 20 Drawing Sheets

(58) **Field of Classification Search**

CPC H01R 13/00; H01R 13/05; H01R 13/53;
 H01R 13/62; H01R 13/625; H01R
 13/627; H01R 13/64; H01R 13/648;
 H01R 13/658; H01R 13/659; H01R
 24/00; H01R 25/00

See application file for complete search history.

(56)

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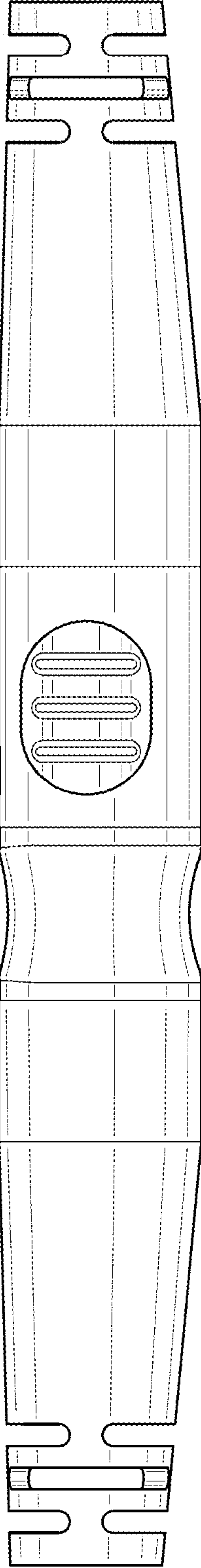


FIG. 1

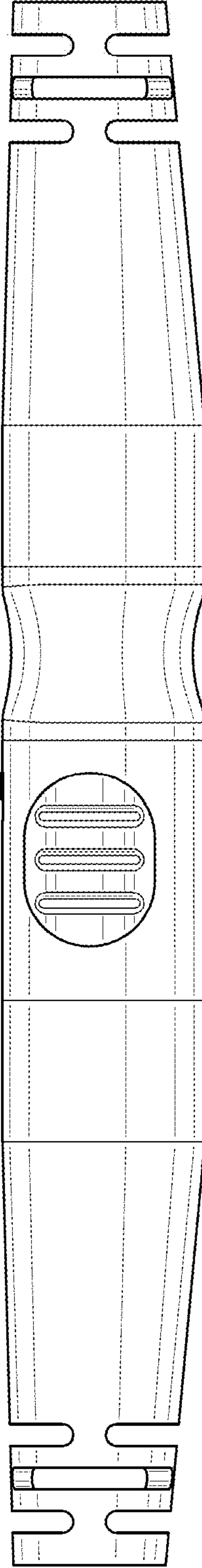


FIG. 2

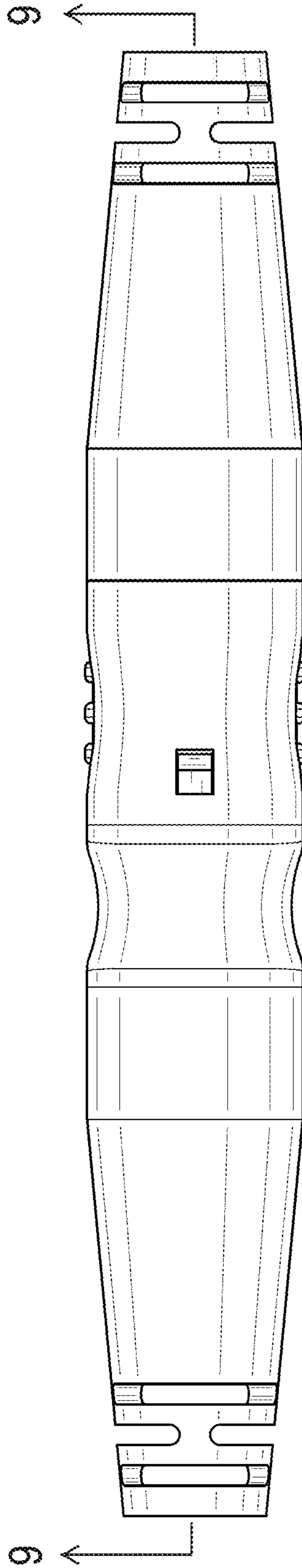


FIG. 3

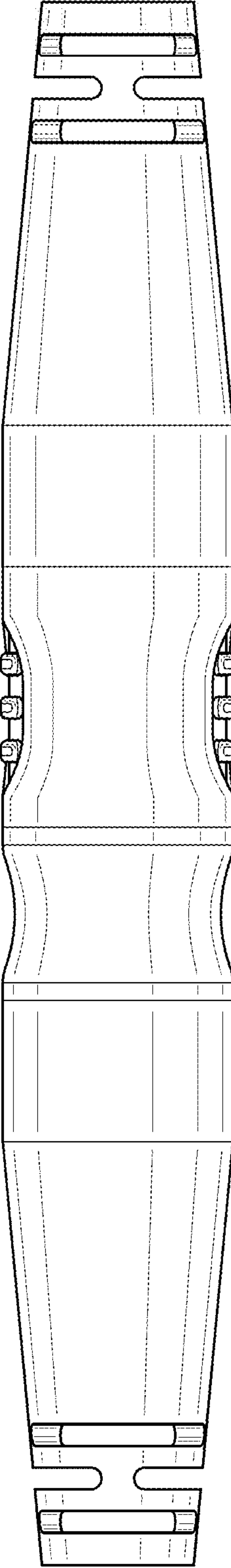


FIG. 4

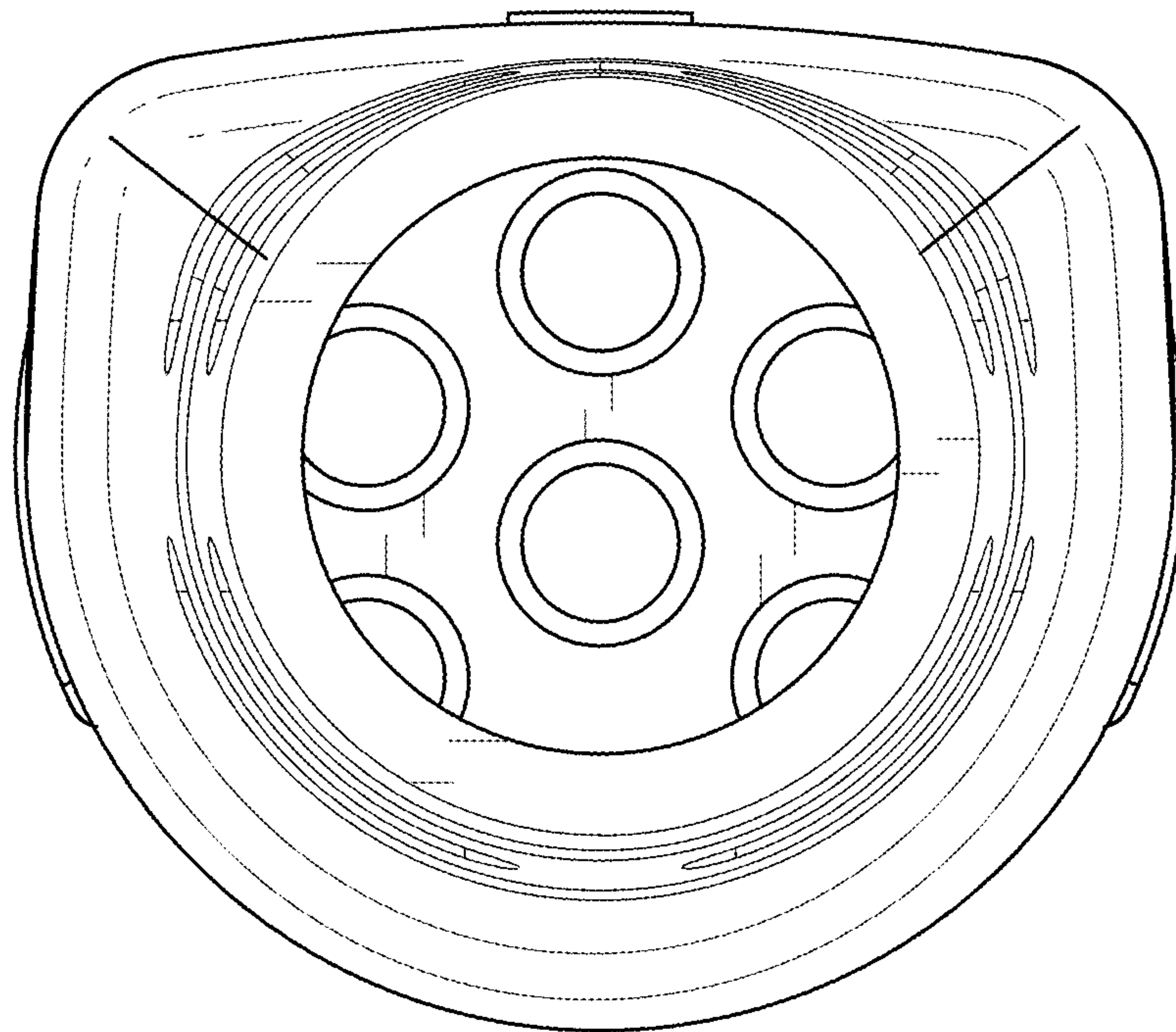


FIG. 5

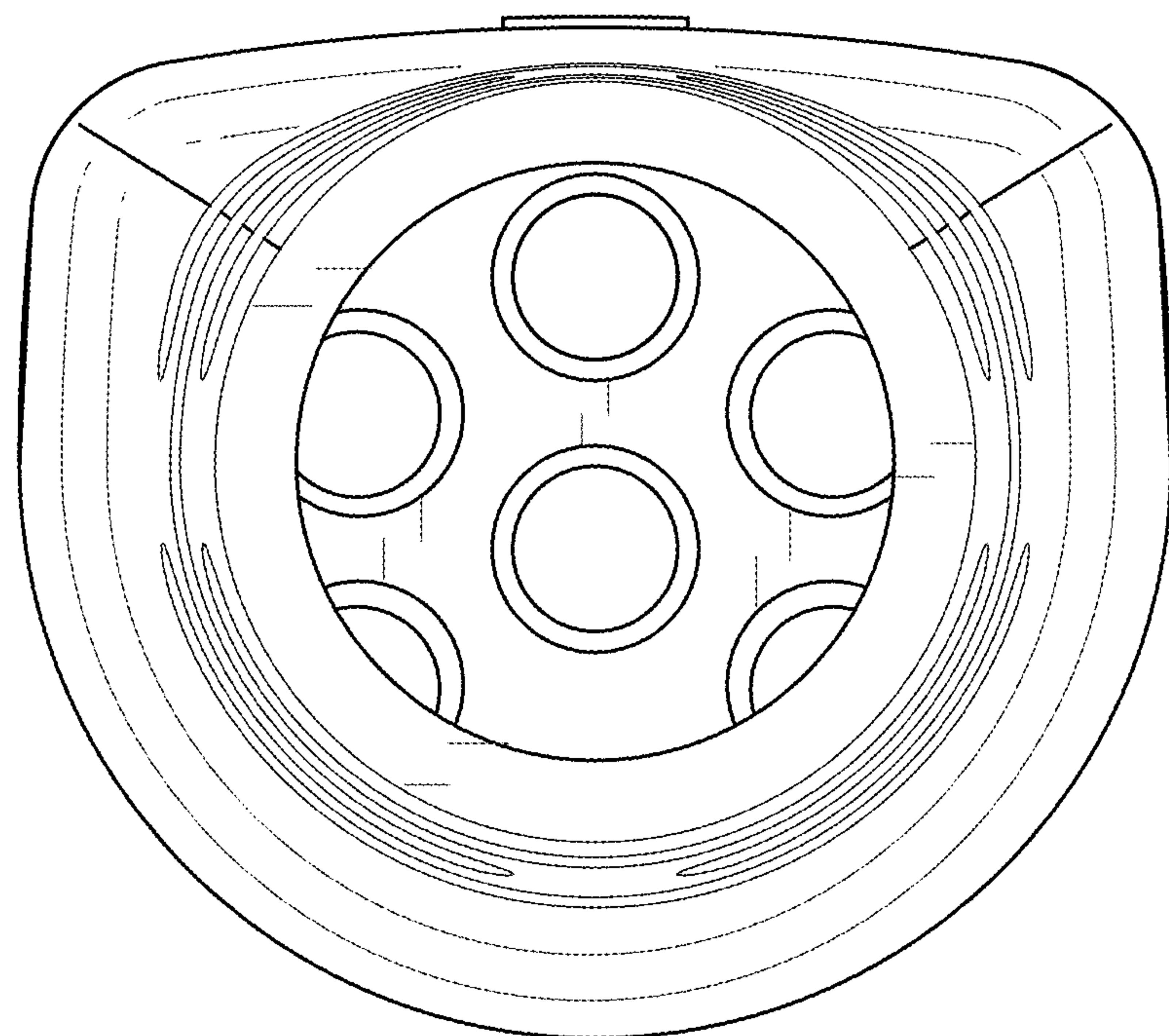


FIG. 6

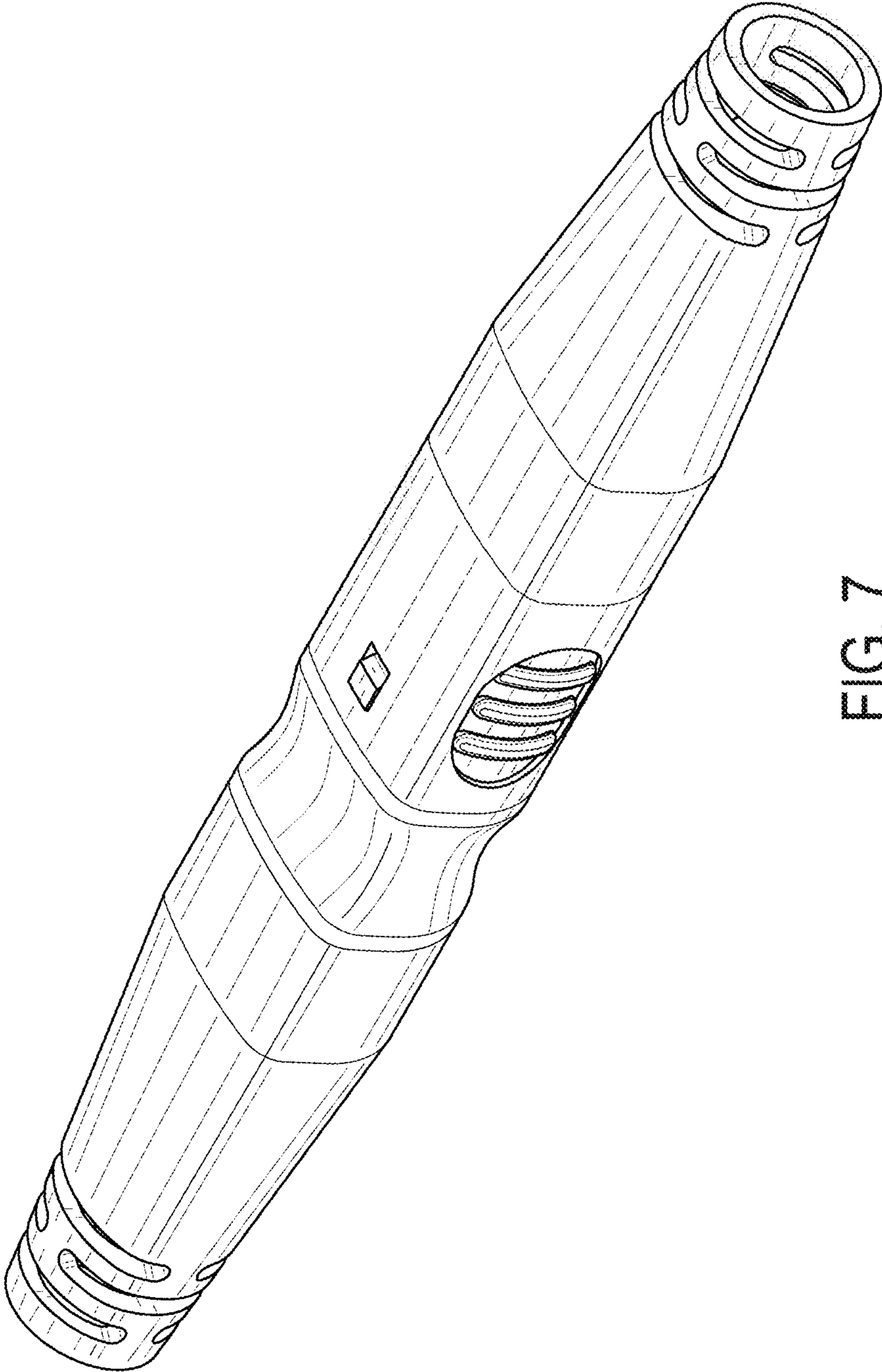


FIG. 7

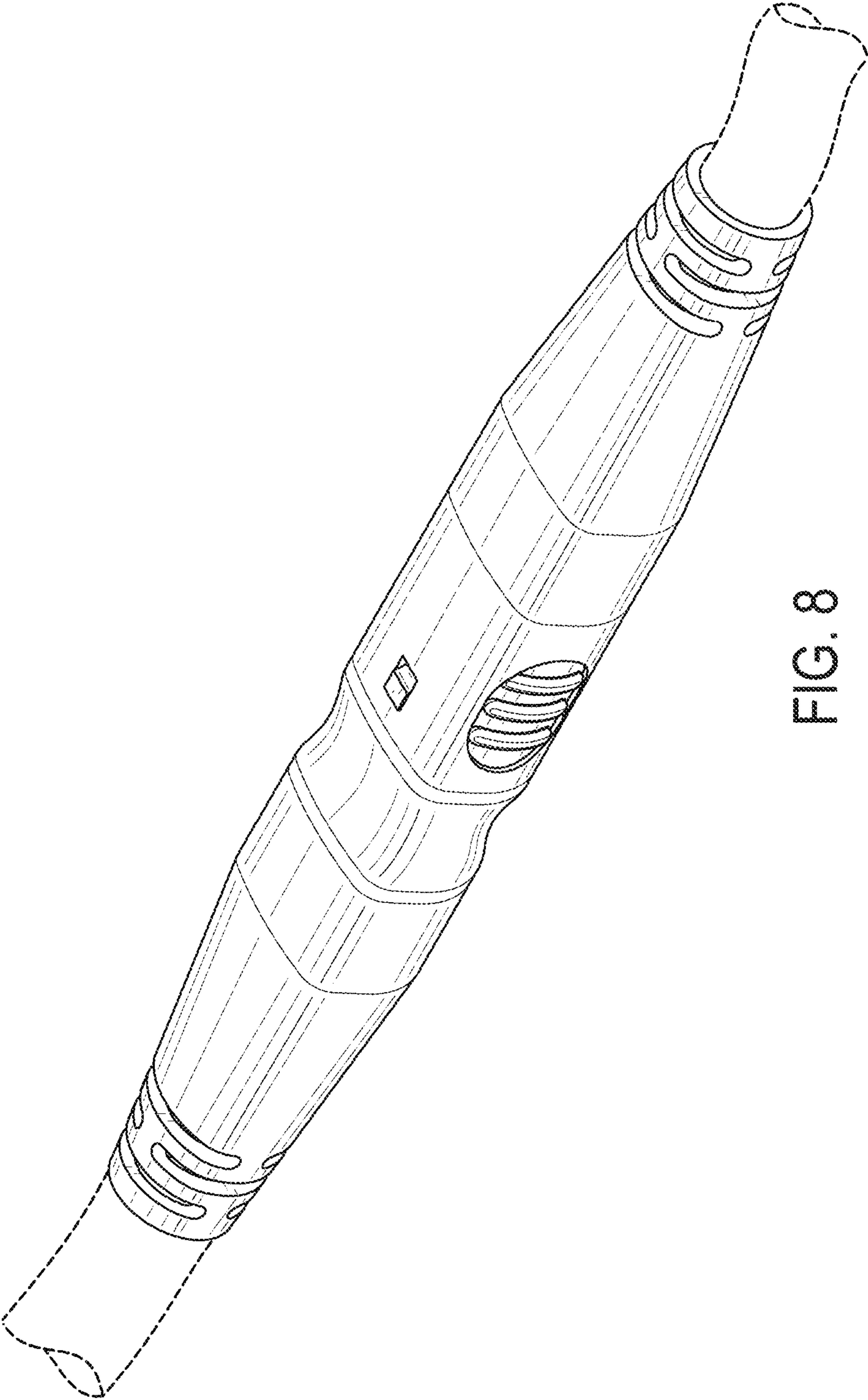


FIG. 8

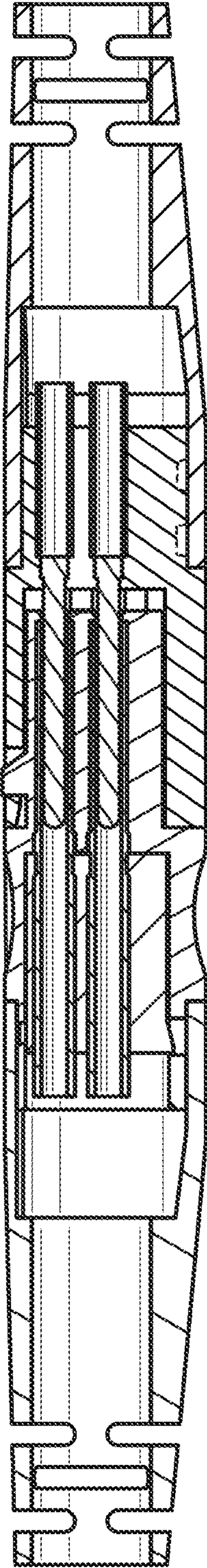


FIG. 9

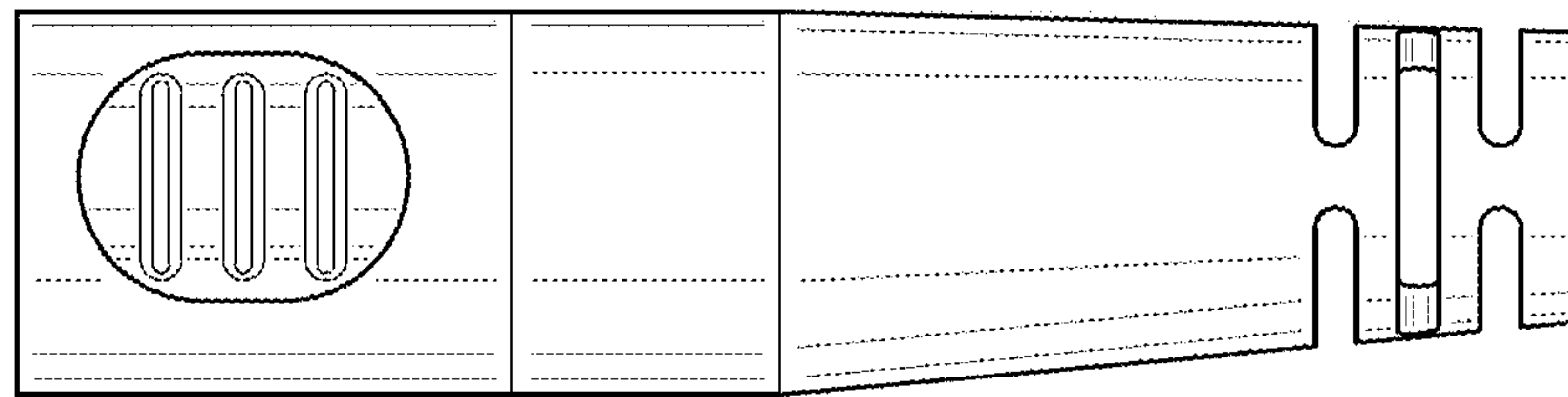


FIG. 10

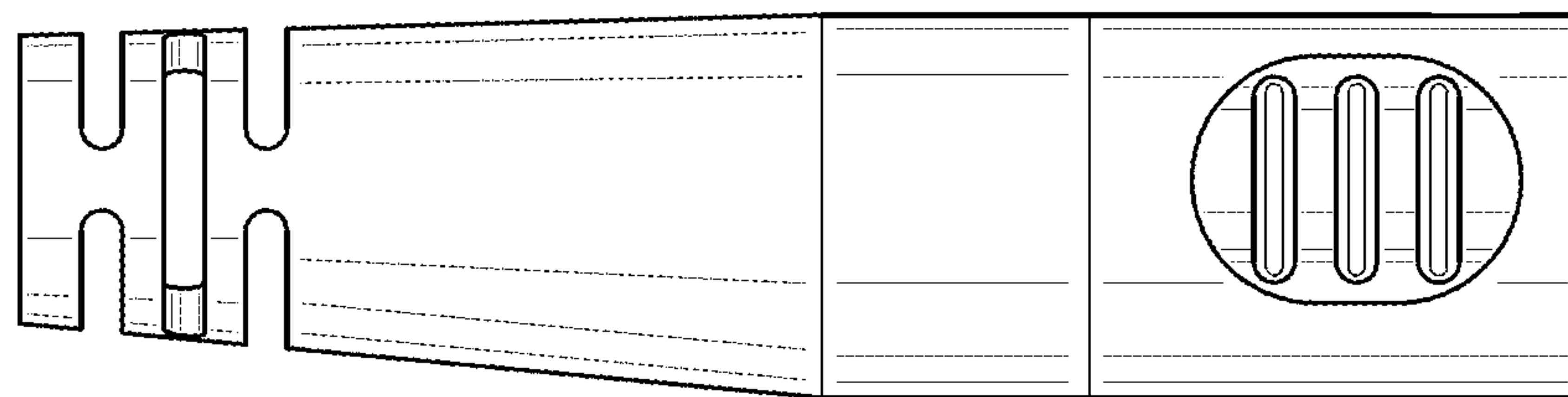


FIG. 11

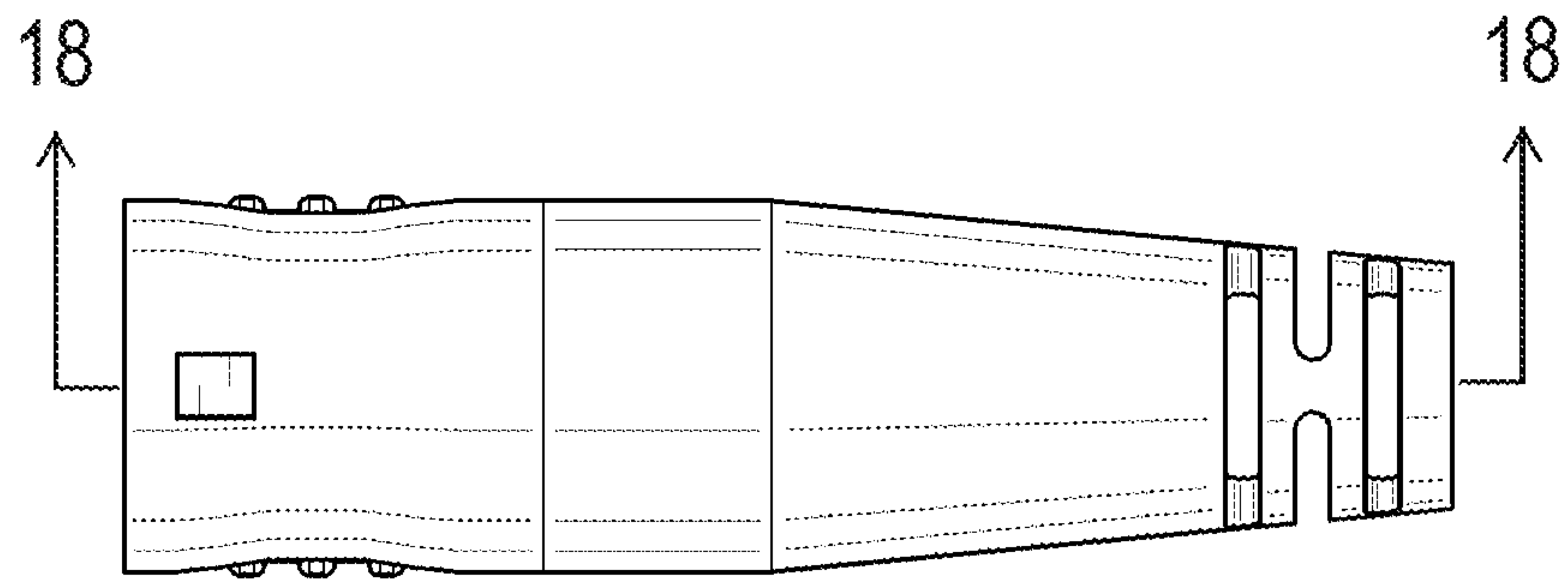


FIG. 12

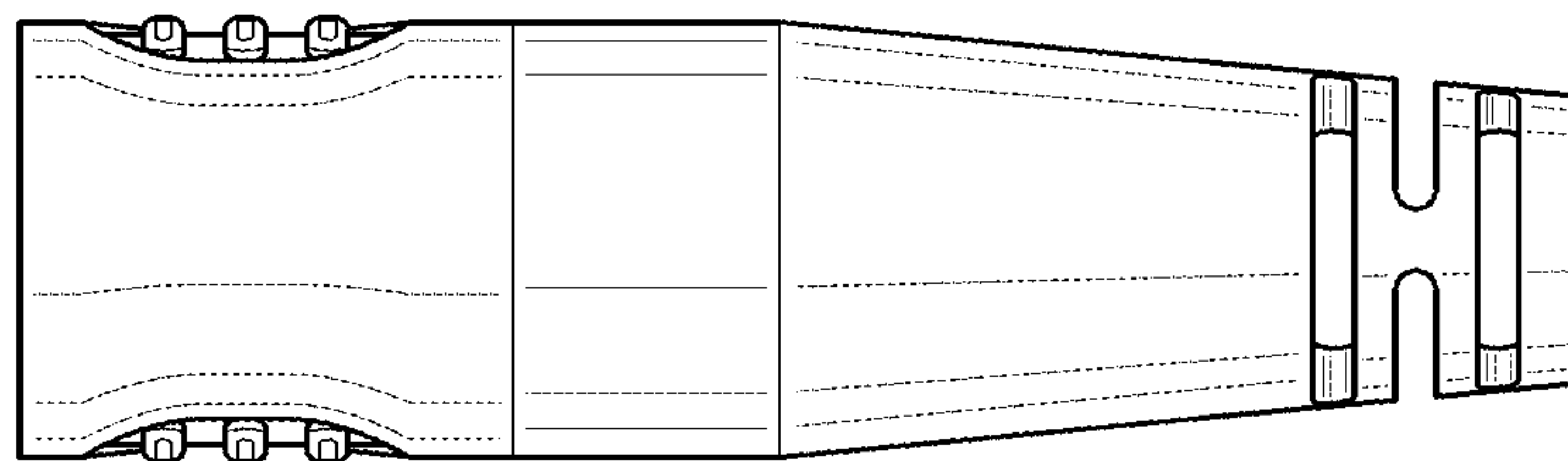


FIG. 13

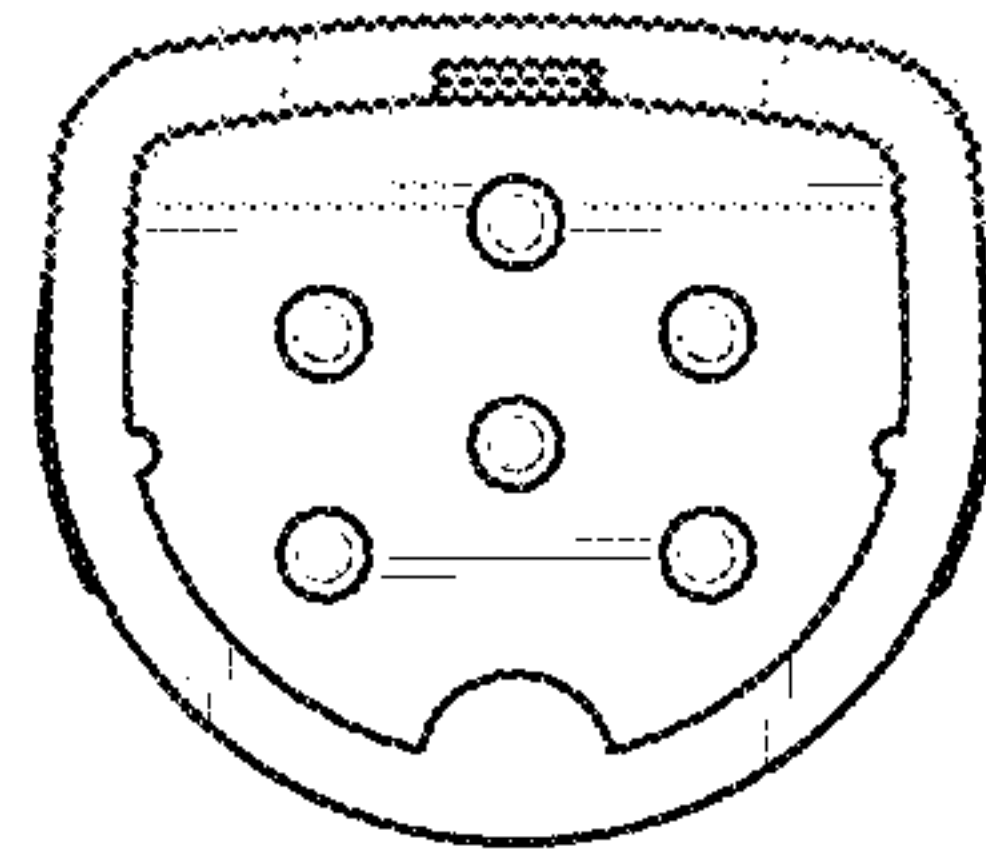


FIG. 14

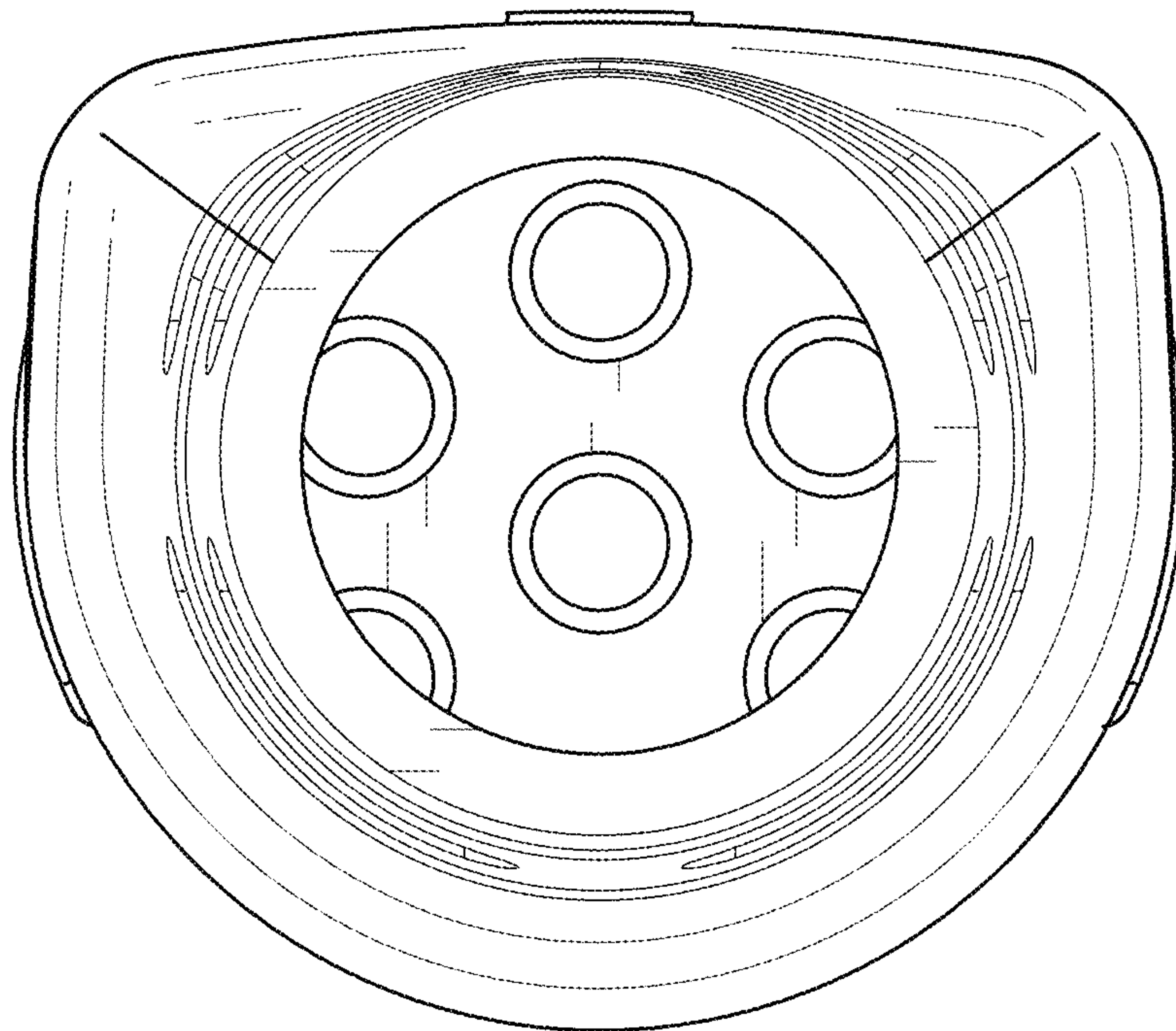


FIG. 15

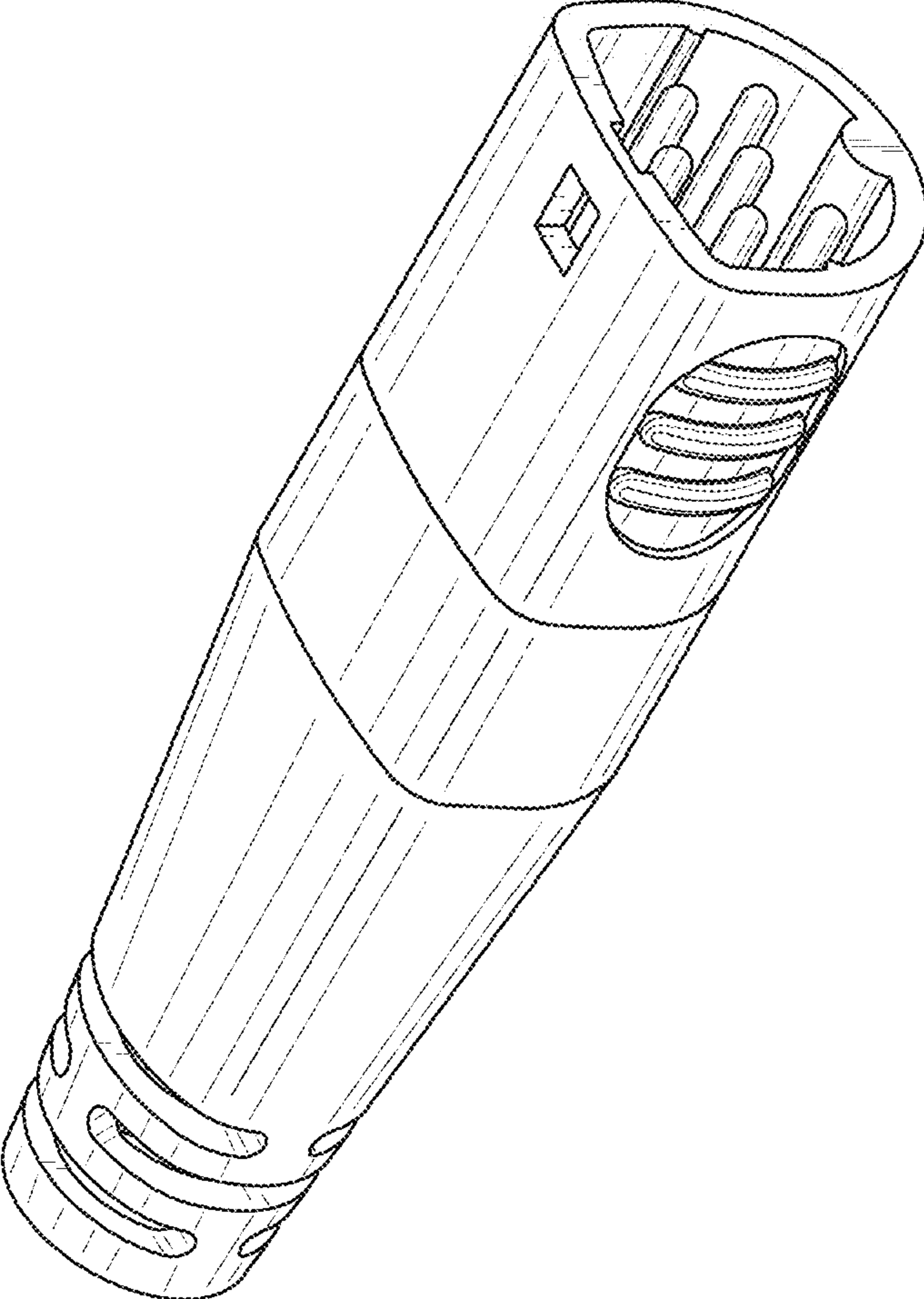


FIG. 16

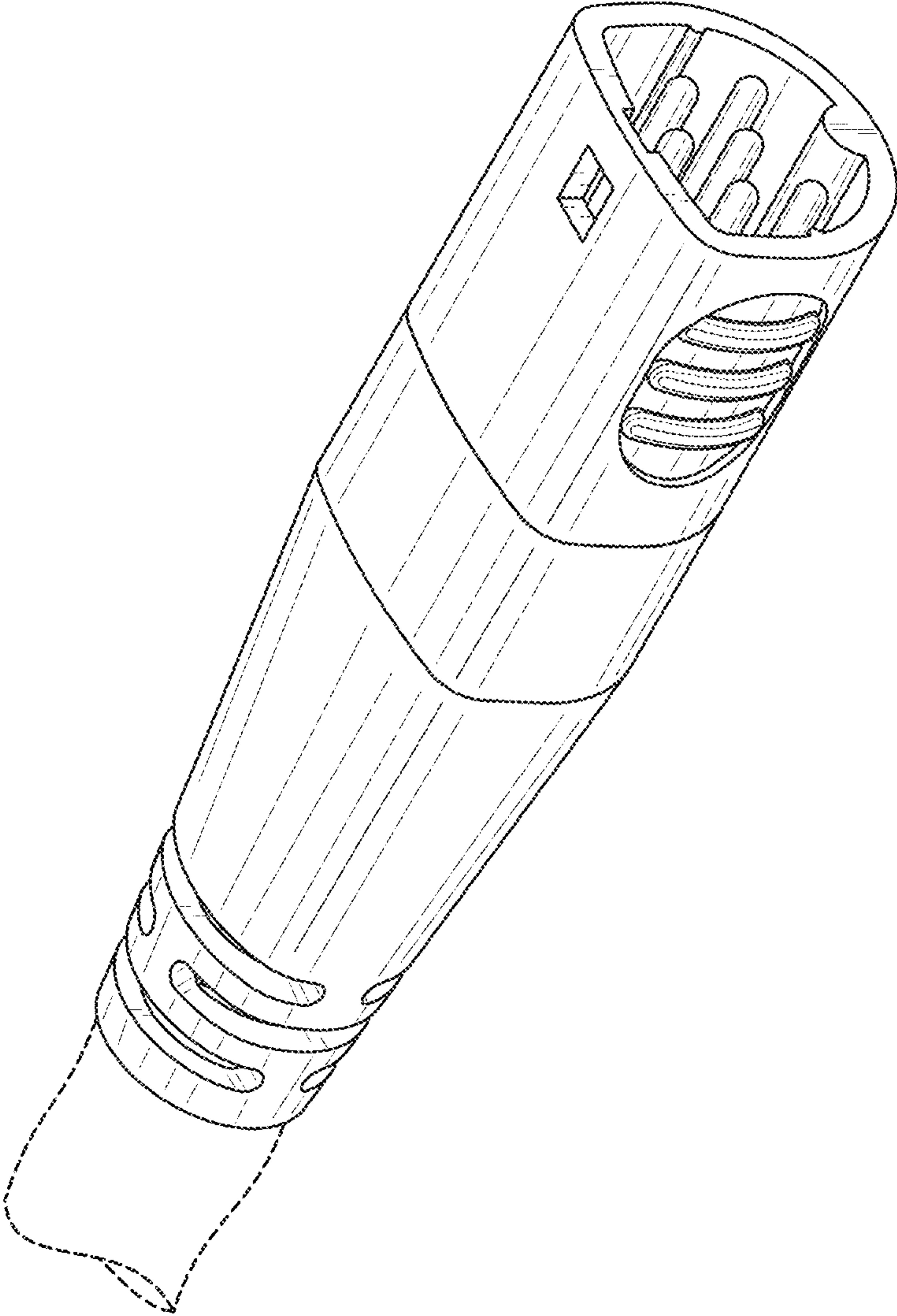


FIG. 17

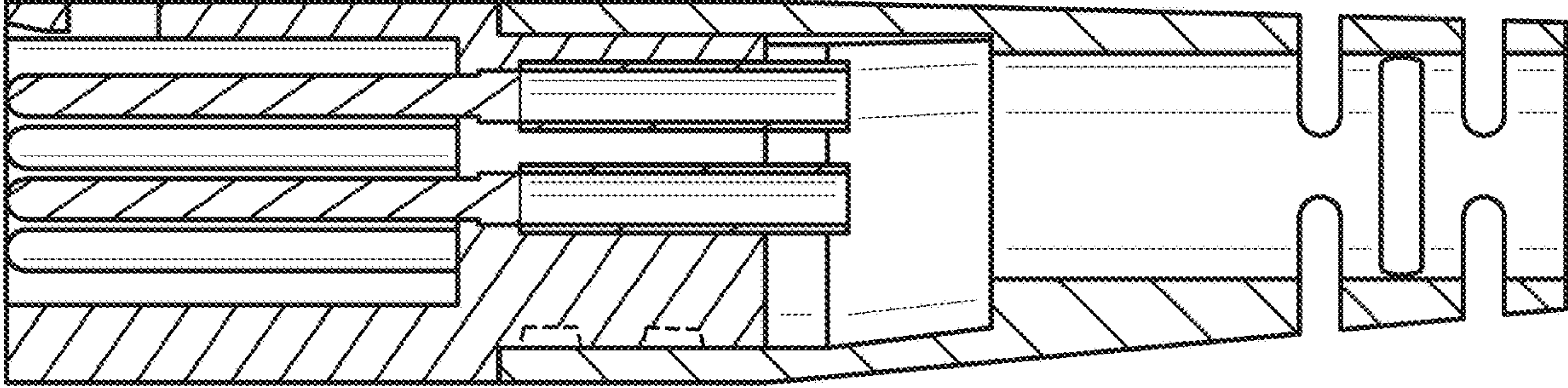


FIG. 18

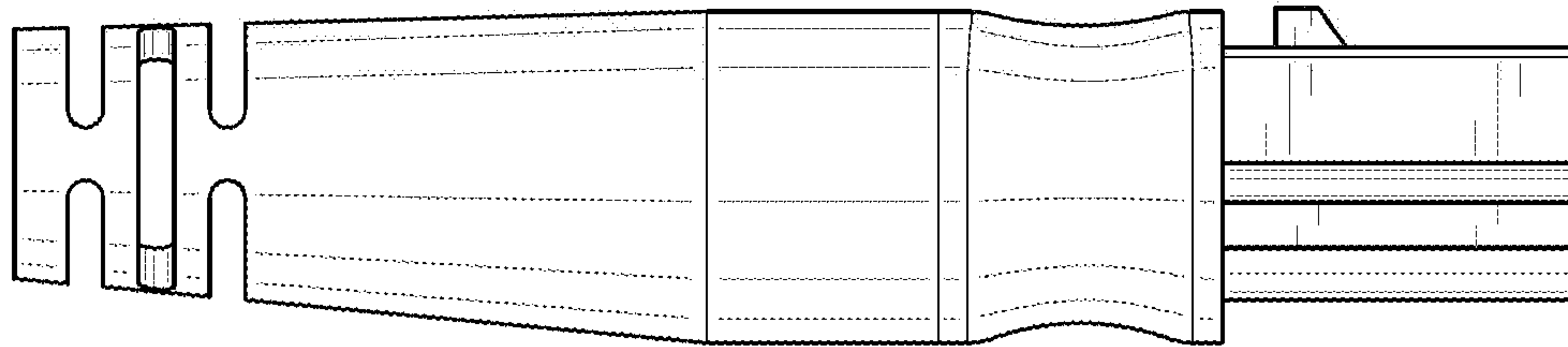


FIG. 19

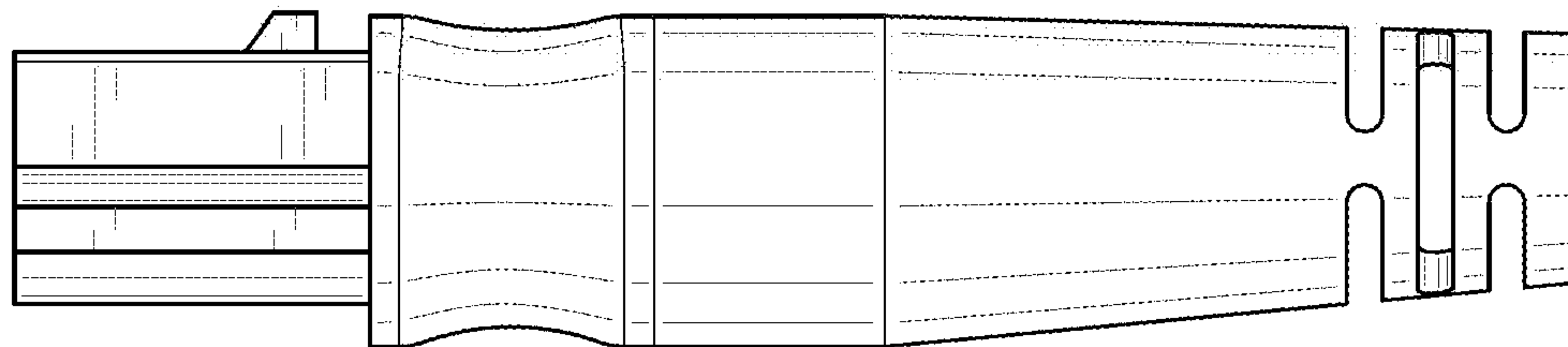


FIG. 20

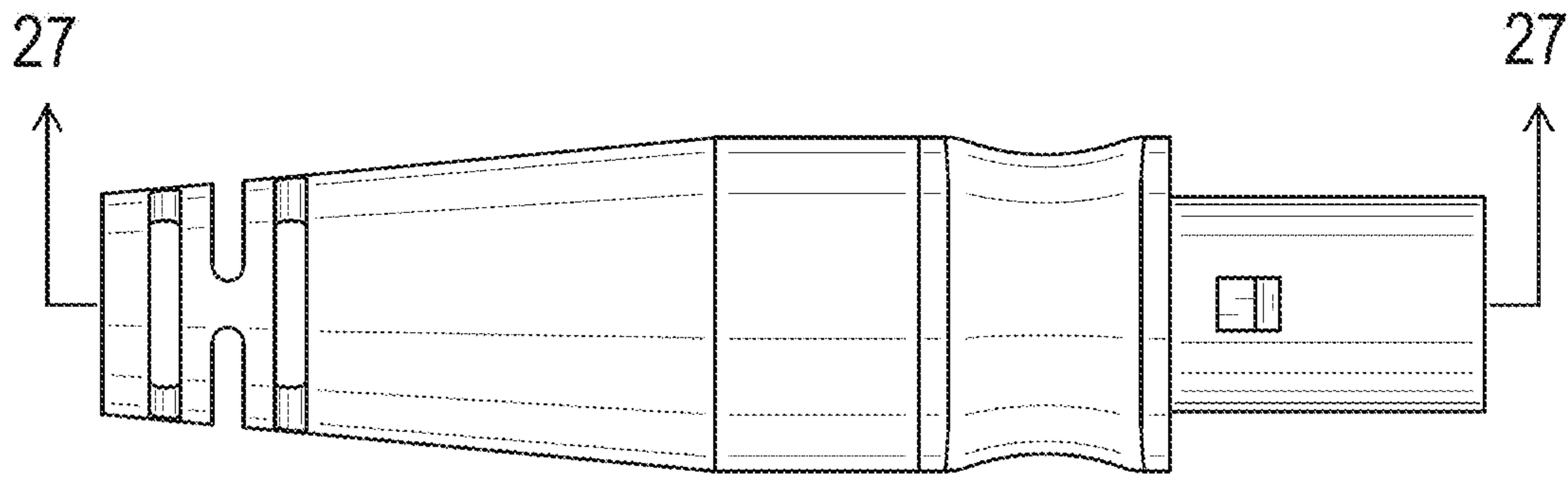


FIG. 21

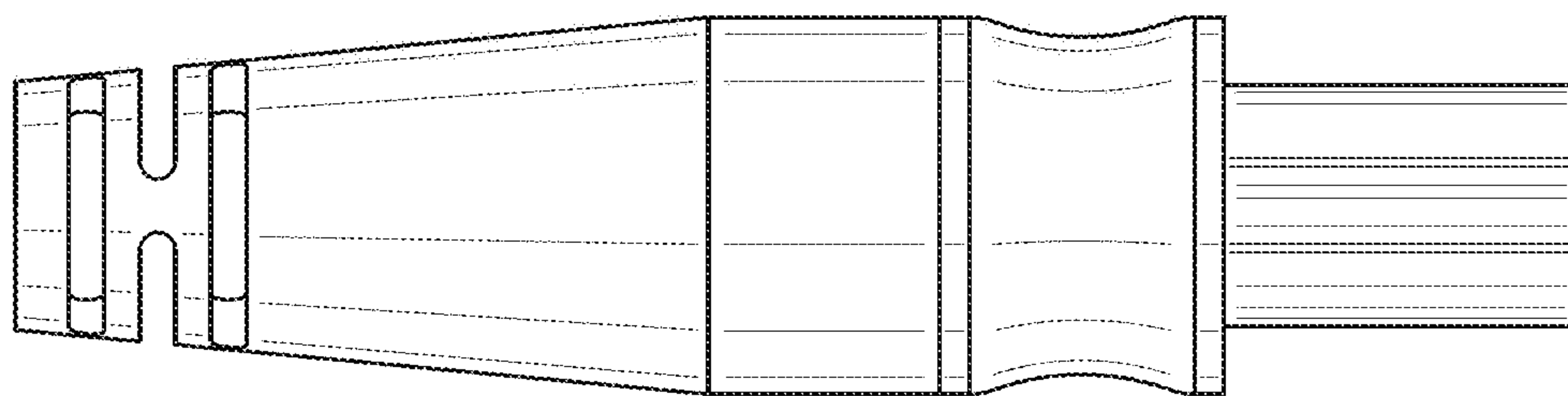


FIG. 22

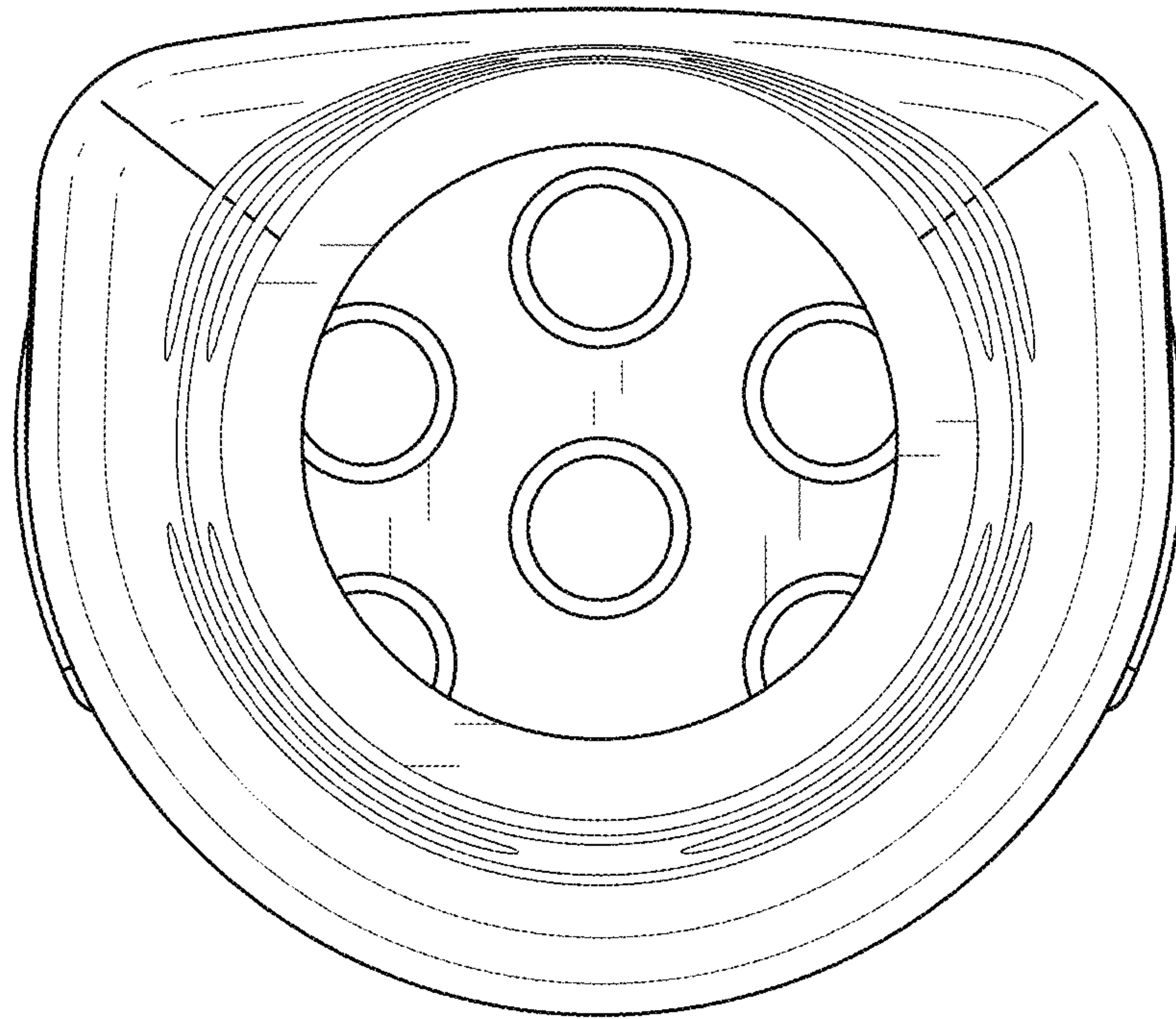


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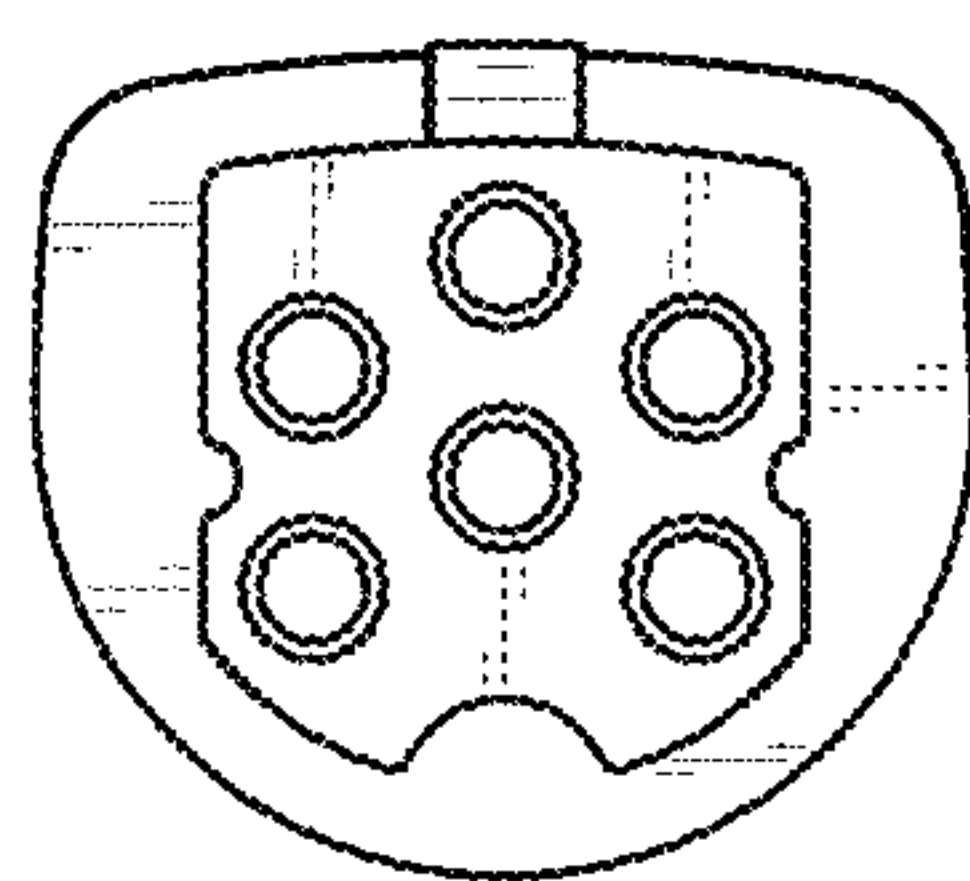


FIG. 24

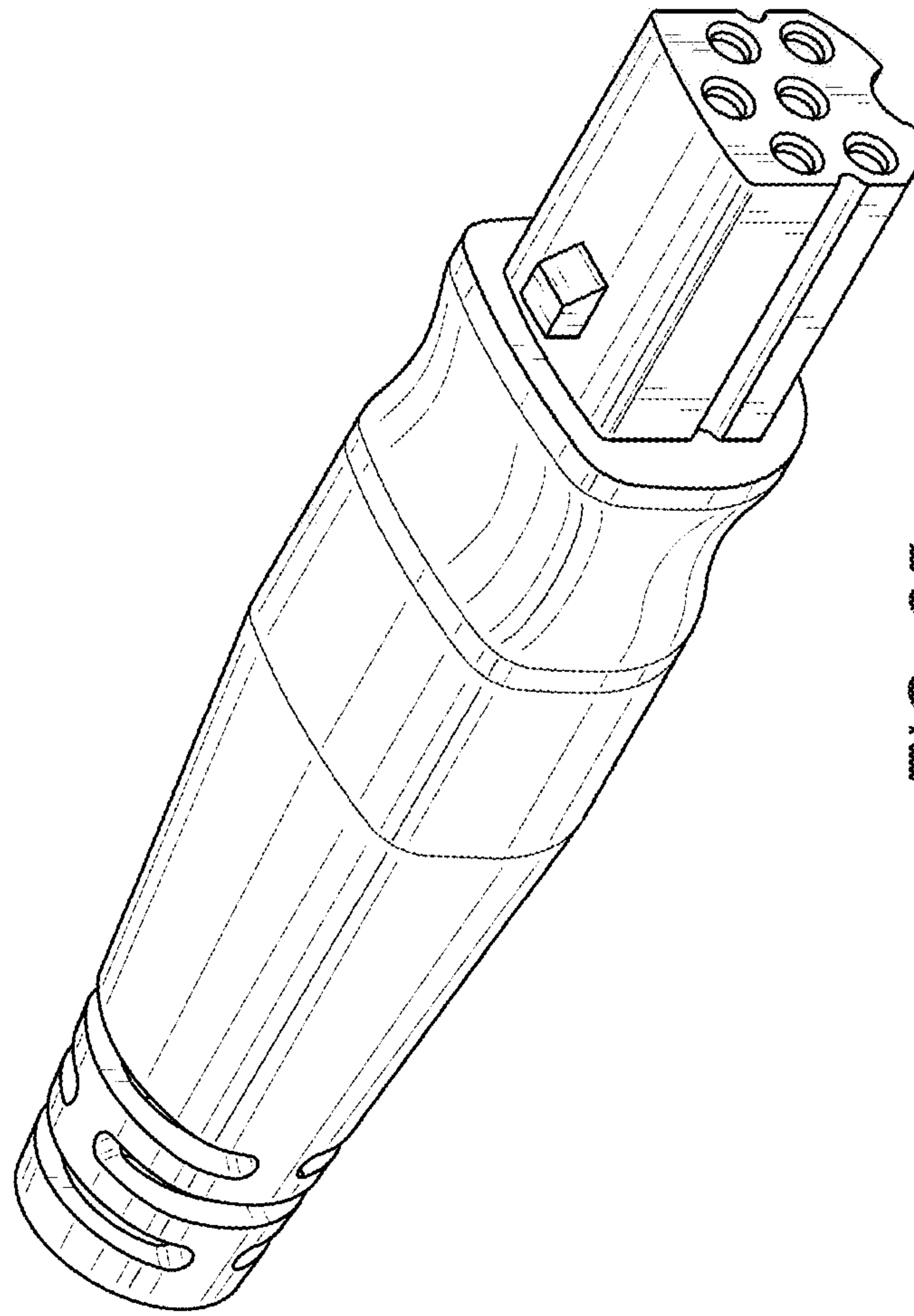


FIG. 25

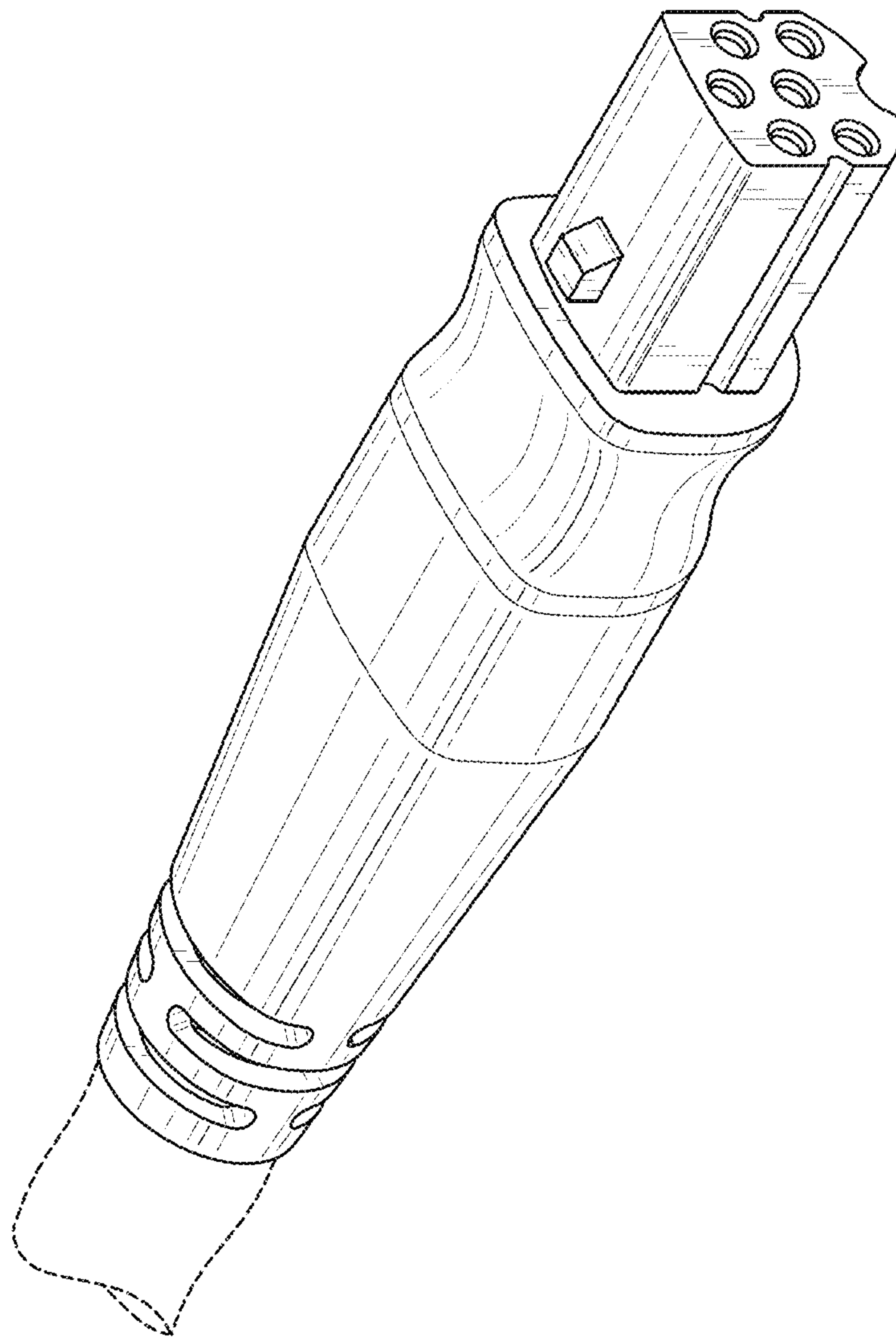


FIG. 26

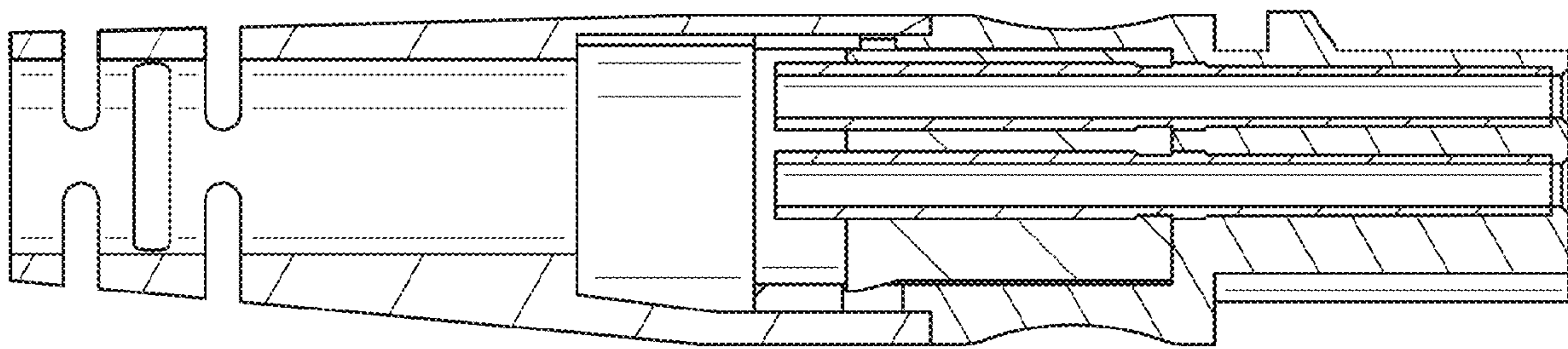


FIG. 27