



US00D988466S

(12) **United States Design Patent** (10) **Patent No.:** **US D988,466 S**
McMahon et al. (45) **Date of Patent:** **** Jun. 6, 2023**

(54) **MEMBRANE FILTRATION MODULE**

(56) **References Cited**

(71) Applicant: **ROHM AND HAAS ELECTRONIC MATERIALS SINGAPORE PTE. LTD**, Singapore (SG)

U.S. PATENT DOCUMENTS

(72) Inventors: **Robert James McMahon**, Leichhardt (AU); **Ying Hao Teo**, Quakers Hill (AU); **Tomasz Swiatek**, Baulkham Hills (AU)

6,048,456 A *	4/2000	Palmer	.....	B01D 24/001 210/282
D561,300 S *	2/2008	Baba	.....	D23/209
D654,558 S *	2/2012	Zeng	.....	D23/208
D767,713 S *	9/2016	Biltoft	.....	D23/209
D792,942 S *	7/2017	Adey	.....	B01D 21/267 D23/209
D793,523 S *	8/2017	Adey	.....	F24D 19/0092 D23/209
D795,390 S *	8/2017	Huda	.....	B01D 29/96 D23/209
D878,516 S *	3/2020	Pathan	.....	D23/209

(73) Assignee: **ROHM AND HAAS ELECTRONIC MATERIALS SINGAPORE PTE, LTD**, Singapore (SG)

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

Primary Examiner — Calvin E Vansant

(21) Appl. No.: **29/804,522**

(57) **CLAIM**

We claim the ornamental design for a membrane filtration module, as shown and described.

(22) Filed: **Aug. 20, 2021**

DESCRIPTION

Related U.S. Application Data

(62) Division of application No. 29/677,895, filed on Jan. 24, 2019, now Pat. No. Des. 950,009.

(51) **LOC (14) Cl.** **23-01**

(52) **U.S. Cl.**
USPC **D23/209**

(58) **Field of Classification Search**
USPC D23/207, 209, 200, 2, 205, 210, 259,
D23/260, 261; D7/700

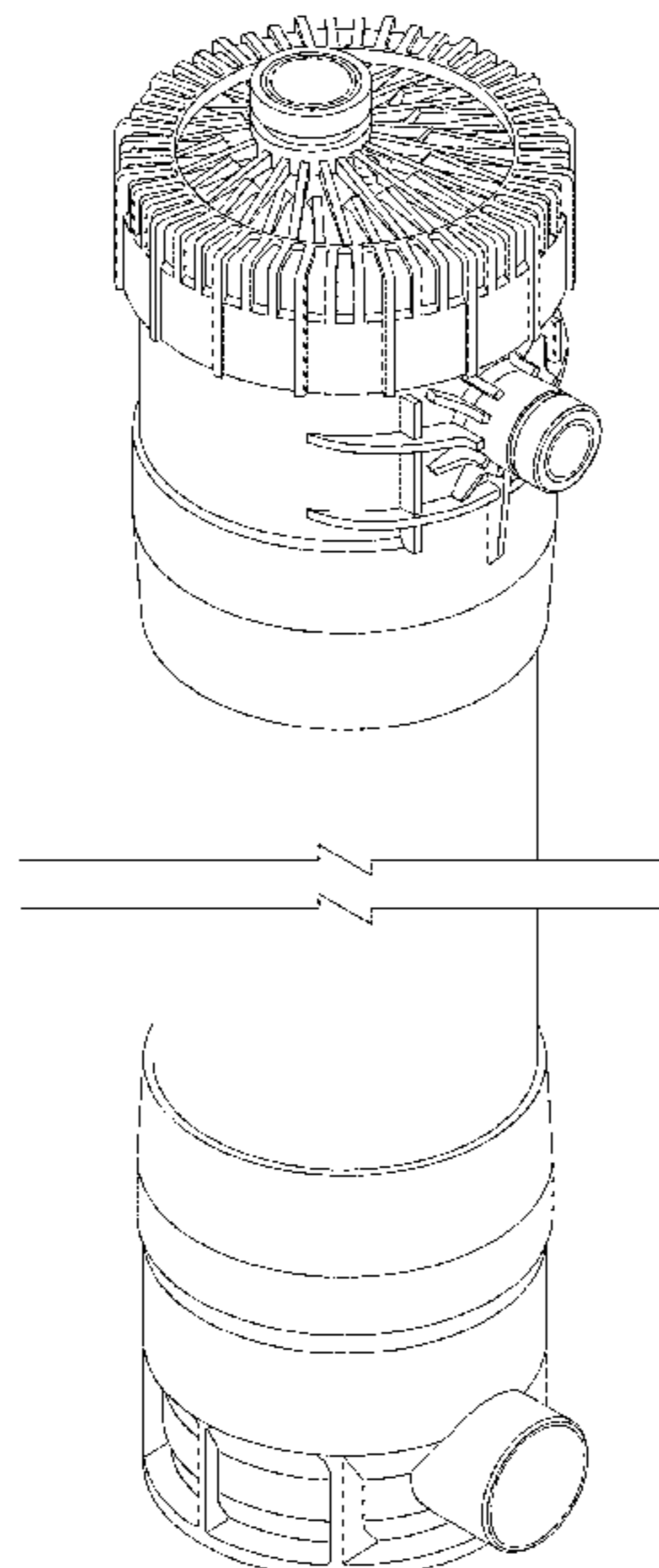
CPC B01D 35/14; B01D 35/30; B01D 35/0276;
B01D 35/027; B01D 29/085; B01D
2201/29; B01D 2201/30; B01D 2201/291;
B01D 2201/295; B01D 2201/296; B01D
2201/298; B01D 2201/301; B01D
2201/306; B01D 2201/309; C02F 1/002

See application file for complete search history.

FIG. 1 is an isometric view of a first embodiment;
FIG. 2 is a side elevation view of a first embodiment;
FIG. 3 is a front elevation view of a first embodiment;
FIG. 4 is a plan view from the top of a first embodiment;
FIG. 5 is a plan view from the bottom of a first embodiment;
FIG. 6 is an isometric view of a second embodiment;
FIG. 7 is a side elevation view of a second embodiment;
FIG. 8 is a front elevation view of a second embodiment;
FIG. 9 is a plan view from the top of a second embodiment;
and,
FIG. 10 is a plan view from the bottom of a second embodiment.

The membrane filtration module is shown with a symbolic break in its length. The appearance of any portion of the article between the break lines forms no part of the claimed design. The dot-dash lines shown in FIGS. 3-5 and FIGS. 8-10 indicate a boundary and form no part of the claimed design.

1 Claim, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2005/0155165 A1* 7/2005 Tsai B01D 35/26
15/1.7
2015/0151220 A1* 6/2015 Adey B01D 21/0009
210/512.1
2017/0043354 A1* 2/2017 Adey F24D 19/0092
2020/0078716 A1* 3/2020 Volker B01D 35/306

* cited by examiner

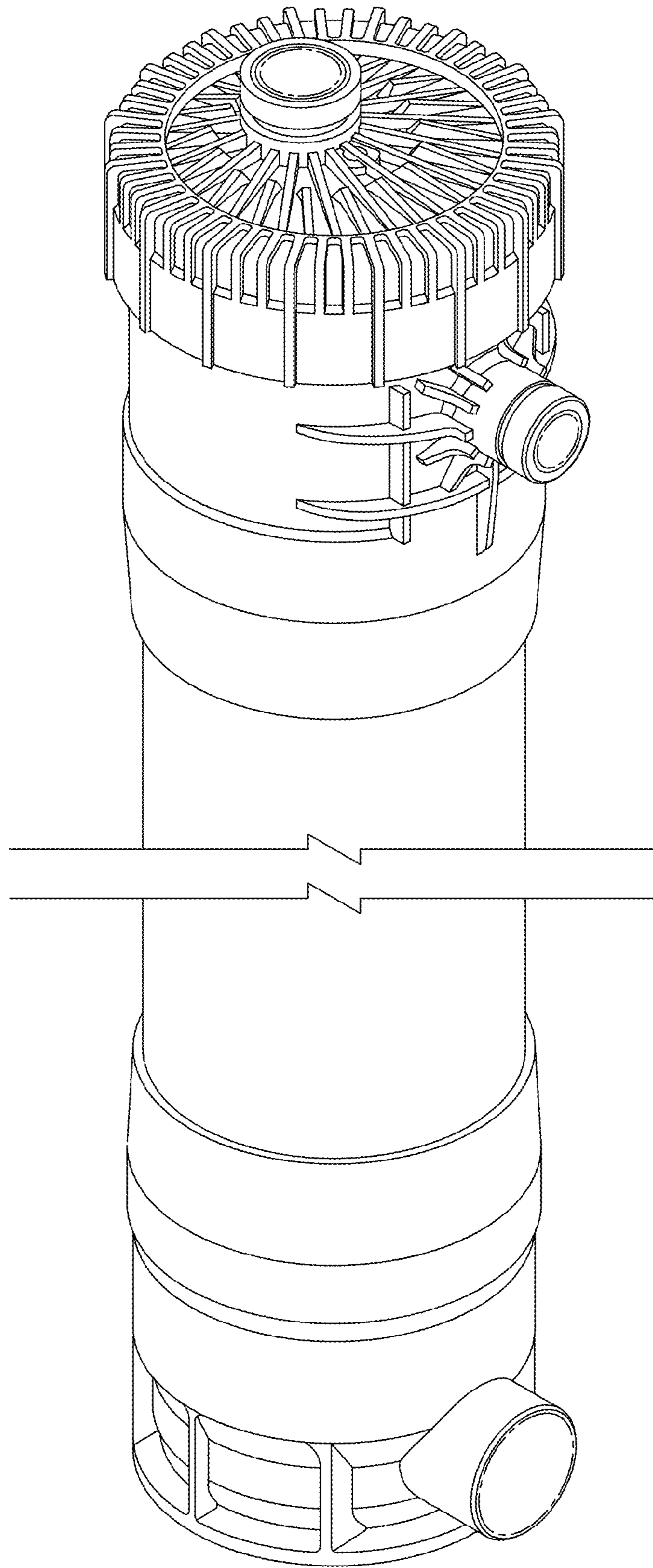


FIG. 1

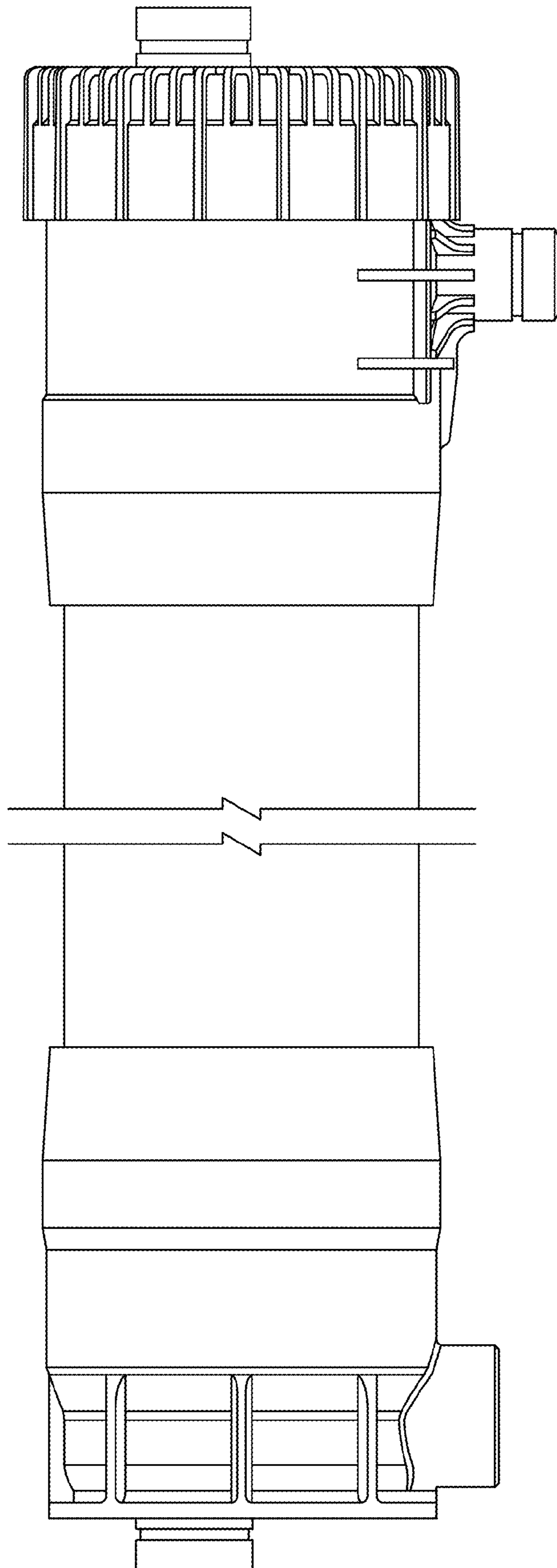


FIG. 2

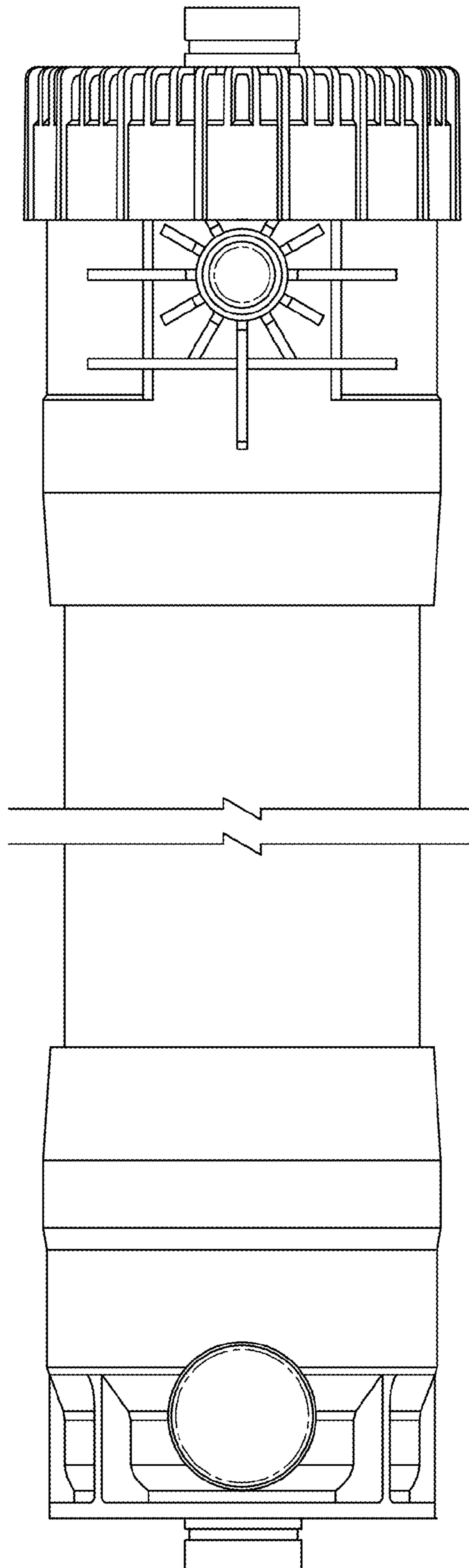


FIG. 3

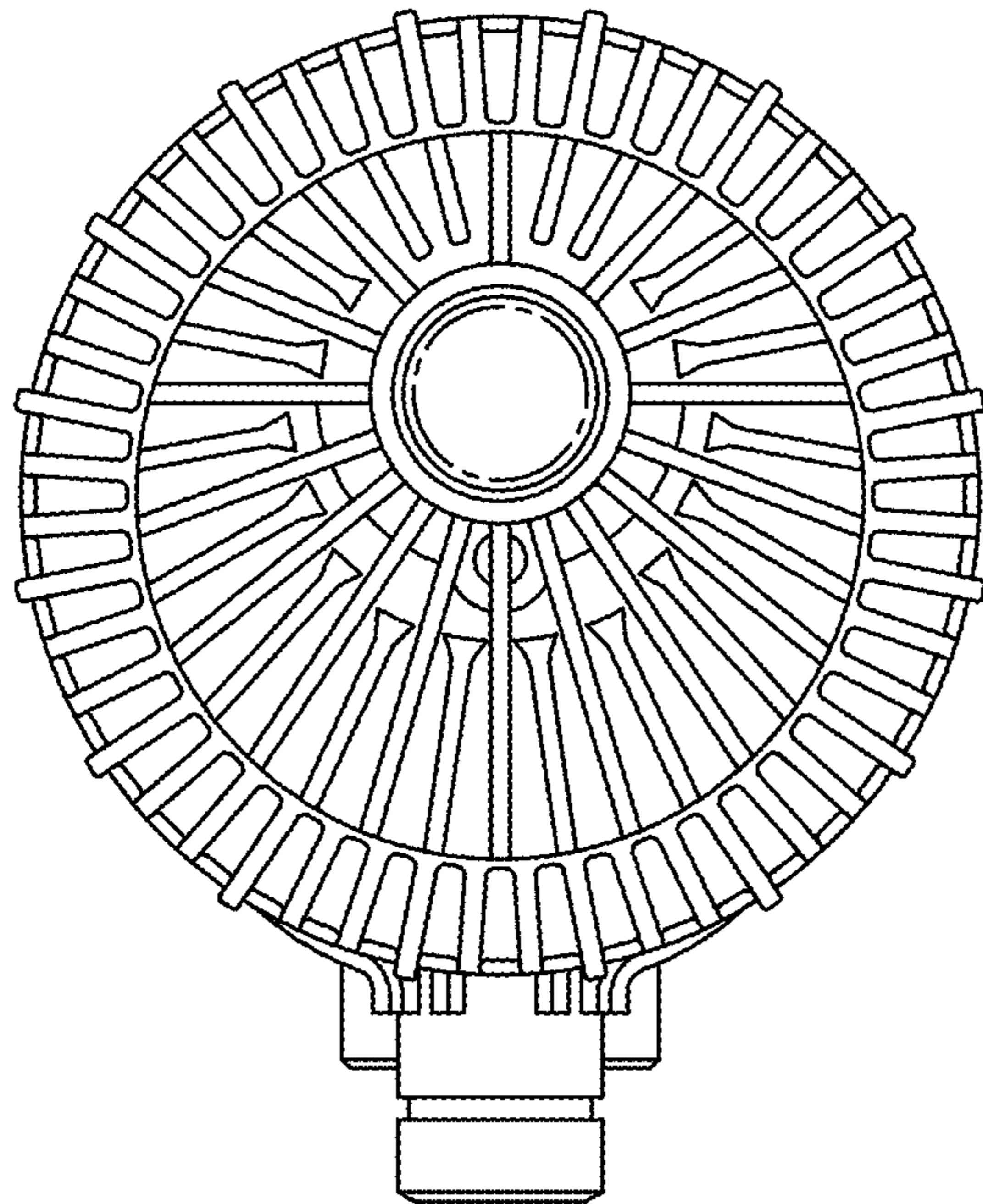


FIG. 4

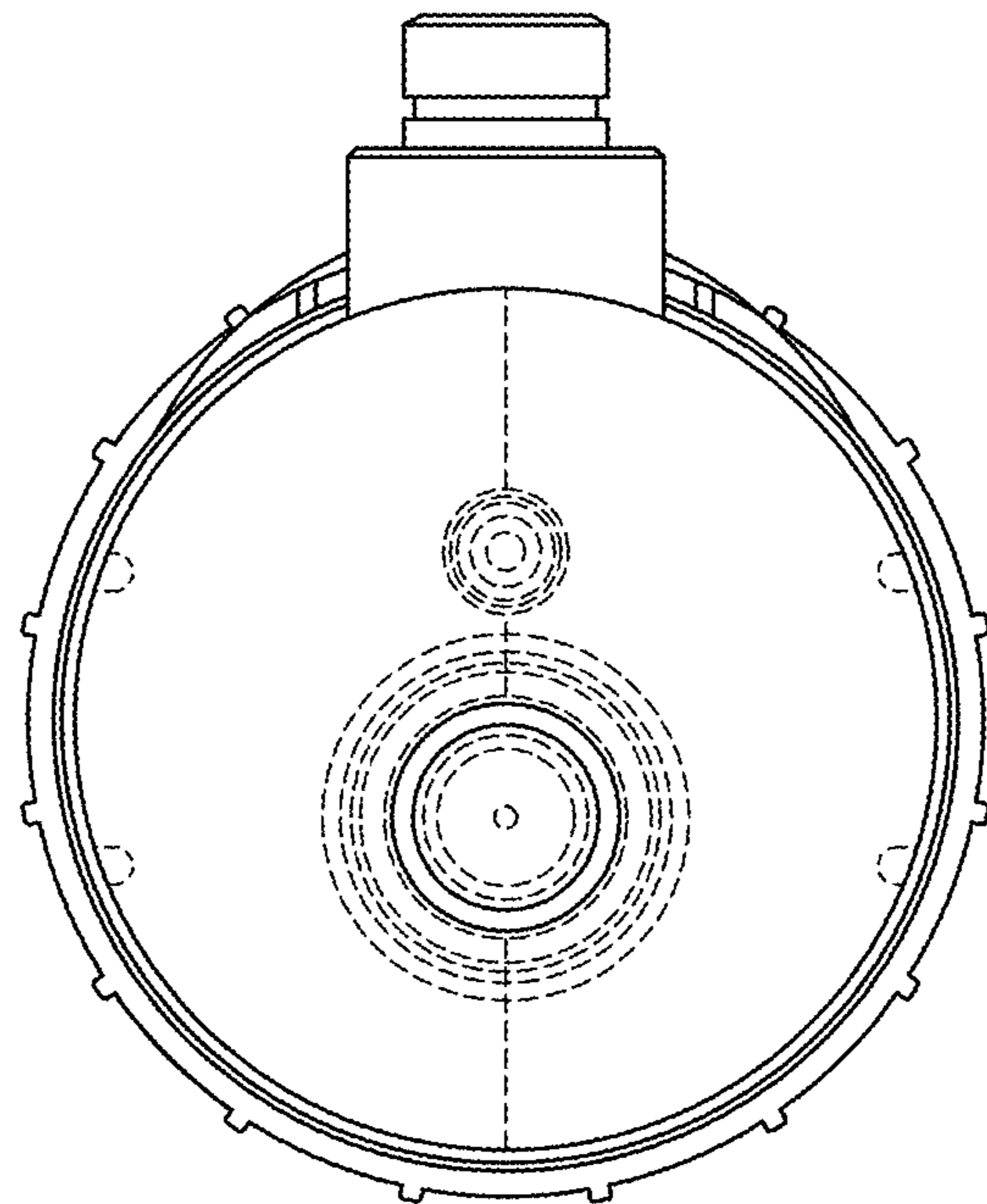


FIG. 5

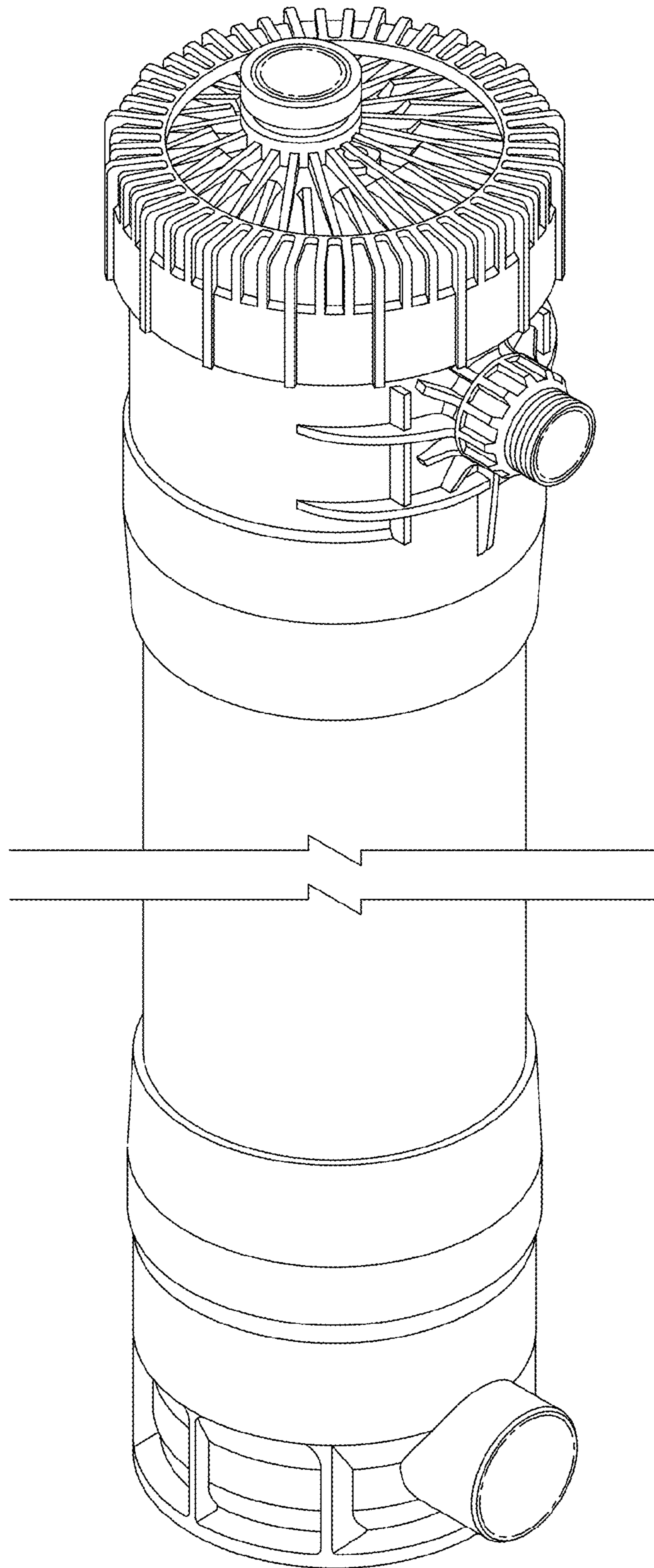


FIG. 6

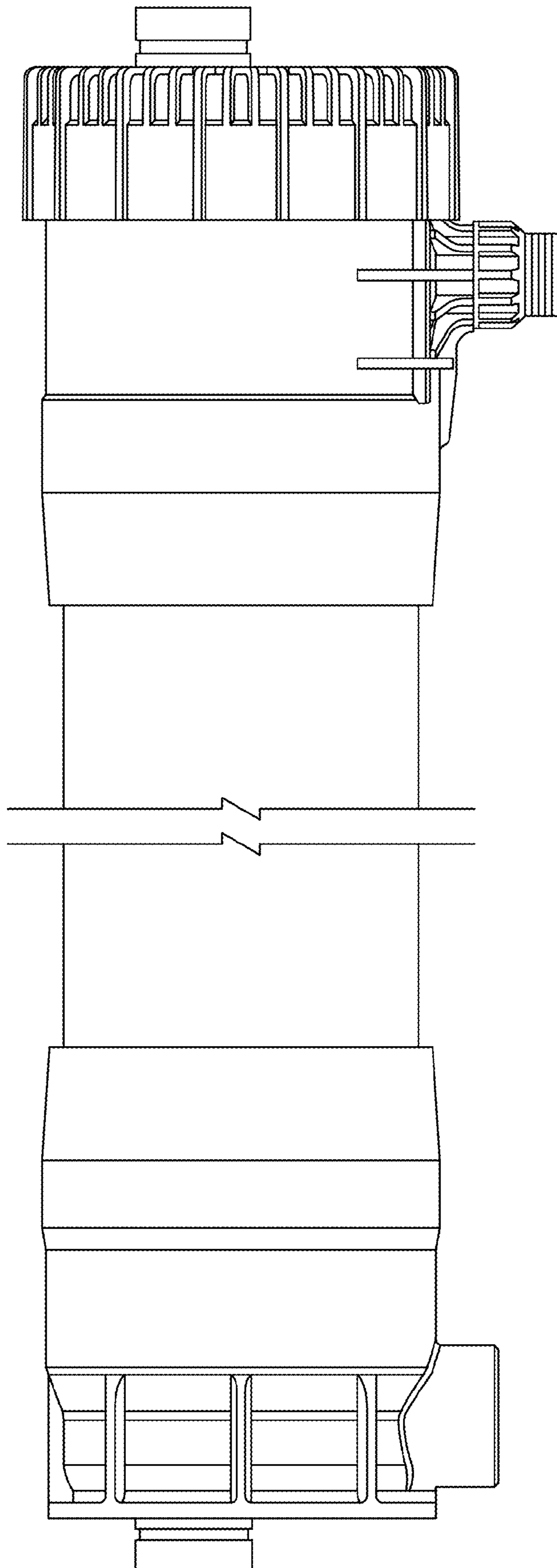


FIG. 7

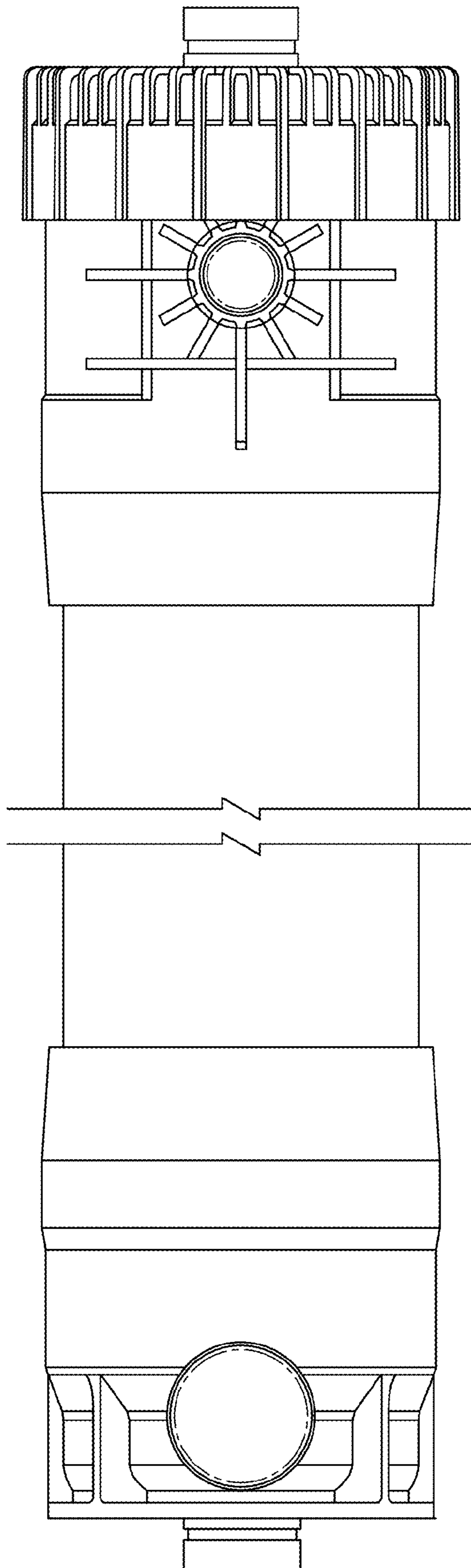


FIG. 8

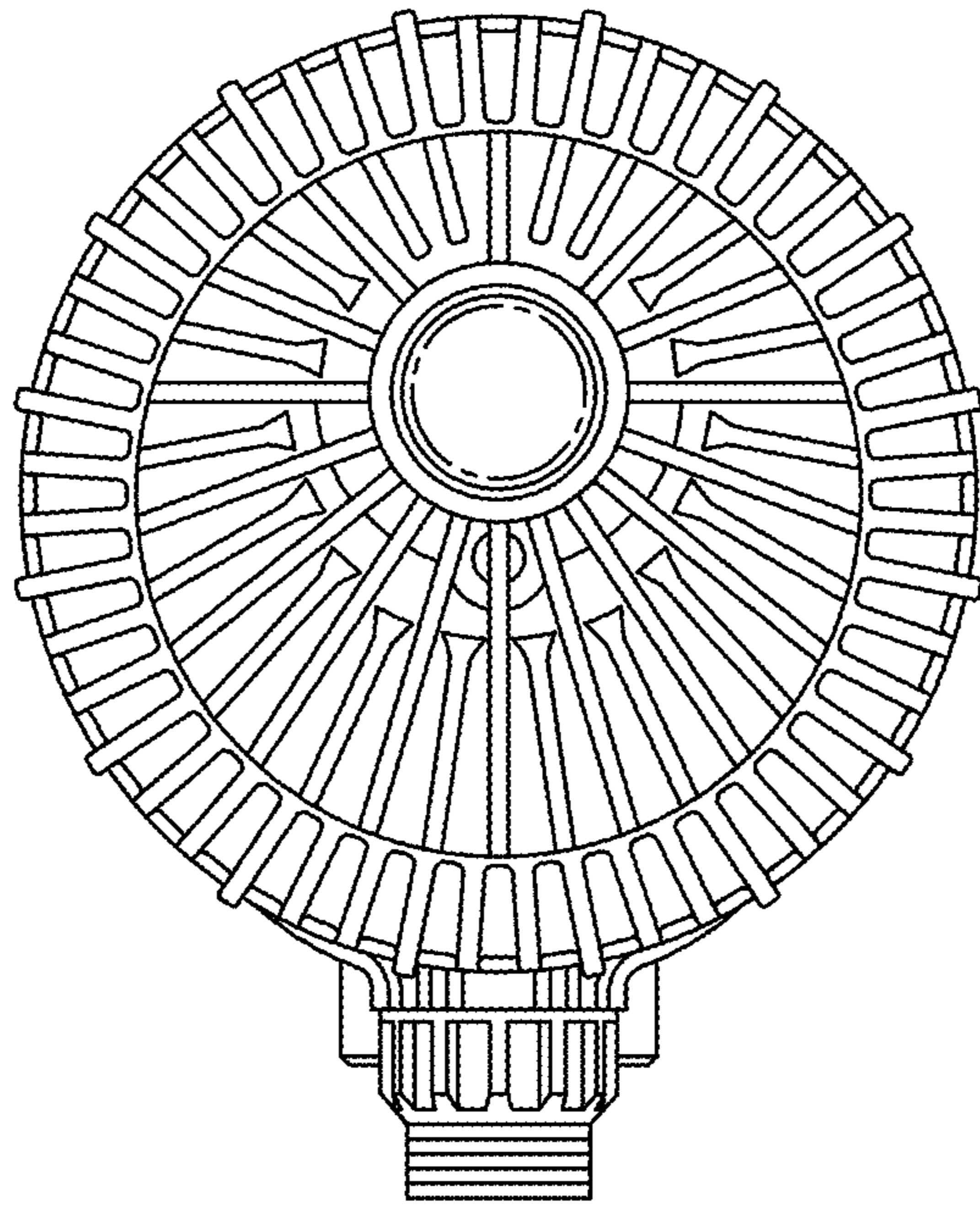


FIG. 9

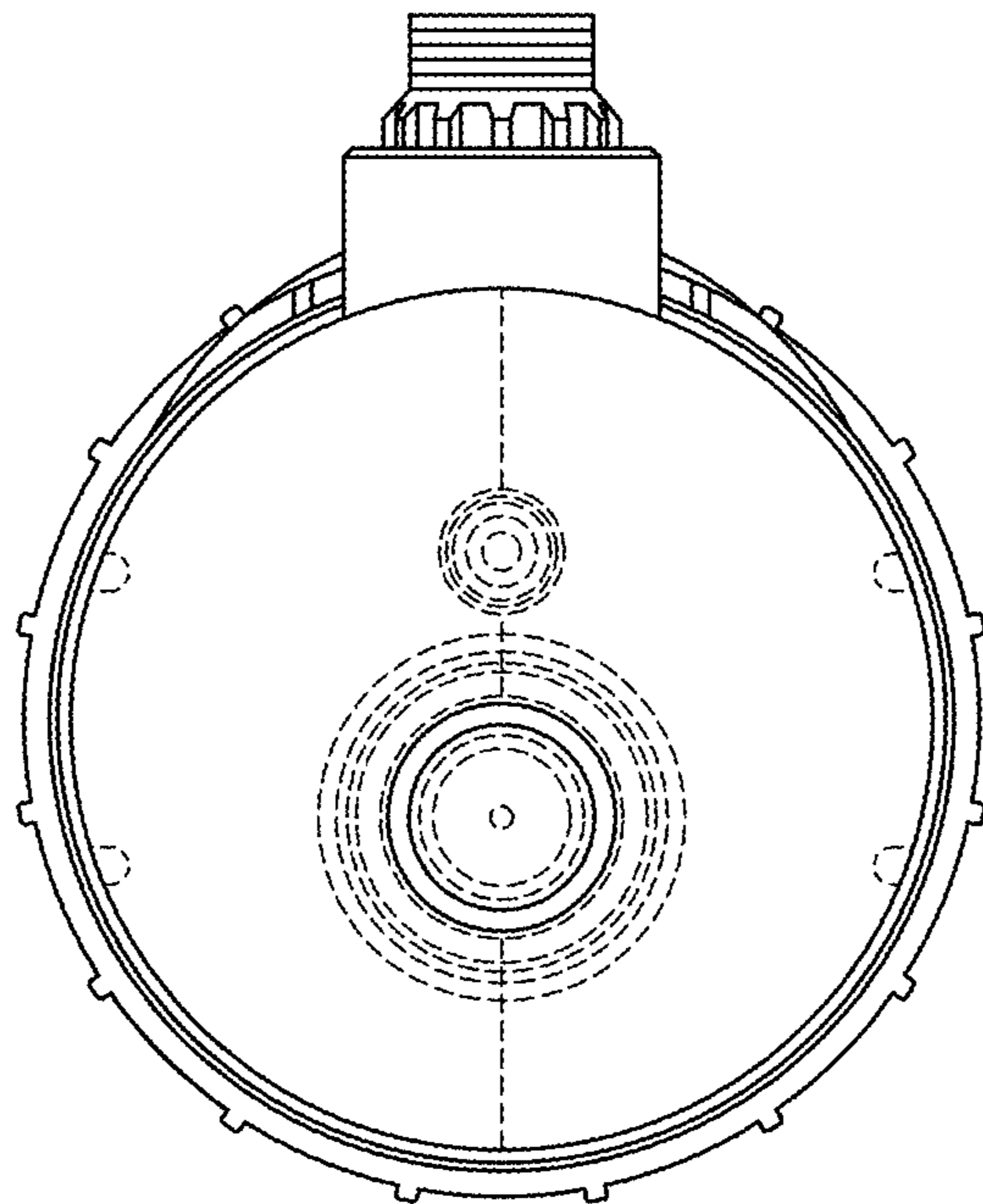


FIG. 10