



US00D794715S

(12) **United States Design Patent** (10) **Patent No.:** **US D794,715 S**
Barea (45) **Date of Patent:** **** Aug. 15, 2017**

(54) **YARN FEEDER**
(71) Applicant: **BTSR INTERNATIONAL S.P.A.**,
Olgiate Olona (Varese) (IT)
(72) Inventor: **Tiziano Barea**, Busto Arsizio (IT)
(73) Assignee: **BTSR INTERNATIONAL S.P.A.**,
Olgiate Olona (Varese) (IT)

8,382,023 B2 * 2/2013 Barea D04B 15/48
242/154
9,181,064 B2 * 11/2015 Barea B65H 51/30
2015/0274482 A1 * 10/2015 Barea B65H 51/22
242/418.1
2016/0096703 A1 * 4/2016 Barea B65H 51/20
226/158
2016/0229659 A1 * 8/2016 Barea B65H 59/40

* cited by examiner

(**) Term: **15 Years**
(21) Appl. No.: **29/557,881**

Primary Examiner — Mitchell Siegel
(74) *Attorney, Agent, or Firm* — Vorys, Sater, Seymour
and Pease LLP

(22) Filed: **Mar. 14, 2016**

(57) **CLAIM**

(30) **Foreign Application Priority Data**

The ornamental design for a yarn feeder, as shown and described.

Sep. 15, 2015 (EM) 002772434-0001

(51) **LOC (10) Cl.** **15-06**

DESCRIPTION

(52) **U.S. Cl.**
USPC **D21/78**

(58) **Field of Classification Search**
USPC D15/66, 72, 78
CPC D04B 15/48; B65H 51/22; B65H 59/18;
B65H 59/00; B65H 59/38; B65H 51/30;
B65H 59/10
See application file for complete search history.

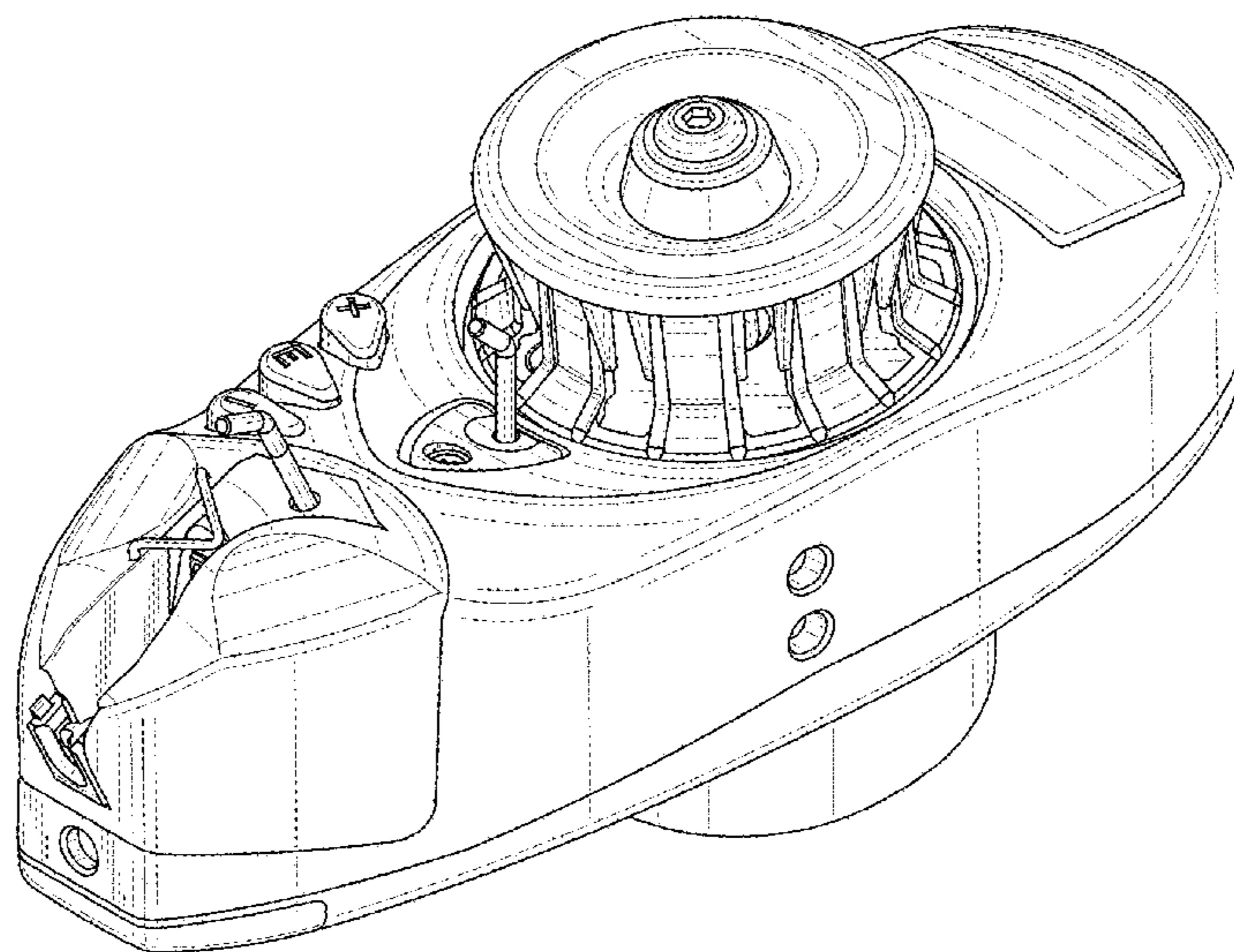
FIG. 1 is a perspective view of a yarn feeder;
FIG. 2 is a top plan view thereof;
FIG. 3 is a left side view thereof;
FIG. 4 is a right side view thereof;
FIG. 5 is a bottom plan view thereof;
FIG. 6 is an end view thereof;
FIG. 7 is an opposite end view thereof;
FIG. 8 is a cross sectional perspective view taken on line of
8-8 of FIG. 12;
FIG. 9 is a cross sectional perspective view taken on line **9-9**
of FIG. 12;
FIG. 10 is a cross sectional perspective view taken on line
10-10 of FIG. 12;
FIG. 11 is a cross sectional perspective view taken on line
11-11 of FIG. 13;
FIG. 12 is a perspective view of FIG. 1 disclosing the cross
sectional cut lines; and,
FIG. 13 is an enlarged bottom plan view of FIG. 5 disclosing
a cross sectional cut line.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,598,560 A * 7/1986 Sawazaki D04B 15/48
242/365.6
4,669,677 A * 6/1987 Roser D04B 15/48
242/365.7
D309,315 S * 7/1990 Maina D15/78
D309,614 S * 7/1990 Maina D15/78
D315,914 S * 4/1991 Chen D15/72
D463,463 S * 9/2002 Zenoni D15/78
D464,065 S * 10/2002 Schmodde D15/78
7,699,258 B2 * 4/2010 Barea D04B 15/48
242/365.7

1 Claim, 13 Drawing Sheets



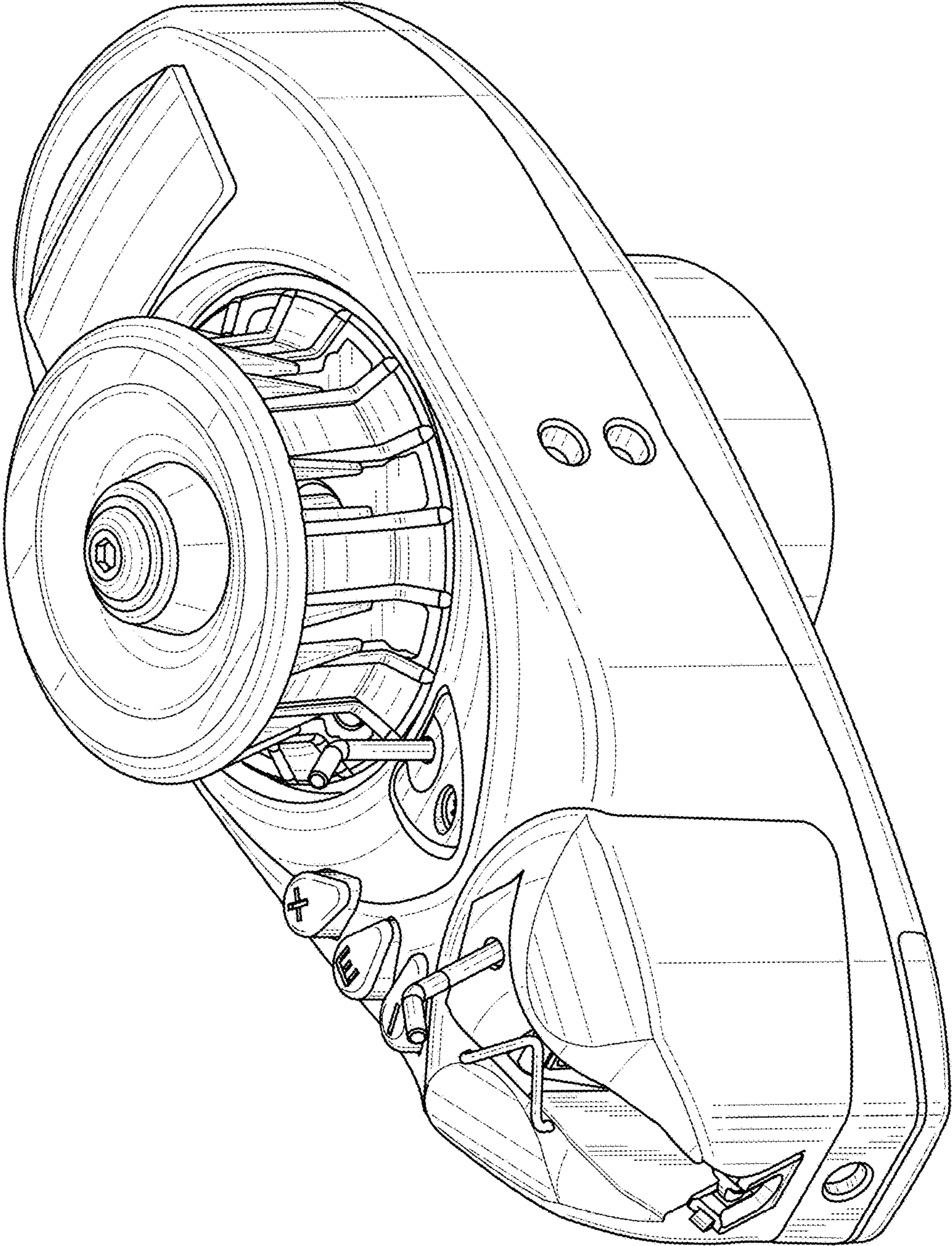


FIG. 1

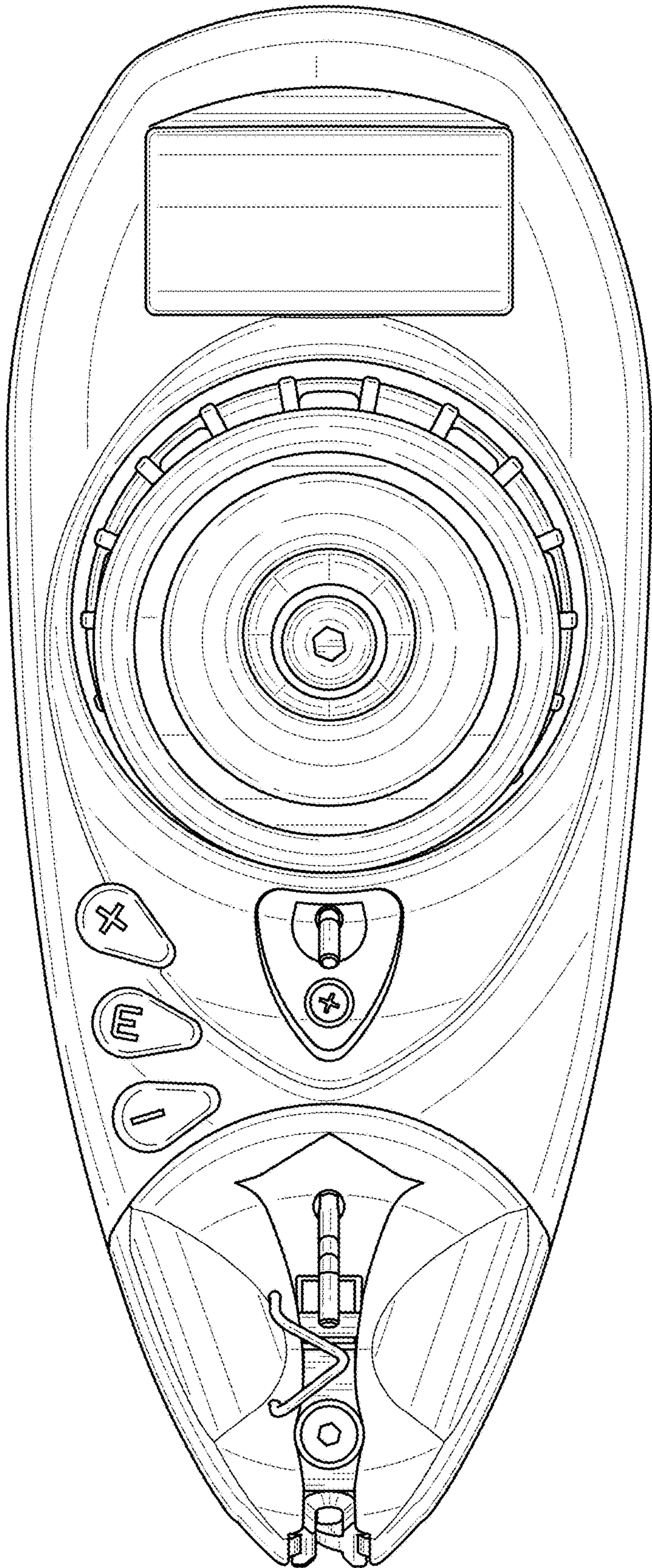


FIG. 2

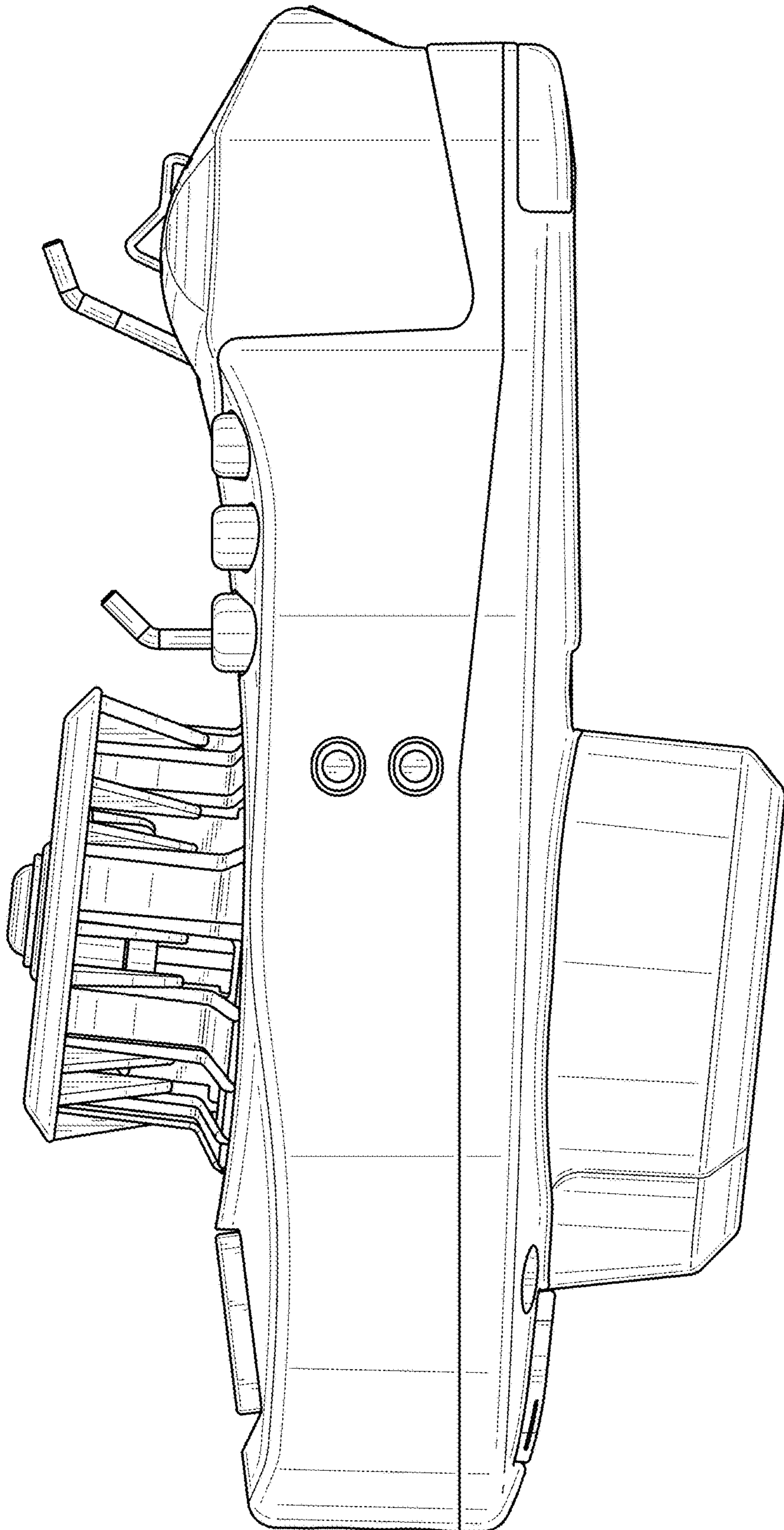


FIG. 3

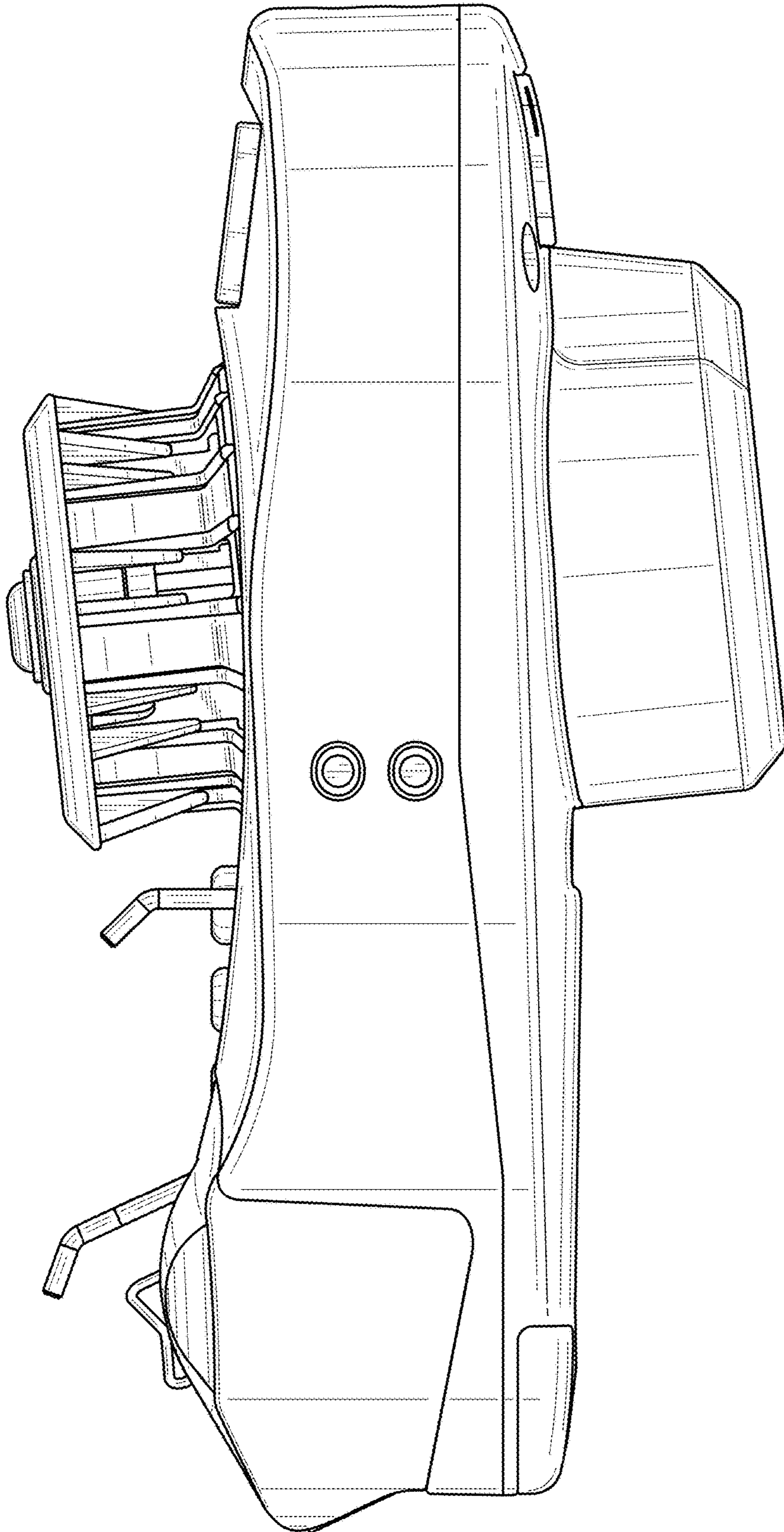


FIG. 4

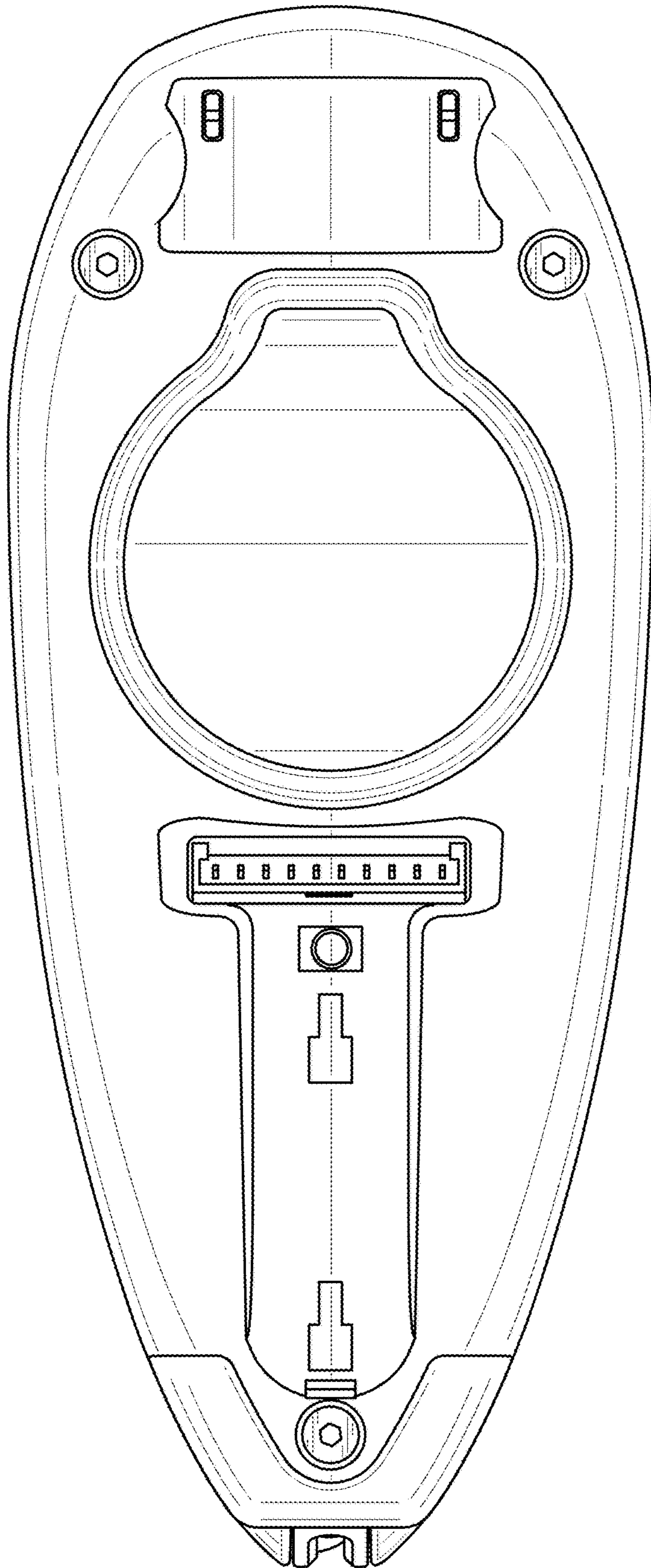


FIG. 5

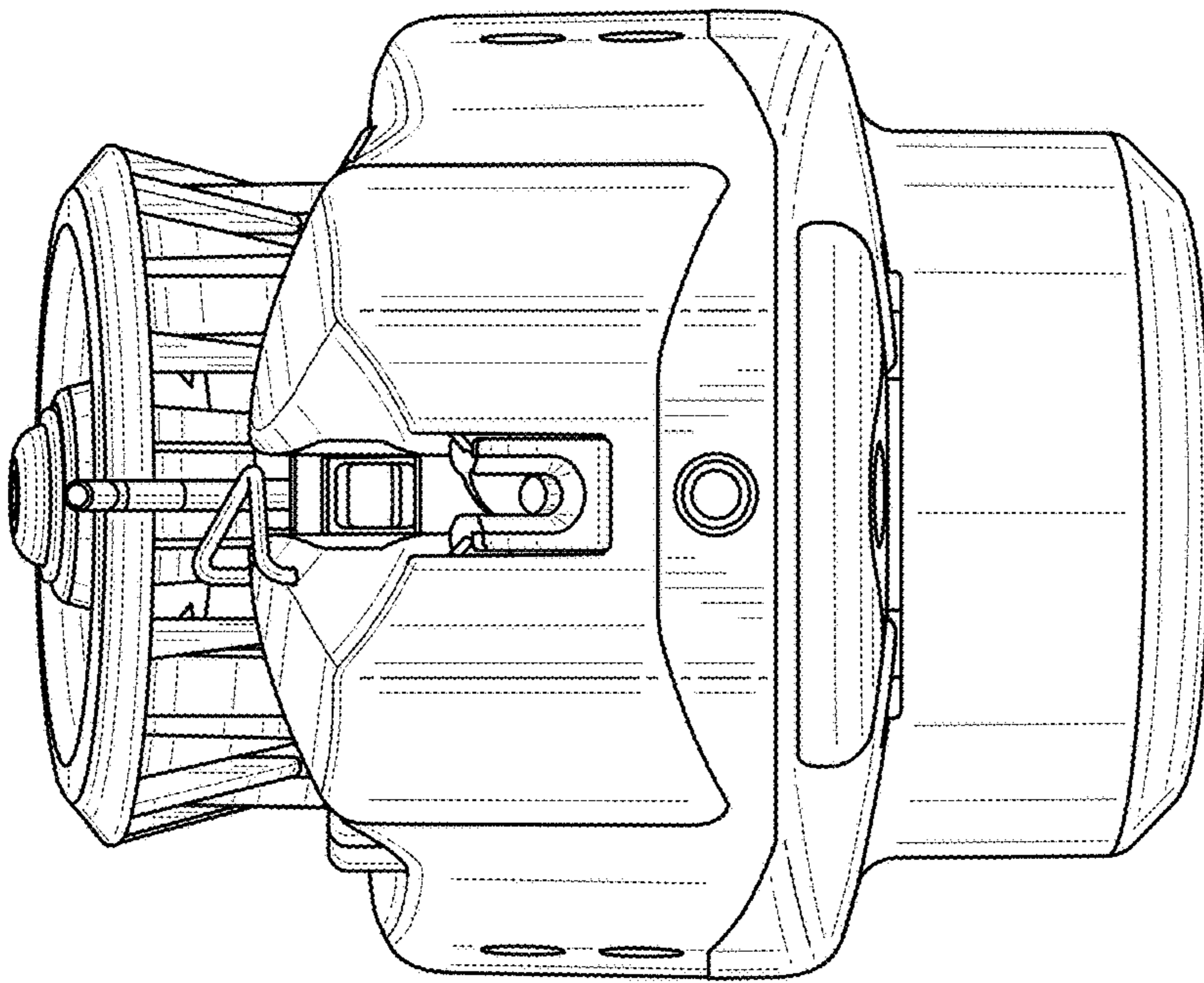


FIG. 6

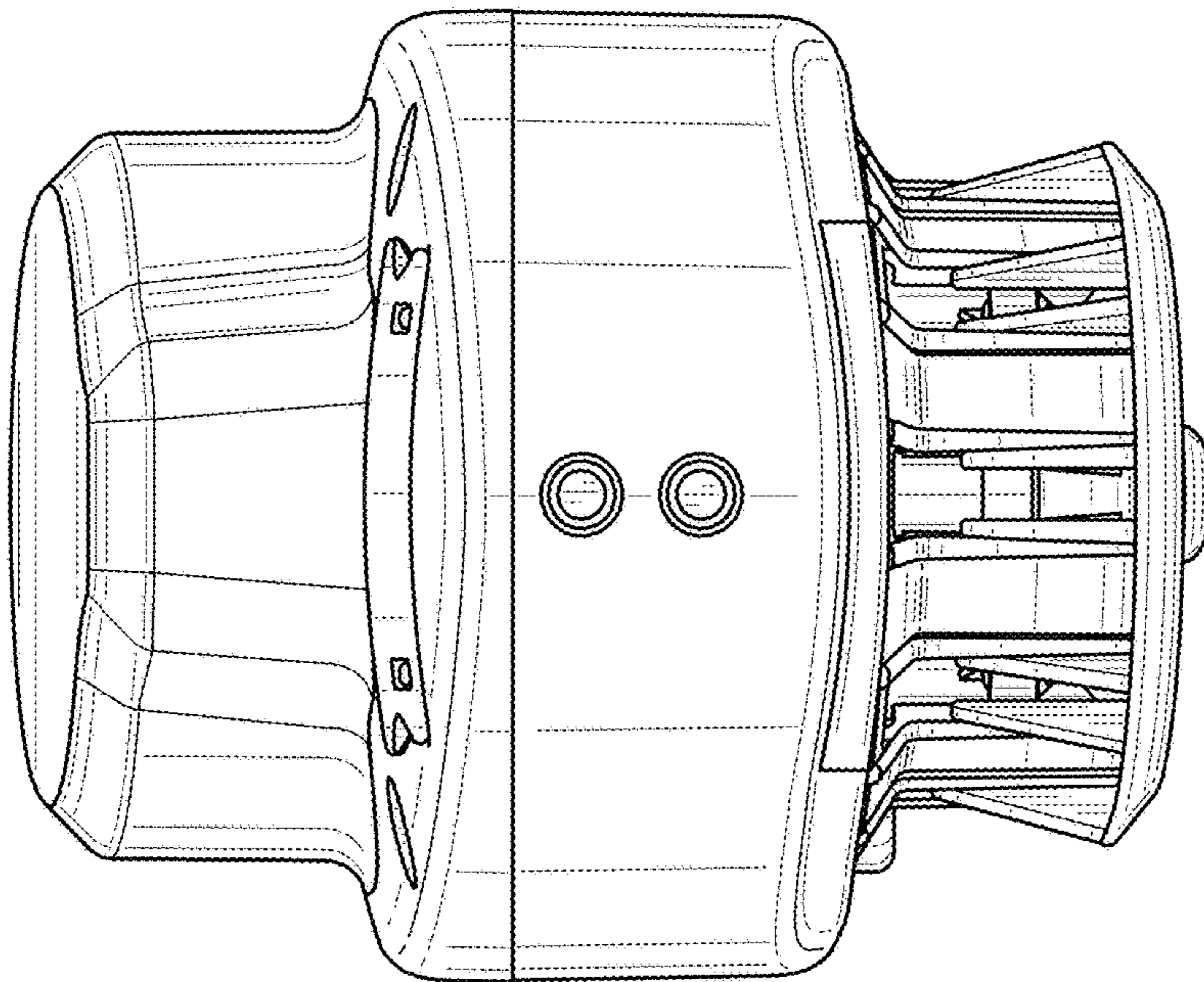


FIG. 7

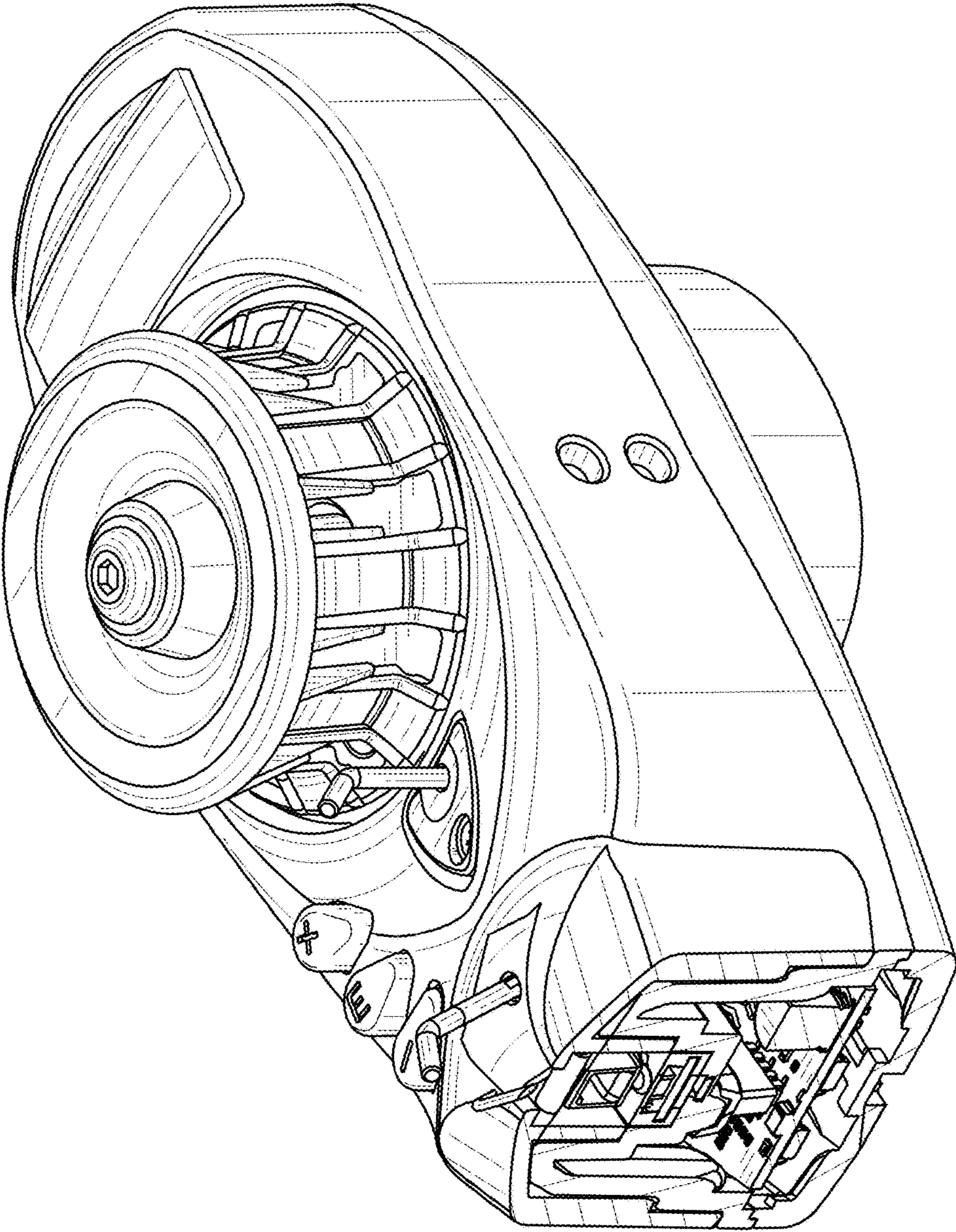


FIG. 8

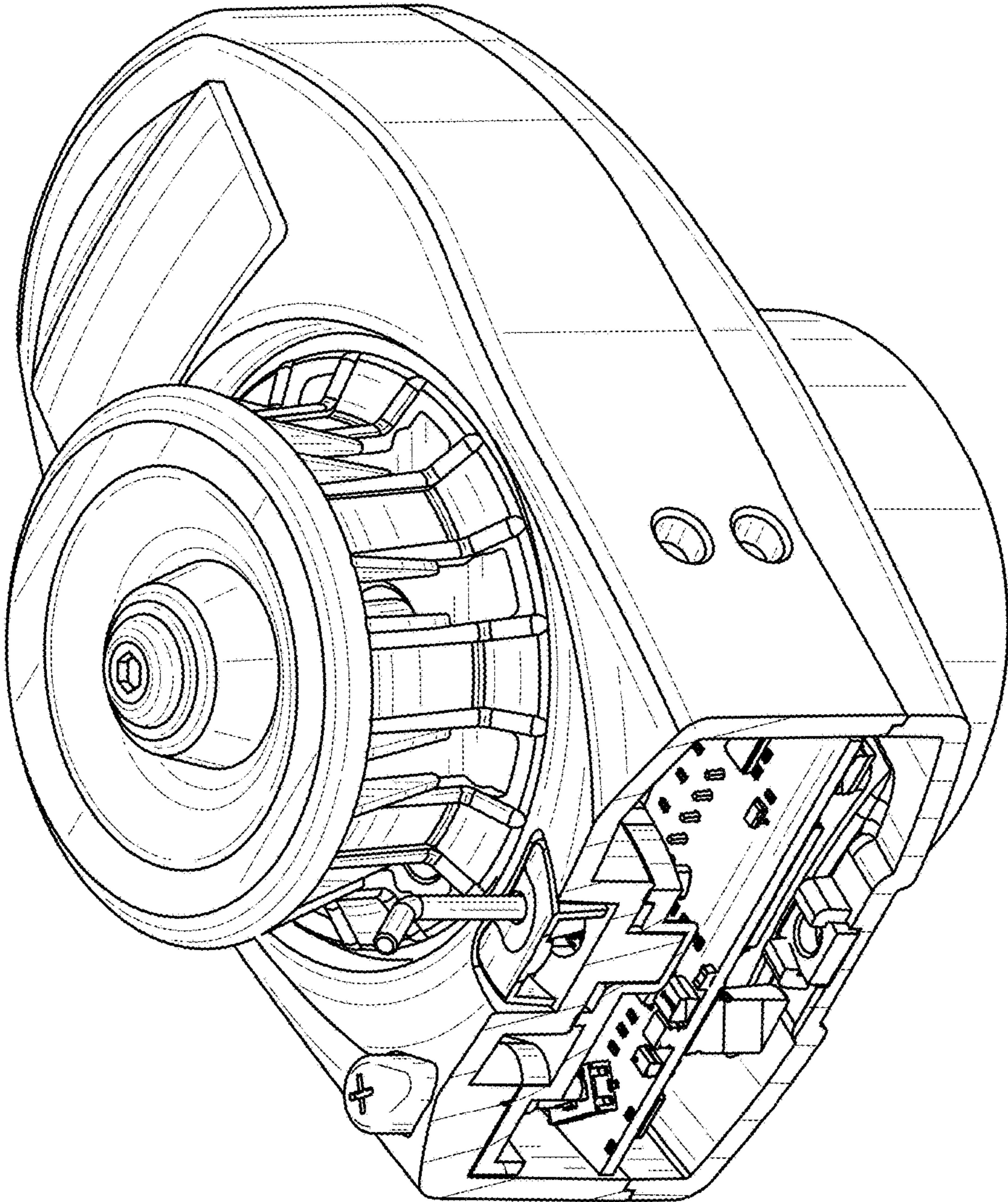


FIG. 9

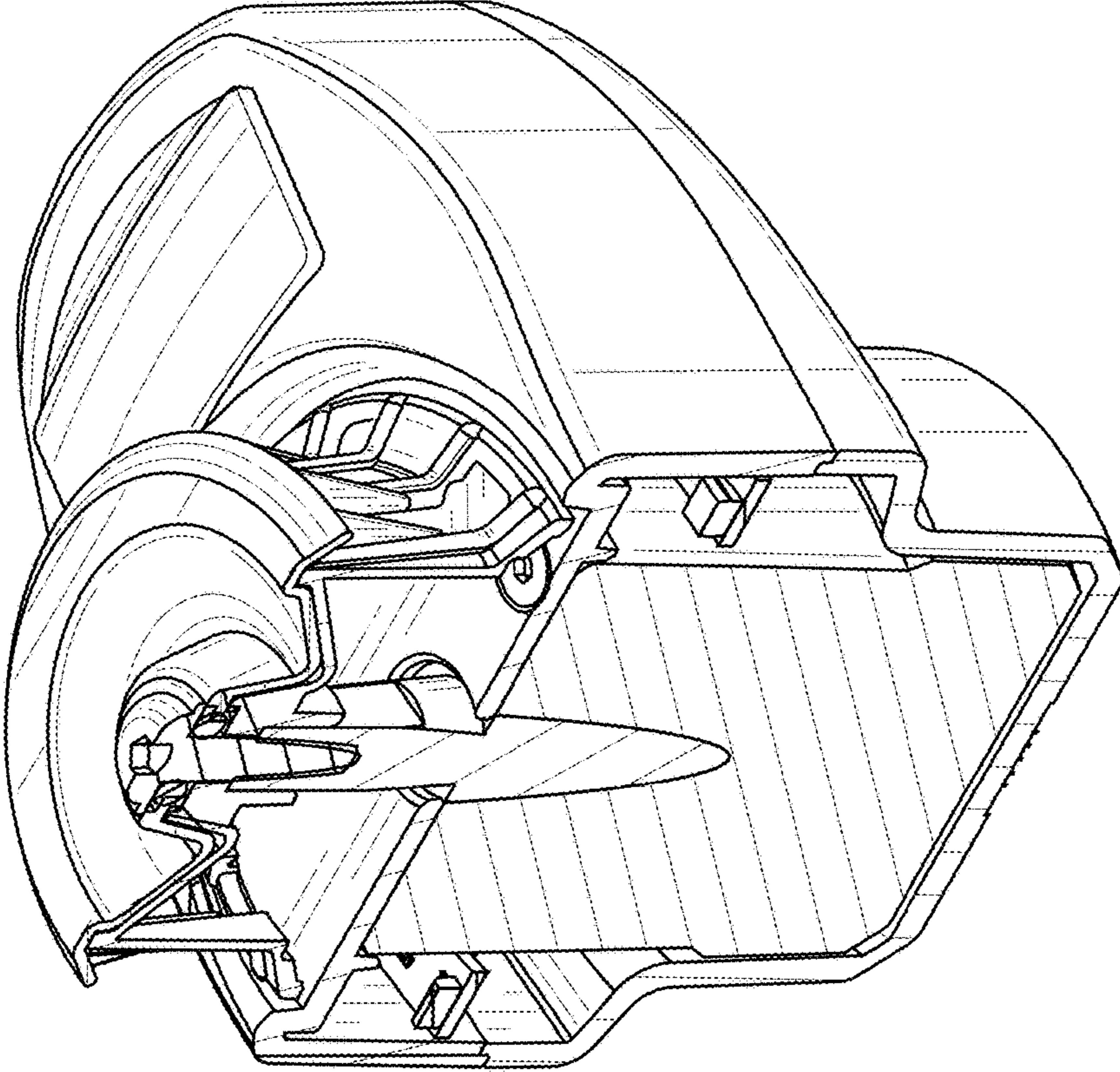


FIG. 10

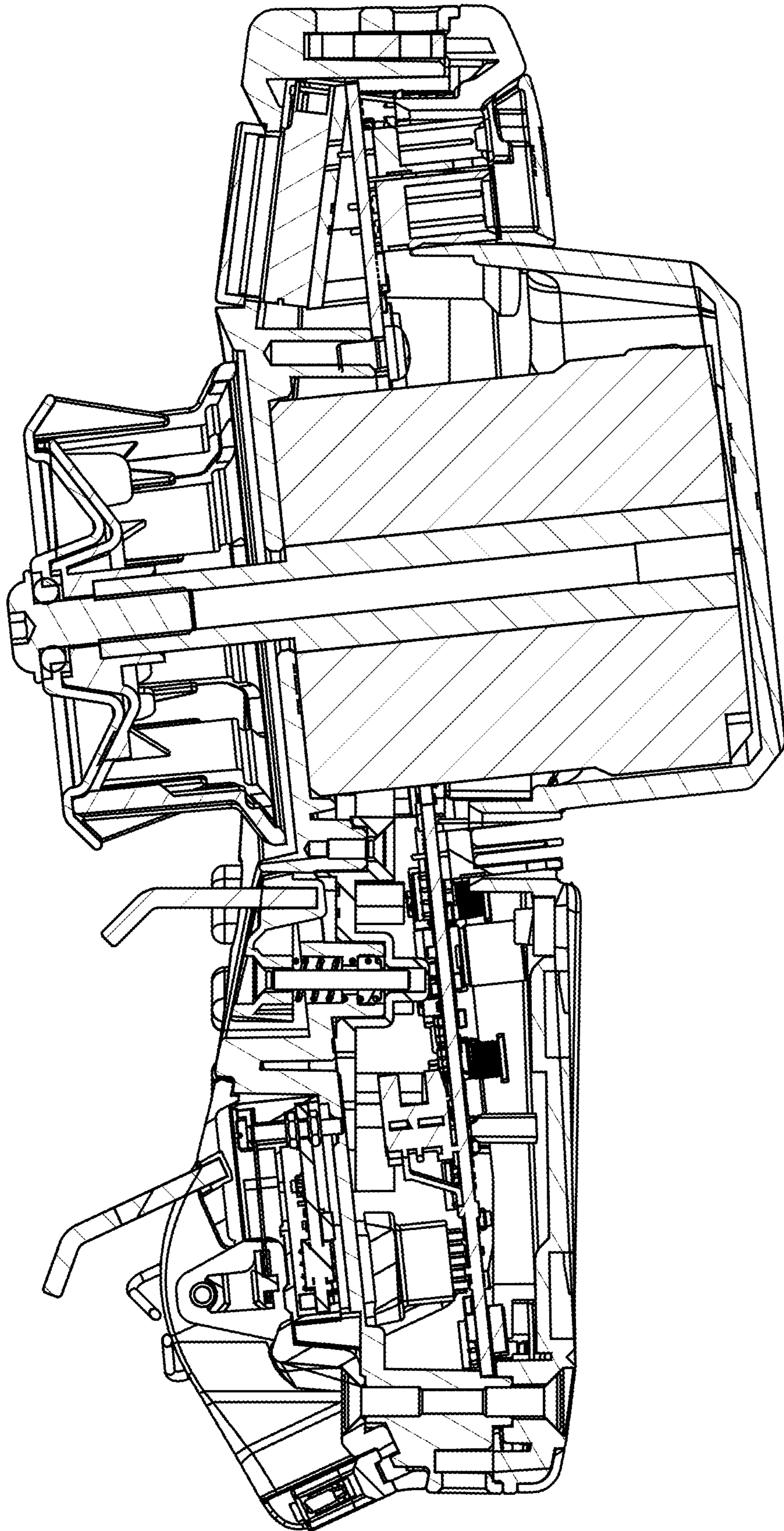


FIG. 11

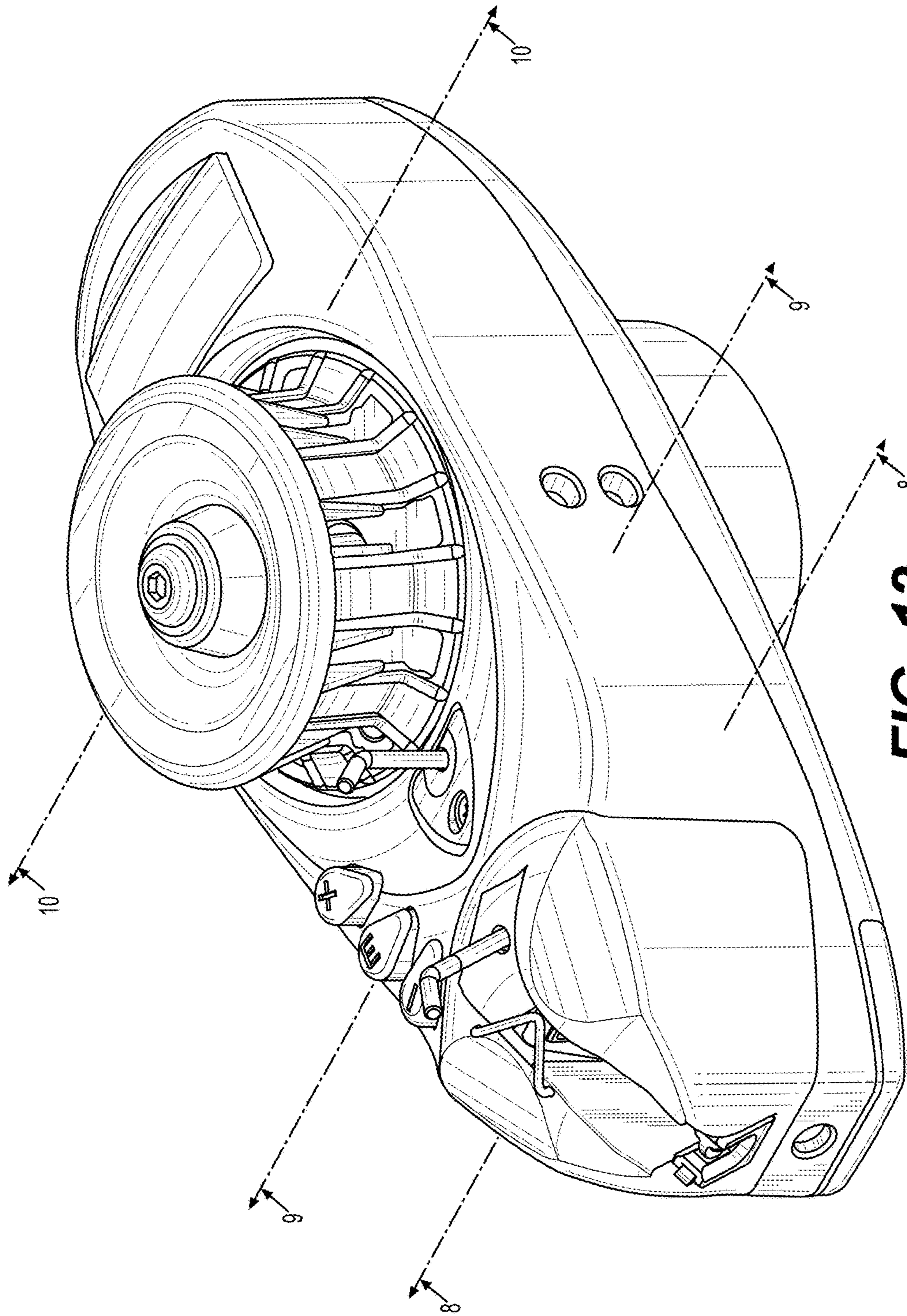


FIG. 12

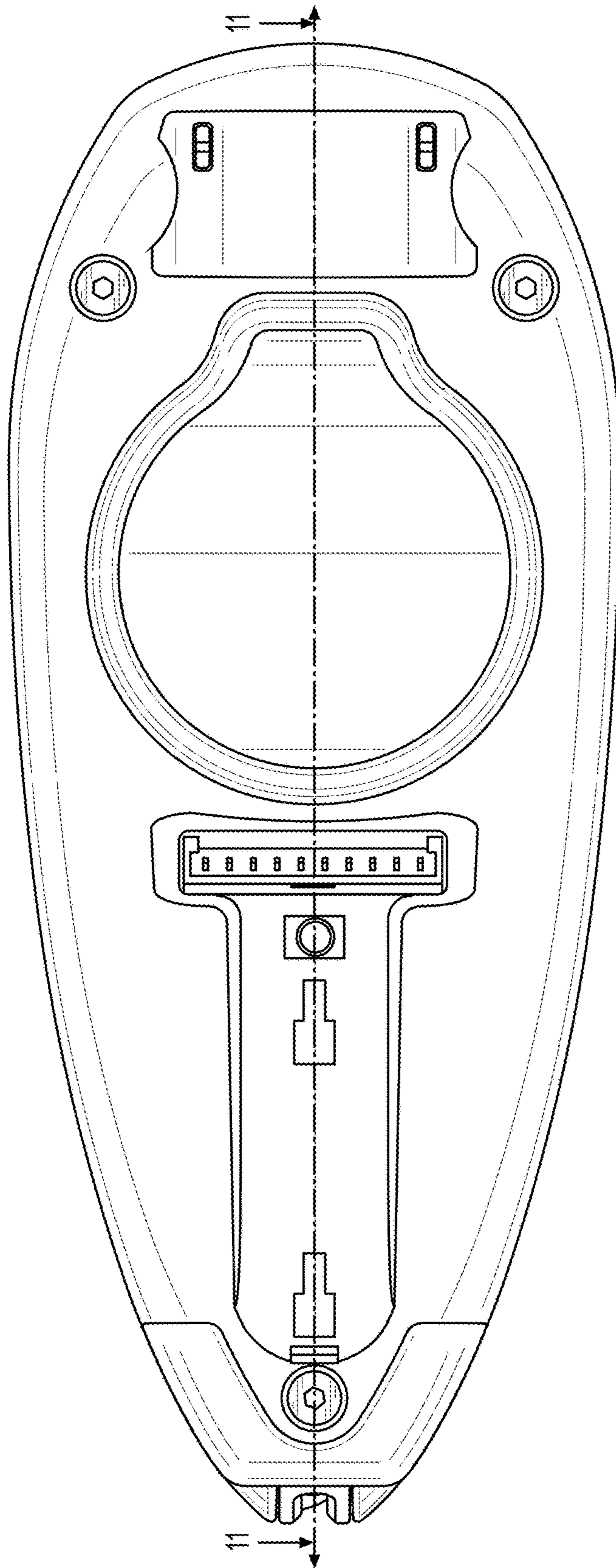


FIG. 13