



US00D870795S

(12) **United States Design Patent** (10) **Patent No.:** **US D870,795 S**
Okayasu et al. (45) **Date of Patent:** **** Dec. 24, 2019**

(54) **VARIABLE FOCAL LENGTH LENS**
(71) Applicant: **MITUTOYO CORPORATION**,
Kanagawa (JP)
(72) Inventors: **Masaki Okayasu**, Tokyo (JP);
Masafumi Yamanaka, Kawasaki (JP);
Isaiah Freerksen, Bothell, WA (US);
Masanori Arai, Kawasaki (JP);
Tatsuya Nagahama, Kawasaki (JP);
Shigeru Ohtani, Kawasaki (JP); **Yu**
Sugai, Hadano (JP); **Yoshiro Asano**,
Tokyo (JP)

(73) Assignee: **MITUTOYO CORPORATION**,
Kanagawa (JP)

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

(21) Appl. No.: **29/658,259**

(22) Filed: **Jul. 30, 2018**

(51) **LOC (12) Cl.** **16-05**

(52) **U.S. Cl.**
USPC **D16/219**

(58) **Field of Classification Search**
USPC D16/134, 136, 200, 202–205, 218, 219,
D16/235, 242; 348/373–376;
359/826–828; 396/529–532, 535,
396/539–541
CPC G03B 17/02; G03B 19/04; G03B 17/56;
G03B 17/04; G03B 15/03; G03B 17/14;
H04N 5/2251; H04N 5/2252; H04N
5/2253; H04N 5/2254; G02B 7/02; G02B
7/04; G02B 7/14

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D428,618 S 7/2000 McBride
D430,888 S 9/2000 Adachi et al.

D493,186 S 7/2004 Moore et al.
D541,326 S 4/2007 Ford et al.
D665,005 S * 8/2012 Asano D16/219
D695,809 S 12/2013 Katori et al.
8,717,413 B2 5/2014 Wilson et al.
D783,078 S * 4/2017 Kim D16/219
D783,700 S * 4/2017 Tagawa D16/219
D810,169 S 2/2018 Bhattacharya
D829,261 S 9/2018 Matsumiya et al.
D837,927 S * 1/2019 Trulsson D22/109
D846,691 S * 4/2019 Cheng D22/109
D856,458 S * 8/2019 Cheng D22/109
D856,459 S * 8/2019 Hamilton D22/109
2002/0159146 A1 10/2002 Leimbach et al.

(Continued)

Primary Examiner — Ramzi S Almatrahi
(74) *Attorney, Agent, or Firm* — Oliff PLC

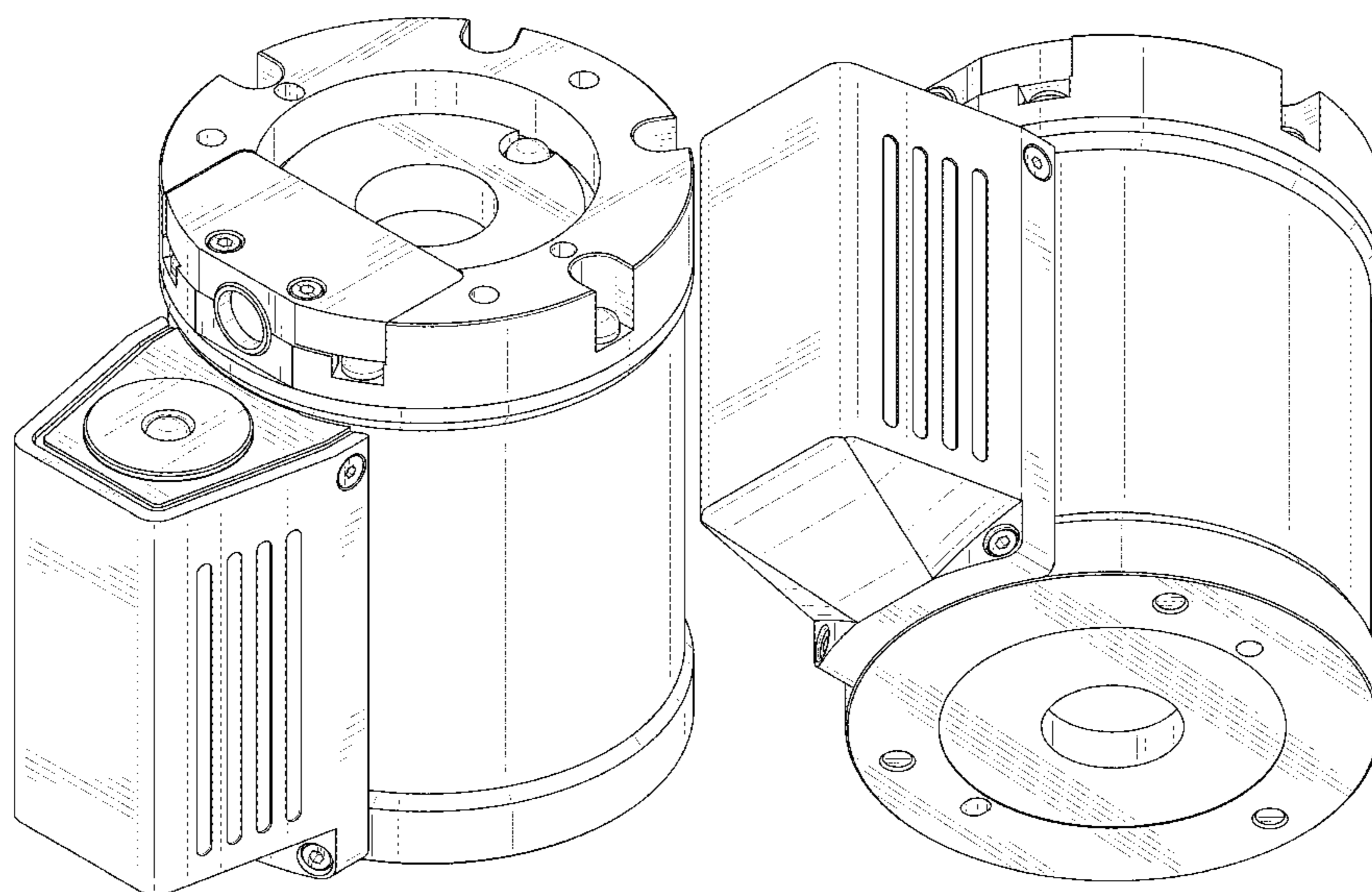
(57) **CLAIM**

The ornamental design for a variable focal length lens, as shown and described.

DESCRIPTION

FIG. 1 is a top rear perspective view of a variable focal length lens;
FIG. 2 is a bottom rear perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a right-side view thereof;
FIG. 6 is a left-side view thereof;
FIG. 7 is a top view thereof;
FIG. 8 is a bottom view thereof; and,
FIG. 9 is a top rear perspective view thereof, shown in condition of use with an image pickup device and a microscope disclosed in broken lines to illustrate an environment. The broken lines showing an image pickup device and a microscope in FIG. 9 represent environmental structure and form no part of the claimed design.

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2014/0268361 A1 9/2014 Nunnink et al.
2015/0301303 A1 10/2015 Kim et al.

* cited by examiner

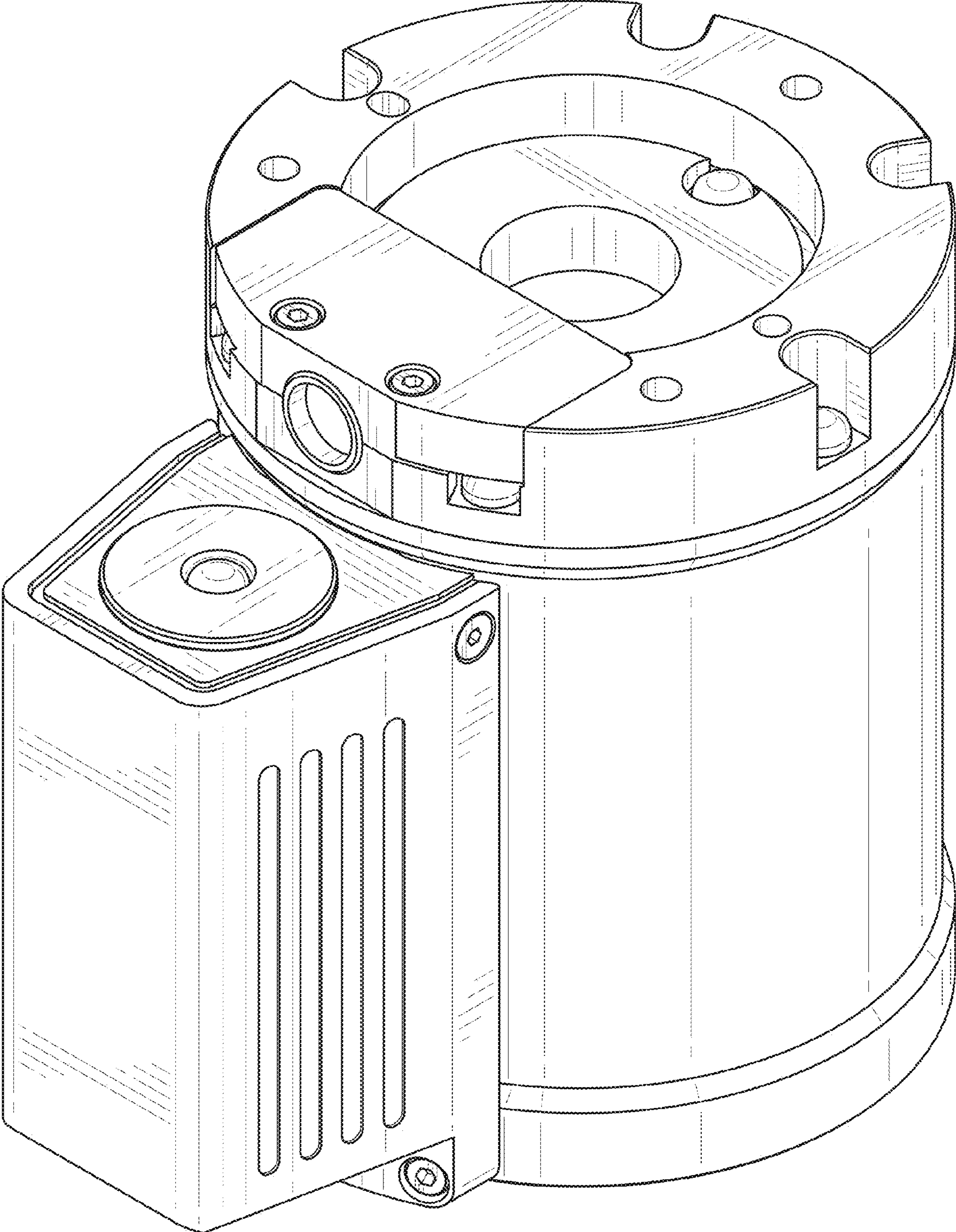


FIG. 1

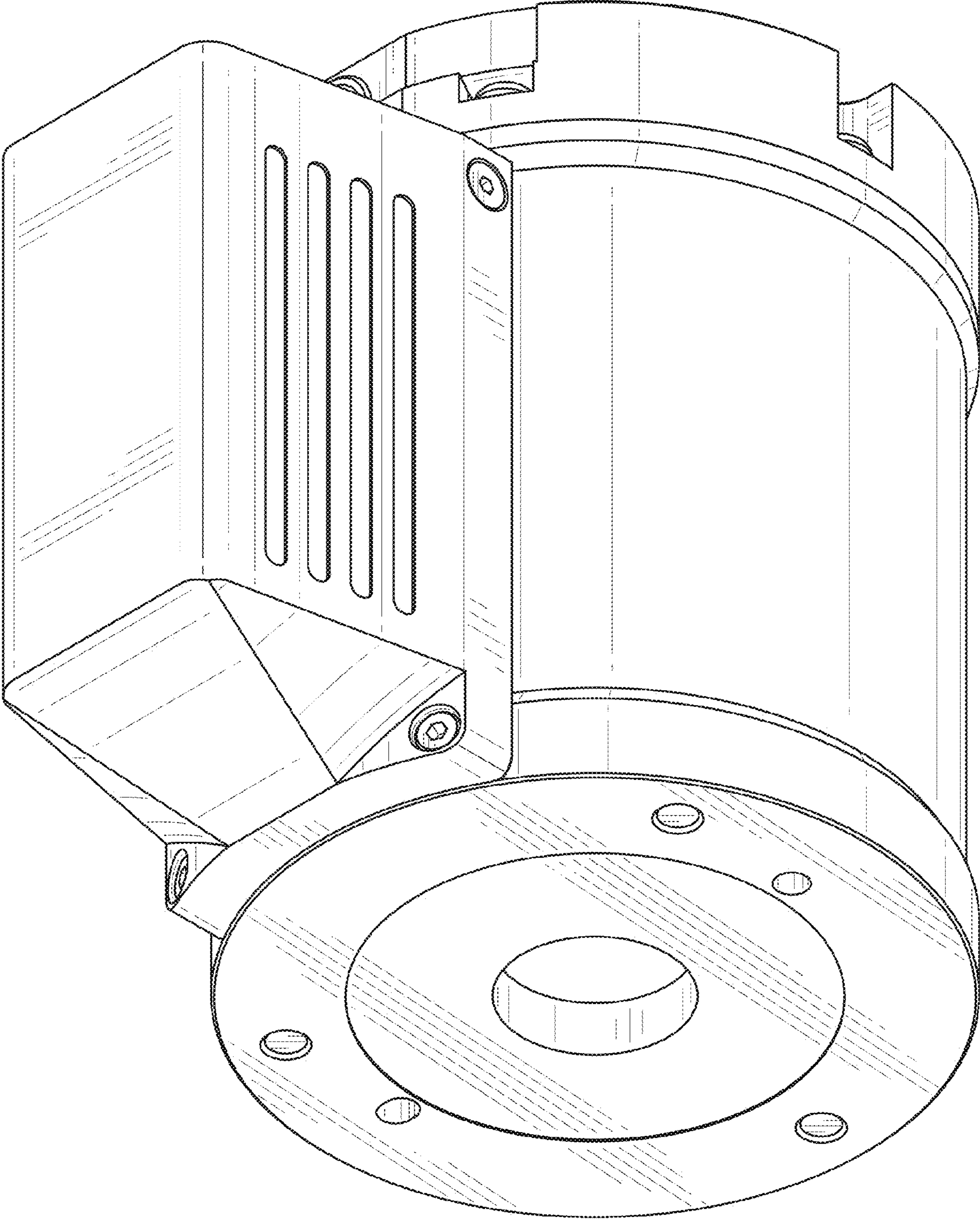


FIG. 2

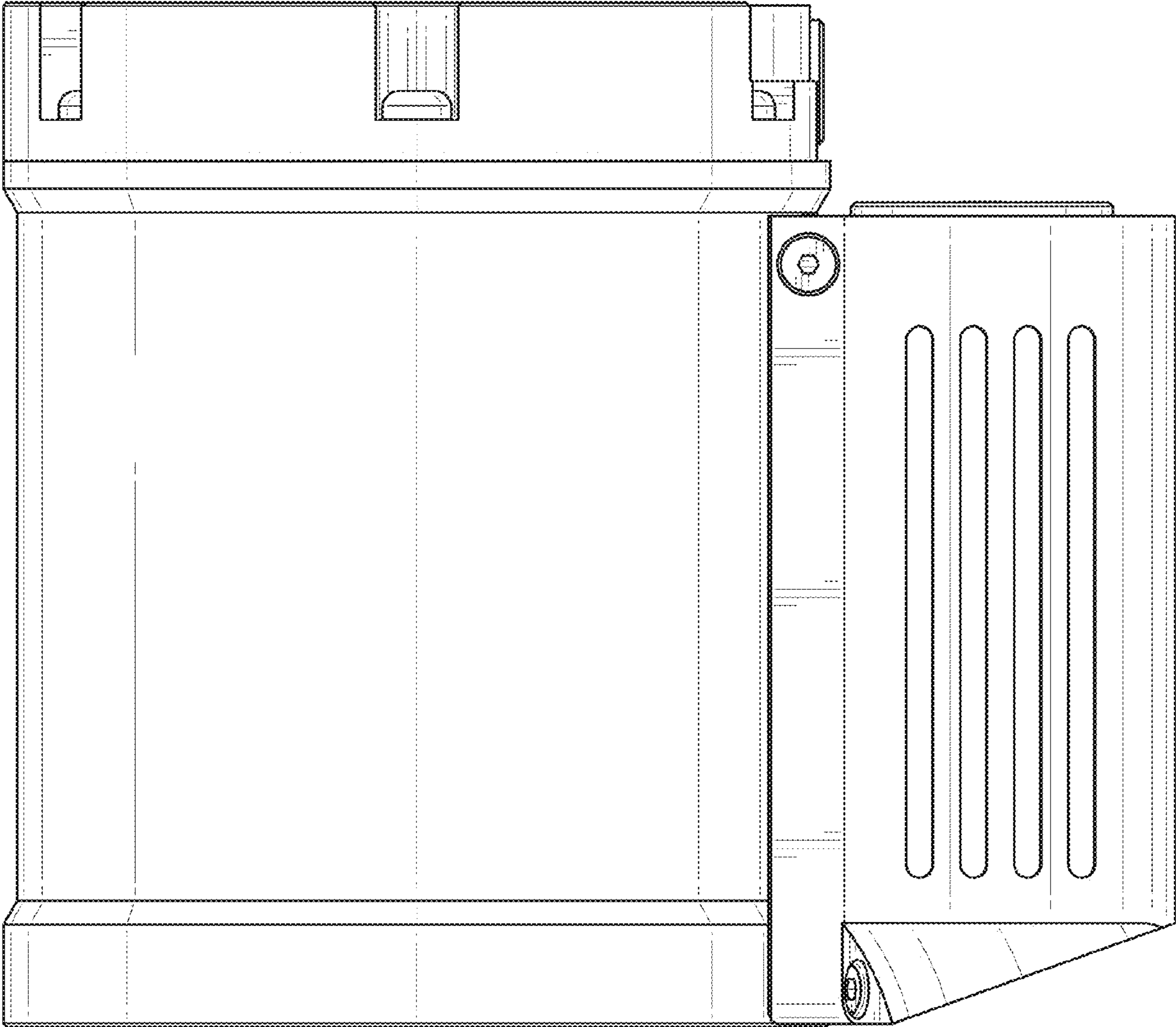


FIG. 3

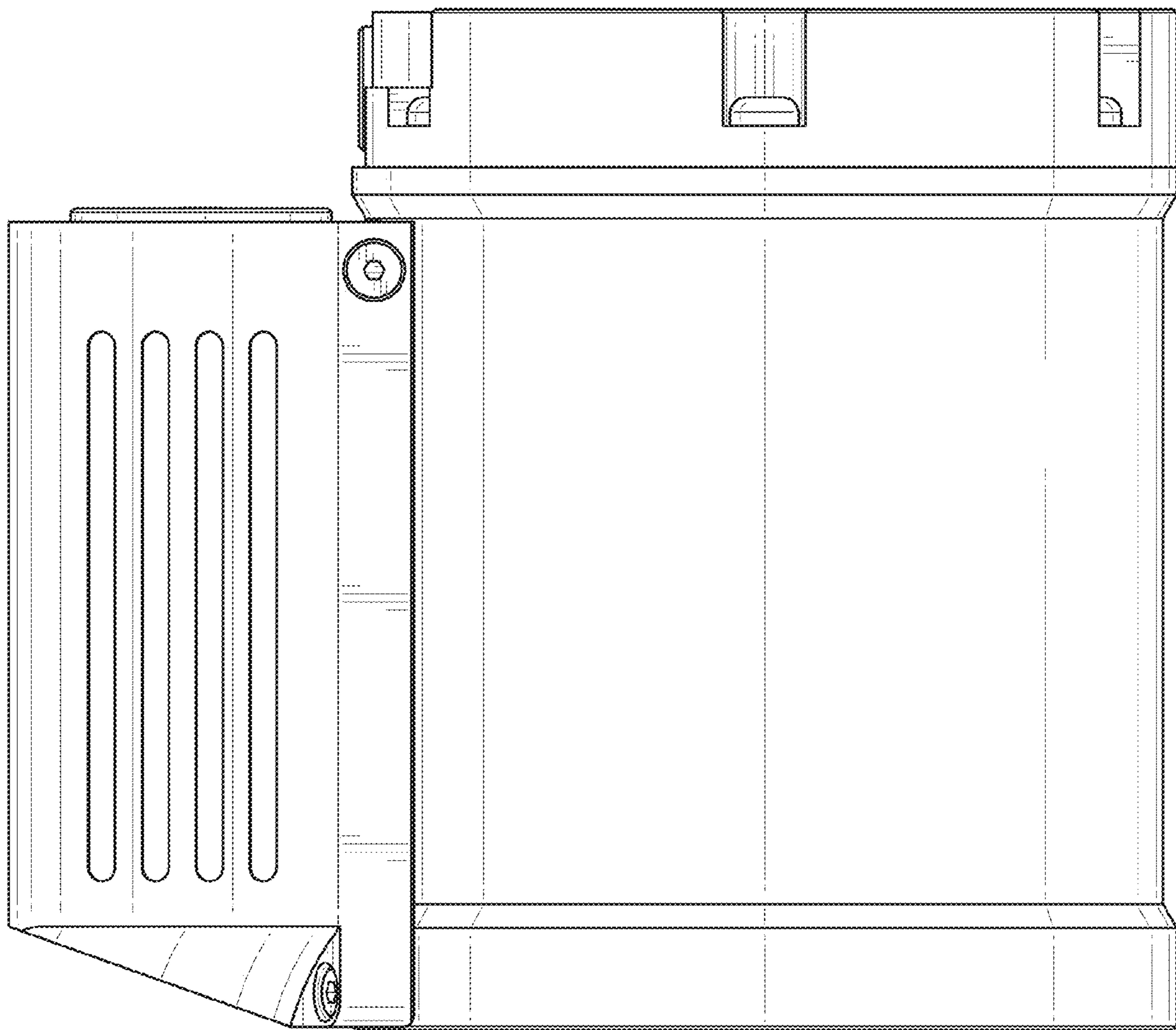


FIG. 4

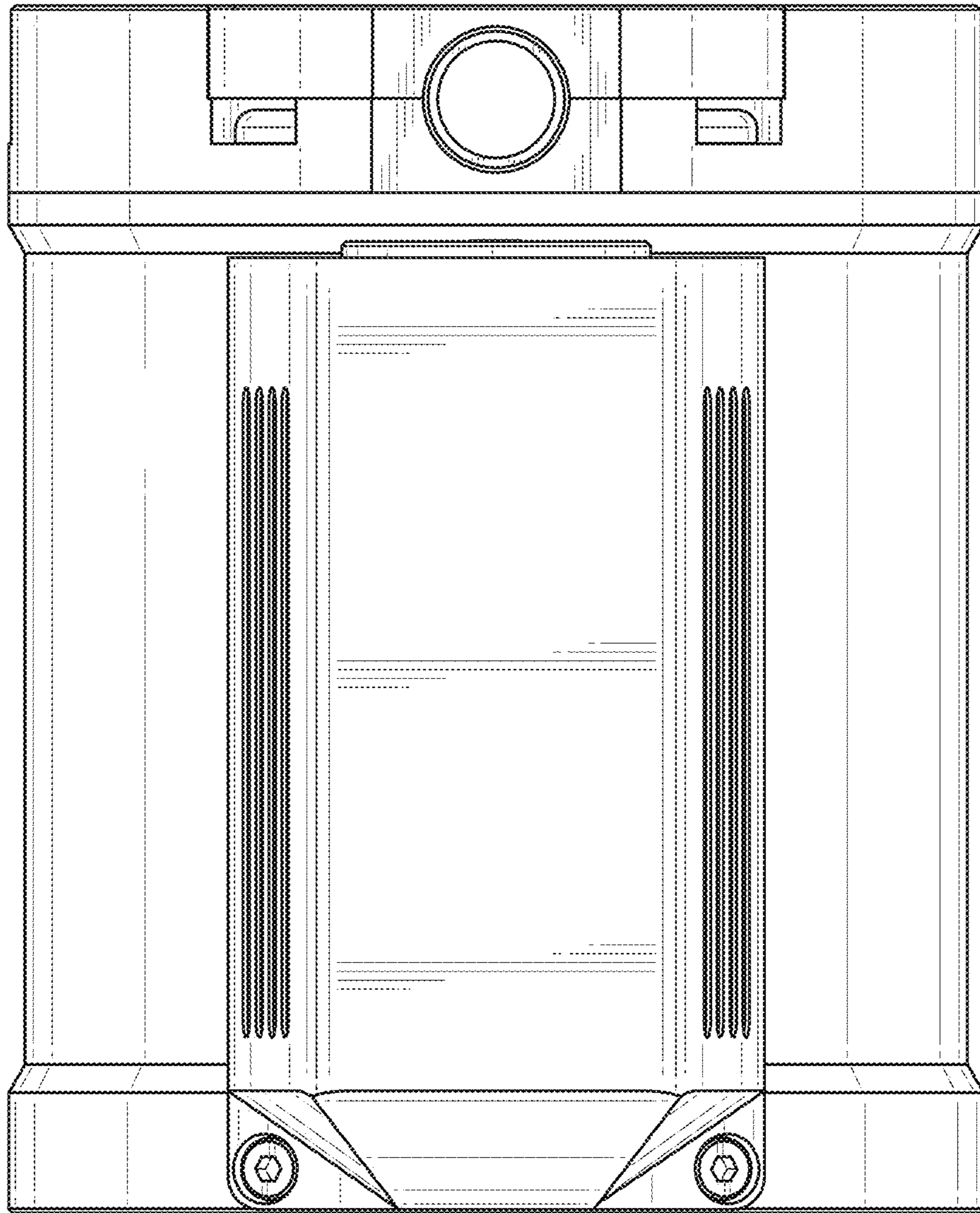


FIG. 5

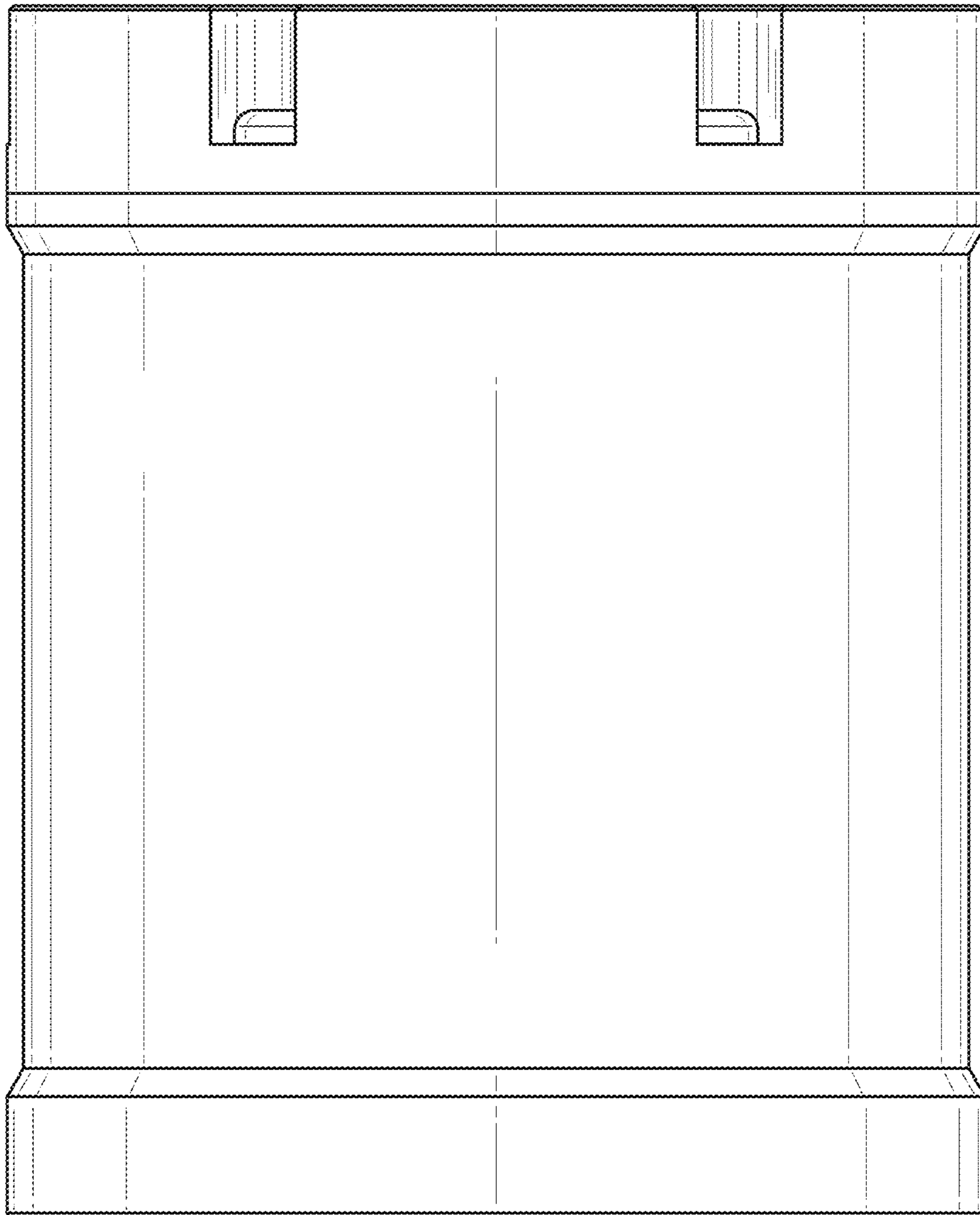


FIG. 6

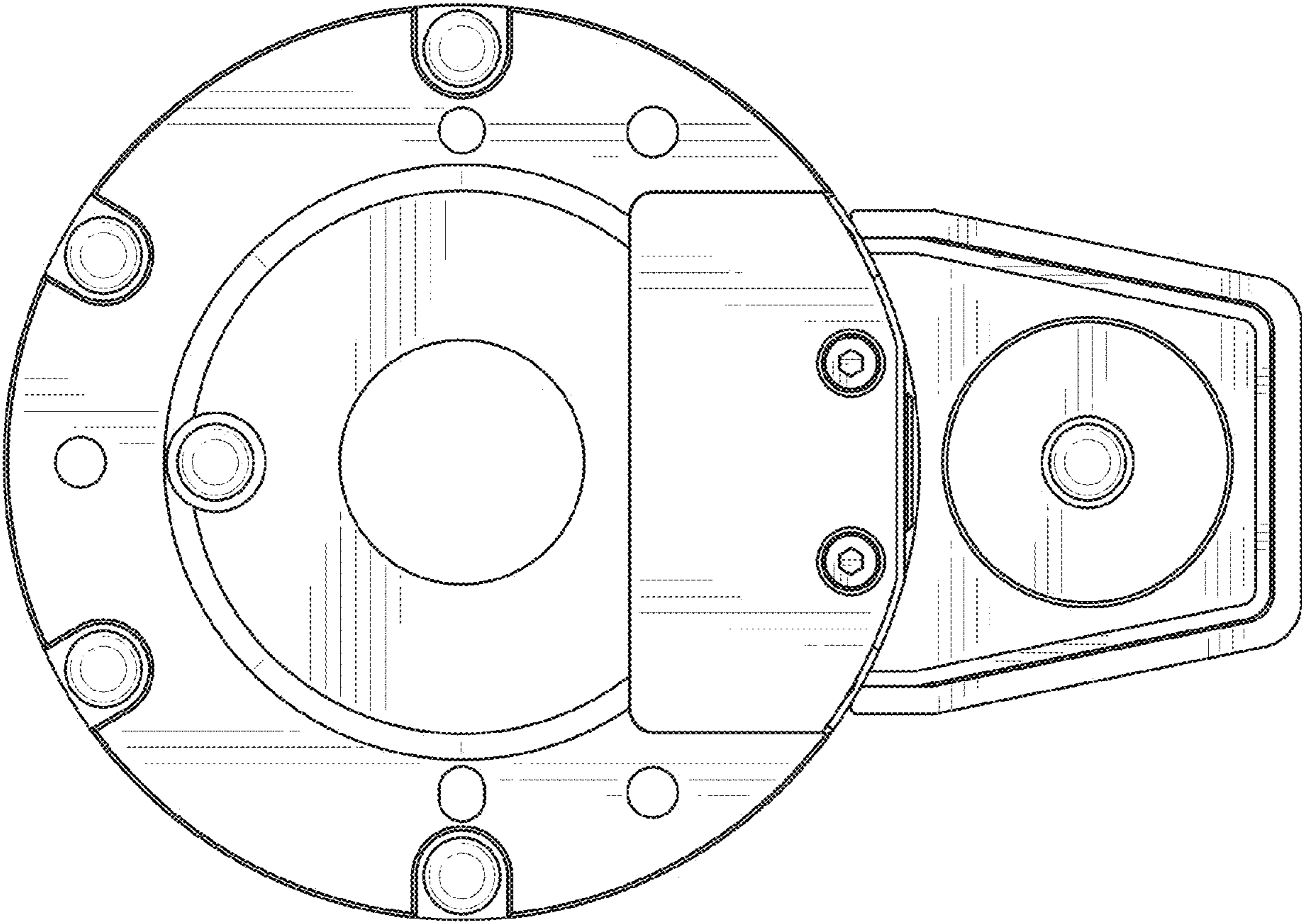


FIG. 7

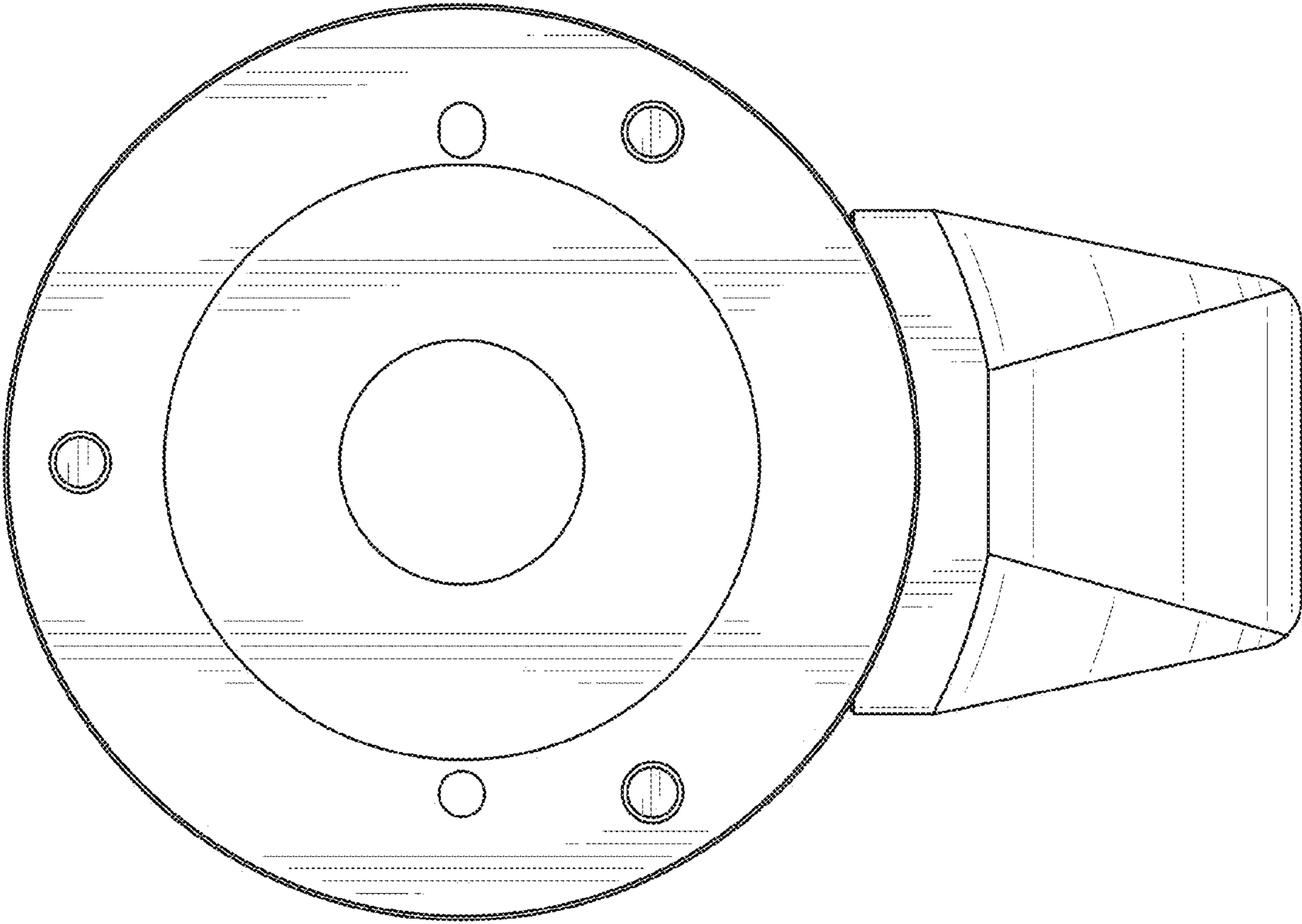


FIG. 8

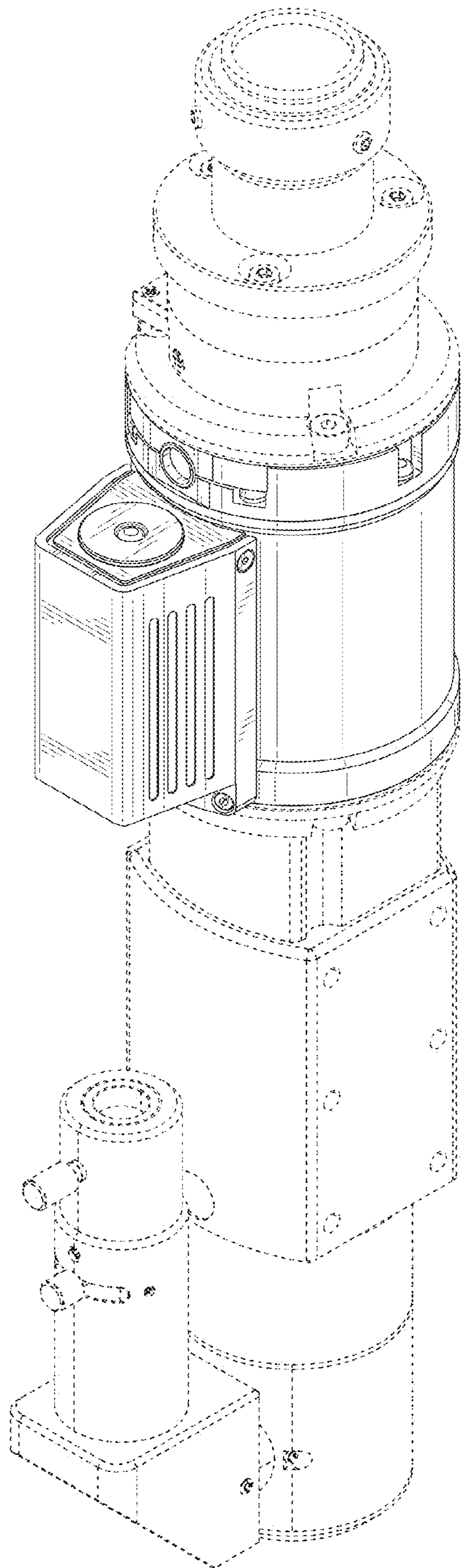


FIG. 9