



US00D681679S

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

(10) **Patent No.:** **US D681,679 S**
(45) **Date of Patent:** **** May 7, 2013**

(54) **VACUUM PUMP**

(56) **References Cited**

(75) Inventors: **Taisuke Osaka**, Miyazaki (JP); **Yusaku Tanabe**, Miyazaki (JP)

(73) Assignee: **Ulvac Kiko, Inc.**, Miyazaki (JP)

(**) Term: **14 Years**

(21) Appl. No.: **29/426,004**

(22) Filed: **Jun. 29, 2012**

(30) **Foreign Application Priority Data**

Jan. 10, 2012 (JP) 2012-000251
Jan. 10, 2012 (JP) 2012-000252

(51) **LOC (9) Cl.** **15-02**

(52) **U.S. Cl.**
USPC **D15/7**

(58) **Field of Classification Search** D15/7-9;
D23/231, 232, 225; 417/60, 235, 265, 321,
417/355, 358, 363, 359, 410.1, 415-416,
417/405, 900, 43, 554; 60/408, 412; 184/26-37;
415/140-147; 123/495, 509; 166/105.1,
166/105.2, 311

See application file for complete search history.

U.S. PATENT DOCUMENTS

D377,967	S	*	2/1997	Rozek et al.	.....	D23/235
D379,996	S	*	6/1997	Leu et al.	.....	D15/9
D382,883	S	*	8/1997	Breitzman et al.	.....	D15/9
D412,174	S	*	7/1999	Faulkner et al.	.....	D15/9
D499,119	S	*	11/2004	Thomas et al.	.....	D15/9
D532,796	S	*	11/2006	Leu	.....	D15/9
D613,633	S	*	4/2010	Leu et al.	.....	D15/9
D668,268	S	*	10/2012	Haener et al.	.....	D15/9

* cited by examiner

Primary Examiner — Ralf Seifert

(74) *Attorney, Agent, or Firm* — Saliwanchik, Lloyd & Eisenschenk

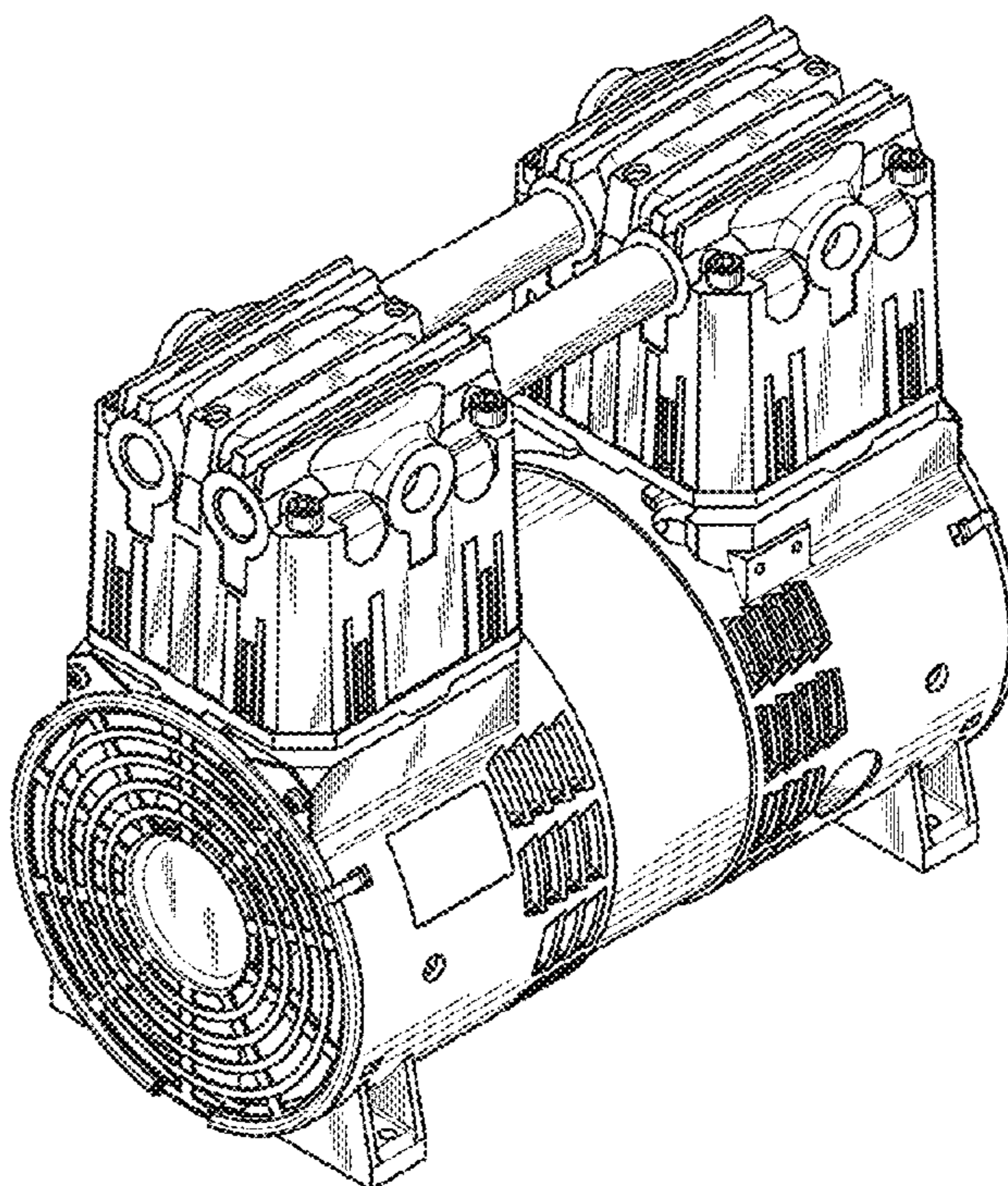
(57) **CLAIM**

The ornamental design for a vacuum pump, as shown and described.

DESCRIPTION

FIG. 1 is a front, top and right side perspective view of a first embodiment of a vacuum pump showing our new design; FIG. 2 is a rear, top and left side perspective view thereof; FIG. 3 is a front elevational view thereof; FIG. 4 is a rear elevational view thereof; FIG. 5 is a right side elevational view thereof; FIG. 6 is a left side elevational view thereof; FIG. 7 is a top plan view thereof; and, FIG. 8 is a bottom plan view thereof.

1 Claim, 4 Drawing Sheets



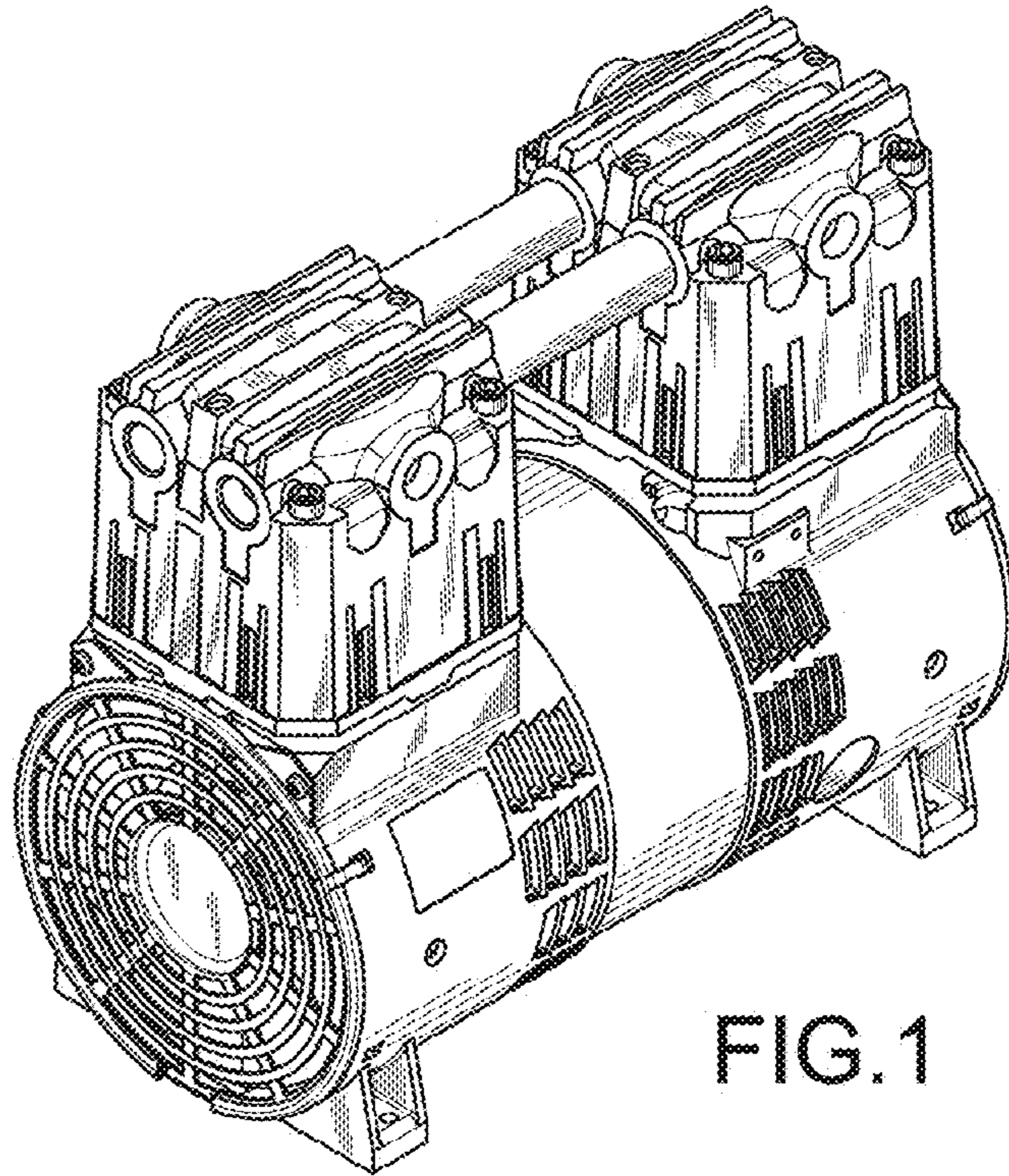


FIG. 1

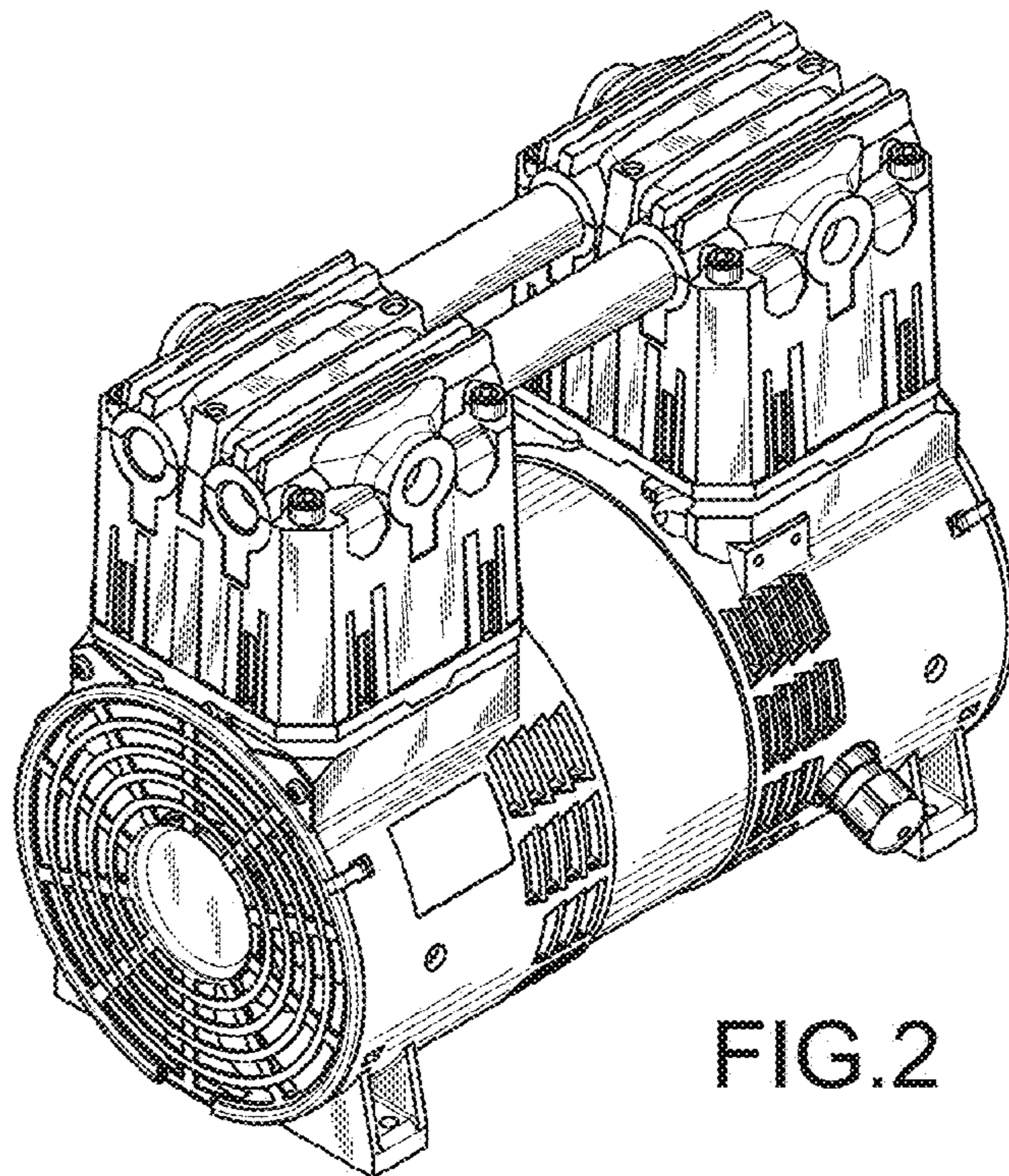


FIG. 2

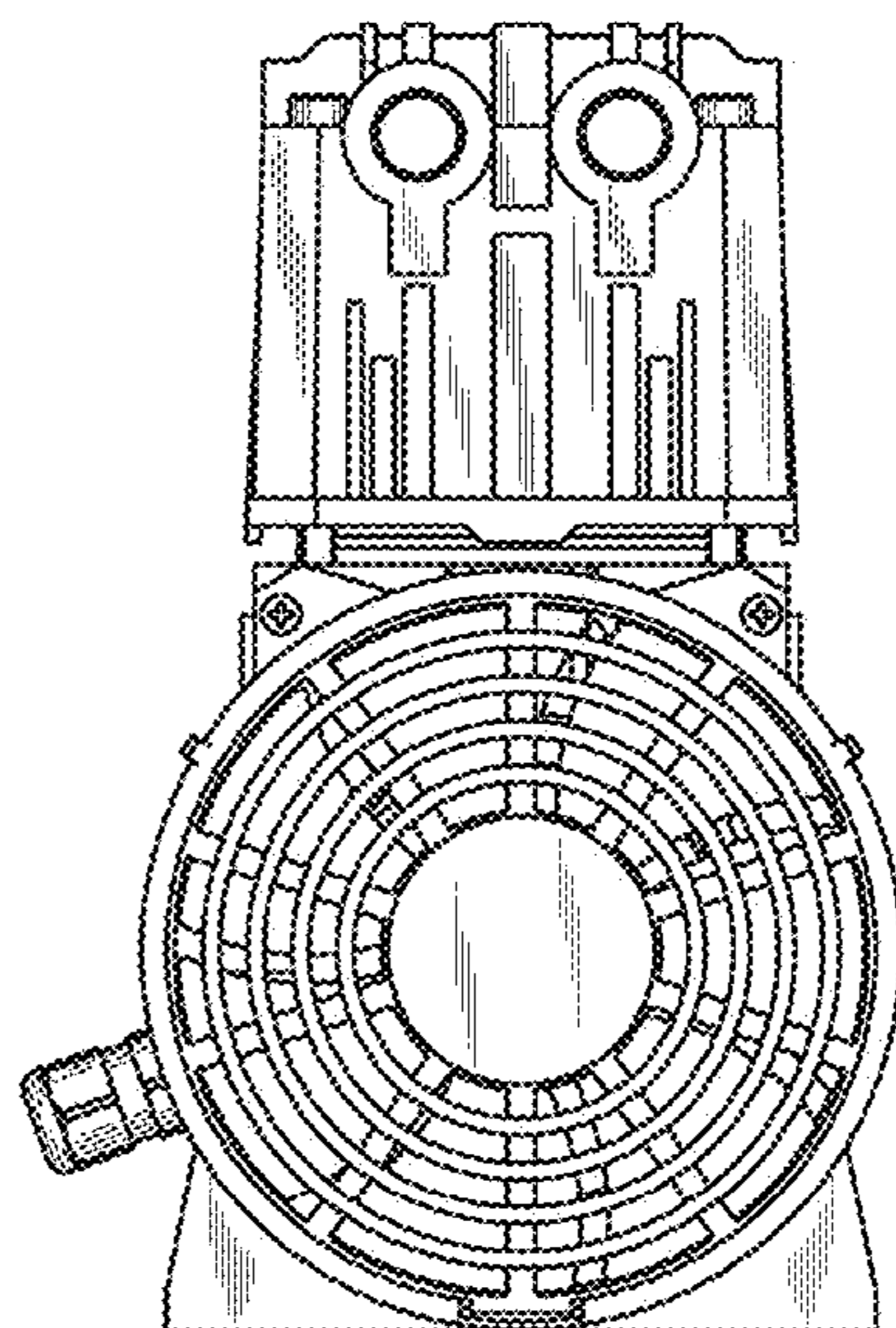


FIG.3

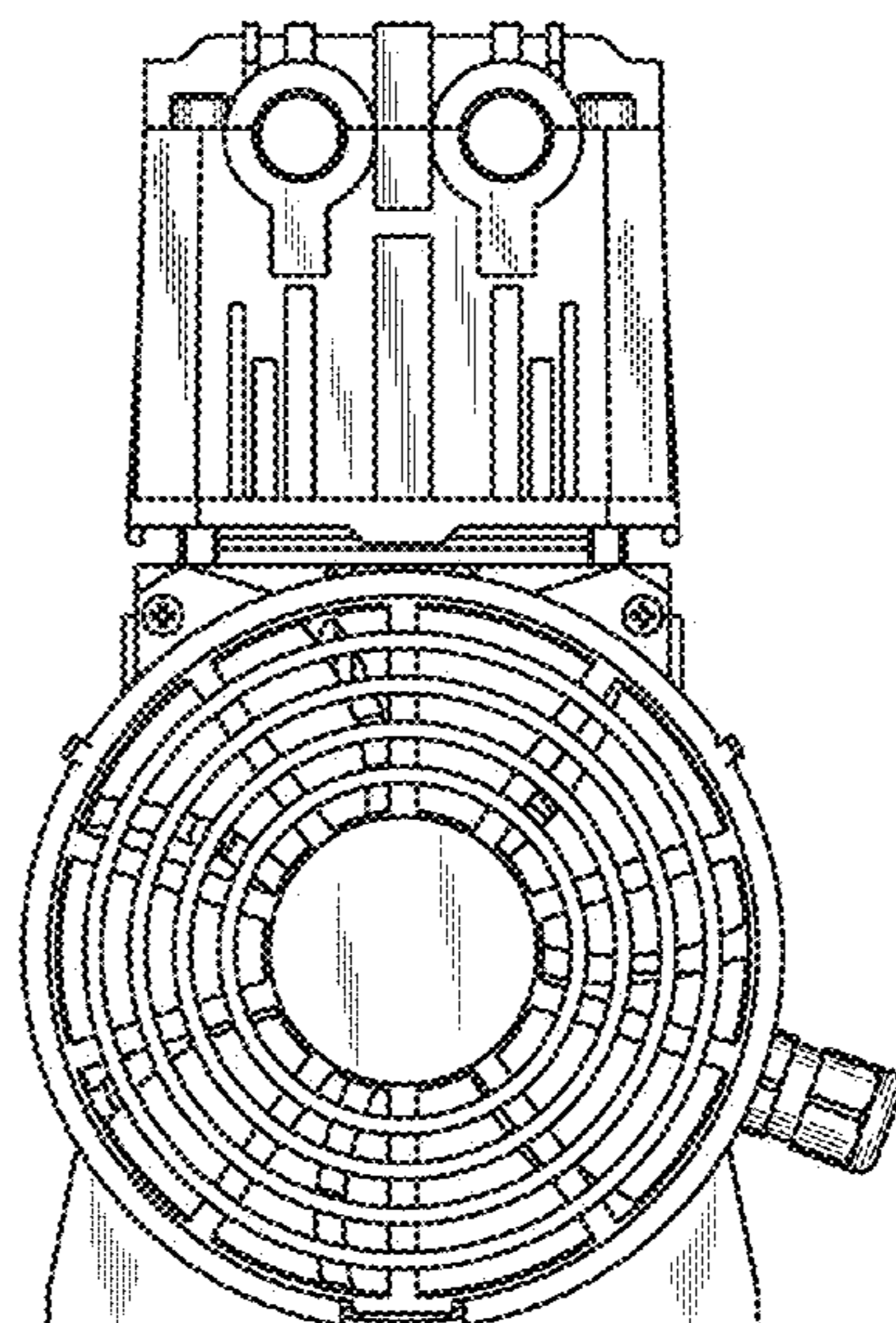


FIG.4

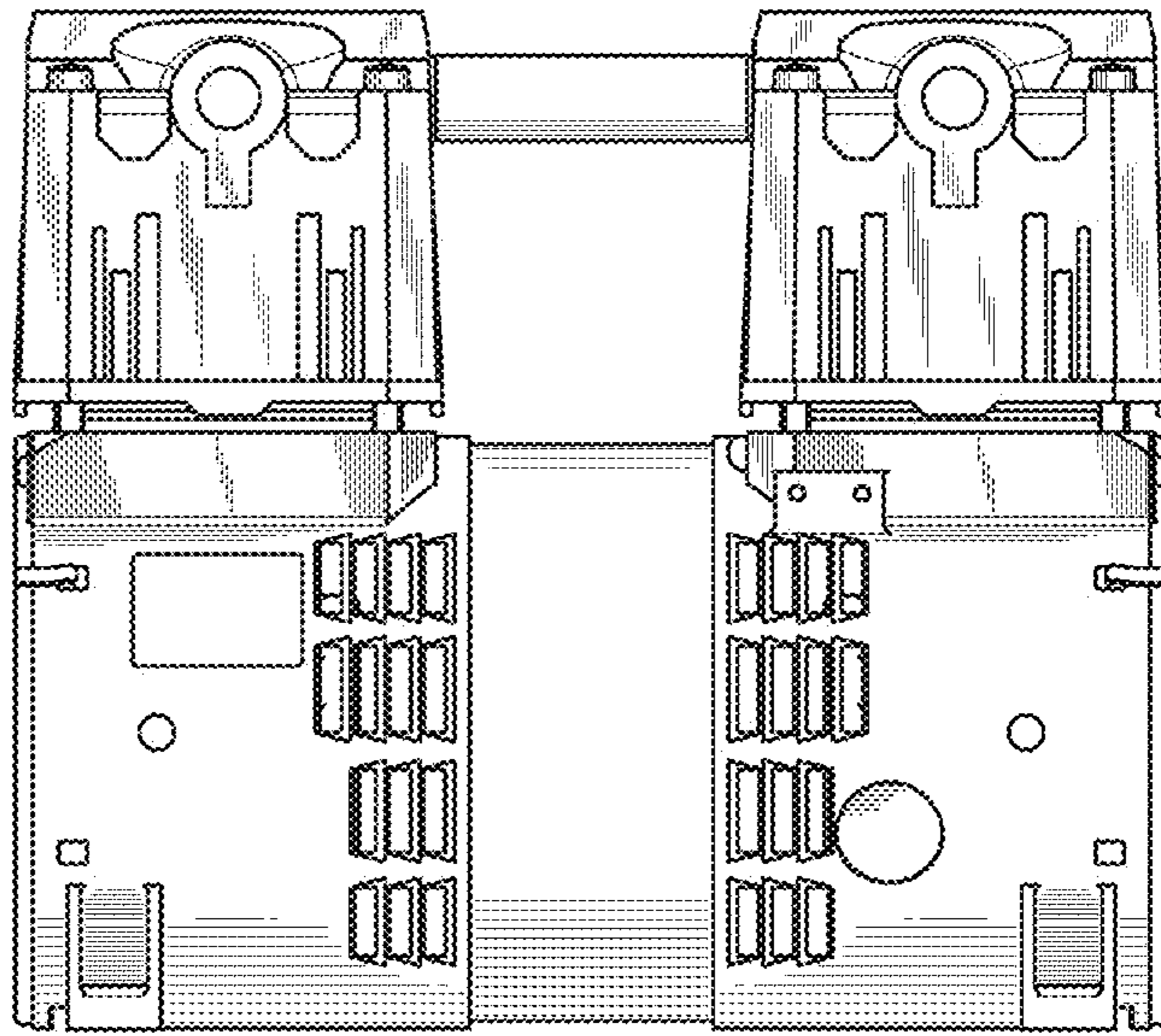


FIG. 5

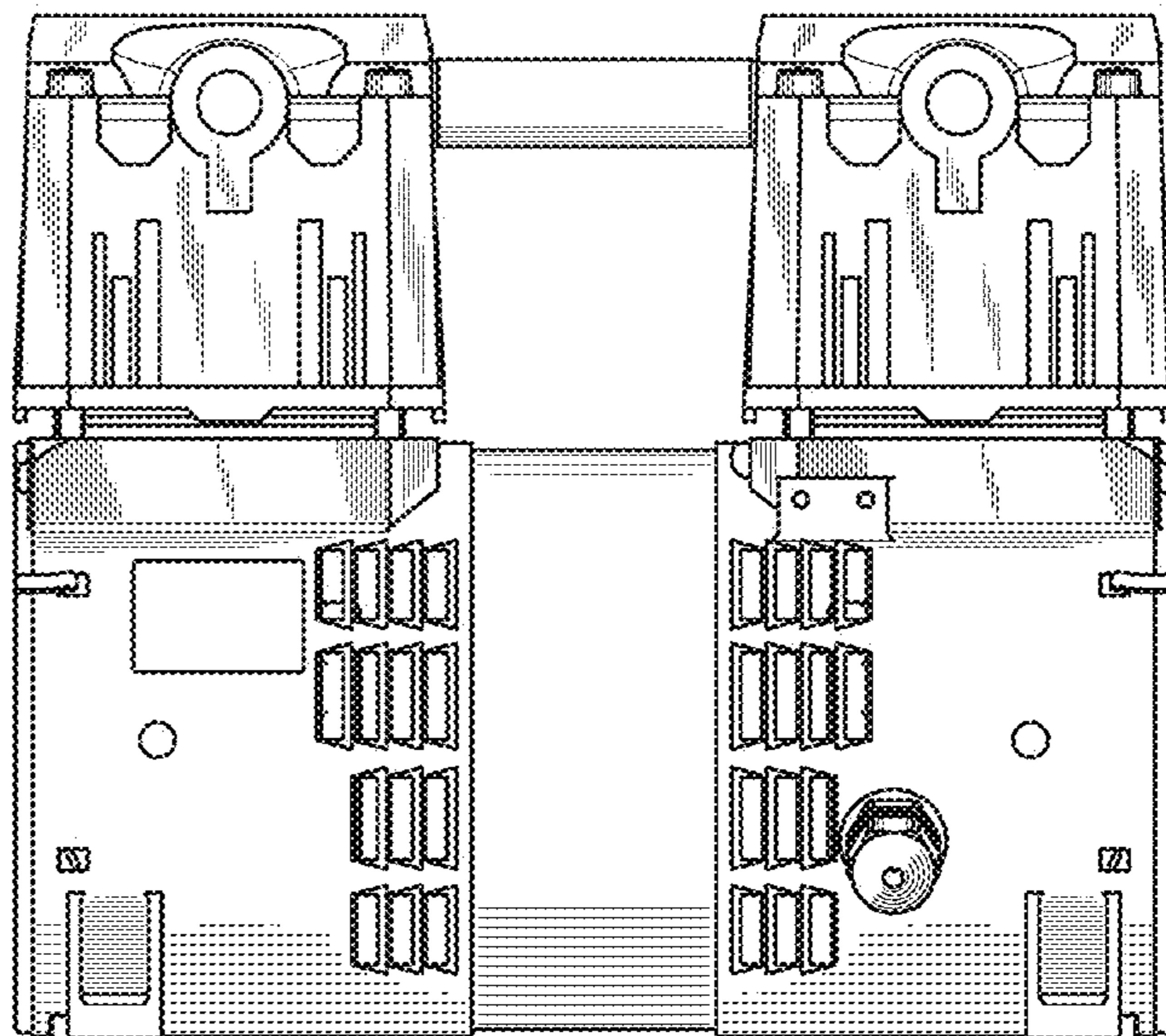


FIG. 6

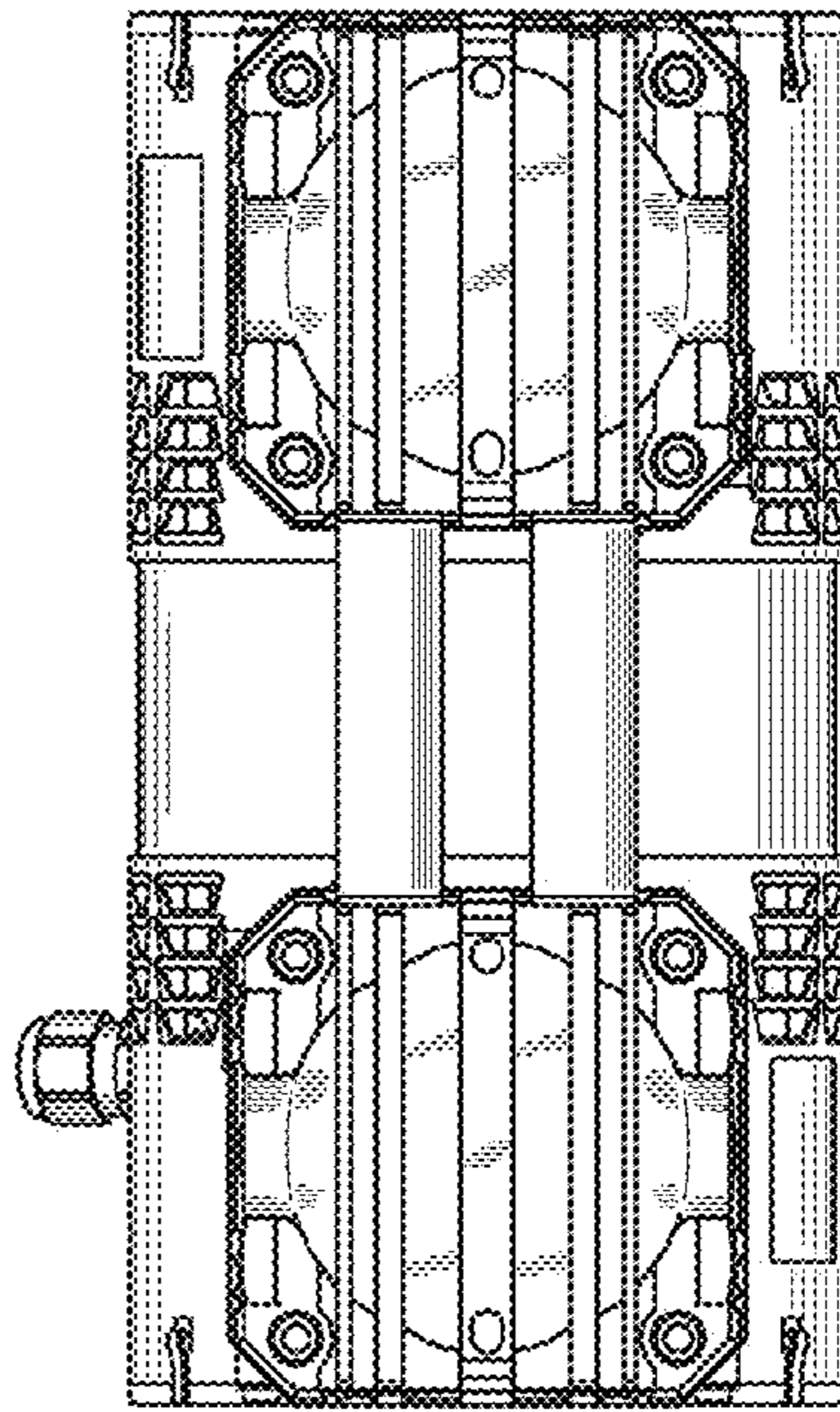


FIG. 7

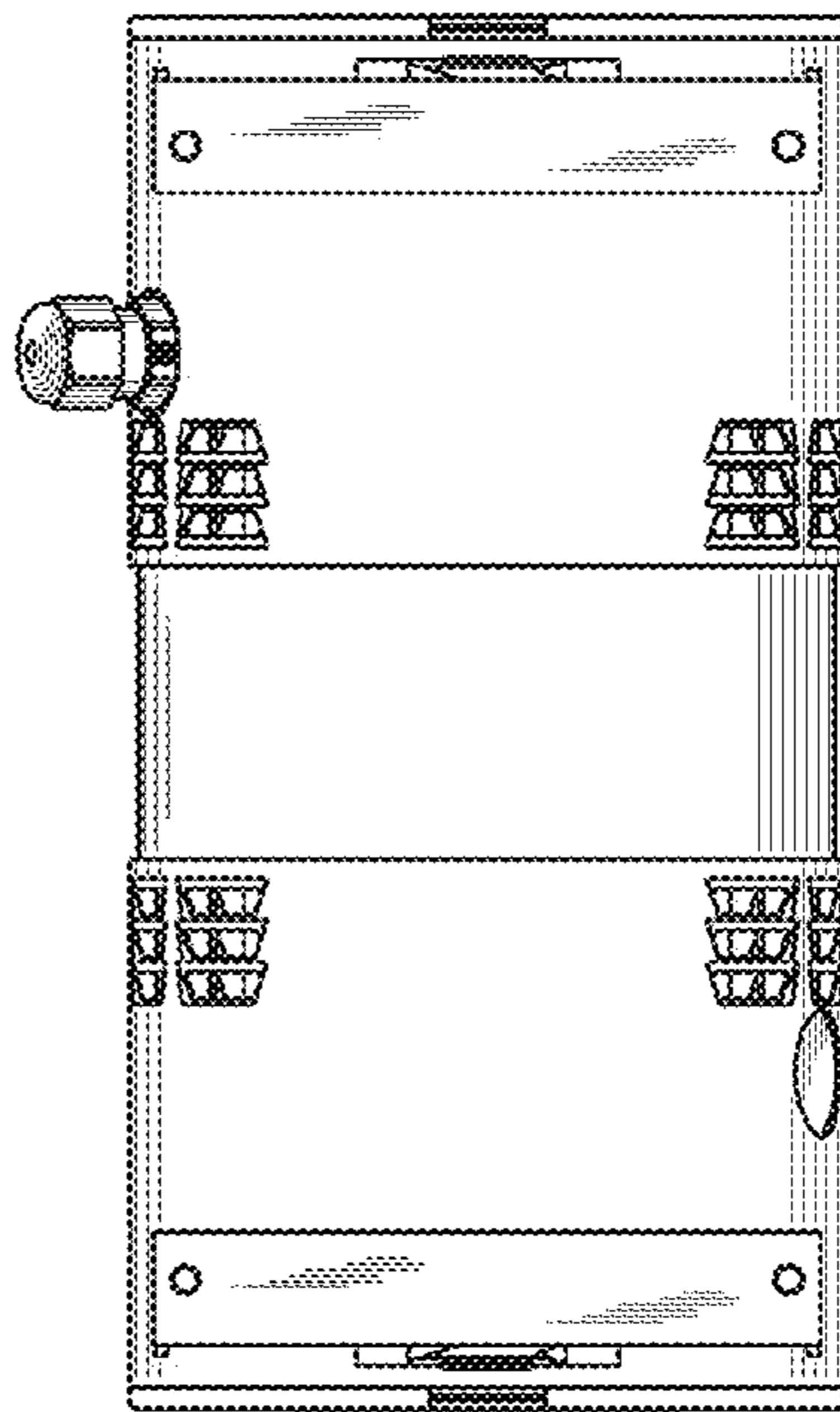


FIG. 8