



US00D689387S

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

(10) **Patent No.:** **US D689,387 S**

(45) **Date of Patent:** **** Sep. 10, 2013**

(54) **MASS ANALYZER**

(75) Inventors: **Hiroshi Muraoka**, Kyoto (JP);
Kazuhisa Sato, Kyoto (JP)

(73) Assignee: **Shimadzu Corporation**, Kyoto (JP)

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

(21) Appl. No.: **29/426,374**

(22) Filed: **Jul. 5, 2012**

(30) **Foreign Application Priority Data**

May 9, 2012 (JP) 2012-010718

(51) **LOC (9) Cl.** **10-04**

(52) **U.S. Cl.**
USPC **D10/81; D24/232**

(58) **Field of Classification Search**

USPC D10/75, 78, 81; D24/216, 232-234;
73/1.01, 1.02-1.08, 1.16, 19.01-19.02, 23.2-23.27,
73/23.3, 23.35-24.01, 52, 53.01, 61.52-61.61,
73/864.21, 431, 864.73, 31.03, 31.05, 866.5,
73/864.84, 864.23, 61.55, 863.01; 250/252.1,
250/251, 25, 266, 281-300, 305, 336.1, 338.1,
250/338.5, 339.07, 339.13, 343, 349, 239,
250/910, 427; 422/50-53, 62-98, 239.2,
422/400, 401, 404; 435/4, 283.1-284.1,
435/286.5, 287.1, 287.2, 806, 13, 14, 287.4,
435/287.7, 287.94, 6.18; 436/43-54, 68,
436/900, 514, 530, 95; 600/300, 301, 309,
600/322, 345, 347, 365, 393, 578, 583, 584;
604/207, 503, 65, 66, 67, 182; 702/19, 40;
221/65, 135; 235/451, 422.01; 95/87; 96/101,
96/106

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D276,315	S	*	11/1984	Collister	.....	D10/81
D283,107	S	*	3/1986	Collister	.....	D10/46
D292,979	S	*	12/1987	Chow	.....	D10/75
6,630,663	B2	*	10/2003	Murphy et al.	.....	250/286
D640,581	S	*	6/2011	Sato et al.	.....	D10/81
2008/0087818	A1	*	4/2008	Li	.....	250/292

* cited by examiner

Primary Examiner — Antoine D Davis

(74) *Attorney, Agent, or Firm* — Jianq Chyun IP Office

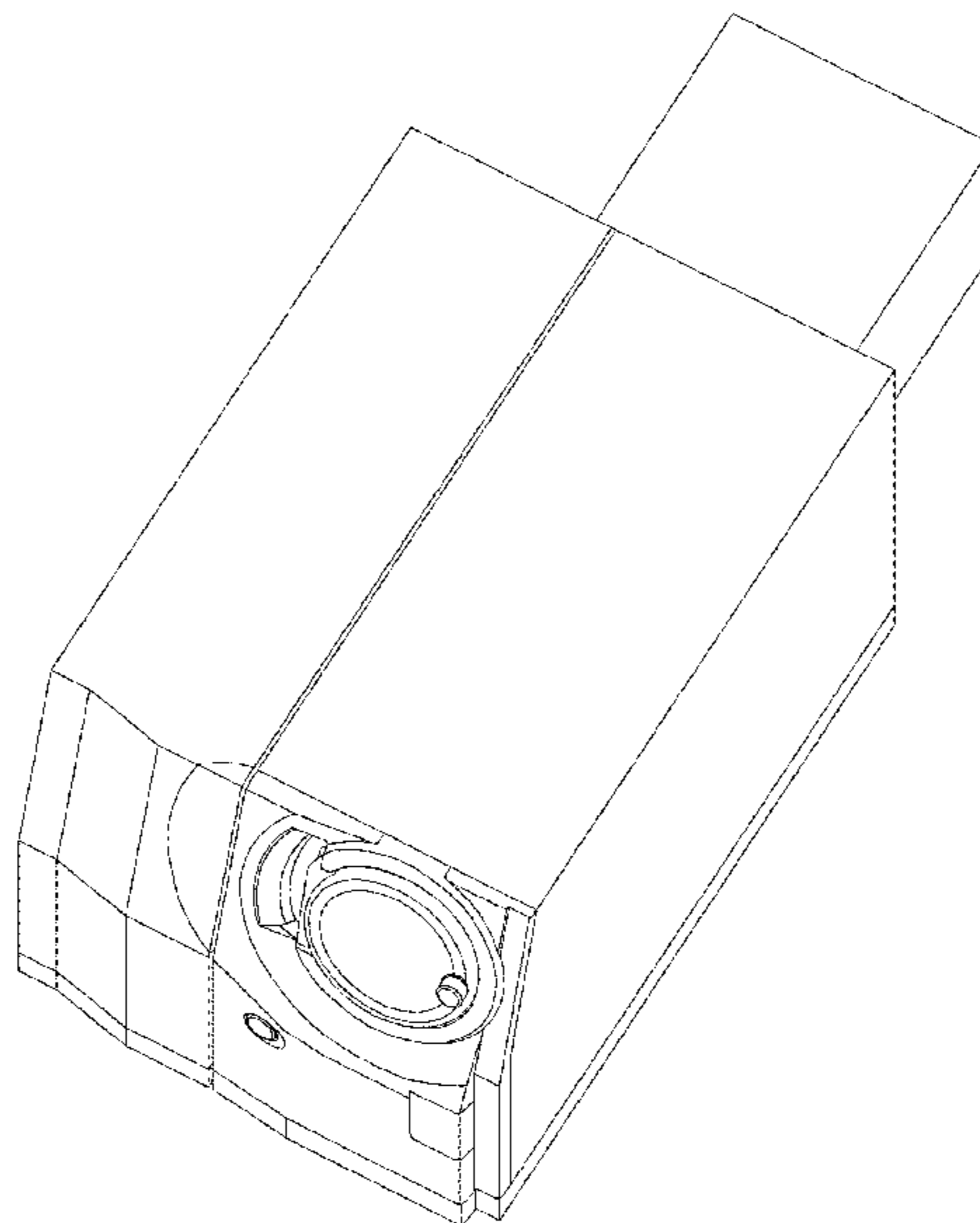
(57) **CLAIM**

The ornamental design for a mass analyzer, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a mass analyzer showing a first embodiment of our new design;
FIG. 2 is a front view of the first embodiment;
FIG. 3 is a rear view of the first embodiment;
FIG. 4 is a left side view of the first embodiment;
FIG. 5 is a right side view of the first embodiment;
FIG. 6 is a top view of the first embodiment;
FIG. 7 is a bottom view of the first embodiment;
FIG. 8 is a perspective view of a mass analyzer showing a second embodiment of our new design;
FIG. 9 is a front view of the second embodiment;
FIG. 10 is a rear view of the second embodiment;
FIG. 11 is a left side view of the second embodiment;
FIG. 12 is a right side view of the second embodiment;
FIG. 13 is a top view of the second embodiment; and,
FIG. 14 is a bottom view of the second embodiment.

1 Claim, 8 Drawing Sheets



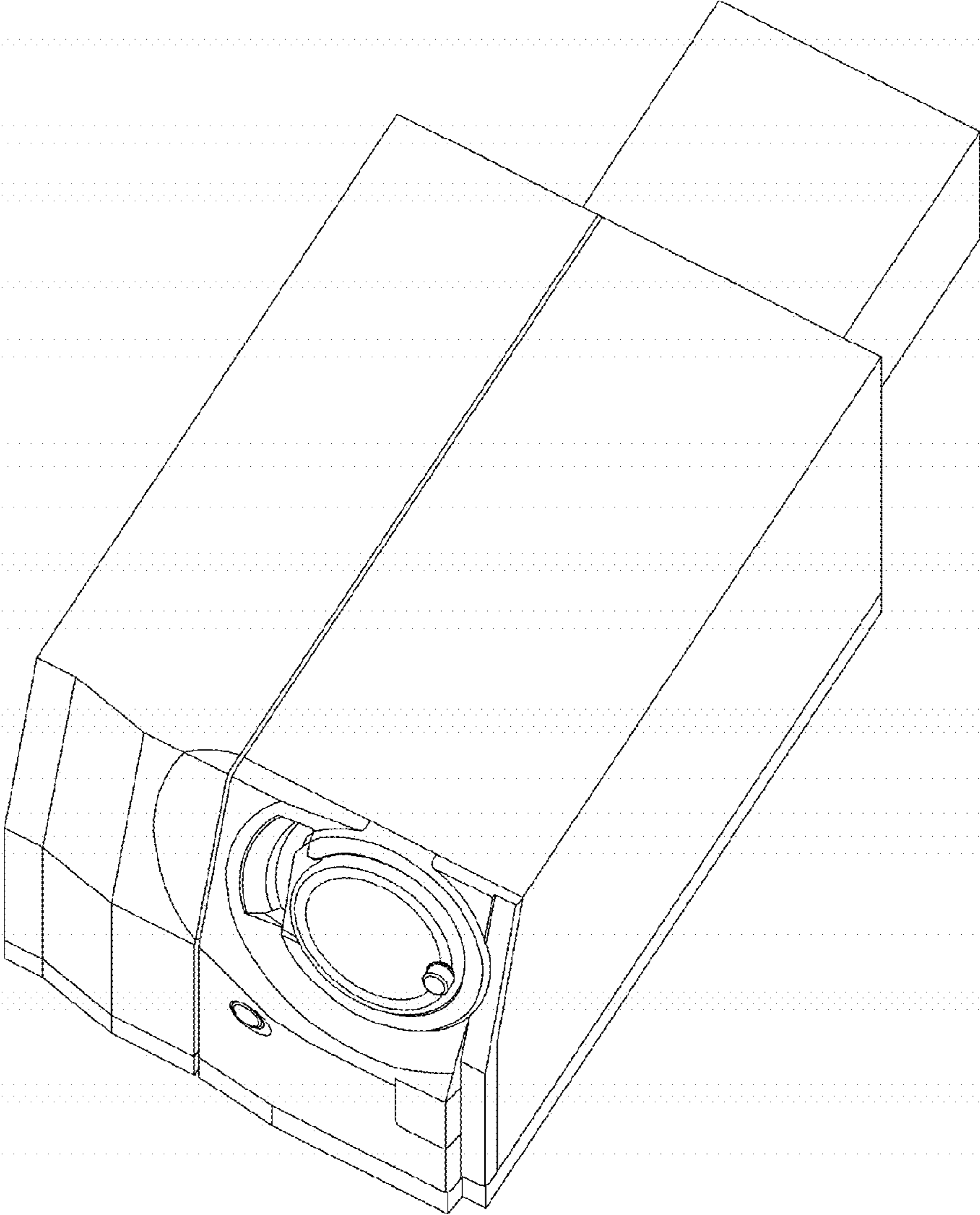


FIG. 1



FIG. 2

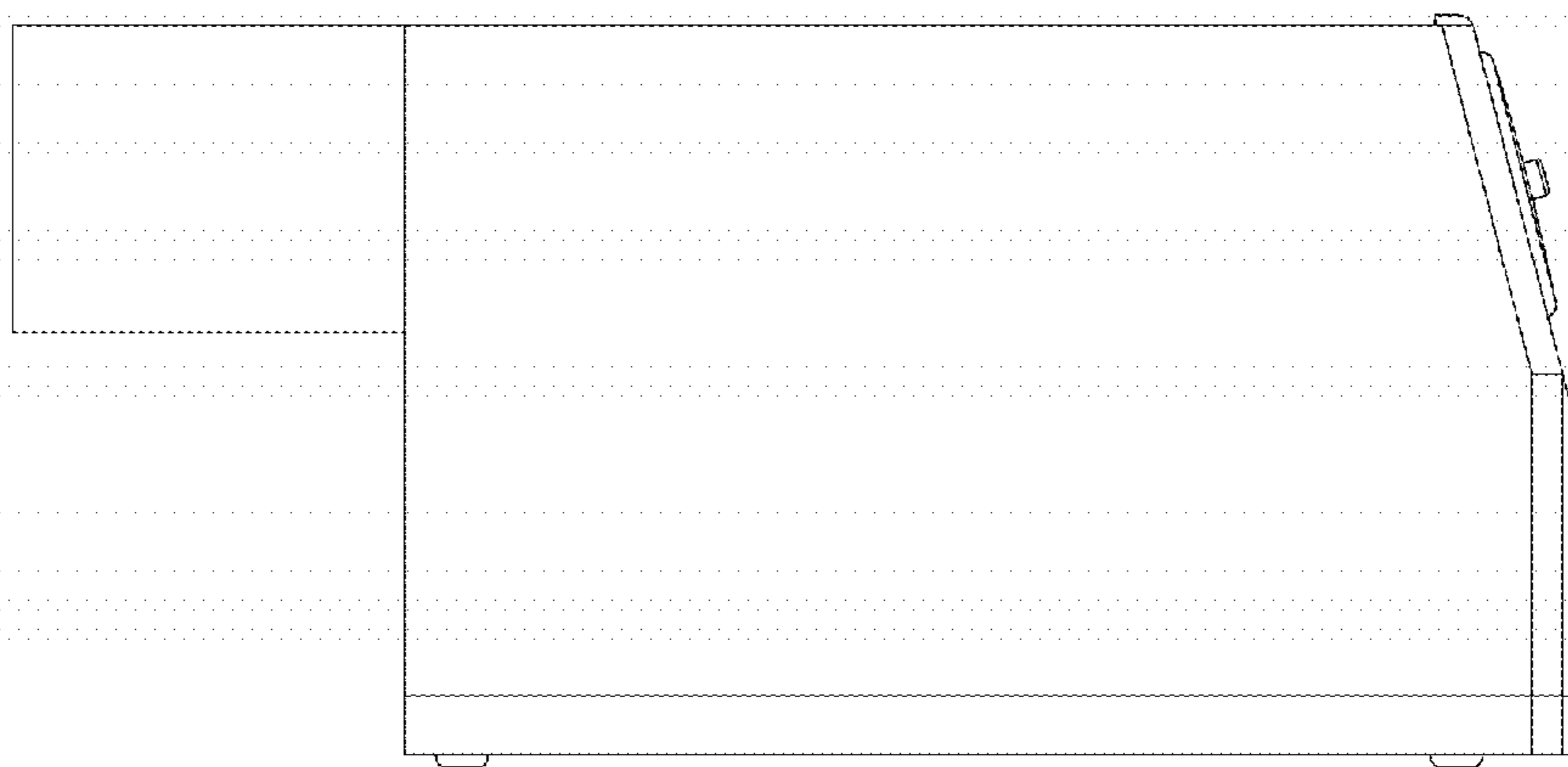


FIG. 3

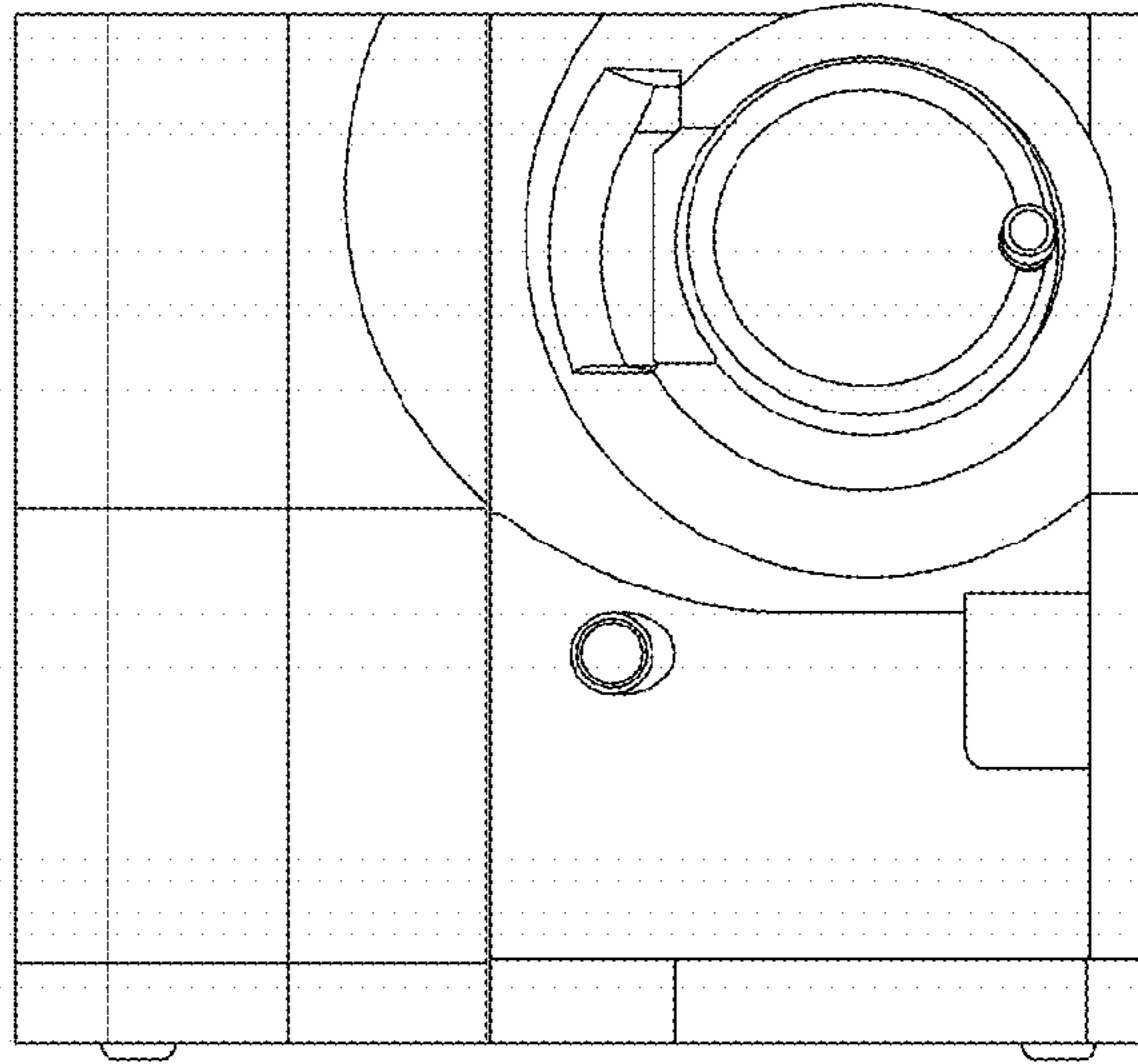


FIG. 4

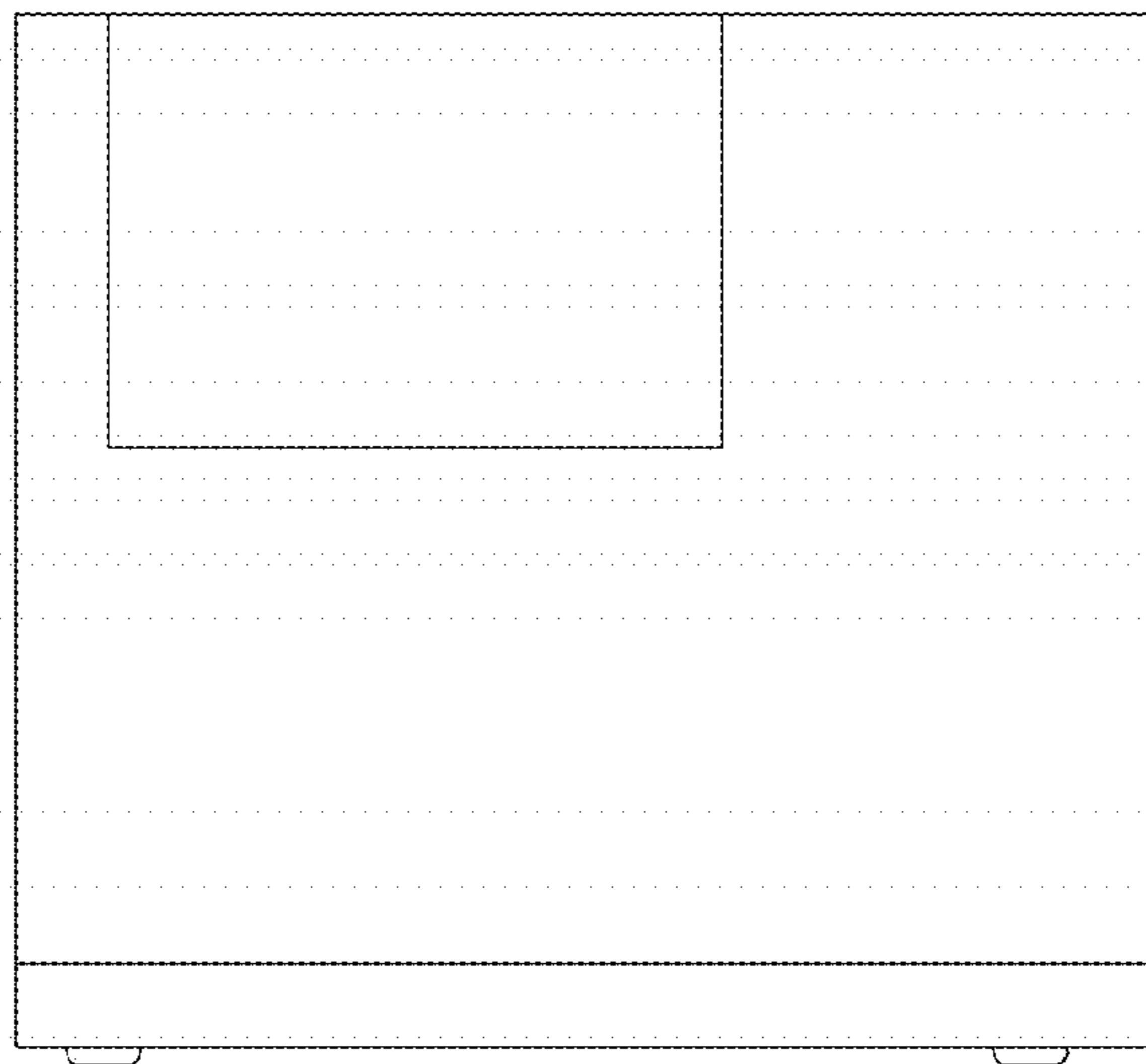


FIG. 5



FIG. 6

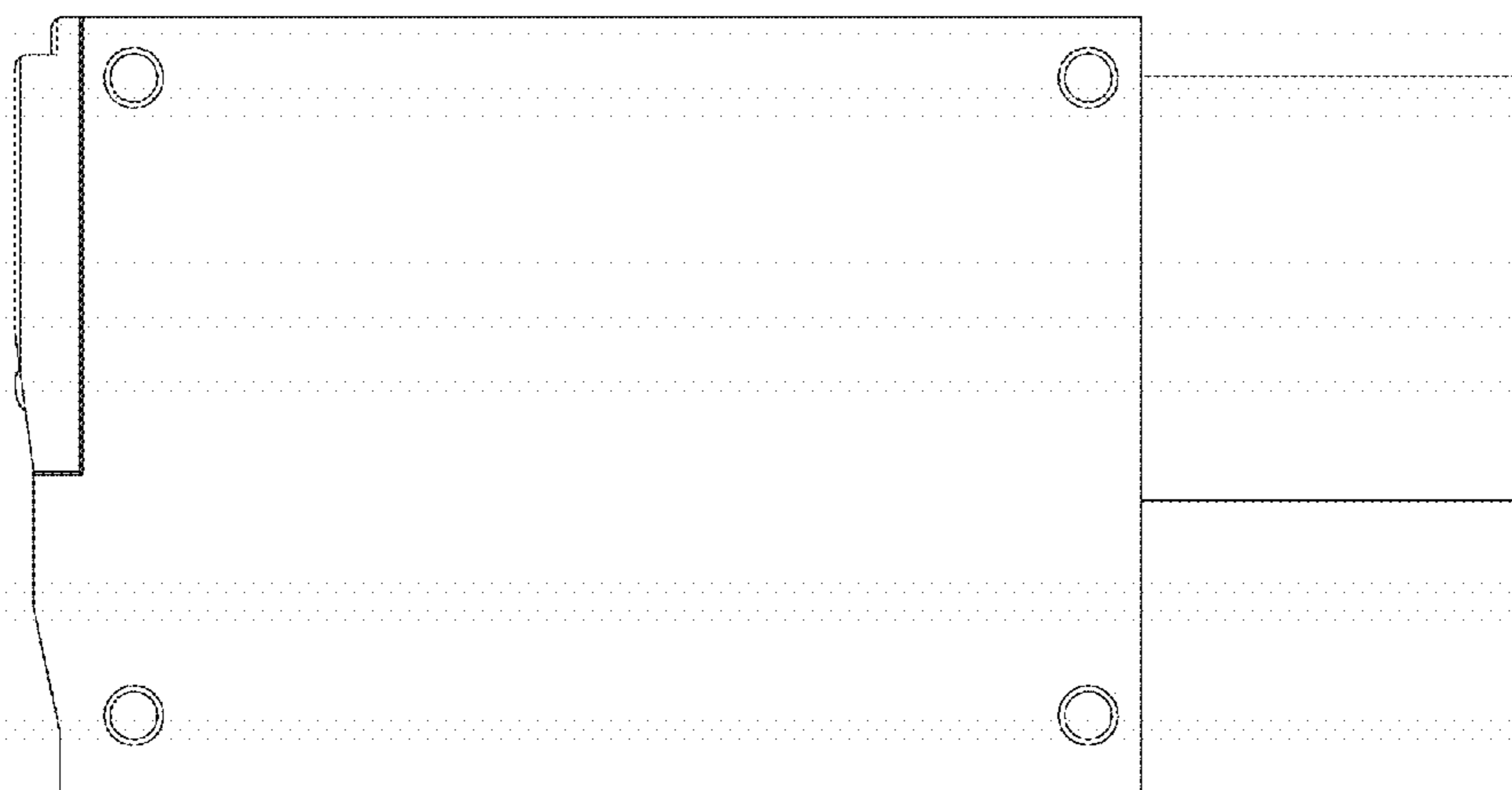


FIG. 7

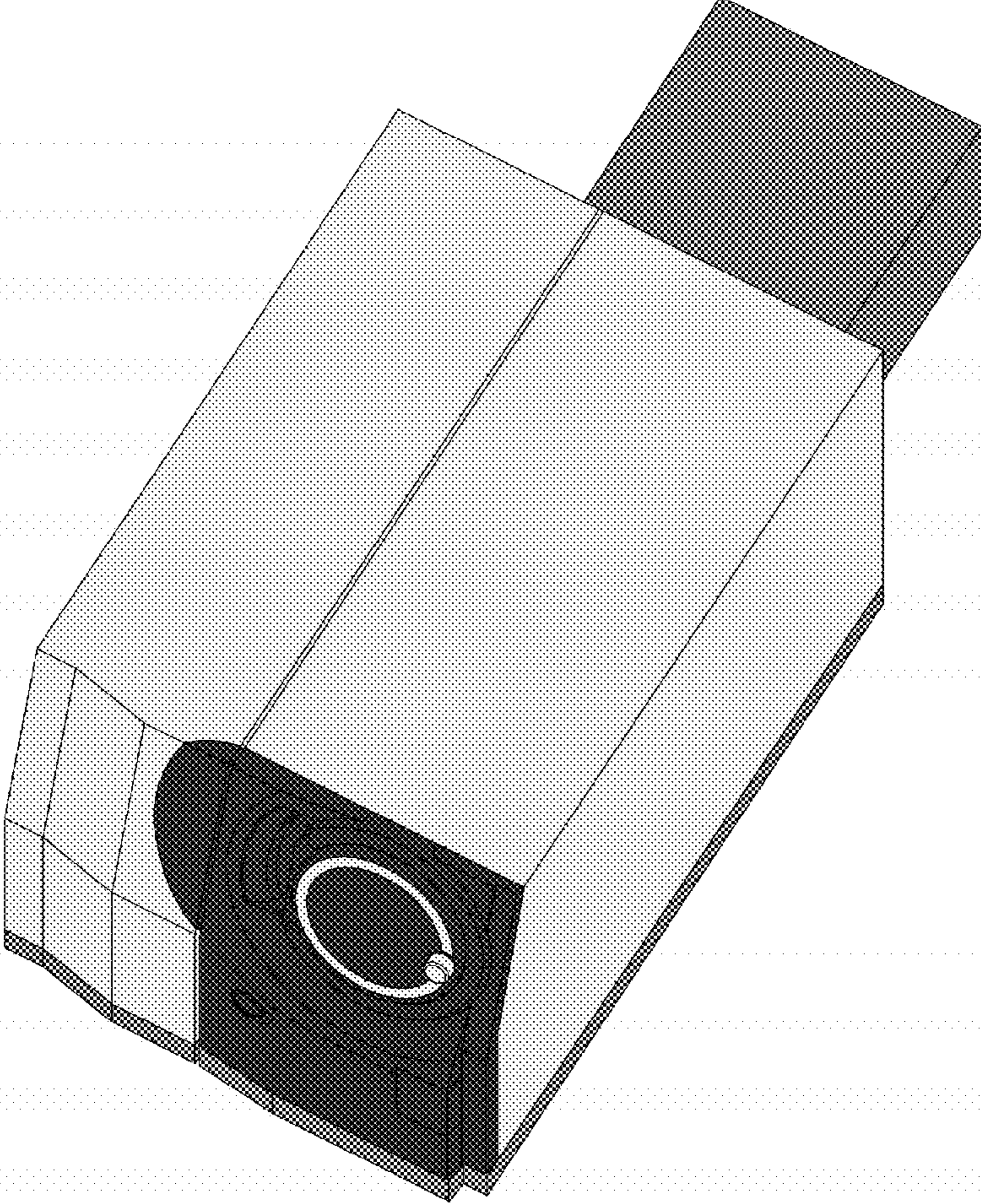


FIG. 8

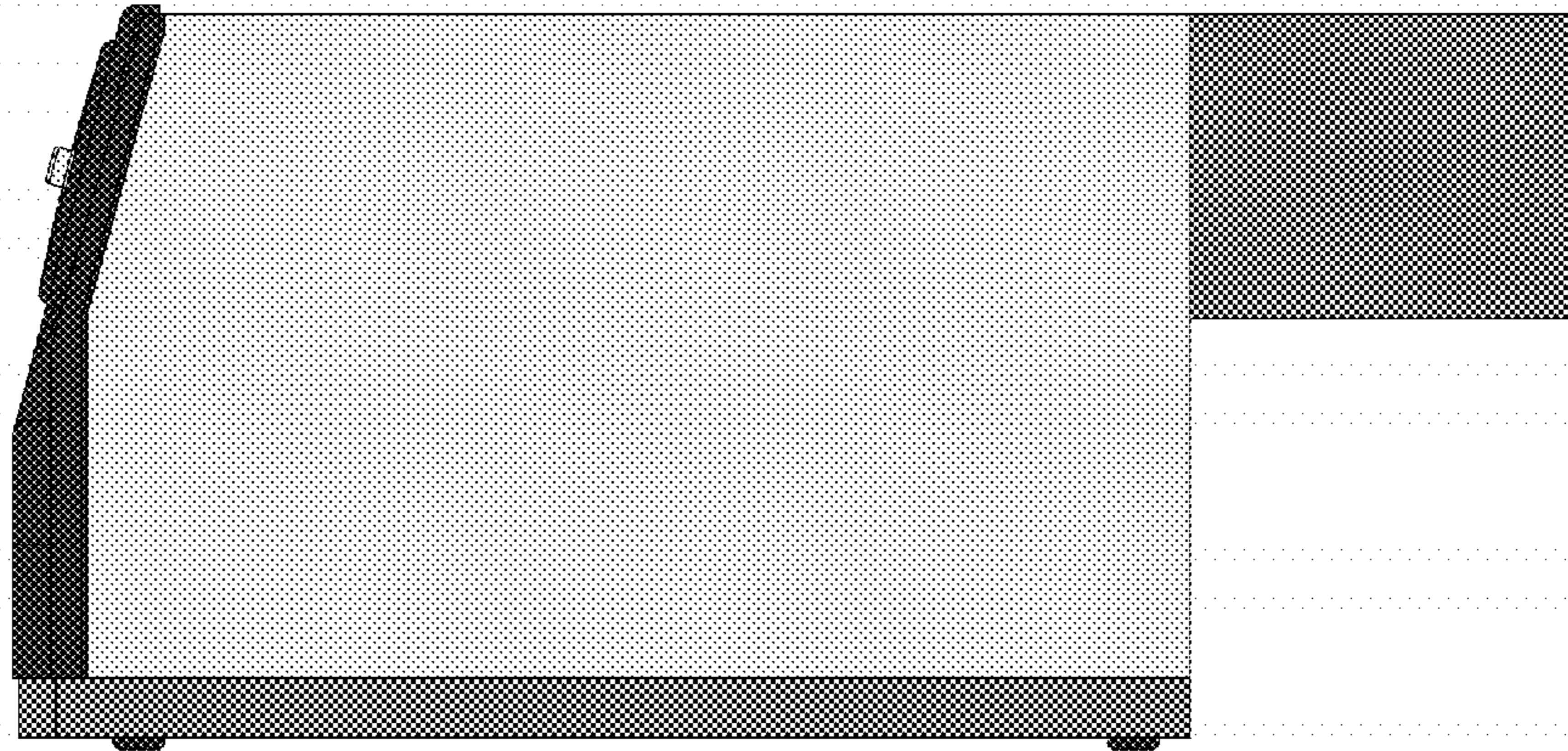


FIG. 9

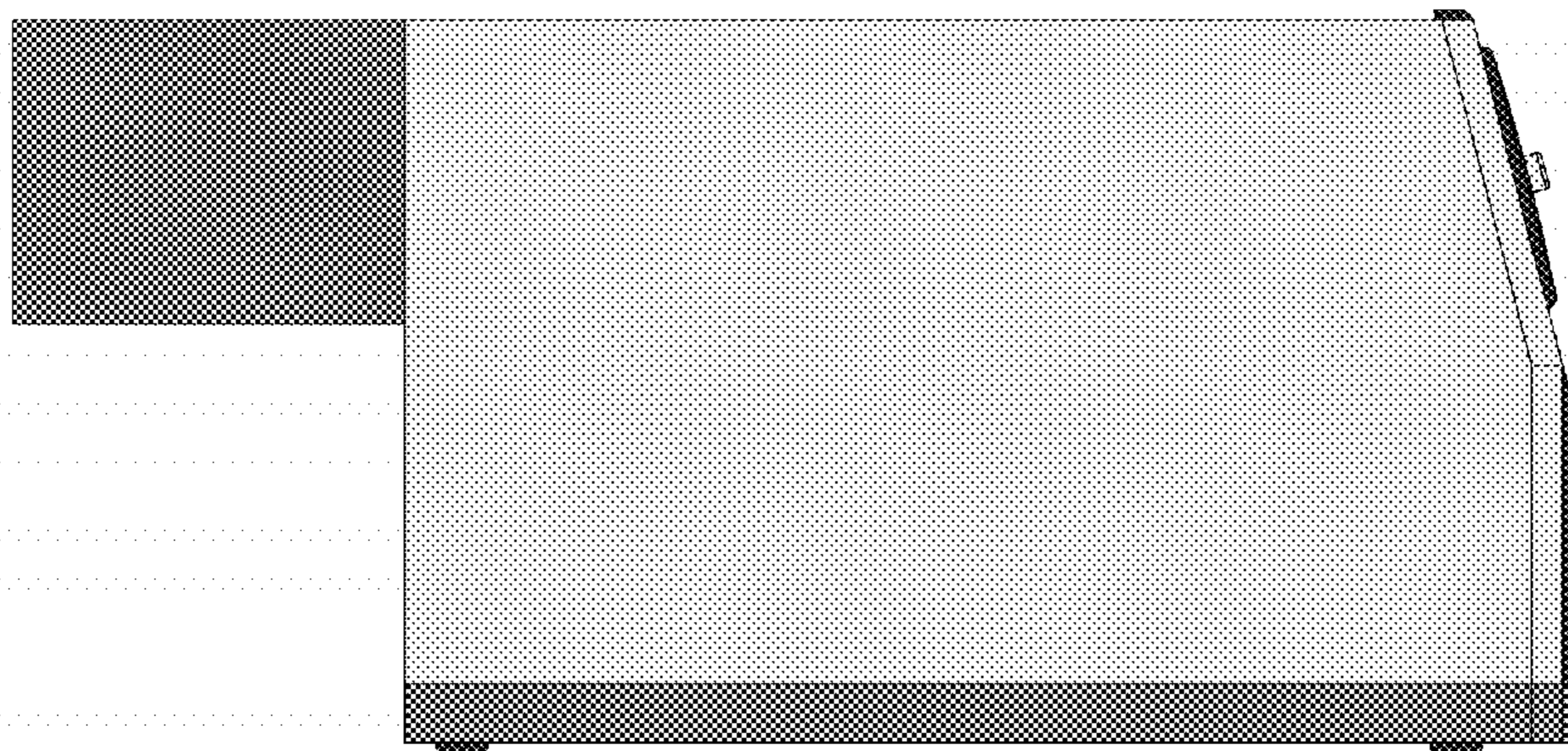


FIG. 10

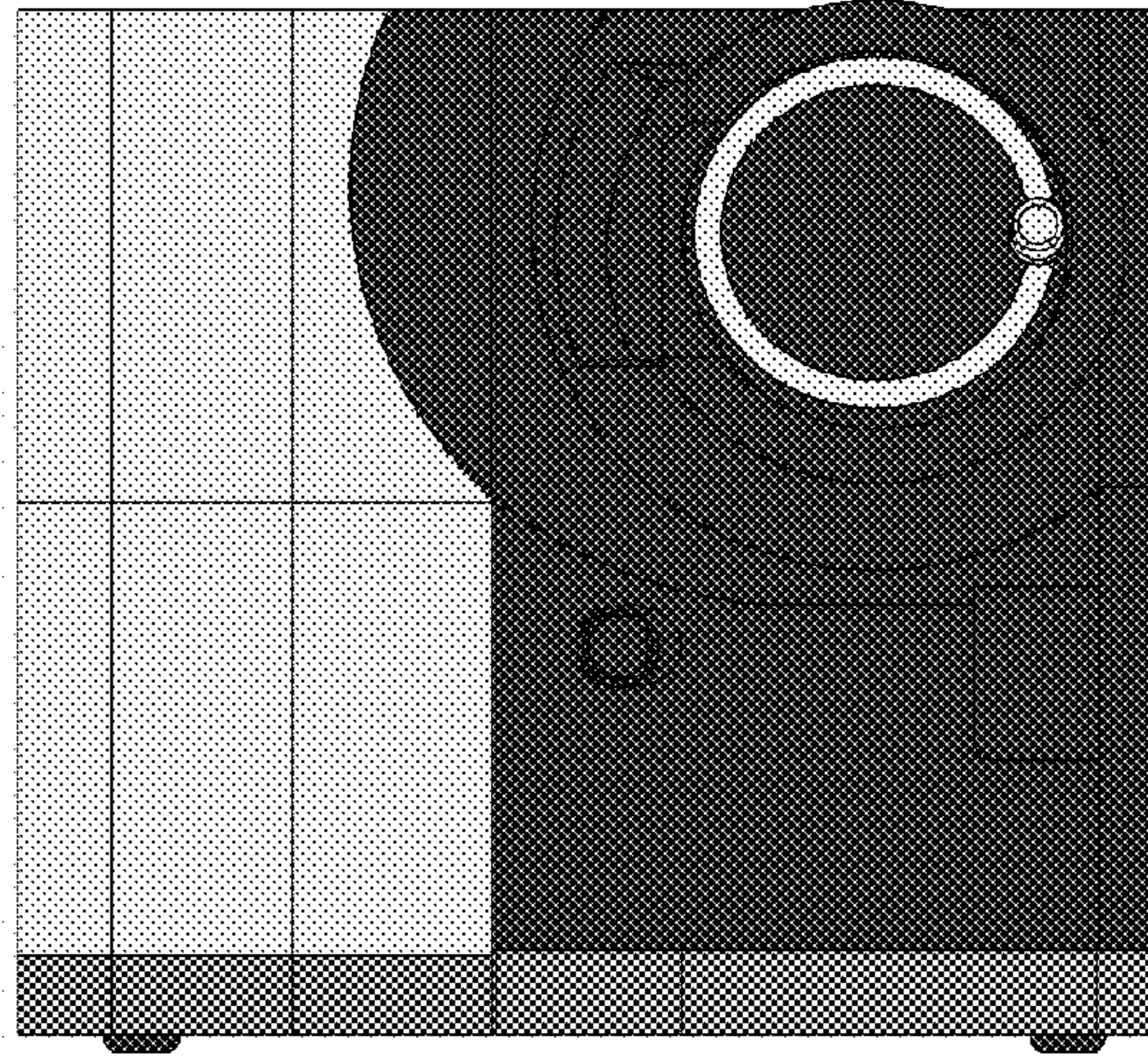


FIG. 11

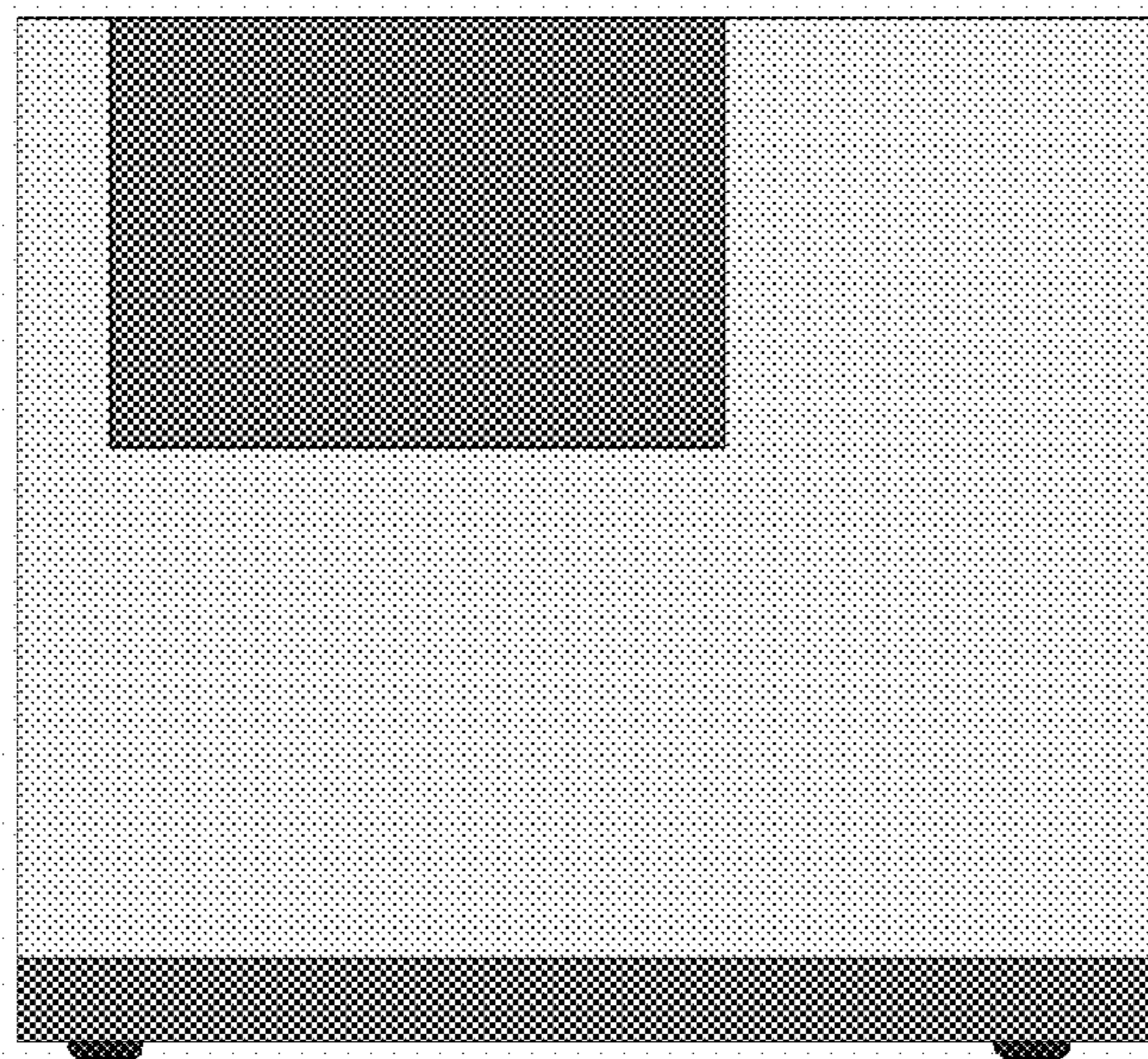


FIG. 12



FIG. 13

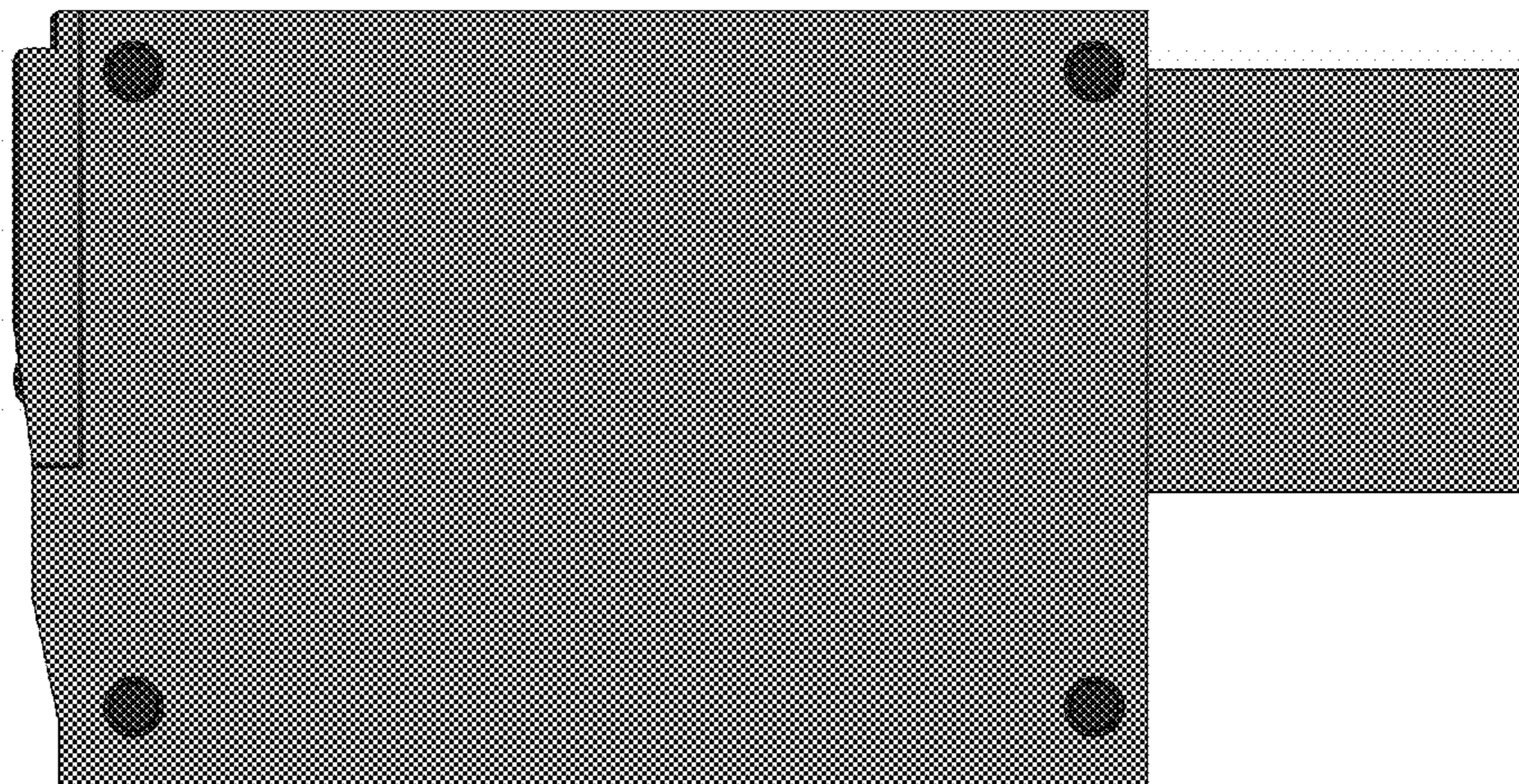


FIG. 14