



US00D786418S

(12) **United States Design Patent** (10) **Patent No.:** **US D786,418 S**
Hirano (45) **Date of Patent:** **** May 9, 2017**

(54) **FAN FILTER UNIT**
(71) Applicant: **Hitachi Kokusai Electric Inc.**, Tokyo (JP)
(72) Inventor: **Makoto Hirano**, Toyama (JP)
(73) Assignee: **HITACHI KOUSAI ELECTRIC INC.**, Tokyo (JP)
(**) Term: **14 Years**
(21) Appl. No.: **29/510,078**
(22) Filed: **Nov. 25, 2014**

D131,010 S * 1/1942 Leslie D23/373
2,284,912 A * 6/1942 Collins F24F 13/1426
126/285 R
D155,345 S * 9/1949 Johnson D23/373
2,636,429 A * 4/1953 Parsons F24F 7/02
454/366
D226,609 S * 4/1973 Drew D23/373
D226,636 S * 4/1973 Van Doren, Jr. D23/335
D376,842 S * 12/1996 Franklin D23/314
D402,748 S * 12/1998 Cuomo D23/386
D448,468 S * 9/2001 Koessler D23/373
D456,551 S * 4/2002 Russello D26/85
D495,047 S * 8/2004 Gilbert D23/387
D558,321 S * 12/2007 Kramer D23/370
D578,200 S * 10/2008 Hedlund D23/371
D587,796 S * 3/2009 Reese D23/370
D594,964 S * 6/2009 Miyake D23/393

(Continued)

(30) **Foreign Application Priority Data**
May 30, 2014 (JP) 2014-011609
(51) **LOC (10) Cl.** **23-04**
(52) **U.S. Cl.**
USPC **D23/370**
(58) **Field of Classification Search**
USPC D23/370-387, 411-414, 365, 355, 342,
D23/332, 328, 337, 335, 314, 393;
415/60, 66, 68, 208.1, 213.1, 214.1,
415/209.3; 310/257; 361/695;
126/299 D, 299 R
CPC F01D 9/042; F04D 25/08; F04D 29/70;
F24F 7/007; F24F 13/082; F24F 7/065;
F24F 13/078; F24F 7/04; F24F 7/02;
B01D 46/00; H05K 7/20
See application file for complete search history.

Primary Examiner — Susan Bennett Hattan
Assistant Examiner — Janice Hallmark
(74) *Attorney, Agent, or Firm* — Fitch, Even, Tabin & Flannery, LLP

(57) **CLAIM**

I claim the ornamental design for a fan filter unit, as shown and described.

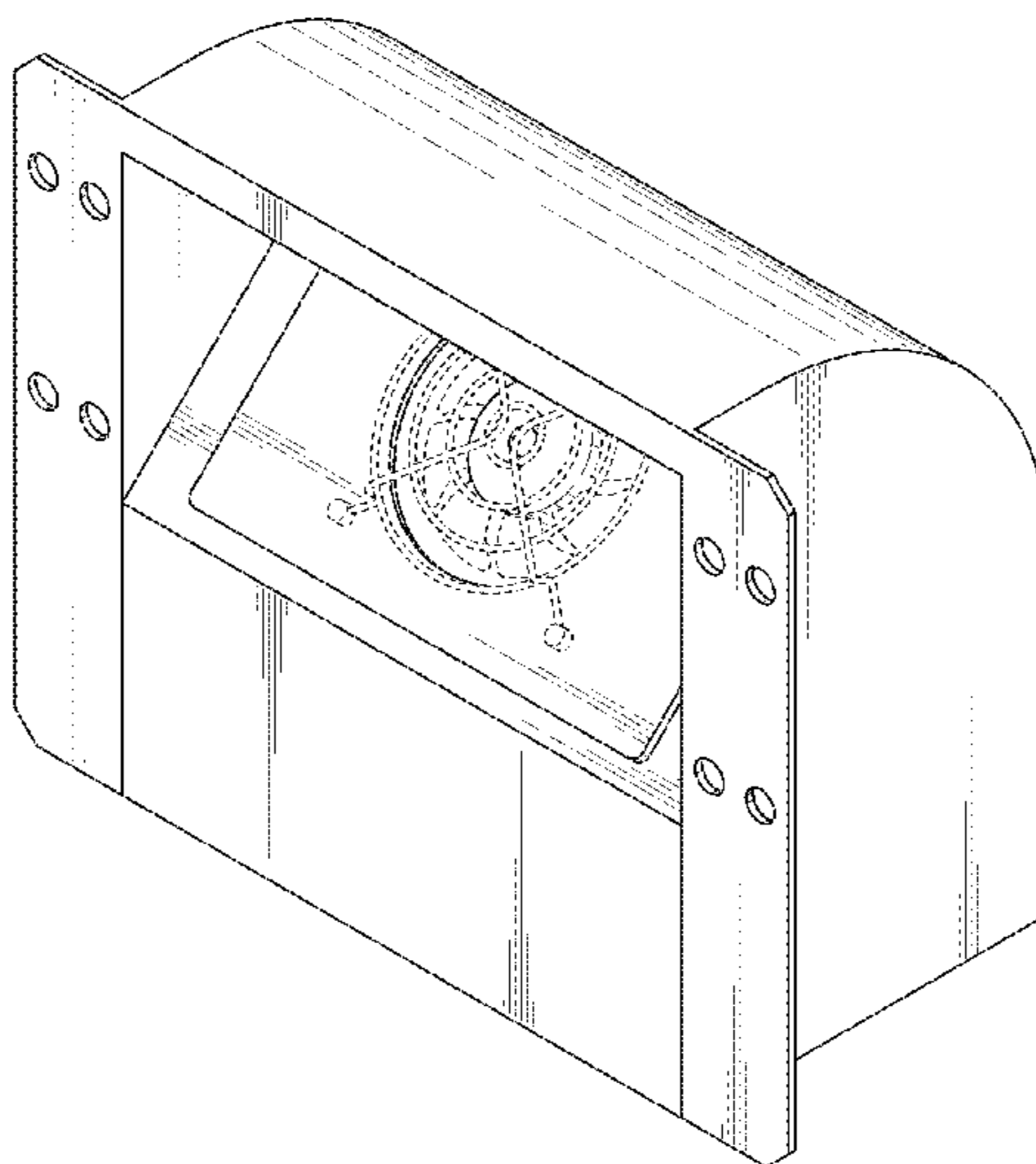
DESCRIPTION

FIG. 1 is a front, top and right side perspective view of an fan filter unit showing our new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left side elevational view thereof;
FIG. 5 is a right side elevational view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof; and,
FIG. 8 is a cross-sectional view taken along lines 8-8 in FIG. 2.

The broken lines shown in the drawings represent portions of the fan filter unit that form no part of the claimed design.

1 Claim, 6 Drawing Sheets

(56) **References Cited**
U.S. PATENT DOCUMENTS
2,102,681 A * 12/1937 Curtis F24F 13/06
454/331
D122,133 S * 8/1940 Bedol D23/387
D131,009 S * 1/1942 Leslie D23/373



(56)

References Cited

U.S. PATENT DOCUMENTS

D674,077 S * 1/2013 Miyake D23/372
D678,994 S * 3/2013 Miyake D23/371
D716,424 S * 10/2014 Merrill D23/314
2010/0051010 A1* 3/2010 Colburn F24C 15/2028
126/299 D

* cited by examiner

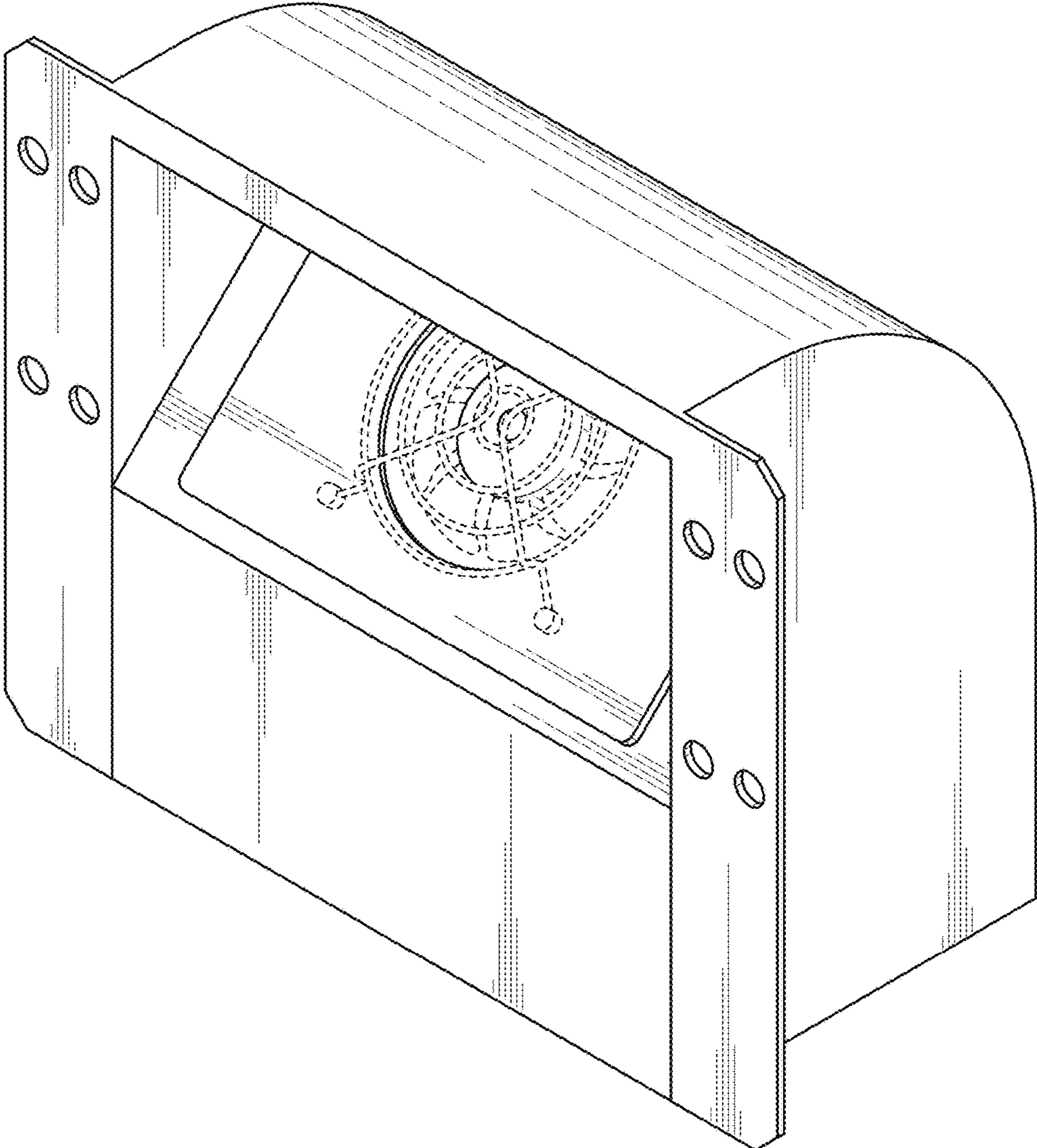
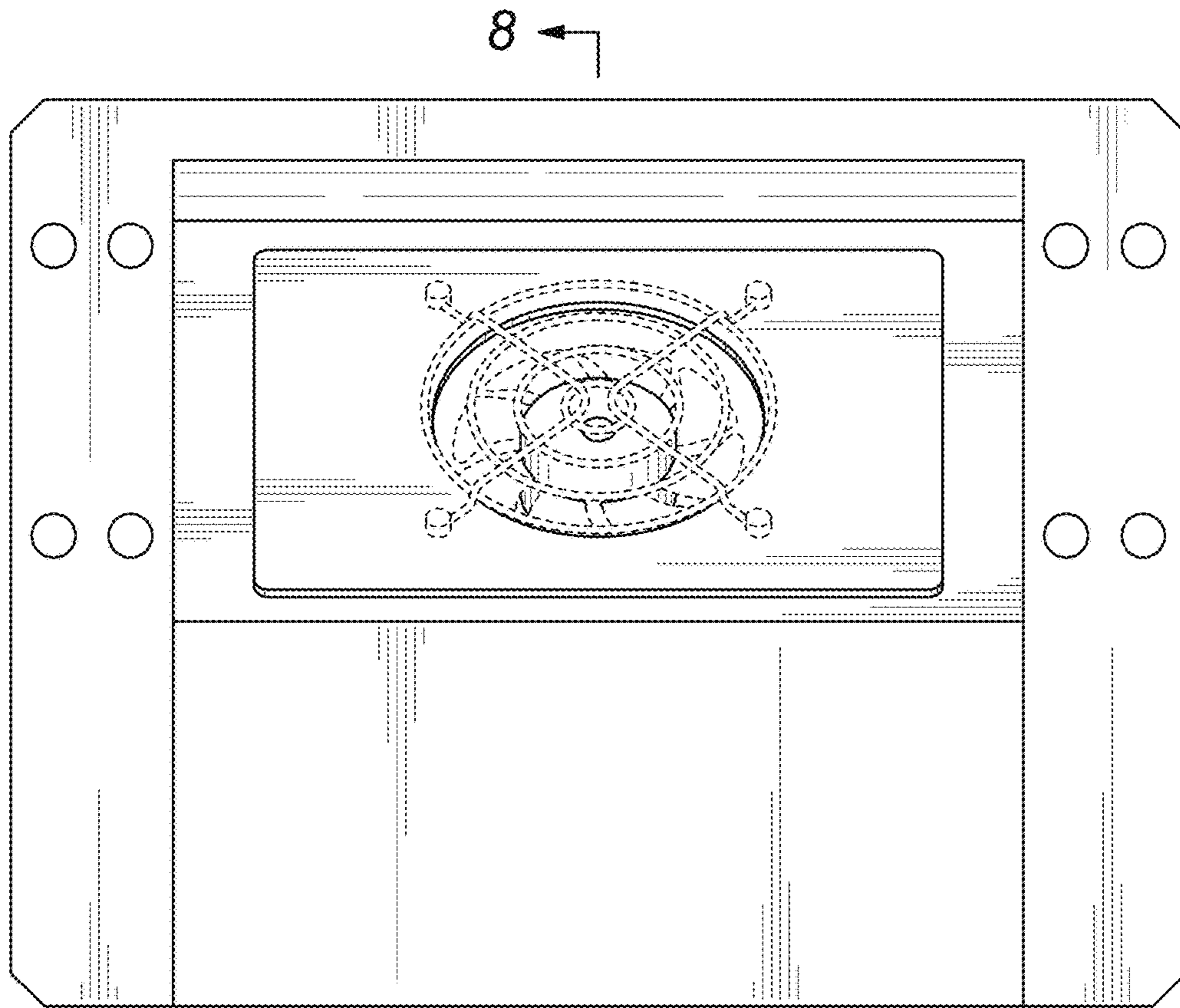


FIG. 1



8 ←
FIG. 2

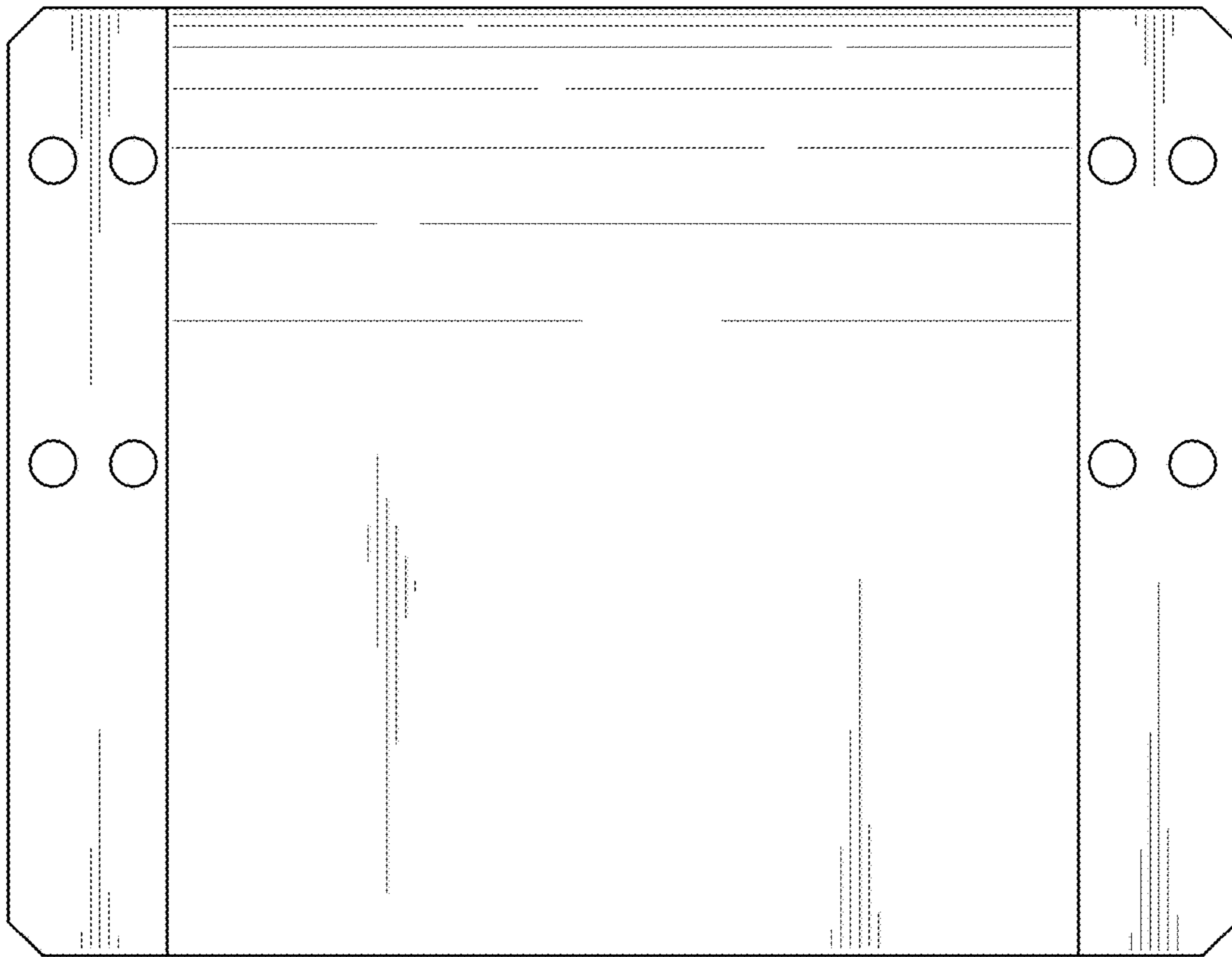


FIG. 3

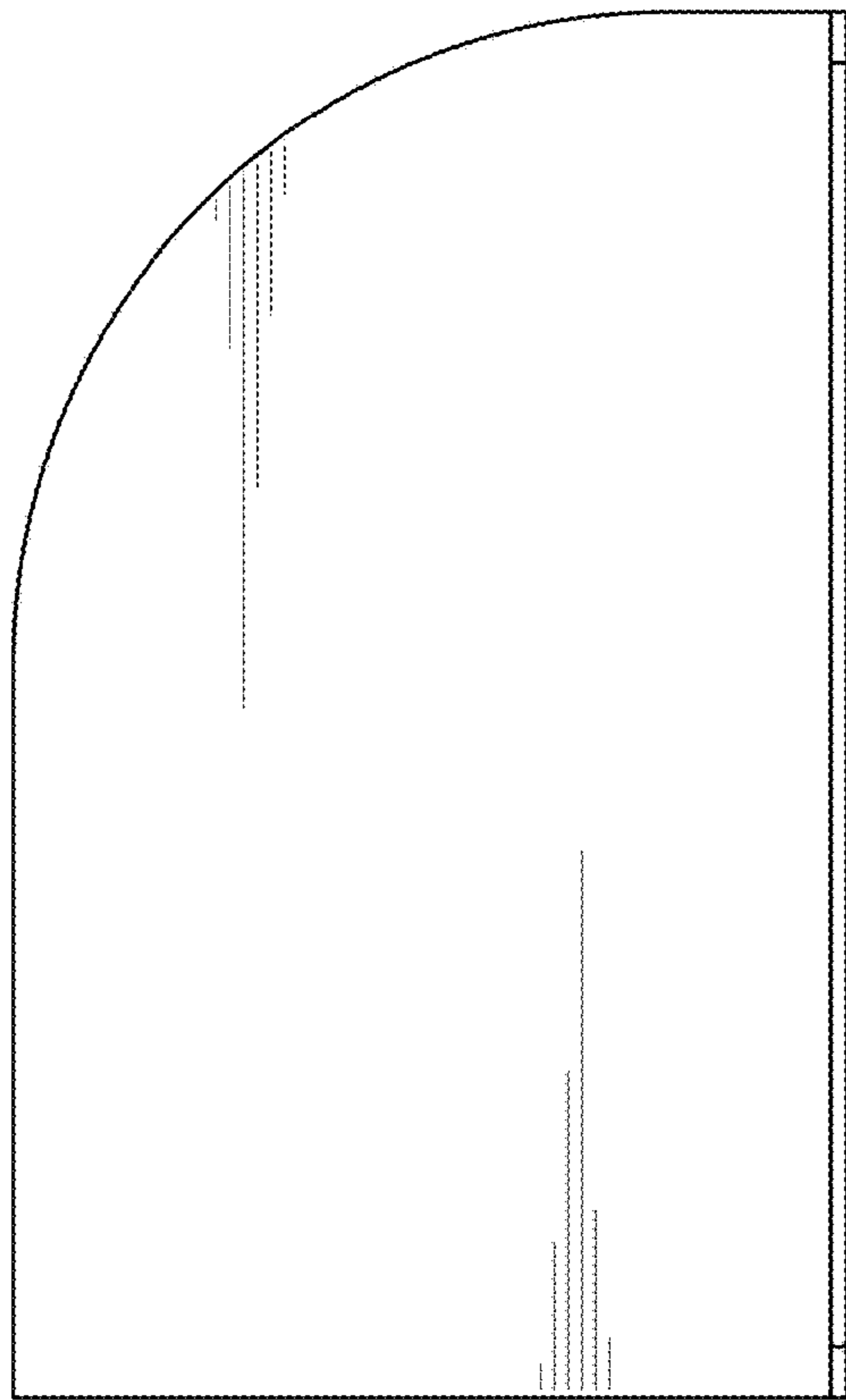


FIG. 4

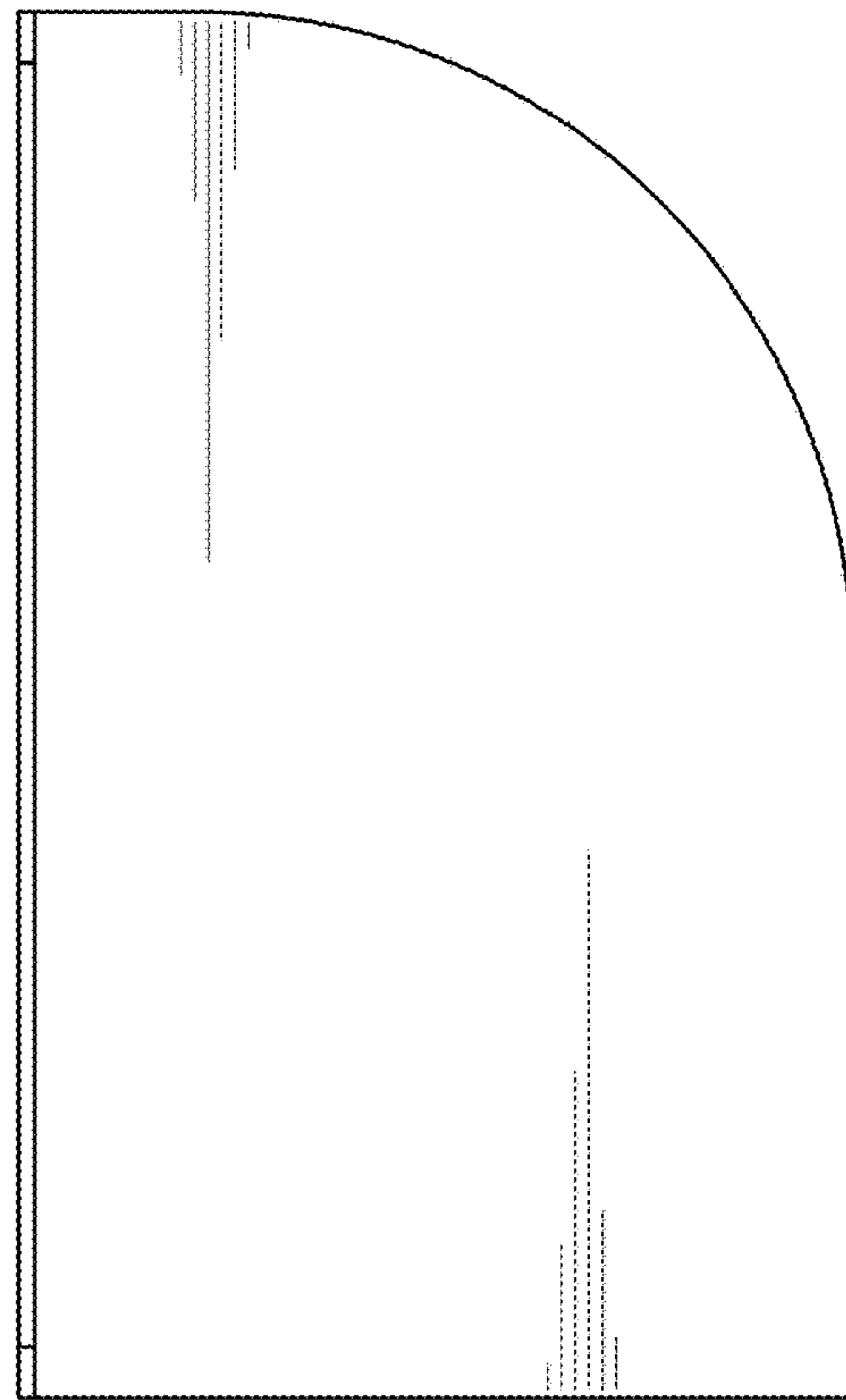


FIG. 5

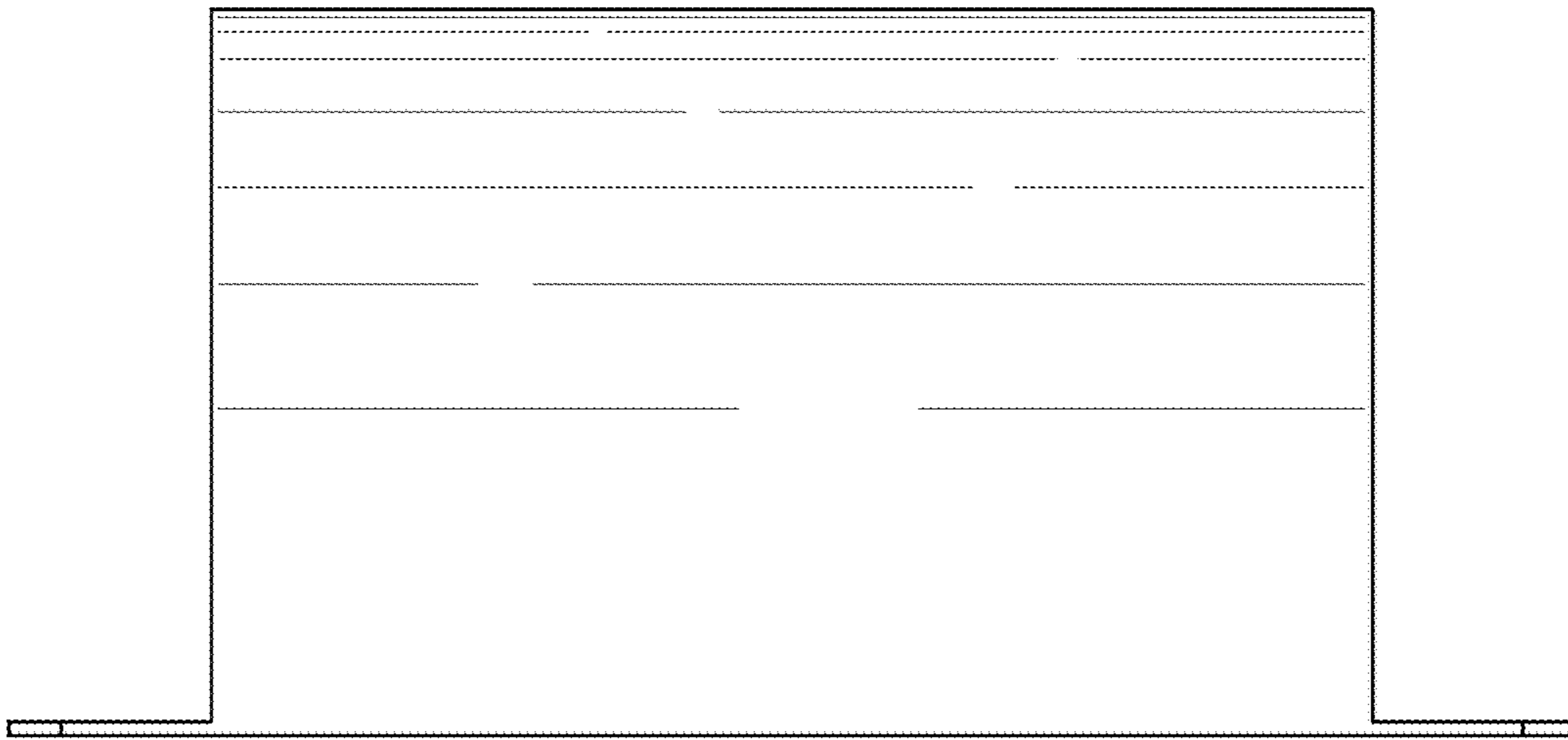


FIG. 6

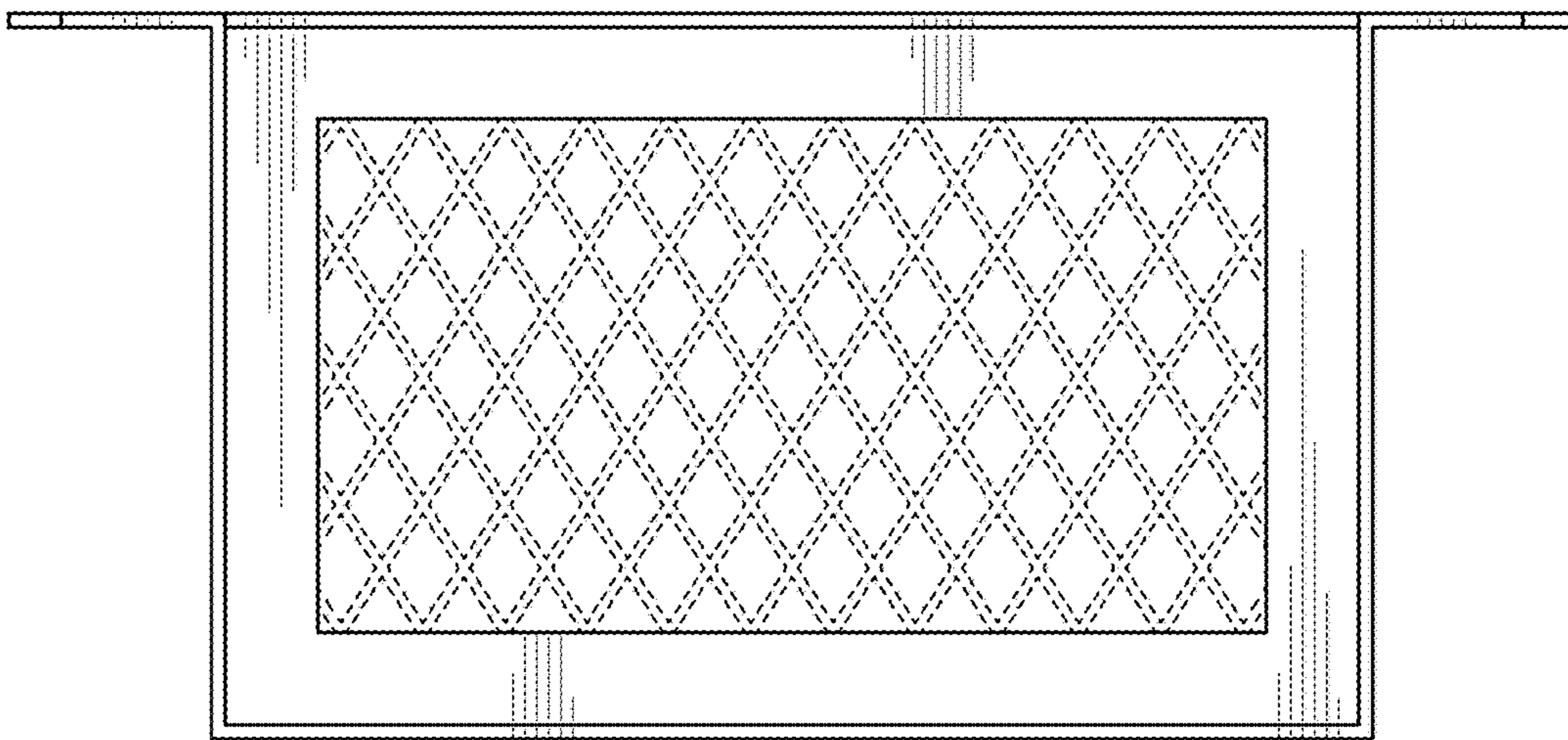


FIG. 7

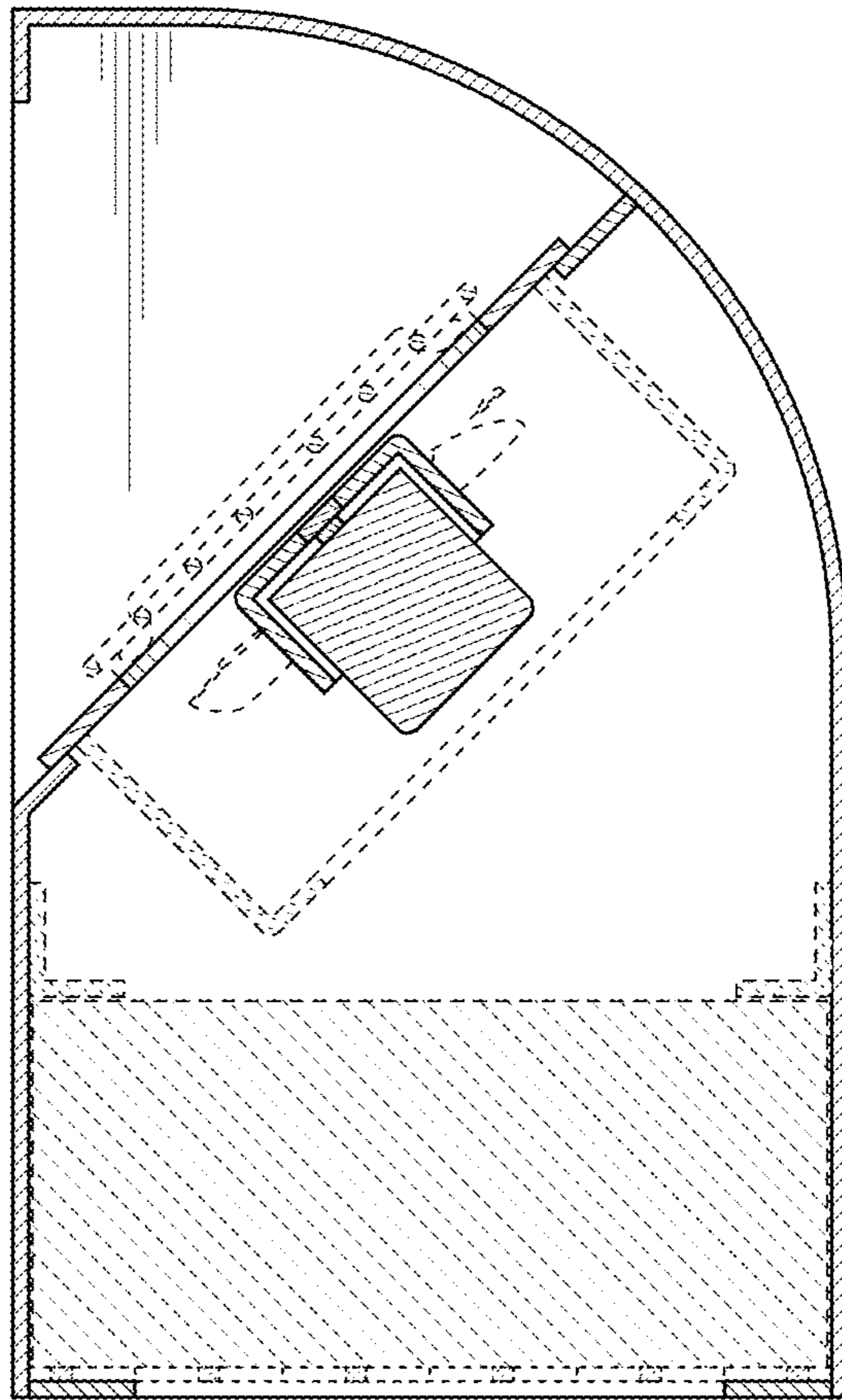


FIG. 8