



US00D845918S

(12) **United States Design Patent**
Miura

(10) **Patent No.:** **US D845,918 S**

(45) **Date of Patent:** **** Apr. 16, 2019**

(54) **LIGHT EMITTING DIODE**

(71) Applicants: **CITIZEN ELECTRONICS CO., LTD.**, Fujiyoshida-shi, Yamanashhi (JP); **CITIZEN WATCH CO., LTD.**, Tokyo (JP)

(72) Inventor: **Yuichi Miura**, Fujiyoshida (JP)

(73) Assignees: **CITIZEN ELECTRONICS CO., LTD.**, Yamanashi (JP); **CITIZEN WATCH CO., LTD.**, Tokyo (JP)

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

(21) Appl. No.: **29/581,301**

(22) Filed: **Oct. 18, 2016**

(30) **Foreign Application Priority Data**

Apr. 18, 2016 (JP) 2016-008528
Apr. 18, 2016 (JP) 2016-008529

(51) **LOC (11) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/180**

(58) **Field of Classification Search**
USPC D13/180; D26/1
CPC ... H01L 25/167; H01L 25/0753; H01L 27/15;
H01L 27/156; H01L 31/02; H01L 33/00;
H01L 33/04; H01L 33/08; H01L 33/10;
H01L 33/20; H01L 33/38; H01L 33/42;
H01L 33/48; H01L 33/6062; H01L
33/483; H01L 33/486; F21K 9/00; F21K
9/30; F21K 9/54

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,483,623 B1 11/2002 Maruyama
7,425,083 B2 9/2008 Kim et al.

D578,673 S 10/2008 Takada et al.
D622,679 S 8/2010 Hsieh
7,815,343 B2 10/2010 Nii et al.
D632,659 S * 2/2011 Hsieh D13/180
D634,716 S 3/2011 Suzuki
D643,821 S 8/2011 Yun
D660,813 S * 5/2012 Otaki D13/180
8,610,140 B2 * 12/2013 Joo H01L 33/60
257/88
9,285,102 B2 * 3/2016 Streppel F21V 13/12
D777,694 S 1/2017 Watanabe
D782,989 S 4/2017 Watanabe

(Continued)

OTHER PUBLICATIONS

Osram, SFH 4780S, Opto Semiconductors, Version 1.0, Jun. 12, 2015, 13 pgs. (e.g., pp. 1 and 9).

(Continued)

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Procopio, Cory, Hargreaves & Savitch LLP

(57) **CLAIM**

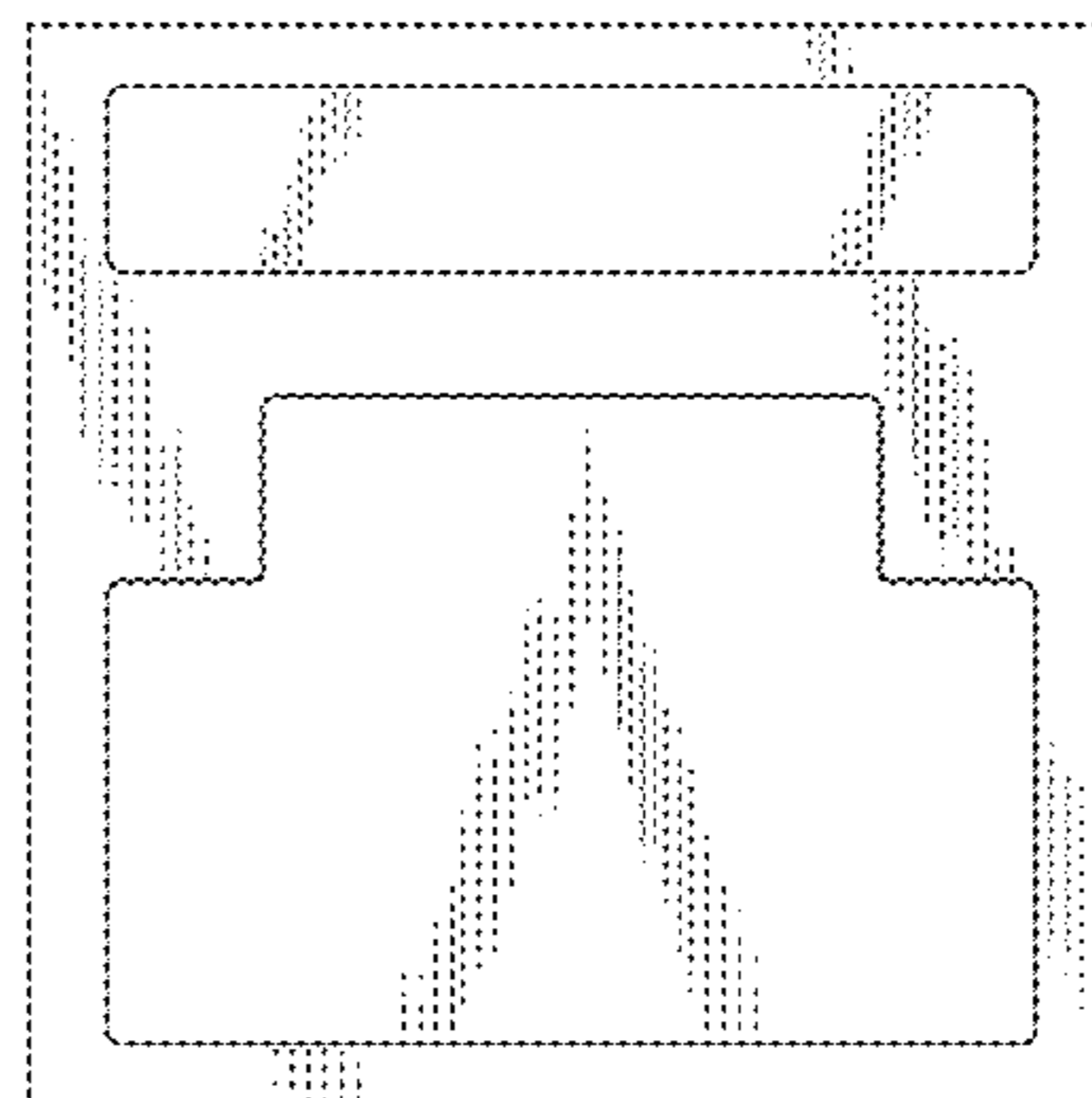
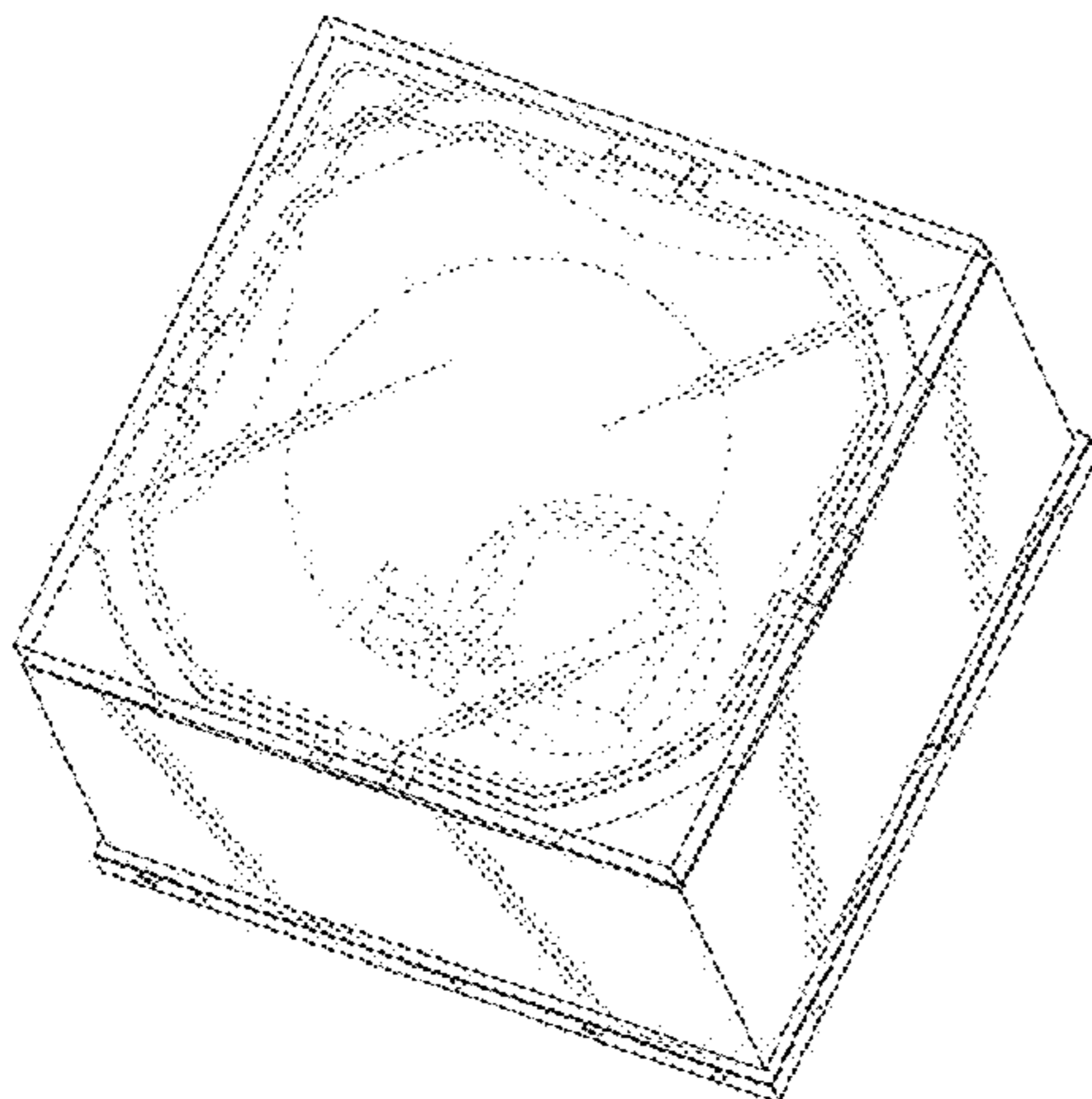
The ornamental design for a light emitting diode, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a light emitting diode showing my new design;
FIG. 2 is a top plan view thereof;
FIG. 3 is a bottom plan view thereof;
FIG. 4 is a front elevational view thereof;
FIG. 5 is a rear elevational view thereof;
FIG. 6 is a left side elevational view thereof; and,
FIG. 7 is a right side elevational view thereof.

In the drawings the even spaced broken lines depict portions of the light emitting diode that form no part of the claimed design. The dash-dot broken lines define the bounds of the claimed design and form no part thereof.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

9,806,239 B2 10/2017 Watanabe
2008/0185605 A1 8/2008 Wada et al.
2010/0140638 A1* 6/2010 Kotani B29C 45/0001
257/98
2011/0062473 A1 3/2011 Tanuma et al.
2011/0255281 A1 10/2011 Takei et al.
2013/0026502 A1* 1/2013 Park H01L 33/505
257/88
2013/0037842 A1 2/2013 Yamada et al.
2015/0014710 A1 1/2015 Yagi et al.
2016/0356643 A1 12/2016 Foucal et al.
2017/0200878 A1 7/2017 Fukuda

OTHER PUBLICATIONS

Osram, SFH 4786S, Opto Semiconductors, Version a.0, Aug. 7, 2015, 15 pgs. (e.g., pp. 1 and 6).
Design U.S. Appl. No. 29/581,299, filed Oct. 18, 2016, 36 pgs.
Design U.S. Appl. No. 29/581,304, filed Oct. 18, 2016, 29 pgs.
Office Action issued on Jan. 4, 2018, for related Design U.S. Appl. No. 29/581,299; 3 pages.

* cited by examiner

FIG. 1

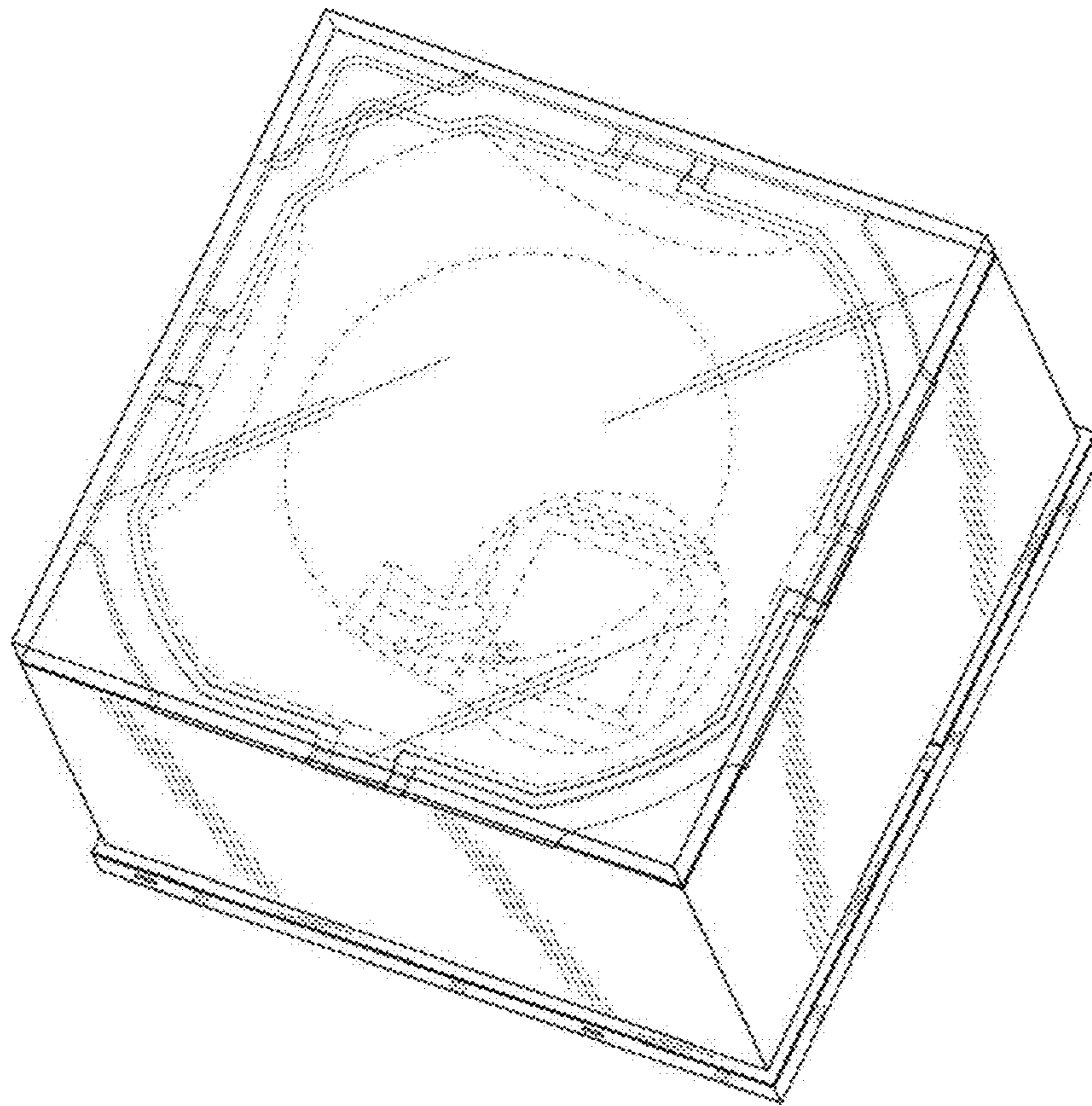


FIG. 2

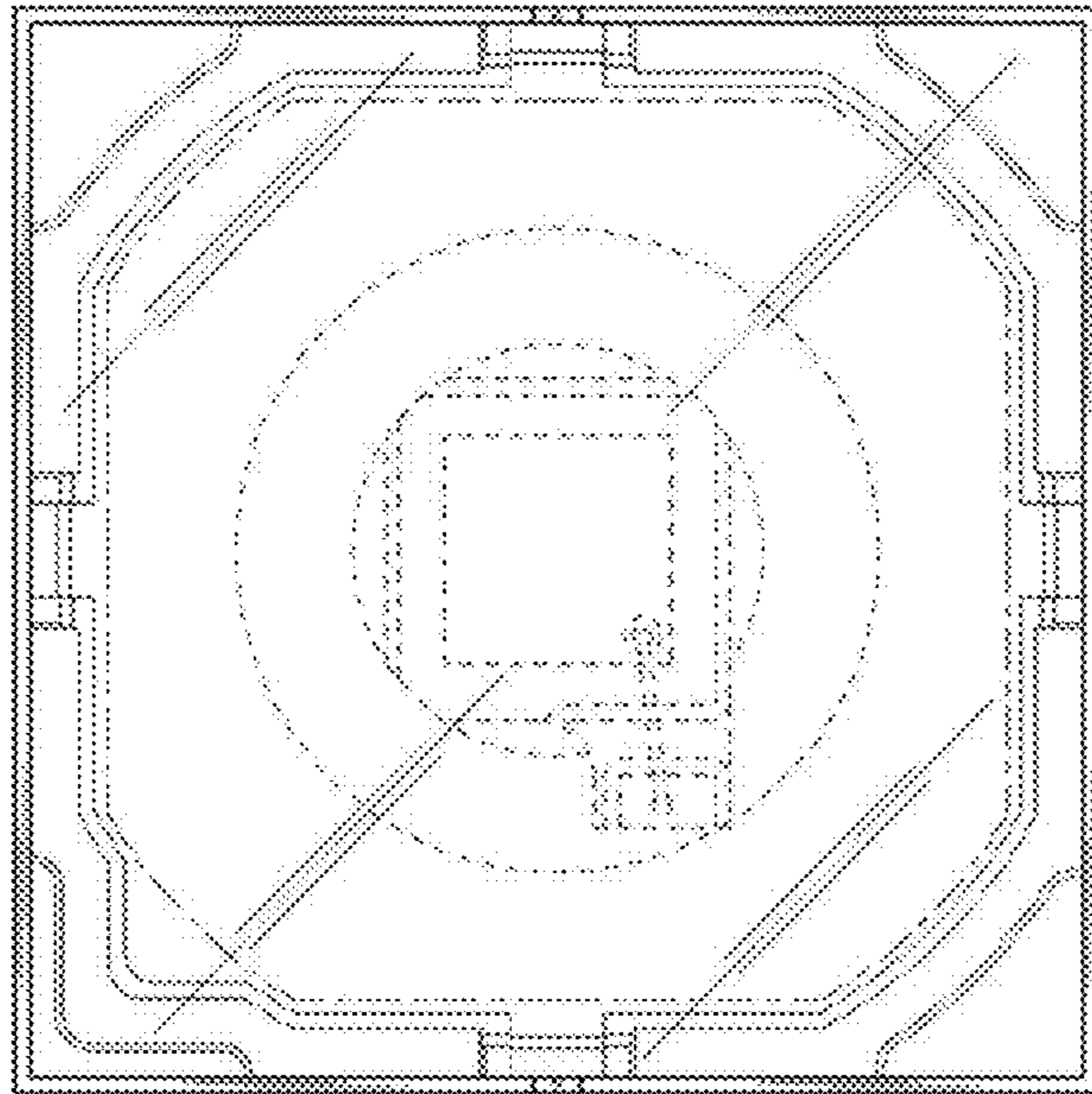


FIG. 3

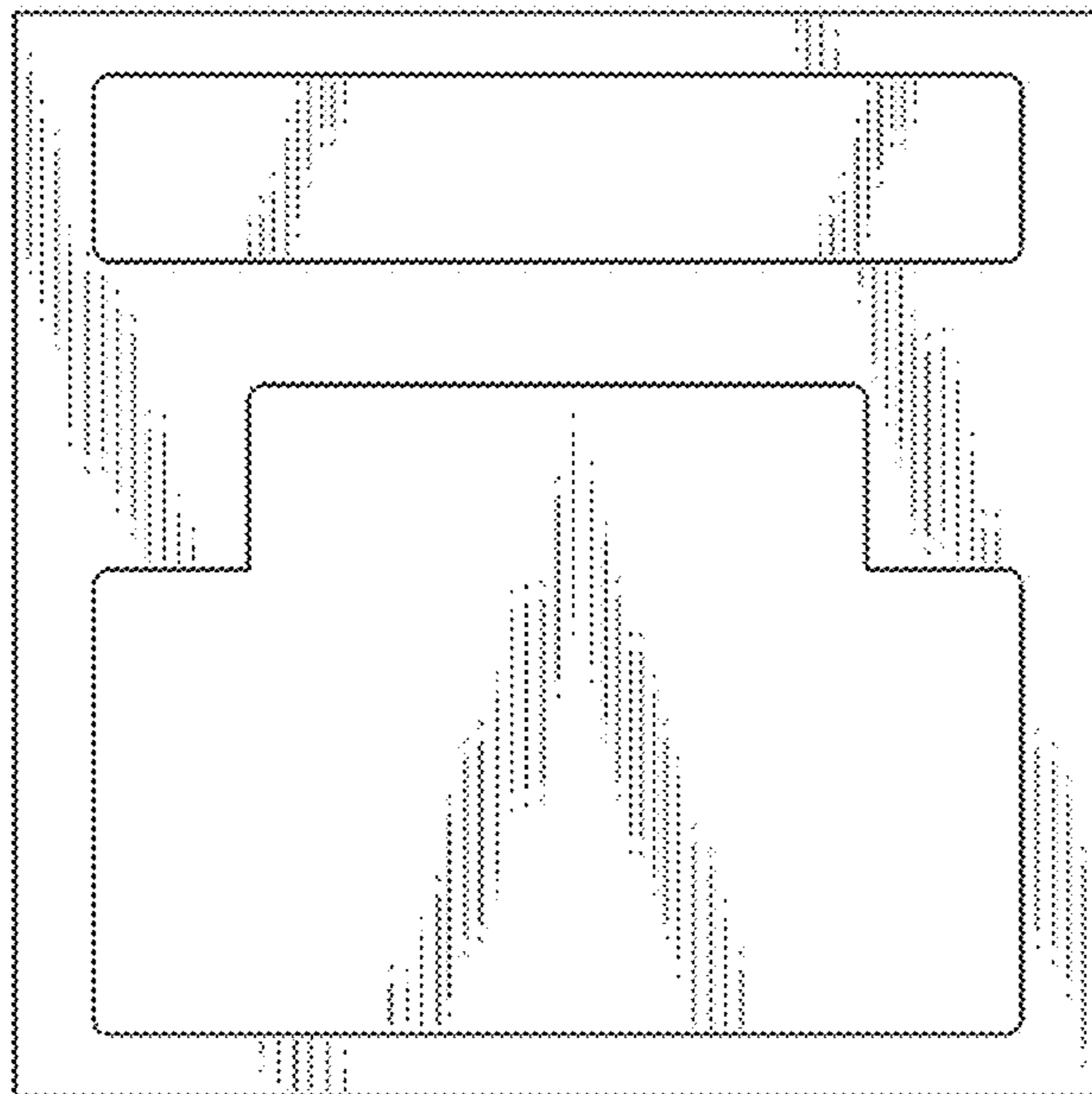


FIG. 4

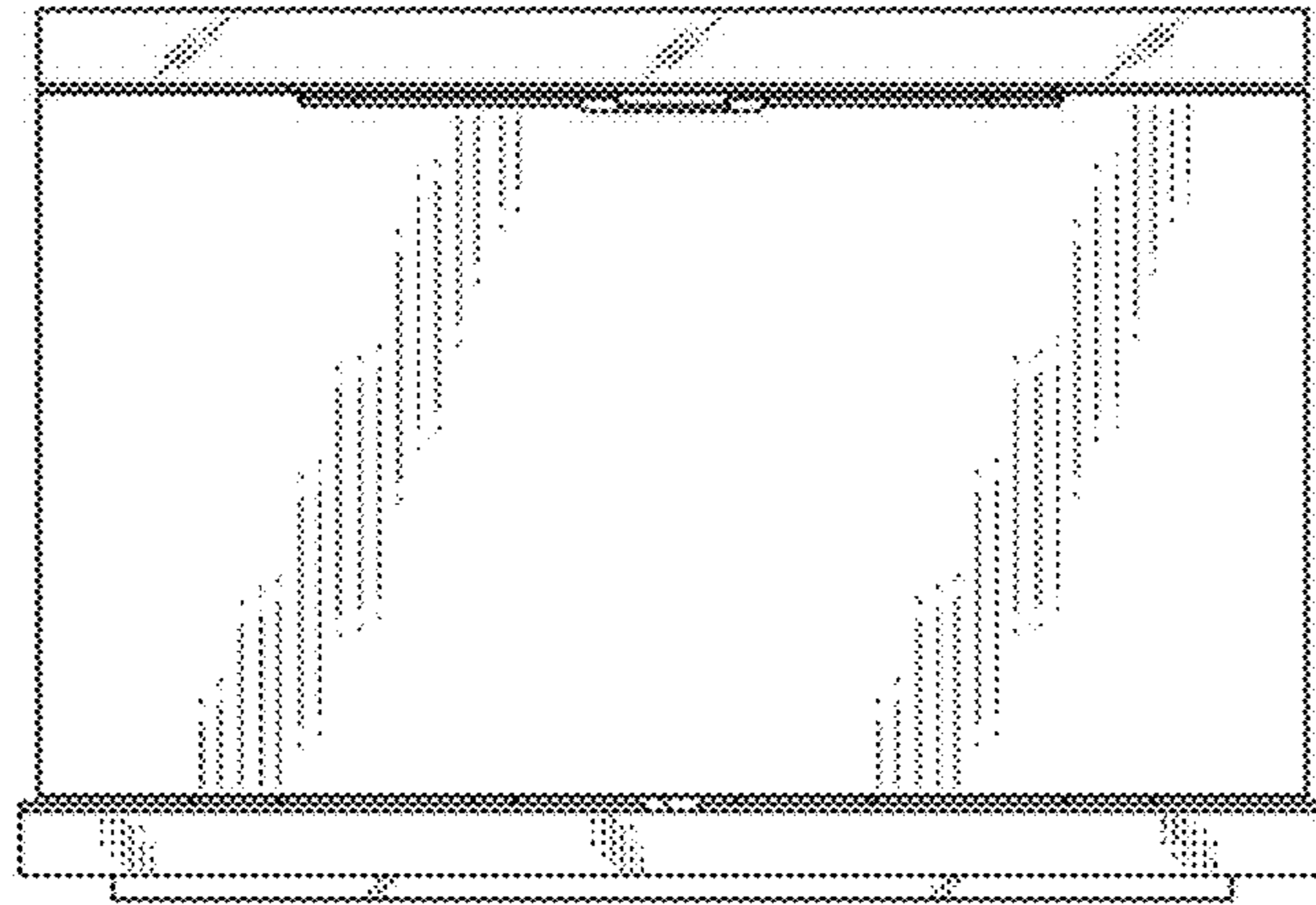


FIG. 5

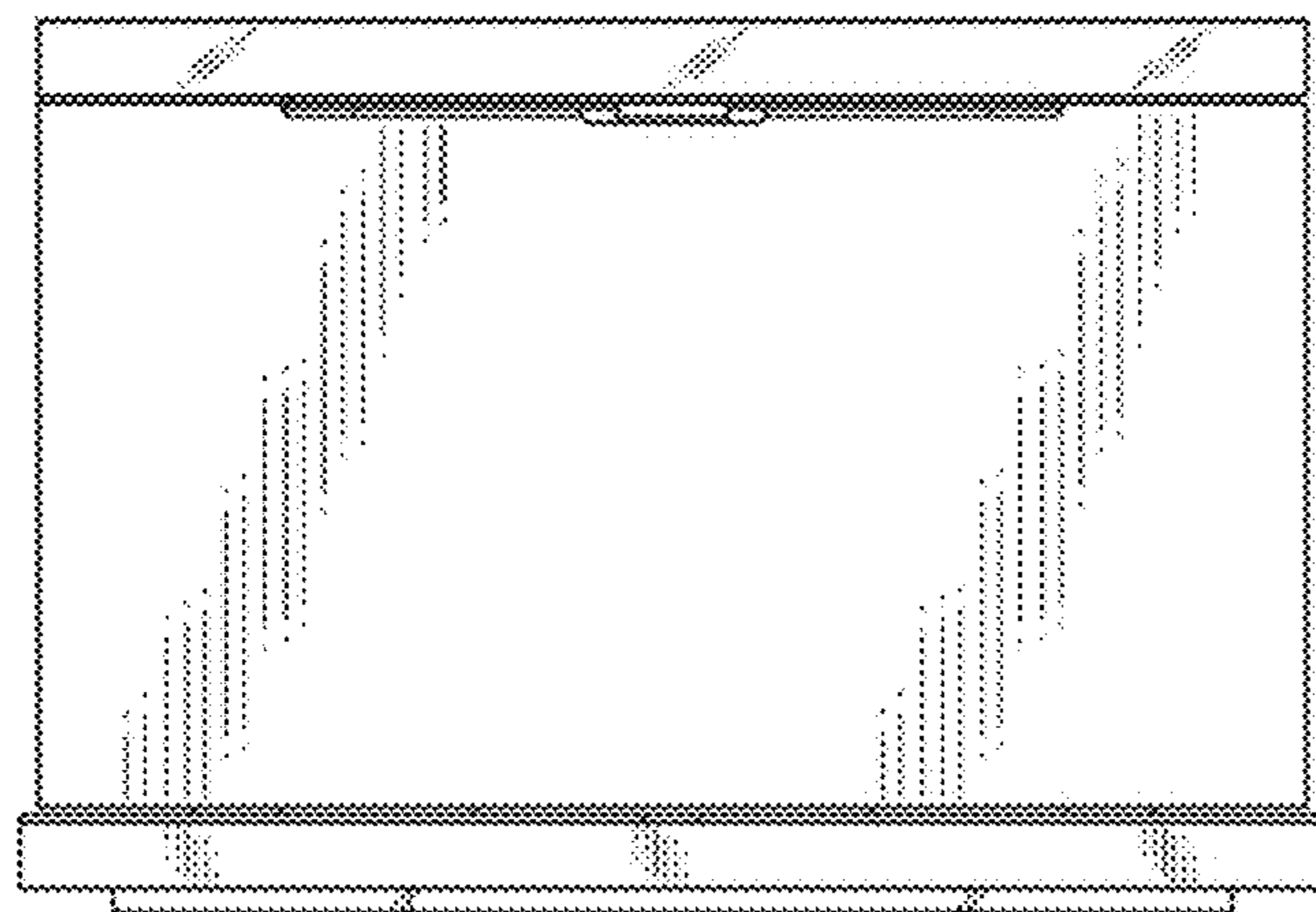


FIG. 6

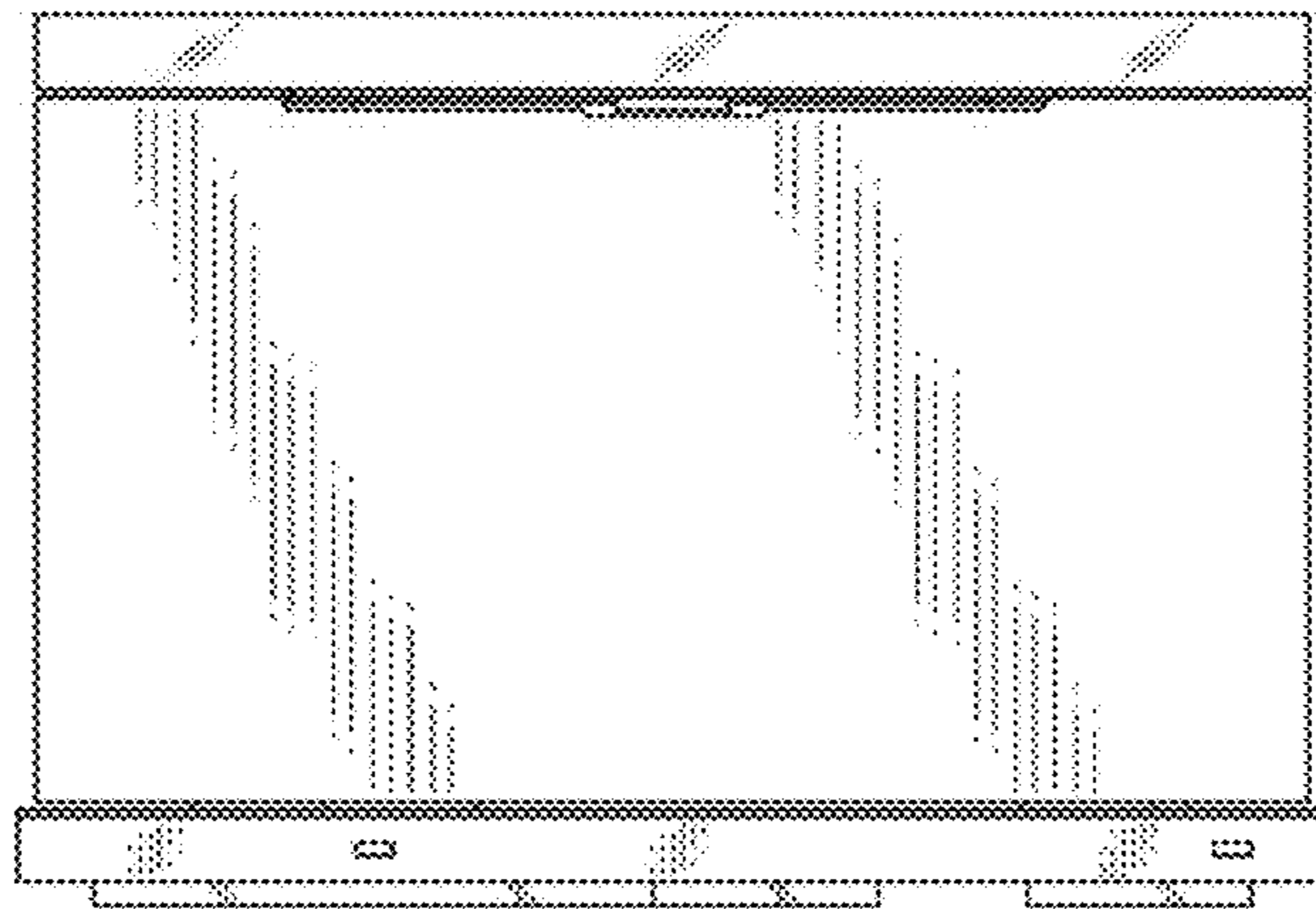


FIG. 7

