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

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(54) **LIGHT EMITTING DIODE**

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

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(51) **LOC (10) 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 33/483; H01L 33/4868

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,774,406 B2 * 8/2004 Isoda 257/99
D531,140 S * 10/2006 Konno et al. D13/180

(Continued)

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(57) **CLAIM**

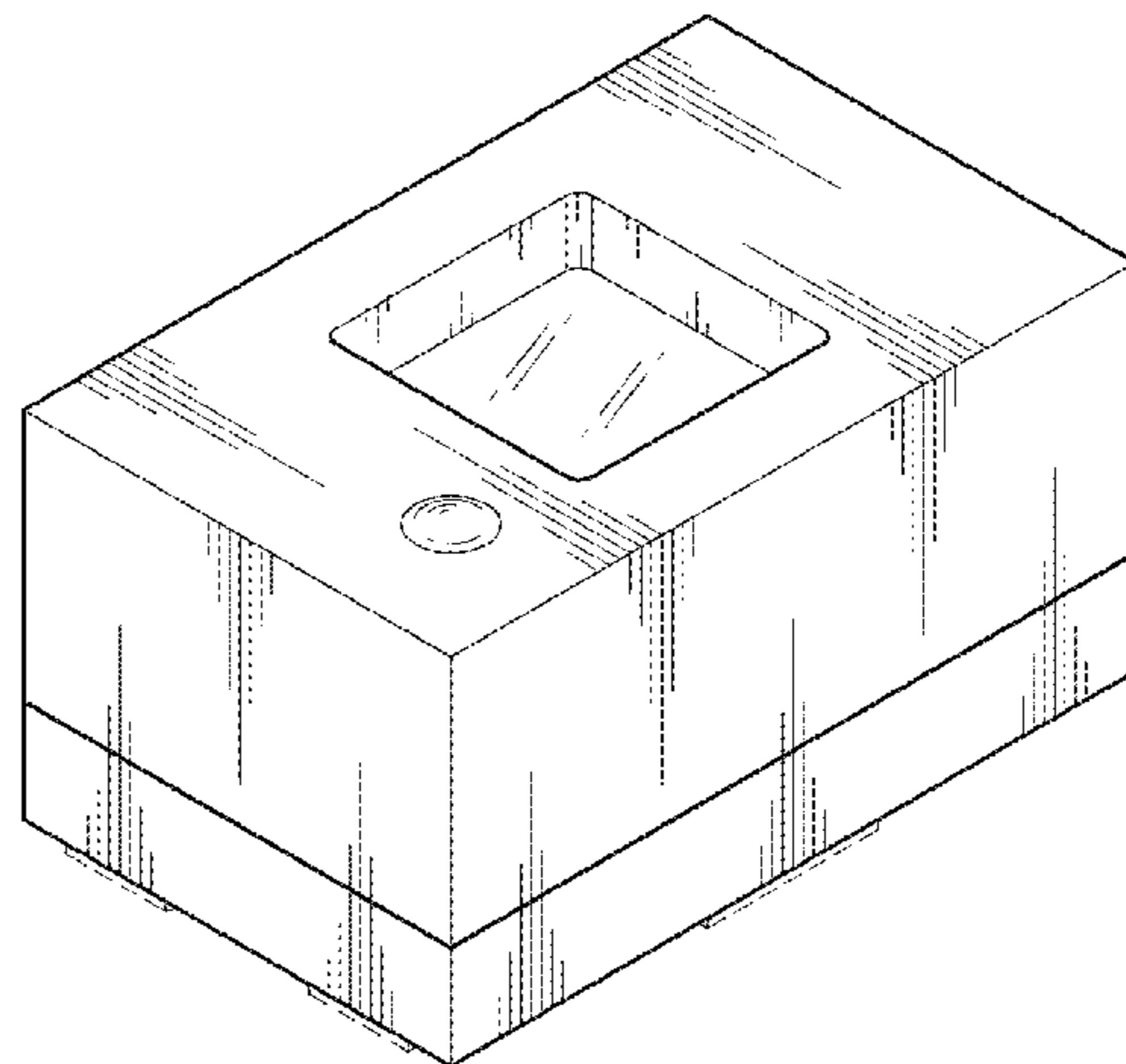
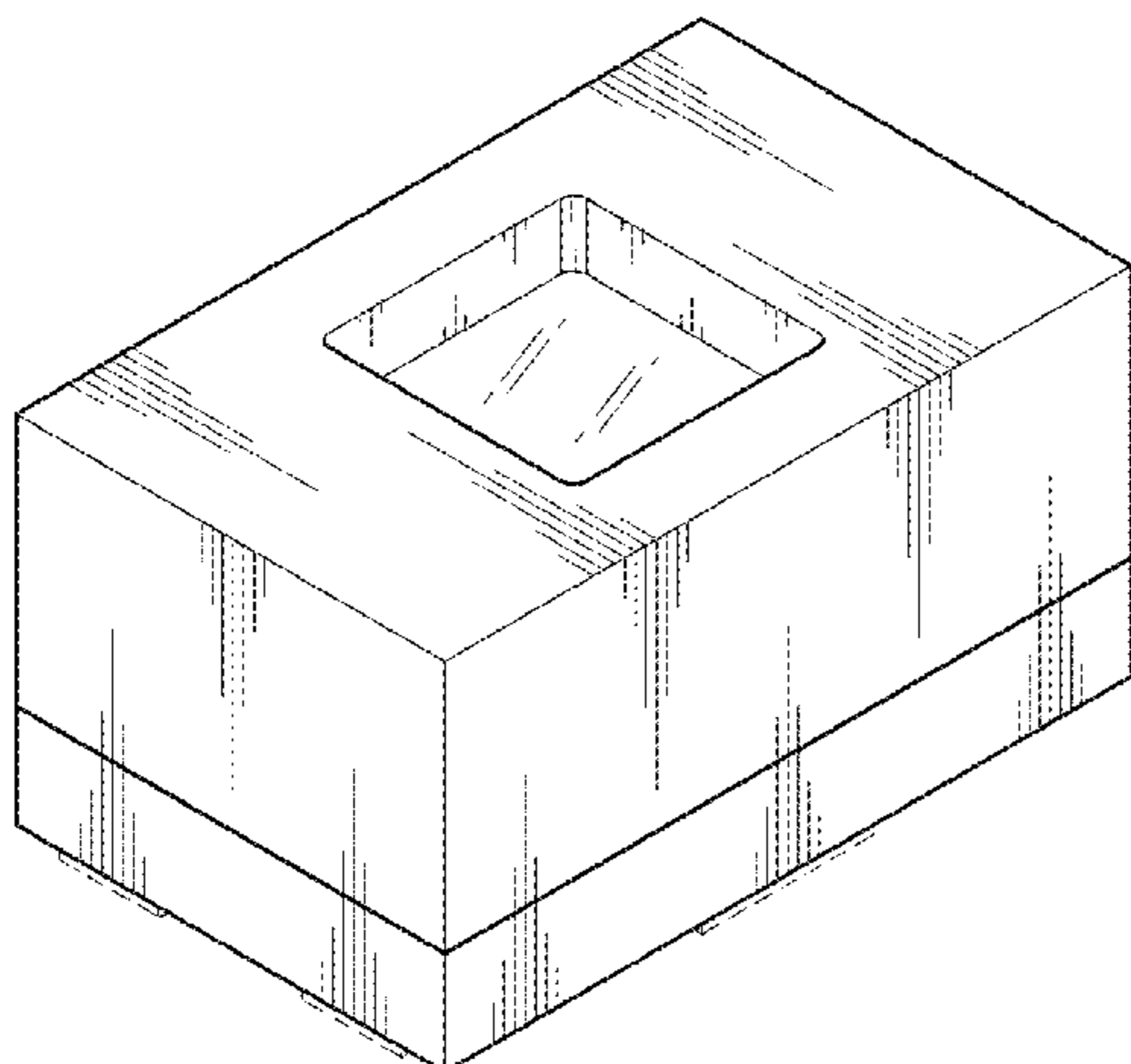
The ornamental design for a “light emitting diode,” as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of a light emitting diode showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is a perspective view viewed from another visual angle thereof;
FIG. 9 is a perspective view of a second embodiment thereof;
FIG. 10 is a front view thereof;
FIG. 11 is a rear view thereof;
FIG. 12 is a left side view thereof;
FIG. 13 is a right side view thereof;
FIG. 14 is a top view thereof;
FIG. 15 is a bottom view thereof;
FIG. 16 is a perspective view viewed from another visual angle thereof;
FIG. 17 is a perspective view of a third embodiment thereof;
FIG. 18 is a front view thereof;
FIG. 19 is a rear view thereof;
FIG. 20 is a left side view thereof;
FIG. 21 is a right side view thereof;
FIG. 22 is a top view thereof;
FIG. 23 is a bottom view thereof; and,
FIG. 24 is a perspective view viewed from another visual angle thereof.

The broken lines depict portions of the light emitting diode which form no part of the claimed design.

1 Claim, 15 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D555,114 S *	11/2007	Yen	.....	D13/180	D634,282 S *	3/2011	Wilson	.....	D13/180
D568,835 S *	5/2008	Nishida et al.	.....	D13/180	D653,629 S *	2/2012	Miyashita	.....	D13/180
D574,791 S *	8/2008	Shimozawa	.....	D13/180	D654,032 S *	2/2012	Yu et al.	.....	D13/180
D580,891 S *	11/2008	Sung et al.	.....	D13/180	8,220,973 B2 *	7/2012	Engl et al.	.....	362/326
D601,977 S *	10/2009	Tsuchiya	.....	D13/180	D694,201 S *	11/2013	Iino	.....	D13/180
D602,451 S *	10/2009	Gielen	.....	D13/180	8,716,742 B2 *	5/2014	Chou	.....	257/99
D610,100 S *	2/2010	Chang et al.	.....	D13/180	8,772,794 B2 *	7/2014	Lee	.....	257/88
D622,232 S *	8/2010	Lai et al.	.....	D13/180	8,860,064 B2 *	10/2014	Tanuma et al.	.....	257/98
D622,679 S *	8/2010	Hsieh	.....	D13/180	D719,535 S *	12/2014	Iino et al.	.....	D13/180
D626,096 S *	10/2010	Ying et al.	.....	D13/180	D724,548 S *	3/2015	Iino et al.	.....	D13/180
					2007/0269927 A1 *	11/2007	Hofer et al.	.....	438/106
					2010/0307799 A1 *	12/2010	Chiang	.....	174/255
					2011/0186870 A1 *	8/2011	Ying et al.	.....	257/88

* cited by examiner

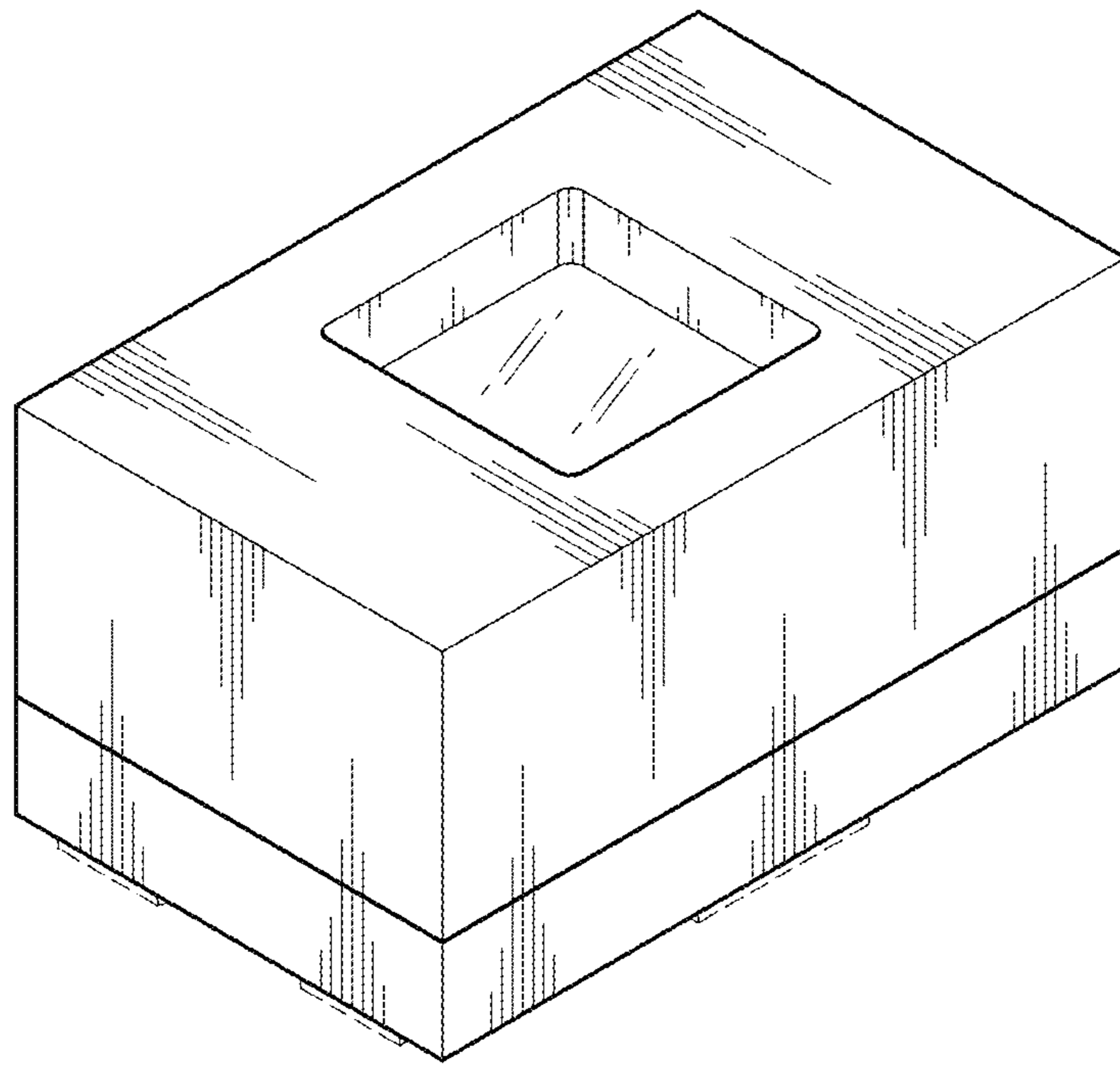


FIG.1

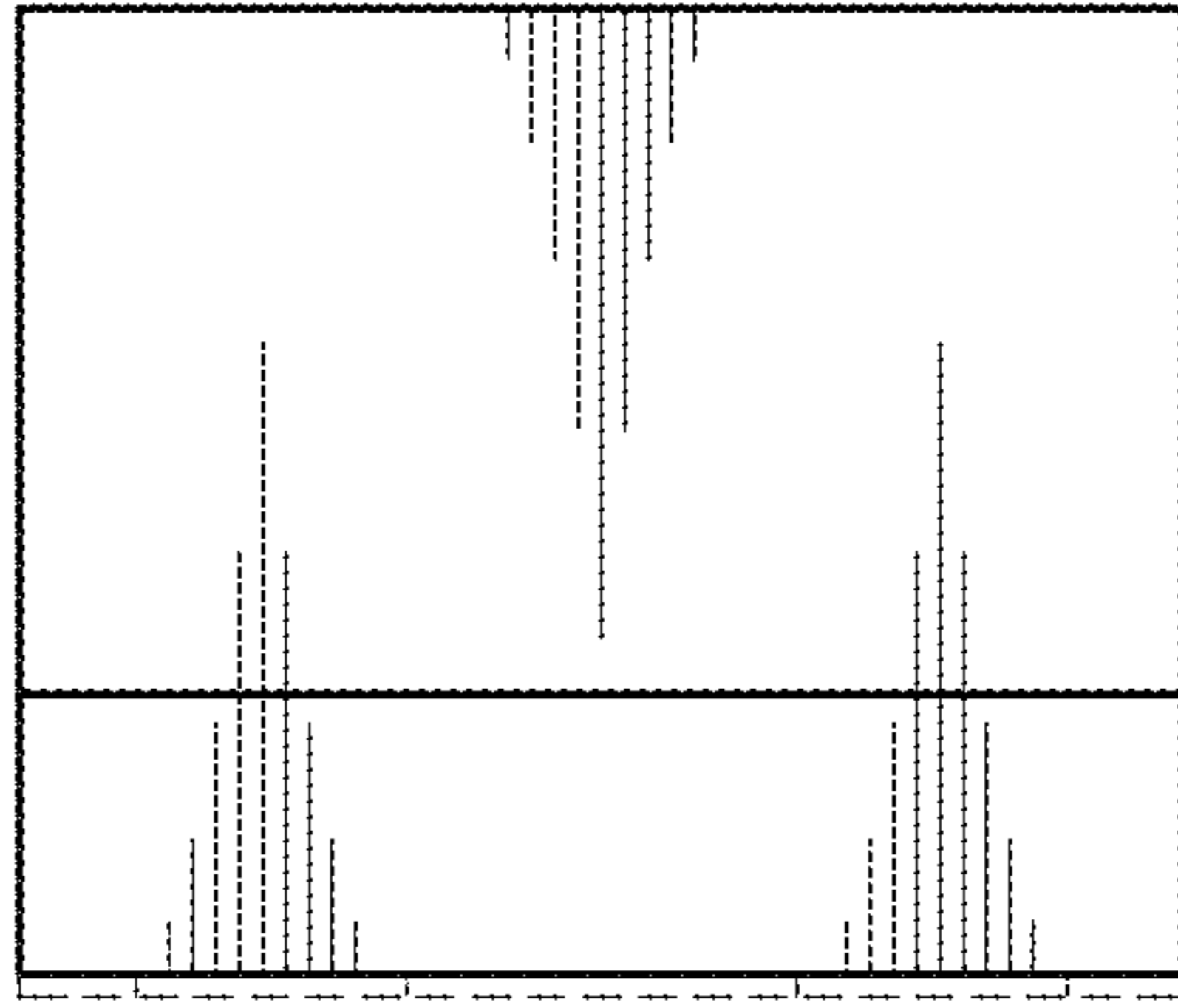


FIG. 2

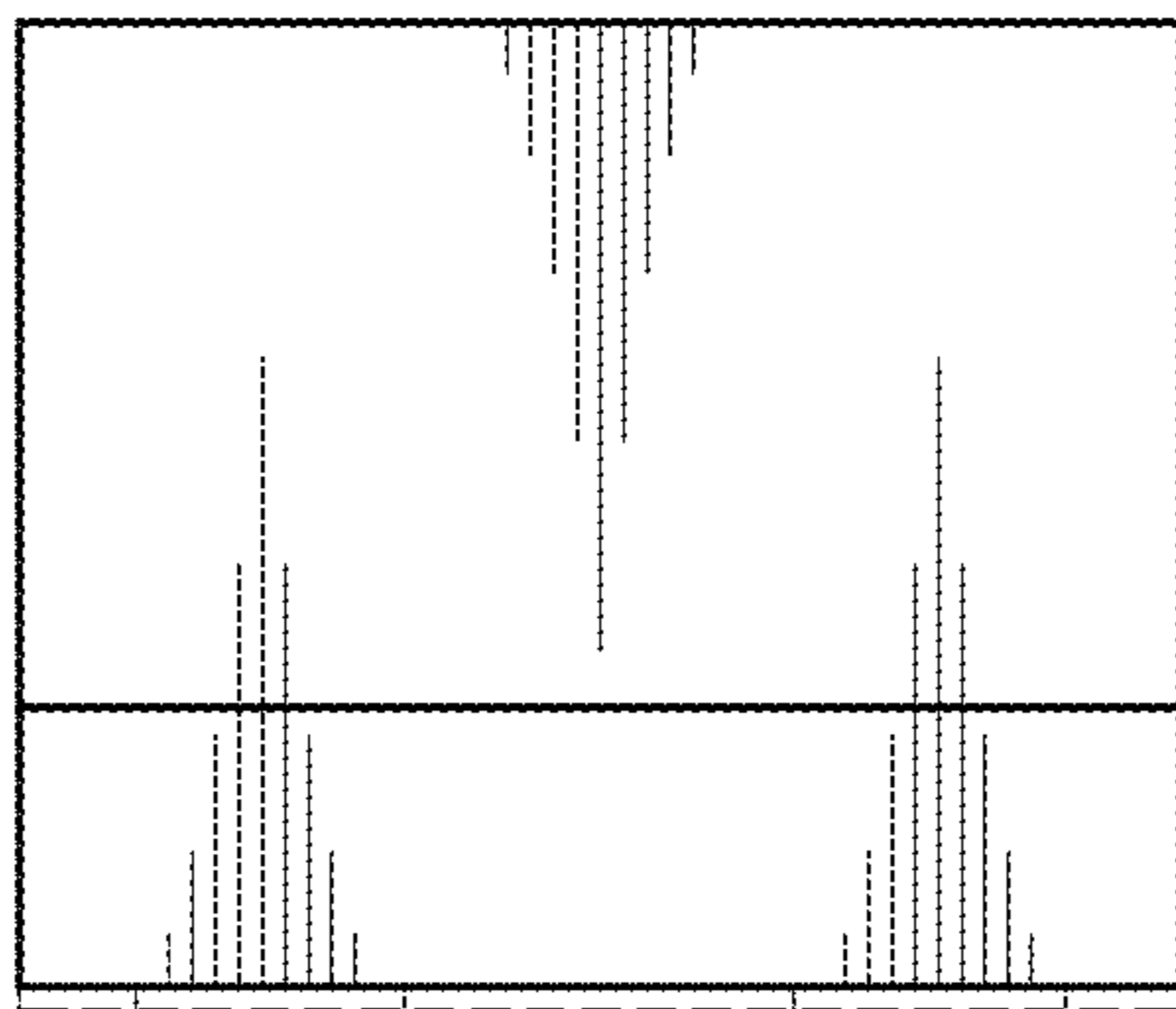


FIG. 3

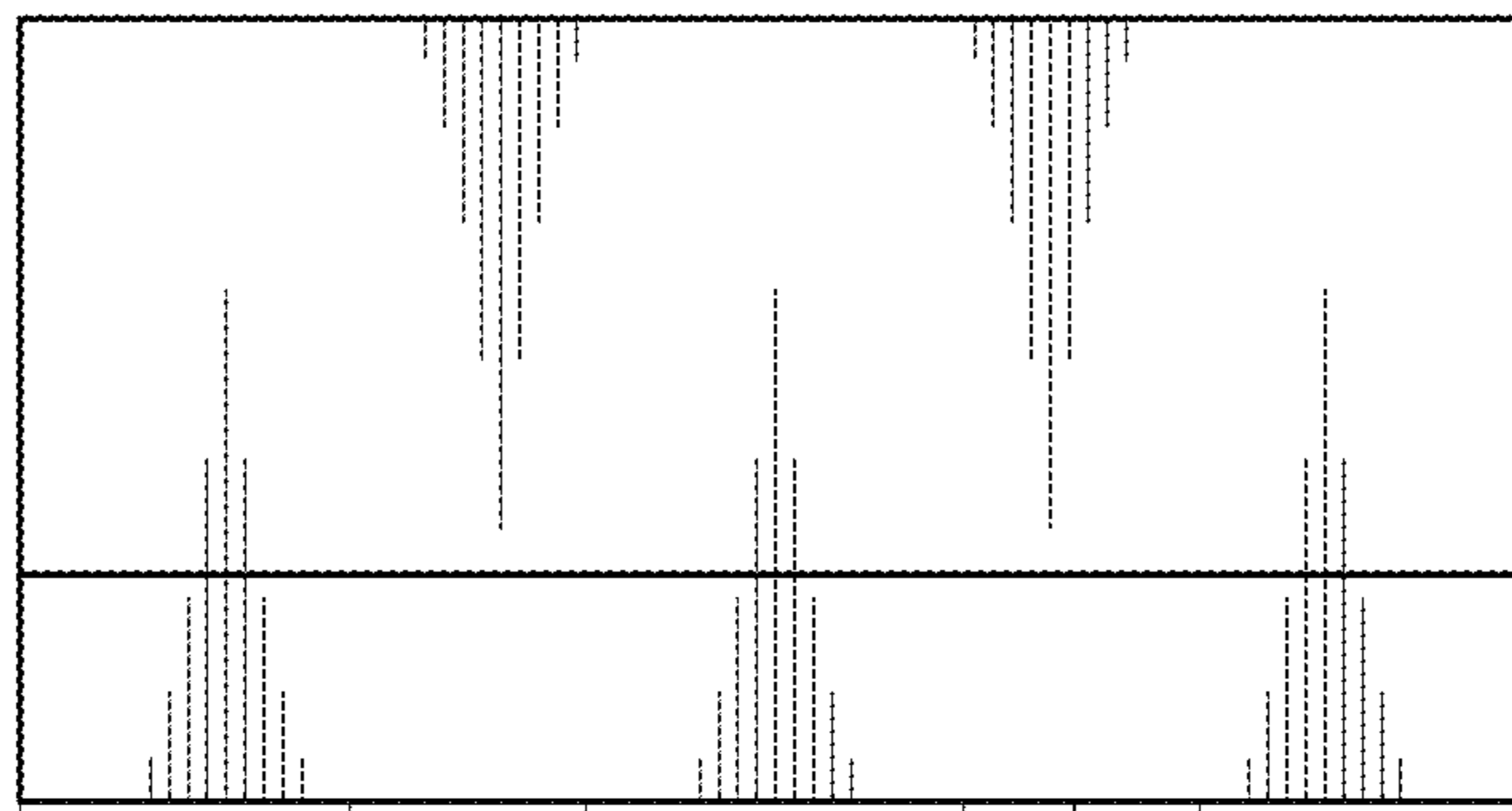


FIG.4

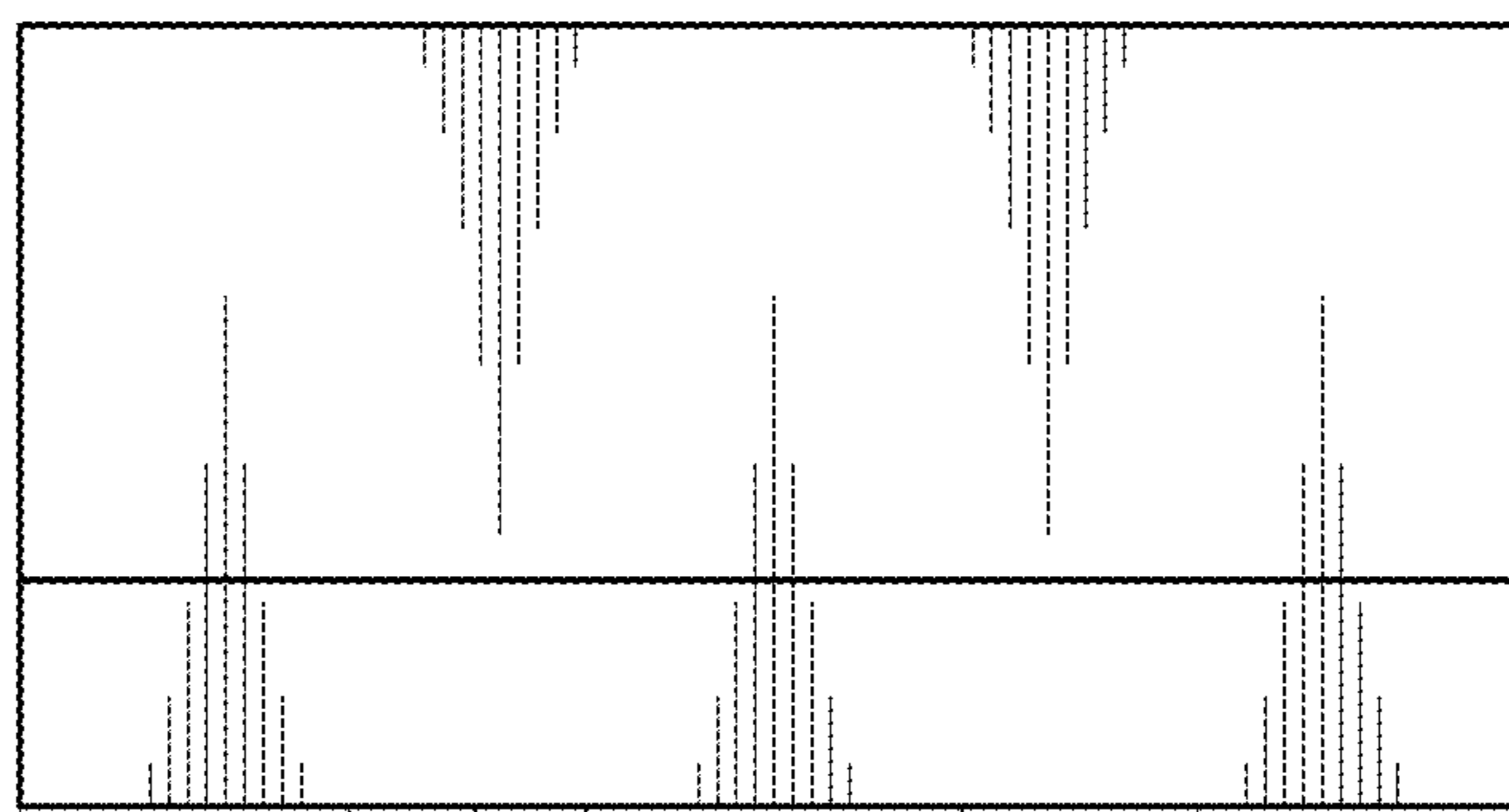


FIG.5

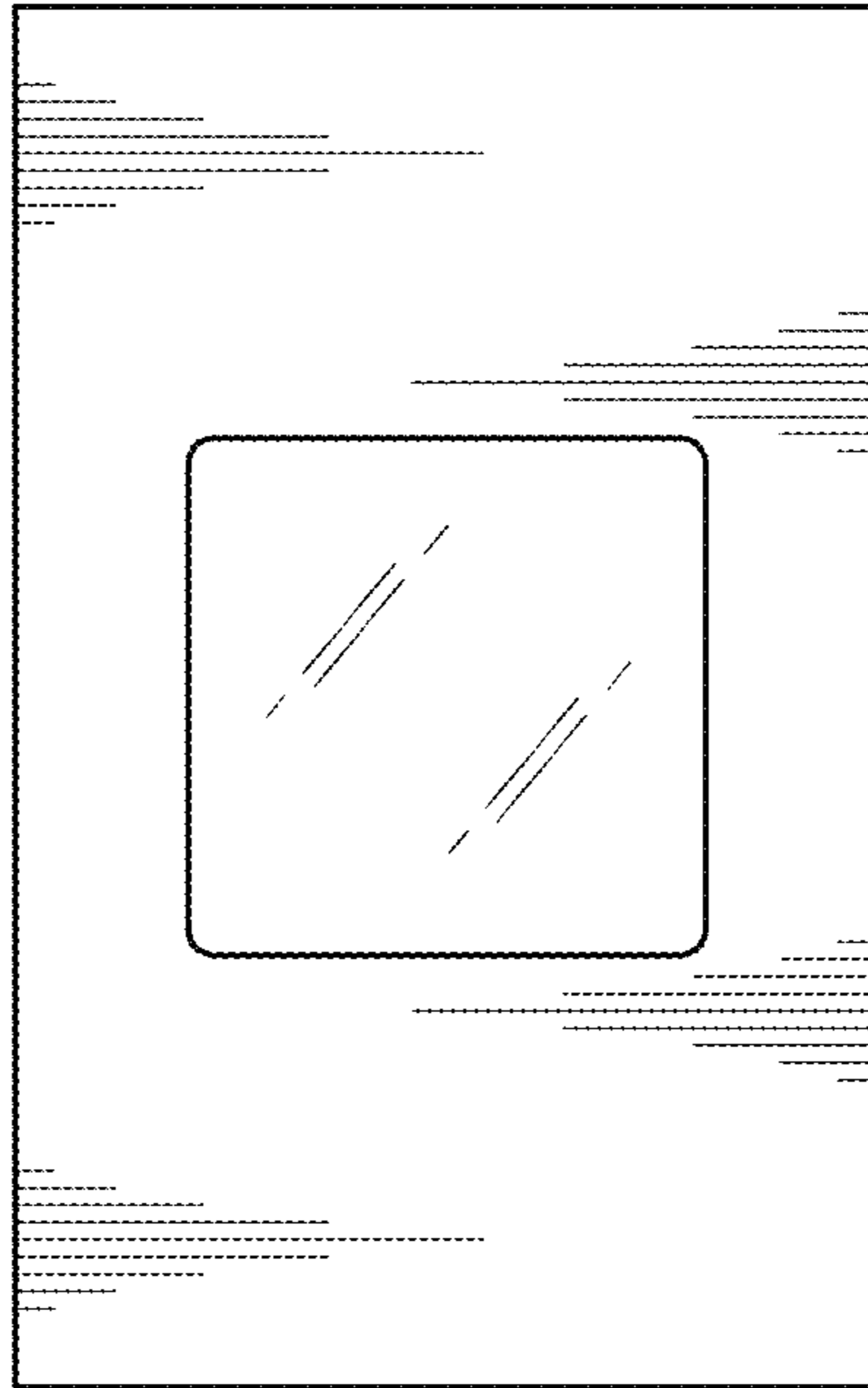


FIG. 6

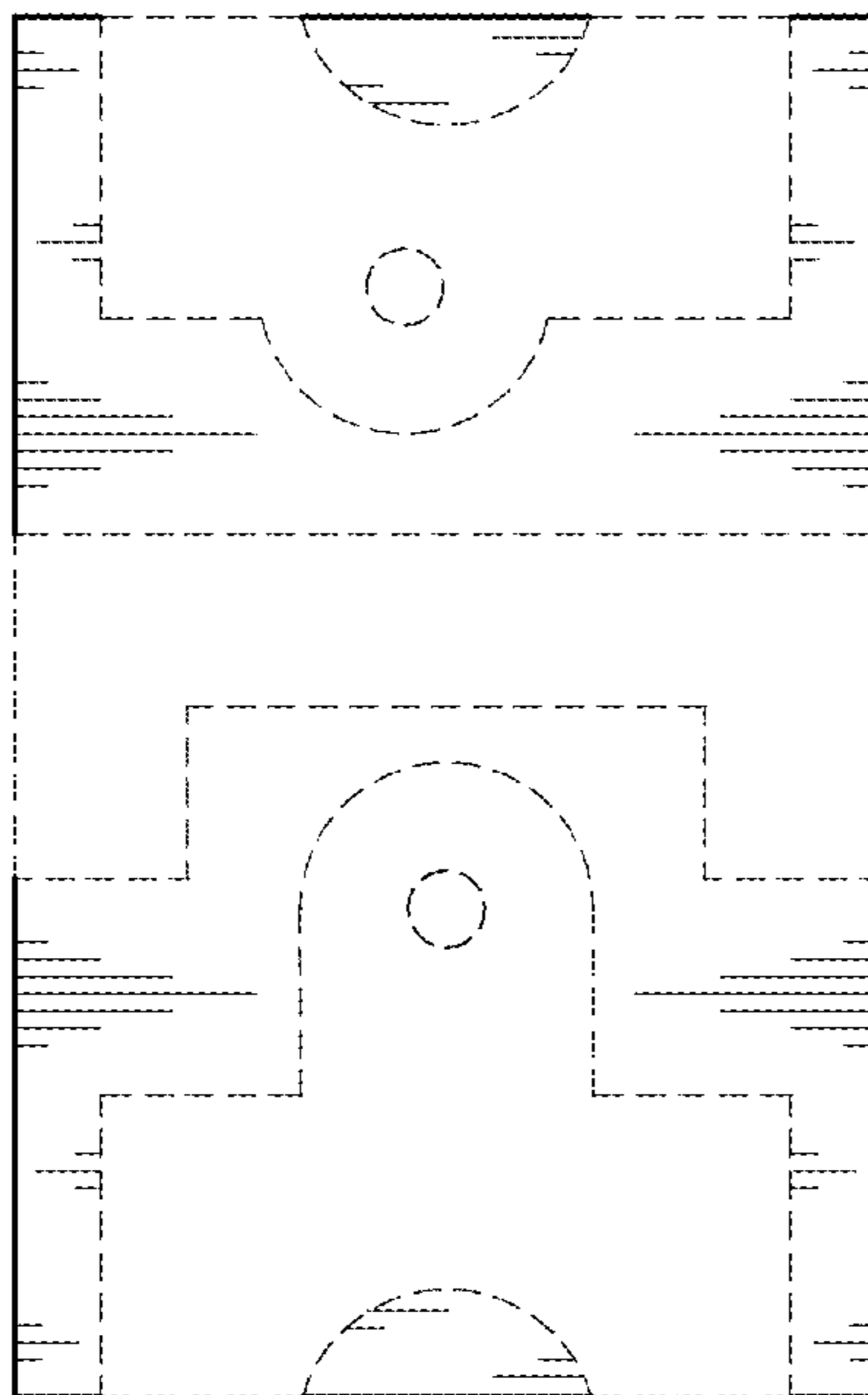


FIG. 7

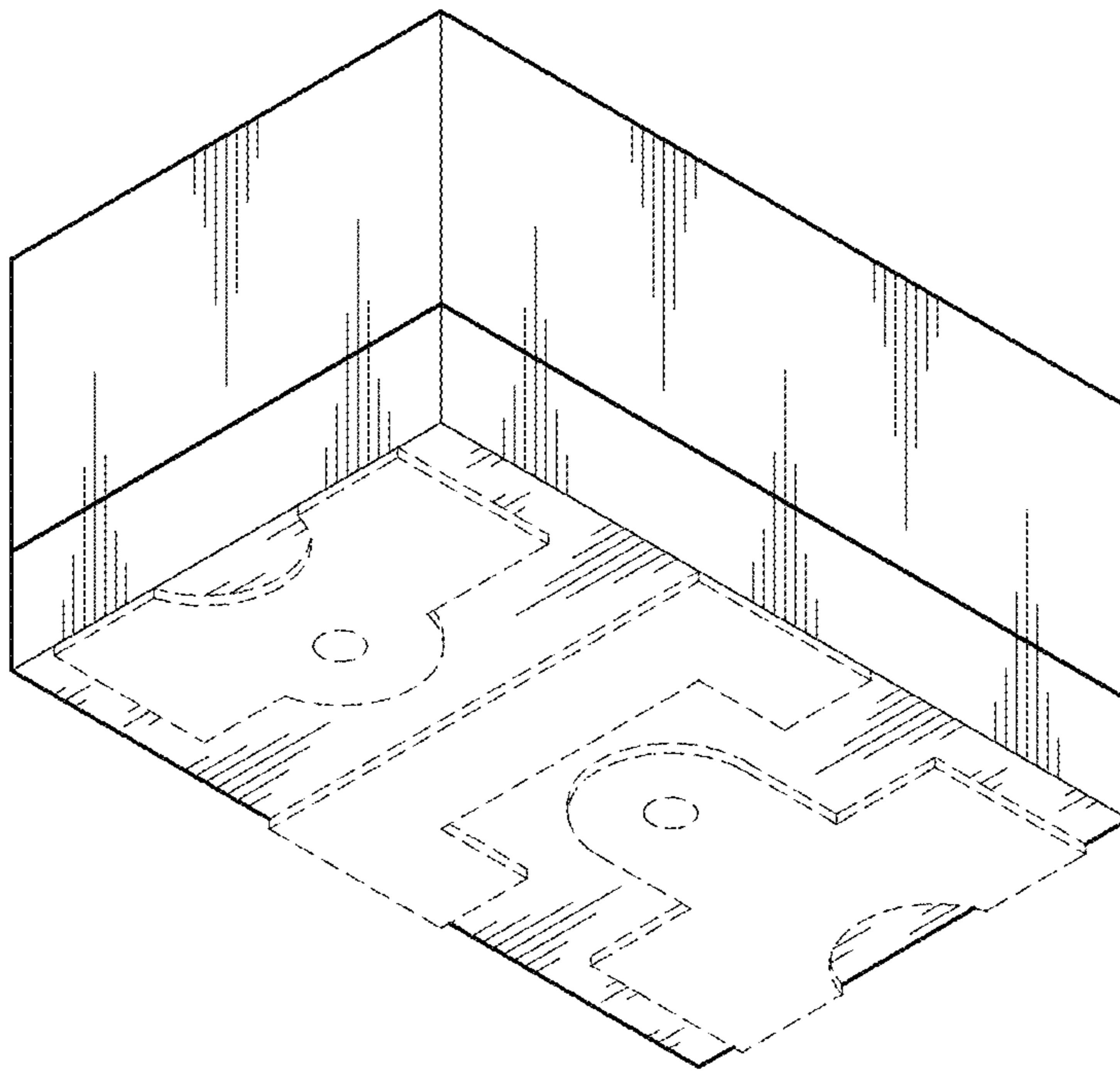


FIG.8

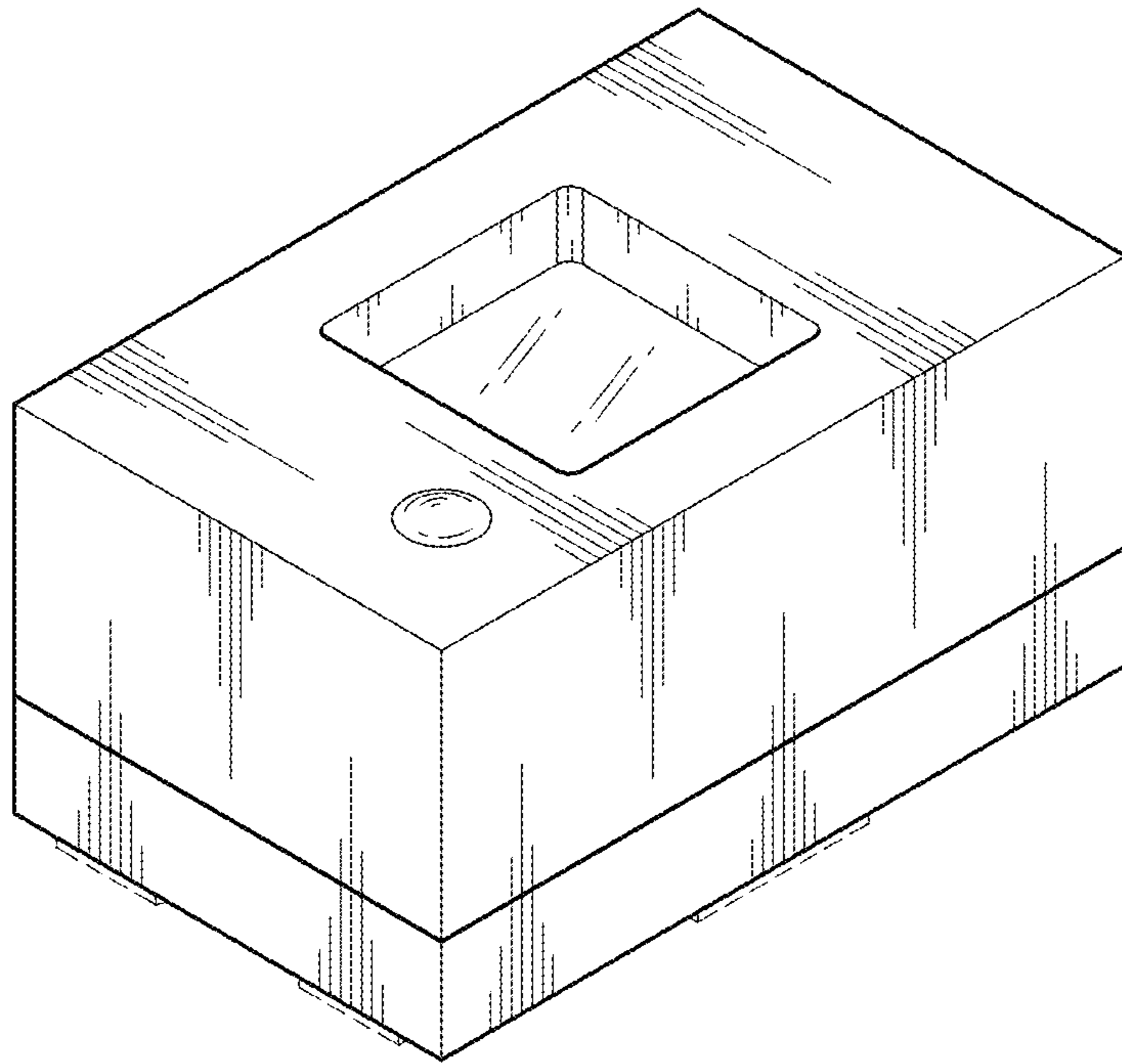


FIG.9

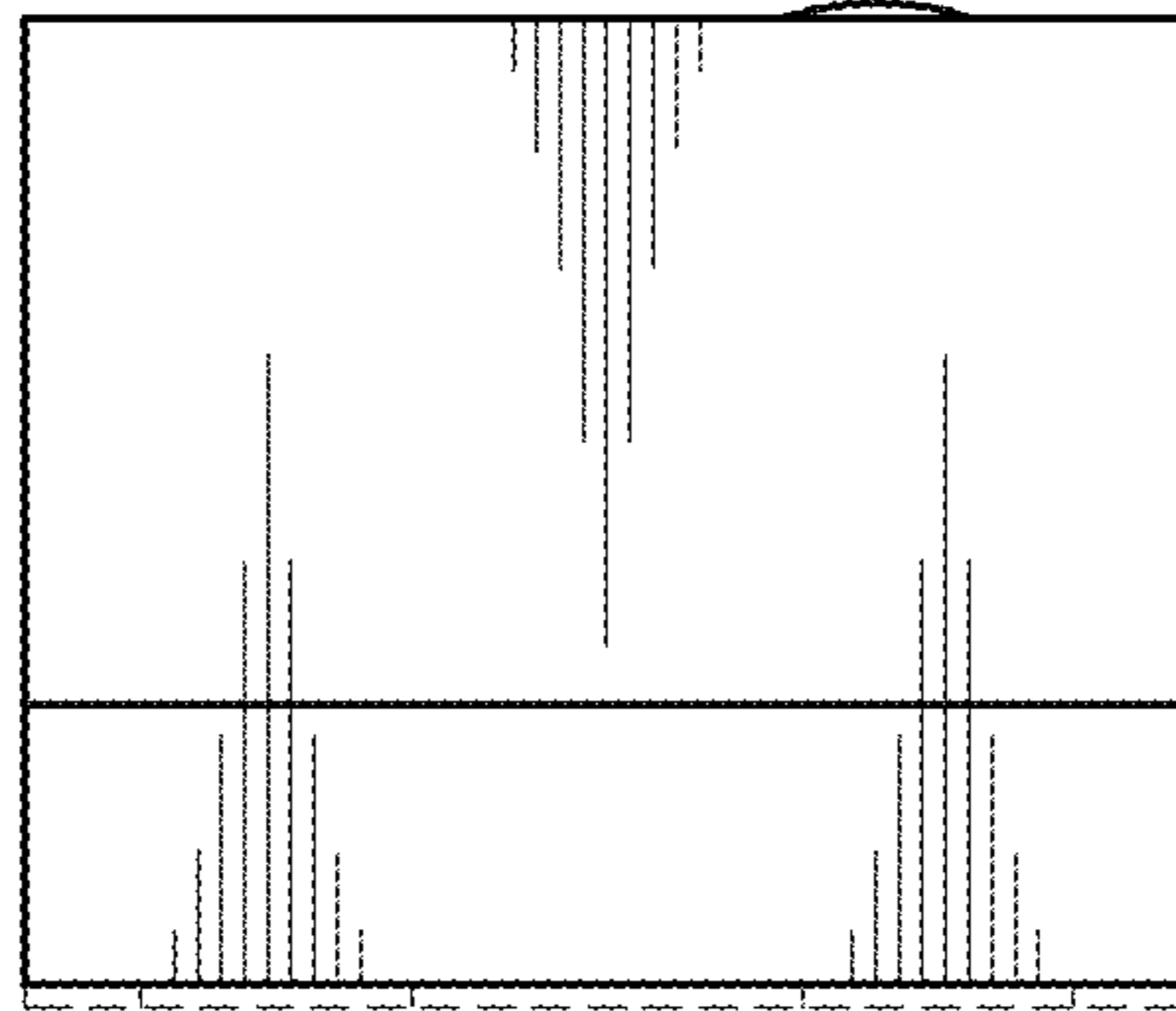


FIG. 10

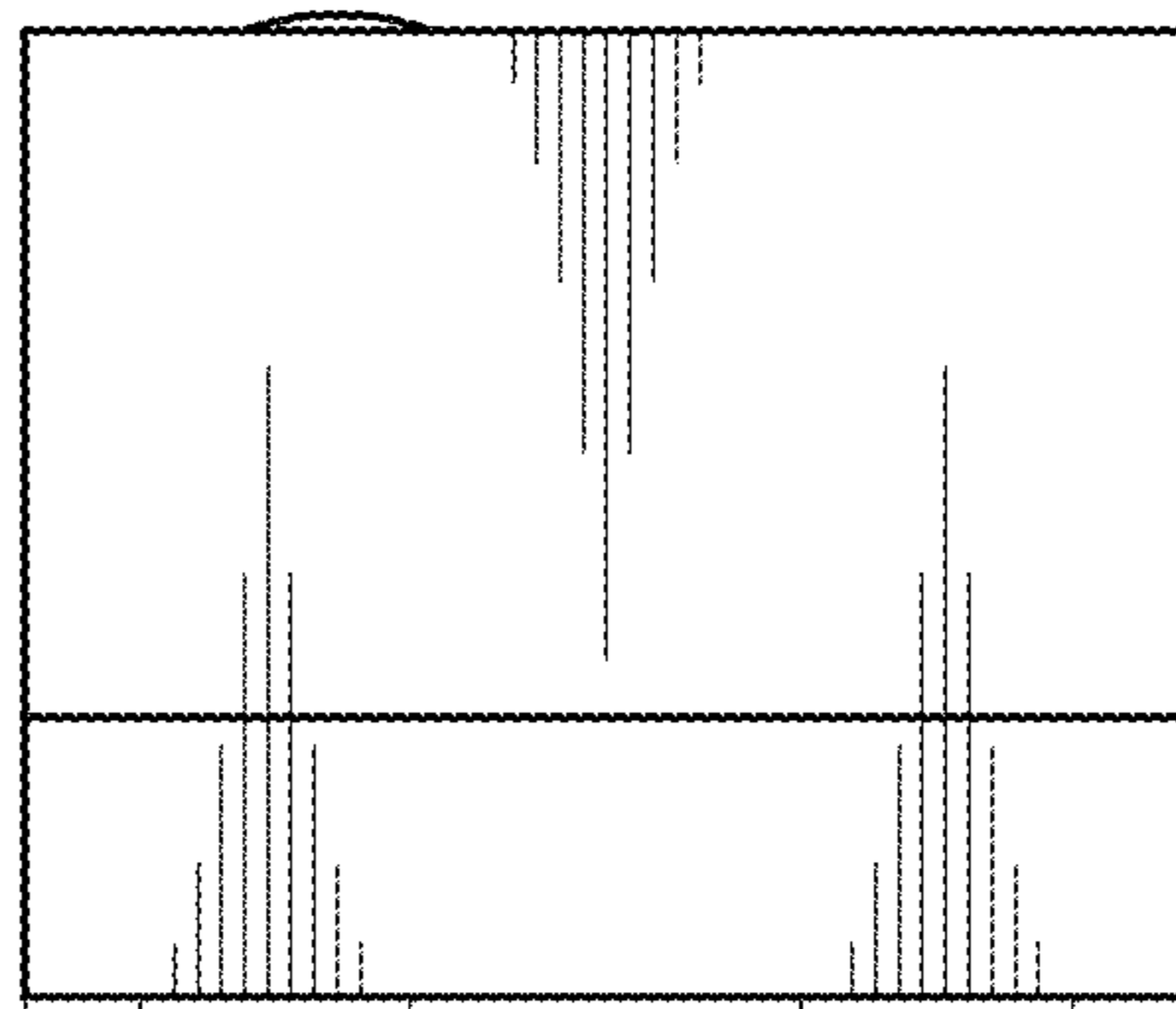


FIG. 11

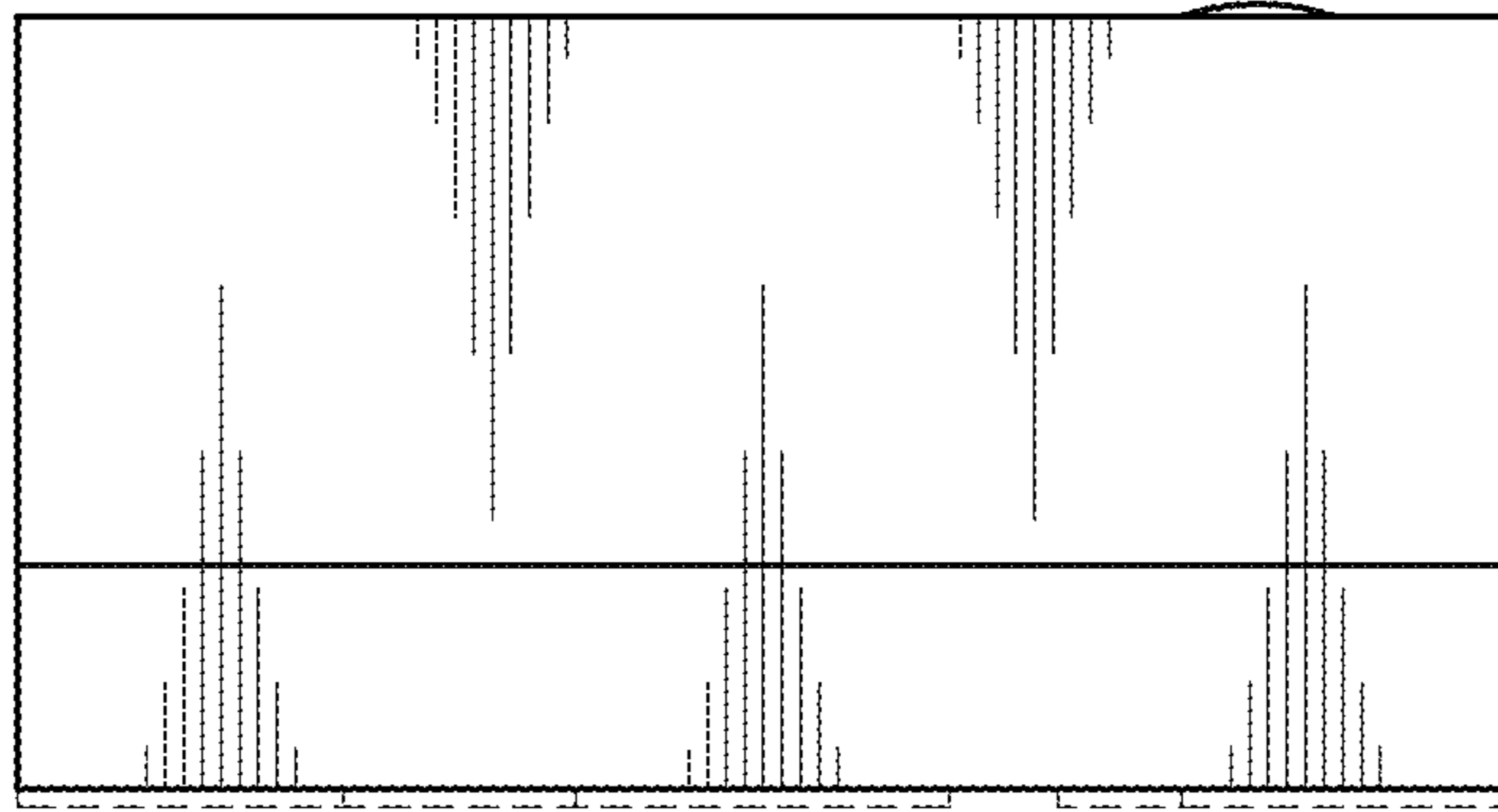


FIG.12

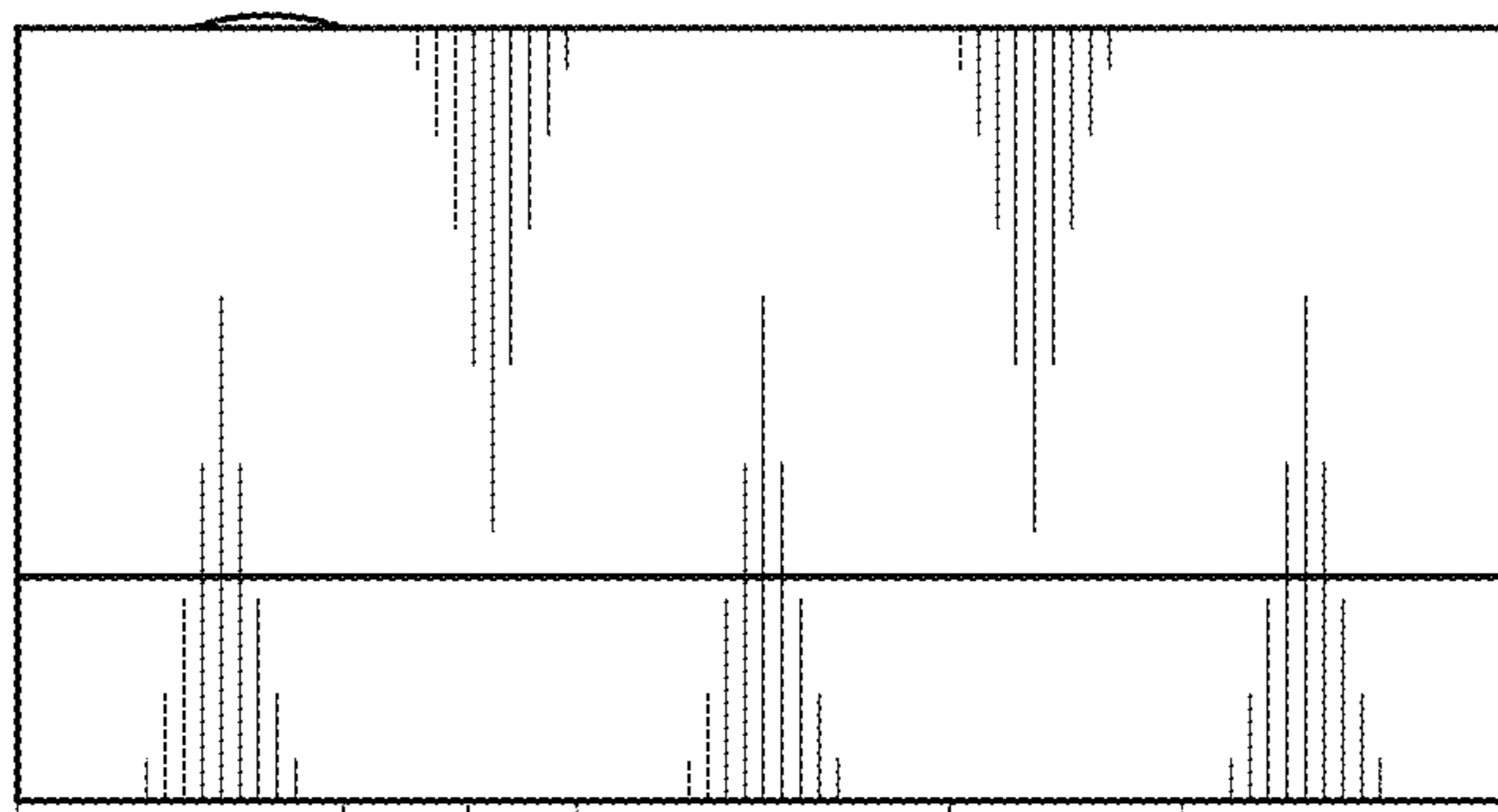


FIG.13

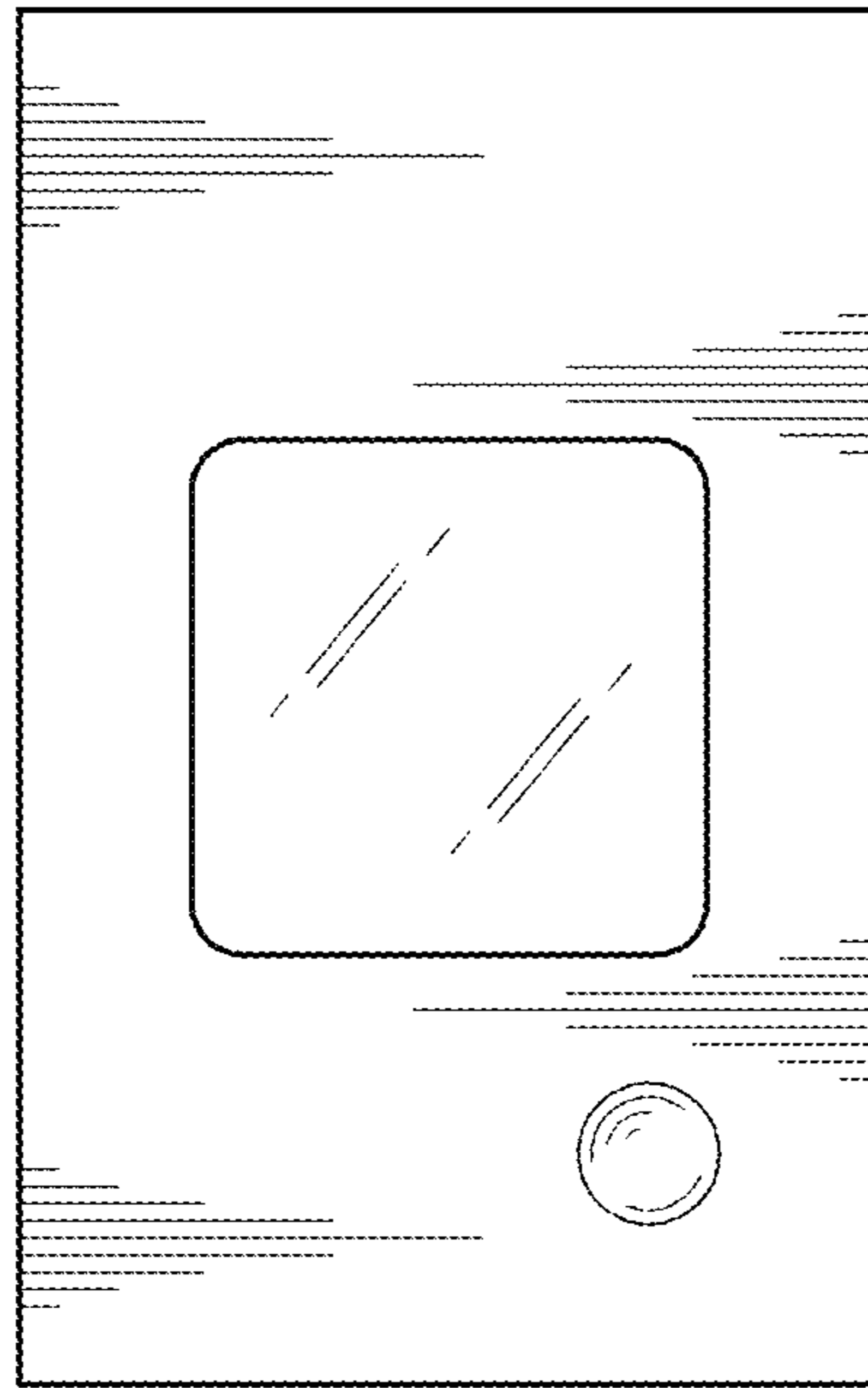


FIG.14

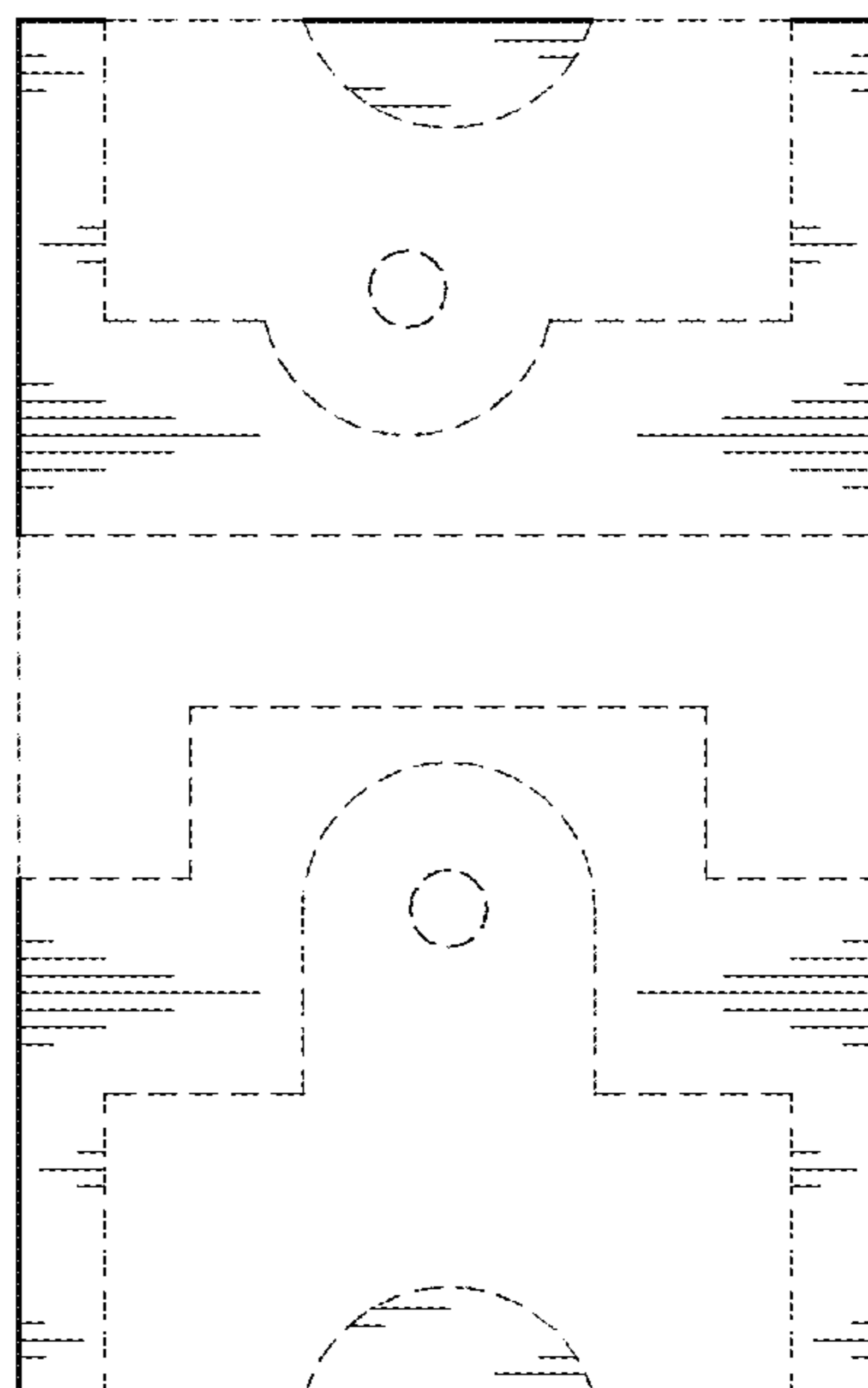


FIG.15

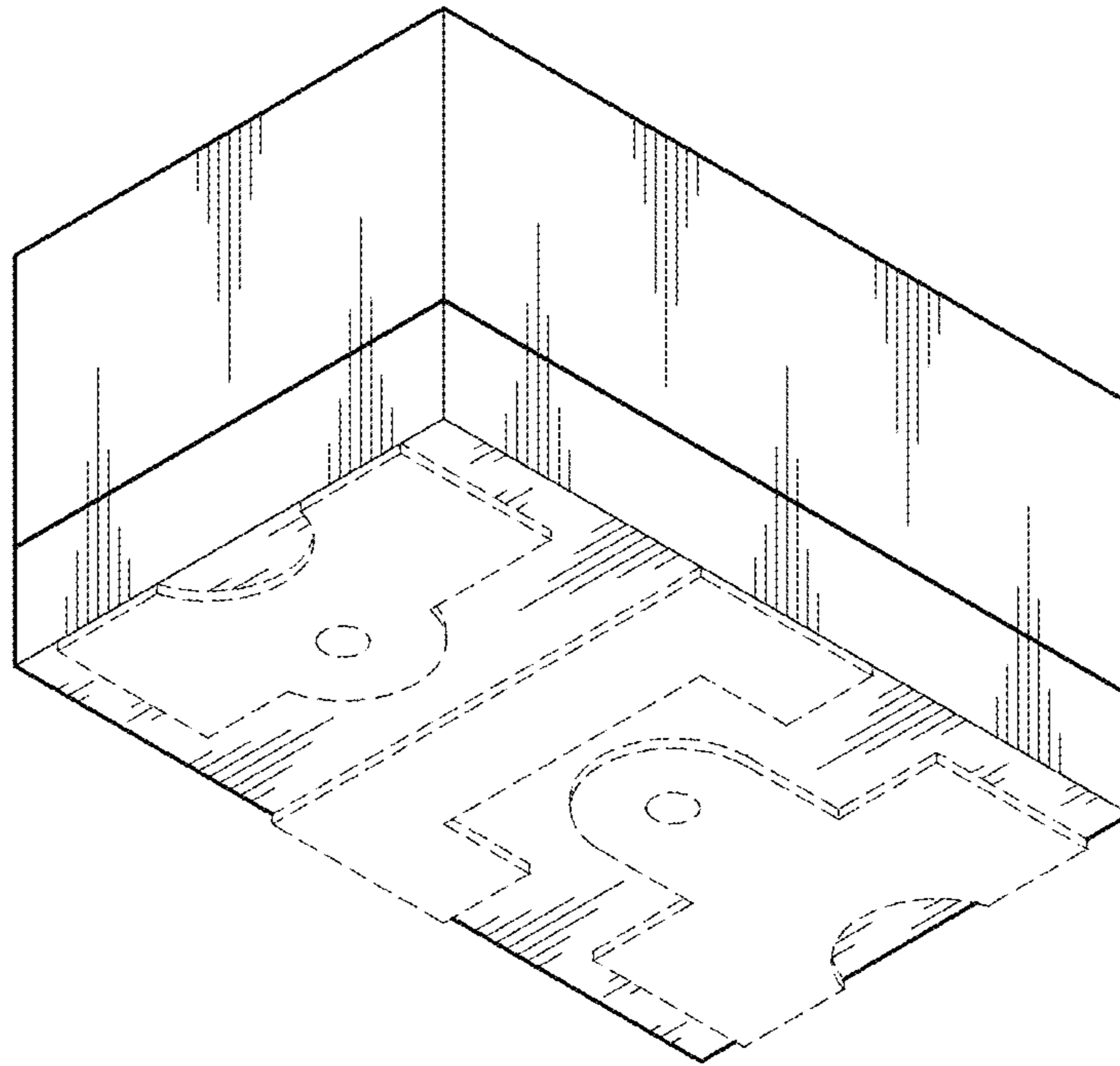


FIG.16

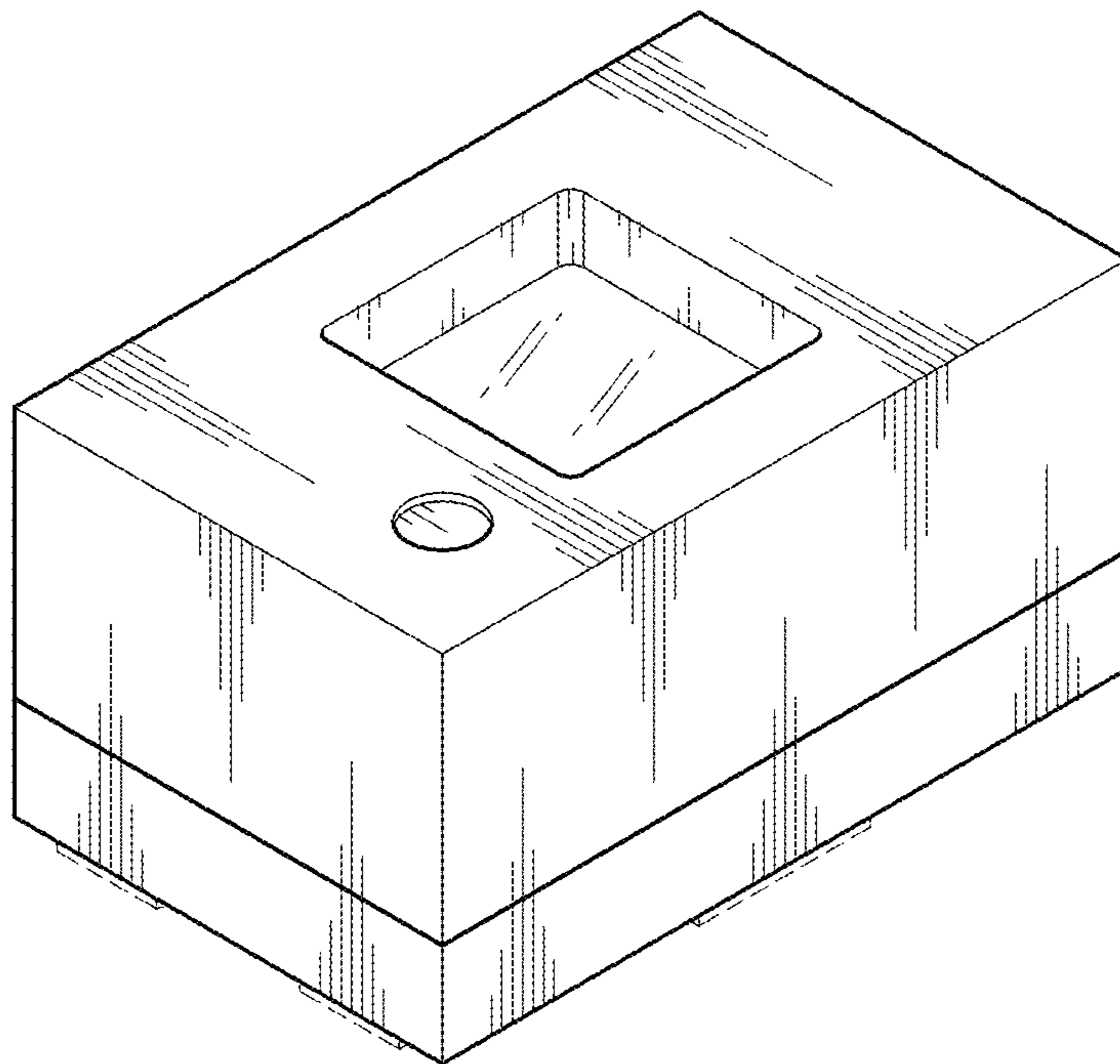


FIG.17

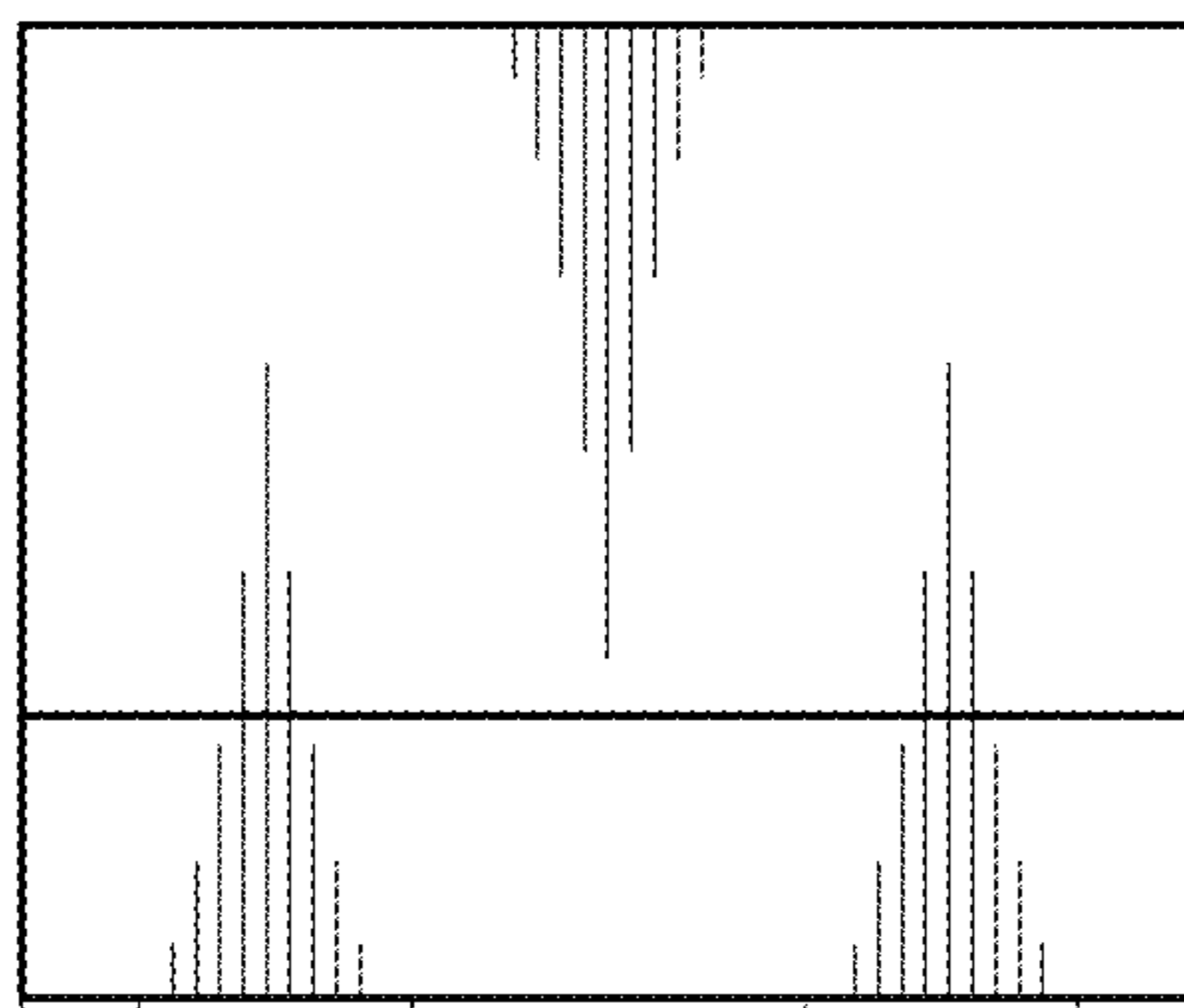


FIG.18

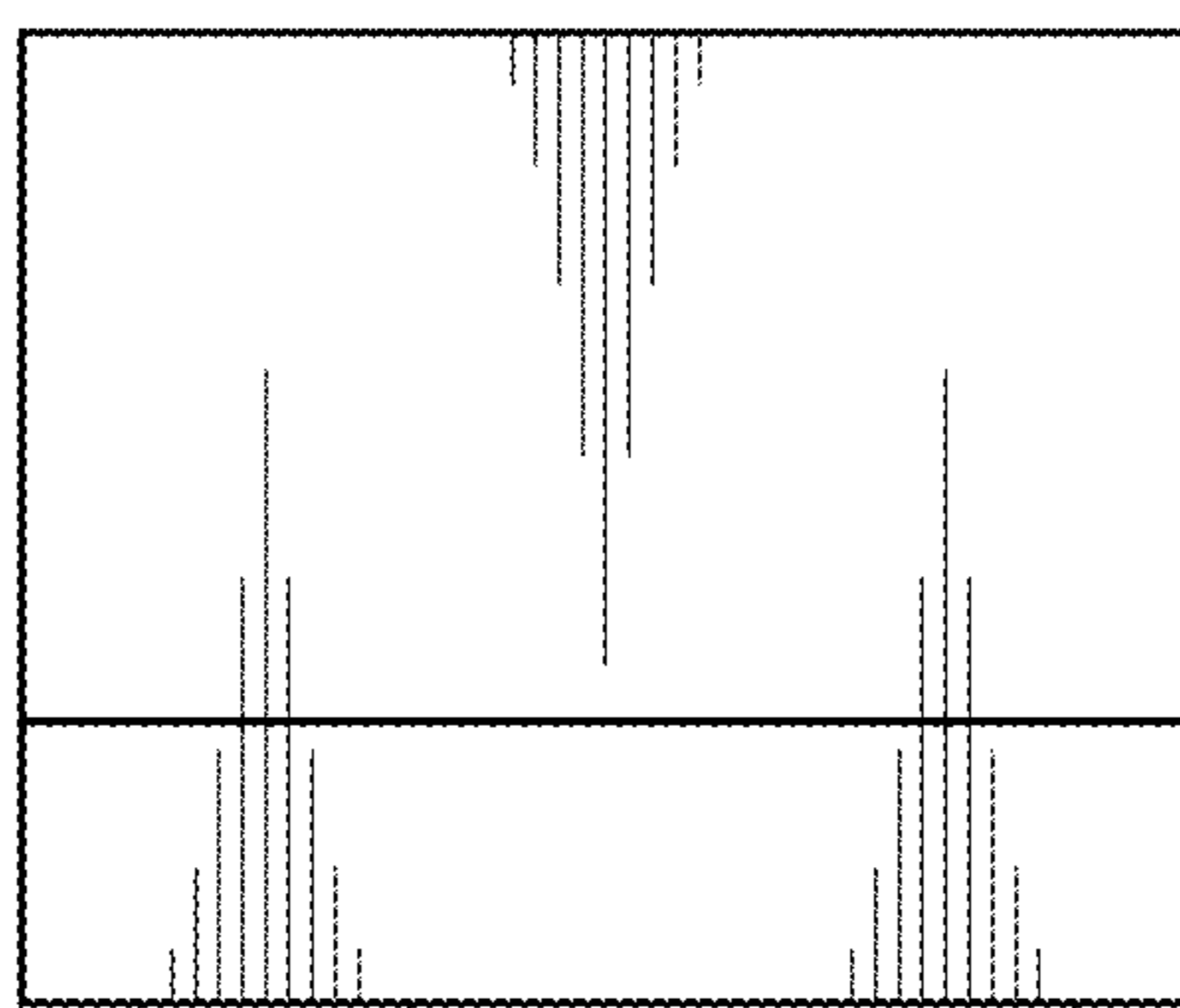


FIG.19

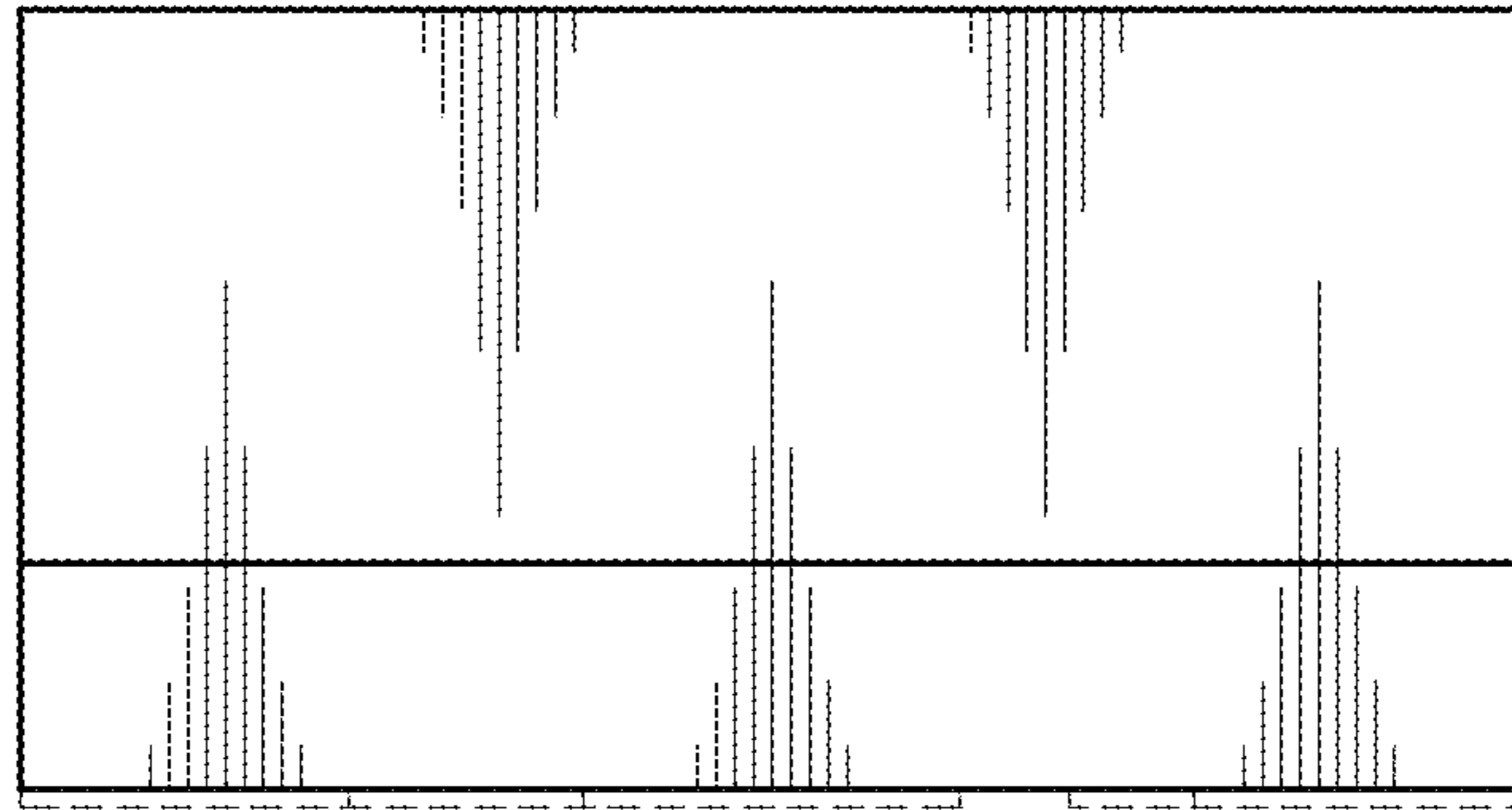


FIG. 20

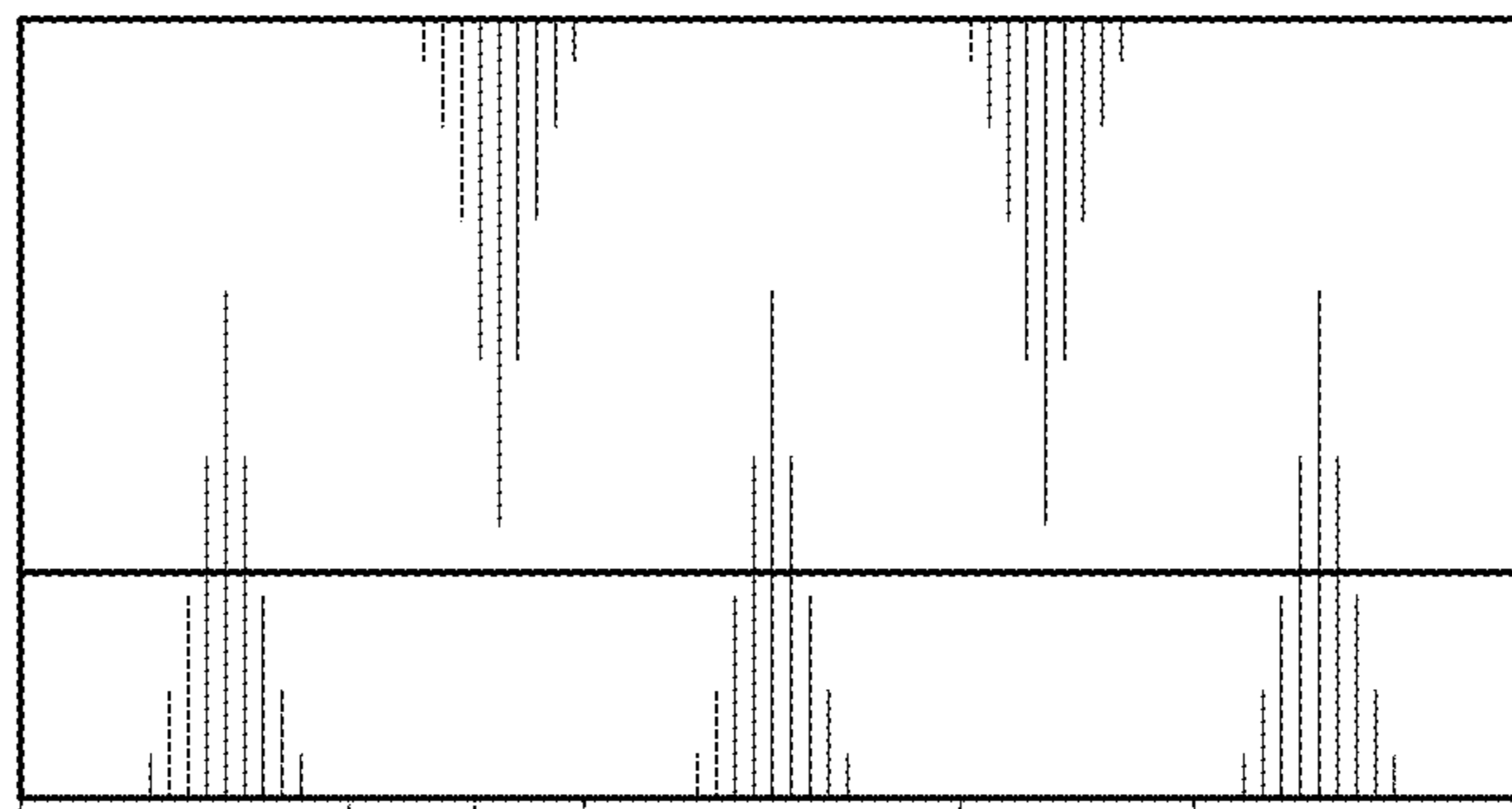


FIG. 21

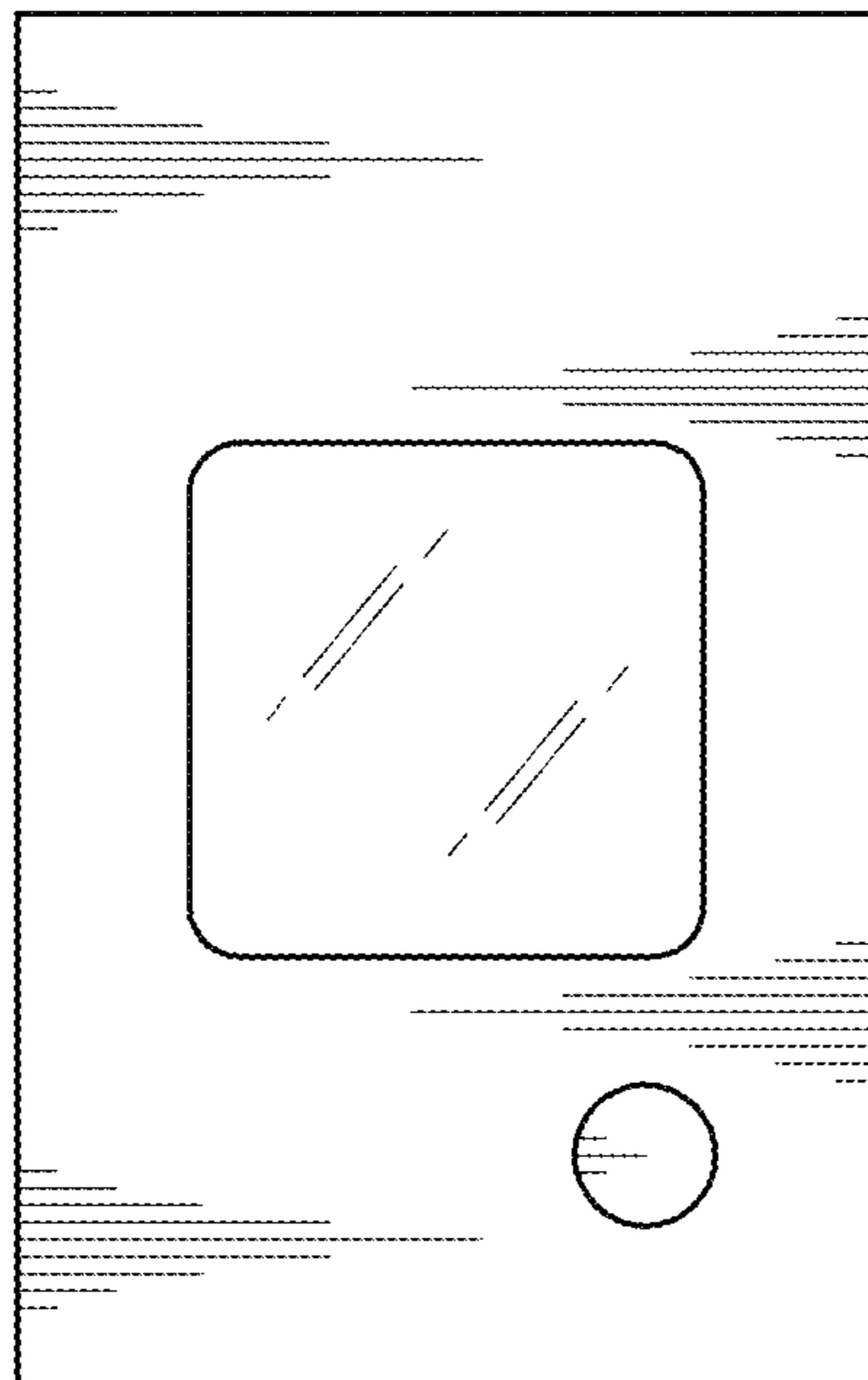


FIG.22

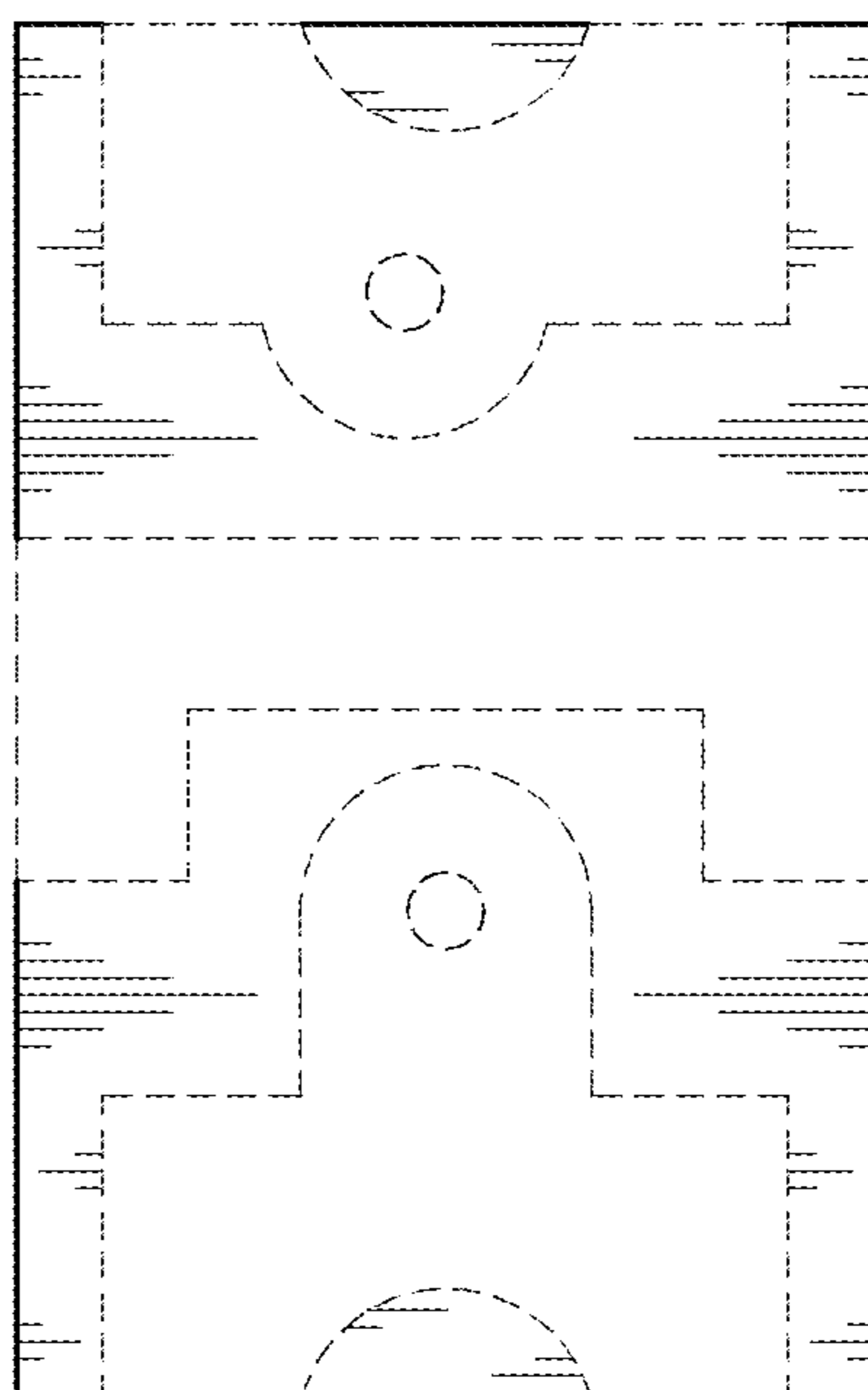


FIG.23

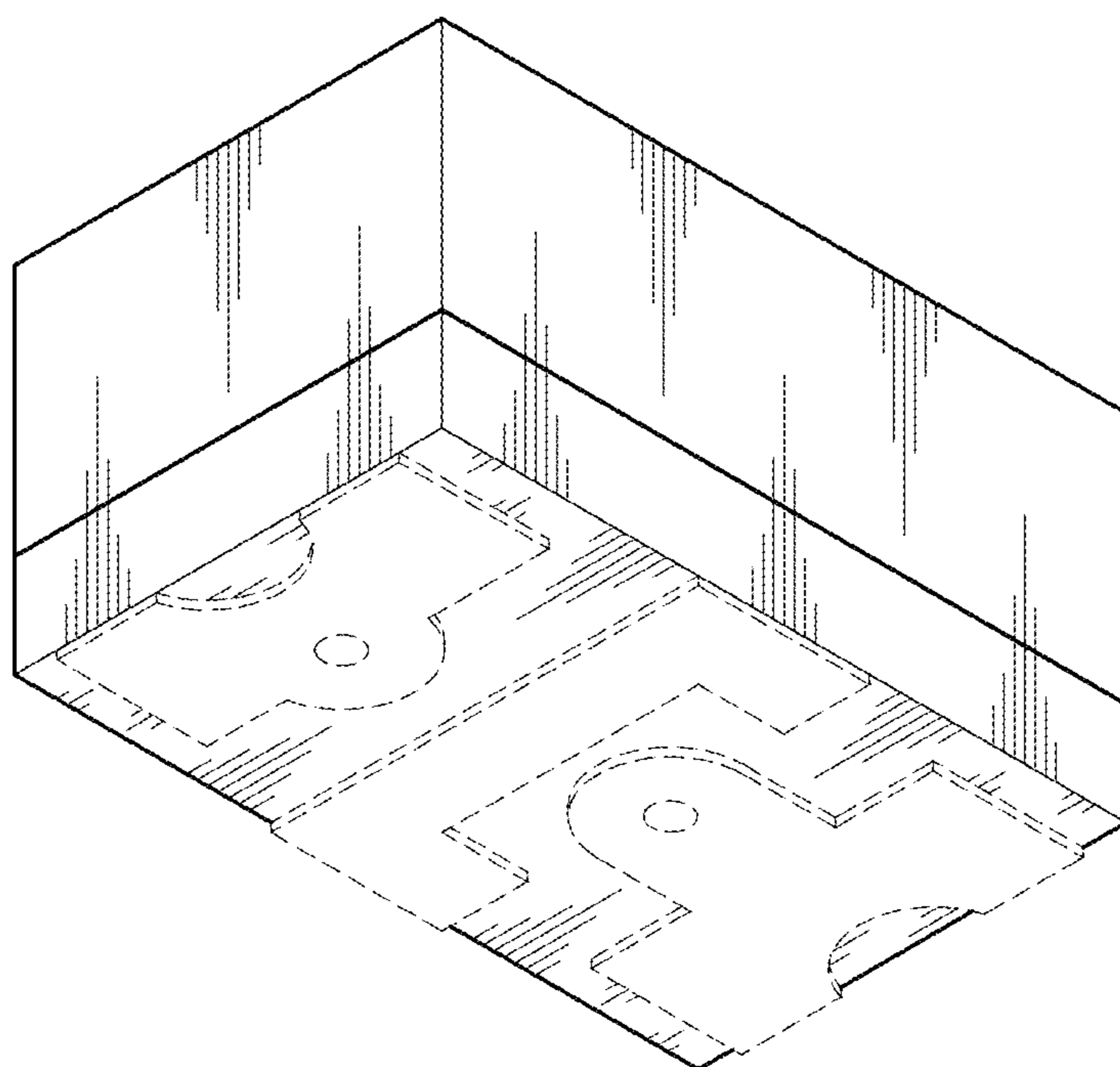


FIG.24