



US00D786203S

(12) **United States Design Patent** (10) **Patent No.:** **US D786,203 S**
Ide (45) **Date of Patent:** **** May 9, 2017**

(54) **LIGHT EMITTING DIODE**

(71) Applicant: **Nichia Corporation**, Anan-shi,
Tokushima (JP)

(72) Inventor: **Yoshiyuki Ide**, Anan (JP)

(73) Assignee: **NICHIA CORPORATION**, Anan-Shi
(JP)

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

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(30) **Foreign Application Priority Data**

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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 33/48; H01L 33/62; H01L 33/483;
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D574,791 S * 8/2008 Shimozawa D13/180
D576,116 S * 9/2008 Shin D13/180
(Continued)

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP

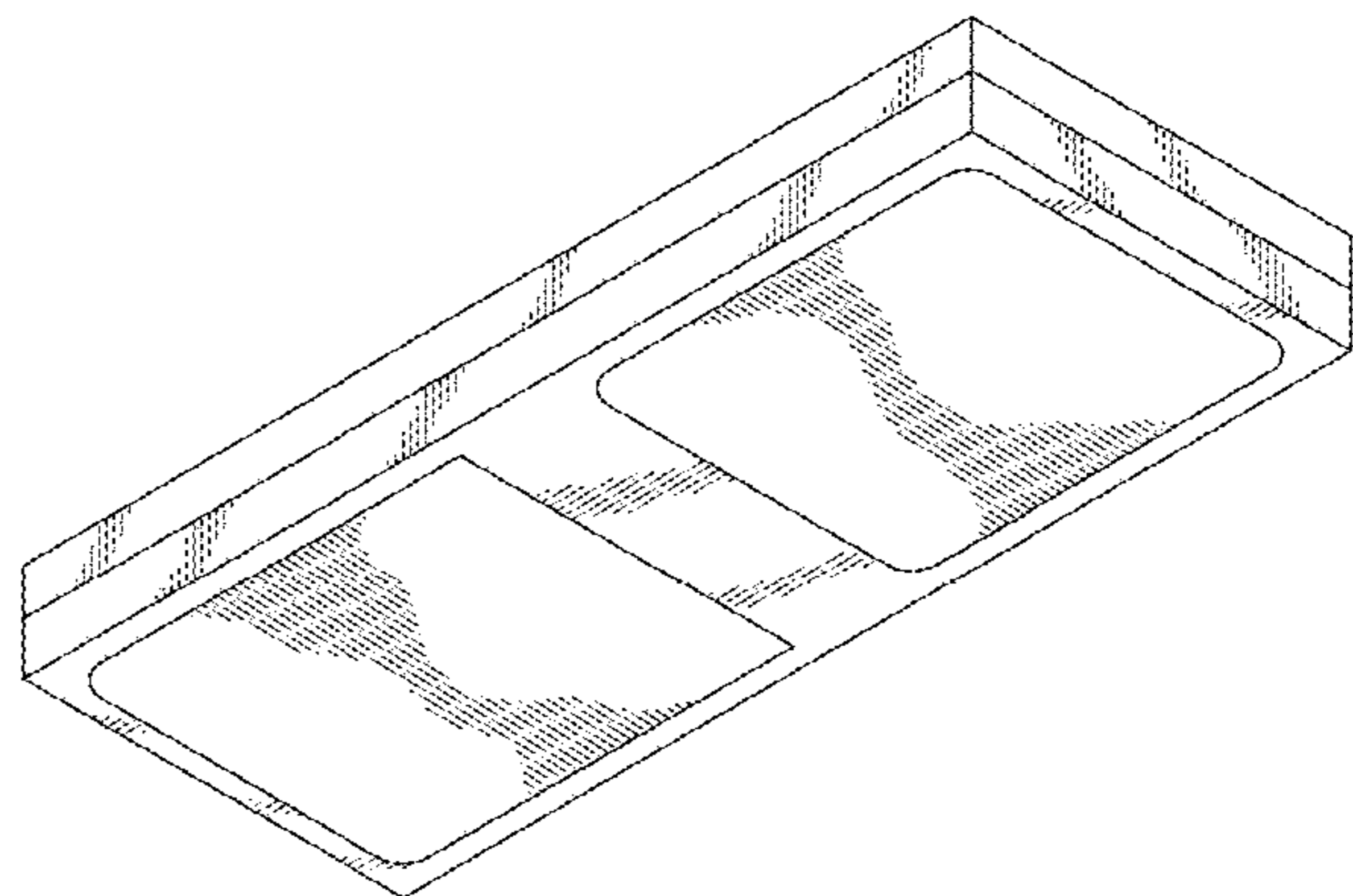
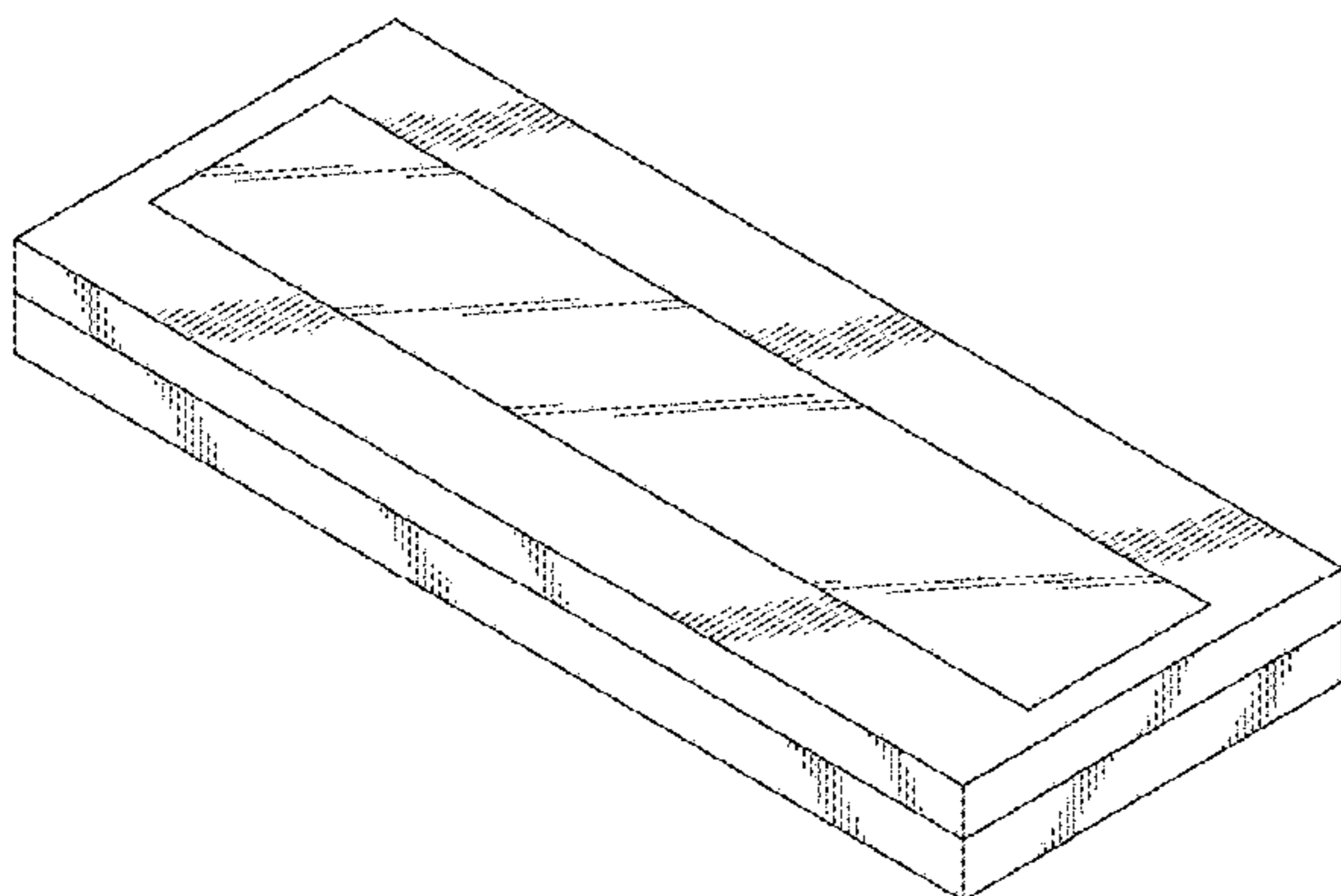
(57) **CLAIM**

We claim the ornamental design for a light emitting diode,
as shown and described.

DESCRIPTION

FIG. 1 is a front, top, right side perspective view of the light emitting diode according to a first embodiment of our new design;
FIG. 2 is a back, top, right side perspective view of the first embodiment;
FIG. 3 is a front view of the first embodiment;
FIG. 4 is a back view of the first embodiment;
FIG. 5 is a top view of the first embodiment;
FIG. 6 is a bottom view of the first embodiment;
FIG. 7 is a right side view of the first embodiment;
FIG. 8 is a left side view of the first embodiment;
FIG. 9 is a front, top, right side perspective view of the light emitting diode according to a second embodiment of our new design;
FIG. 10 is a back, top, right side perspective view of the second embodiment;
FIG. 11 is a front view of the second embodiment;
FIG. 12 is a back view of the second embodiment;
FIG. 13 is a top view of the second embodiment;
FIG. 14 is a bottom view of the second embodiment;
FIG. 15 is a right side view of the second embodiment;
FIG. 16 is a left side view of the second embodiment;
FIG. 17 is a front, top, right side perspective view of the light emitting diode according to a third embodiment of our new design;
FIG. 18 is a back, top, right side perspective view of the third embodiment;
FIG. 19 is a front view of the third embodiment;
FIG. 20 is a back view of the third embodiment;
FIG. 21 is a top view of the third embodiment;
FIG. 22 is a bottom view of the third embodiment;
FIG. 23 is a right side view of the third embodiment; and,
FIG. 24 is a left side view of the third embodiment.
The oblique shading lines in the drawings indicate a translucent material.

1 Claim, 9 Drawing Sheets



(58) **Field of Classification Search**
 CPC . 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

D578,084	S	*	10/2008	Kobayakawa	.....	D13/180
D578,969	S	*	10/2008	Kobayakawa	.....	D13/180
D590,357	S	*	4/2009	Miyashita	.....	D13/180
D597,500	S	*	8/2009	Sung	.....	D13/180
D654,032	S	*	2/2012	Yu	.....	D13/180
D664,103	S	*	7/2012	Sasaoka	.....	D13/180
D664,107	S	*	7/2012	Wang	.....	D13/180
D664,505	S	*	7/2012	Ko	.....	D13/180
D670,663	S	*	11/2012	Ko	.....	D13/180
D678,225	S	*	3/2013	Ko	.....	D13/180
D710,316	S	*	8/2014	Ikeda	.....	D13/180
D714,237	S	*	9/2014	Chen	.....	D13/180
D718,726	S	*	12/2014	Lo	.....	D13/180
D719,535	S		12/2014	Iino et al.		
D728,492	S	*	5/2015	Lin	.....	D13/180
9,029,877	B2	*	5/2015	Lee	.....	H01L 25/0753 257/100

9,076,943	B2	*	7/2015	Lin	.....	H01L 33/62
2005/0280017	A1	*	12/2005	Oshio	.....	H01L 33/647 257/99
2007/0063213	A1	*	3/2007	Hsieh	.....	H01L 25/0753 257/99
2007/0096114	A1	*	5/2007	Aoki	.....	H01L 33/486 257/79
2010/0102348	A1	*	4/2010	Lin	.....	H01L 33/486 257/98
2012/0161180	A1	*	6/2012	Komatsu	.....	H01L 33/486 257/98
2013/0026502	A1	*	1/2013	Park	.....	H01L 33/505 257/88
2013/0277706	A1	*	10/2013	Chen	.....	H01L 33/64 257/99
2014/0175501	A1	*	6/2014	Sota	.....	H01L 33/62 257/99
2016/0035953	A1	*	2/2016	Yoon	.....	H01L 33/486 257/99
2016/0072032	A1	*	3/2016	Seo	.....	H01L 33/54 257/99
2016/0087183	A1	*	3/2016	Mineshita	.....	H01L 24/48 257/99

* cited by examiner

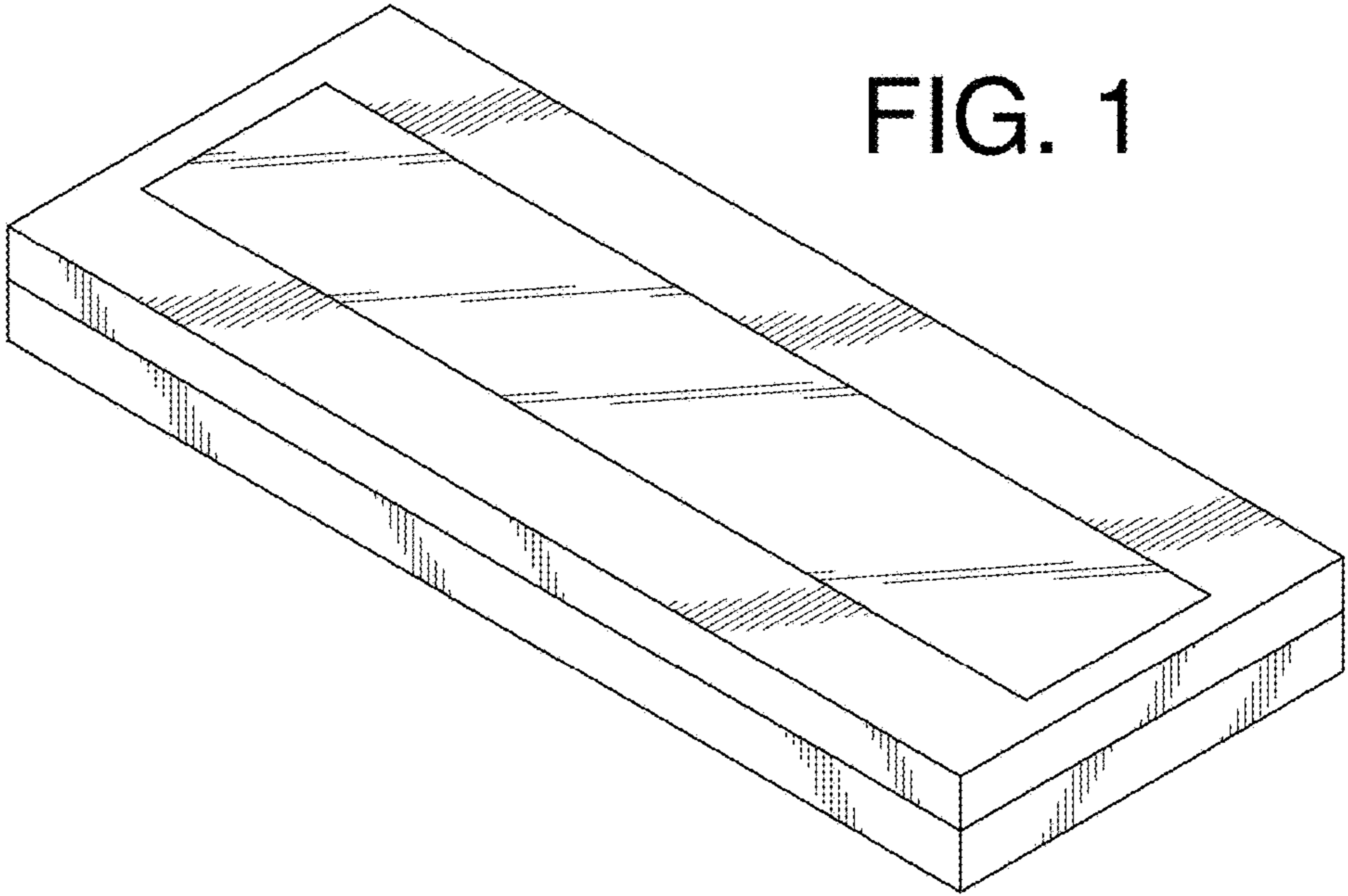


FIG. 1

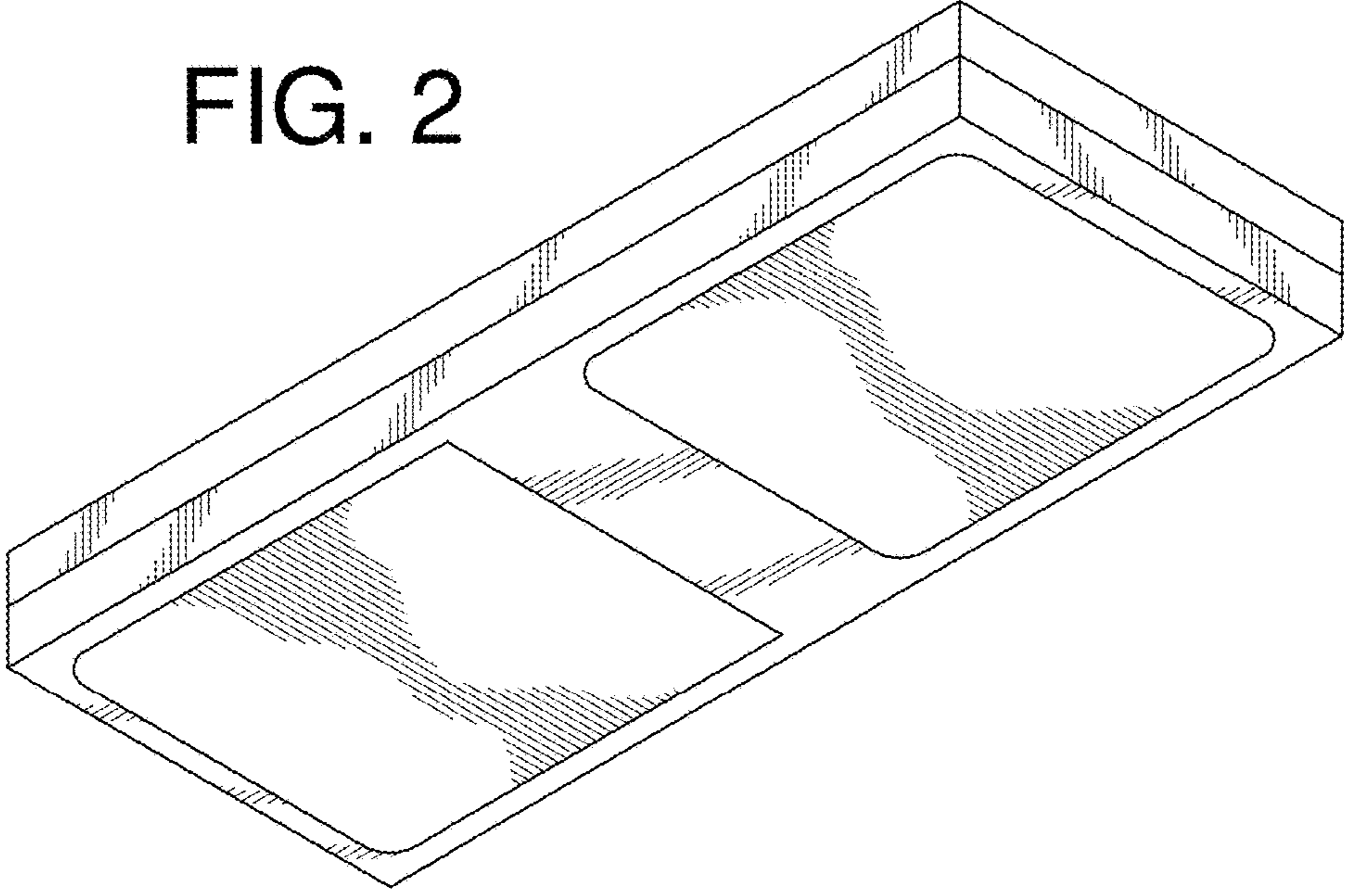


FIG. 2

FIG. 3

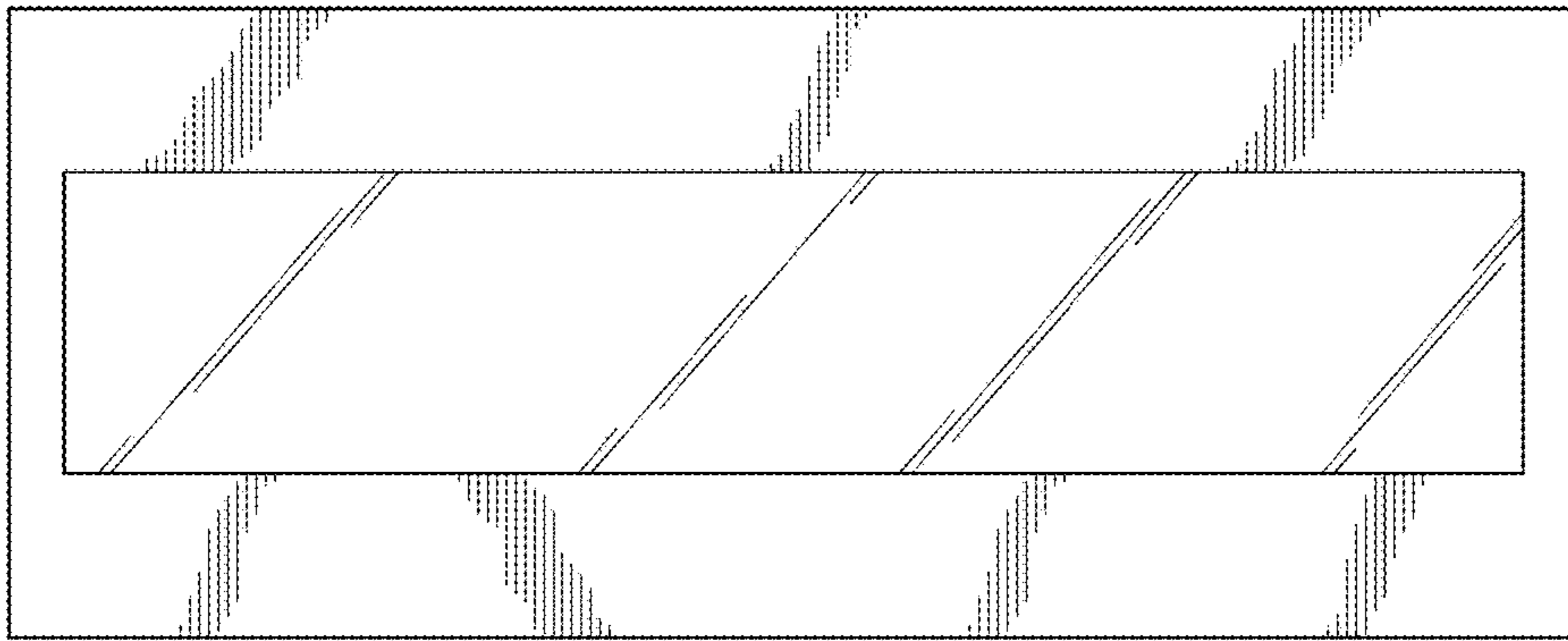


FIG. 4

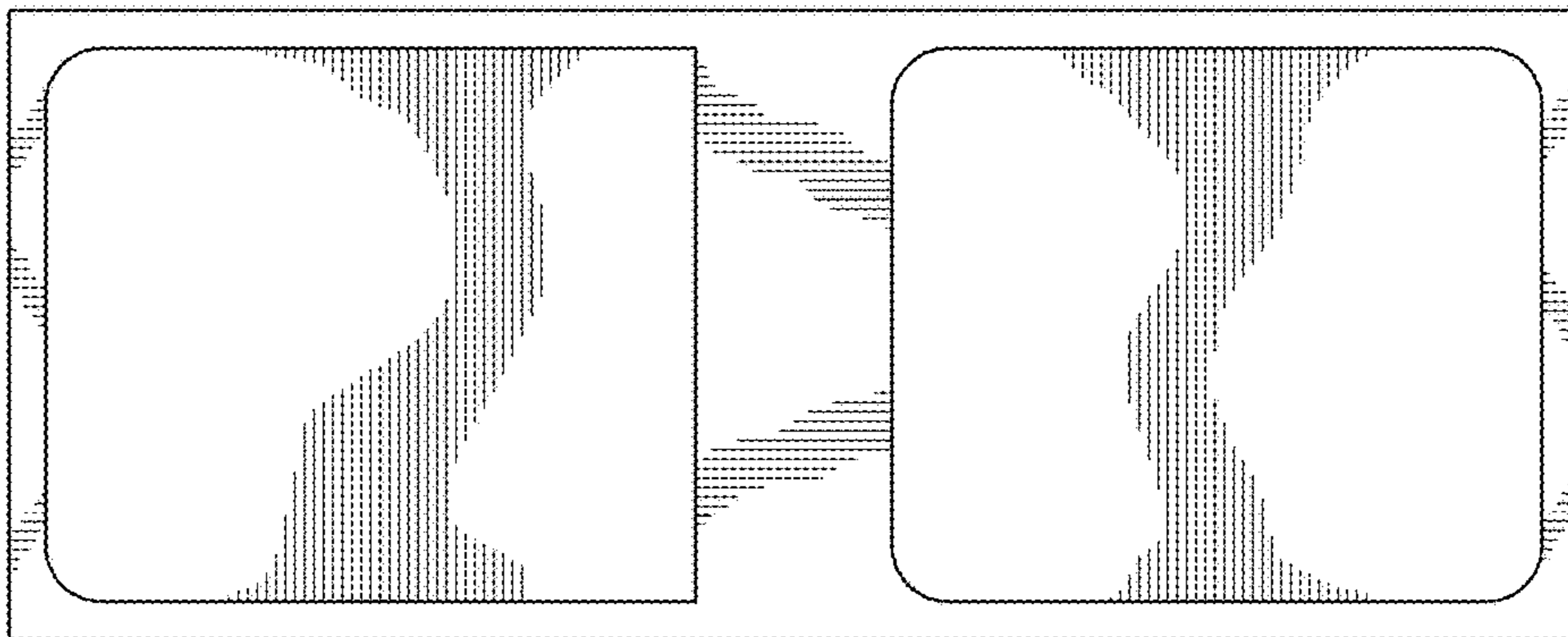


FIG. 5

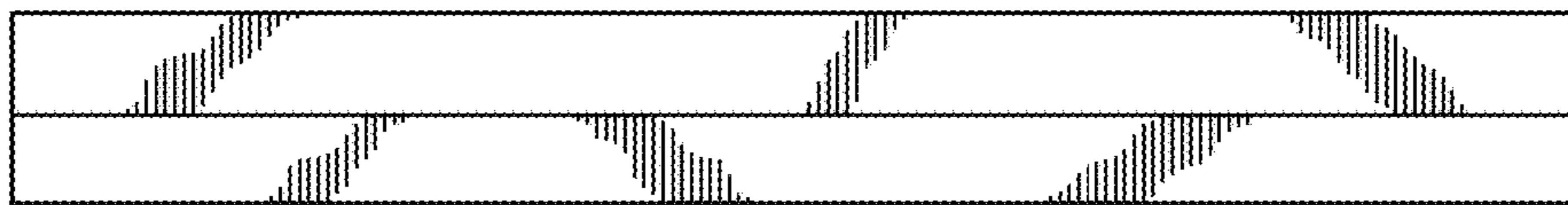


FIG. 6

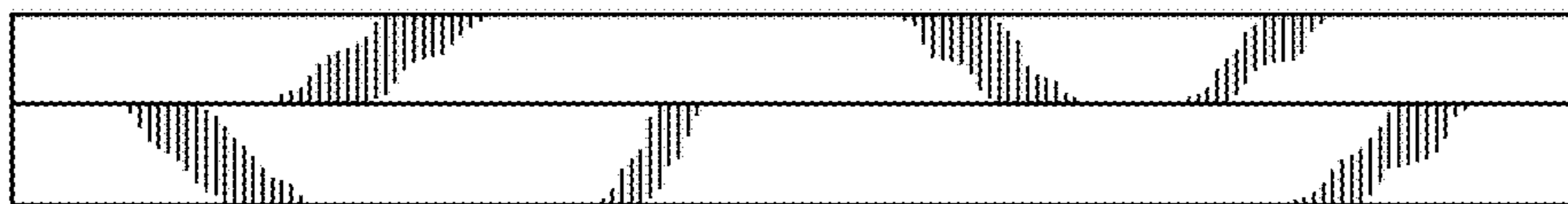


FIG. 7



FIG. 8



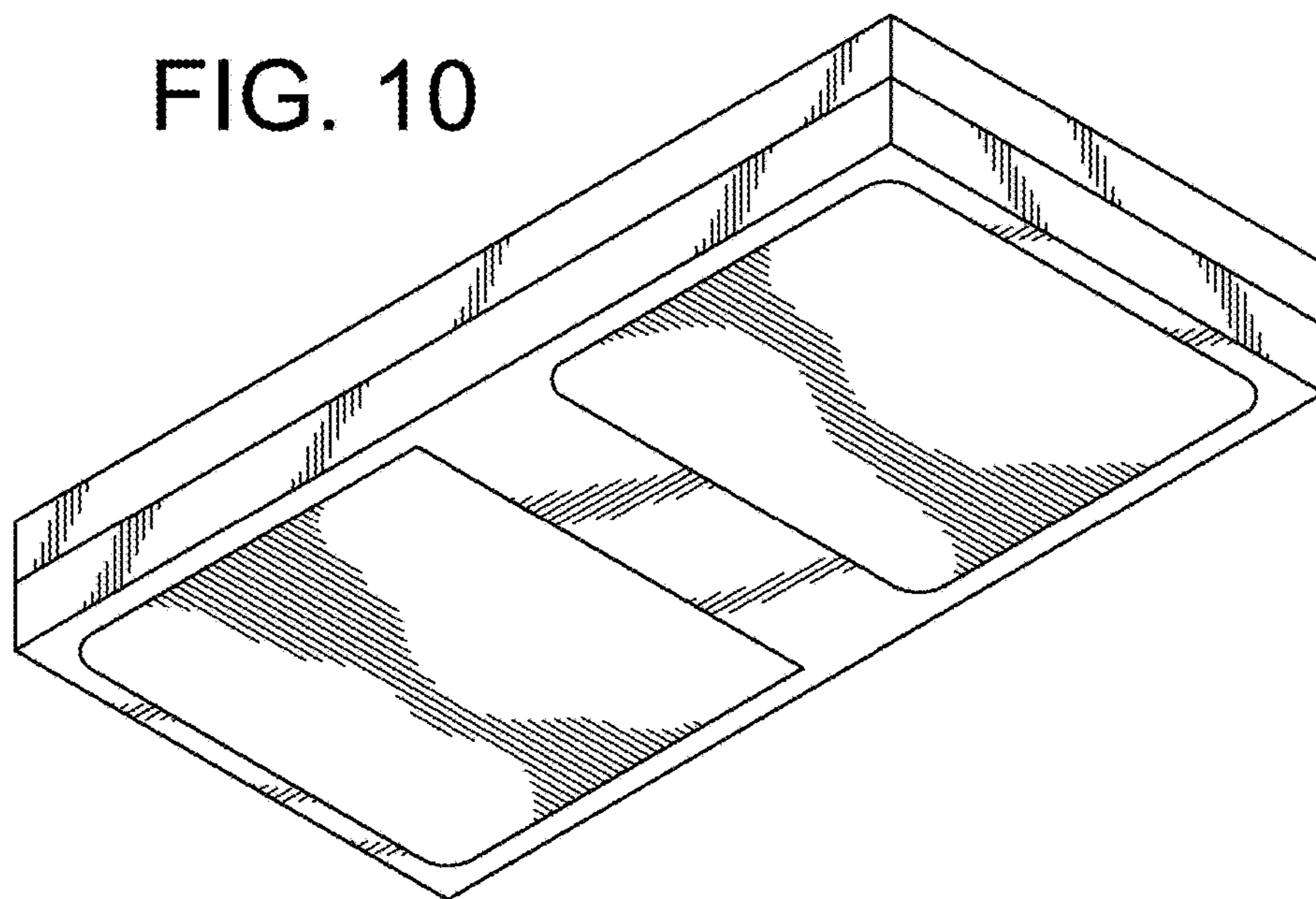
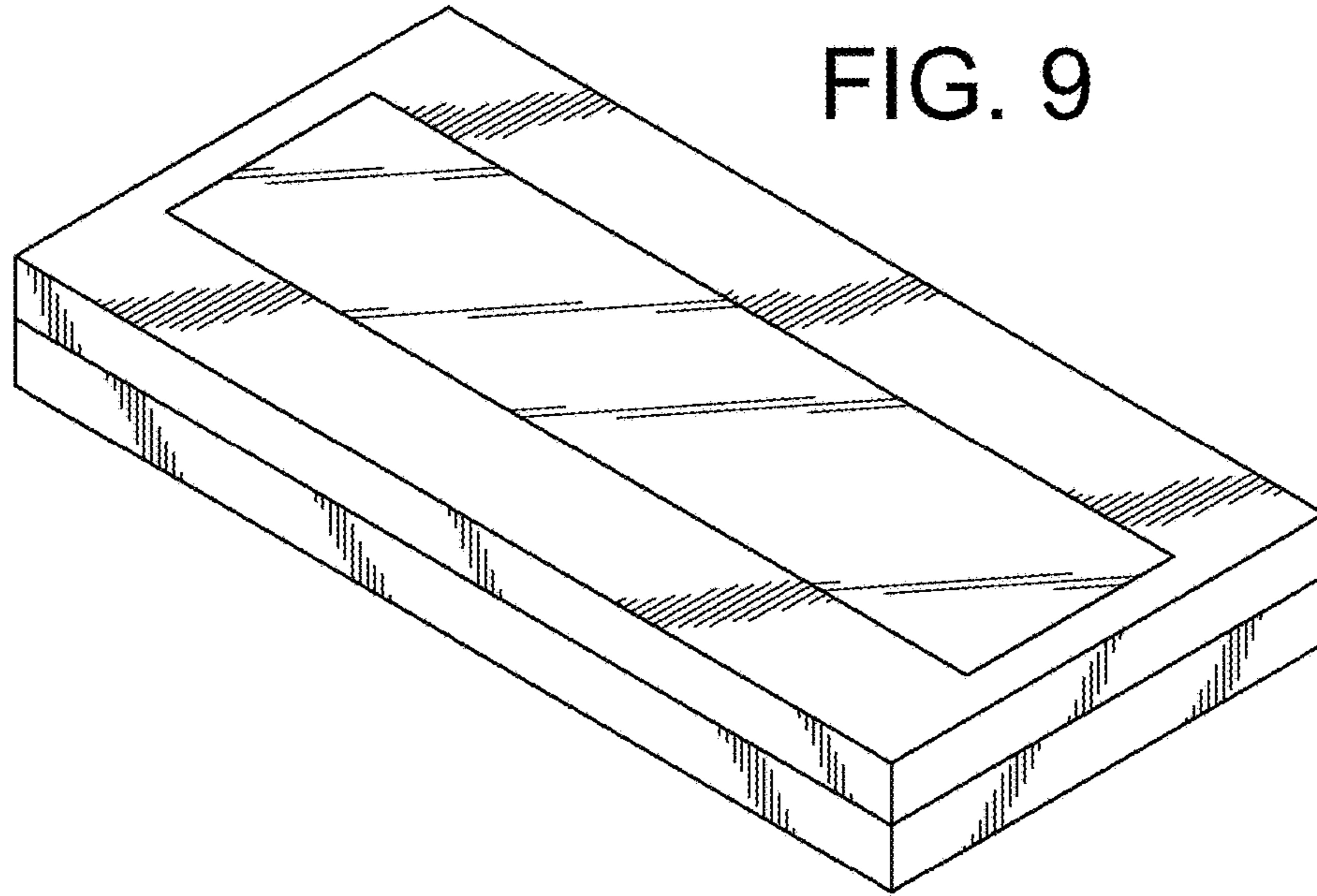


FIG. 11

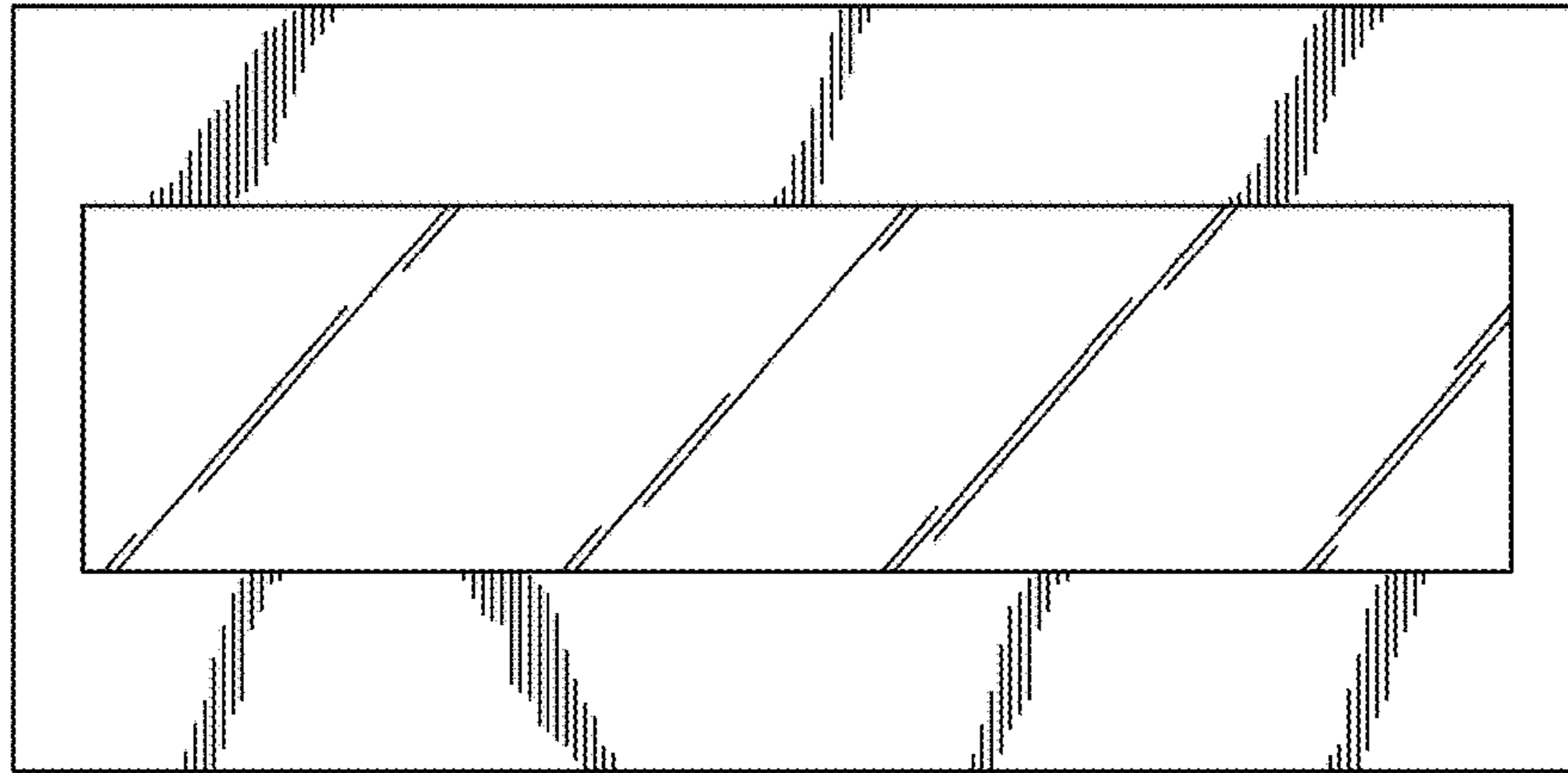


FIG. 12

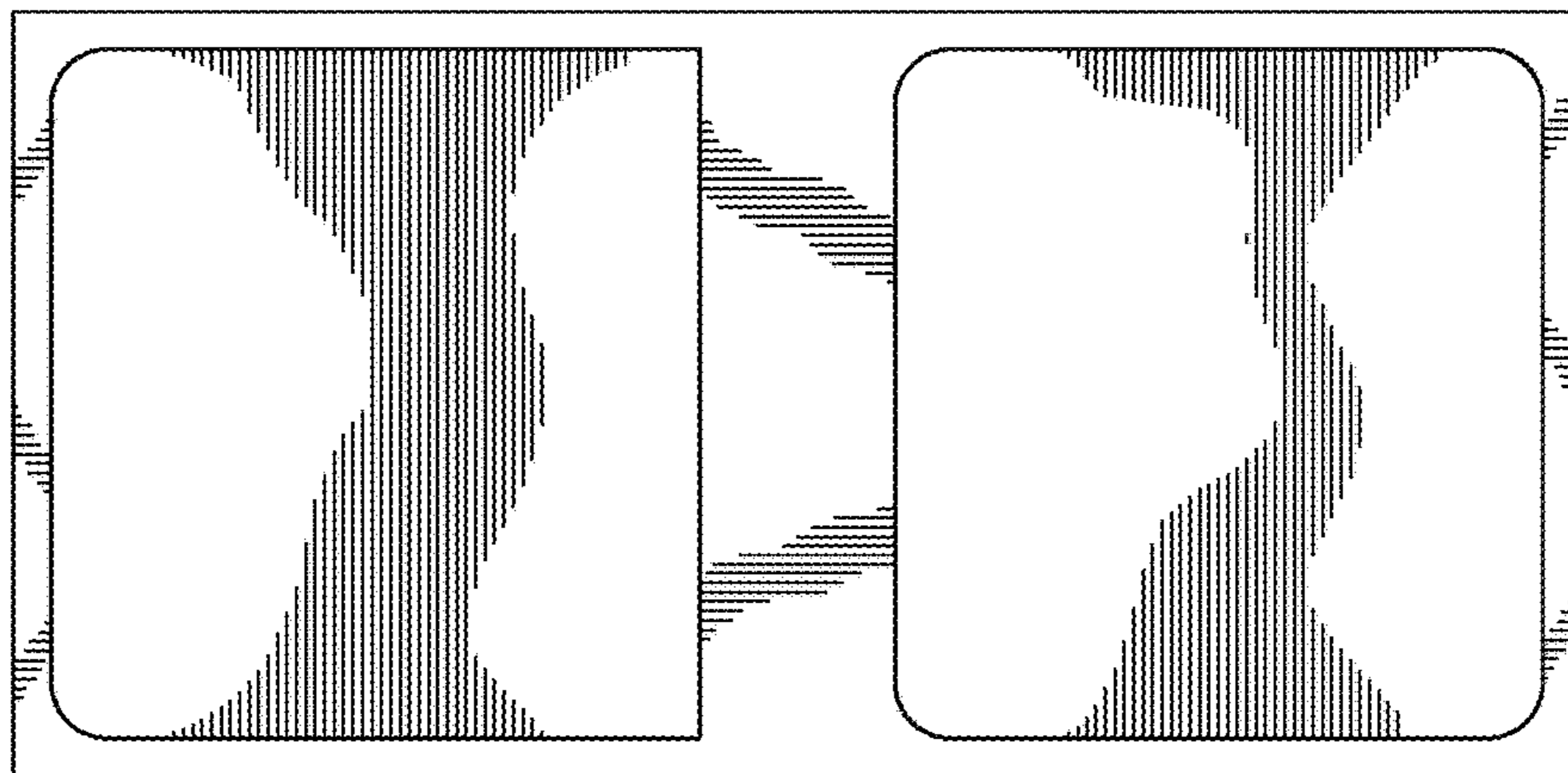


FIG. 13

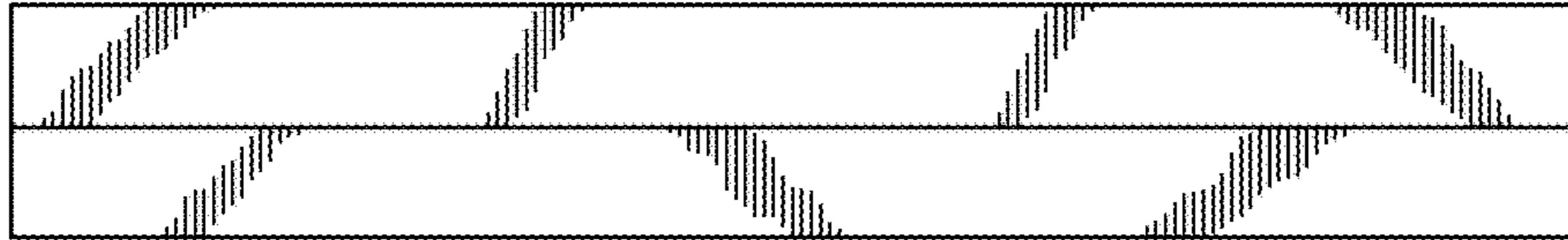


FIG. 14

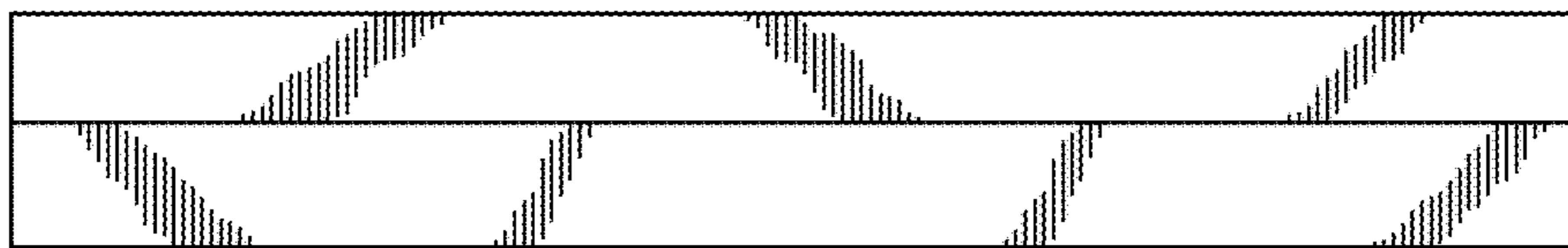


FIG. 15

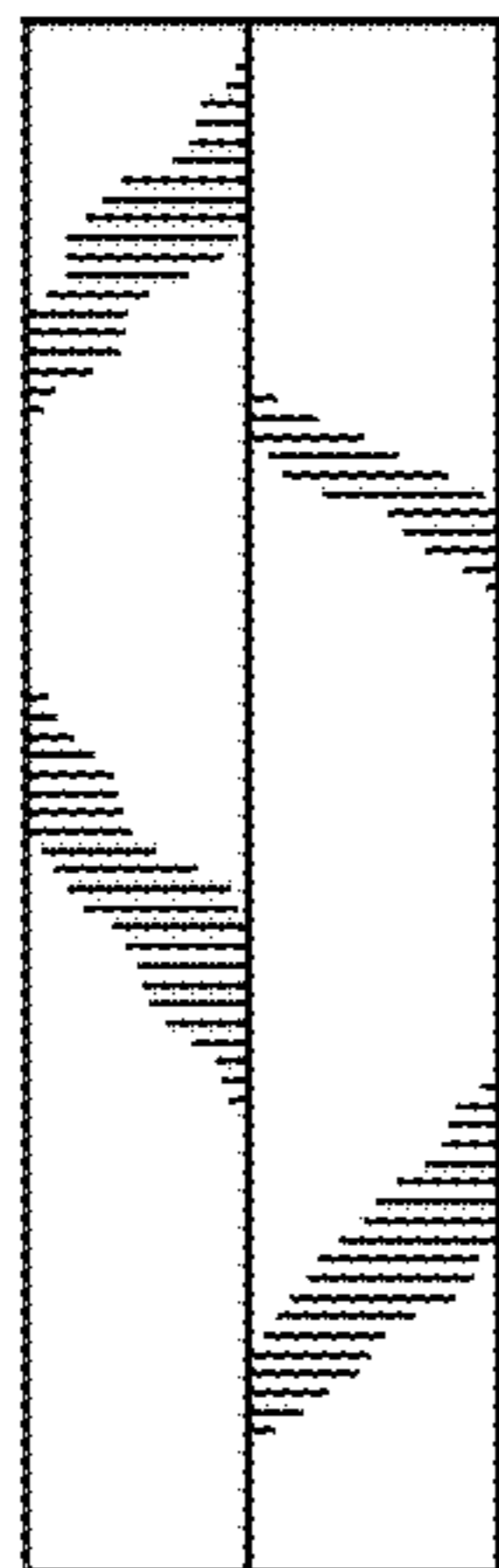
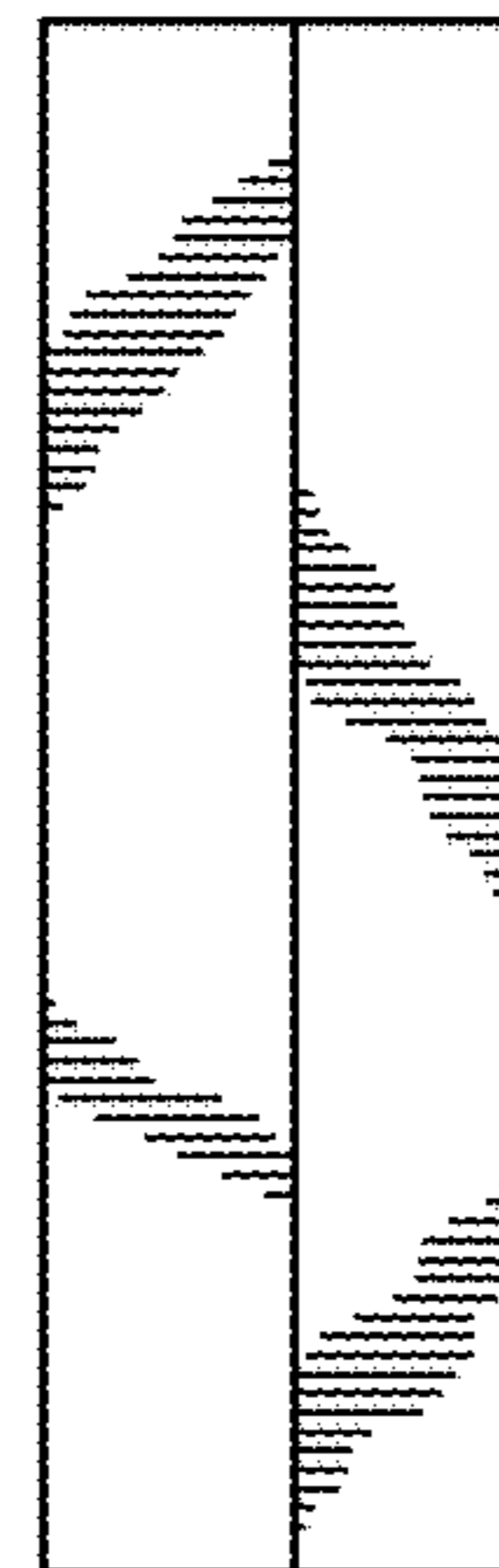


FIG. 16



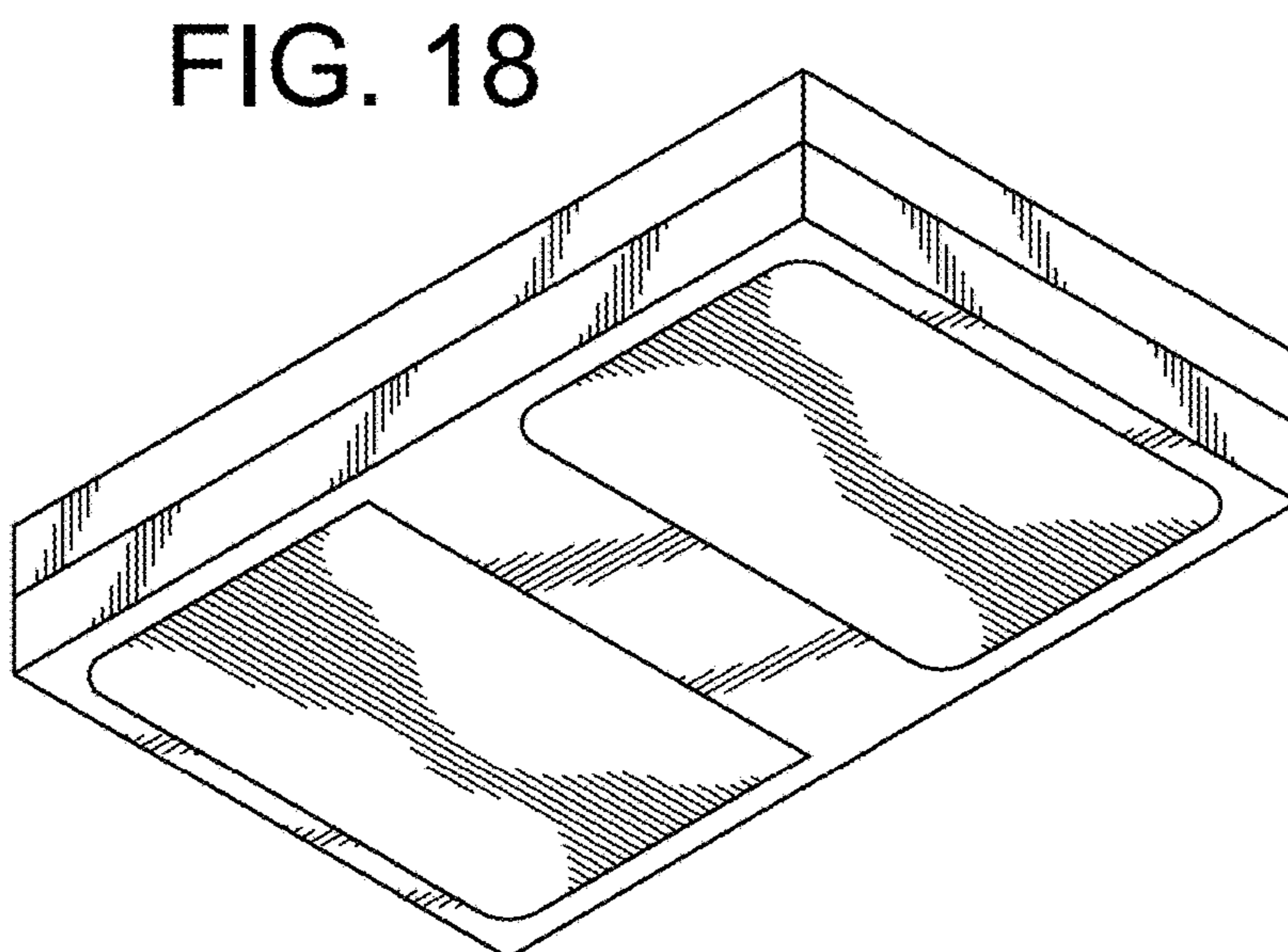
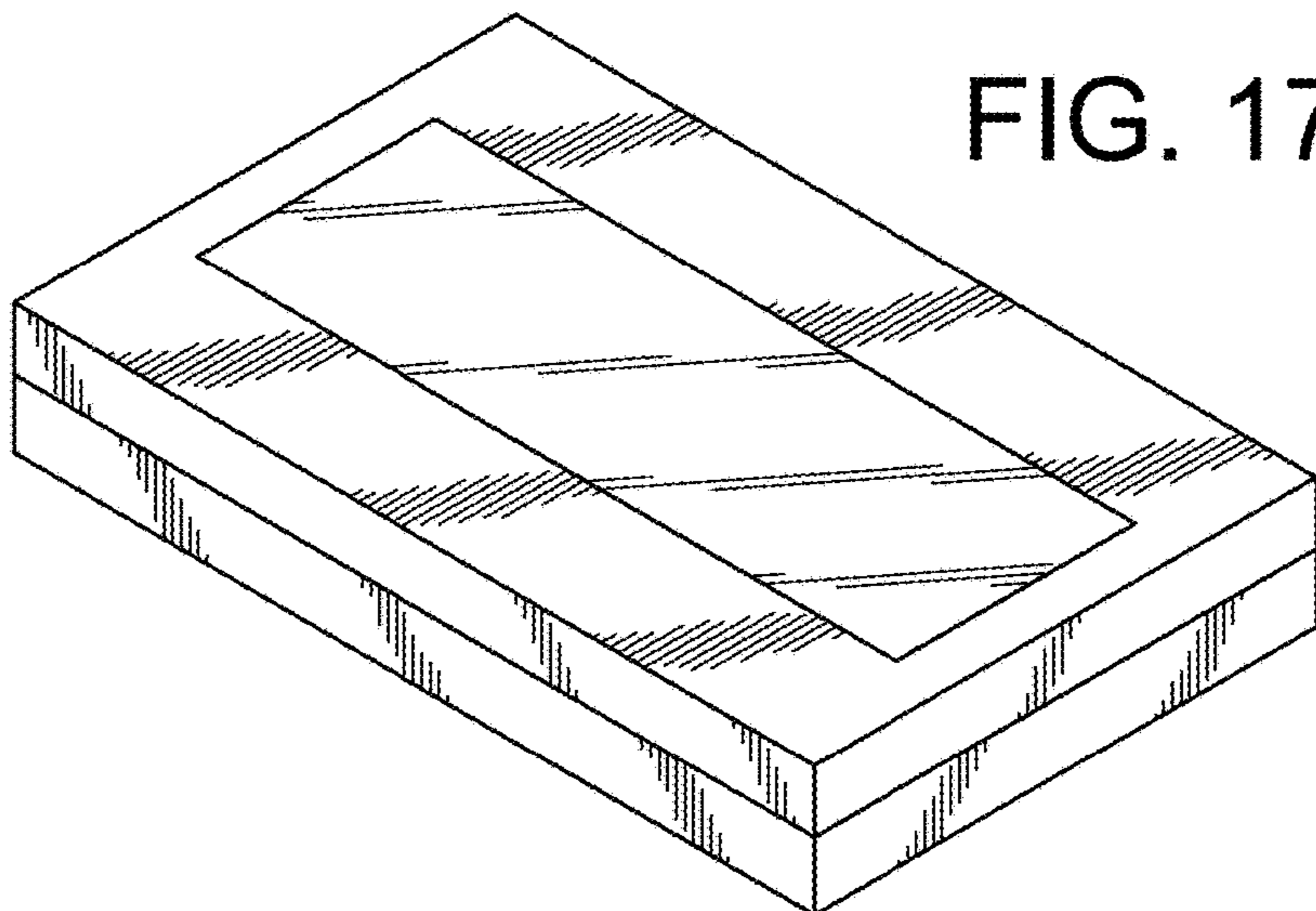


FIG. 19

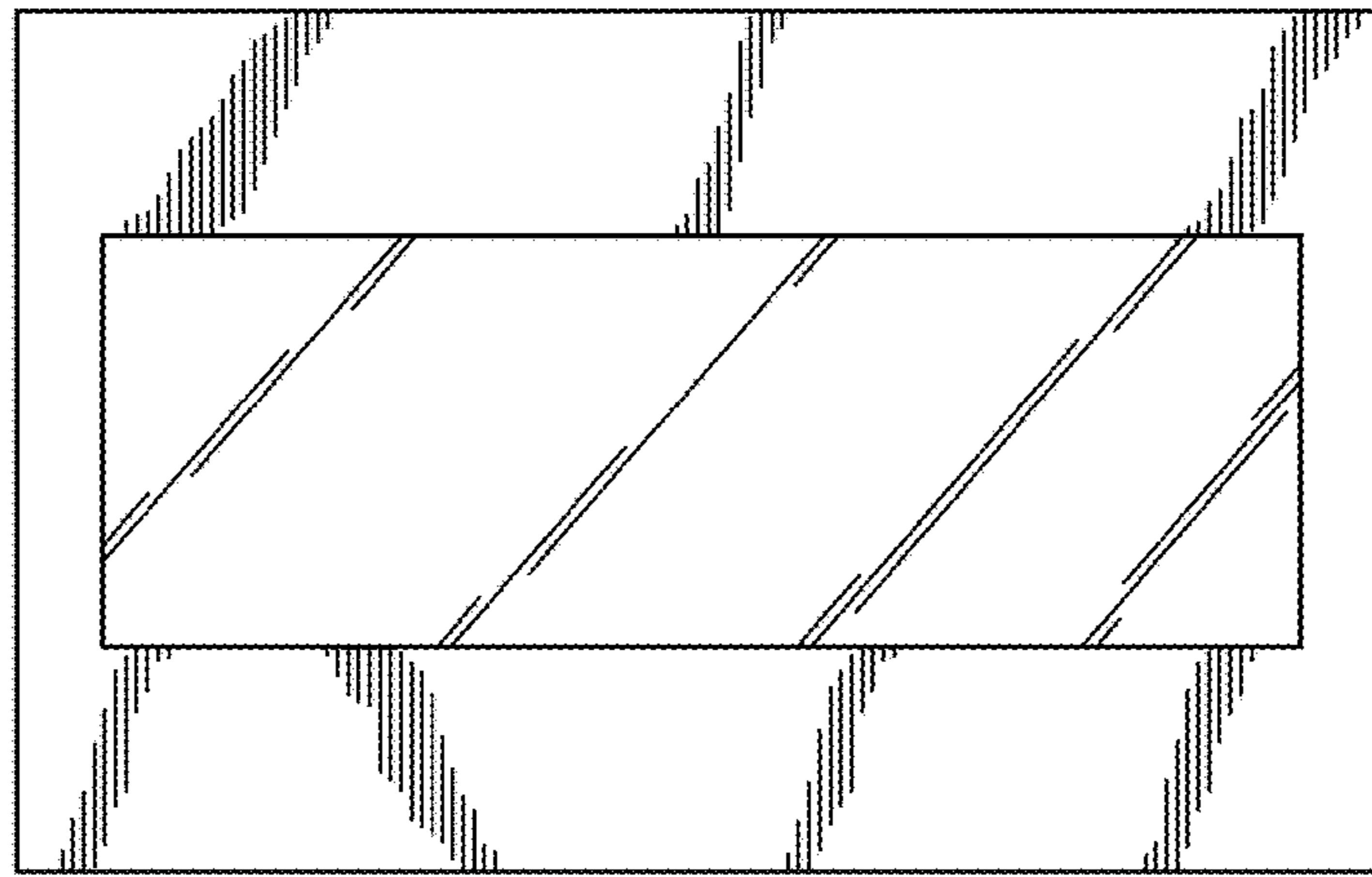


FIG. 20

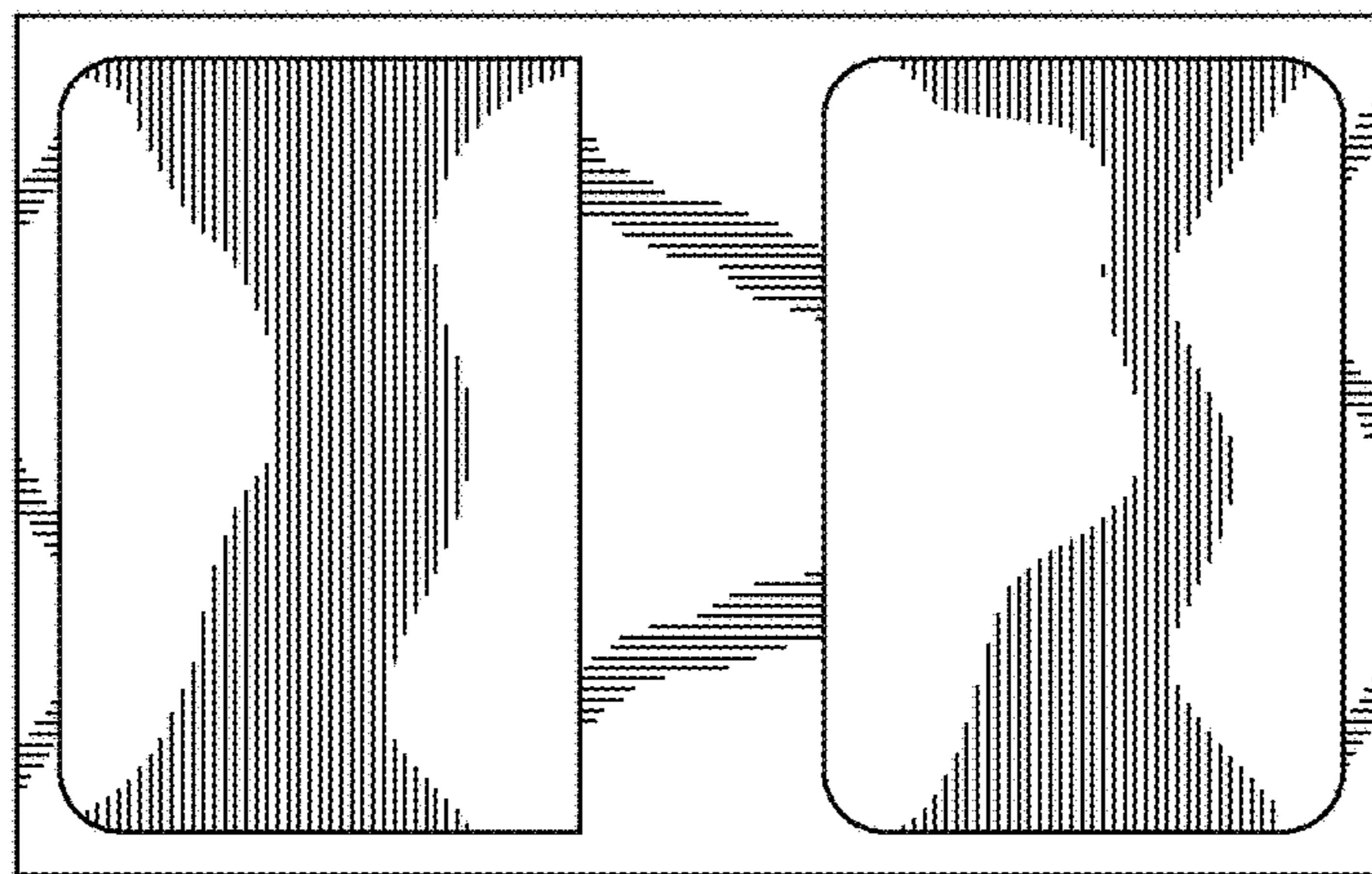


FIG. 21

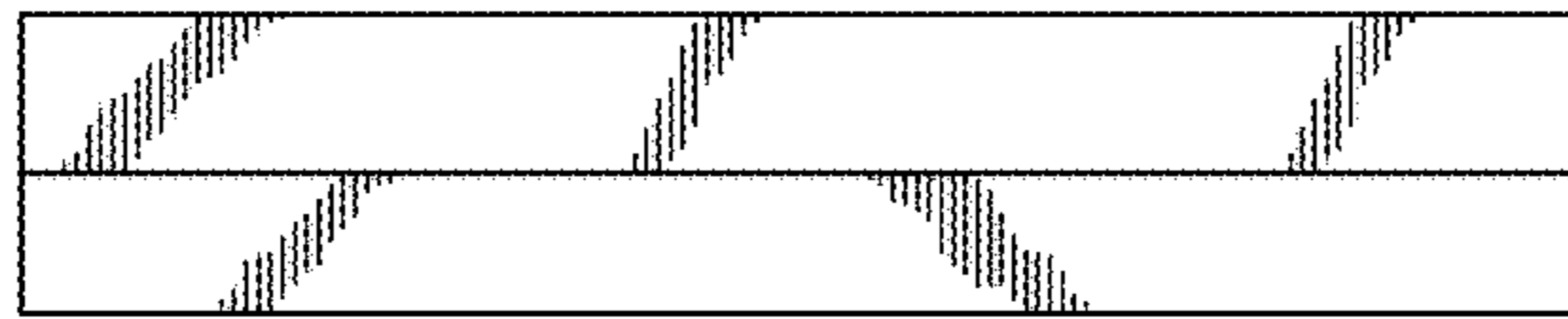


FIG. 22

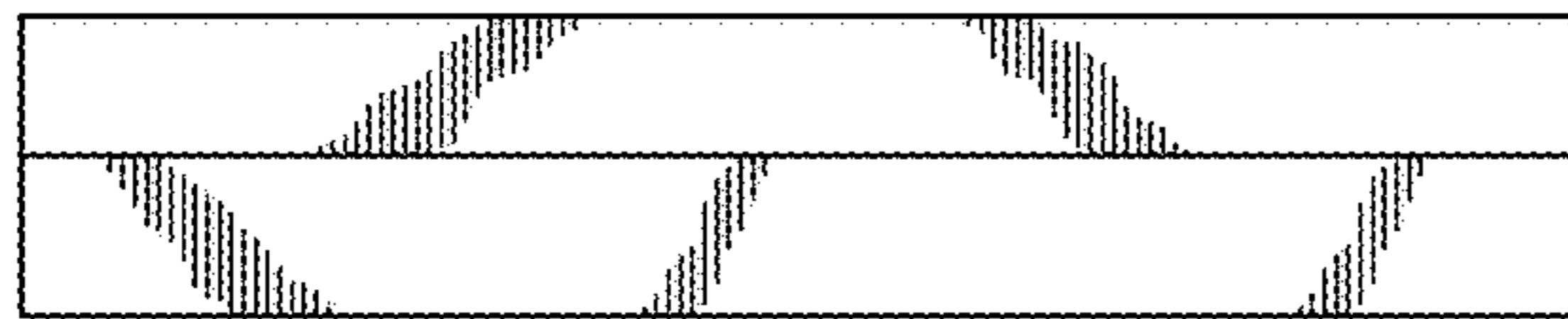


FIG. 23



FIG. 24

