



US00D895559S

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

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(54) **LIGHT EMITTING DIODE**

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

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(Continued)

(51) **LOC (12) Cl.** ..... **13-03**

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

(58) **Field of Classification Search**  
USPC ..... D13/180; D24/1, 2

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D405,426 S \* 2/1999 Yamaoka ..... D13/180  
6,520,669 B1 \* 2/2003 Chen ..... F21S 41/143  
362/545

(Continued)

**OTHER PUBLICATIONS**

Masahiro Watanabe et al., Design U.S. Appl. No. 29/685,304, filed Mar. 27, 2019, not published.

(Continued)

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(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a top plan view of a light emitting diode showing our new design;

FIG. 2 is a bottom plan view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a rear elevational view thereof;

FIG. 5 is a left side elevational view thereof;

FIG. 6 is a right side elevational view thereof;

FIG. 7 is a cross-sectional view thereof taken along the lines 7-7 and 7'-7' in FIG. 1;

FIG. 8 is a top plan view of the second embodiment of a light emitting diode showing our new design;

FIG. 9 is a bottom plan view thereof;

FIG. 10 is a front elevational view thereof;

FIG. 11 is a rear elevational view thereof;

FIG. 12 is a left side elevational view thereof;

FIG. 13 is a right side elevational view thereof;

FIG. 14 is a cross-sectional view thereof taken along the lines 14-14 and 14'-14' in FIG. 8;

FIG. 15 is a top plan view of the third embodiment of a light emitting diode showing our new design;

FIG. 16 is a bottom plan view thereof;

FIG. 17 is a front elevational view thereof;

FIG. 18 is a rear elevational view thereof;

FIG. 19 is a left side elevational view thereof;

FIG. 20 is a right side elevational view thereof;

FIG. 21 is a cross-sectional view thereof taken along the lines 21-21 and 21'-21' in FIG. 15;

FIG. 22 is a top plan view of the fourth embodiment of a light emitting diode showing our new design;

FIG. 23 is a bottom plan view thereof;

FIG. 24 is a front elevational view thereof;

FIG. 25 is a rear elevational view thereof;

FIG. 26 is a left side elevational view thereof;

FIG. 27 is a right side elevational view thereof; and,

(Continued)

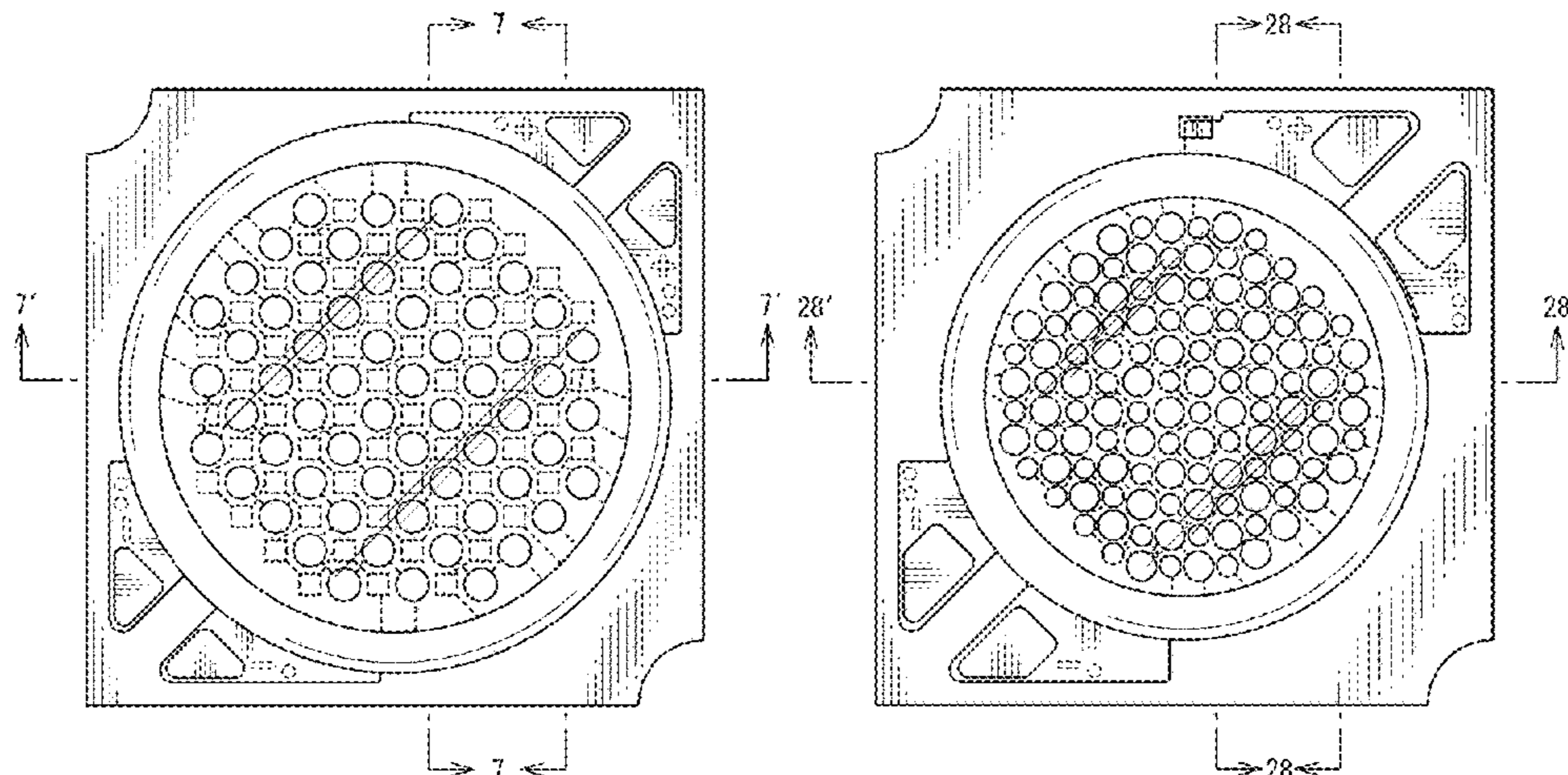


FIG. 28 is a cross-sectional view thereof taken along the lines 28-28 and 28'-28' in FIG. 22.

The broken lines shown in FIGS. 1, 7, 8, 15, 21 and 22 are for illustrative purposes only and form no part of the claimed design.

**1 Claim, 16 Drawing Sheets**

(30) **Foreign Application Priority Data**

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(58) **Field of Classification Search**

CPC ... H01L 25/167; H01L 25/0753; H01L 27/15;  
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H01L 33/04; H01L 33/08; H01L 33/10;  
H01L 33/20; H01L 33/38; H01L 33/42;  
H01L 33/48; H01L 33/483; H01L 33/486;  
F21K 9/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D489,142 S \* 4/2004 Froech ..... D25/157  
D494,286 S \* 8/2004 Matsui ..... D13/180  
D494,288 S \* 8/2004 Matsui ..... D13/180  
D508,573 S \* 8/2005 Matsui ..... D26/1  
D514,530 S \* 2/2006 Matsui ..... D13/180  
D528,994 S \* 9/2006 Matsui ..... D13/180  
D528,996 S \* 9/2006 Egawa ..... D13/180

D562,473 S \* 2/2008 Matsui ..... D26/1  
D608,740 S \* 1/2010 Lu ..... D13/180  
D636,925 S \* 4/2011 Kawagoe ..... D26/120  
D639,498 S \* 6/2011 Kawagoe ..... D26/120  
D674,523 S \* 1/2013 Kaffash ..... D26/1  
D675,347 S \* 1/2013 Wollard ..... D20/10  
8,440,500 B2 \* 5/2013 Su ..... H01L 25/0753  
438/116  
D700,585 S 3/2014 Takeda et al.  
D707,192 S \* 6/2014 Hussell ..... D13/180  
D744,156 S \* 11/2015 Kjaergaard Toft ..... D26/120  
D751,046 S \* 3/2016 Kuriki ..... D13/180  
D778,246 S 2/2017 Kuriki  
D786,809 S 5/2017 Kuriki  
2008/0112162 A1 \* 5/2008 Chan ..... G02F 1/133603  
362/230  
2012/0056232 A1 \* 3/2012 Fujimoto ..... H01L 33/38  
257/99  
2014/0138715 A1 \* 5/2014 Zhang ..... H01L 25/0753  
257/88  
2014/0291706 A1 \* 10/2014 Lin ..... H01L 25/0753  
257/88  
2015/0311414 A1 \* 10/2015 Lin ..... H01L 33/005  
257/88  
2015/0338041 A1 \* 11/2015 Wimmer ..... H01L 25/0753  
362/20  
2017/0092804 A1 \* 3/2017 Peng ..... H01L 33/0095  
2017/0103966 A1 \* 4/2017 Choi ..... H01L 24/81  
2017/0279015 A1 \* 9/2017 Ryu ..... H01L 33/647  
2018/0094799 A1 \* 4/2018 Shan ..... H01L 25/0753  
2019/0097106 A1 \* 3/2019 Ditzel ..... H01L 25/0753

OTHER PUBLICATIONS

Masahiro Watanabe et al., Design U.S. Appl. No. 29/685,314, filed Mar. 27, 2019, not published.

\* cited by examiner



FIG. 1

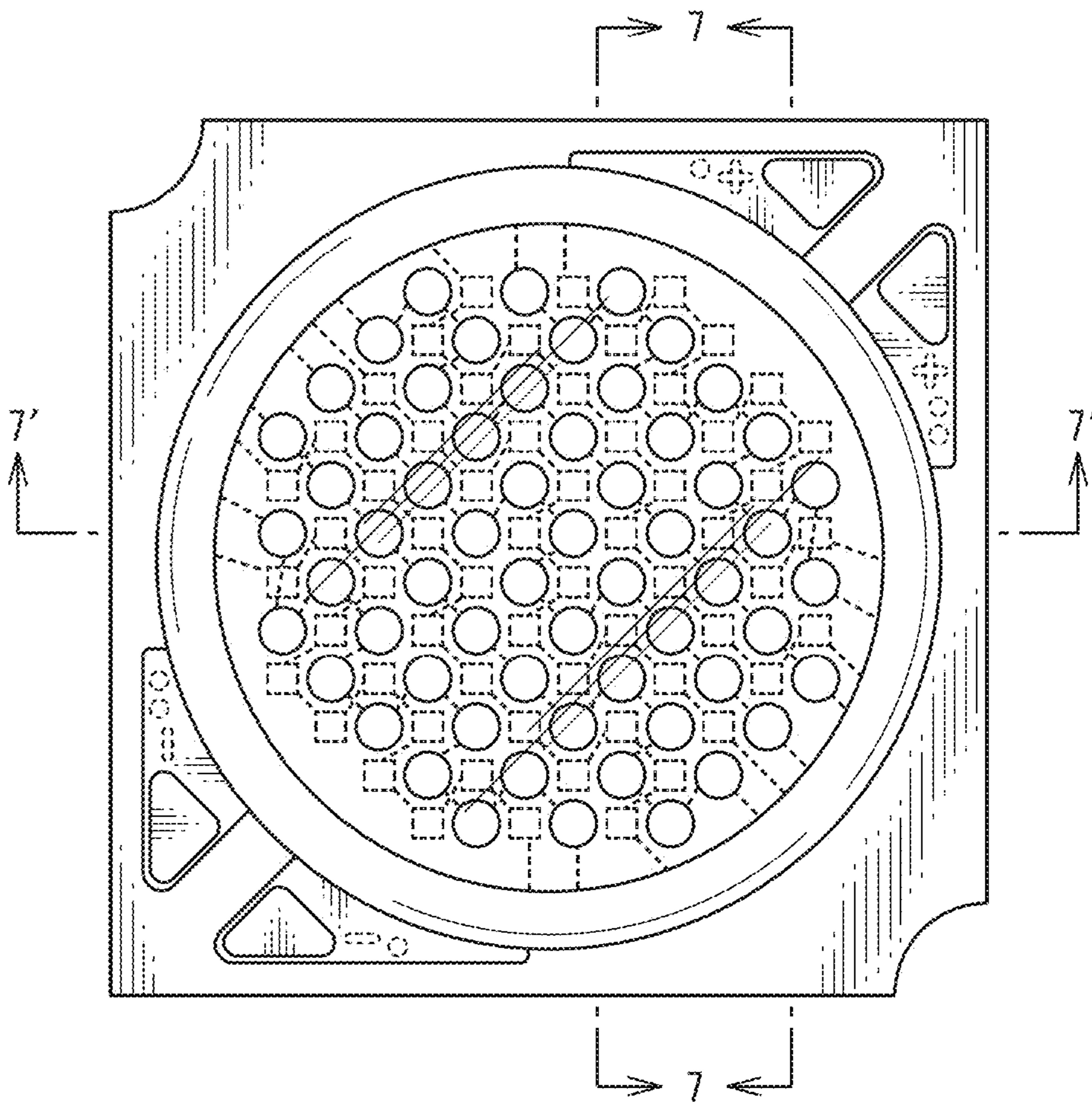


FIG. 2

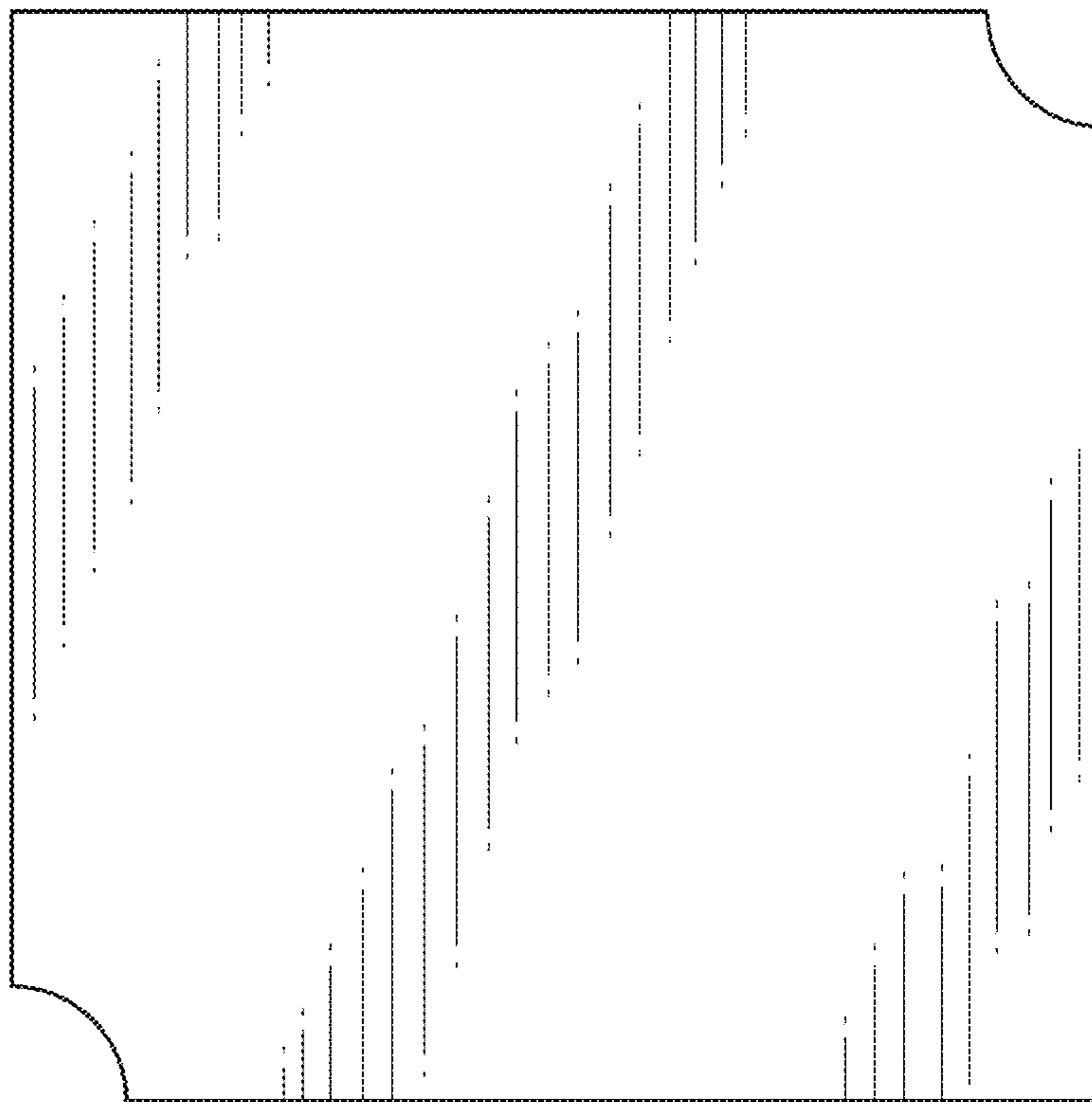


FIG. 3

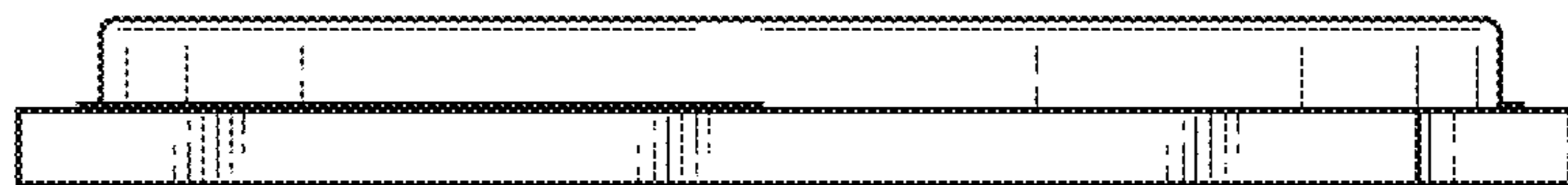


FIG. 4

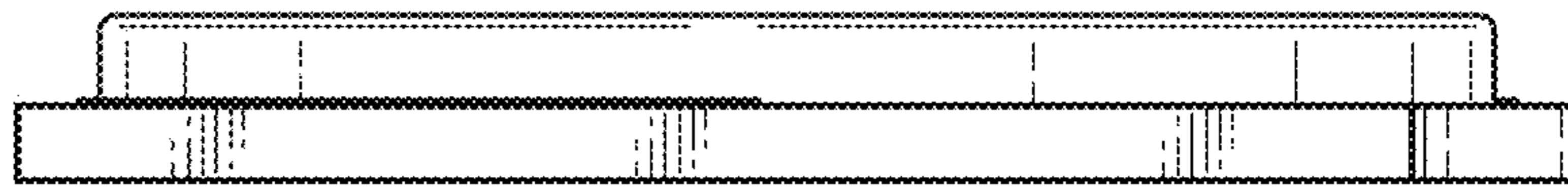


FIG. 5

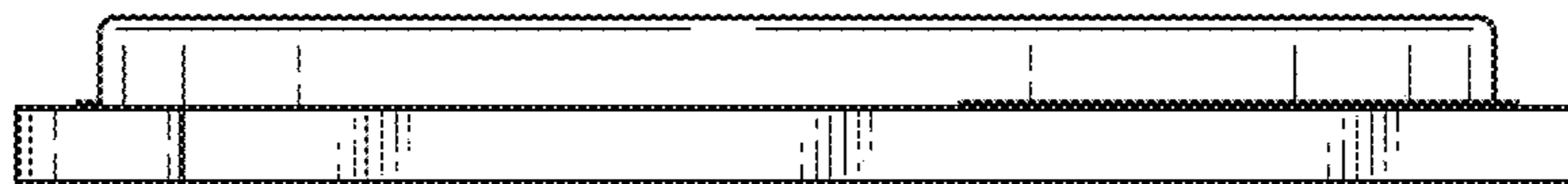


FIG. 6



FIG. 7

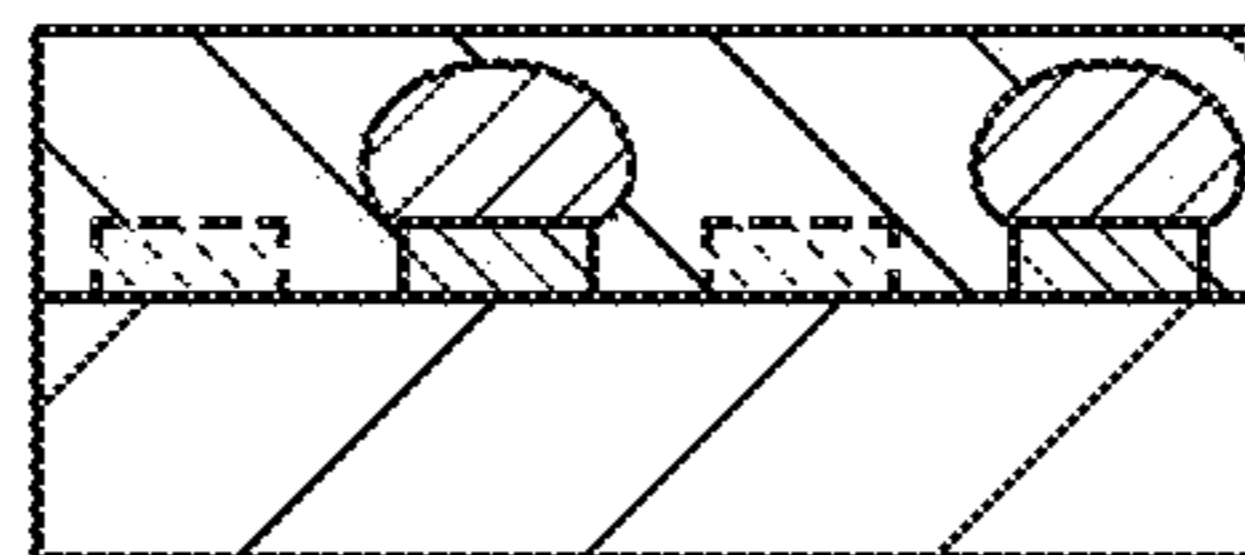


FIG. 8

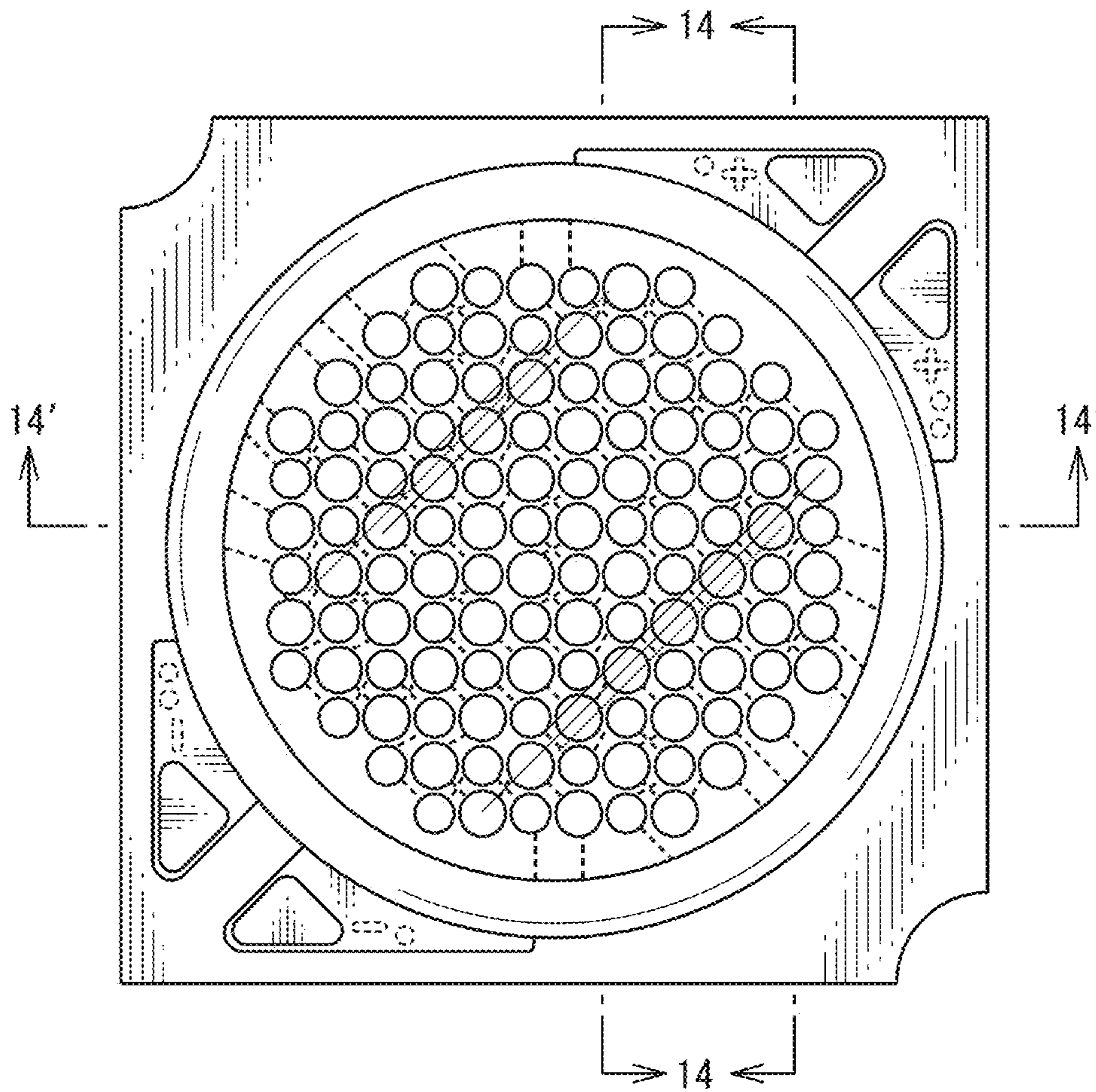


FIG. 9

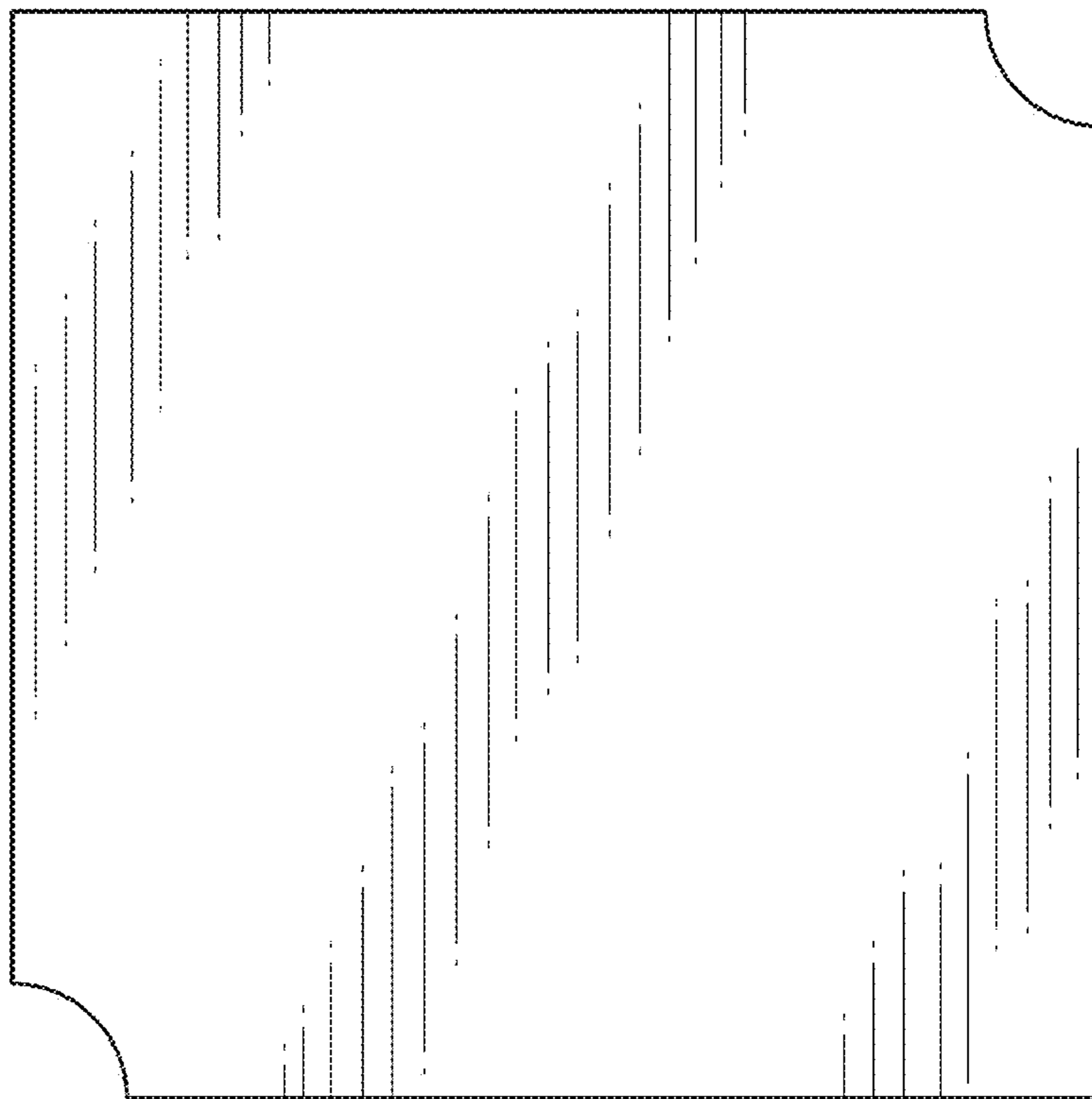


FIG. 10





FIG. 11

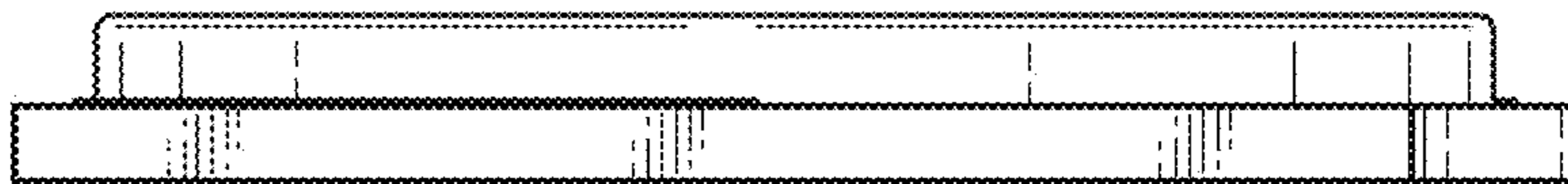


FIG. 12



FIG. 13



FIG. 14

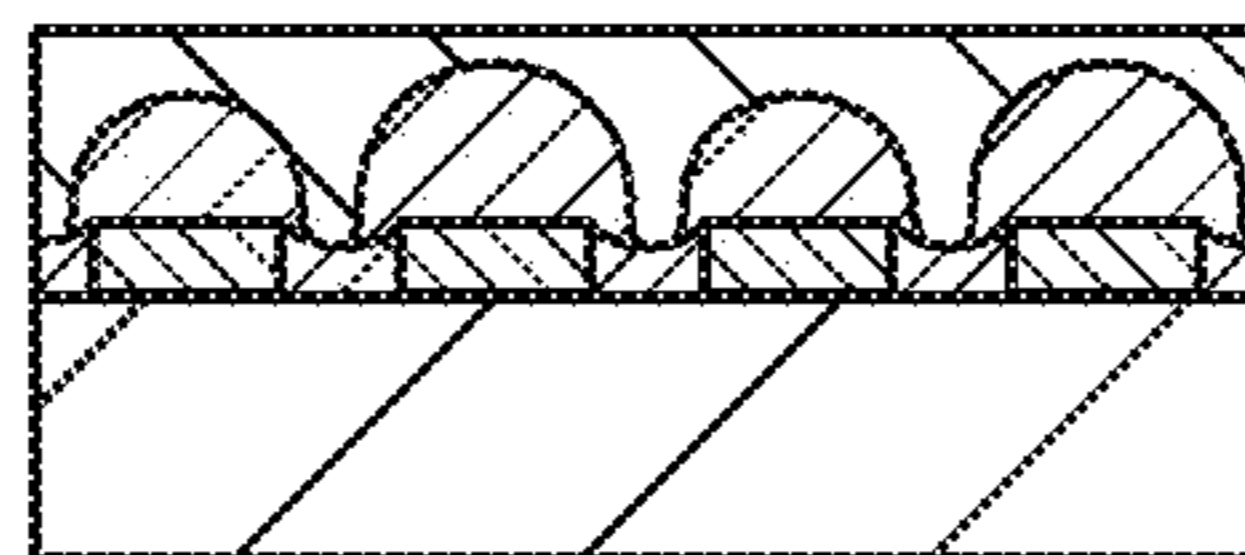


FIG. 15

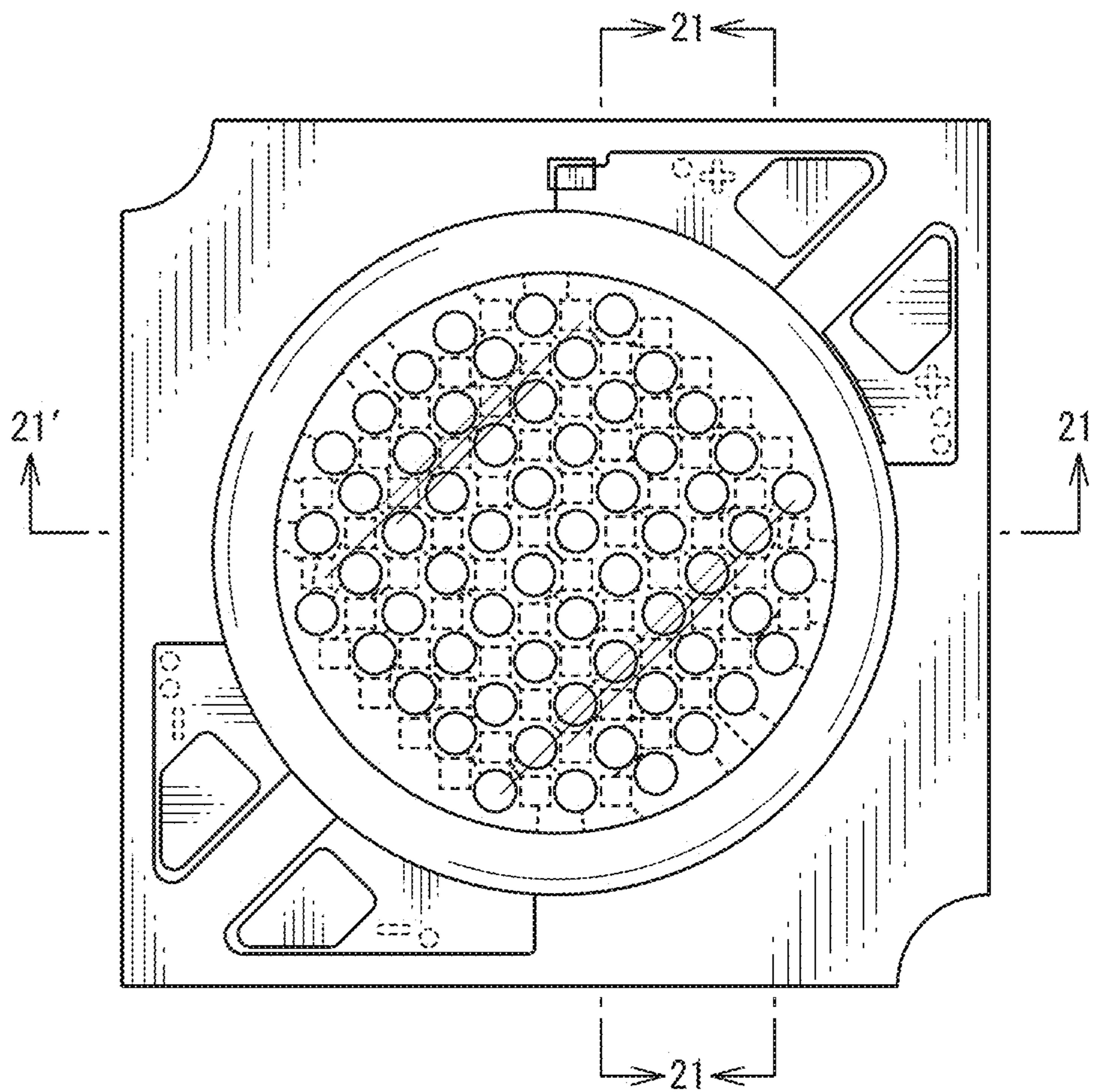


FIG. 16

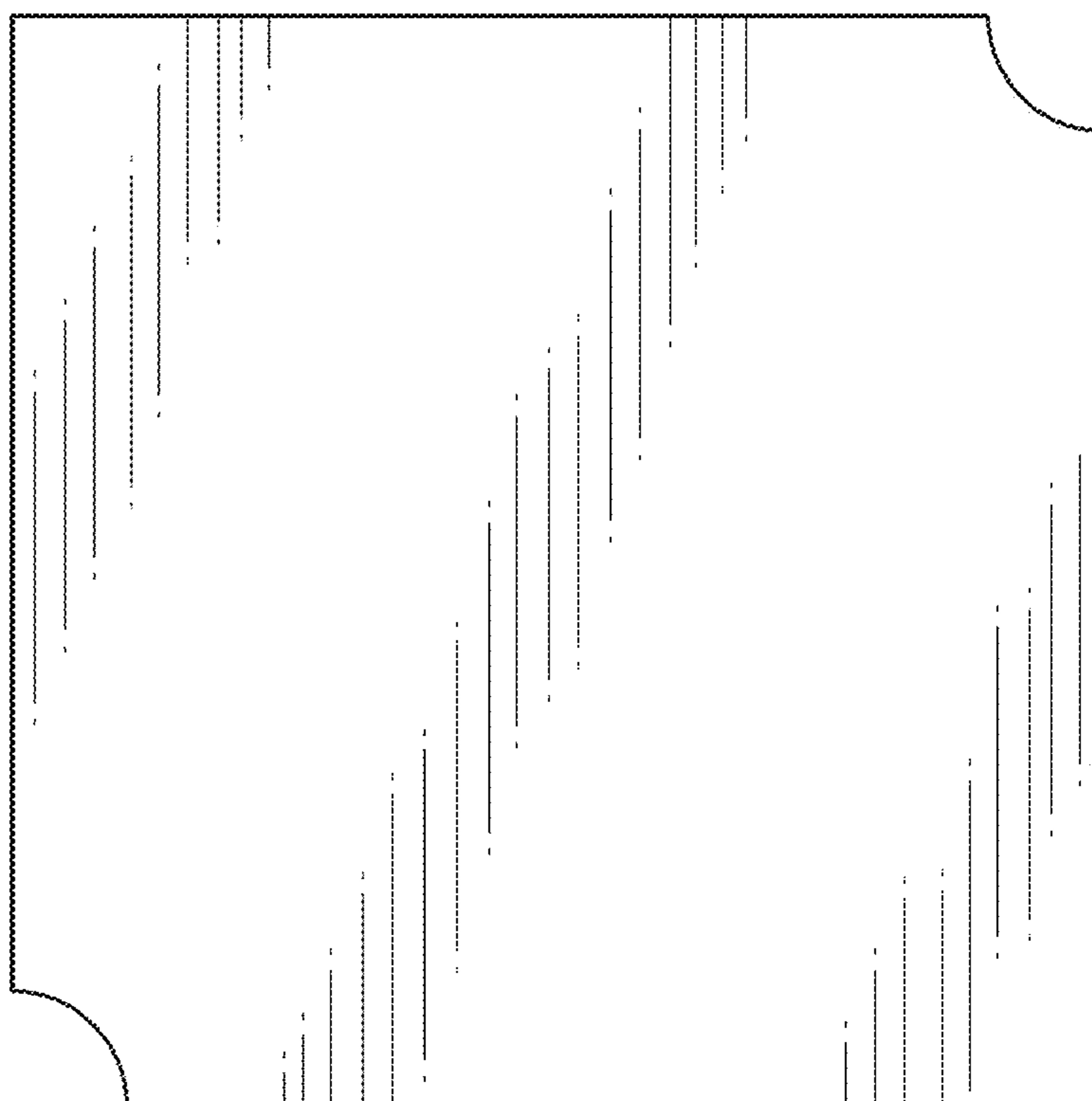


FIG. 17

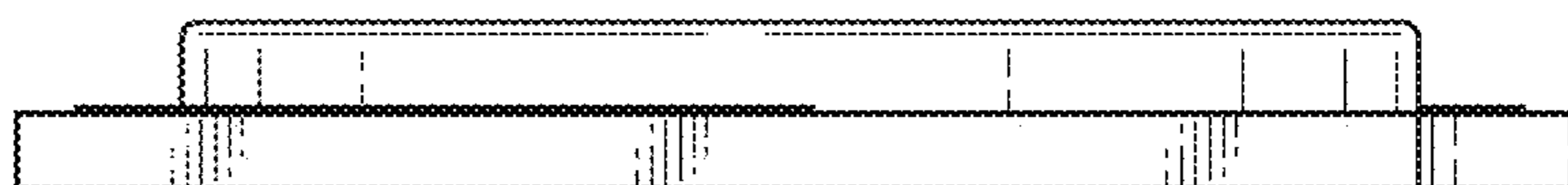




FIG. 18



FIG. 19

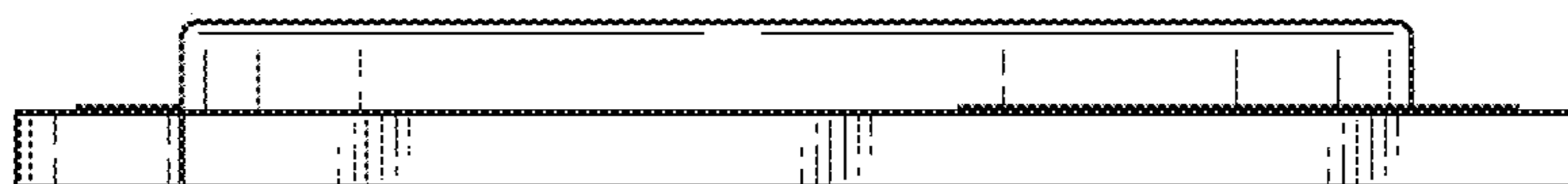


FIG. 20



FIG. 21

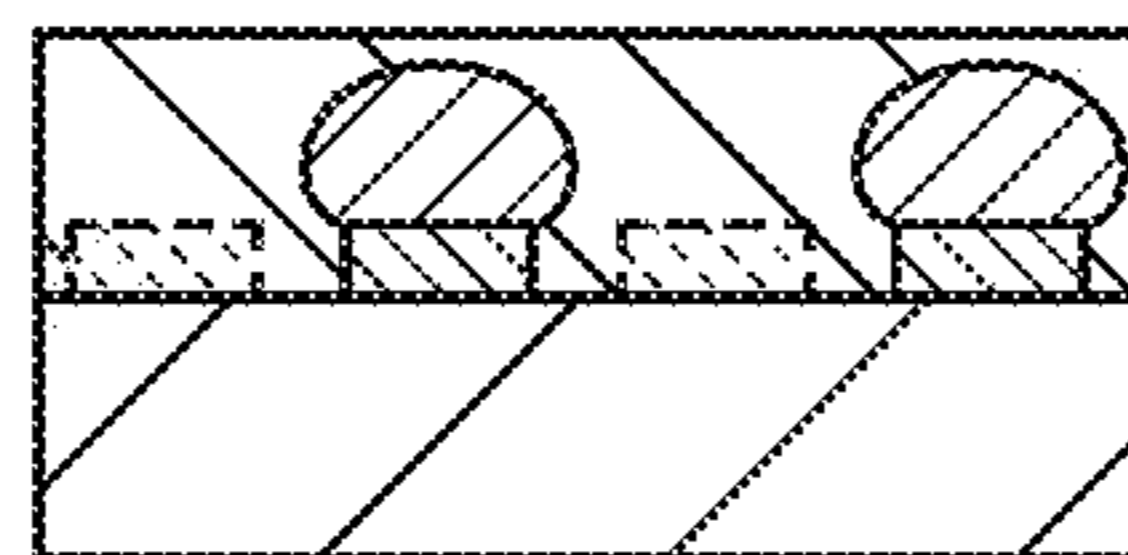


FIG. 22

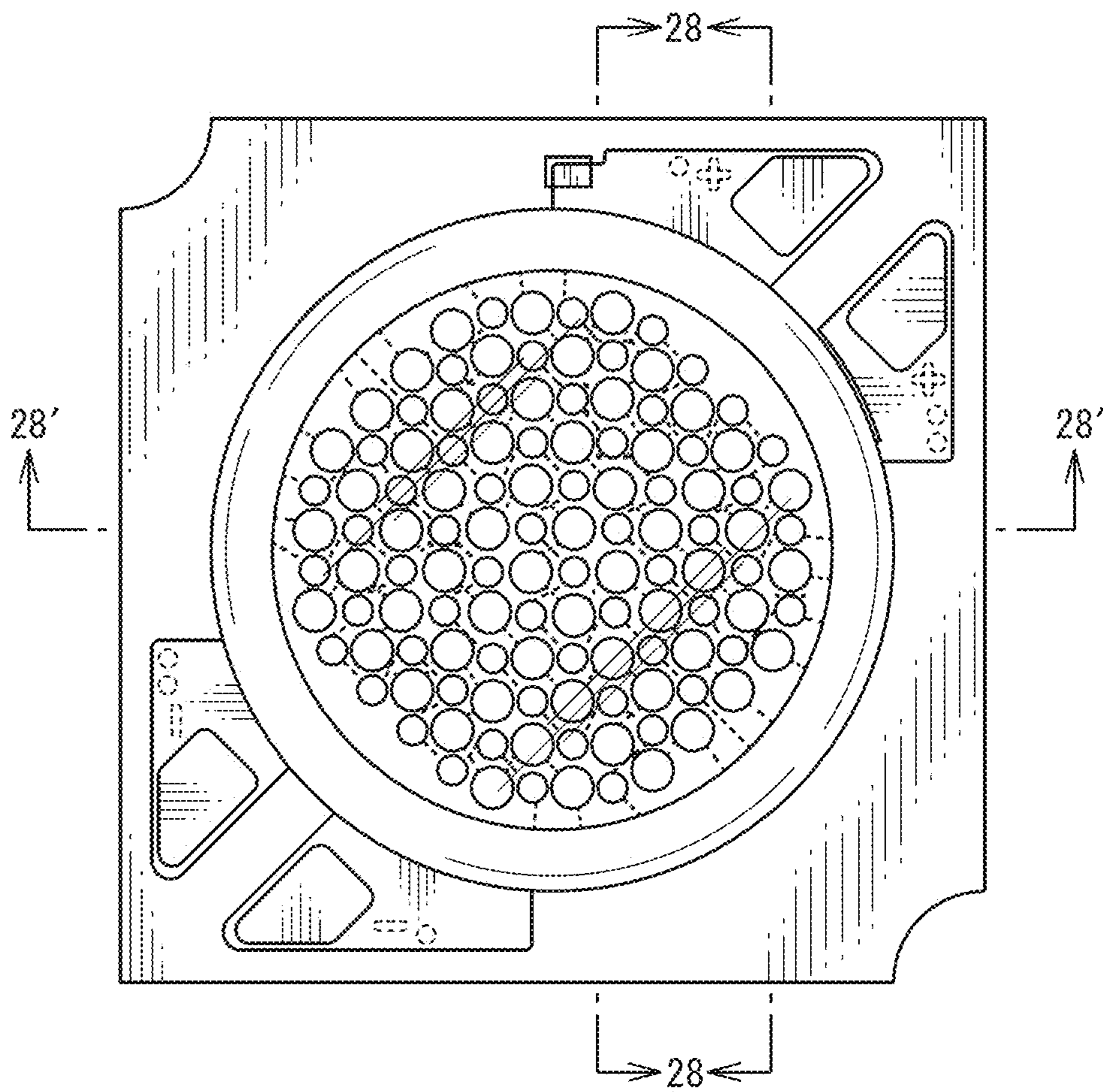


FIG. 23

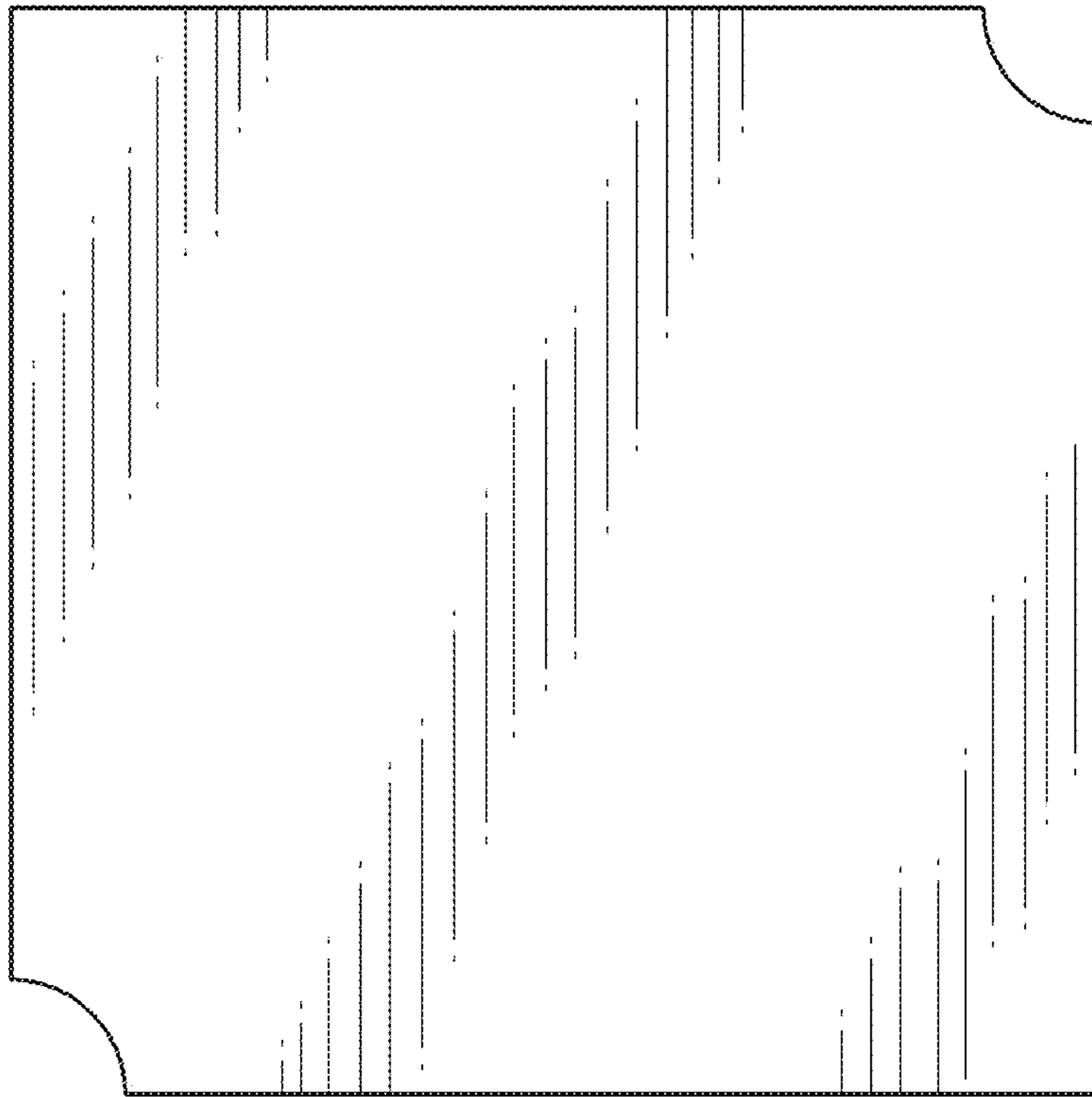


FIG. 24

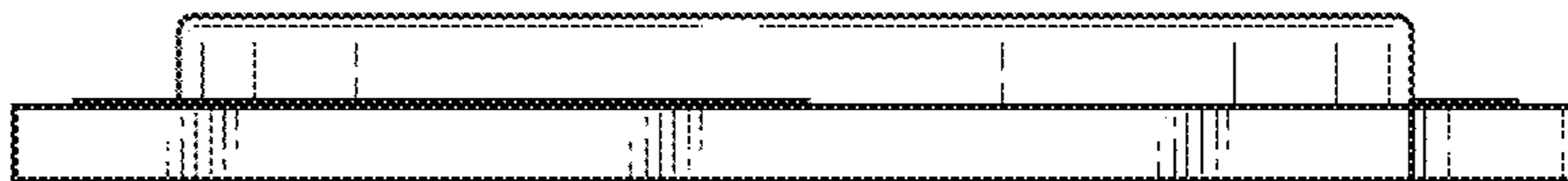




FIG. 25



FIG. 26



FIG. 27



FIG. 28

