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

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- (54) **LIGHT EMITTING DIODE**
- (71) Applicants: **CITIZEN ELECTRONICS CO., LTD.**, Fujiyoshida (JP); **CITIZEN WATCH CO., LTD.**, Nishitokyo (JP)
- (72) Inventors: **Masahiro Watanabe**, Yamanashi (JP); **Shingo Kuriki**, Yamanashi (JP); **Kazuki Matsumura**, Fuefuki (JP)

6,520,669 B1 *	2/2003	Chen	F21S 41/143 362/545
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

(Continued)

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

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

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

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

(58) **Field of Classification Search**
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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 33/483; H01L 33/486;
F21K 9/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D402,772 S *	12/1998	Lodhie	D26/26
D405,426 S *	2/1999	Yamaoka	D13/180
D434,510 S *	11/2000	Lodhie	D26/2

OTHER PUBLICATIONS

Ex Parte Quayle Action for related Design U.S. Appl. No. 29/685,314 dated Jun. 23, 2020; 11 pages.

(Continued)

Primary Examiner — Selina Sikder

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

(57) **CLAIM**

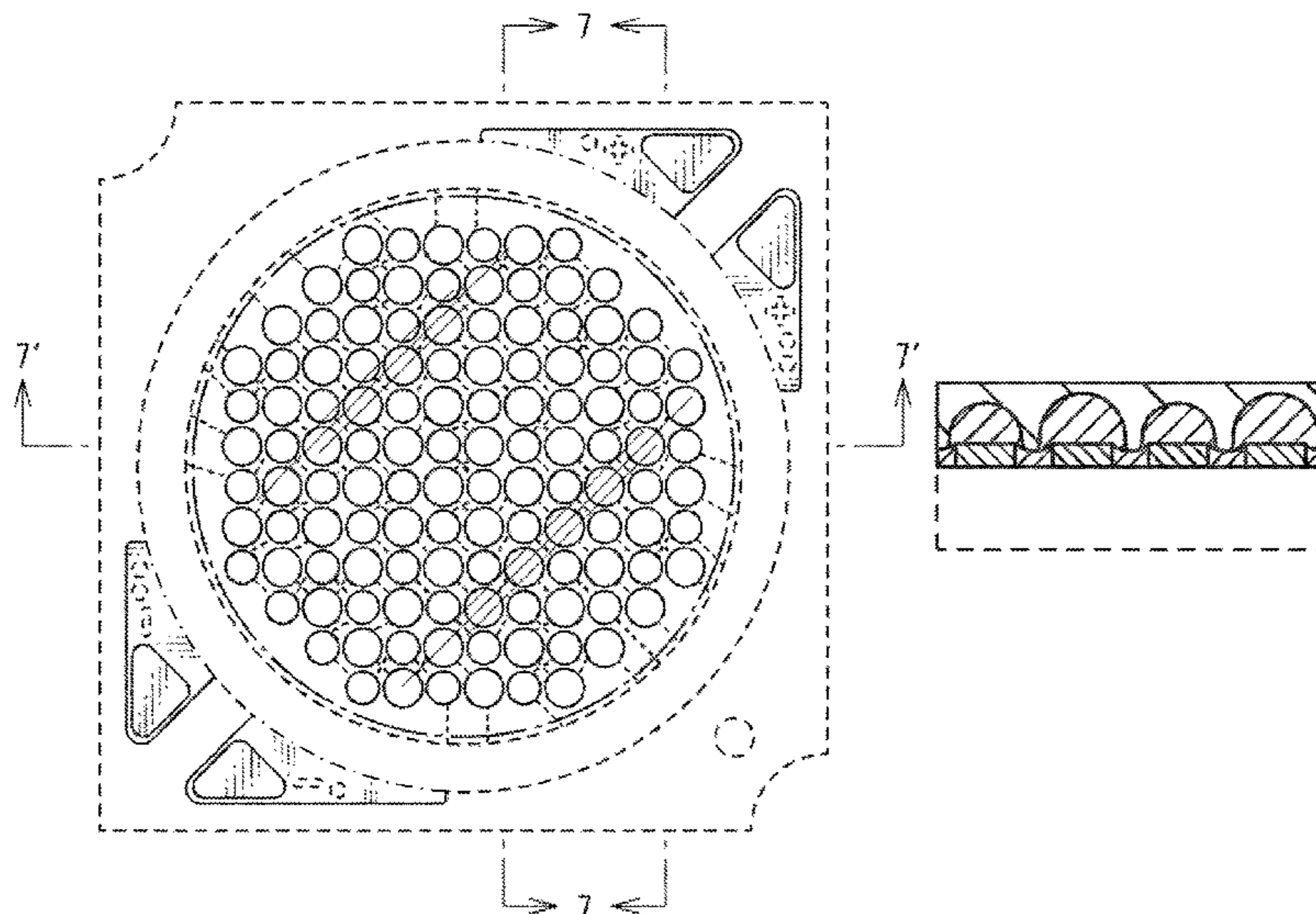
The ornamental design for a light emitting diode, as shown and described.

DESCRIPTION

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

The dashed broken lines in the drawings are for the purpose of illustrating unclaimed portions of the light emitting diode and form no part of the claimed design, and the dash-dot-dash broken lines illustrate the boundary of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

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
D778,246 S	2/2017	Kuriki	
D786,809 S	5/2017	Kuriki	
2007/0139930 A1 *	6/2007	Spivak	A61N 5/0616 362/294
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

Notice of Allowance for related Design U.S. Appl. No. 29/685,330 dated May 5, 2020; 17 pages.

* cited by examiner

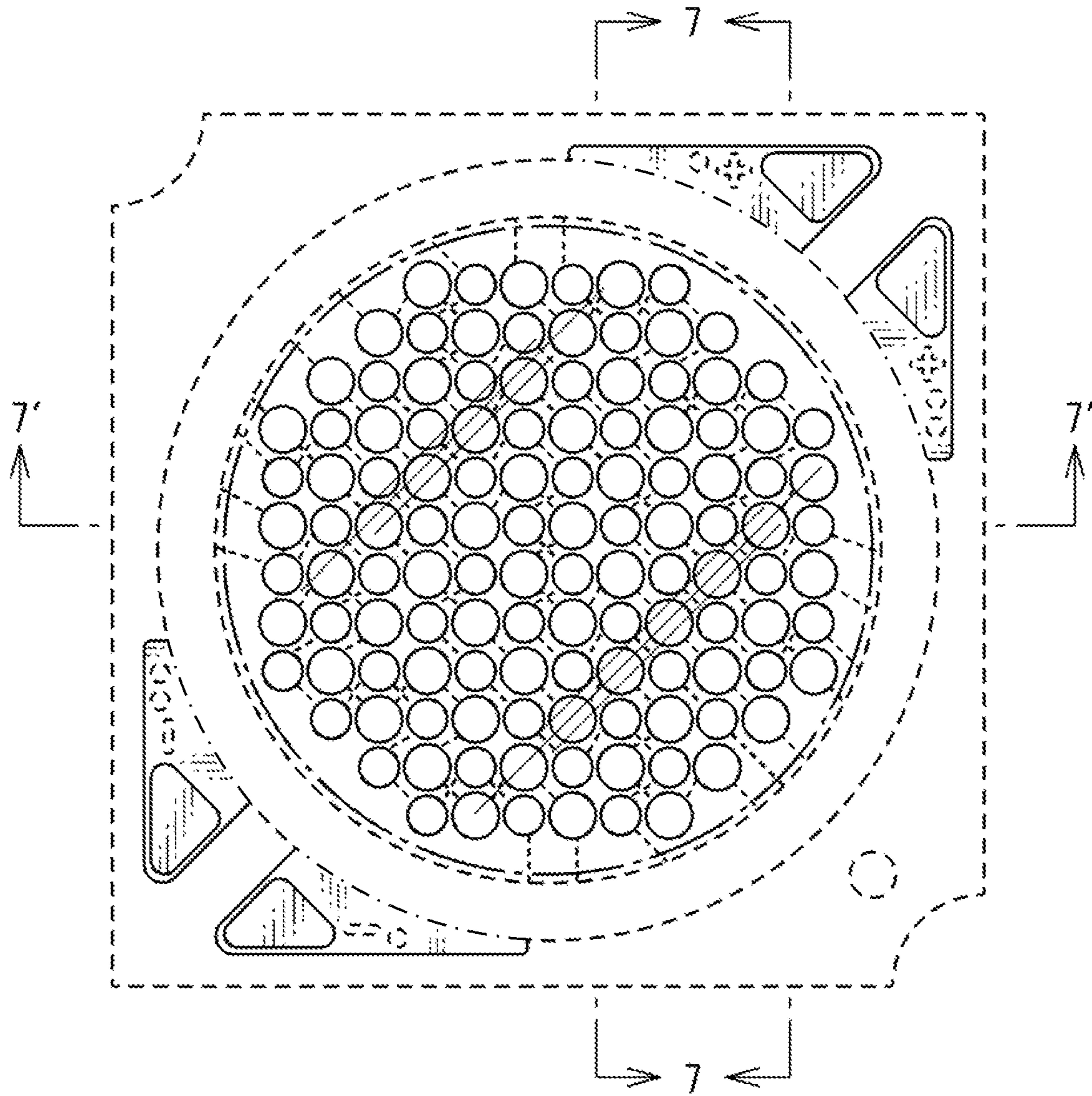


FIG. 1

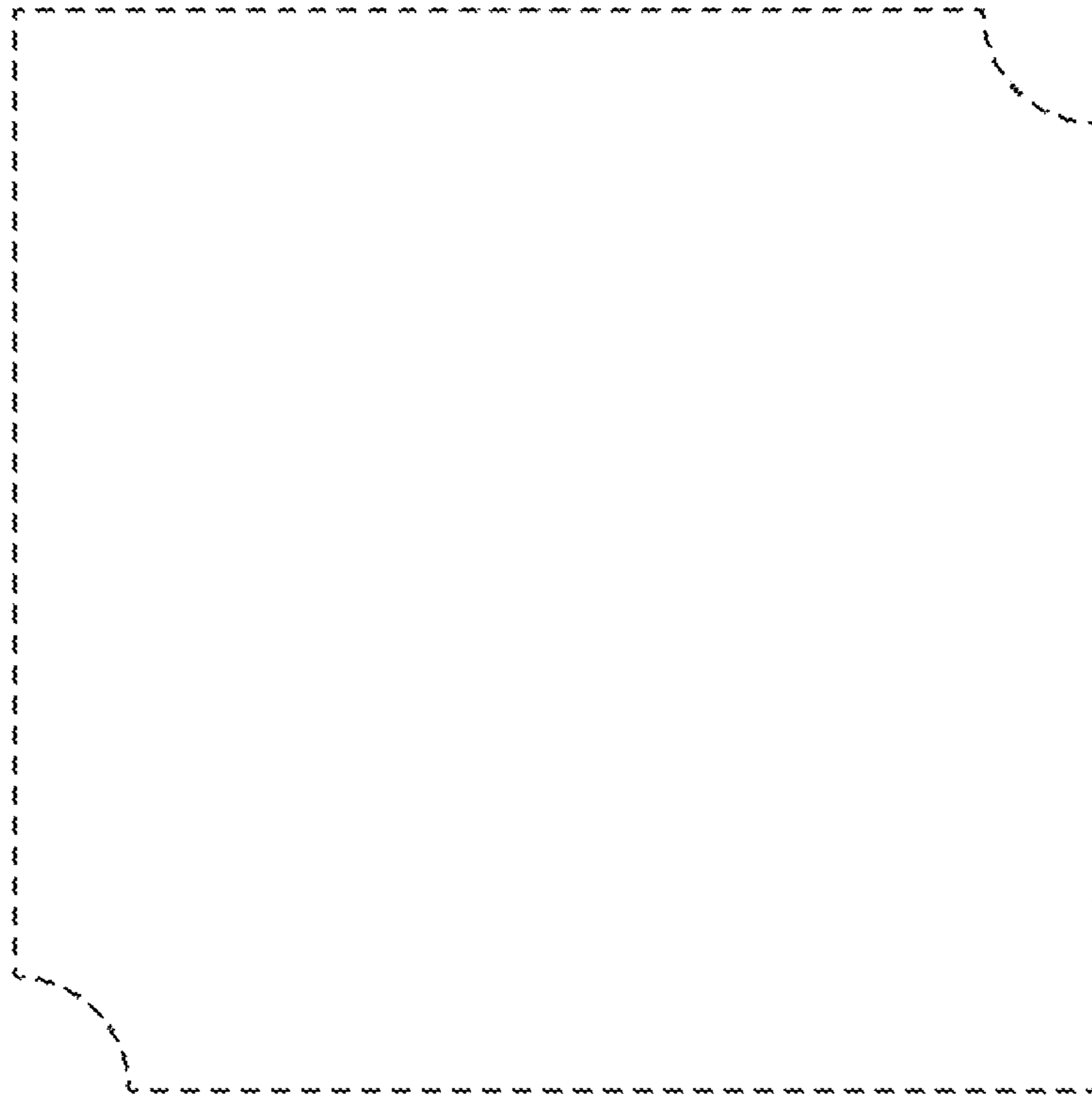


FIG. 2



FIG. 3



FIG. 4



FIG. 5



FIG. 6

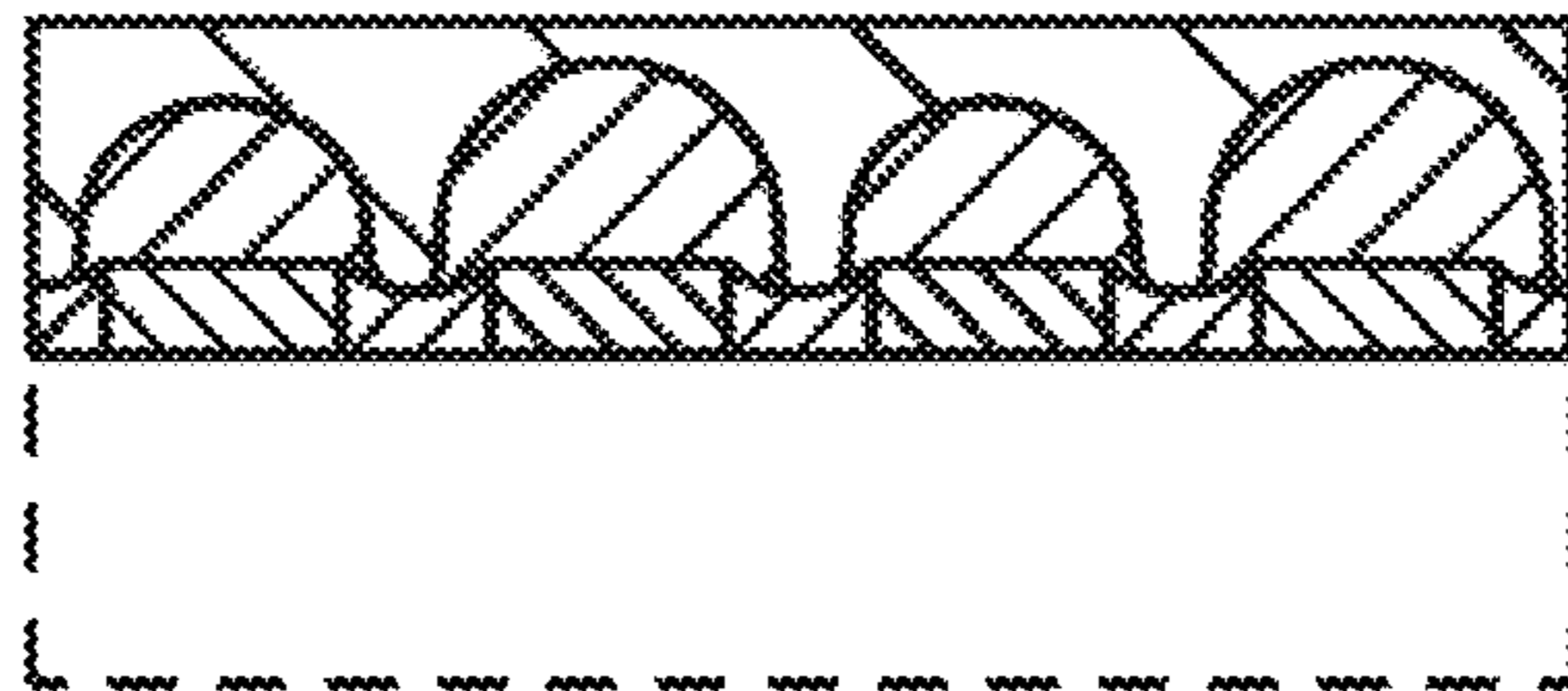


FIG. 7