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

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- (54) **LIGHT-EMITTING DIODE**
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- (52) **U.S. Cl.**
USPC **D13/180**
- (58) **Field of Classification Search**
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H01L 27/156; H01L 33/08; H01L 33/10;
H01L 33/20; H01L 33/38; H01L 33/42;
H01L 33/52; H01L 33/54; H01L 33/60;
H01L 33/62; H01L 33/382; H01L 33/486;
H01L 33/642
USPC D13/180; D26/1; 257/79, 80, 81, 88,
257/89, 95, 98, 99, 100, E33.058; 362/555,
362/800
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
- | | | | | | |
|-----------|------|---------|------------|-------|---------|
| 7,282,741 | B2 * | 10/2007 | Kim et al. | ..... | 257/79 |
| 7,462,868 | B2 * | 12/2008 | Li et al. | ..... | 257/79 |
| 7,544,971 | B2 * | 6/2009 | Chen | ..... | 257/80 |
| 7,777,240 | B2 * | 8/2010 | Lin et al. | | 257/94 |
| 8,344,392 | B2 * | 1/2013 | Yeh et al. | | 257/79 |
| D676,001 | S * | 2/2013 | Hsu et al. | | D13/180 |

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|--------------|------|---------|----------------|-------|---------|
| D680,977 | S * | 4/2013 | Hsu et al. | | D13/180 |
| D691,569 | S * | 10/2013 | Edmond et al. | | D13/180 |
| D693,779 | S * | 11/2013 | Chu et al. | | D13/180 |
| D694,723 | S * | 12/2013 | Wu et al. | ..... | D13/180 |
| D698,743 | S * | 2/2014 | Hon et al. | ..... | D13/180 |
| D700,152 | S * | 2/2014 | Hsu et al. | ..... | D13/180 |
| 2006/0192206 | A1 * | 8/2006 | Kong et al. | ..... | 257/79 |
| 2009/0140280 | A1 * | 6/2009 | Shen et al. | ..... | 257/98 |
| 2011/0278631 | A1 * | 11/2011 | Shen et al. | ..... | 257/99 |
| 2012/0241808 | A1 * | 9/2012 | Akiyama et al. | ..... | 257/99 |
| 2012/0273830 | A1 * | 11/2012 | Huang et al. | ..... | 257/99 |
| 2013/0032848 | A1 * | 2/2013 | Chen et al. | ..... | 257/99 |
| 2013/0221394 | A1 * | 8/2013 | Huang et al. | ..... | 257/99 |
| 2013/0228802 | A1 * | 9/2013 | Wang et al. | ..... | 257/88 |
| 2014/0034974 | A1 * | 2/2014 | Li | | 257/88 |
| 2014/0034981 | A1 * | 2/2014 | Hung et al. | | 257/98 |

* cited by examiner

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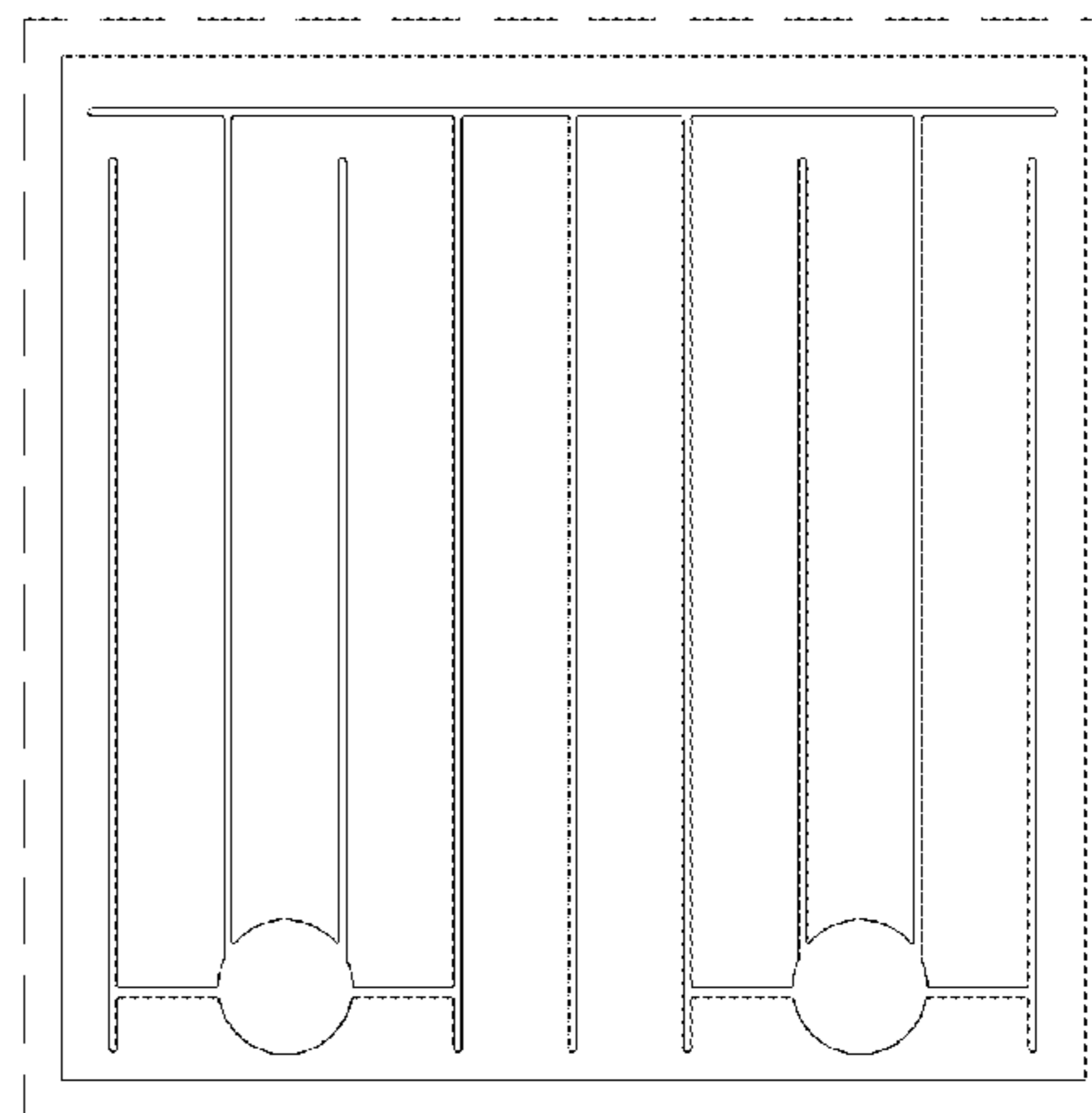
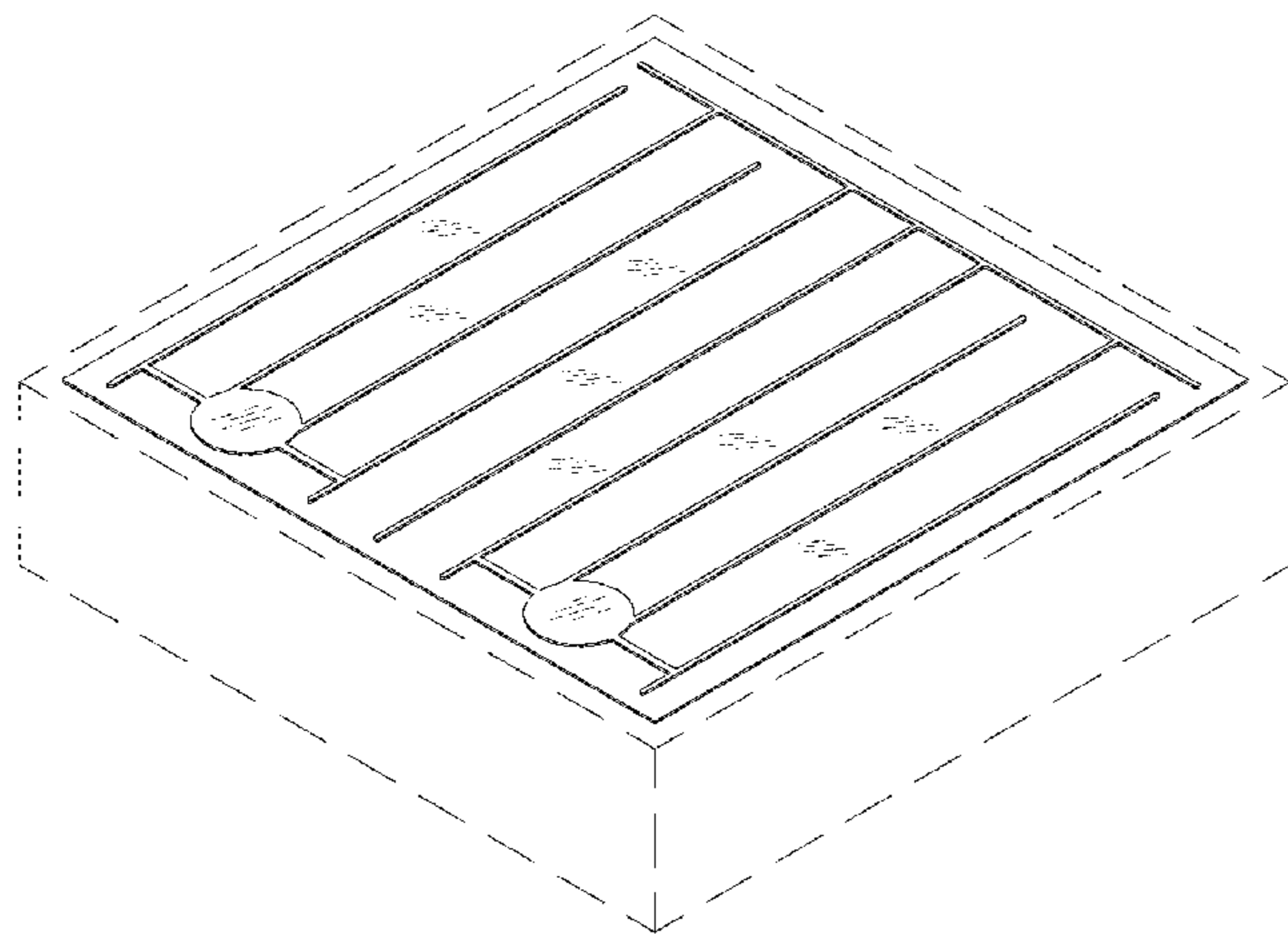
(57) **CLAIM**
The ornamental design for a light-emitting diode, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a light-emitting diode showing our new design;
 FIG. 2 is another perspective view thereof;
 FIG. 3 is a front elevational view thereof;
 FIG. 4 is a rear elevational view thereof;
 FIG. 5 is a left side view thereof;
 FIG. 6 is a right side view thereof;
 FIG. 7 is a top plan view thereof; and,
 FIG. 8 is a bottom plan view thereof.

The broken line showing is for the purpose of illustrating environmental structure only and forms no part of the claimed design.

1 Claim, 6 Drawing Sheets



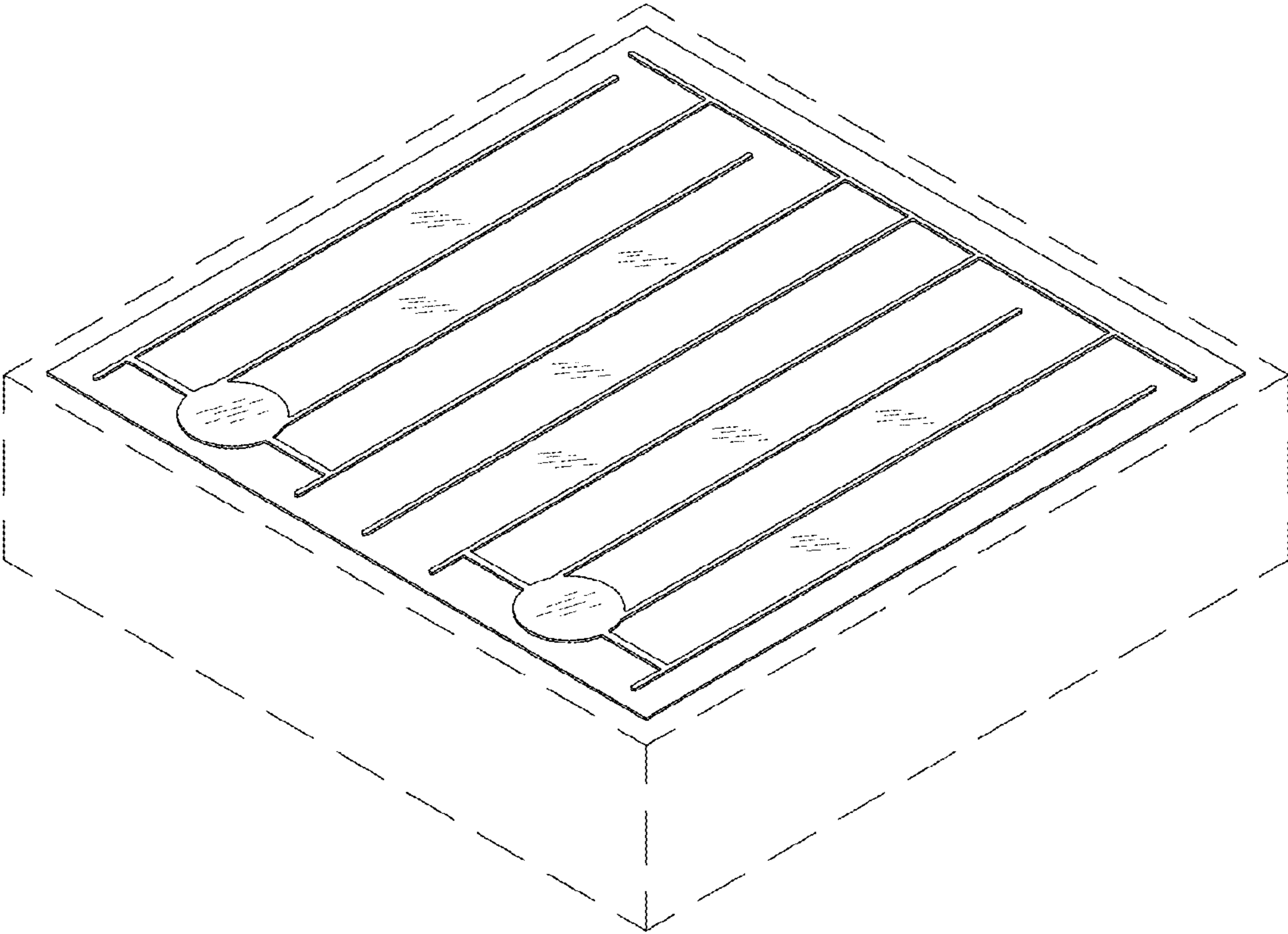


FIG.1

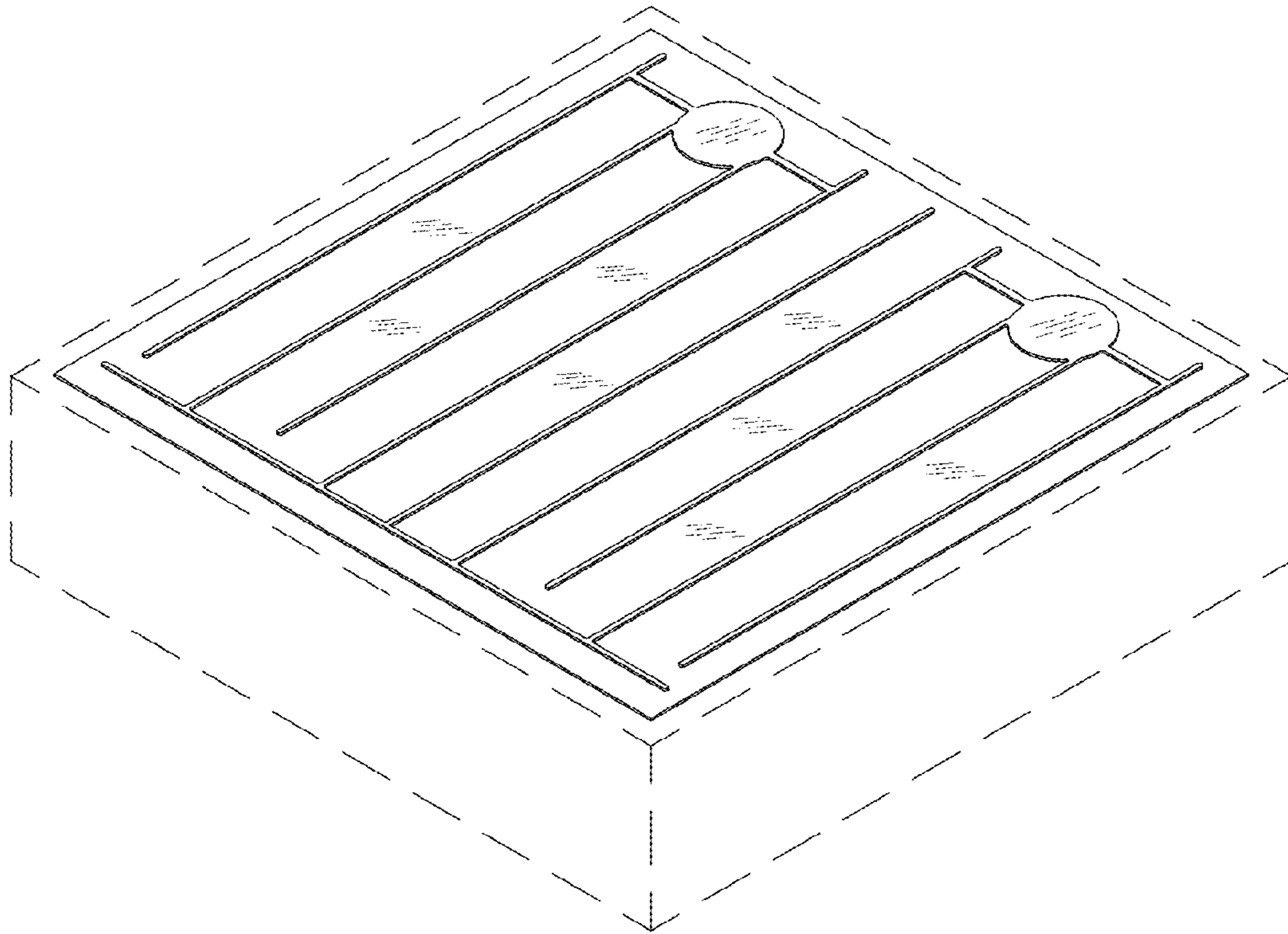


FIG.2

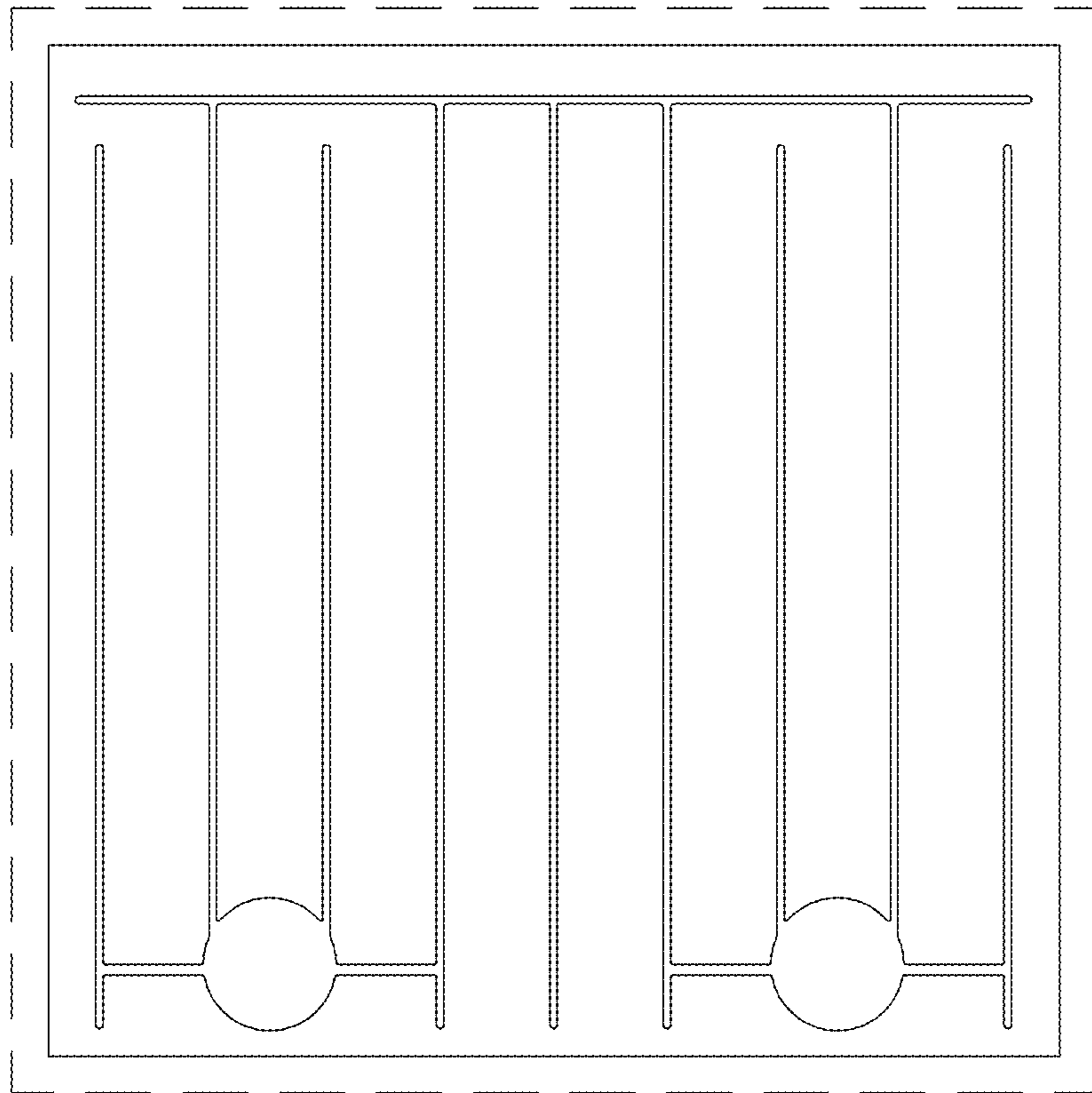


FIG.3



FIG.4

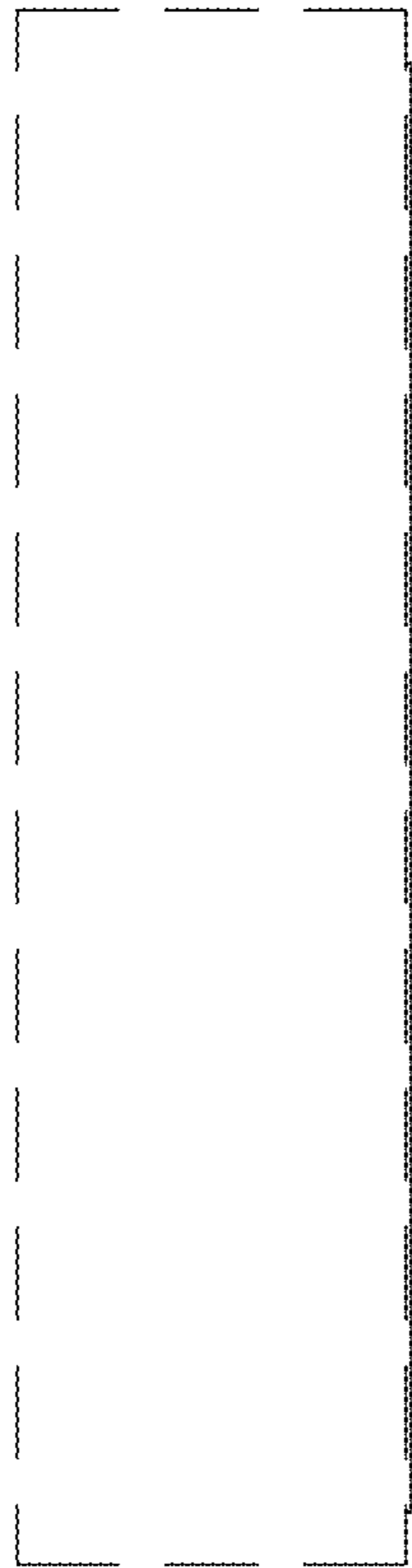


FIG.5

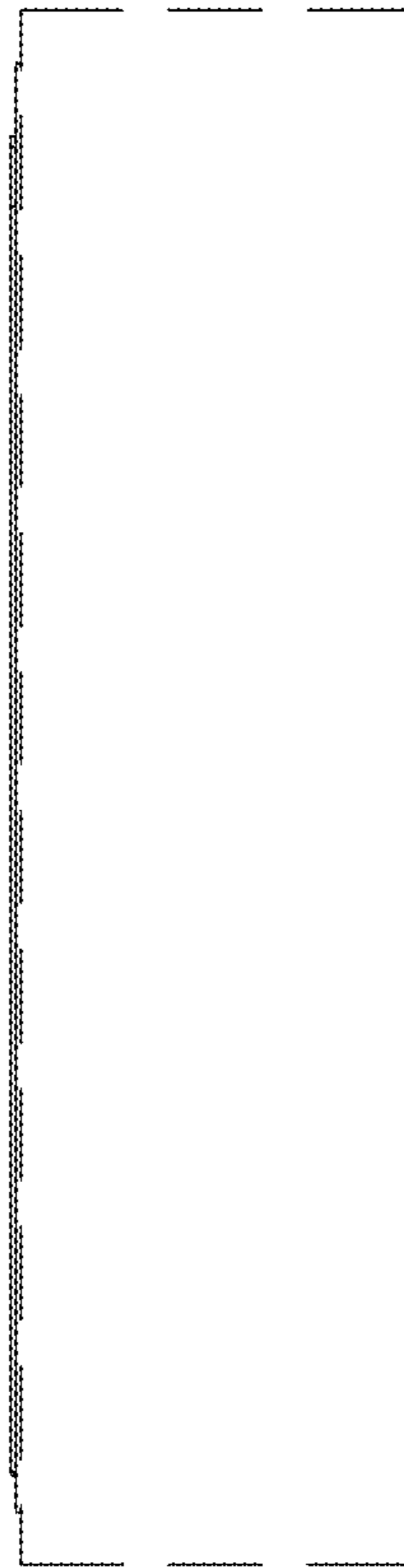


FIG.6



FIG. 7



FIG. 8