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

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(54) **LIGHT-EMITTING DIODE**  
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(\*\*) Term: **14 Years**

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**Related U.S. Application Data**

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(30) **Foreign Application Priority Data**

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

(58) **Field of Classification Search** ..... D13/180;  
D26/1, 2; 257/79, 80, 81, 88, 89, 95, 98,  
257/99, 100, E33.058; 313/483, 498, 500;  
362/555, 800

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,011,575 A 3/1977 Groves  
5,309,001 A 5/1994 Watanabe

5,744,828 A \* 4/1998 Nozaki et al. .... 257/94  
7,135,709 B1 \* 11/2006 Wirth et al. .... 257/95  
7,166,905 B1 1/2007 Shah  
D582,865 S 12/2008 Edmond  
7,626,211 B2 12/2009 Sugiura  
7,638,808 B2 12/2009 Owen  
D609,200 S 2/2010 Kim  
D616,385 S 5/2010 Chen  
D631,017 S 1/2011 Arazoe  
7,902,568 B2 3/2011 Morikawa  
7,906,795 B2 3/2011 Huang  
D646,234 S \* 10/2011 Yao et al. .... D13/180  
2009/0050921 A1 2/2009 Bierhuizen

\* cited by examiner

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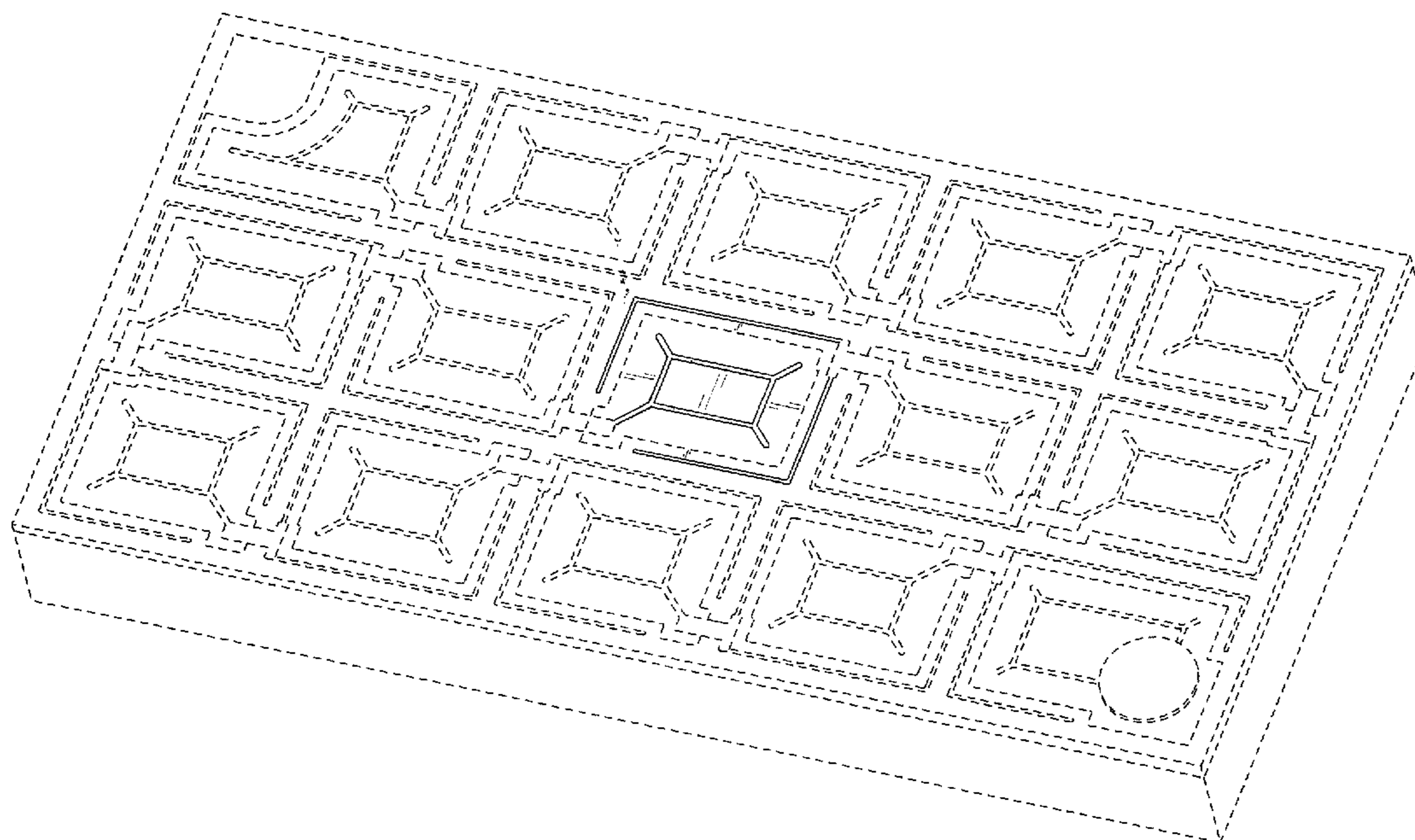
(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a front, right perspective view of a light-emitting diode in an array showing our new design, the diode; and, FIG. 2 is a front elevational view of the light-emitting diode in the array, the rear thereof being flat and unornamented. The broken lines are for showing environmental structure and are not a part of the claimed invention. The diode is a unbroken surface.

**1 Claim, 2 Drawing Sheets**



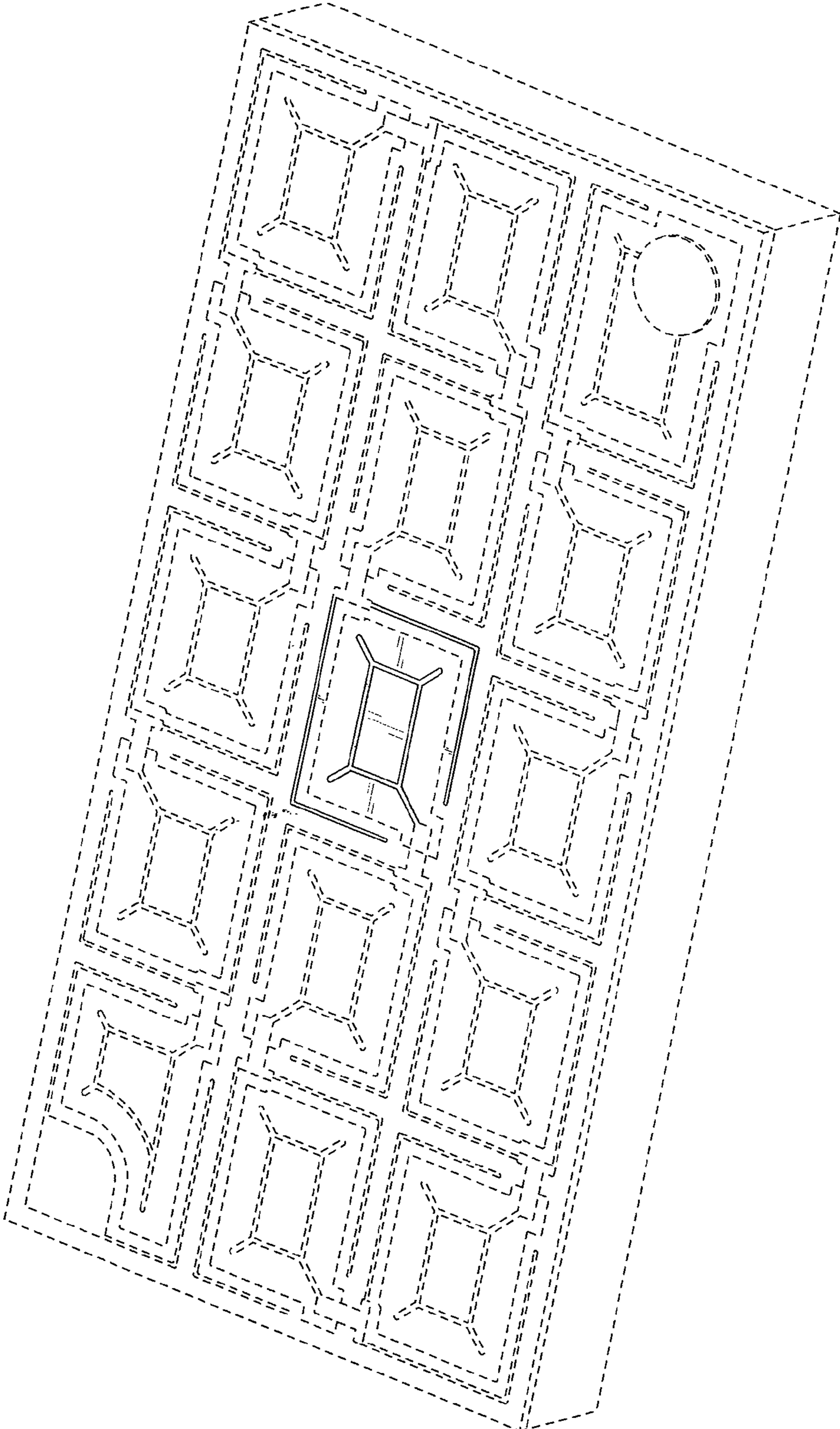


FIG. 1

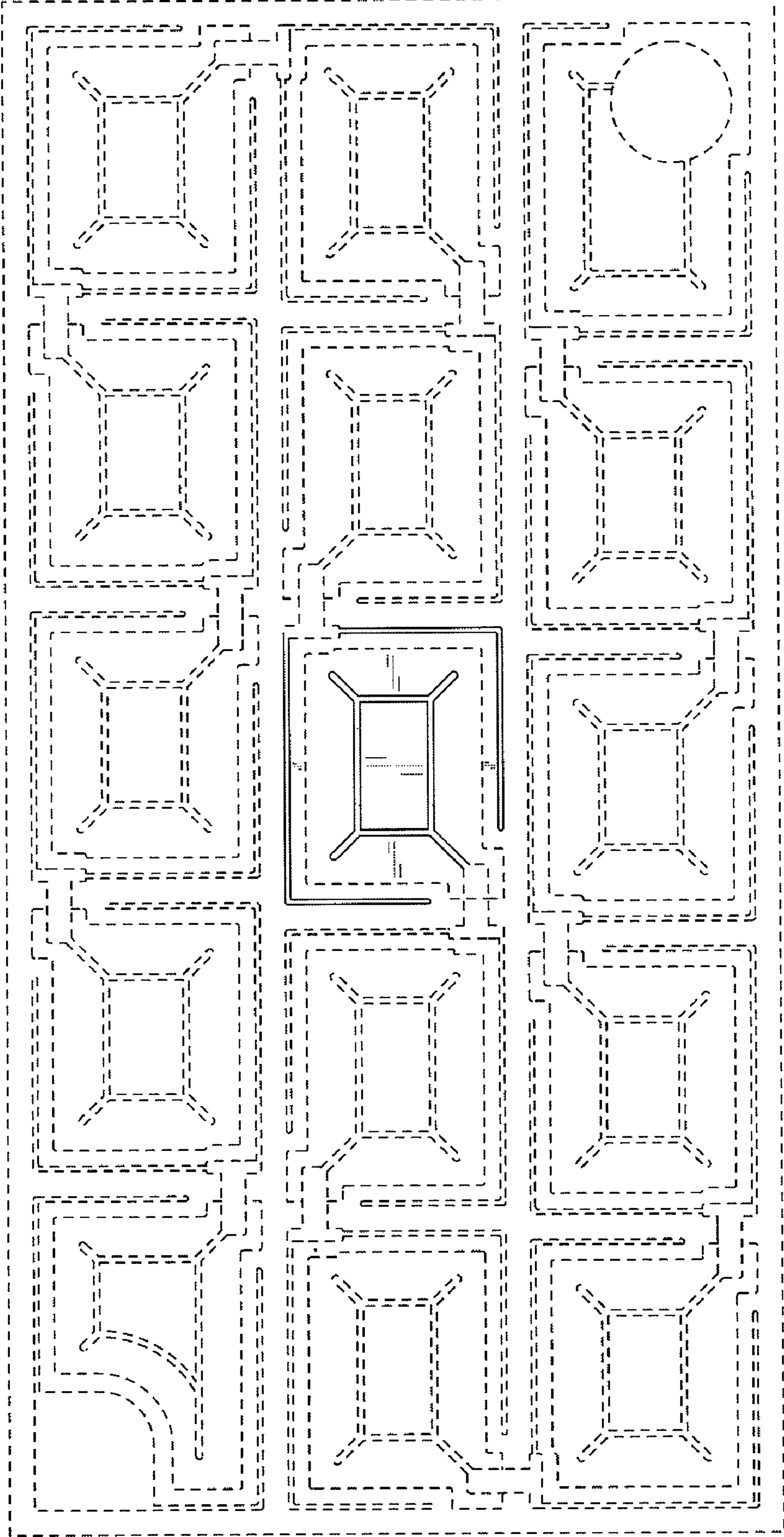


FIG. 2