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United States Patent [19]

[11] **Patent Number: Des. 407,073**

Burkhart et al.

[45] **Date of Patent: **Mar. 23, 1999**

[54] **ELECTROSTATIC CHUCK WITH IMPROVED SPACING AND CHARGE MIGRATION REDUCTION MASK**

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5,459,632 10/1995 Birang et al. 361/234

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[57] **CLAIM**

[**] Term: **14 Years**

The ornamental design for an electrostatic chuck with improved spacing and charge migration reduction mask, as shown herein.

[21] Appl. No.: **81,237**

DESCRIPTION

[22] Filed: **Dec. 24, 1997**

FIG. 1 is a top view of the electrostatic chuck having the improved spacing and charge migration reduction mask; FIG. 2 is an elevation view of the electrostatic chuck when looking up along the y-axis in FIG. 1, the view when looking down along the y-axis being a mirror image of FIG. 2; FIG. 2A is a detailed view of part of the surface of the electrostatic chuck seen in FIG. 2; FIG. 3 is a bottom view of the electrostatic chuck; FIG. 4 is an elevation view of the electrostatic chuck when looking to the right along the x-axis in FIG. 1; FIG. 4A is a detailed view of part of the surface of the electrostatic chuck seen in FIG. 4; FIG. 5 is an elevation view of the electrostatic chuck when looking to the left along the x-axis in FIG. 1 and; and, FIG. 5A is a detailed view of part of the surface of the electrostatic chuck seen in FIG. 5.

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 639,841, May 8, 1996, Pat. No. 5,764,471.

[51] **LOC (6) Cl.** **13-99**

[52] **U.S. Cl.** **D13/199**

[58] **Field of Search** D13/199; 361/230, 361/233, 234; 279/128; 269/8, 903

[56] **References Cited**

U.S. PATENT DOCUMENTS

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1 Claim, 2 Drawing Sheets

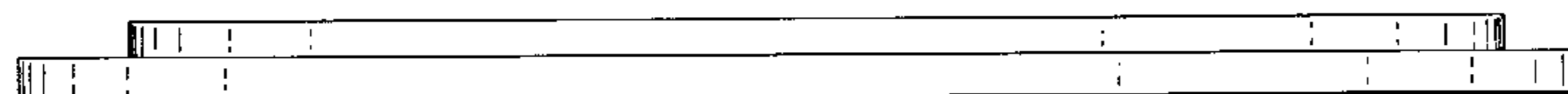
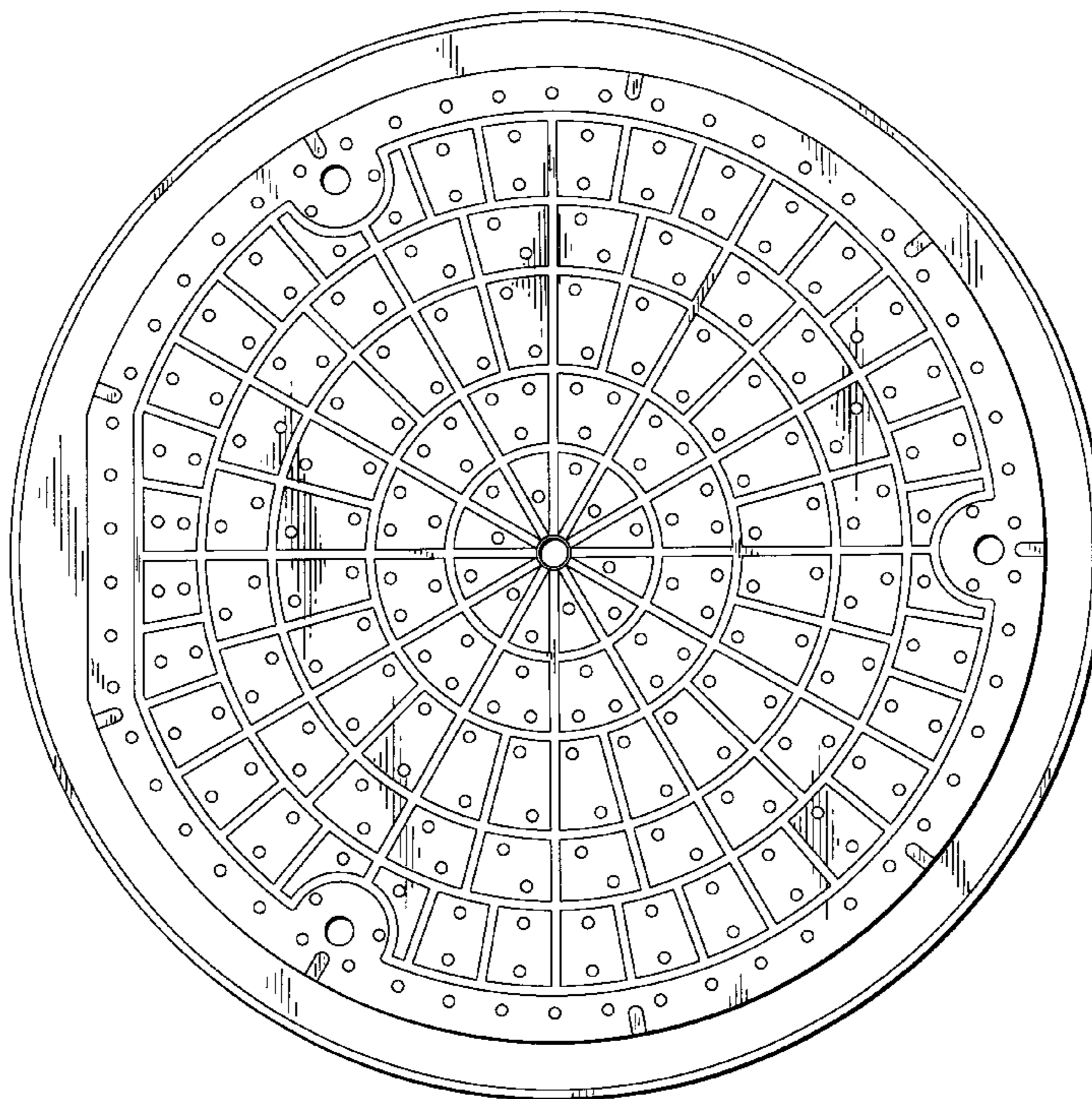


FIG. 1

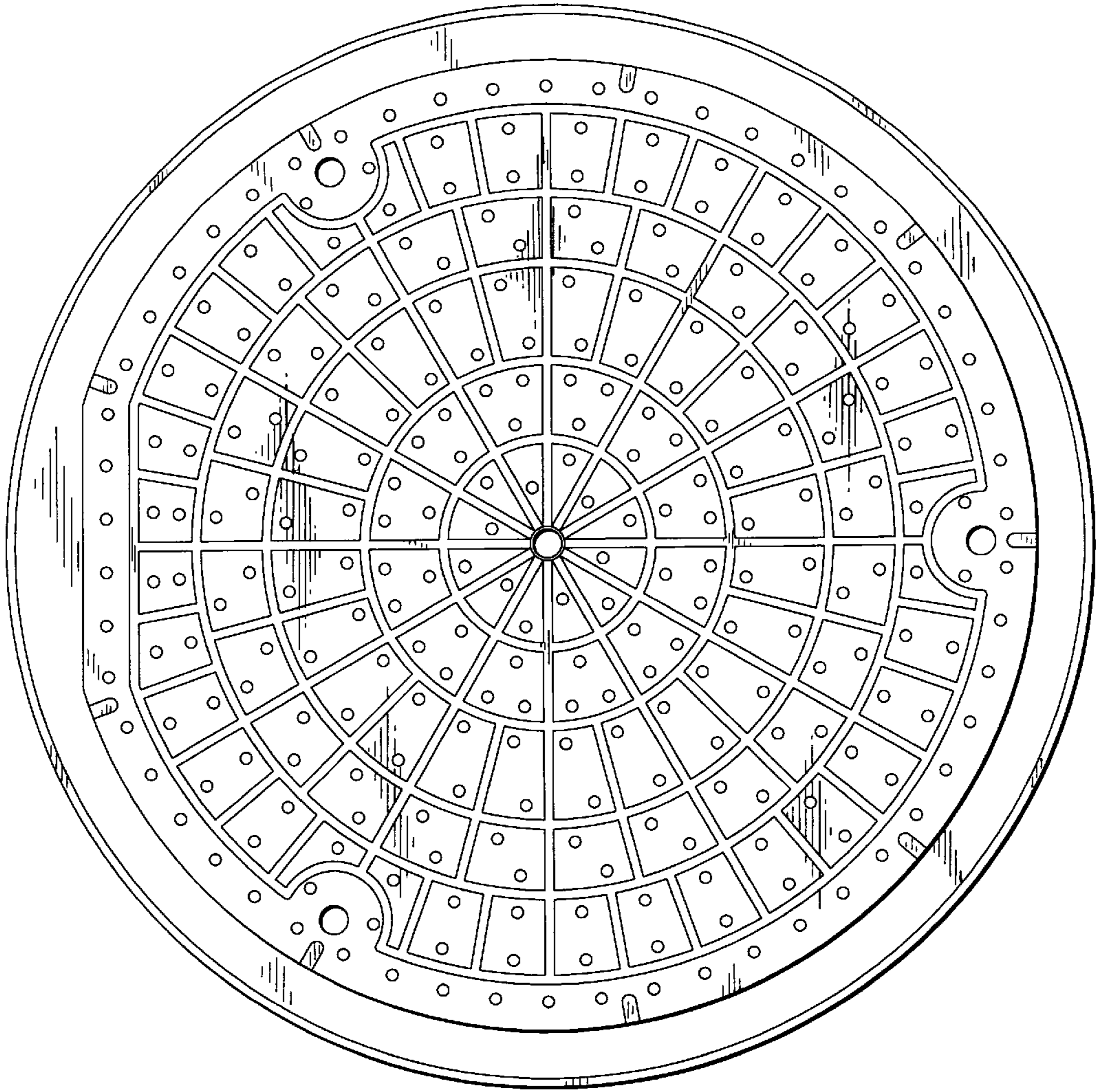


FIG. 2

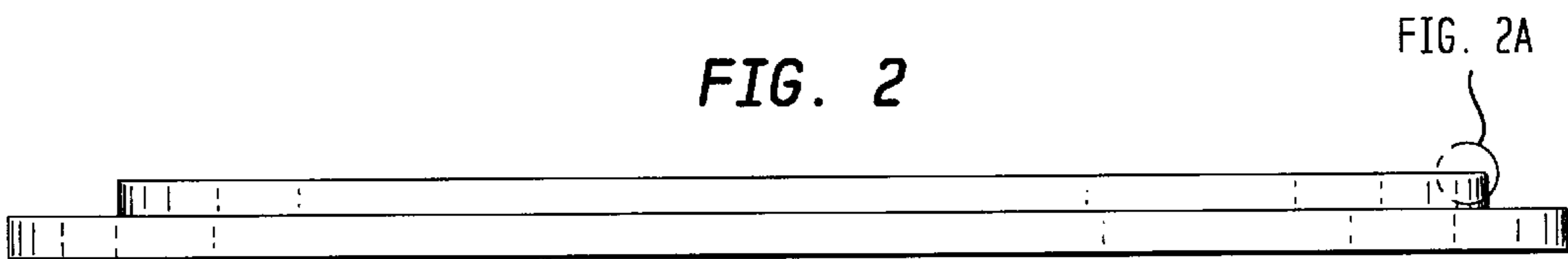


FIG. 2A

FIG. 2A

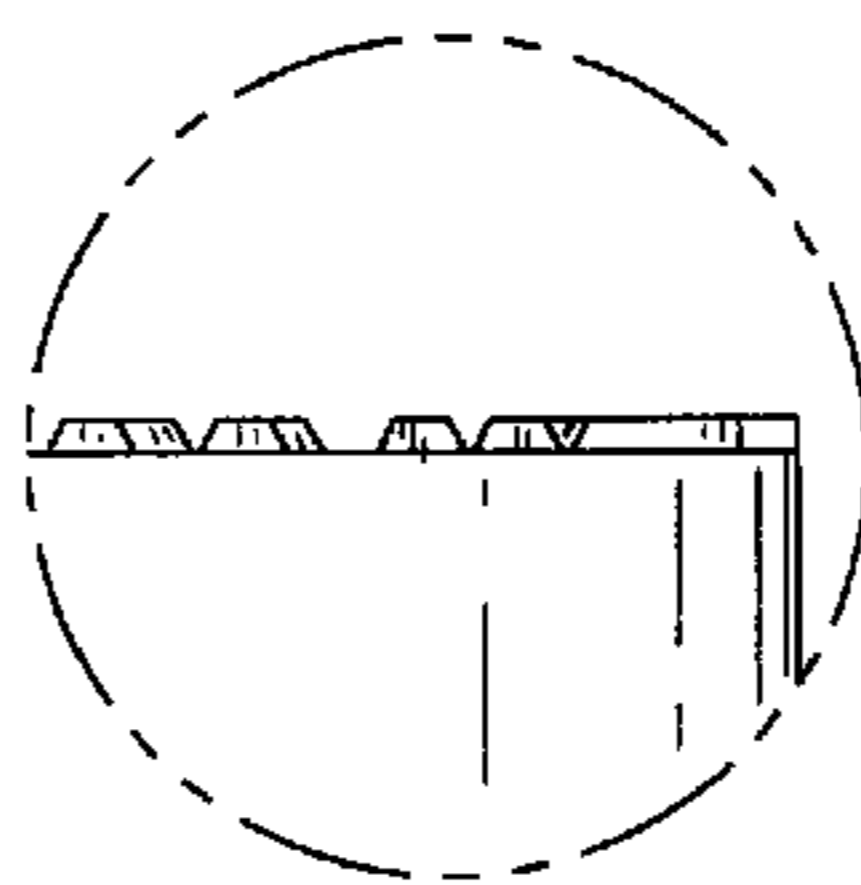


FIG. 3

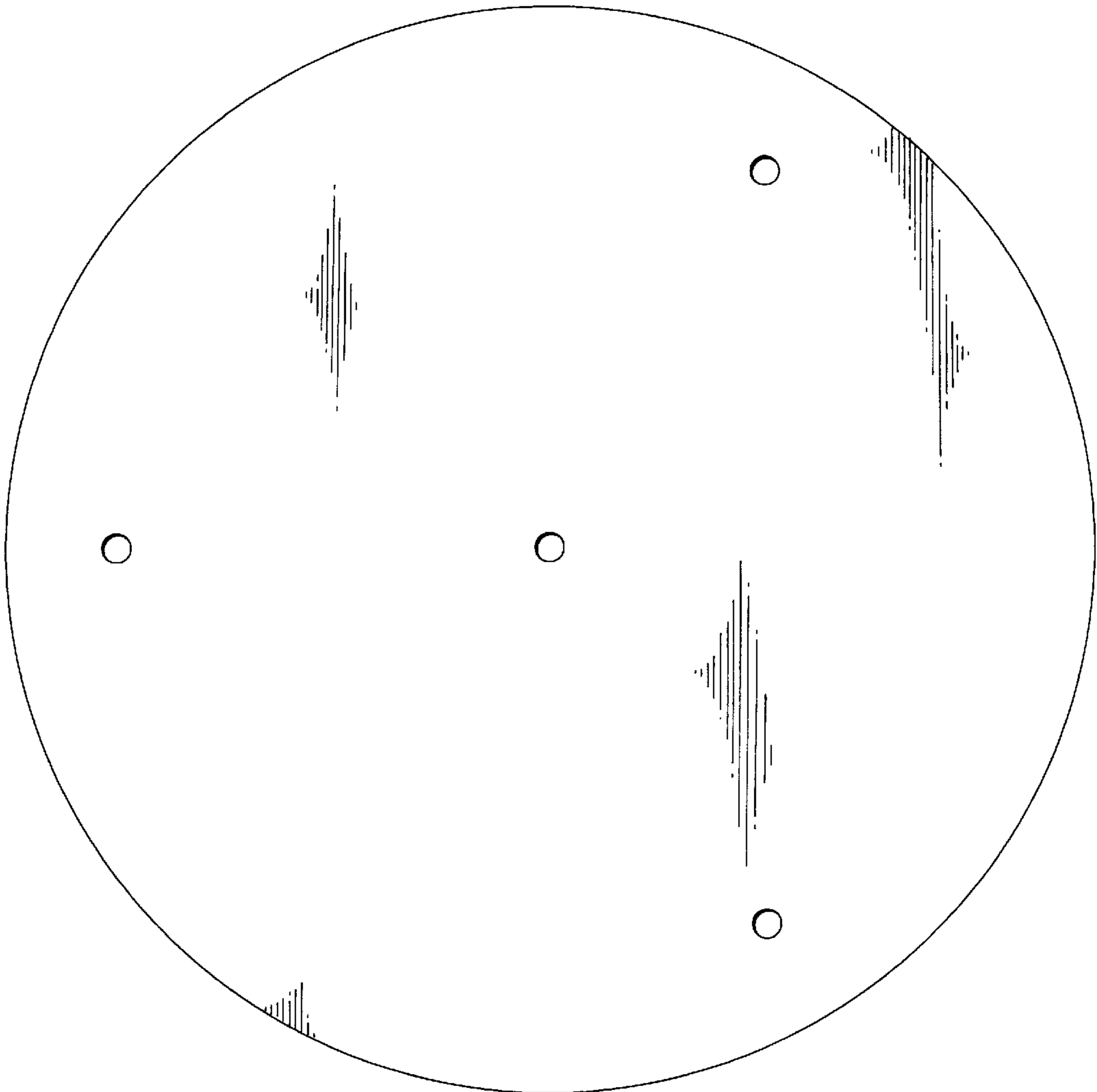


FIG. 4

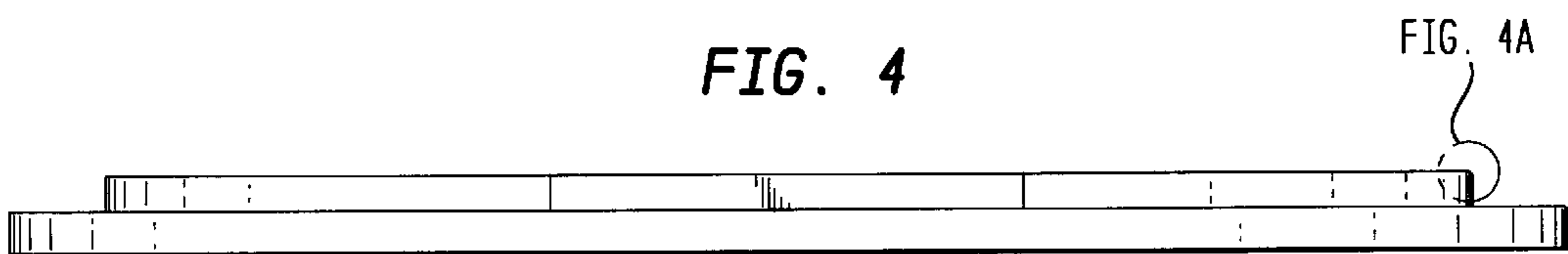


FIG. 4A

FIG. 4A

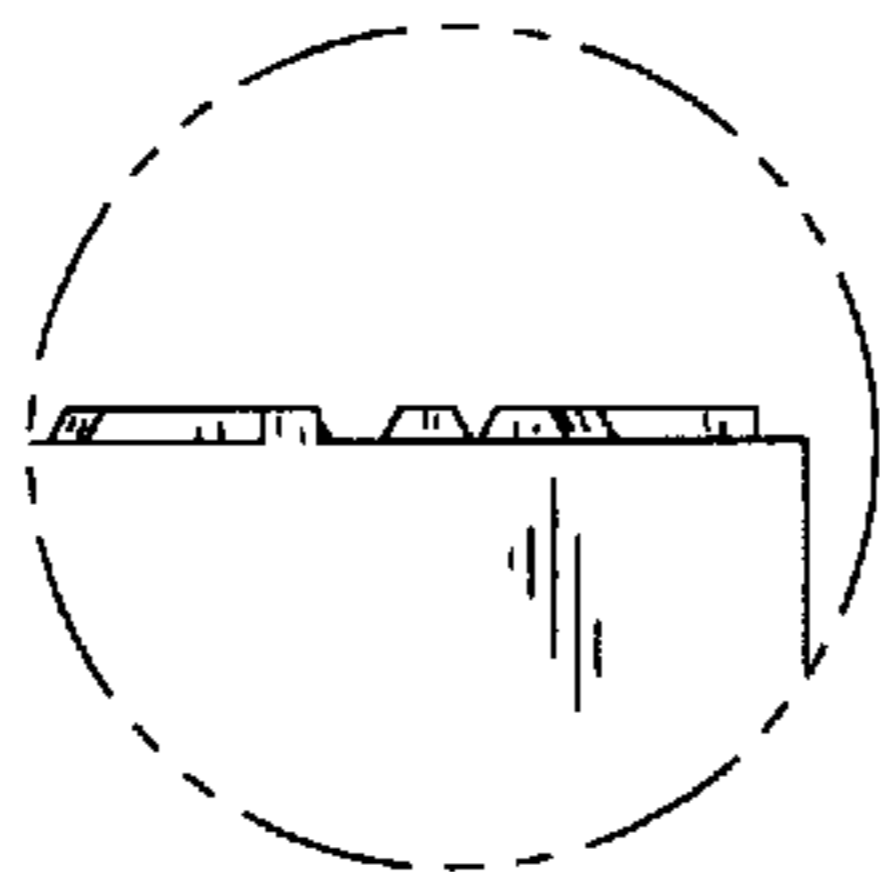


FIG. 5A

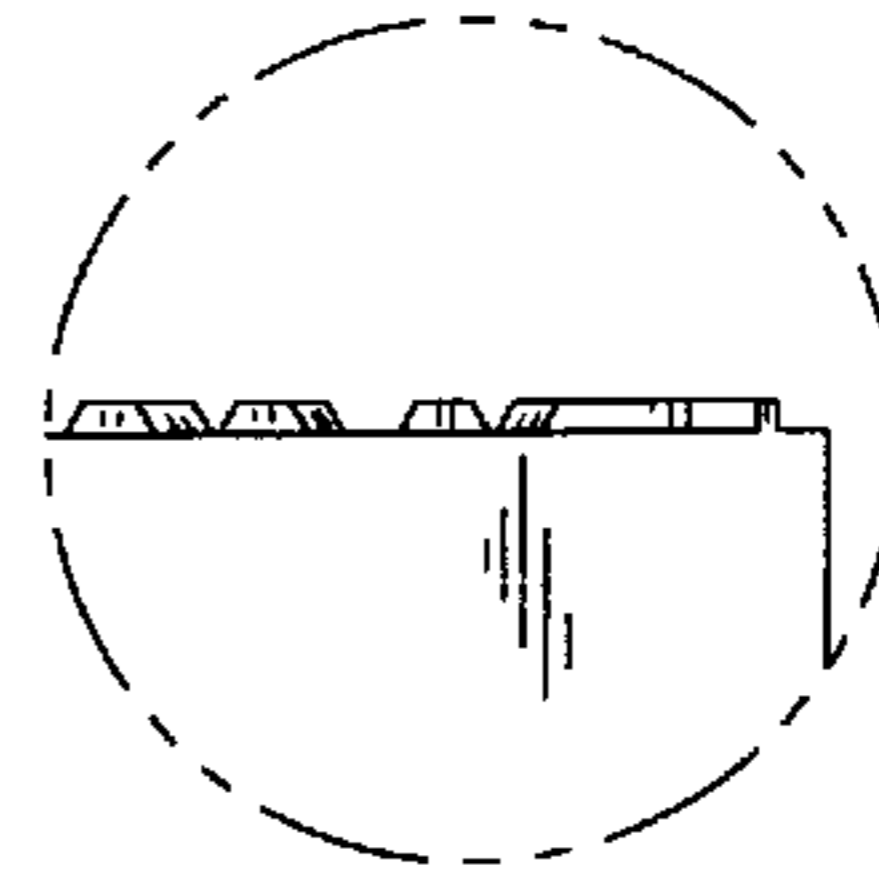


FIG. 5

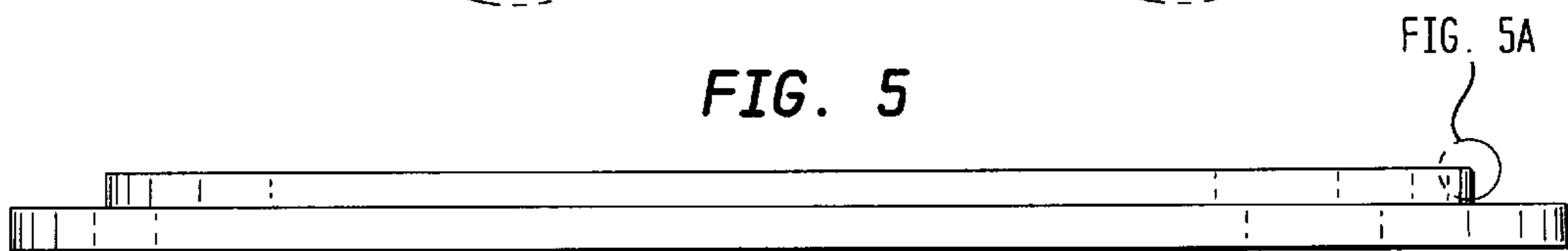


FIG. 5A