US00D859332S

(12) **United States Design Patent** (10) **Patent No.: US D859,332 S**
Yamaki et al. (45) **Date of Patent:** ** ***Sep. 10, 2019**

(54) **ELASTIC MEMBRANE FOR SEMICONDUCTOR WAFER POLISHING**

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(73) Assignee: **EBARA CORPORATION**, Tokyo (JP)

(*) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/630,484**

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(30) **Foreign Application Priority Data**

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Jun. 29, 2017 (JP) 2017-013971

(51) **LOC (12) Cl.** **13-03**
(52) **U.S. Cl.**
USPC **D13/182**
(58) **Field of Classification Search**
USPC D13/182; 451/66, 288, 289
CPC B24B 37/30; B24B 41/061; B24B 49/16
See application file for complete search history.

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Primary Examiner — Selina Sikder
(74) *Attorney, Agent, or Firm* — Pearne & Gordon LLP

(57) **CLAIM**

The ornamental design for an elastic membrane for semiconductor wafer polishing, as shown and described.

DESCRIPTION

FIG. **1** is a top perspective view a first embodiment of an elastic membrane for semiconductor wafer polishing showing our new design;
FIG. **2** is a bottom perspective view thereof;
FIG. **3** is a top plan view thereof;
FIG. **4** is a bottom view thereof;
FIG. **5** is a front view thereof;
FIG. **6** is a side view thereof;
FIG. **7** is a cross sectional view taken along section line **7-7** in FIG. **3** thereof;
FIG. **8** is an enlarged portion view of section **8** in FIG. **7** thereof;
FIG. **9** is a top perspective view a second embodiment of an elastic membrane for semiconductor wafer polishing showing our new design;
FIG. **10** is a bottom perspective view thereof;
FIG. **11** is a top plan view thereof;
FIG. **12** is a bottom view thereof;
FIG. **13** is a front view thereof;
FIG. **14** is a side view thereof;
FIG. **15** is a cross sectional view taken along section line **15-15** in FIG. **11** thereof; and,
FIG. **16** is an enlarged portion view of section **16** in FIG. **15** thereof.

1 Claim, 8 Drawing Sheets

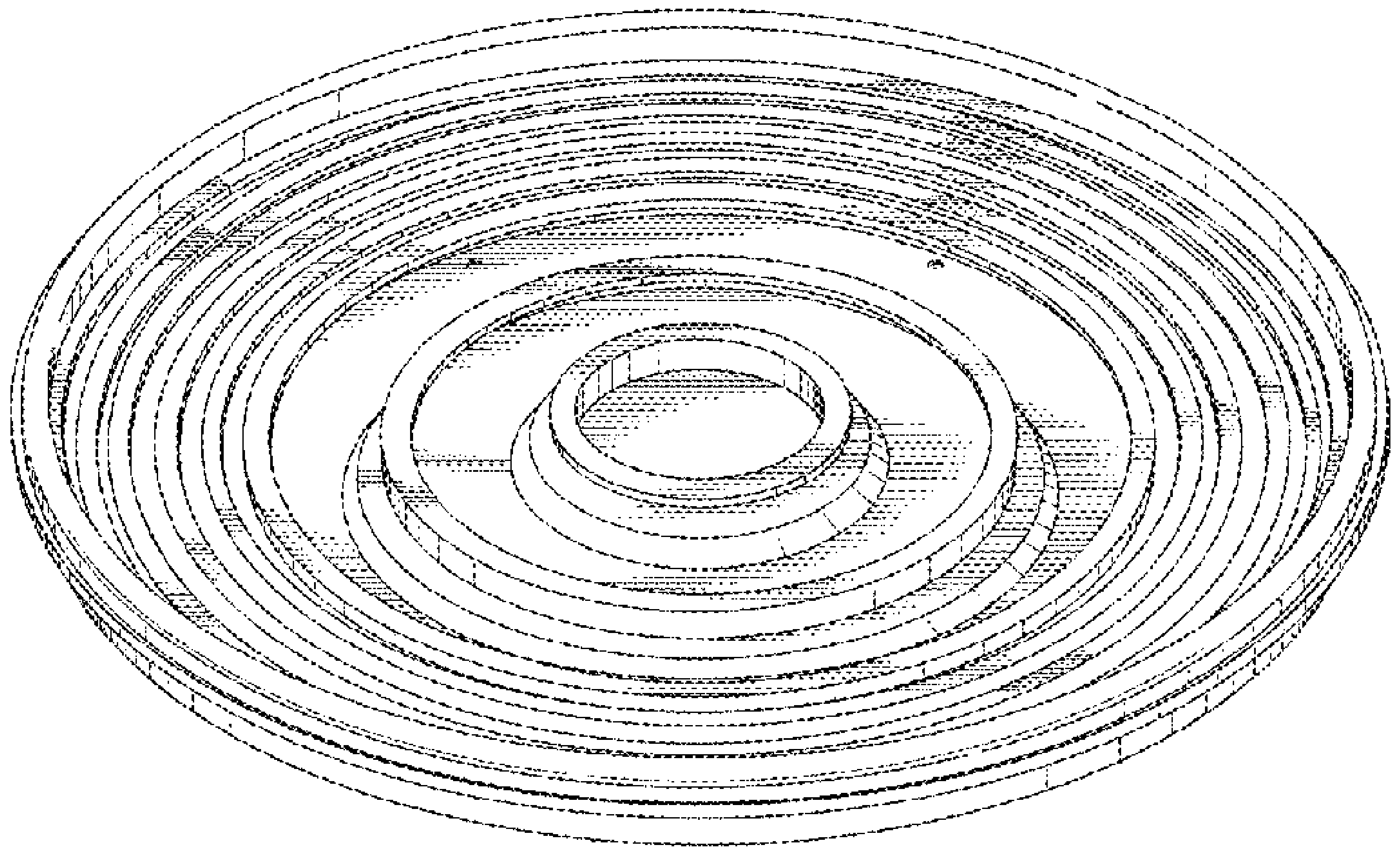

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FIG. 1

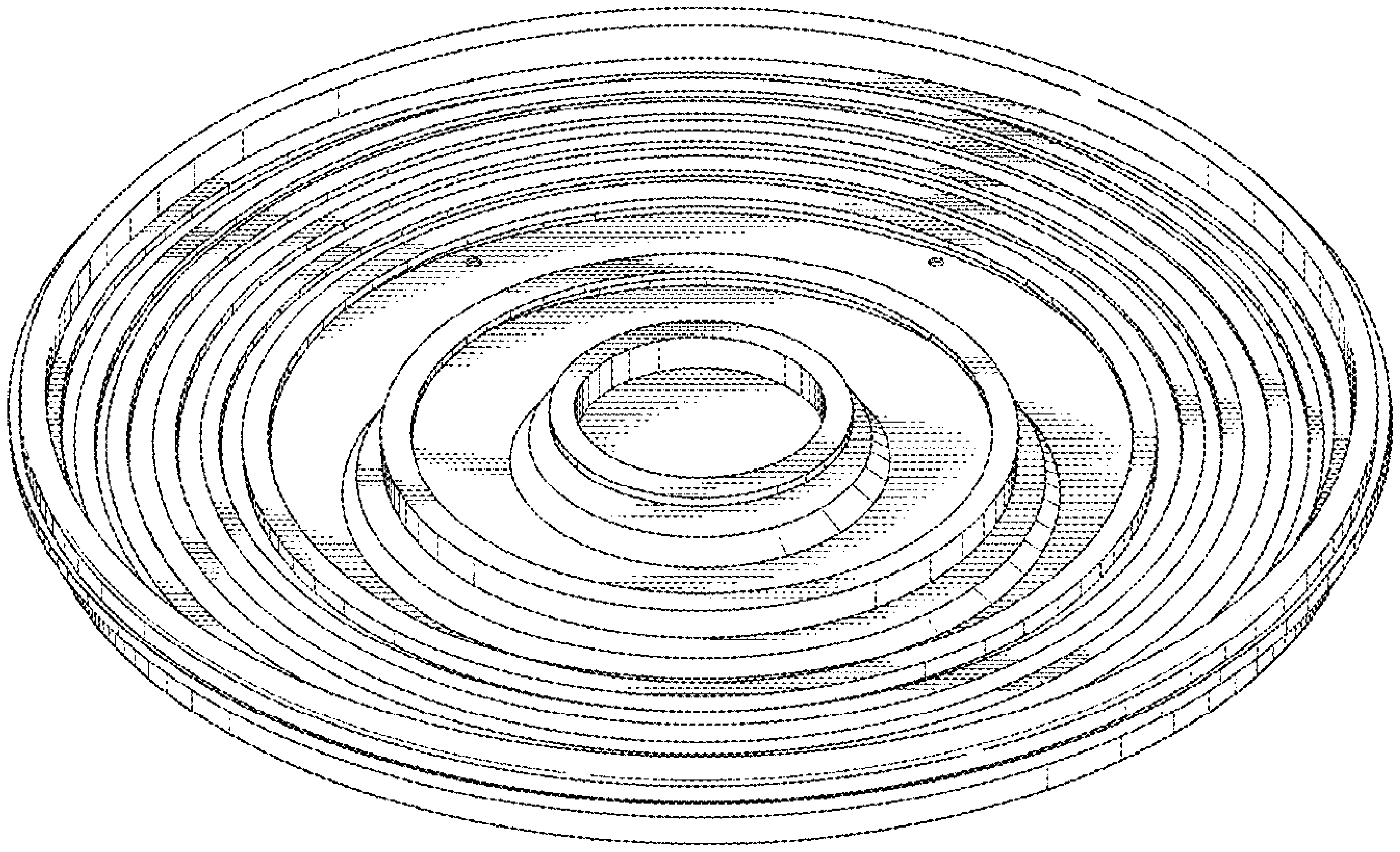

FIG. 2

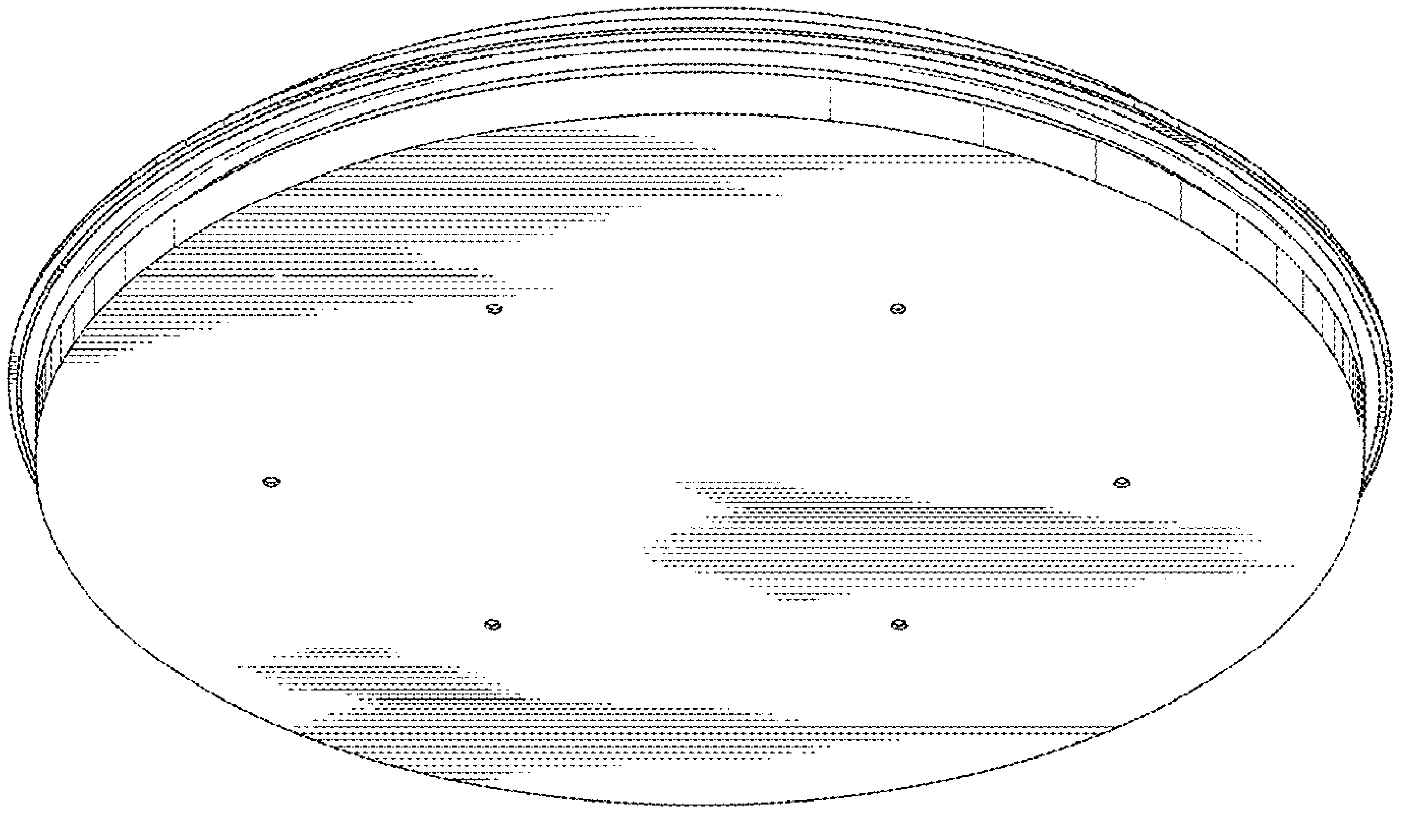

FIG. 3

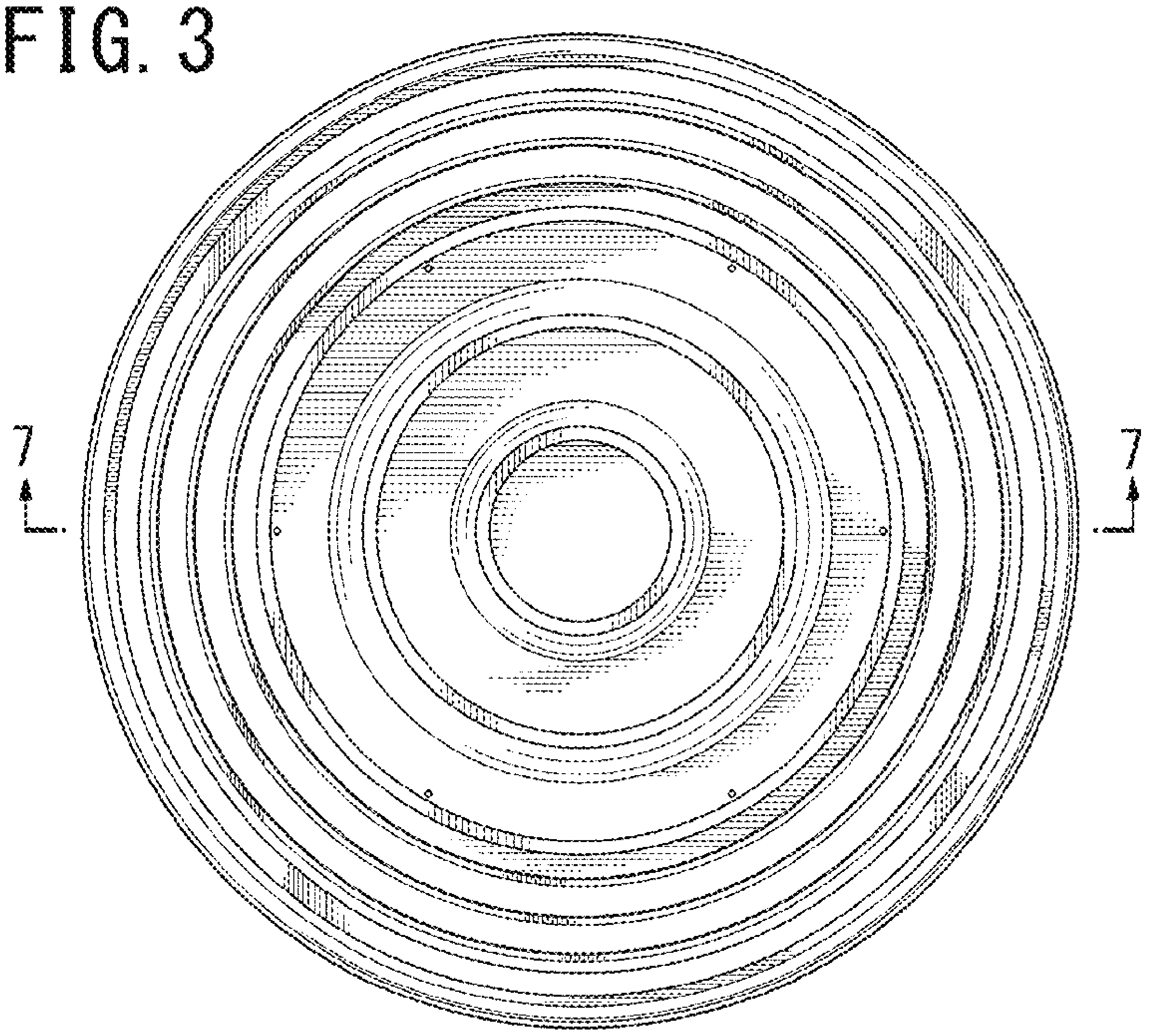

FIG. 4

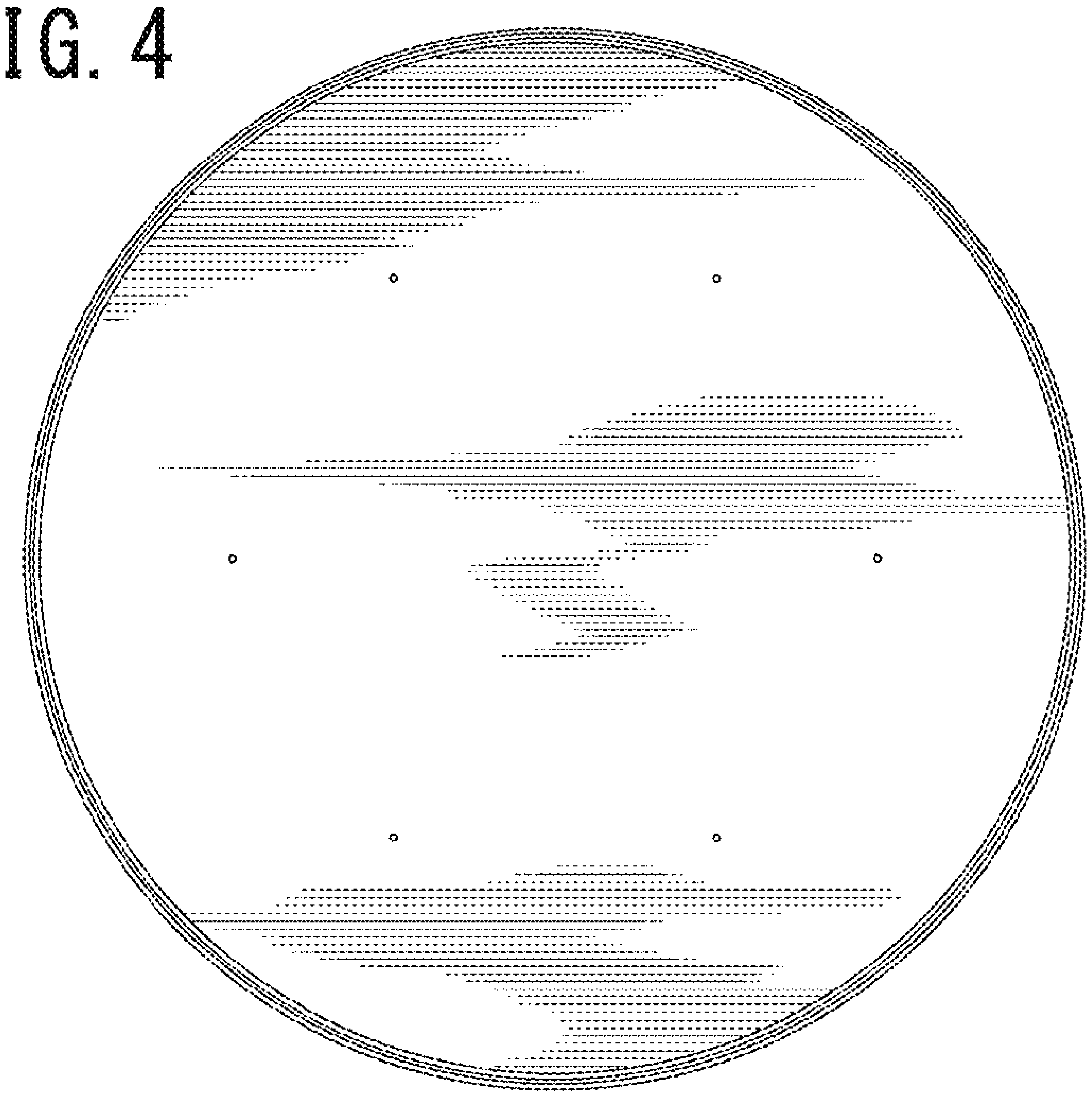

FIG. 5

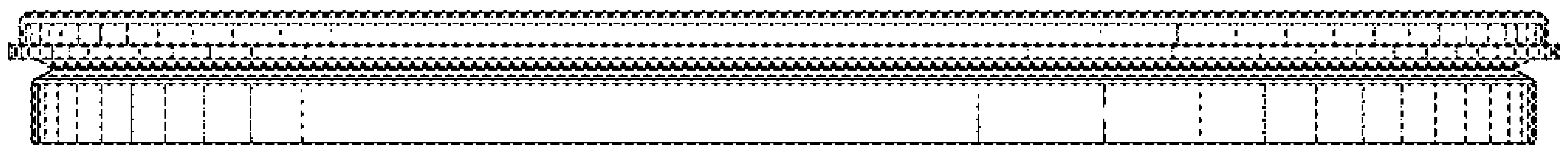

FIG. 6

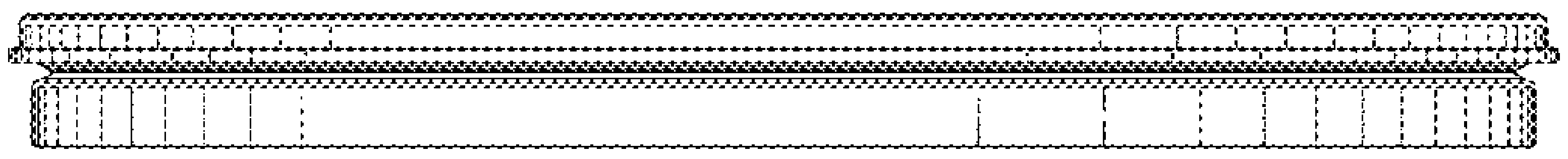

FIG. 7

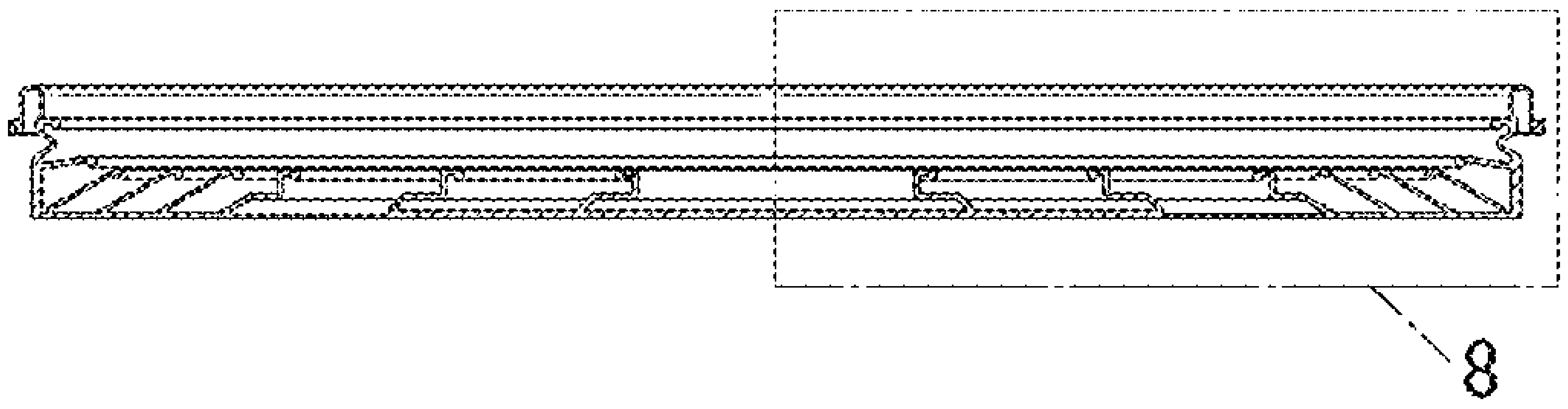

FIG. 8

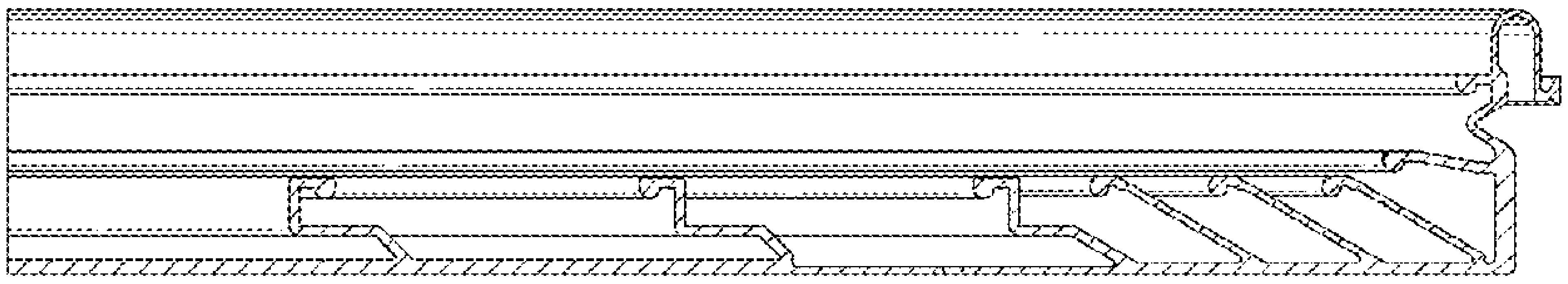

FIG. 9

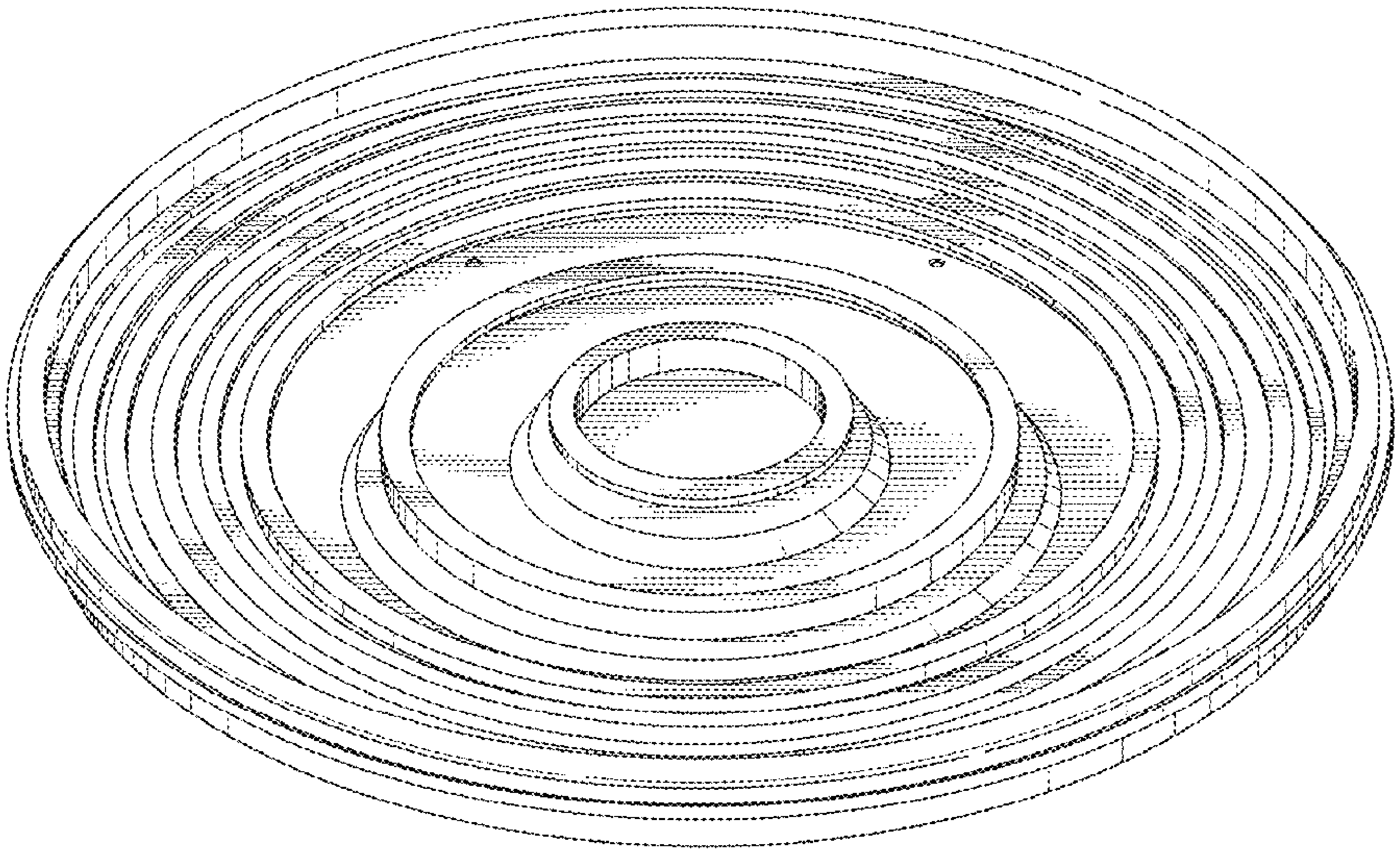

FIG. 10

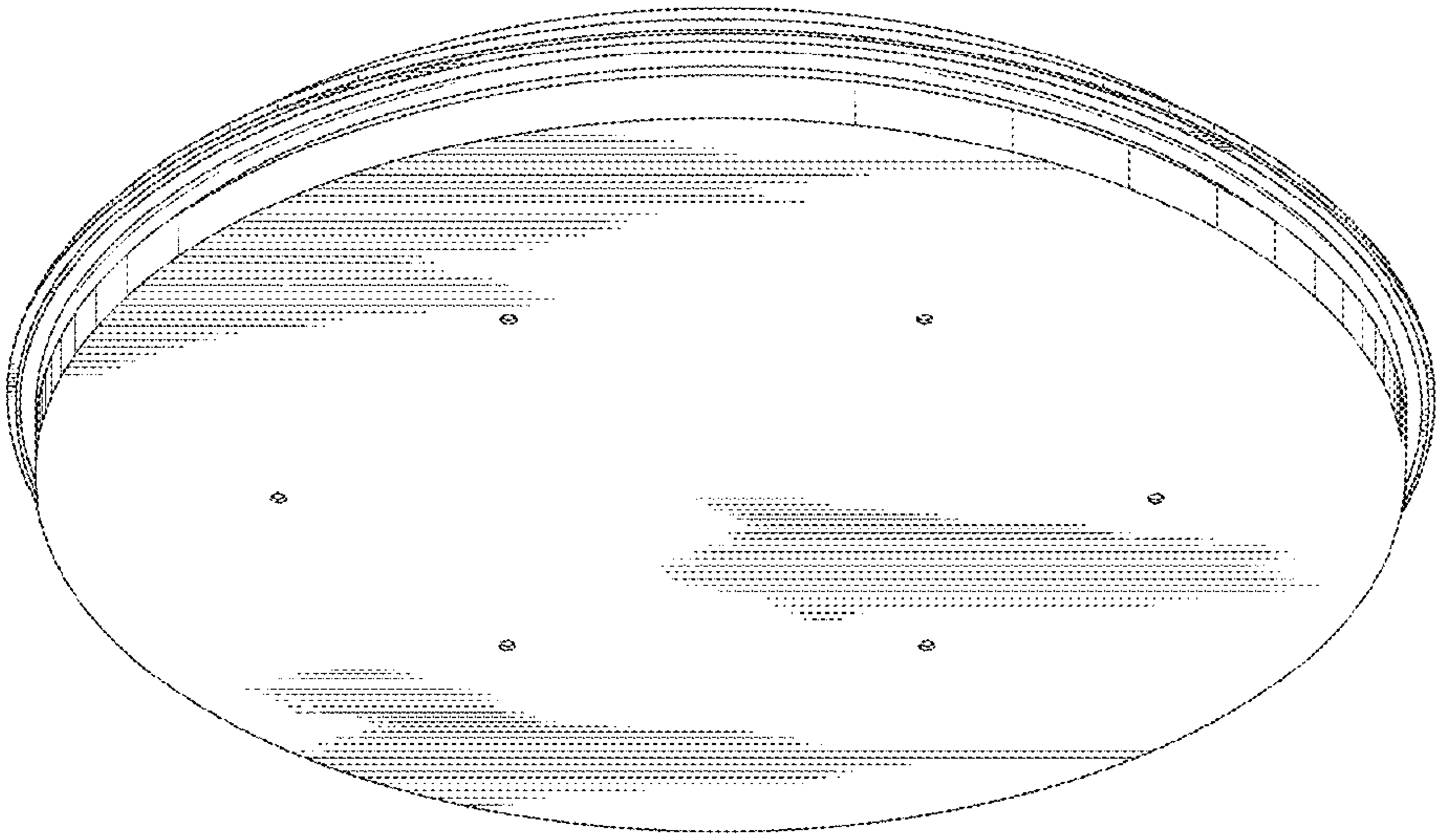

FIG. 11

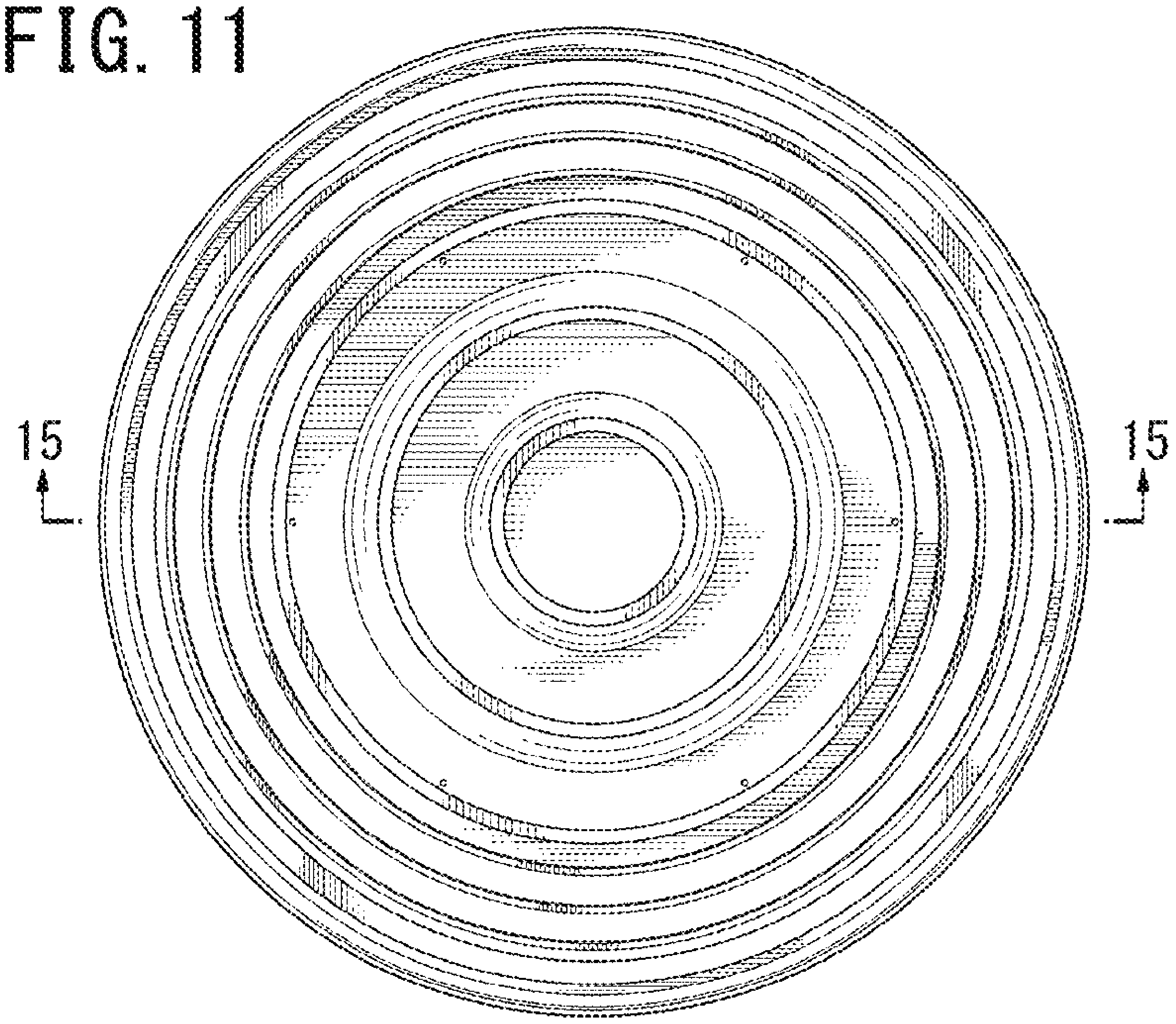

FIG. 12

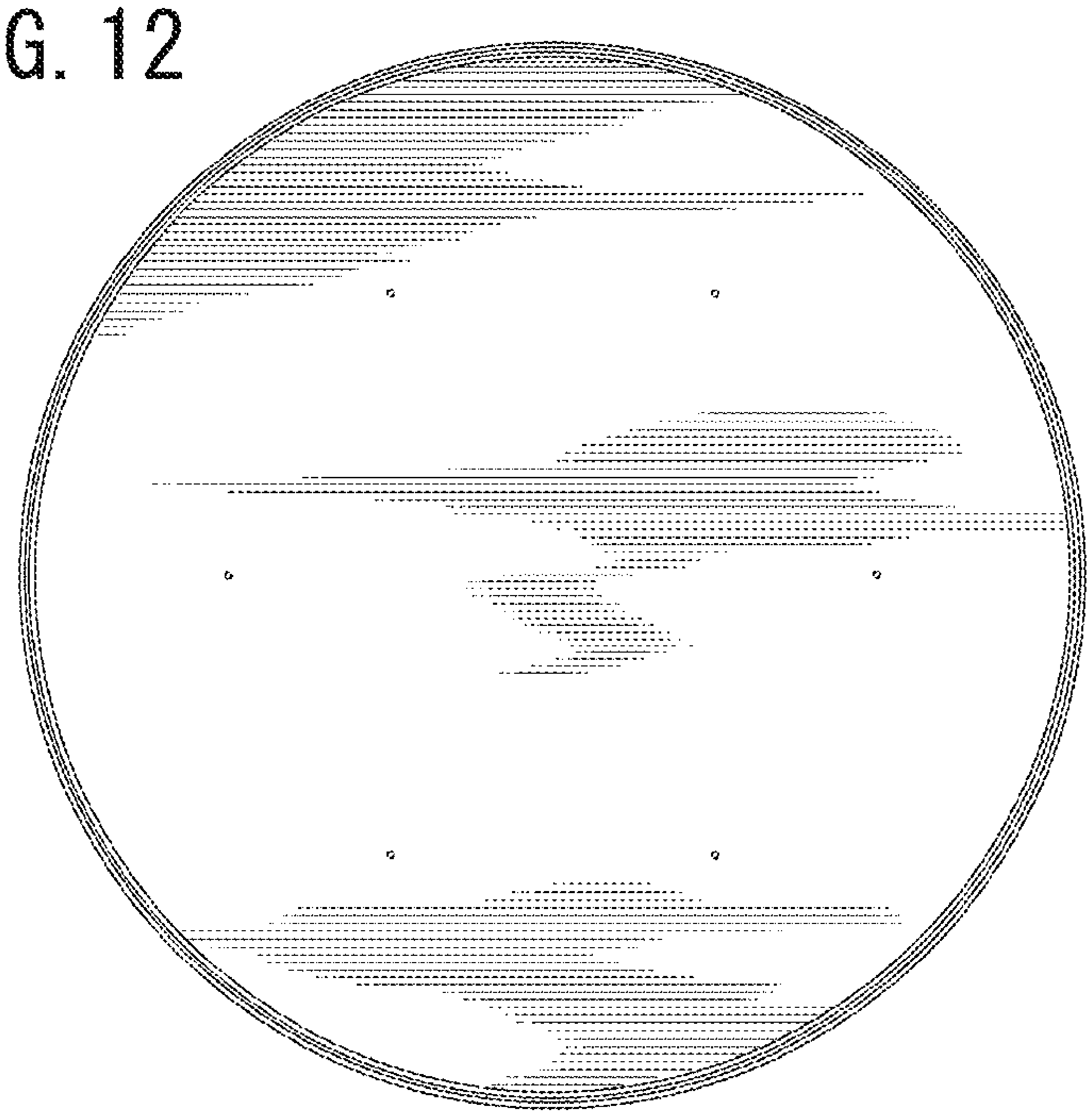

FIG. 13

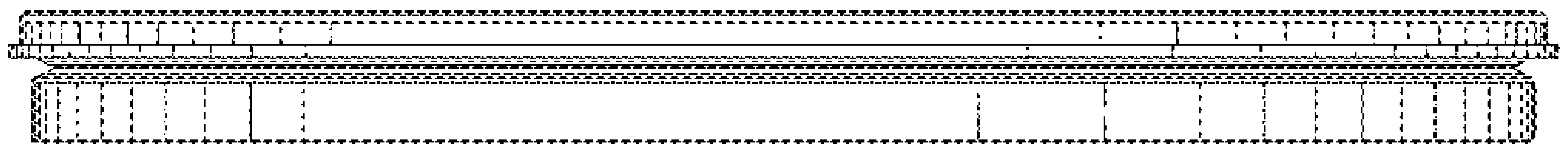

FIG. 14

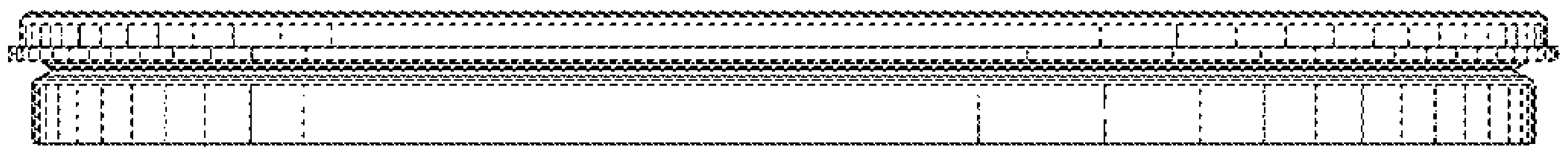

FIG. 15

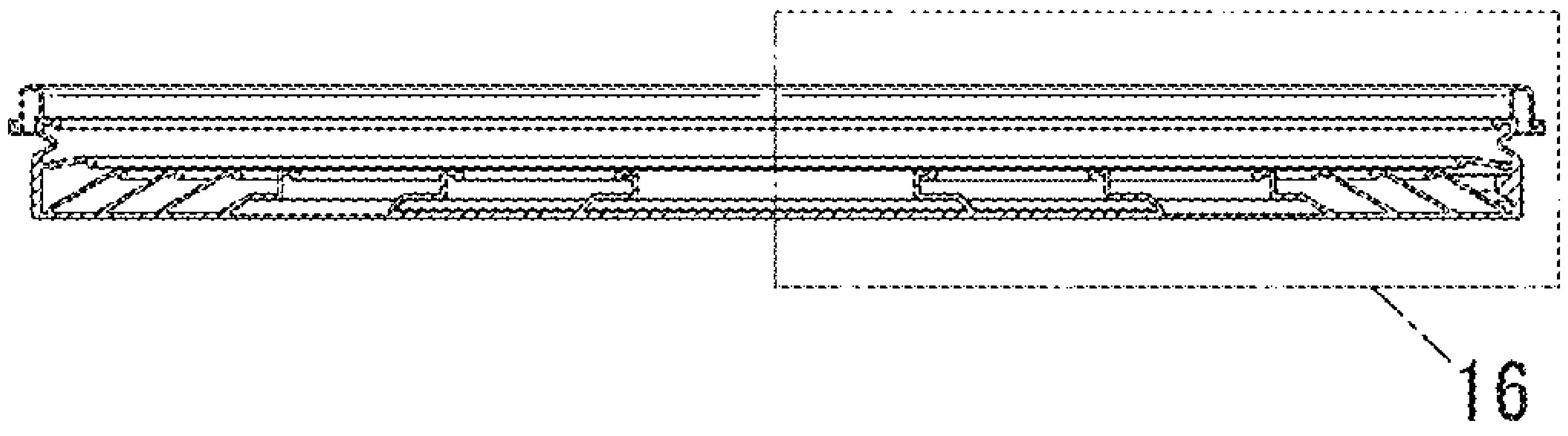

FIG. 16