



US00D648289S

(12) **United States Design Patent**
Mayer et al.(10) **Patent No.:** **US D648,289 S**
(45) **Date of Patent:** ** *Nov. 8, 2011(54) **ELECTROPLATING FLOW SHAPING PLATE HAVING OFFSET SPIRAL HOLE PATTERN**(75) Inventors: **Steven T. Mayer**, Lake Oswego, OR (US); **David Porter**, Sherwood, OR (US); **Robert Rash**, Portland, OR (US)(73) Assignee: **Novellus Systems, Inc.**, San Jose, CA (US)

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

(**) Term: **14 Years**(21) Appl. No.: **29/377,521**(22) Filed: **Oct. 21, 2010**(51) LOC (9) Cl. **13-03**(52) U.S. Cl. **D13/182**

(58) Field of Classification Search D13/182; 205/82, 96, 157; 204/297.01, 297.05, 230.2, 204/252, 261, 273; 257/E21.175

See application file for complete search history.

(56)

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Primary Examiner — Selina Sikder(74) *Attorney, Agent, or Firm* — Weaver Austin Villeneuve & Sampson LLP**(57) CLAIM**

We claim the ornamental design for an electroplating flow shaping plate having offset spiral hole pattern, as shown and described.

DESCRIPTION

FIG. 1 is a front plan view of an electroplating flow shaping plate having offset spiral hole pattern showing an embodiment of our new design;

FIG. 2 is a bottom view thereof;

FIG. 3 is a right side elevational view thereof, the left, top and bottom side elevational views being identical images thereof;

FIG. 4 is a front perspective view thereof; and

FIG. 5 is a rear perspective view thereof.

FIG. 6 is a front plan view of an electroplating flow shaping plate having offset spiral hole pattern showing a second embodiment of our new design;

FIG. 7 is a bottom view thereof;

FIG. 8 is a right side elevational view thereof, the left, top and bottom side elevational views being identical images thereof;

FIG. 9 is a front perspective view thereof; and

FIG. 10 is a rear perspective view thereof.

FIG. 11 is a front plan view of an electroplating flow shaping plate having offset spiral hole pattern showing a third embodiment of our new design;

FIG. 12 is a bottom view thereof; and

FIG. 13 is a right side elevational view thereof, the left, top and bottom side elevational views being identical images thereof;

FIG. 14 is a front perspective view thereof; and

FIG. 15 is a rear perspective view thereof.

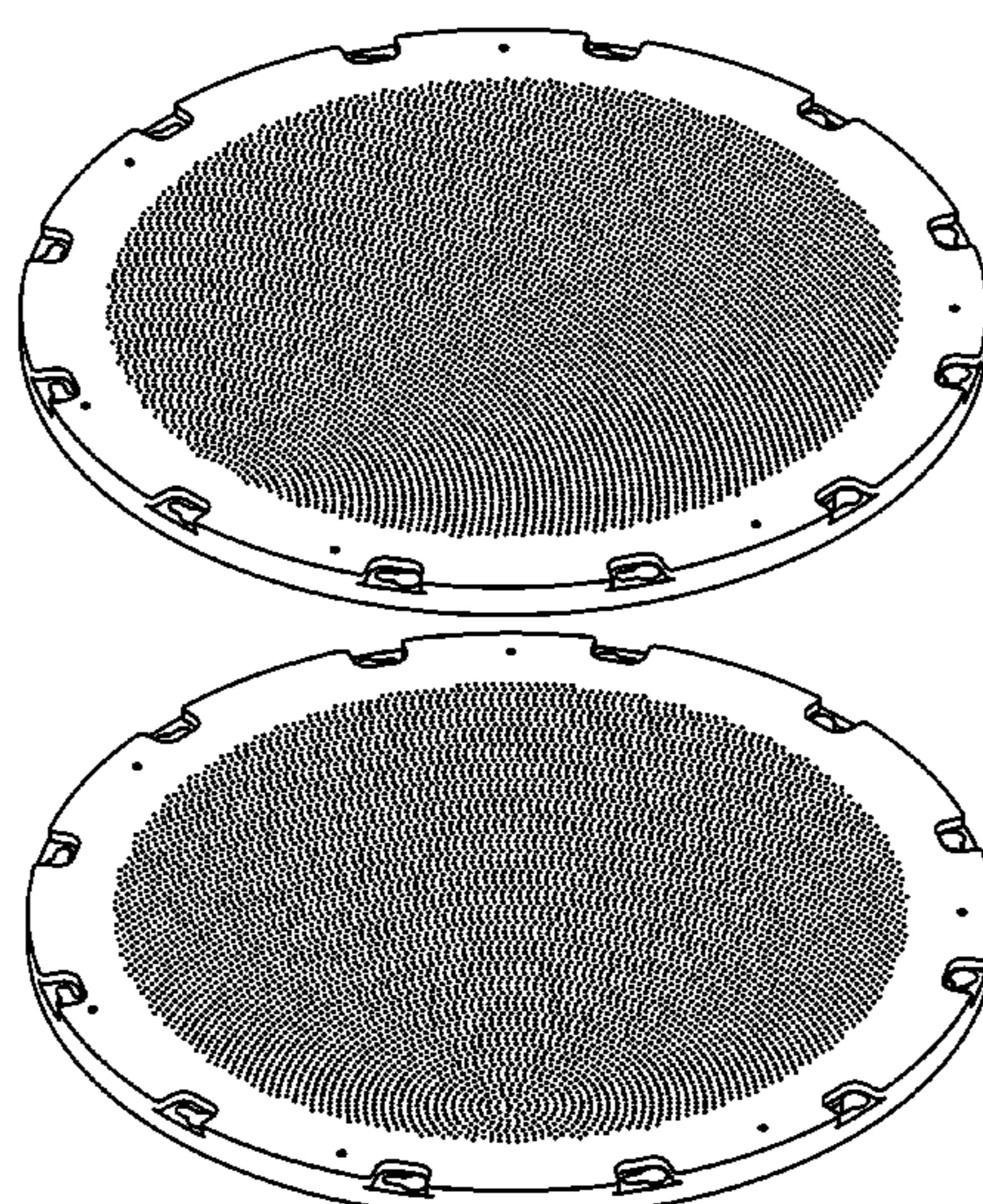
FIG. 16 is a front plan view of an electroplating flow shaping plate having offset spiral hole pattern showing a fourth embodiment of our new design;

FIG. 17 is a bottom view thereof; and

FIG. 18 is a right side elevational view thereof, the left, top and bottom side elevational views being identical images thereof;

FIG. 19 is a front perspective view thereof; and,

FIG. 20 is a rear perspective view thereof.

1 Claim, 16 Drawing Sheets

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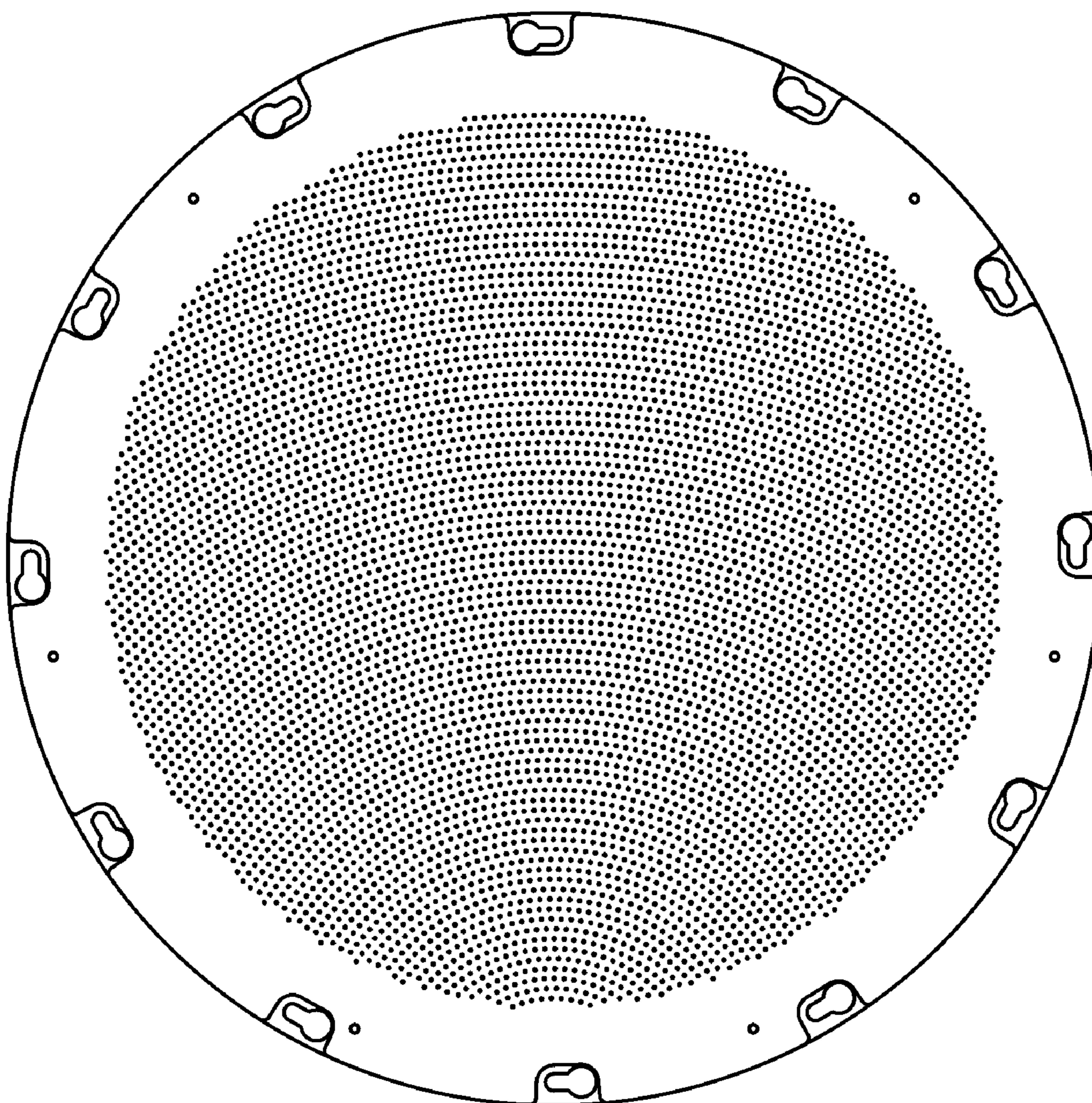


Fig. 1

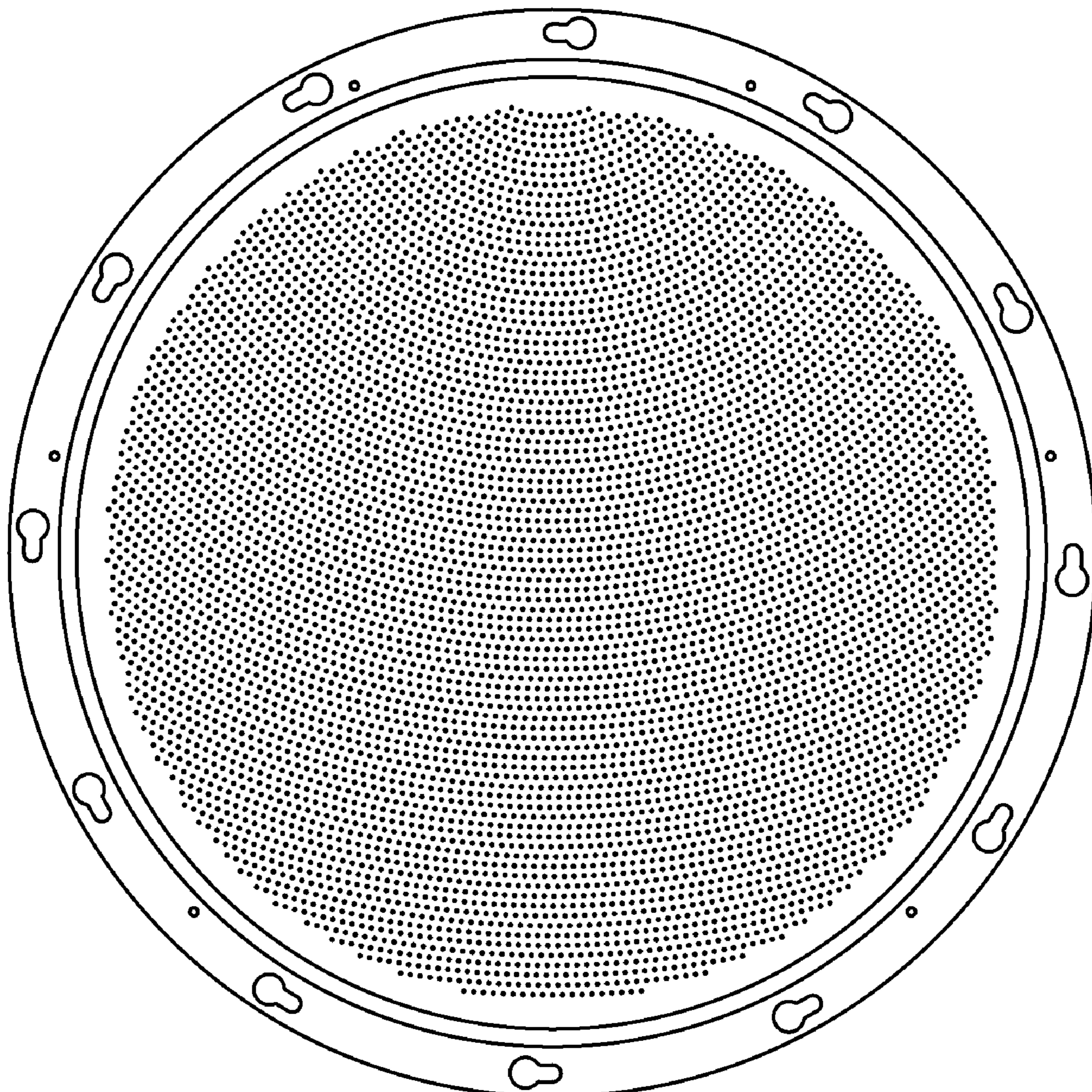


Fig. 2

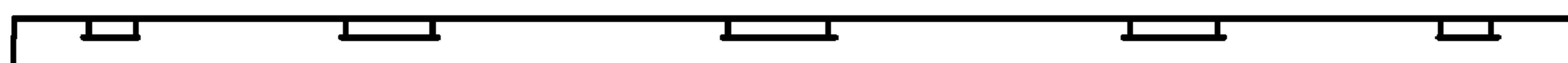


Fig. 3

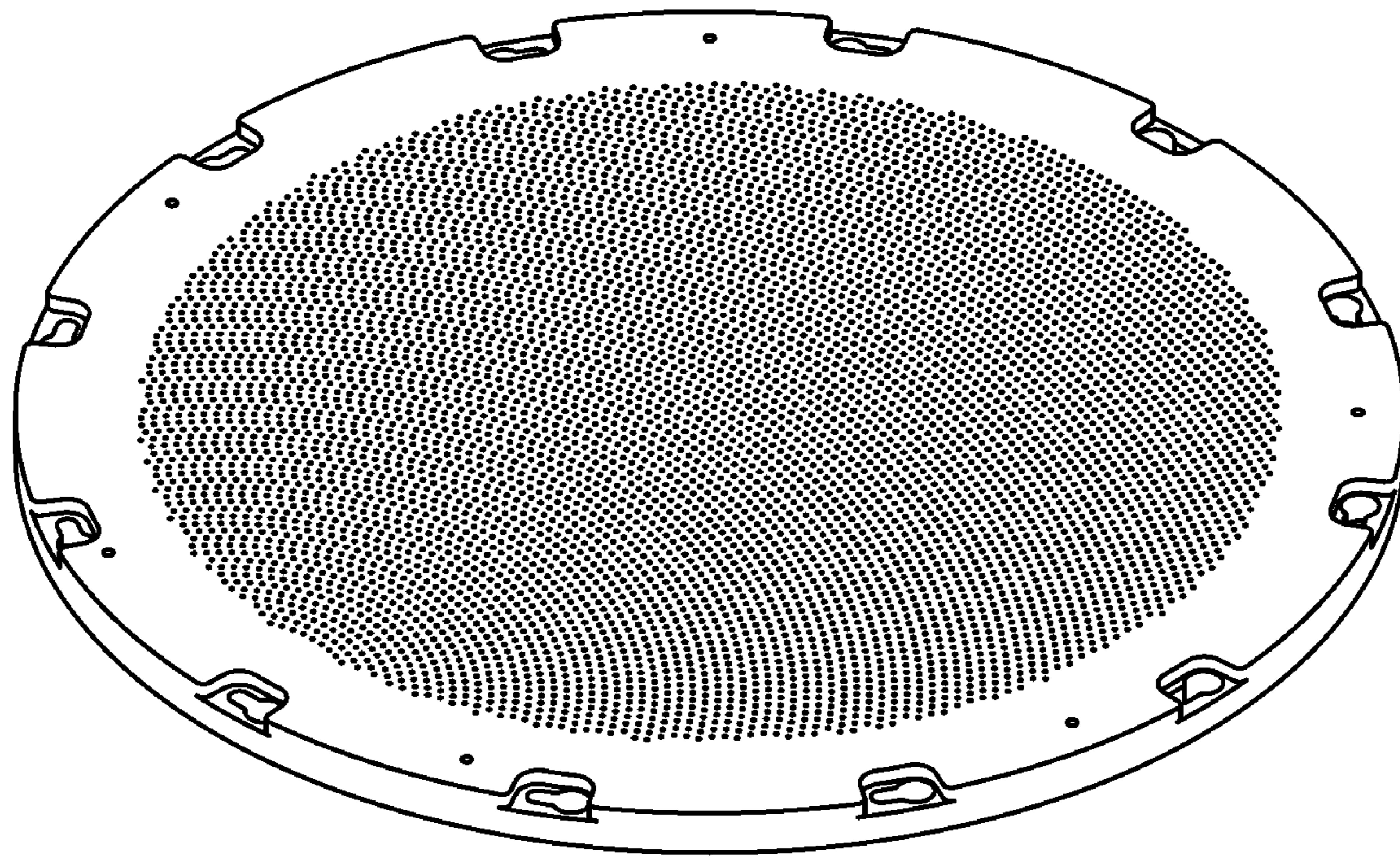


Fig. 4

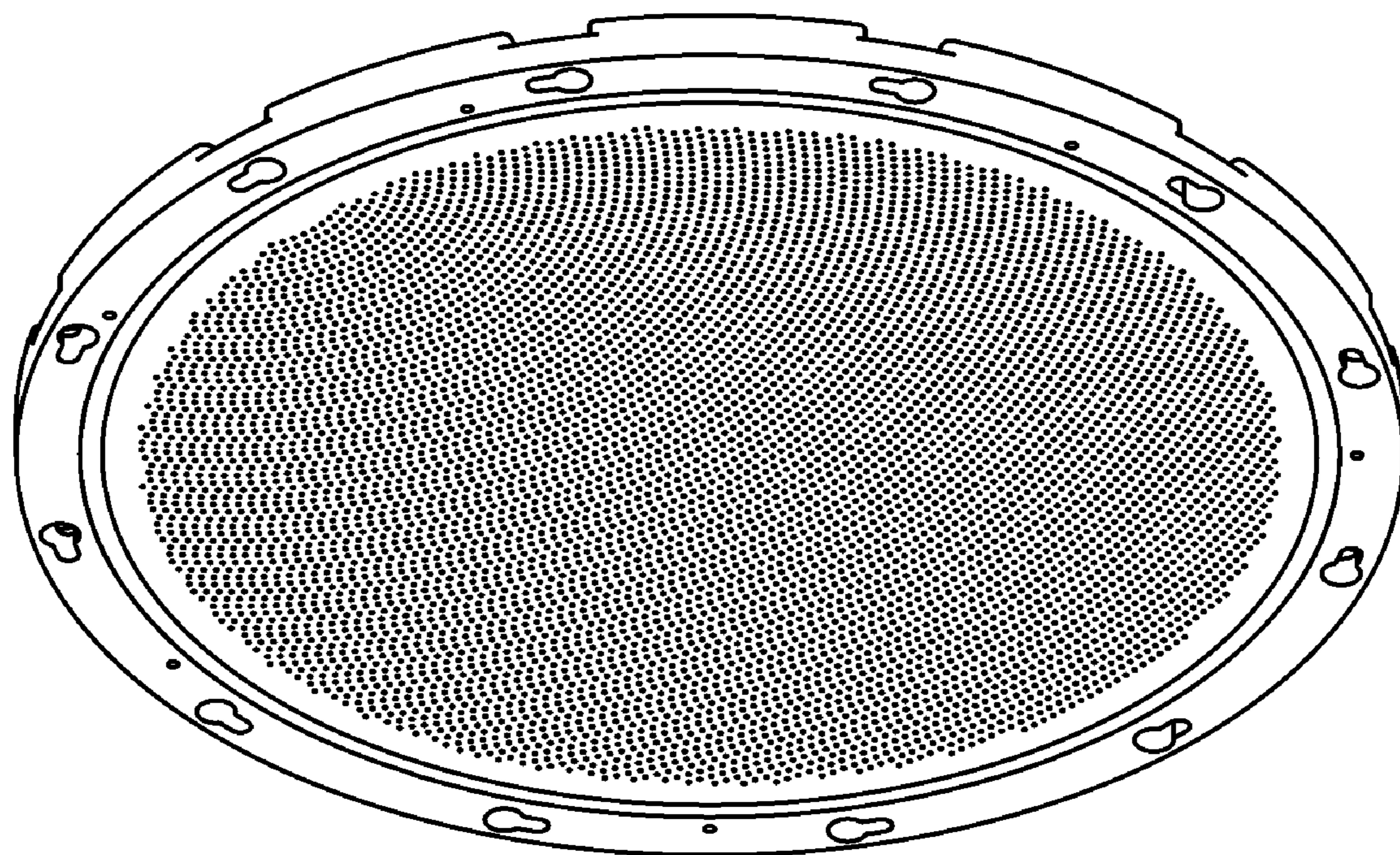


Fig. 5

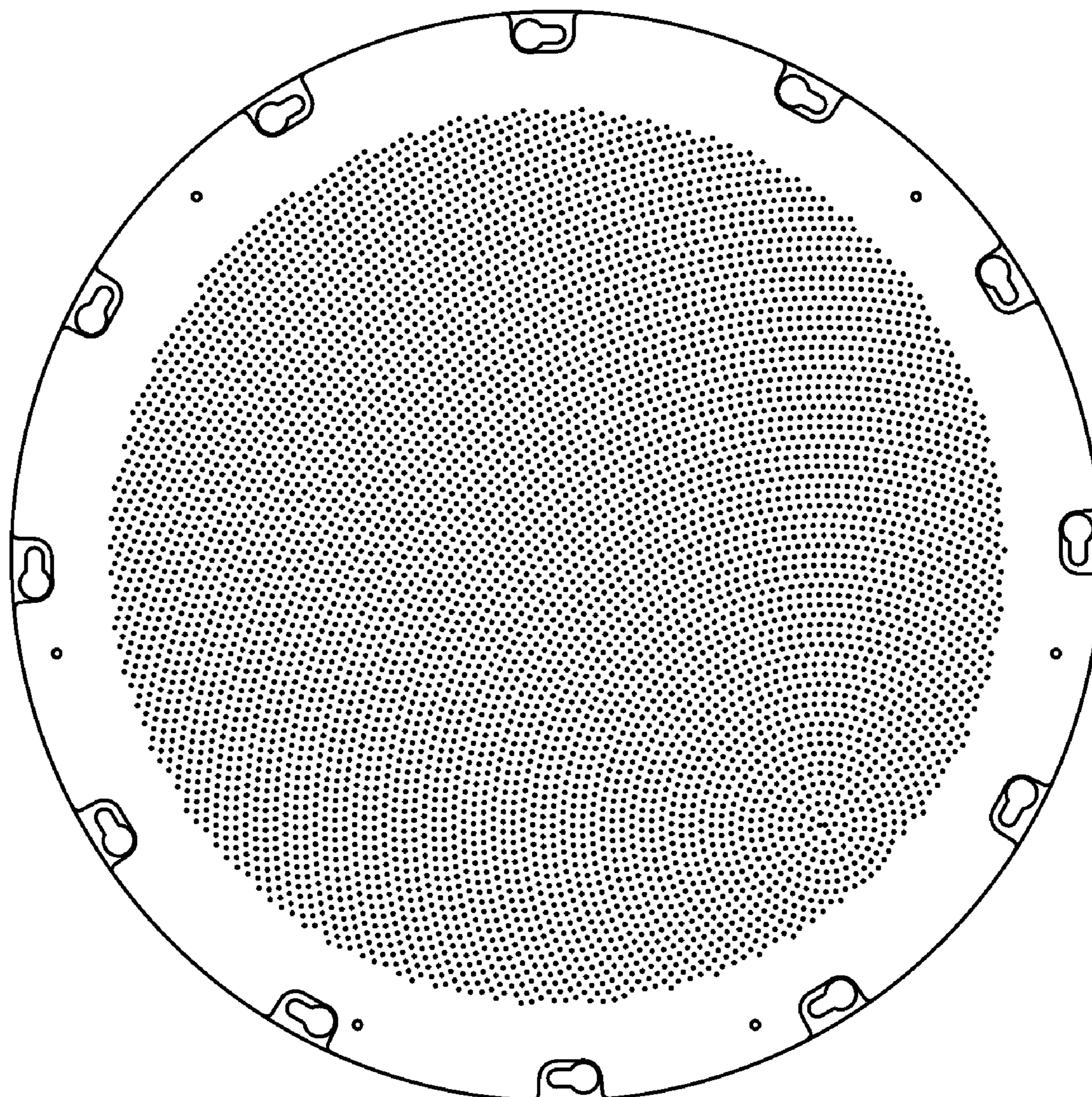


Fig. 6

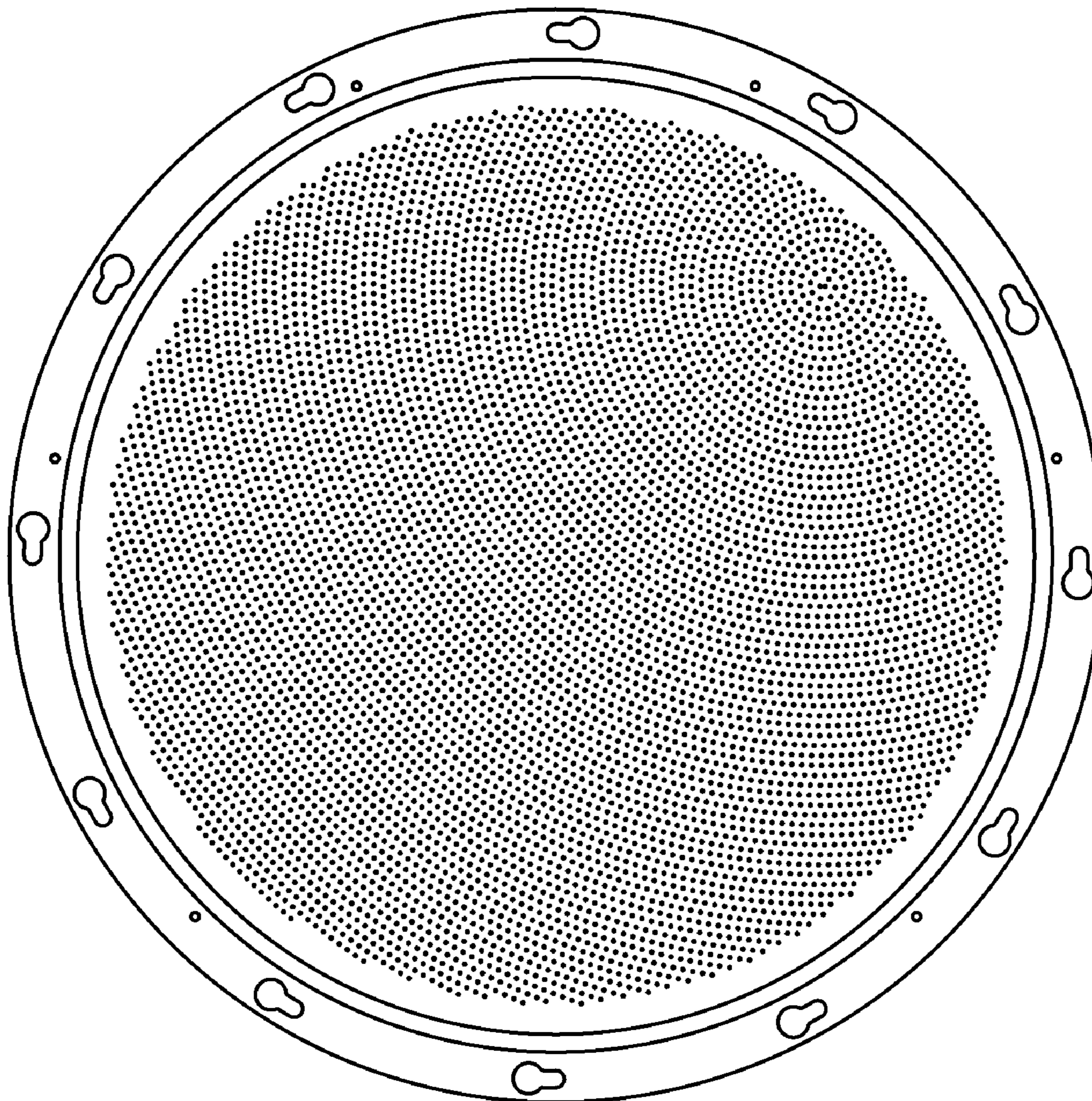


Fig. 7

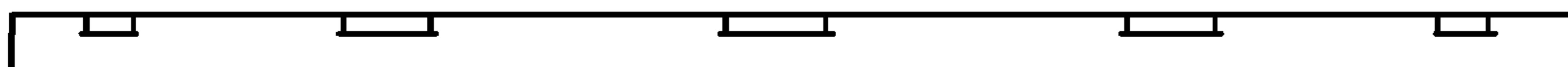


Fig. 8

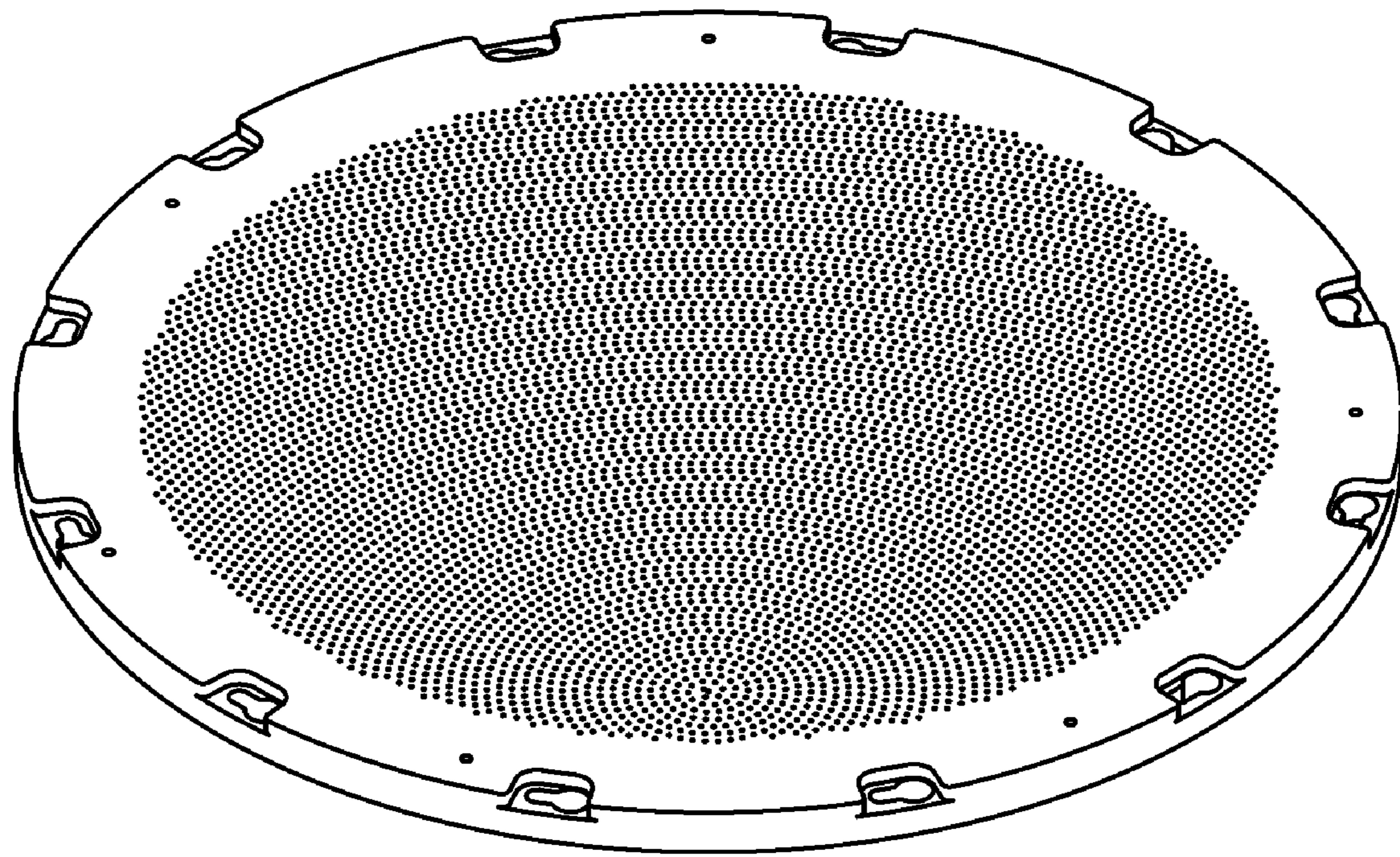


Fig. 9

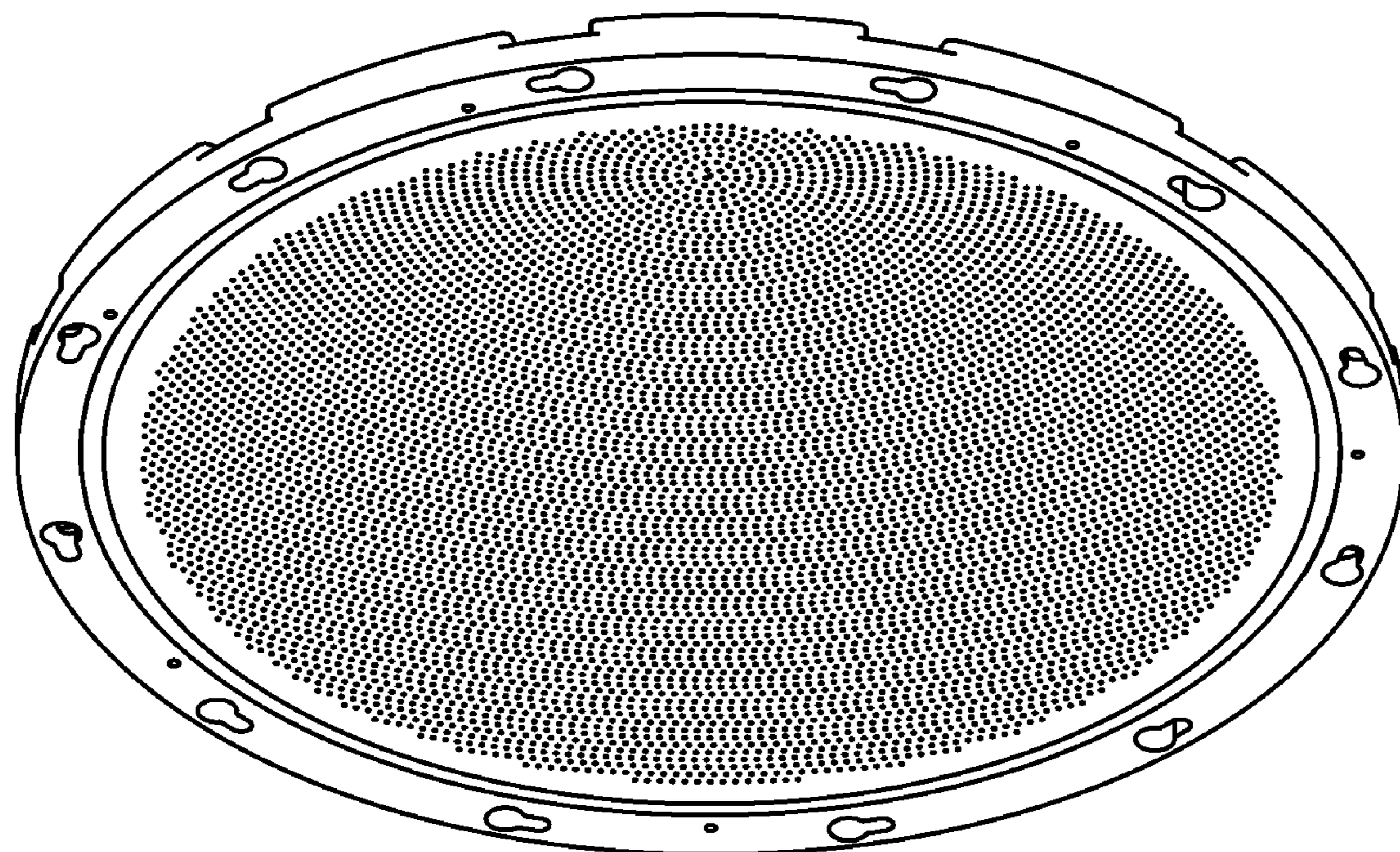


Fig. 10

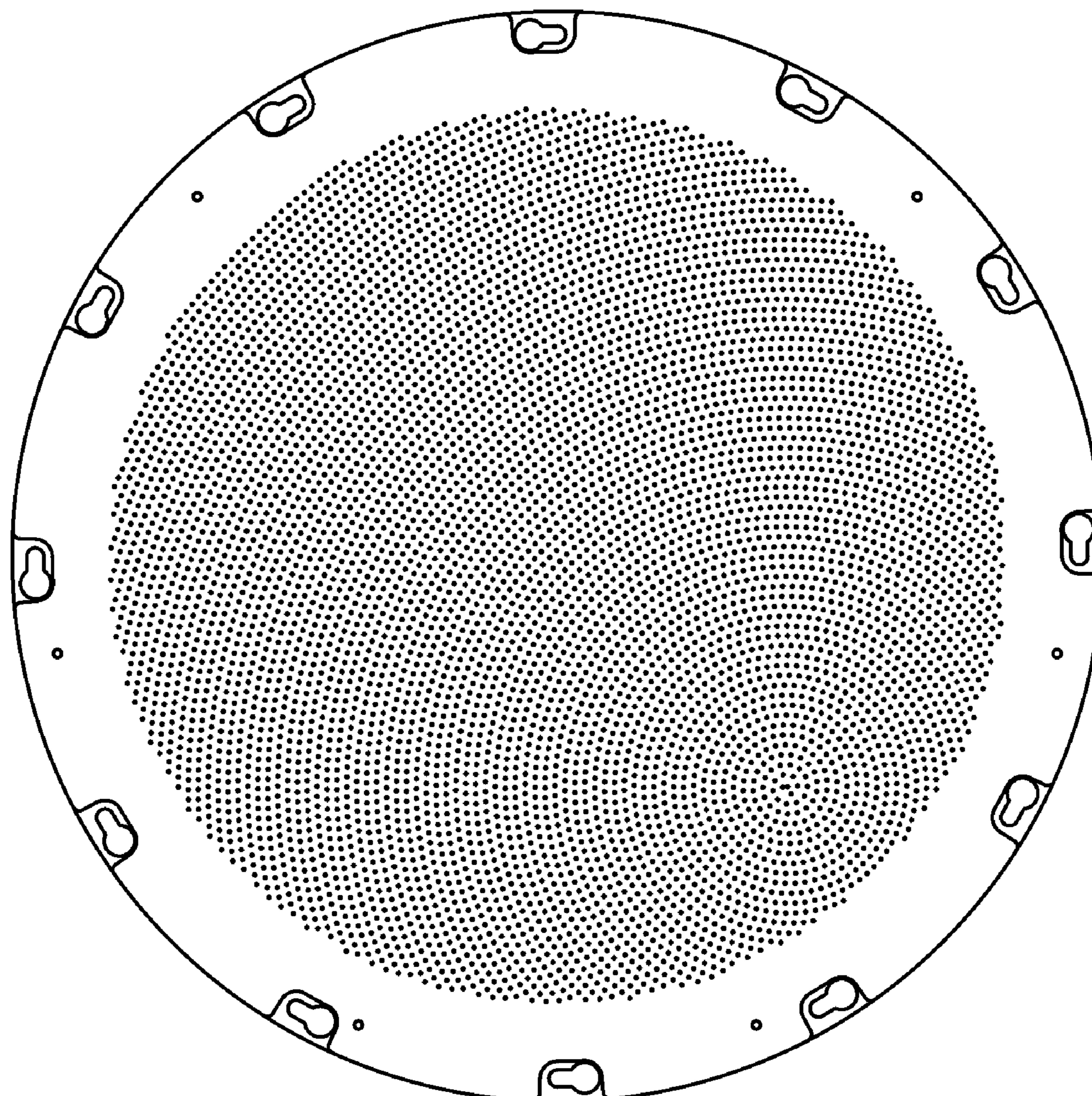


Fig. 11

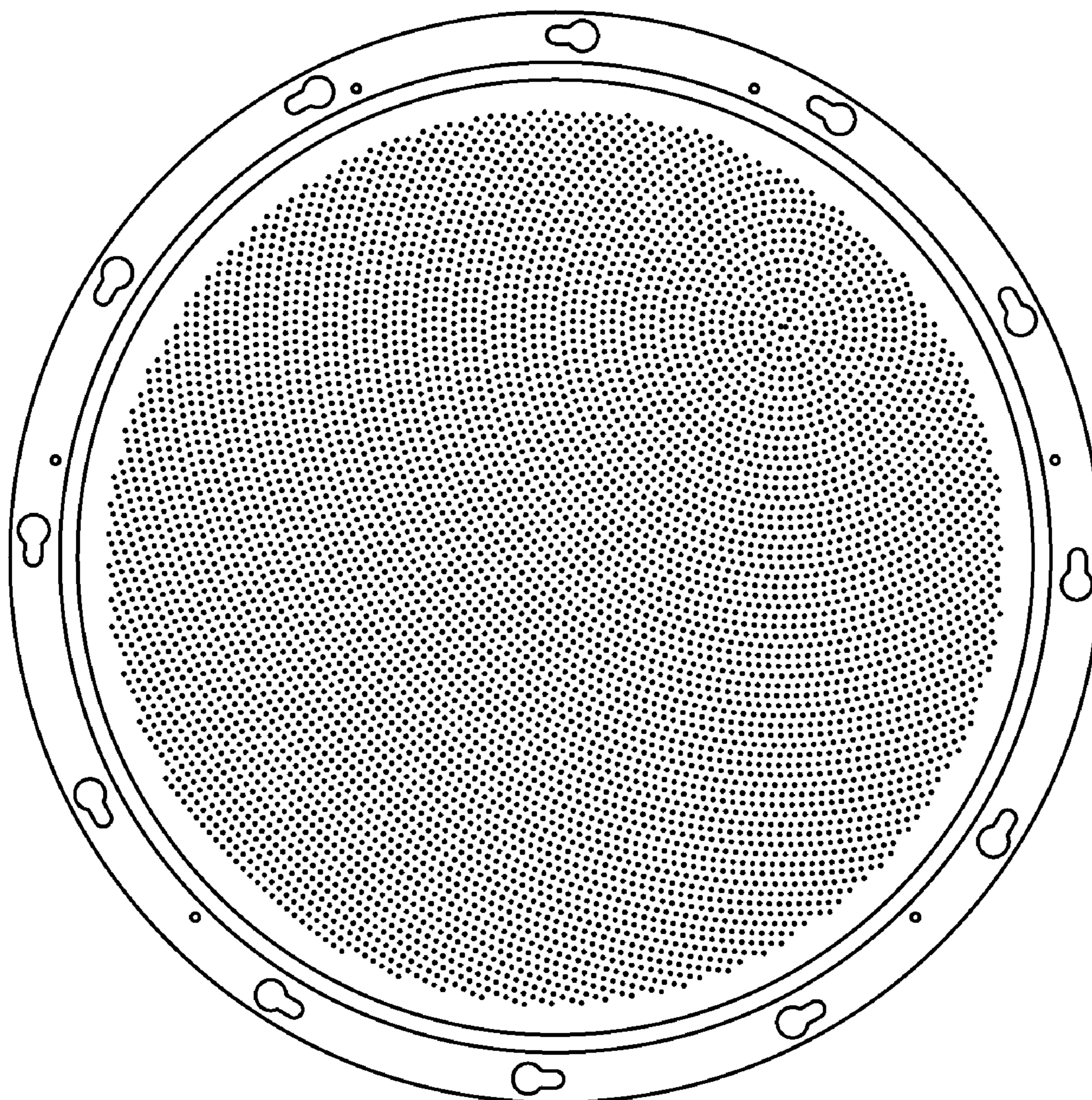


Fig. 12

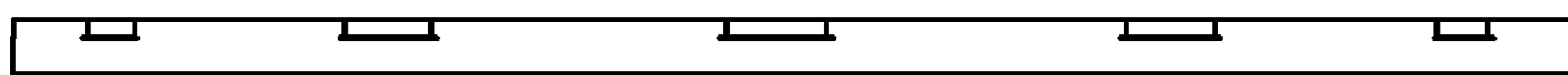


Fig. 13

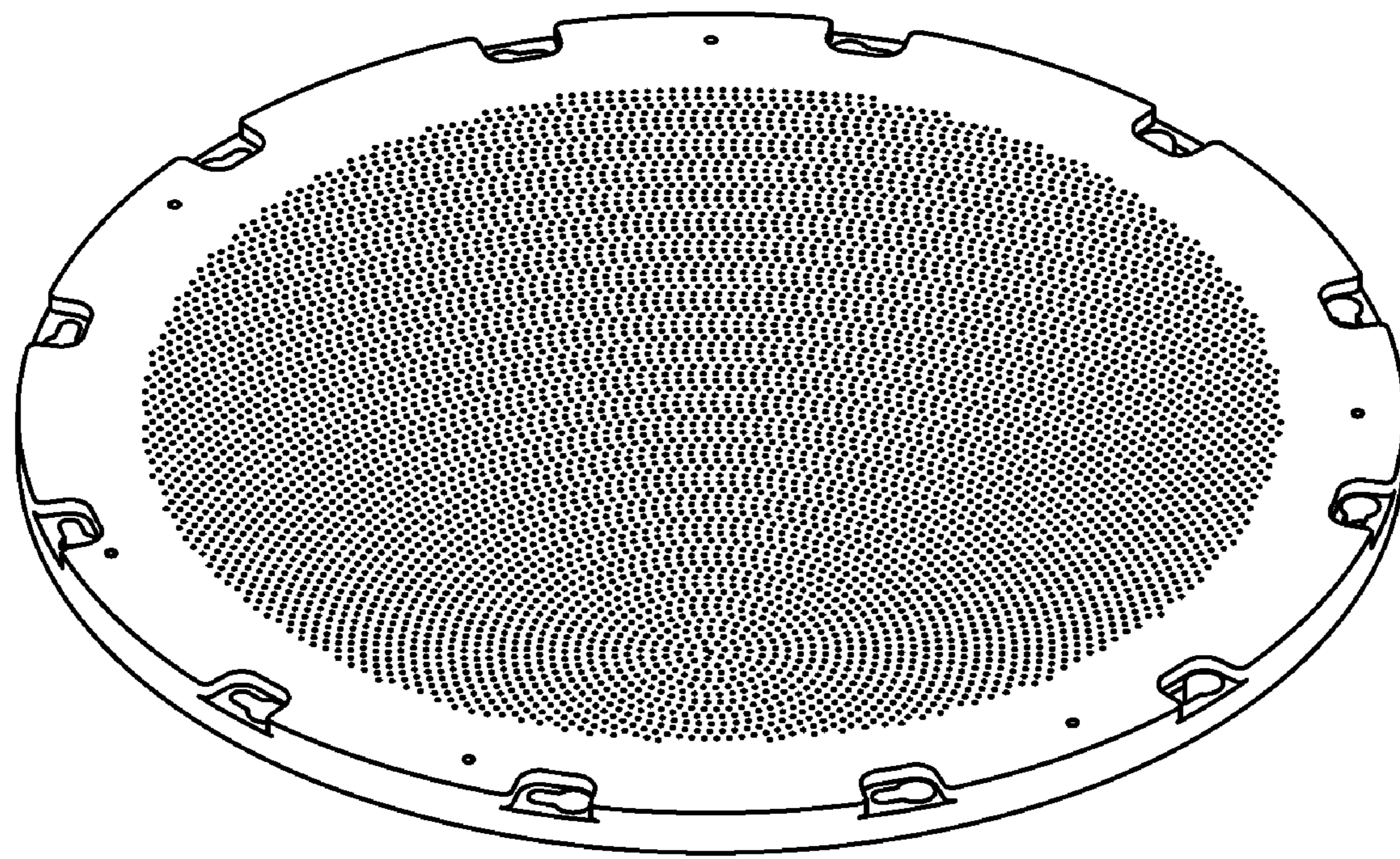


Fig. 14

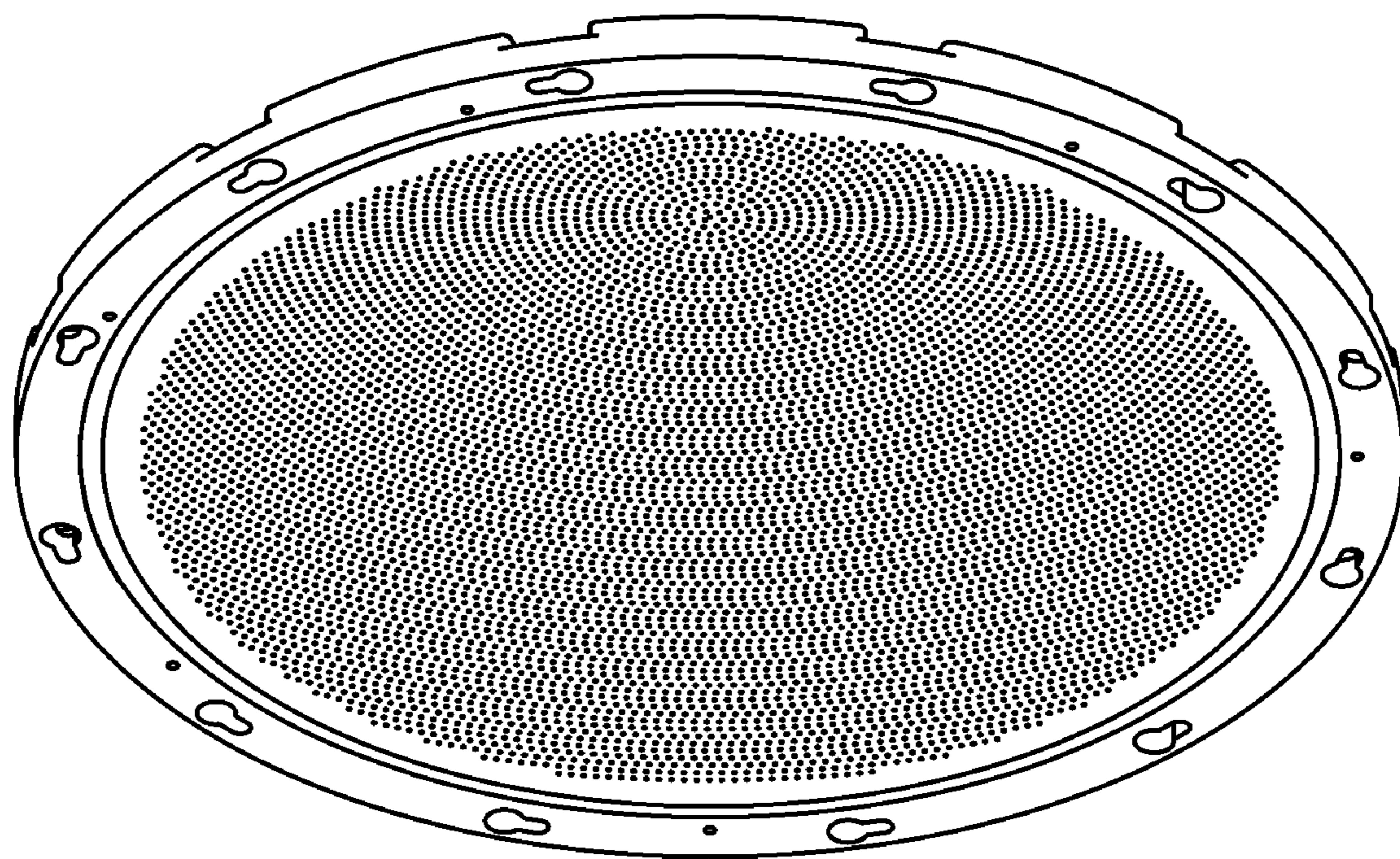


Fig. 15

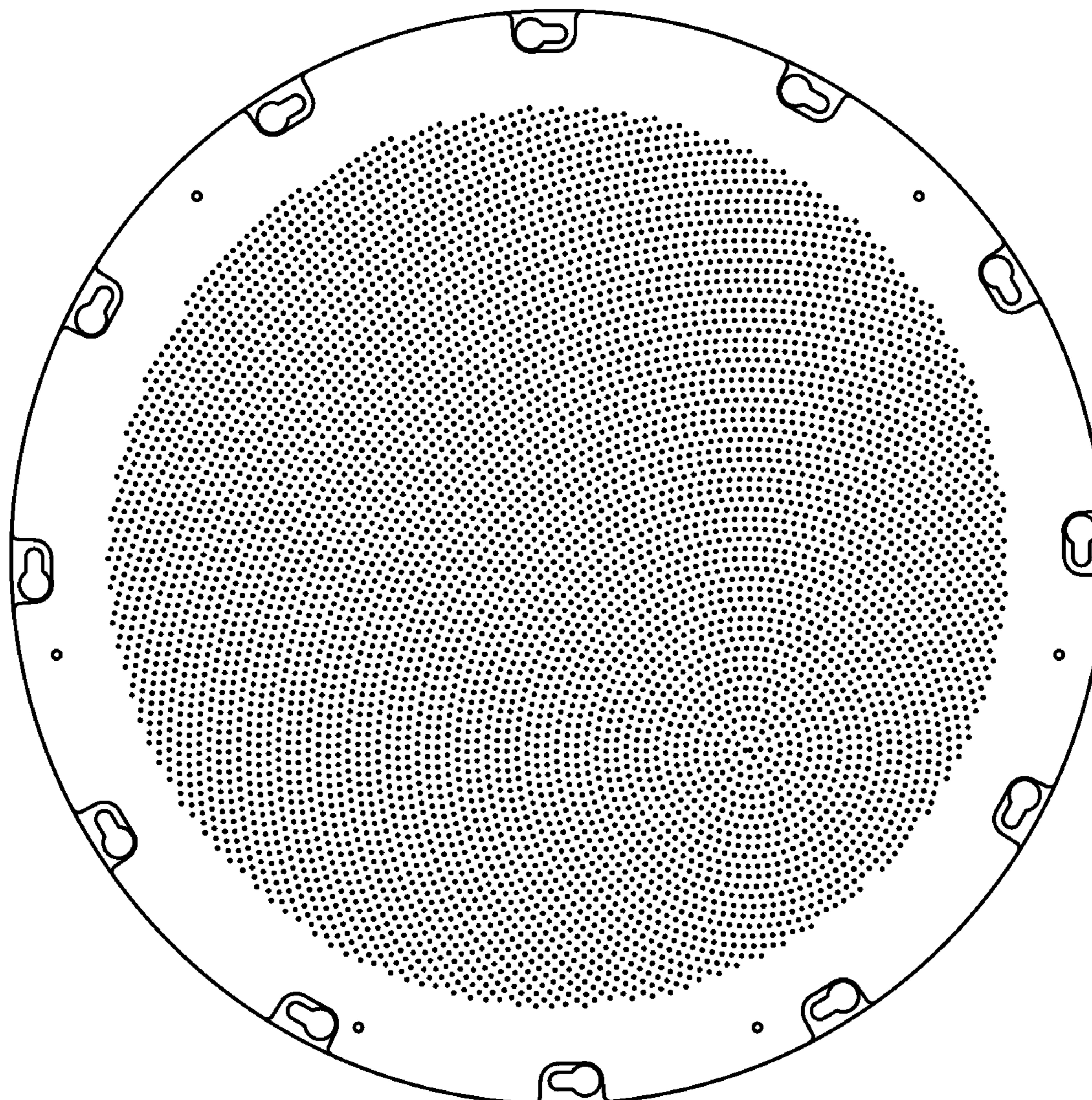


Fig. 16

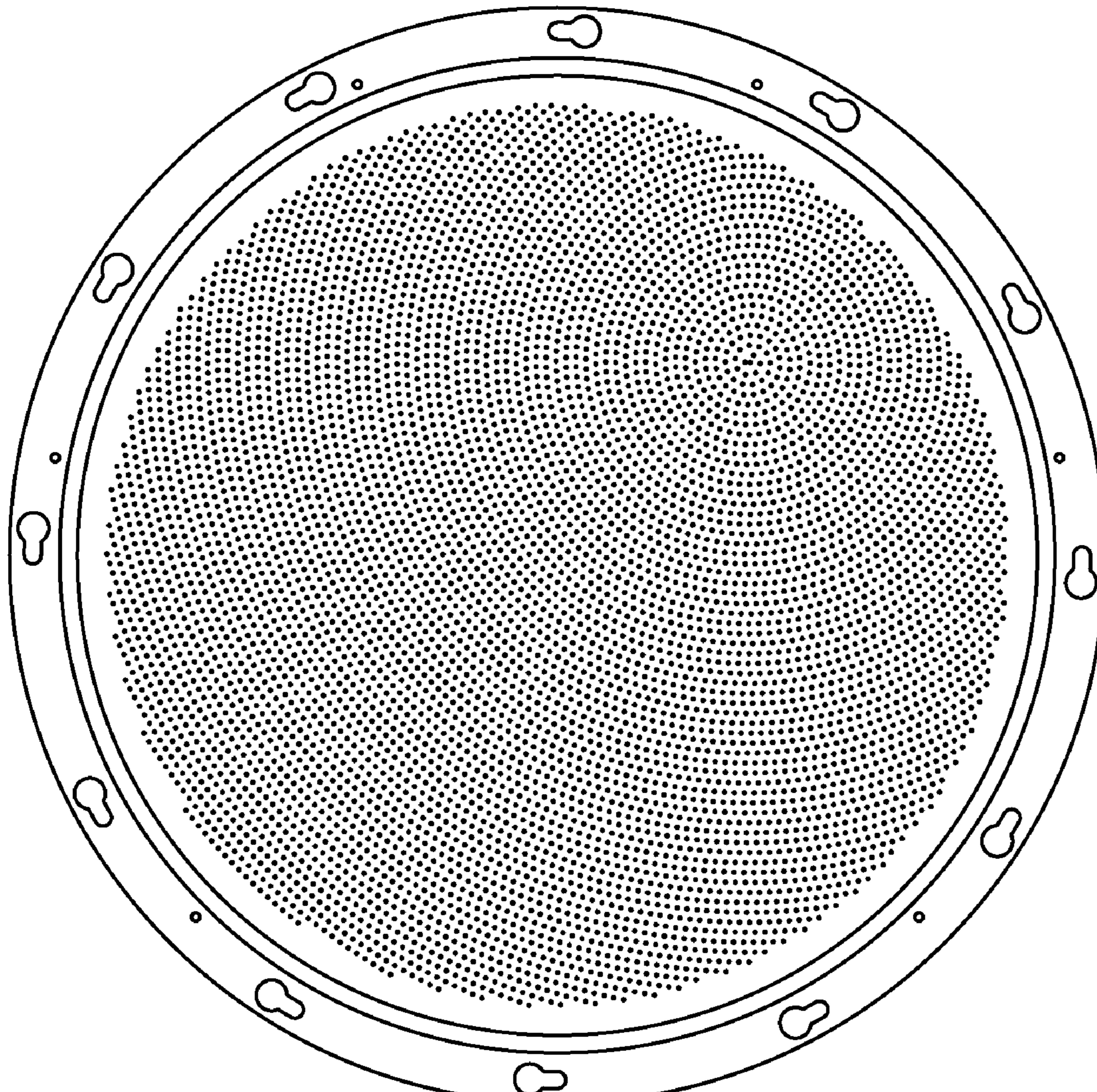


Fig. 17

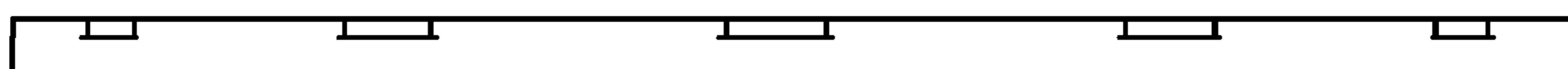


Fig. 18

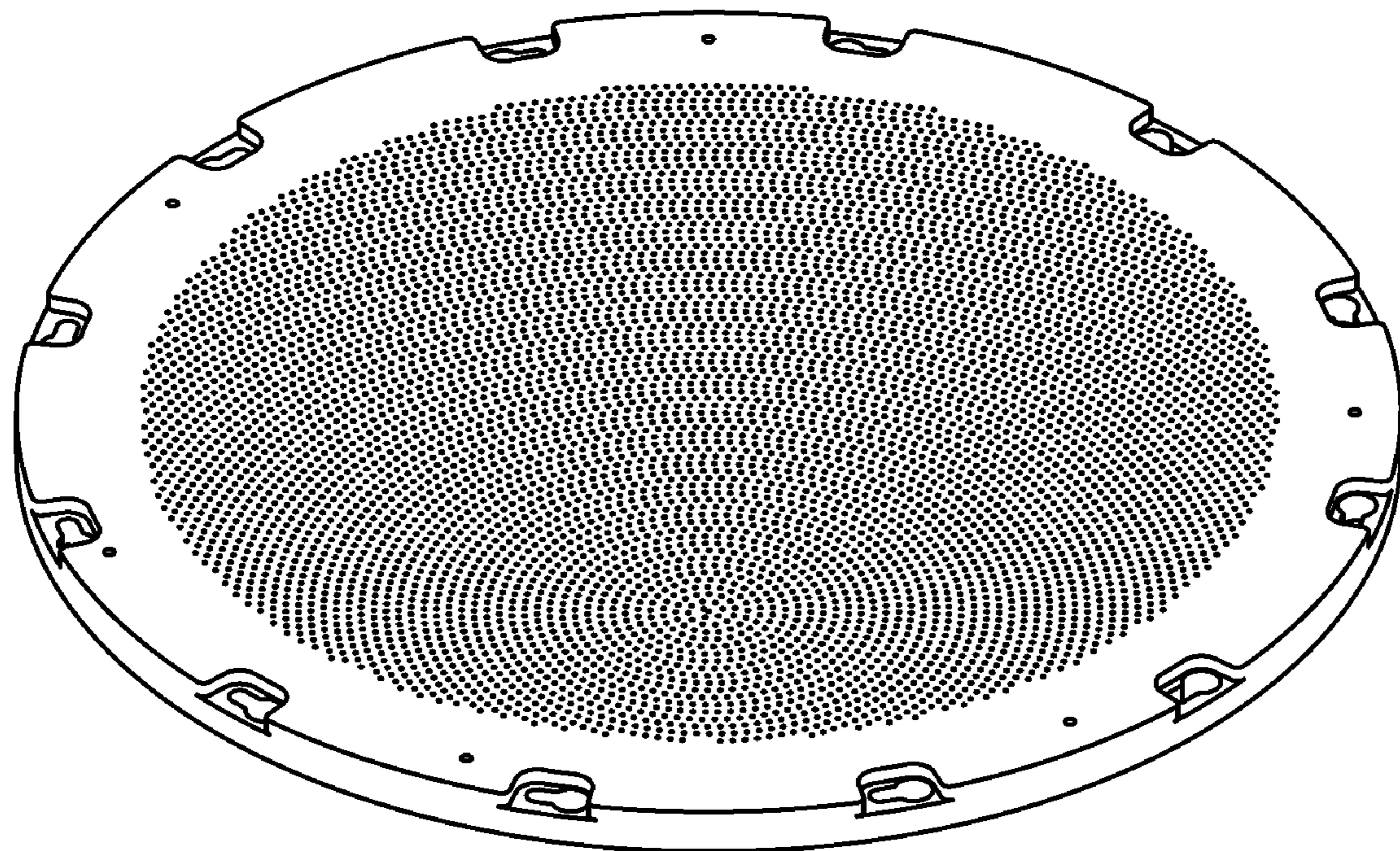


Fig. 19

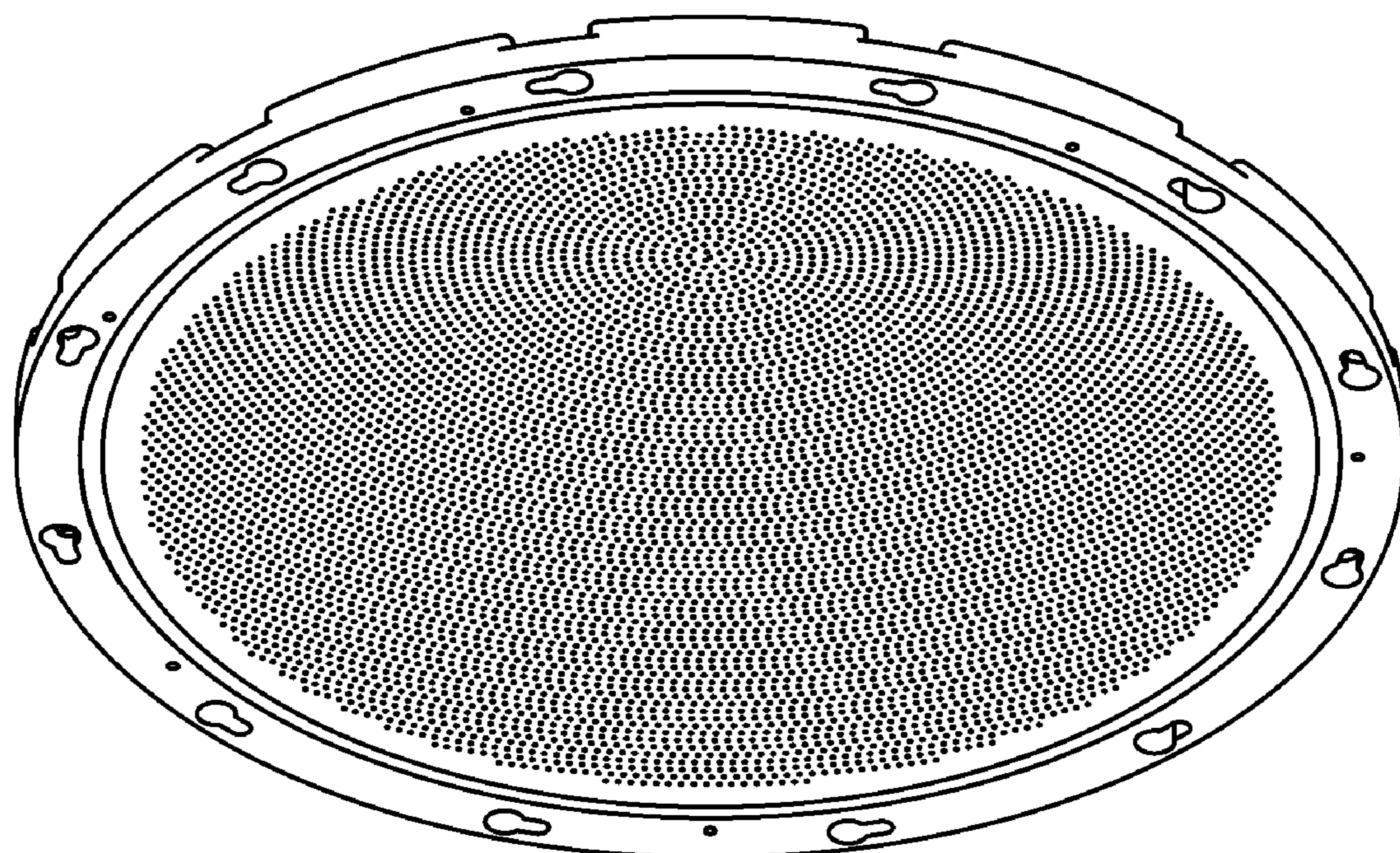


Fig. 20