



US00D836573S

(12) **United States Design Patent** (10) **Patent No.:** **US D836,573 S**  
**Ichino et al.** (45) **Date of Patent:** **\*\* Dec. 25, 2018**

(54) **RING FOR A PLASMA PROCESSING APPARATUS**

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(73) Assignee: **Hitachi High-Technologies Corporation**, Tokyo (JP)

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

(21) Appl. No.: **29/610,998**

(22) Filed: **Jul. 18, 2017**

(30) **Foreign Application Priority Data**

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(51) **LOC (11) Cl.** ..... **13-03**

(52) **U.S. Cl.**  
USPC ..... **D13/182**

(58) **Field of Classification Search**  
USPC ..... D13/158–177, 182, 18; D15/122, 199, D15/138, 144, 144.1; 204/286.1, 297.1;  
(Continued)

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(57) **CLAIM**

The ornamental design for a ring for a plasma processing apparatus, as shown and described.

**DESCRIPTION**

This application contains subject matter related to the following co-pending U.S. design patent applications:

Application Ser. No. 29/610,995, filed herewith and entitled “Electrode Cover for a Plasma Processing Apparatus”;

Application Ser. No. 29/610,996, filed herewith and entitled “Electrode Cover for a Plasma Processing Apparatus”;

Application Ser. No. 29/610,999, filed herewith and entitled “Cover Ring for a Plasma Processing Apparatus”; and

Application Ser. No. 29/611,001, filed herewith and entitled “Discharge Chamber for a Plasma Processing Apparatus”.

FIG. 1 is a front, top and right side perspective view of a ring for a plasma processing apparatus, showing our new design; FIG. 2 is a front, bottom and right side perspective view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a rear elevational view thereof;

FIG. 5 is a top plan view thereof;

FIG. 6 is a left side elevational view thereof;

FIG. 7 is a right side elevational view thereof;

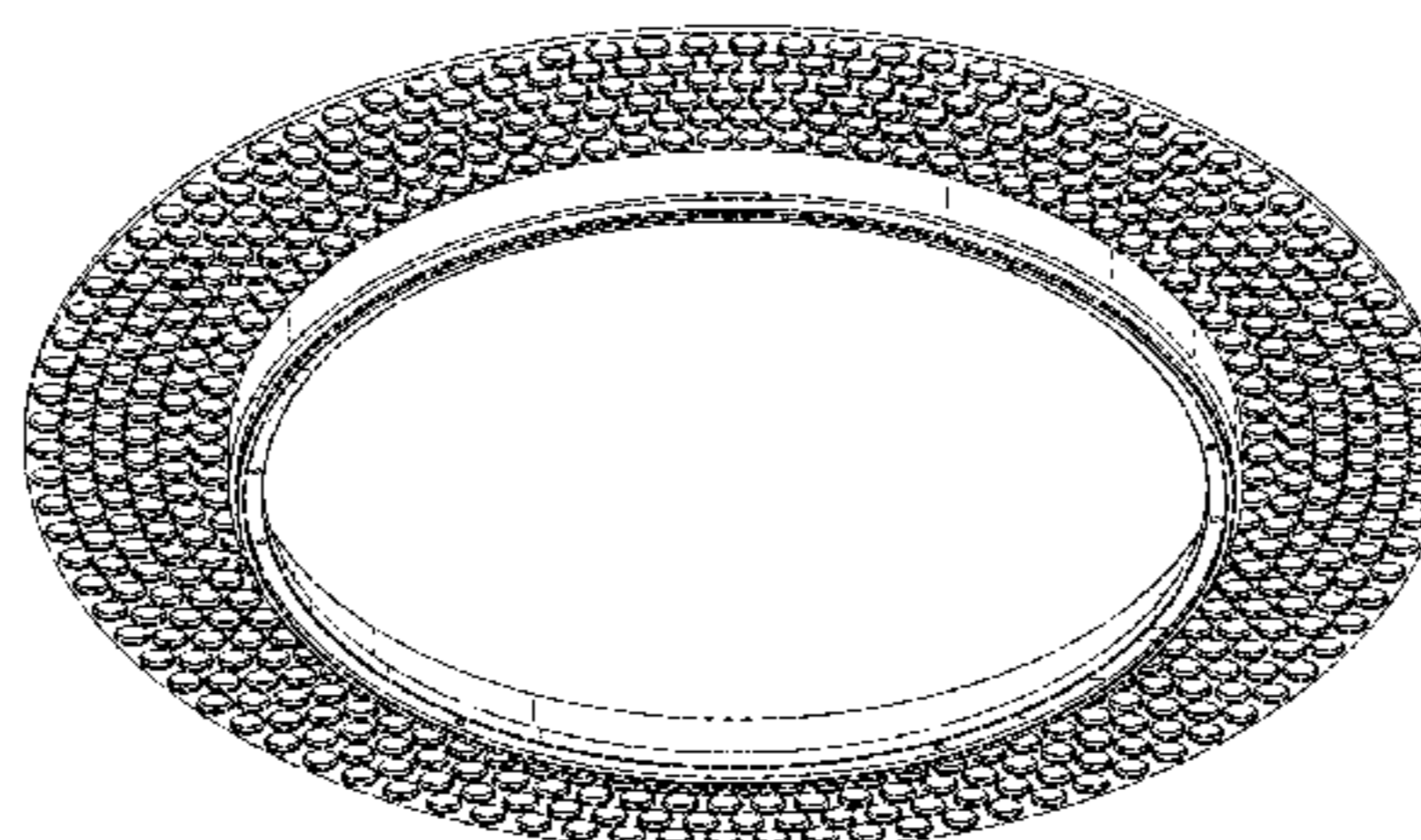
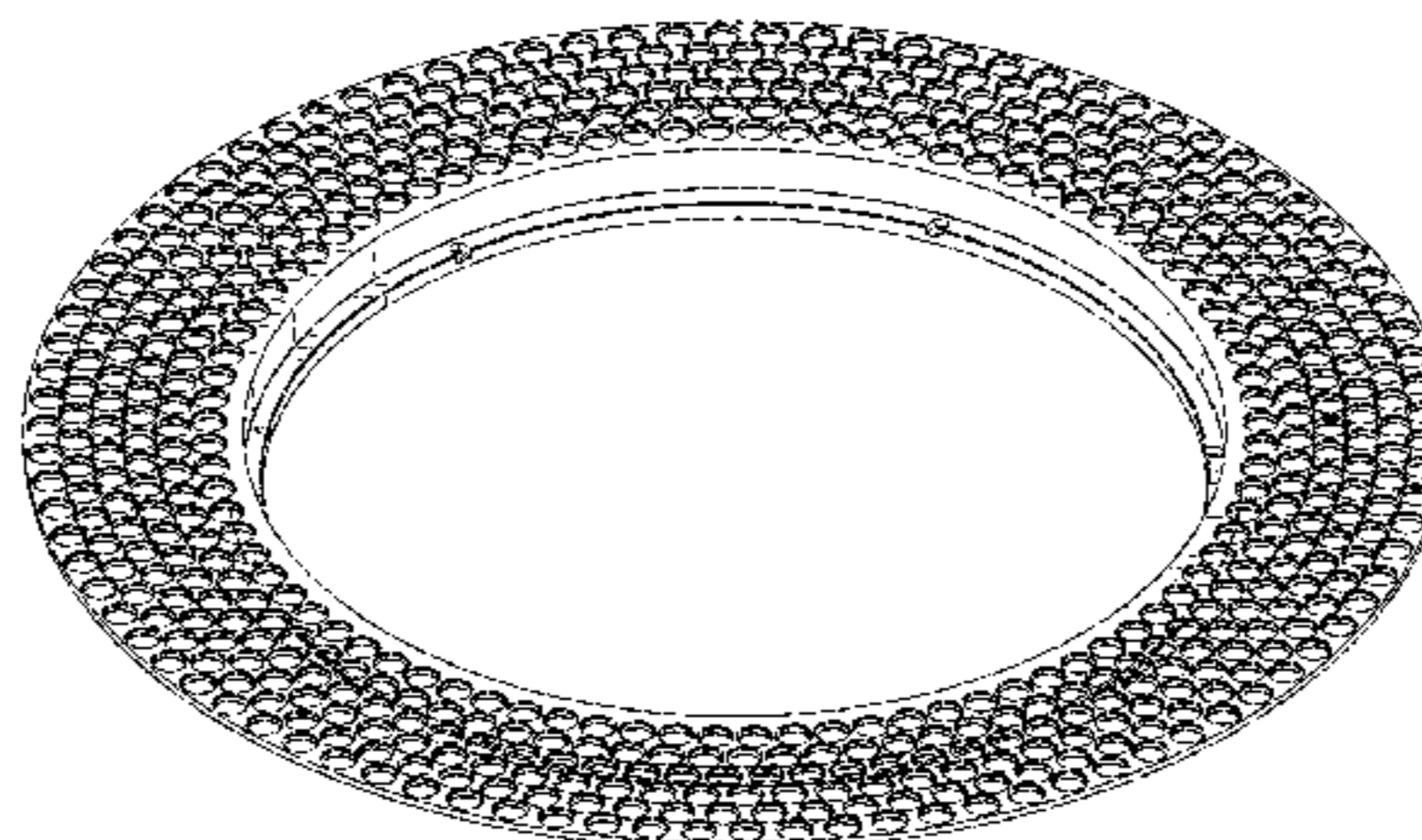
FIG. 8 is a bottom plan view thereof;

FIG. 9 is a cross-sectional view taken along line 9-9 of FIG. 5; and,

FIG. 10 is an enlarged view of the portion shown in box 10 in FIG. 9.

The broken lines showing a rectangular box labeled 10 in the drawings in FIG. 9 form no part of the claimed design.

**1 Claim, 4 Drawing Sheets**



(58) **Field of Classification Search**

USPC ..... 205/118, 123; 200/1 R, 5 R, 52 R, 315,  
 200/310, 6 A, 302.1, 308, 314, 317, 11 R,  
 200/16 B; 118/666, 715, 733; 219/444.1,  
 219/147, 247; 438/482, 706, 716, 758;  
 451/285; D8/399

CPC ..... C25D 17/10; C25D 17/12; C25D 17/14;  
 C25D 17/06; C25D 17/08; C25D 7/12;  
 C25D 7/10; H01L 21/283; H01H 9/02;  
 H01H 9/0214; H01H 9/04; H01H 9/161;  
 H01H 13/04; H01H 13/06; H01H 13/023;  
 H01H 21/08; H01H 19/025

See application file for complete search history.

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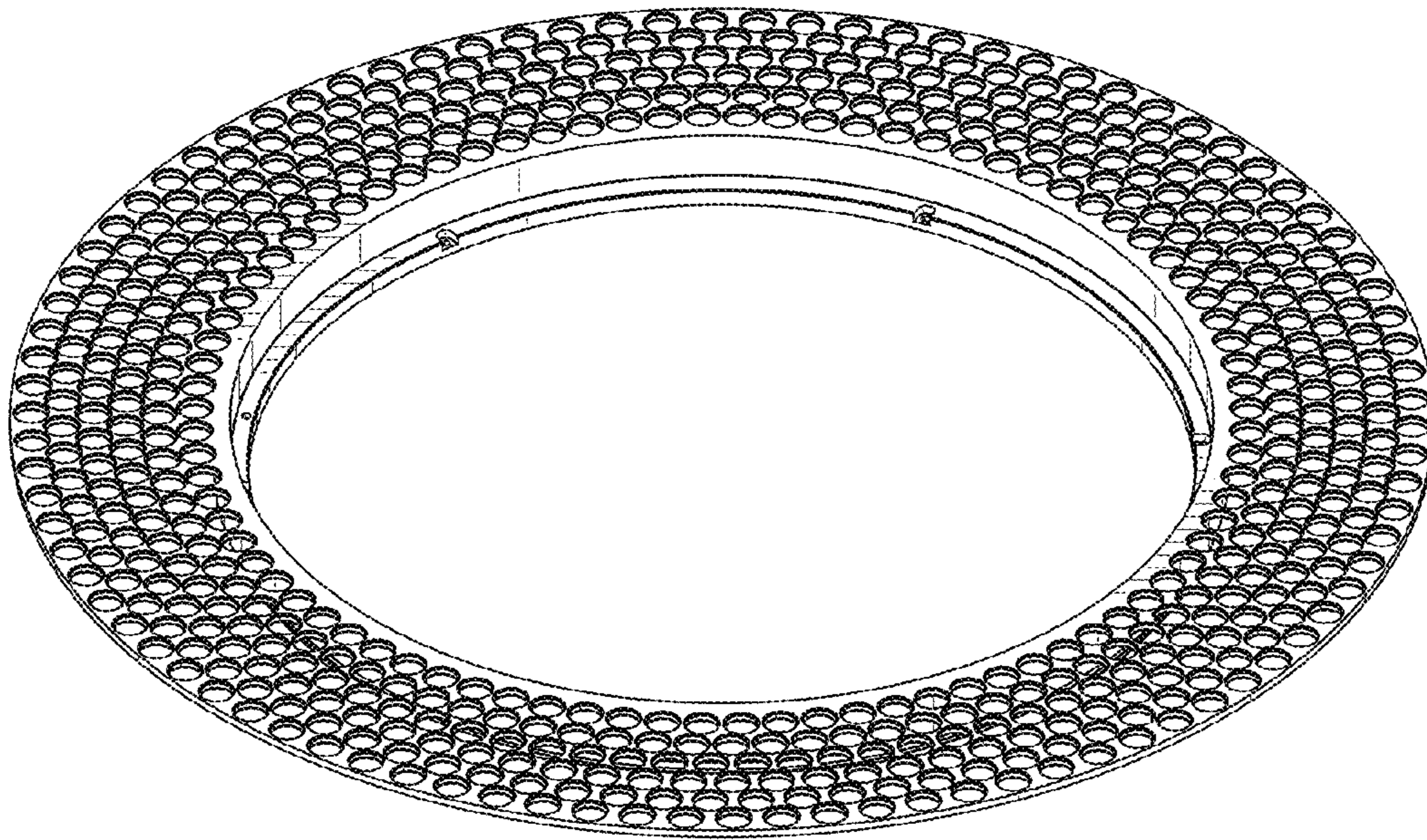


FIG. 1

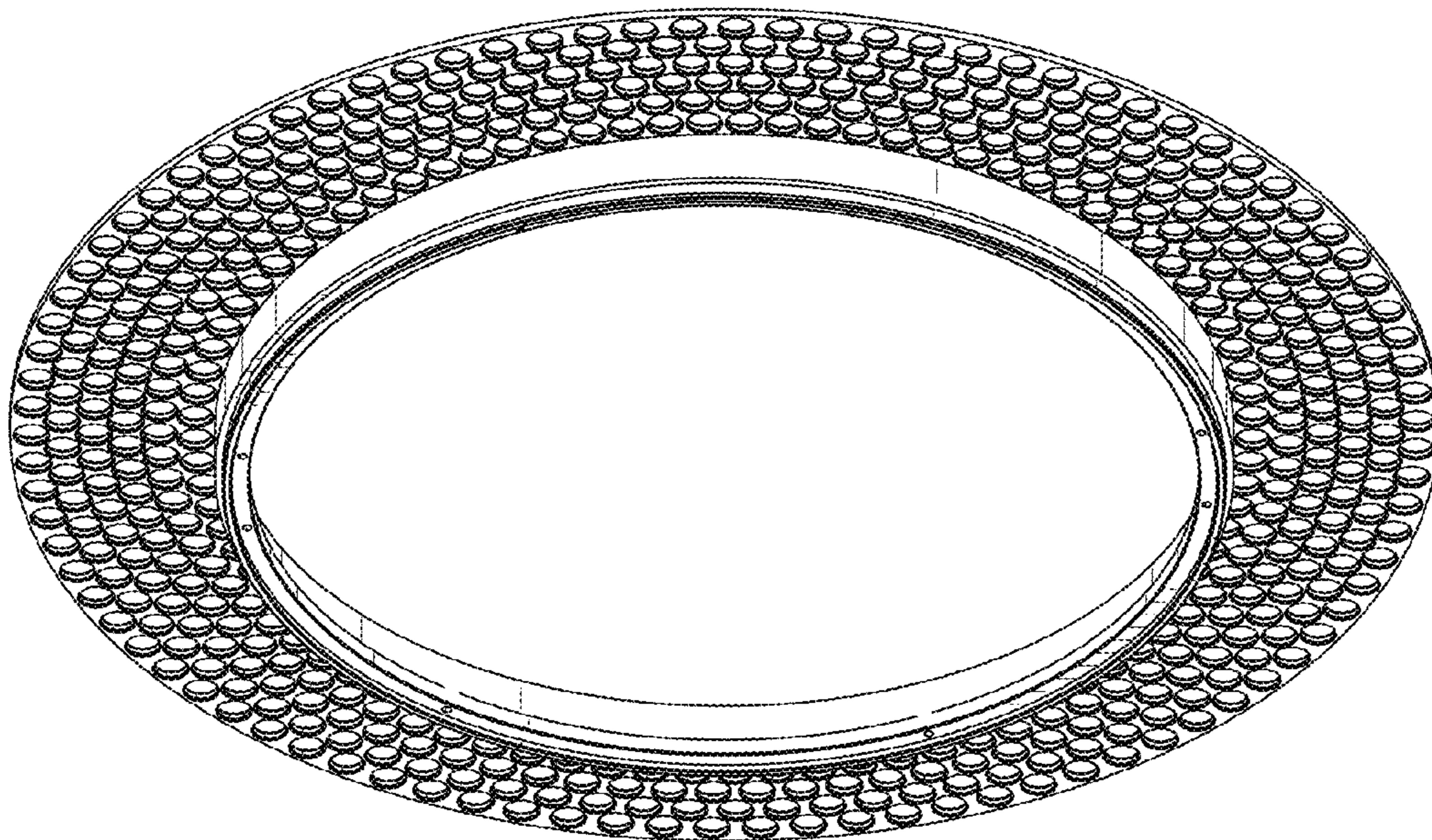


FIG. 2



FIG. 3

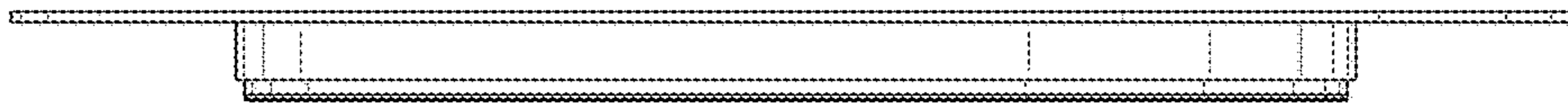


FIG. 4

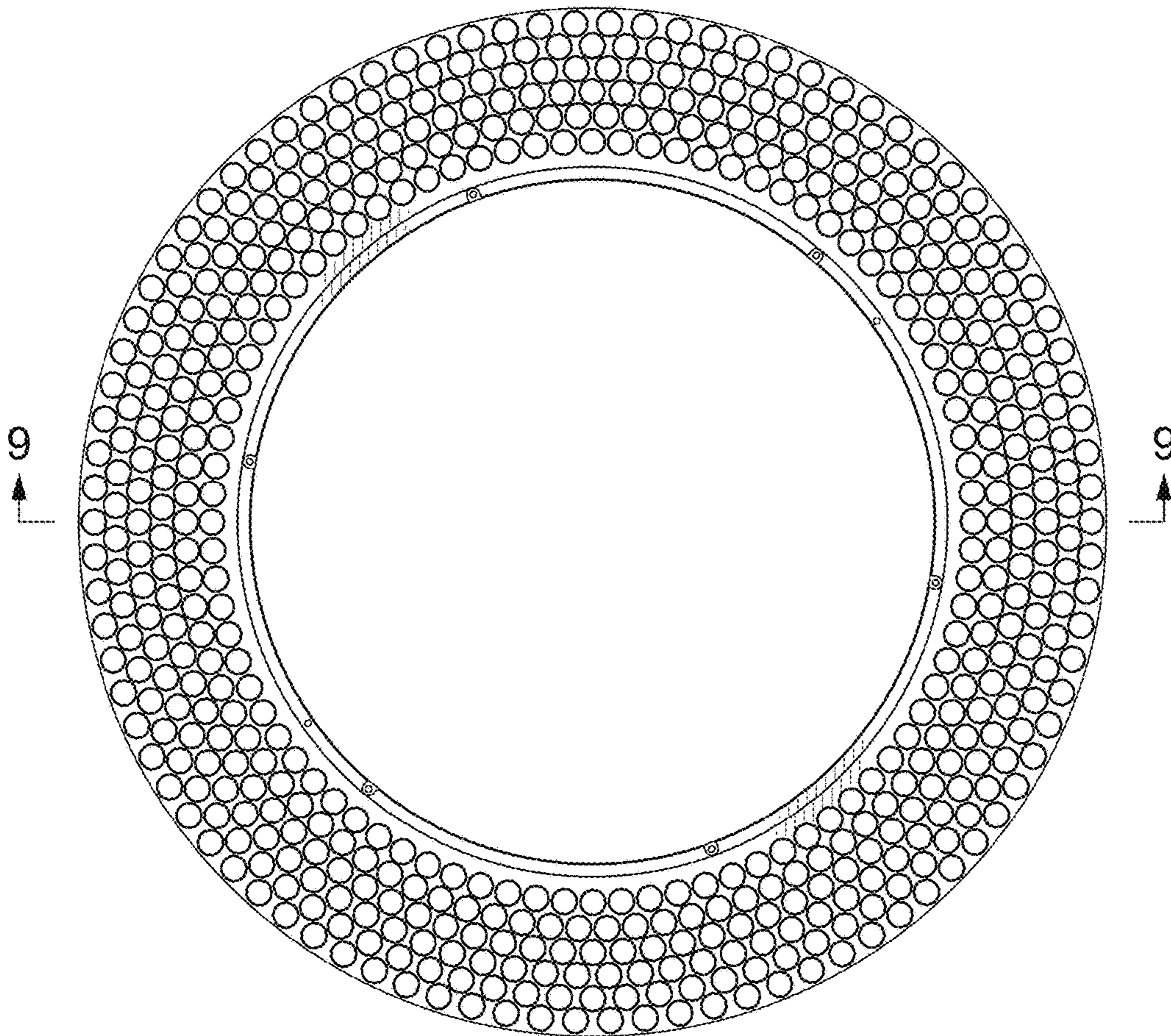


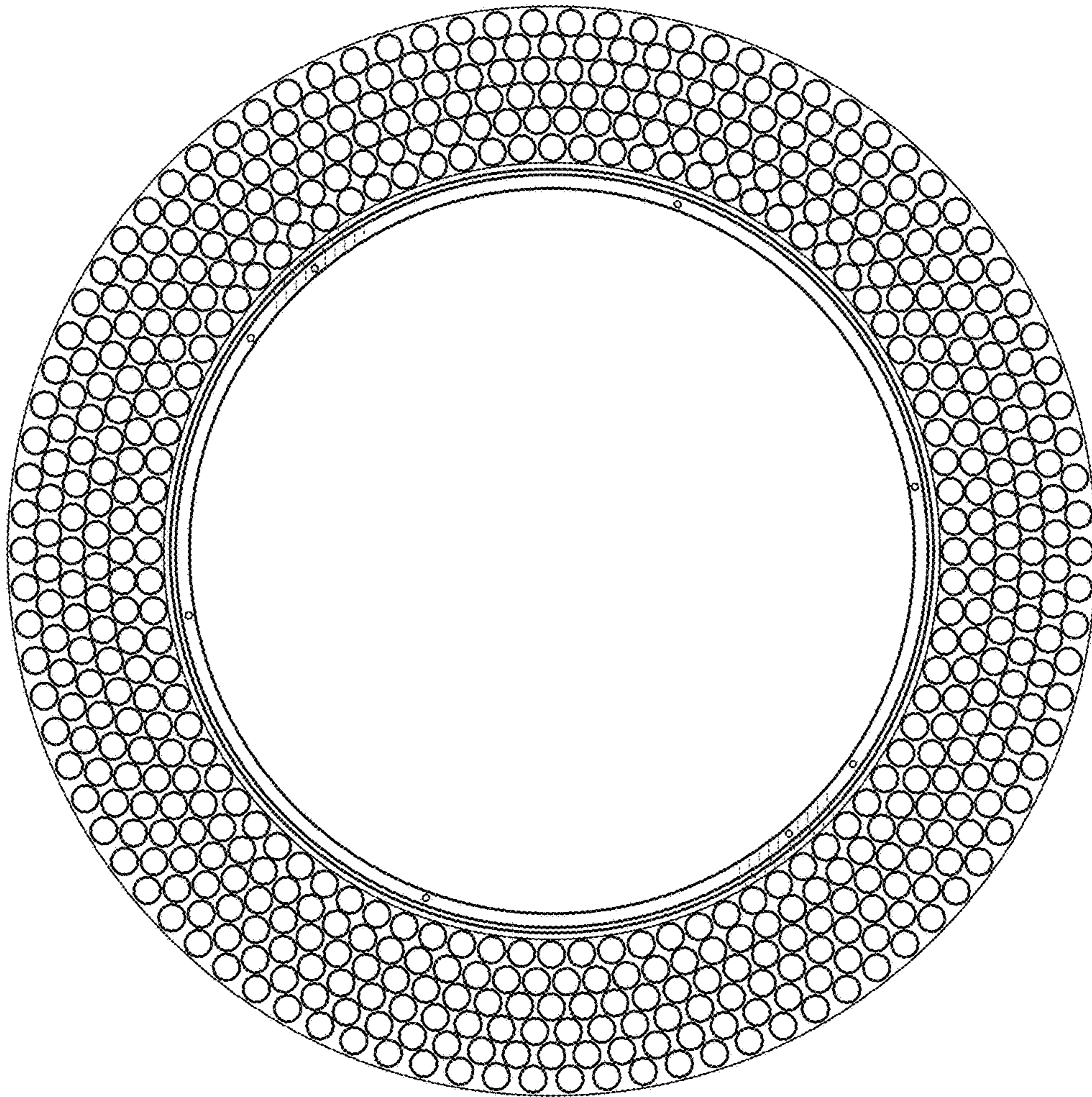
FIG. 5



*FIG. 6*



*FIG. 7*



*FIG. 8*

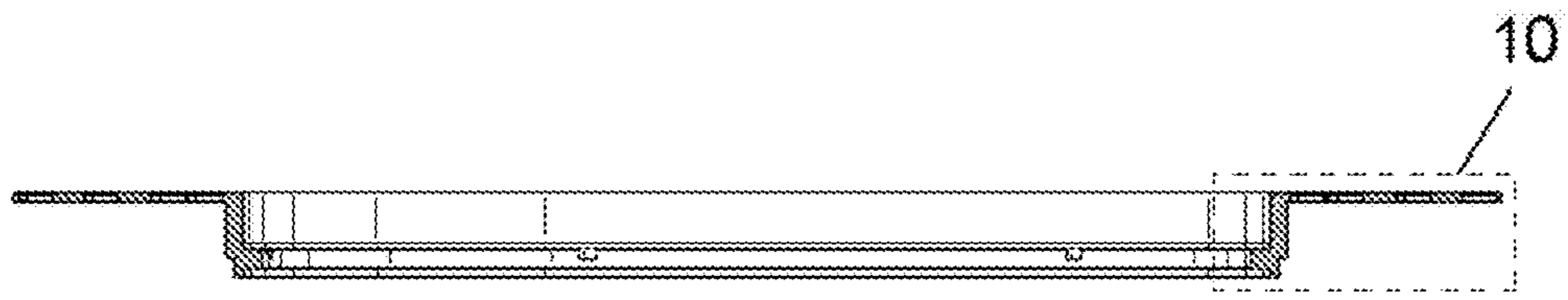


FIG. 9

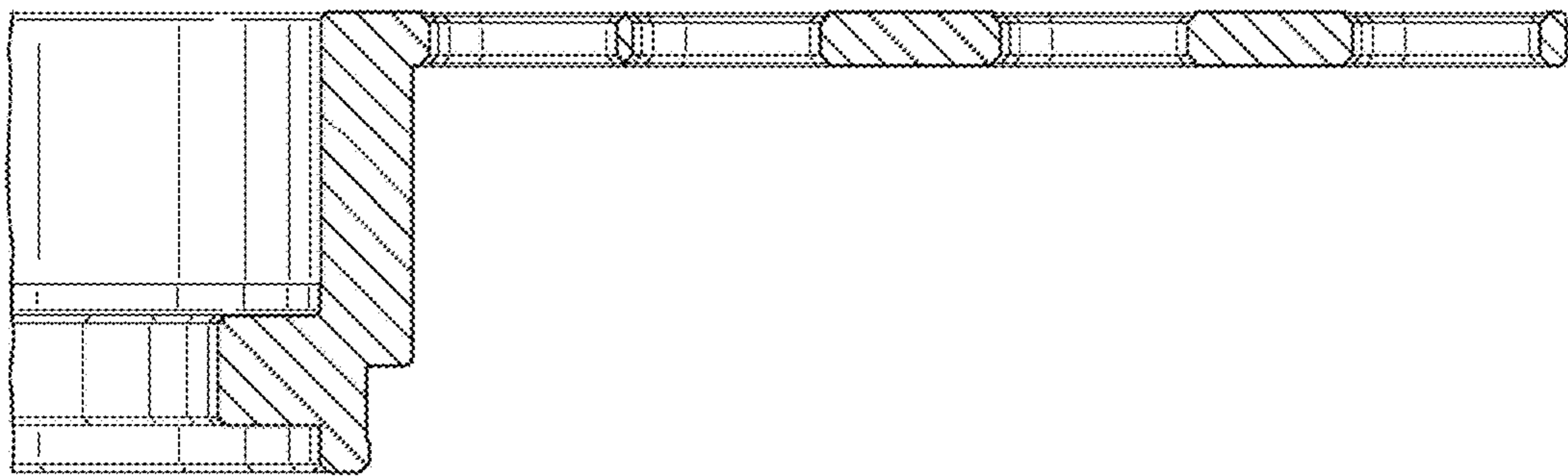


FIG. 10