



US00D716678S

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

(10) **Patent No.:** **US D716,678 S**

(45) **Date of Patent:** **\*\* Nov. 4, 2014**

(54) **JIG FOR MEASURING WITHSTAND  
VOLTAGE OF SEMICONDUCTOR ELEMENT**

(71) Applicant: **Sumitomo Electric Industries, Ltd.**,  
Osaka (JP)

(72) Inventors: **Misako Honaga**, Osaka (JP); **Takeyoshi  
Masuda**, Osaka (JP)

(73) Assignee: **Sumitomo Electric Industries, Ltd.**,  
Osaka-shi (JP)

(\*\*) Term: **14 Years**

(21) Appl. No.: **29/449,951**

(22) Filed: **Mar. 15, 2013**

(30) **Foreign Application Priority Data**

Oct. 5, 2012 (JP) ..... 2012-024371  
Oct. 5, 2012 (JP) ..... 2012-024372  
Oct. 5, 2012 (JP) ..... 2012-024373

(51) **LOC (10) Cl.** ..... **10-03**

(52) **U.S. Cl.**  
USPC ..... **D10/103**

(58) **Field of Classification Search**

USPC ..... D10/78, 103; 206/710, 832; 204/228.7,  
204/229.8, 230.8; 257/620, 415, E21.567,  
257/228, 79, E29.151, E51.005, 330, 591,  
257/E21.384, E29.198, E21.267; 438/680,  
438/459, 113, 464, 462, 455, 149, 772, 762,  
438/777, 786, 158, 28, 654

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,963,390 A \* 12/1960 Dickson, Jr. .... 438/97  
5,729,020 A \* 3/1998 Matsushita et al. .... 250/370.08

6,164,454 A \* 12/2000 Freund et al. .... 206/706  
6,555,841 B1 \* 4/2003 Sakushima et al. .... 257/48  
6,638,865 B2 \* 10/2003 Tanaka ..... 438/692  
6,767,803 B2 \* 7/2004 Tsujimoto ..... 438/460  
6,848,579 B2 \* 2/2005 Cleaver ..... 206/454  
7,005,718 B2 \* 2/2006 Wester ..... 257/431  
8,357,980 B2 \* 1/2013 Williams et al. .... 257/414

\* cited by examiner

*Primary Examiner* — Antoine D Davis

(74) *Attorney, Agent, or Firm* — Venable LLP; Michael A.  
Sartori; F. Brock Riggs

(57) **CLAIM**

The ornamental design for a jig for measuring withstand  
voltage of semiconductor element, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of a first embodiment of the jig for  
measuring withstand voltage of semiconductor element,  
which has tapped holes used to hold a substrate provided with  
a semiconductor element and has a hollow to contain insulat-  
ing liquid to submerge the substrate during measurement of a  
withstanding voltage of the element, showing our new design;  
FIG. 2 is a rear view thereof;  
FIG. 3 is a top plan view thereof;  
FIG. 4 is a bottom plan view thereof;  
FIG. 5 is a right side view thereof;  
FIG. 6 is a left side view thereof;  
FIG. 7 is a front perspective view thereof;  
FIG. 8 is a sectional view taken along line 8-8 of FIG. 3  
thereof;  
FIG. 9 is a referential top plan view showing the state in use  
thereof; and,  
FIG. 10 is a referential front perspective view showing the  
state in use thereof.  
The broken line showing is for illustrative purpose only and  
forms no part of the claimed design.

**1 Claim, 5 Drawing Sheets**

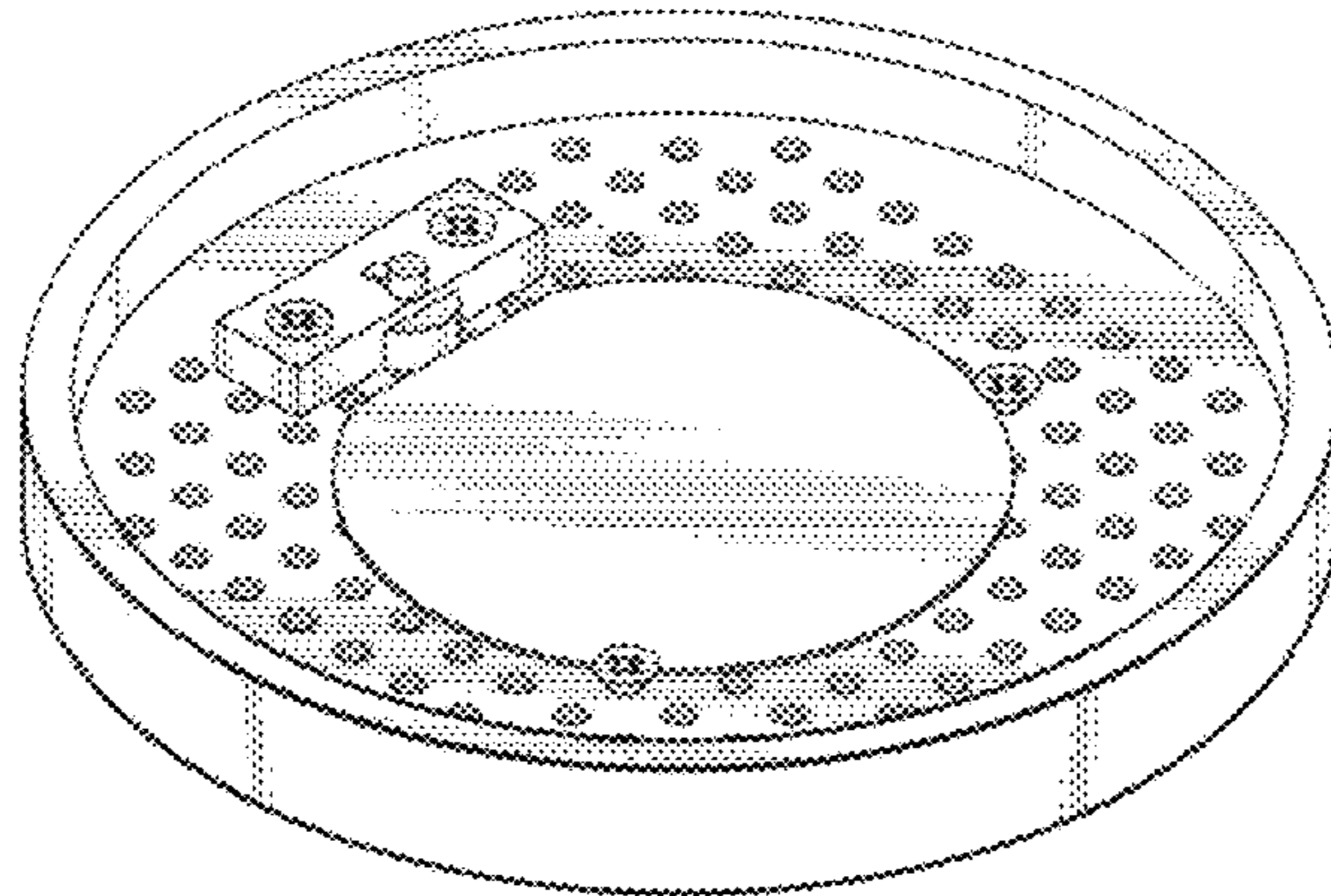


FIG. 1



FIG. 2



FIG. 3

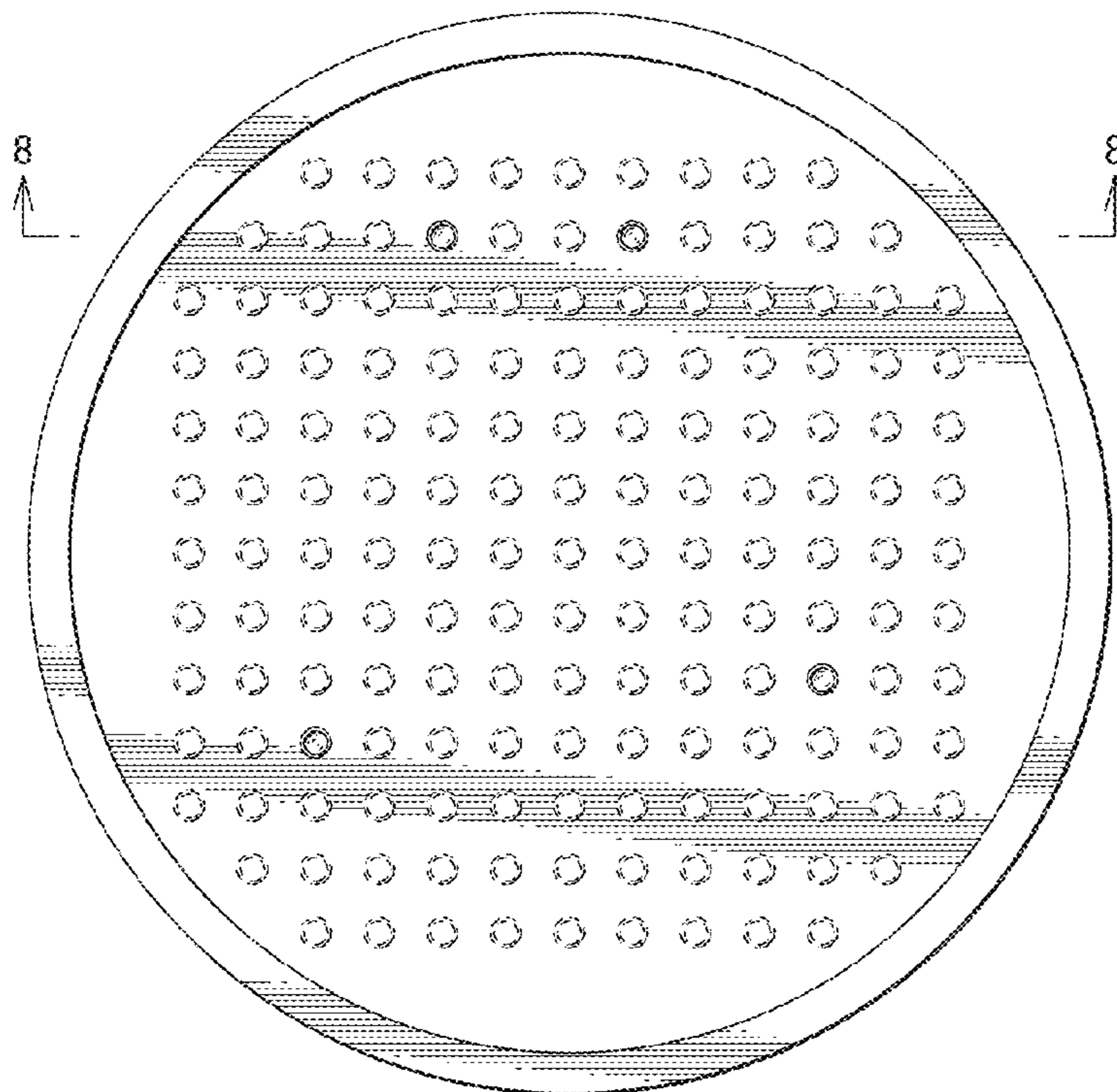


FIG.4

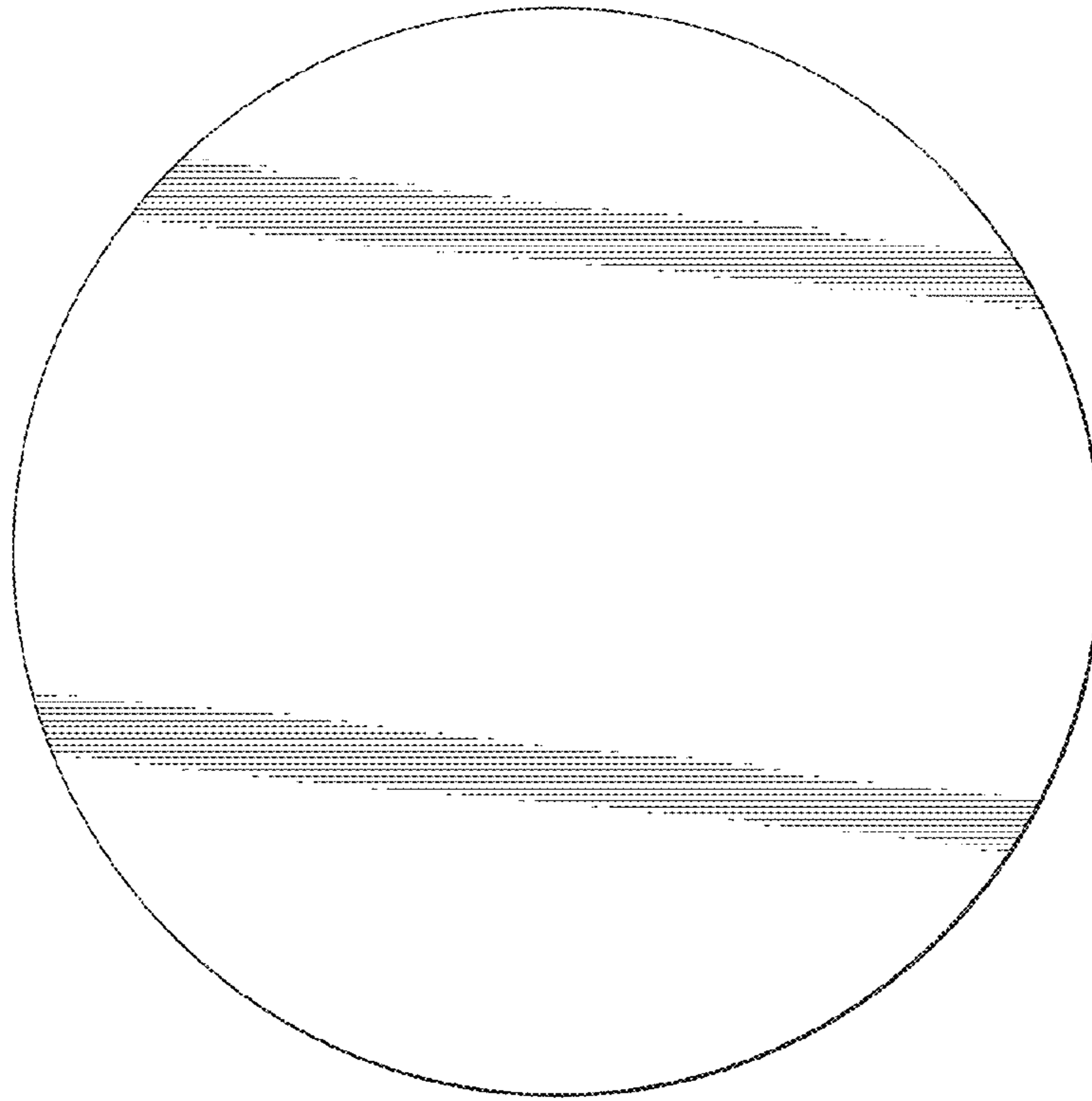


FIG.5



FIG.6

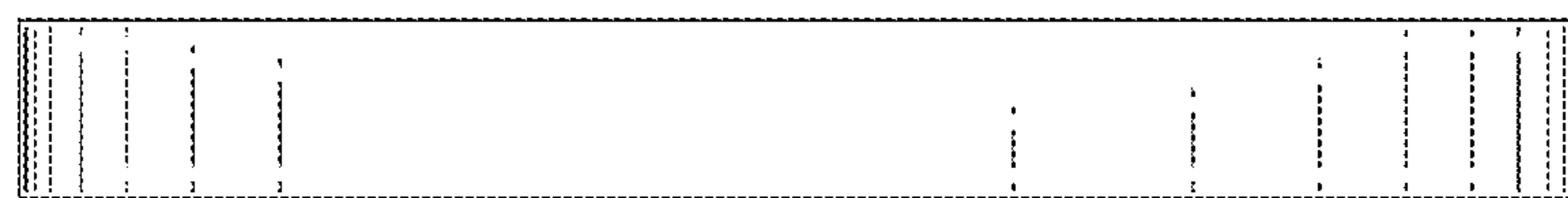


FIG.7

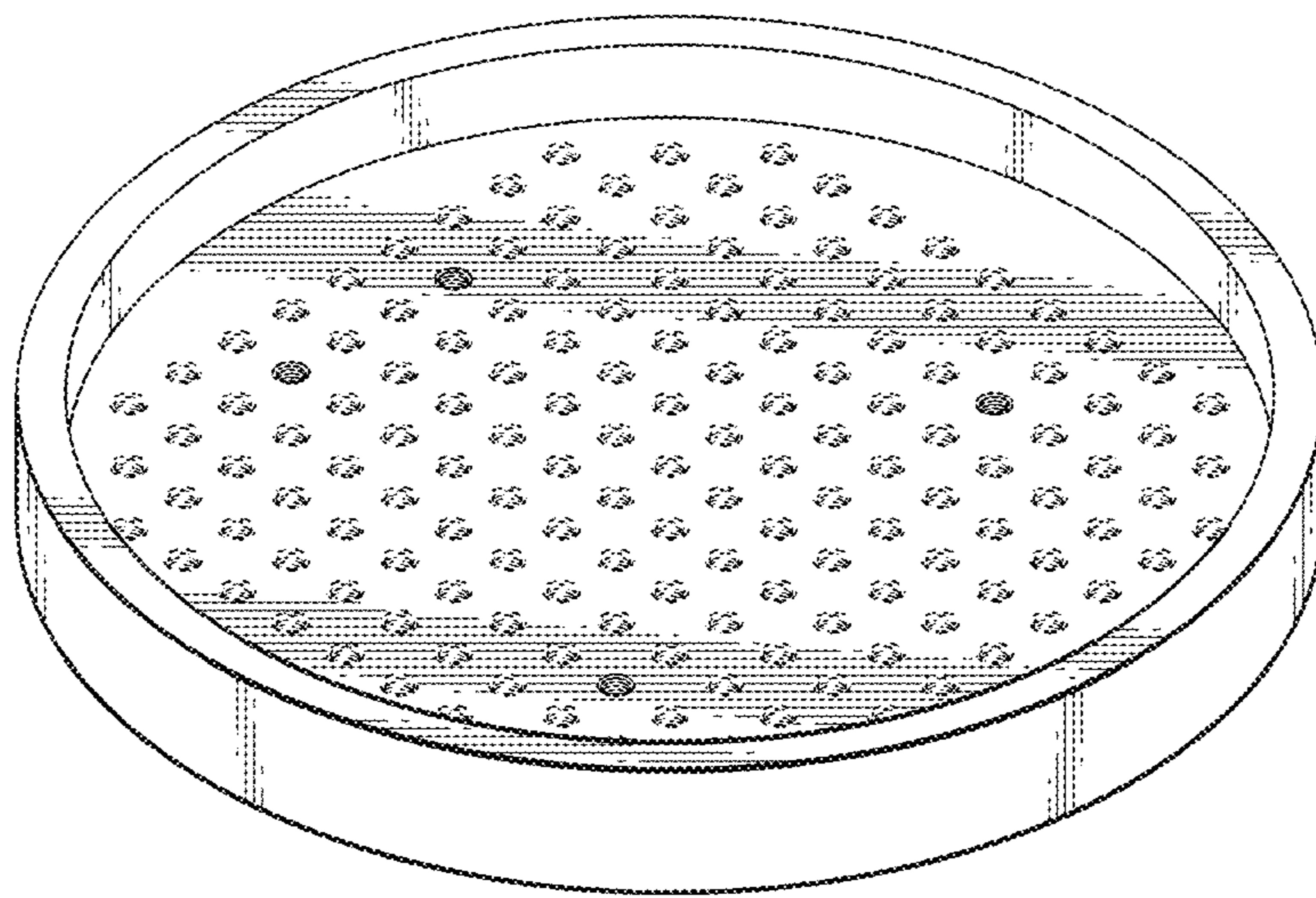


FIG.8

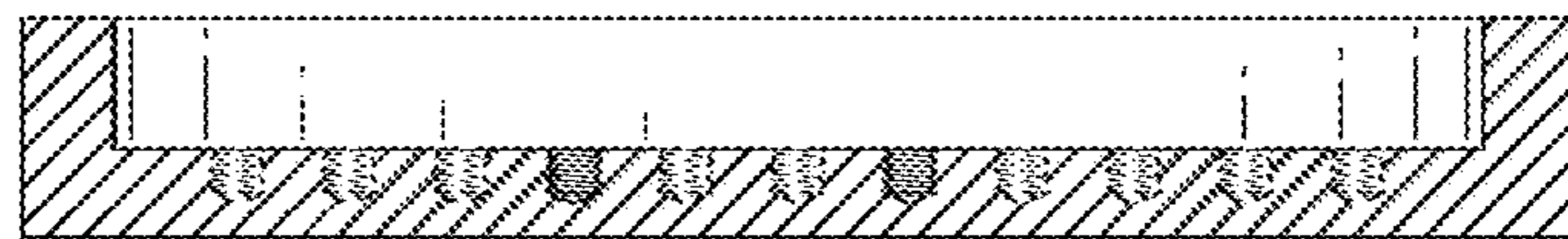


FIG.9

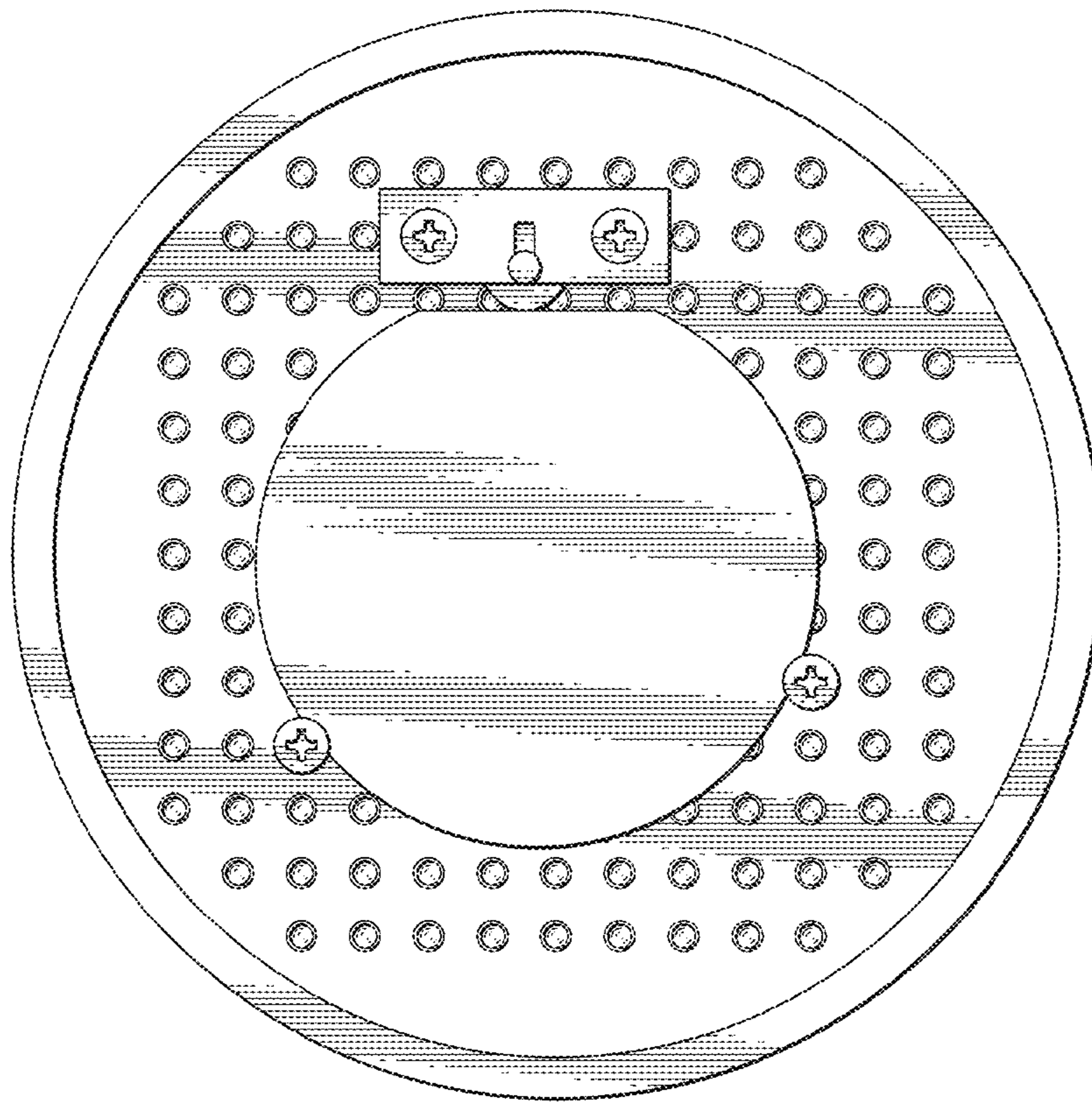


FIG. 10

