



US00D716742S

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

(10) **Patent No.:** **US D716,742 S**
(45) **Date of Patent:** **** Nov. 4, 2014**

(54) **SUBSTRATE SUPPORTER FOR SEMICONDUCTOR DEPOSITION APPARATUS**
(71) Applicant: **ASM IP Holding B.V.**, Almere (NL)
(72) Inventors: **Hyun Soo Jang**, Daejeon (KR); **Dae Youn Kim**, Daejeon (KR); **Jeong Ho Lee**, Seoul (KR); **Seung Seob Lee**, Seoul (KR); **Hak Yong Kwon**, Osan-si (KR)
(73) Assignee: **ASM IP Holding B.V.**, Almere (NL)

D600,660 S * 9/2009 Sato D13/182
D606,952 S * 12/2009 Lee et al. D13/182
D609,652 S * 2/2010 Nagasaka et al. D13/182
D614,593 S * 4/2010 Lee et al. D13/182
D649,126 S * 11/2011 Takahashi D13/182
D651,991 S * 1/2012 Nishiguchi et al. D13/182
D651,992 S * 1/2012 Nishiguchi et al. D13/182
D654,883 S * 2/2012 Honma et al. D13/182
D654,884 S * 2/2012 Honma et al. D13/182
D655,257 S * 3/2012 Honma et al. D13/182
D655,259 S * 3/2012 Honma et al. D13/182
D674,759 S * 1/2013 Chang et al. D13/182
D686,582 S * 7/2013 Krishnan et al. D13/182
D690,671 S * 10/2013 Gurary et al. D13/182

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

(21) Appl. No.: **29/484,670**

(22) Filed: **Mar. 12, 2014**

(30) **Foreign Application Priority Data**

Sep. 13, 2013 (KR) 30-2013-0047450

(51) **LOC (10) Cl.** **13-03**

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

(58) **Field of Classification Search**
USPC D13/182; 118/500, 715, 728, 729;
156/345.51, 345.52, 345.53, 345.55;
279/128; 361/234; 414/217, 220.01,
414/416.03, 935, 936, 937, 938, 939, 940,
414/941

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,078,565 A * 2/1963 Sanders 29/527.6
D320,361 S * 10/1991 Karasawa D10/103
D363,464 S * 10/1995 Fukasawa D13/182
D411,516 S * 6/1999 Imafuku et al. D13/182
D544,452 S * 6/2007 Nakamura et al. D13/182
D546,784 S * 7/2007 Hayashi D13/182
D548,705 S * 8/2007 Hayashi D13/182

(Continued)

FOREIGN PATENT DOCUMENTS

KR 3020090000444 4/2009

Primary Examiner — Elizabeth J Oswecki

(74) *Attorney, Agent, or Firm* — Lexyoume IP Meister, PLLC

(57) **CLAIM**

The ornamental design for a substrate supporter for semiconductor deposition apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a substrate supporter for semiconductor deposition apparatus showing our new design;

FIG. 2 is a front elevation view thereof;

FIG. 3 is a rear elevation view thereof;

FIG. 4 is a left side elevation view thereof;

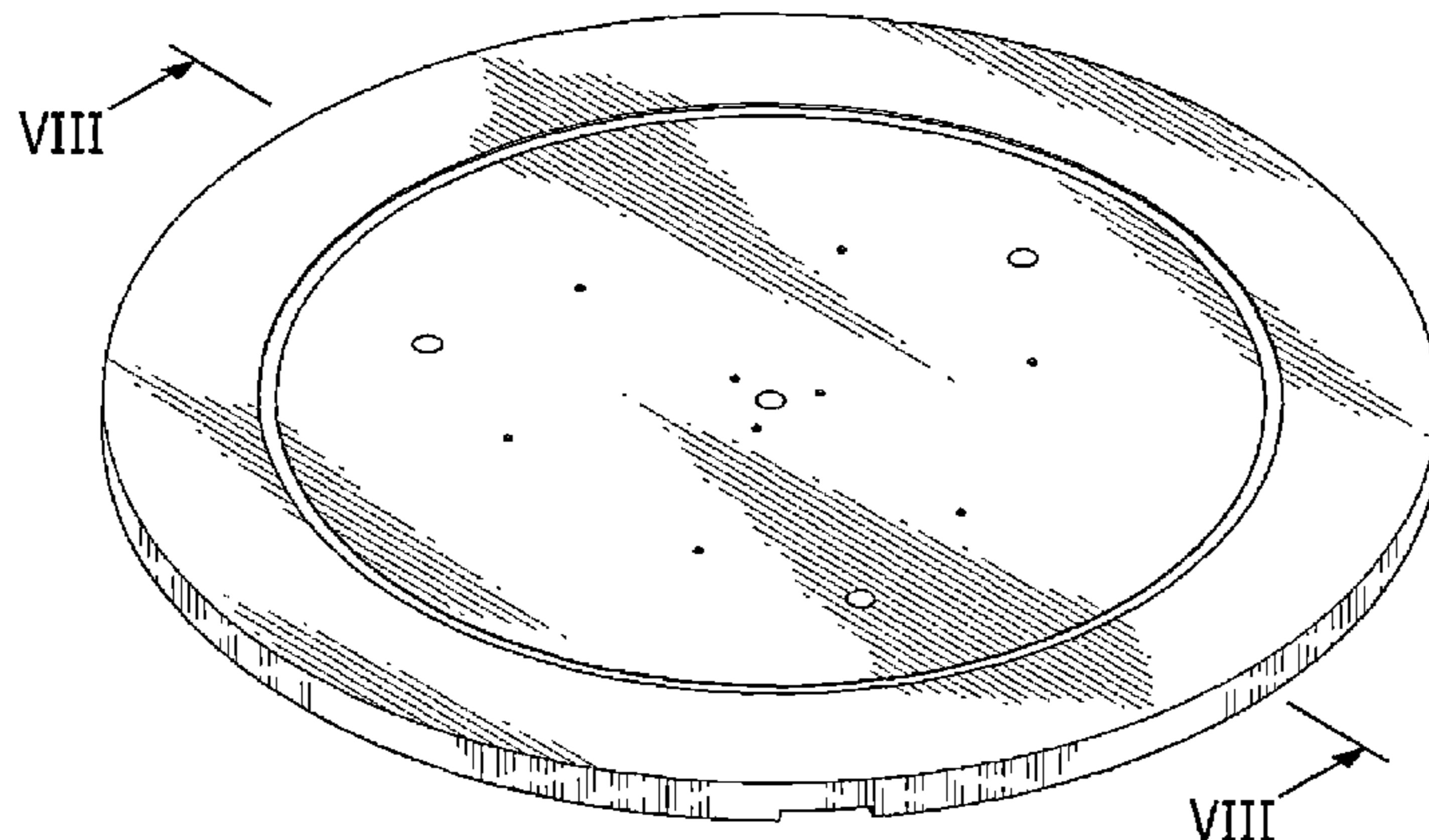
FIG. 5 is a right side elevation view thereof;

FIG. 6 is a top plan view thereof;

FIG. 7 is a bottom plan view thereof; and,

FIG. 8 is a cross-sectional view taken along line VIII-VIII of FIG. 1 with two partially enlarged views showing a transition from a center recess on the top surface of the support and an outer edge at the outer portion of the support.

1 Claim, 8 Drawing Sheets



US D716,742 S

Page 2

(56)

References Cited

U.S. PATENT DOCUMENTS

D695,241 S * 12/2013 Gurary et al. D13/182
D695,242 S * 12/2013 Gurary et al. D13/182
D703,162 S * 4/2014 Tamaso D13/182

2005/0035514 A1* 2/2005 Hillman et al. 269/21
2005/0152089 A1* 7/2005 Matsuda et al. 361/234
2005/0193952 A1* 9/2005 Goodman et al. 118/728
2005/0252447 A1* 11/2005 Zhao et al. 118/715

* cited by examiner

FIG.1

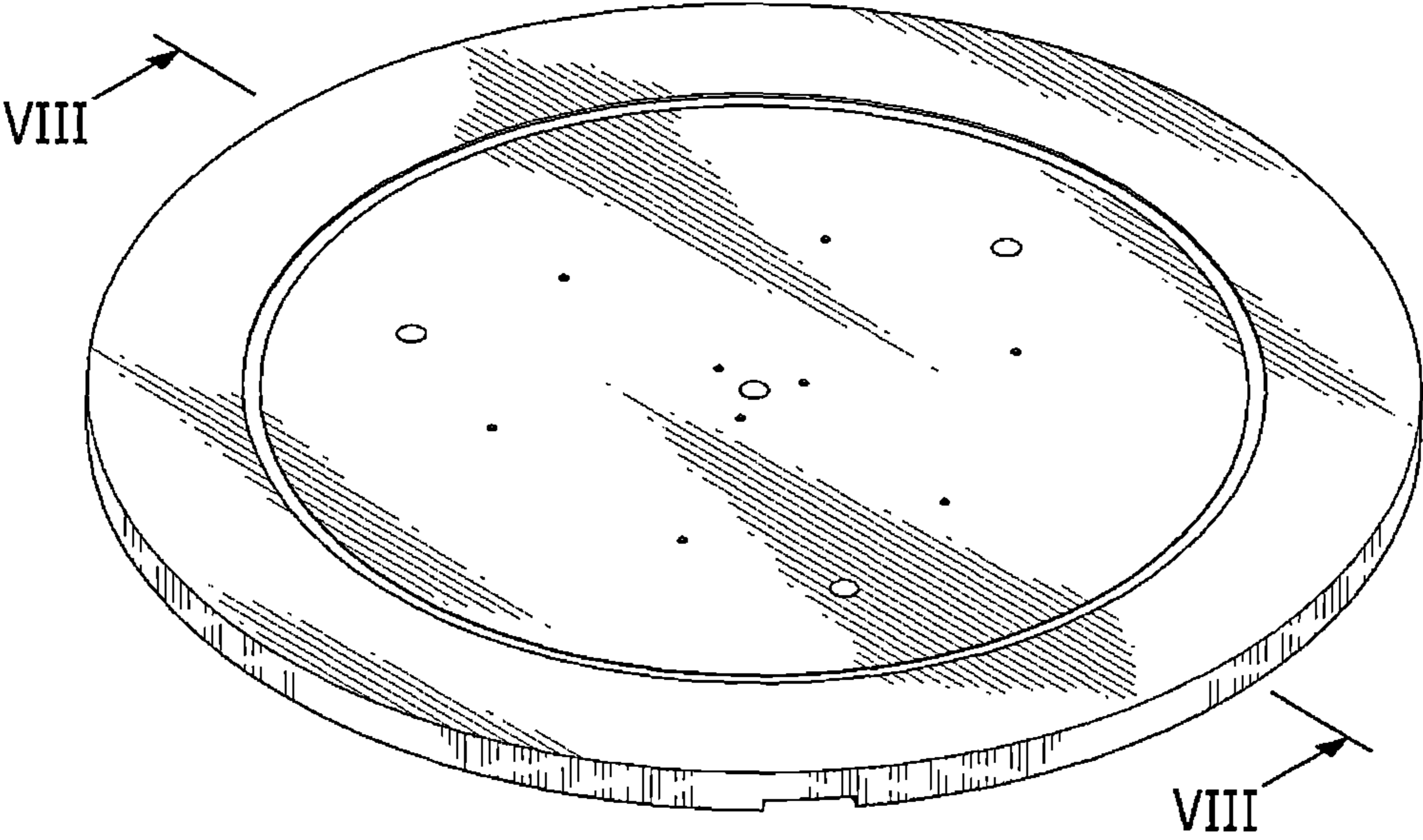


FIG.2



FIG.3



FIG.4



FIG.5



FIG.6

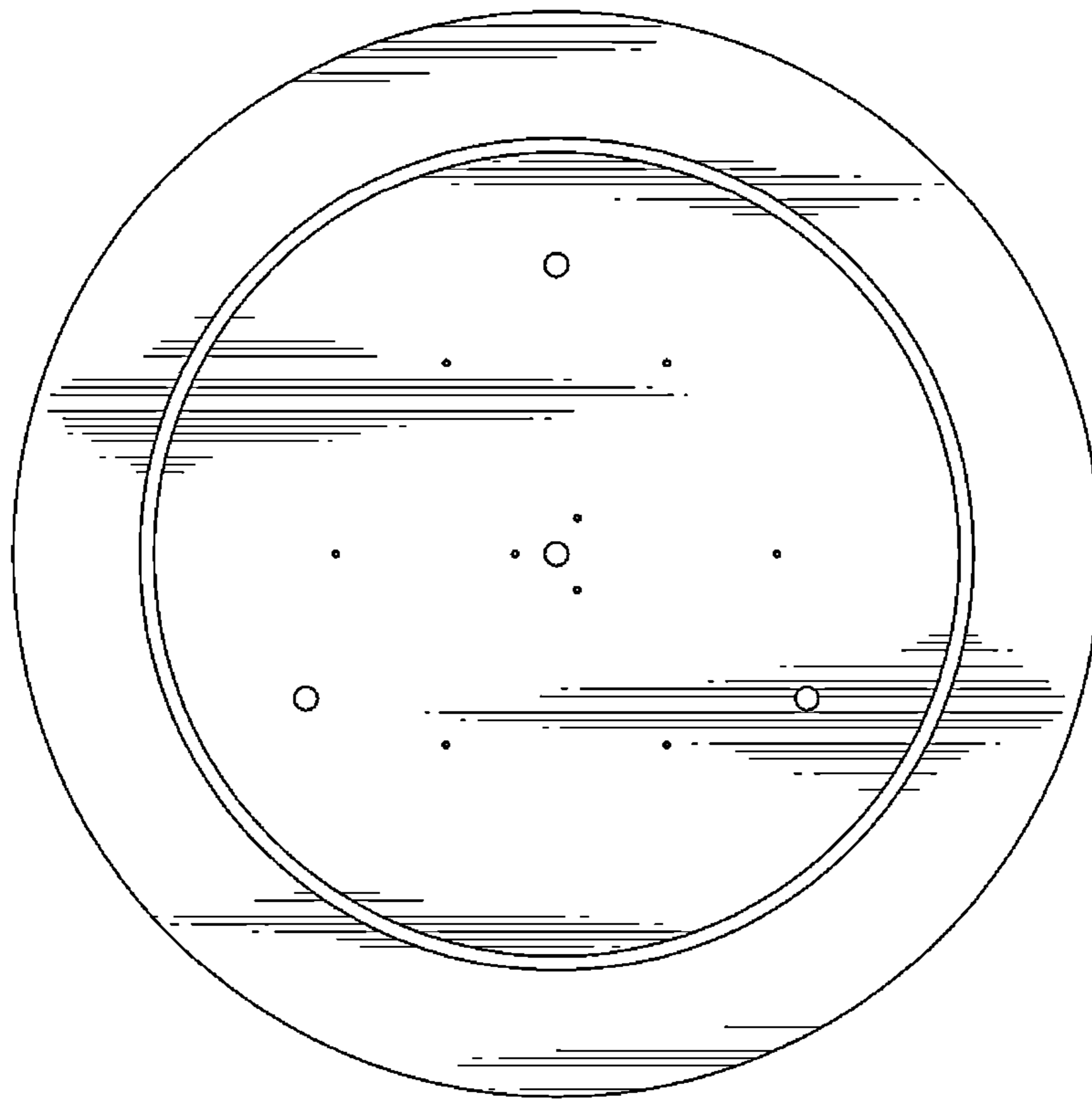


FIG.7

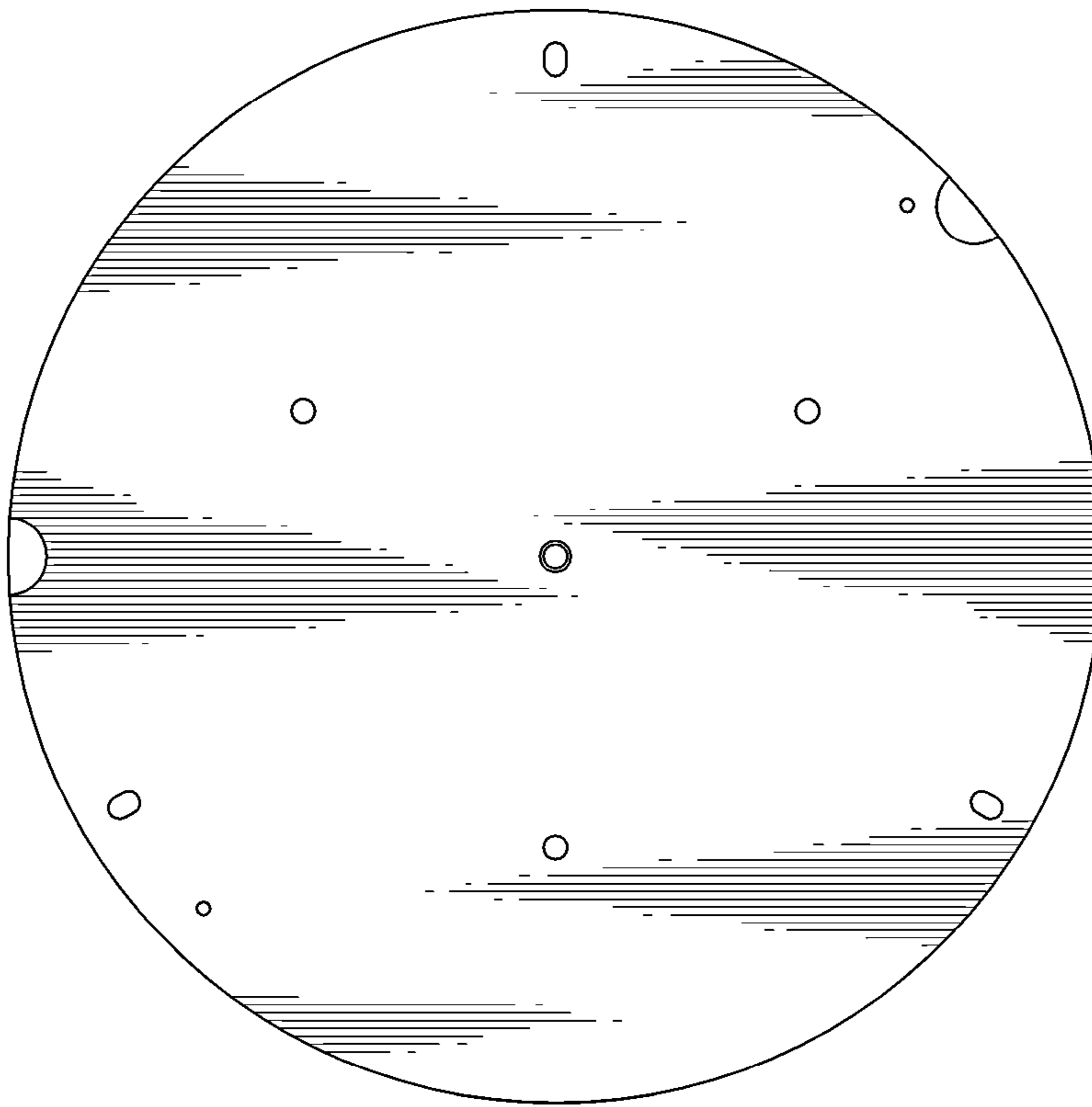


FIG.8

