US00D794753S

(12) **United States Design Patent**
Miller

(10) **Patent No.: US D794,753 S**
(45) **Date of Patent: ** Aug. 15, 2017**

---

(54) **SHOWERHEAD FOR A SEMICONDUCTOR PROCESSING CHAMBER**

(71) Applicant: **Applied Materials, Inc.**, Santa Clara, CA (US)

(72) Inventor: **Aaron Miller**, Sunnyvale, CA (US)

(73) Assignee: **APPLIED MATERIALS, INC.**, Santa Clara, CA (US)

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

(21) Appl. No.: **29/560,672**

(22) Filed: **Apr. 8, 2016**

(51) **LOC (10) Cl.** **23-01**

(52) **U.S. Cl.**
USPC **D23/213**

(58) **Field of Classification Search**
USPC D23/213, 223, 226, 229, 230
CPC C23C 16/45565; B05B 1/00; B05B 1/18; B05B 9/01
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,086,677	A		7/2000	Umotoy et al.	
D566,228	S	*	4/2008	Neagoe	D23/213
D593,640	S	*	6/2009	Schoenherr	D23/213
7,658,800	B2	*	2/2010	Chen	C23C 16/45565 118/715
D639,385	S	*	6/2011	Flowers	D23/213
D641,829	S	*	7/2011	Angelov	D23/213
D694,359	S	*	11/2013	Schoenherr	D23/213
D707,328	S	*	6/2014	Schoenherr	D23/213
D733,257	S	*	6/2015	Schoenherr	D23/213
D736,348	S	*	8/2015	Tan	D23/213
D751,176	S	*	3/2016	Schoenherr	D23/213
D752,708	S	*	3/2016	Chung	D23/213
D757,893	S	*	5/2016	Walker	D23/213
9,343,307	B2		5/2016	Anikitchev	
9,353,439	B2	*	5/2016	Kashyap	C23C 16/45525
9,464,353	B2	*	10/2016	Park	C23C 16/45551
9,484,190	B2	*	11/2016	Glukhoy	H01J 37/3244
2003/0140851	A1		7/2003	Janakiraman et al.	
2005/0173569	A1		8/2005	Noorbakhsh et al.	
2006/0021703	A1		2/2006	Umotoy et al.	
2006/0234514	A1		10/2006	Gianoulakis et al.	
2009/0179085	A1		7/2009	Carducci et al.	

* cited by examiner

Primary Examiner — Robin V Webster
(74) *Attorney, Agent, or Firm* — Patterson + Sheridan, LLP

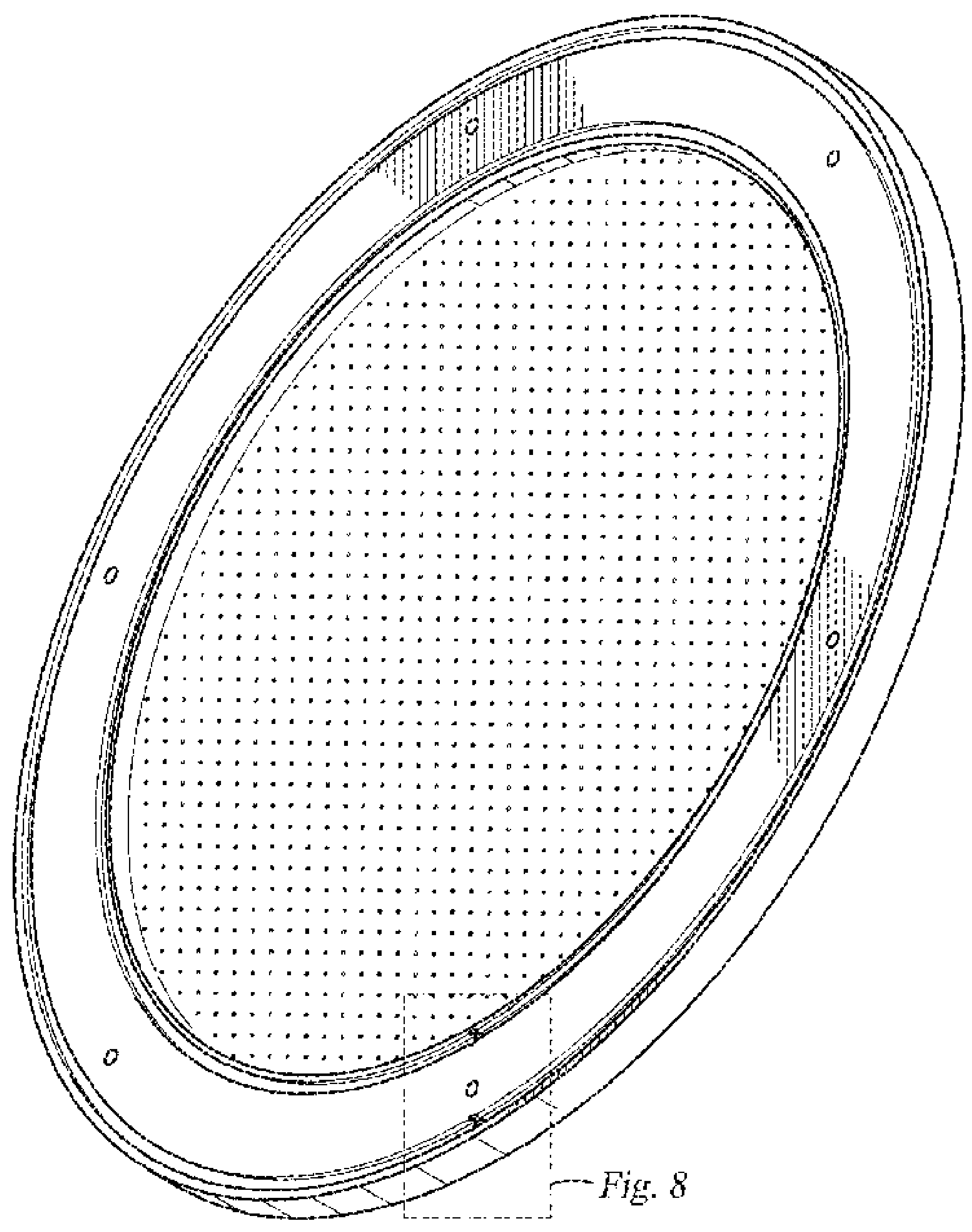
(57) **CLAIM**

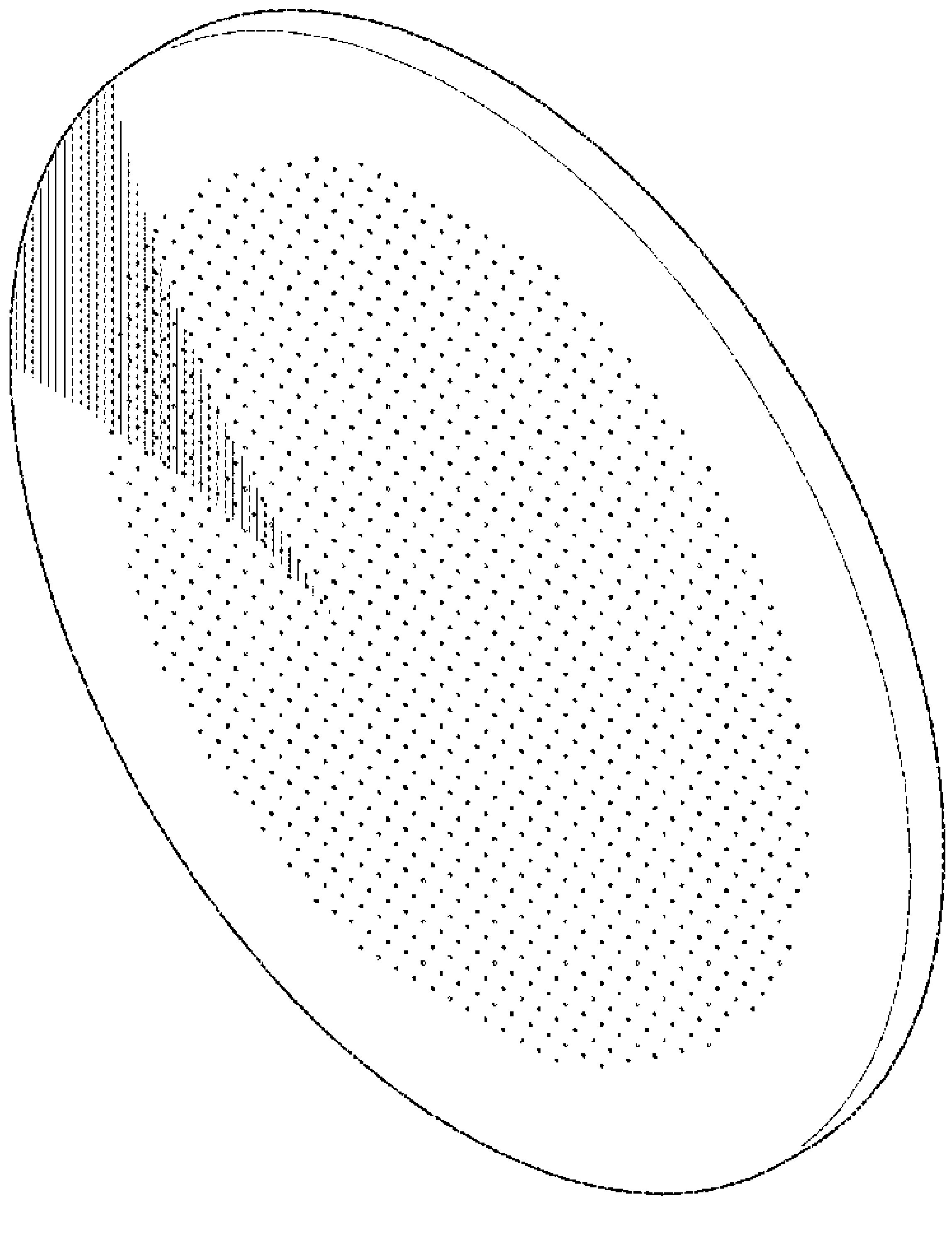
The ornamental design for a showerhead for a semiconductor processing chamber, as shown and described.

DESCRIPTION

FIG. **1** is an isometric top view of a showerhead for a semiconductor processing chamber showing my new design.
FIG. **2** is an isometric bottom view thereof.
FIG. **3** is a top plan view thereof.
FIG. **4** is a bottom plan view thereof.
FIG. **5** is a side elevational view thereof, the other side elevational views being identical.
FIG. **6** is a cross-sectional view thereof taken along lines **6-6** of FIG. **3**.
FIG. **7** is an enlarged view of a portion of FIG. **6**; and,
FIG. **8** is an enlarged view of a portion of FIG. **1**.

1 Claim, 7 Drawing Sheets





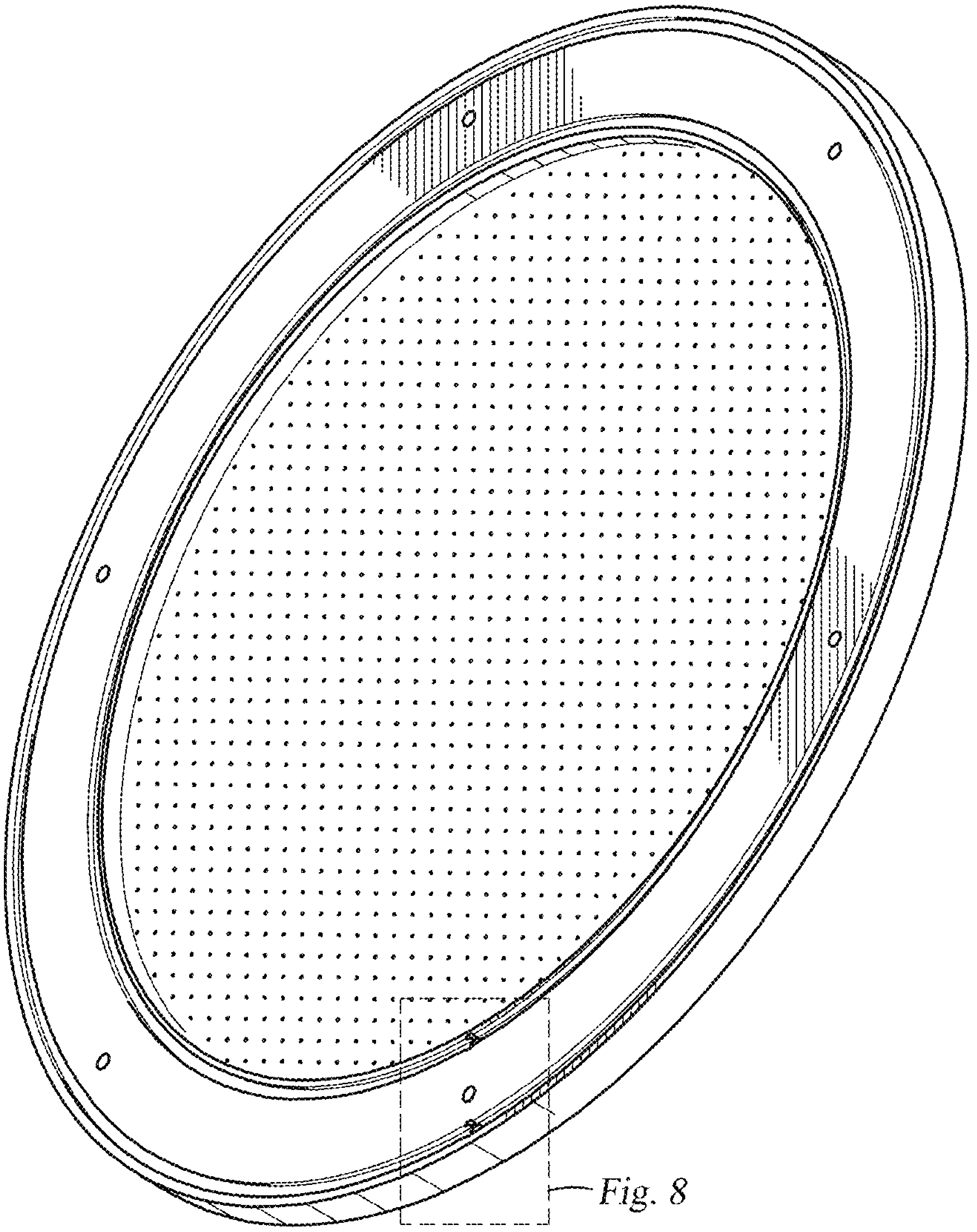


Fig. 1

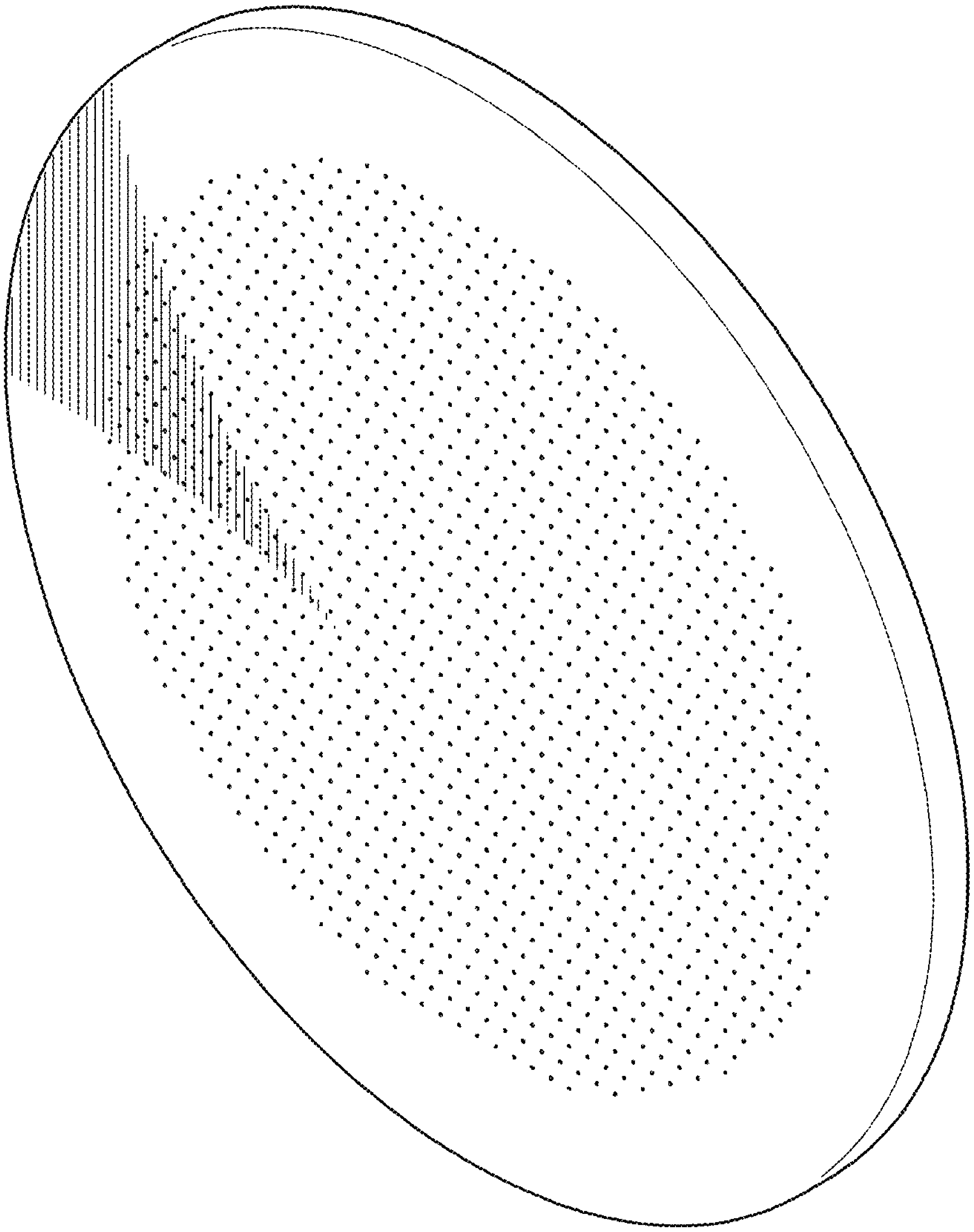


Fig. 2

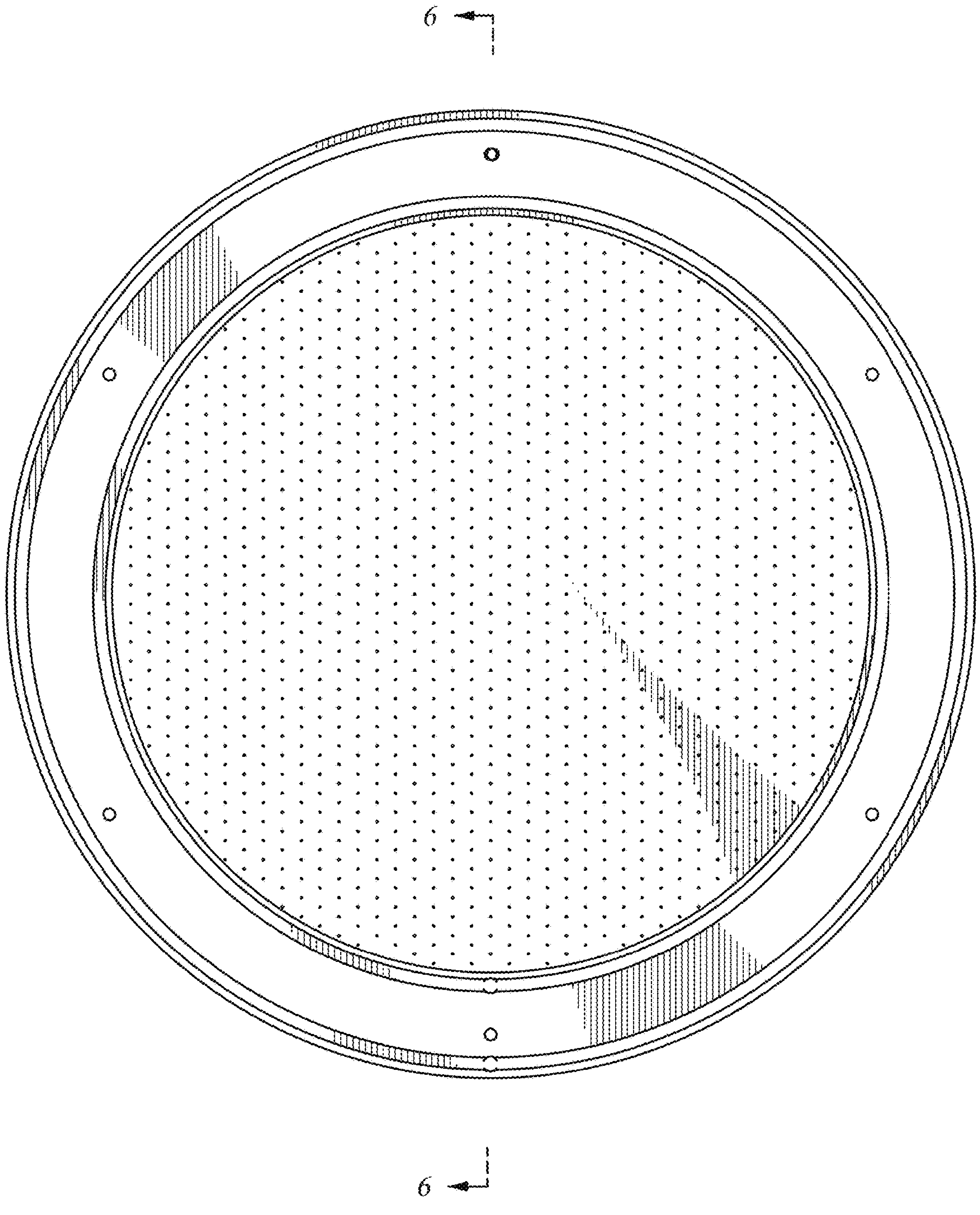


Fig. 3

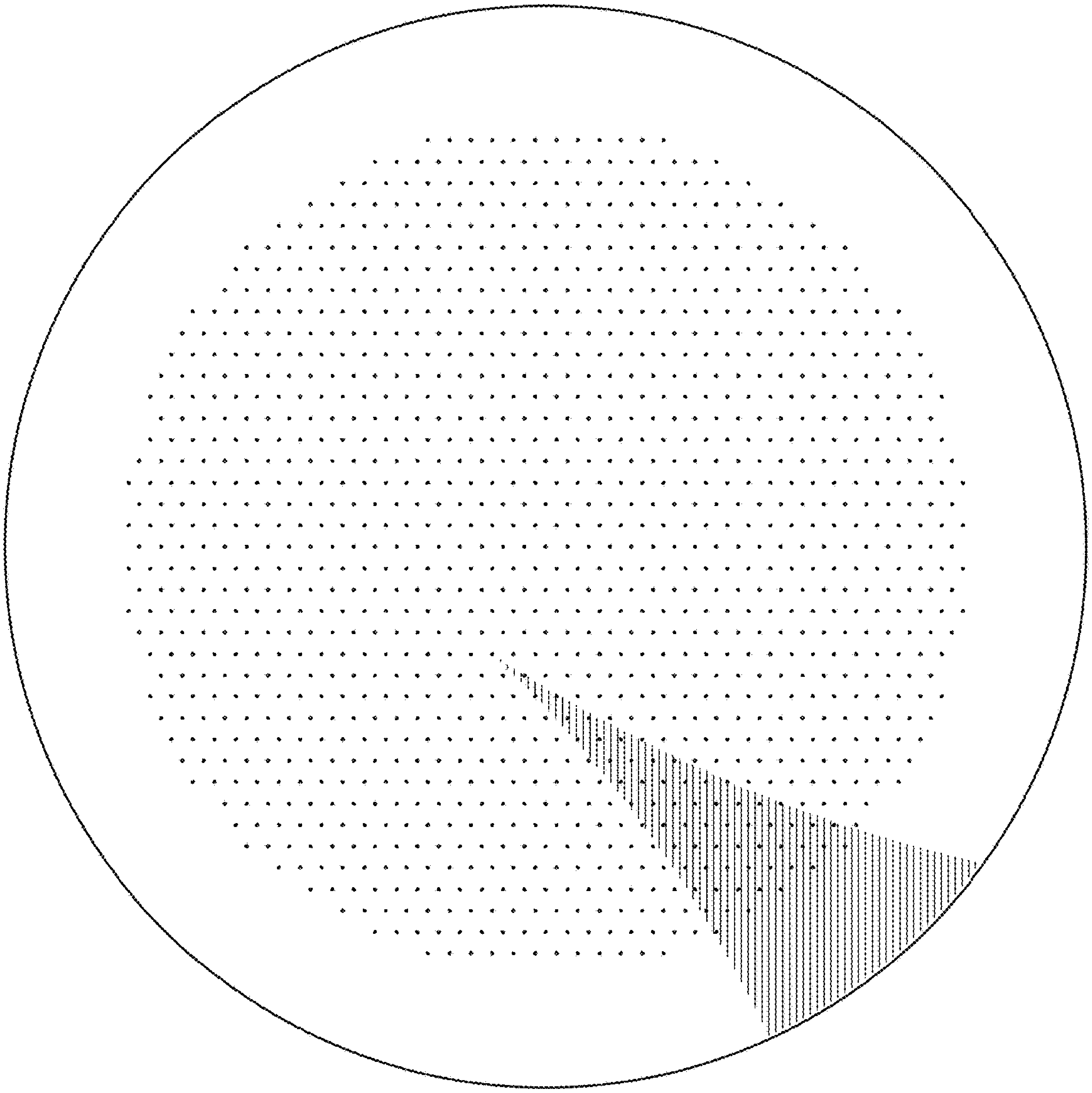


Fig. 4

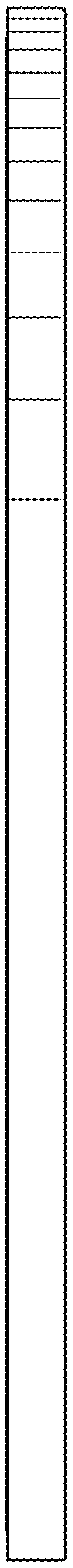


Fig. 5

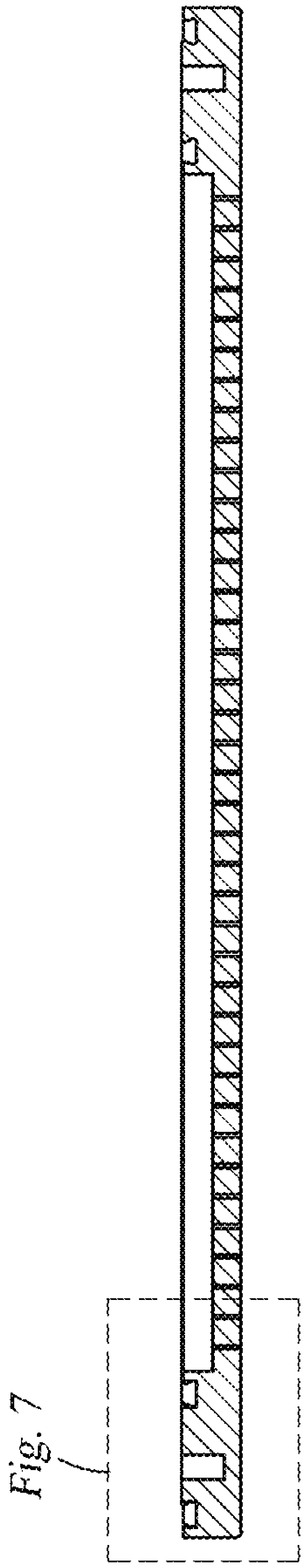


Fig. 6

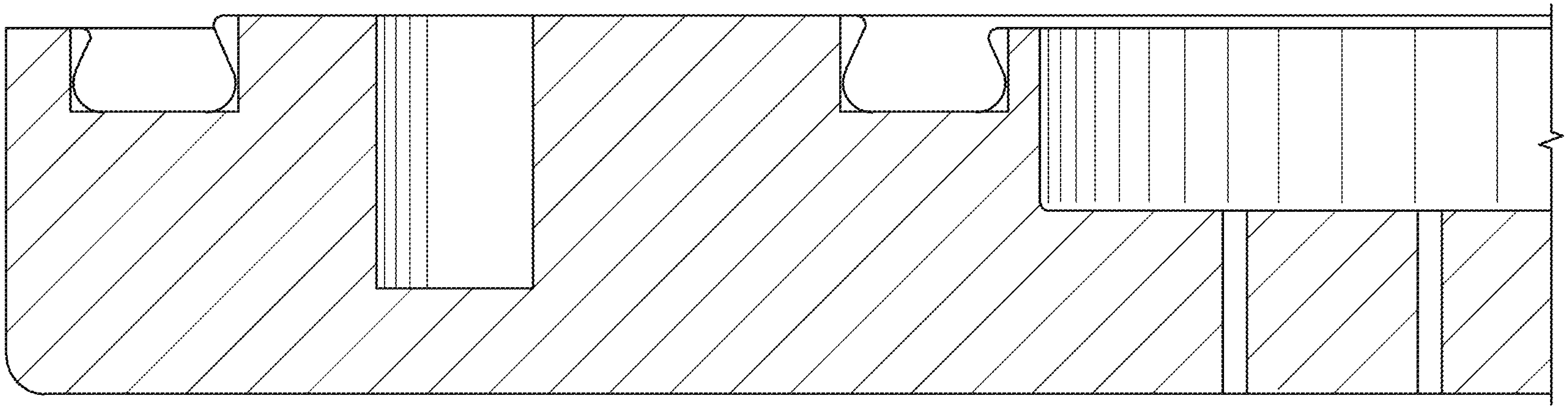


Fig. 7

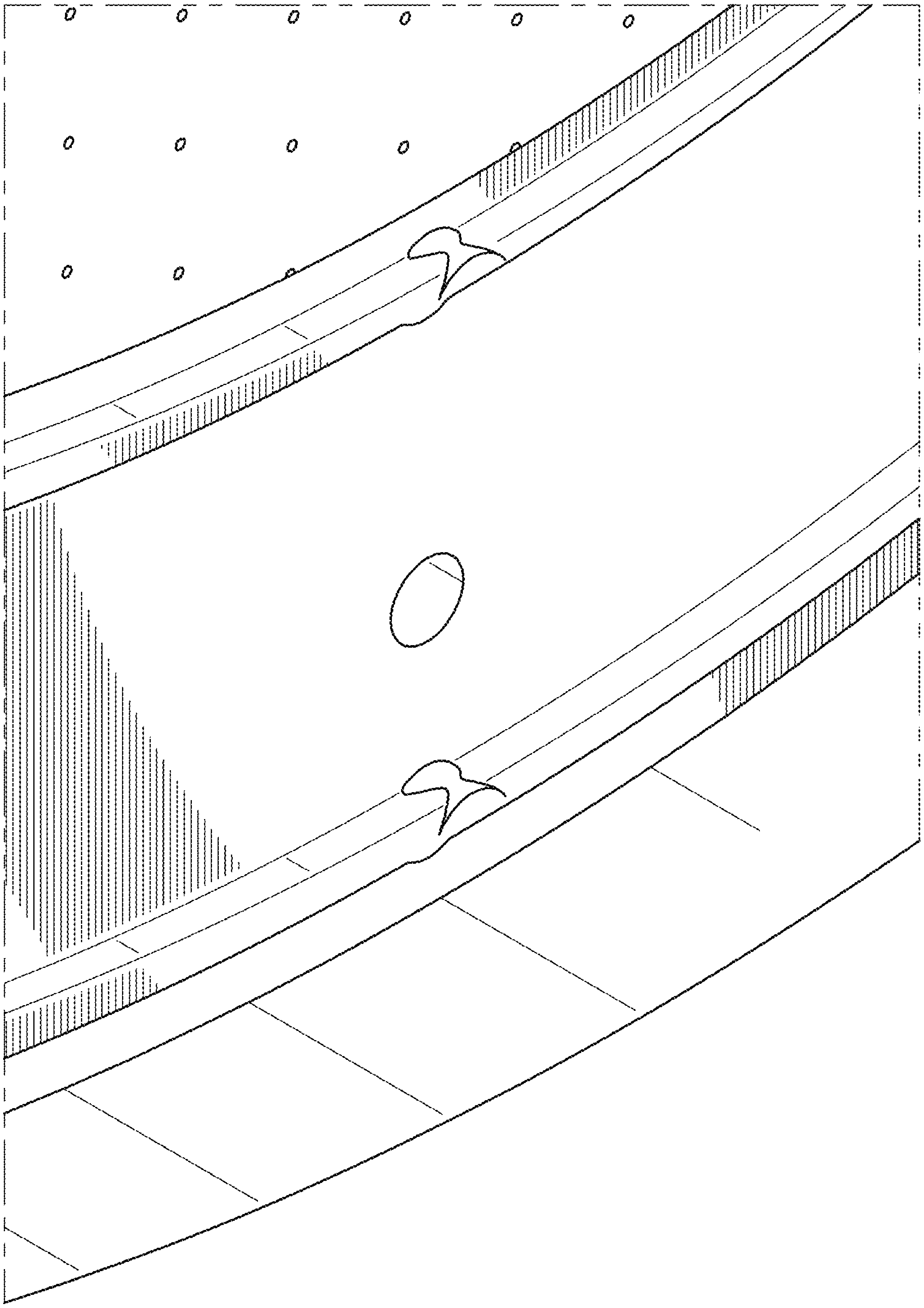


Fig. 8