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Kirkland et al.

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(54) **WAFER SUPPORT RING**

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

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(51) **LOC (10) Cl.** **12-05**

(52) **U.S. Cl.**
USPC **D34/29**

(58) **Field of Classification Search**
USPC .... D34/29, 28; 198/851, 853, 825, 890.1, 198/370.1, 370.04, 782, 722, 771, 866, 367, 198/790; 193/35 A, 35 C; 414/744.5, 800; D23/269
CPC H01L 21/67259; H01L 21/67742; H01L 21/67288; H02K 5/128
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,893,649	A *	7/1975	Cornell	....	B65F 1/06 248/101
4,867,401	A *	9/1989	Graff	....	B65B 67/12 248/99
4,899,967	A *	2/1990	Johnson	....	B65B 67/12 248/97
D457,283	S *	5/2002	Wayt	....	D34/1
D591,924	S *	5/2009	Abe	....	D34/35
8,016,542	B2 *	9/2011	Cox	....	H01L 21/67742 414/744.5
D646,764	S *	10/2011	Rusconi	....	D23/269
D655,401	S *	3/2012	Muramatsu	....	D23/269
D667,601	S *	9/2012	Fitzpatrick	....	D34/6
D723,239	S *	2/2015	Raschke	....	D34/29
D743,513	S *	11/2015	Yamagishi	....	D23/269
D754,308	S *	4/2016	Nakagawa	....	D23/269
2004/0048474	A1 *	3/2004	Asano	....	H01L 21/67259 438/689
2006/0166503	A1 *	7/2006	Sasaki	....	B24B 37/042 438/692
2012/0263569	A1 *	10/2012	Priddy	....	C30B 23/02 414/800
2013/0330165	A1 *	12/2013	Wimplinger	......	H01L 21/67288 414/800
2014/0154038	A1 *	6/2014	Hudgens	....	H02K 5/128 414/744.5

* cited by examiner

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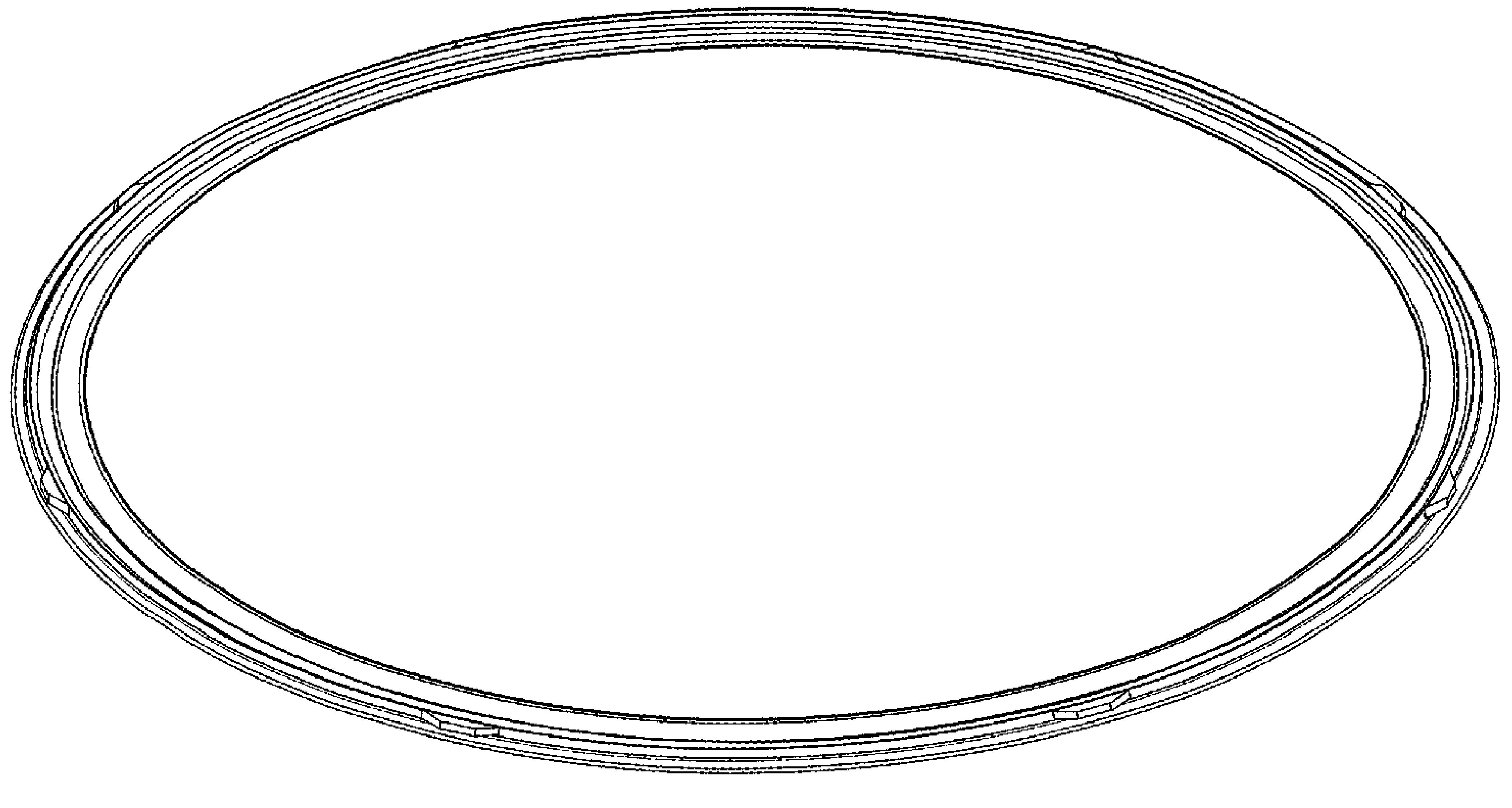
(57) **CLAIM**

The ornamental design for a wafer support ring, as shown and described.

DESCRIPTION

FIG. **1** is a top perspective view of a wafer support ring showing our new design;
FIG. **2** is a bottom perspective view thereof;
FIG. **3** is a top plan view thereof;
FIG. **4** is a bottom plan view thereof;
FIG. **5** is a front elevational view, with the rear being a mirror image thereof;
FIG. **6** is a cross sectional view taken at line **6**-**6** of FIG. **3**; and,
FIG. **7** is a cross sectional view taken at line **7**-**7** of FIG. **3**.

1 Claim, 6 Drawing Sheets



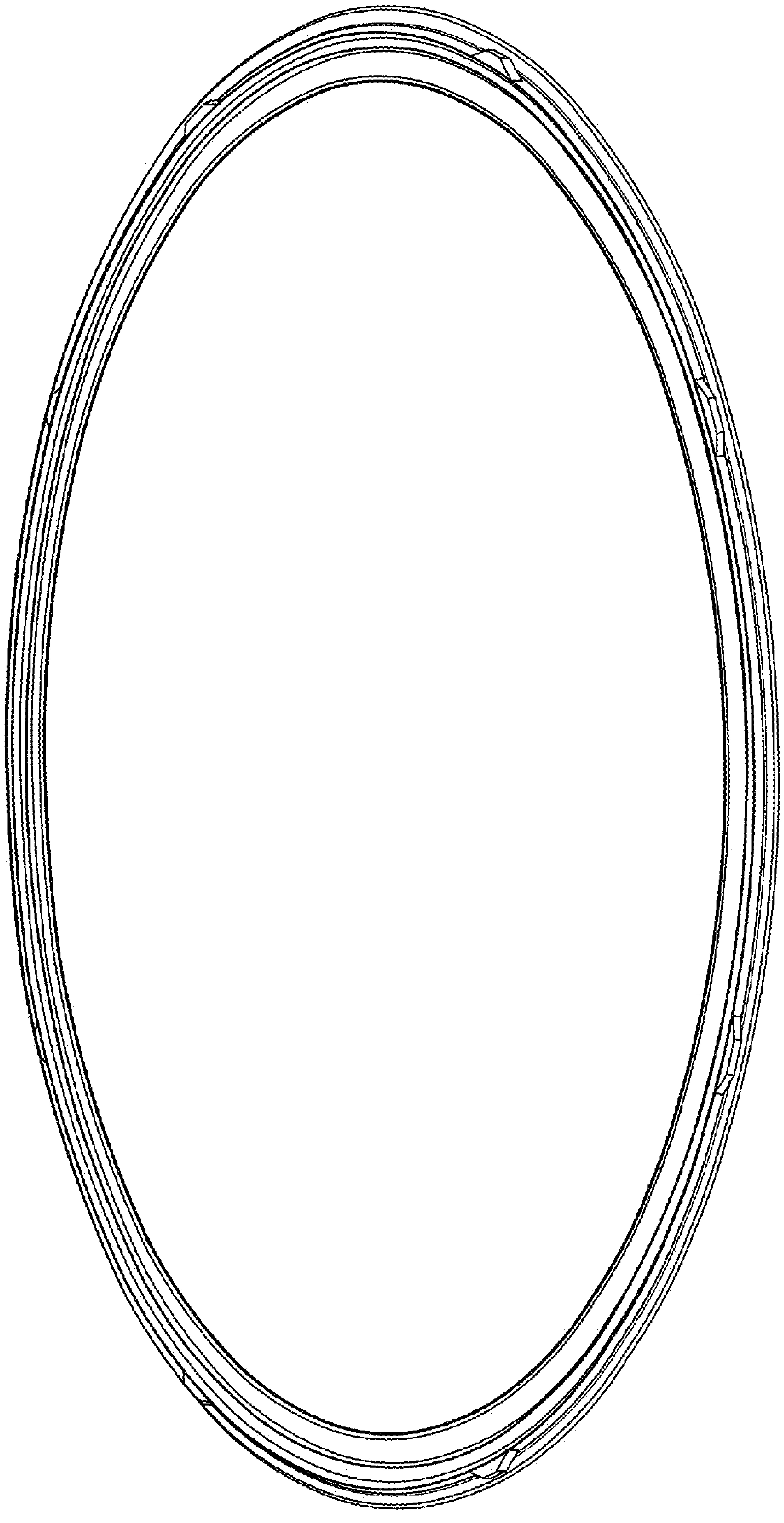


Fig. 1

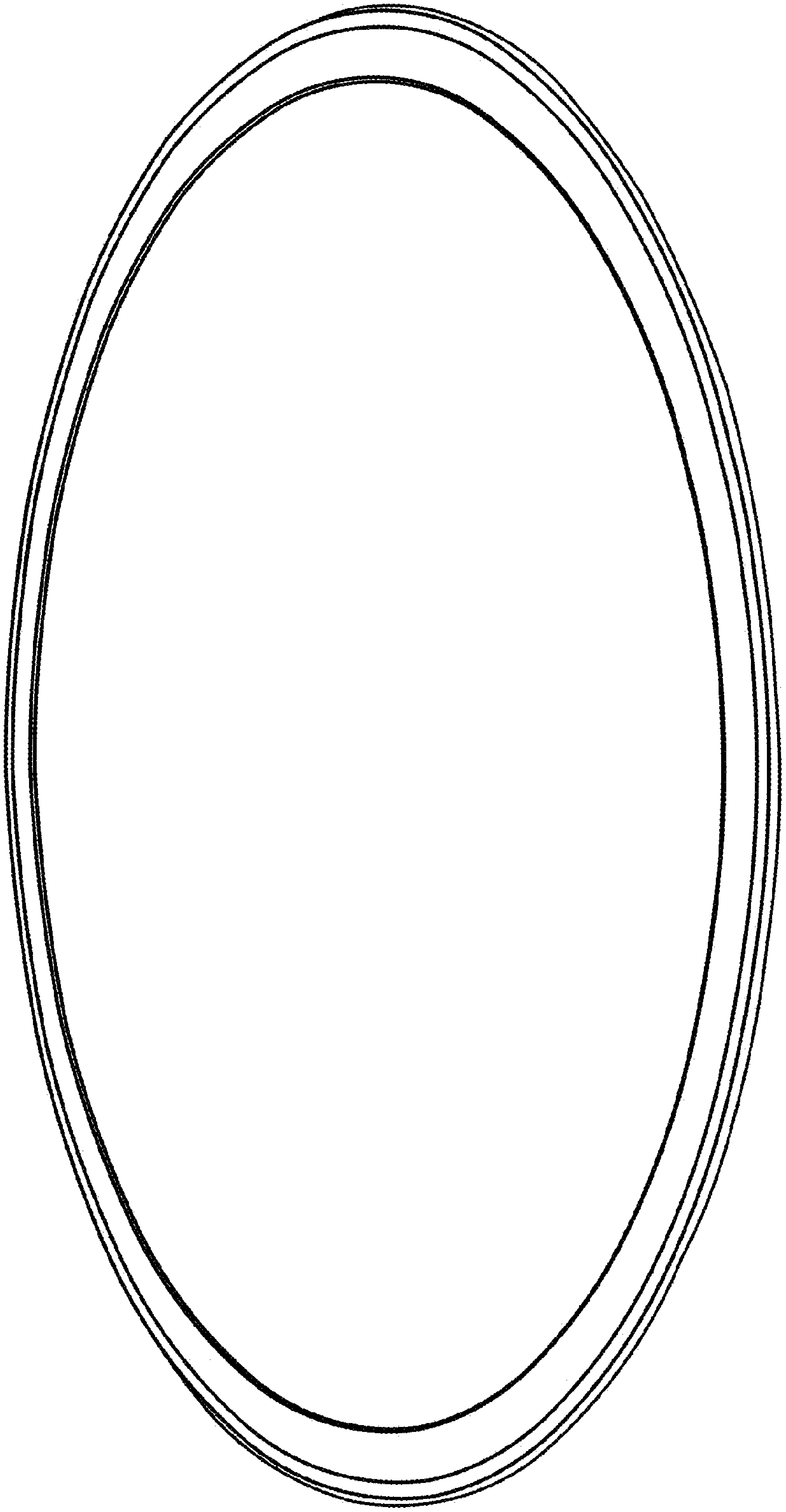


Fig. 2

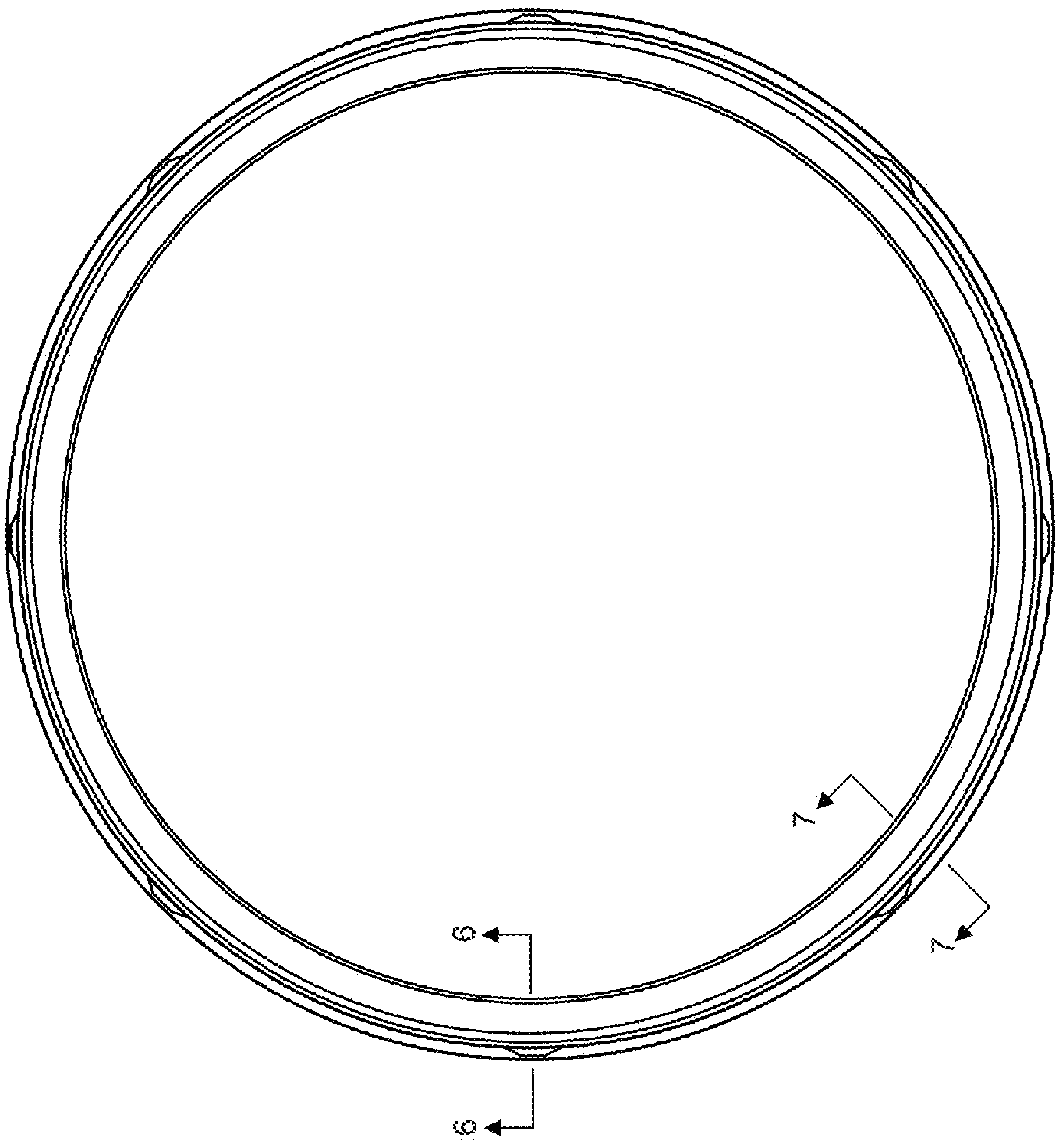


Fig. 3

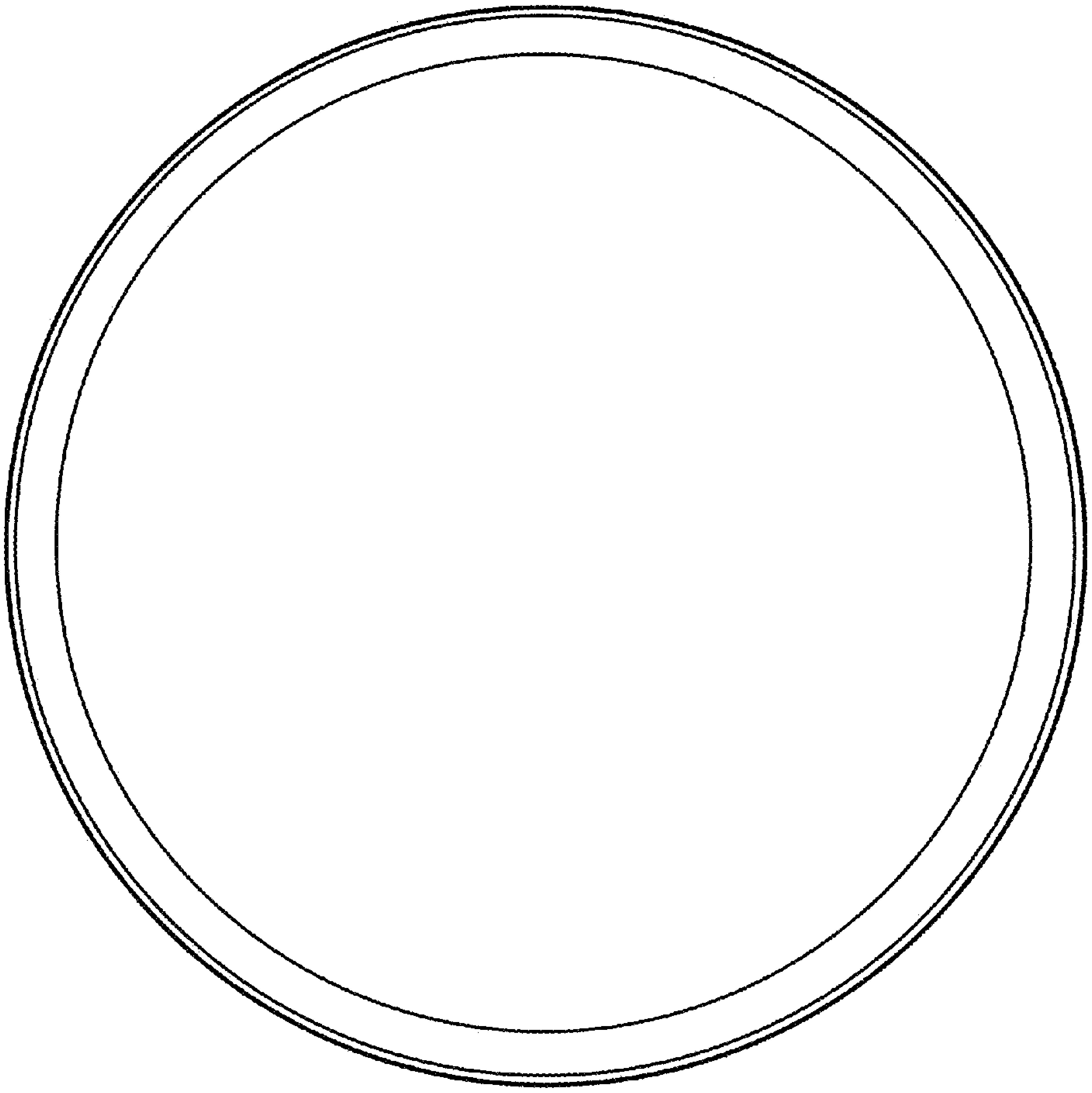


Fig. 4

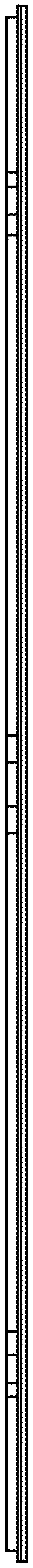


Fig. 5

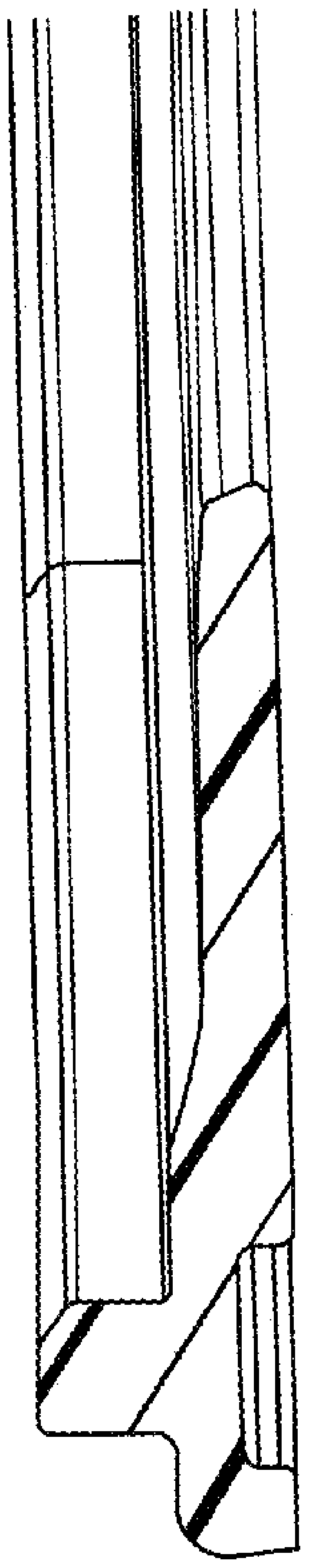


Fig. 6

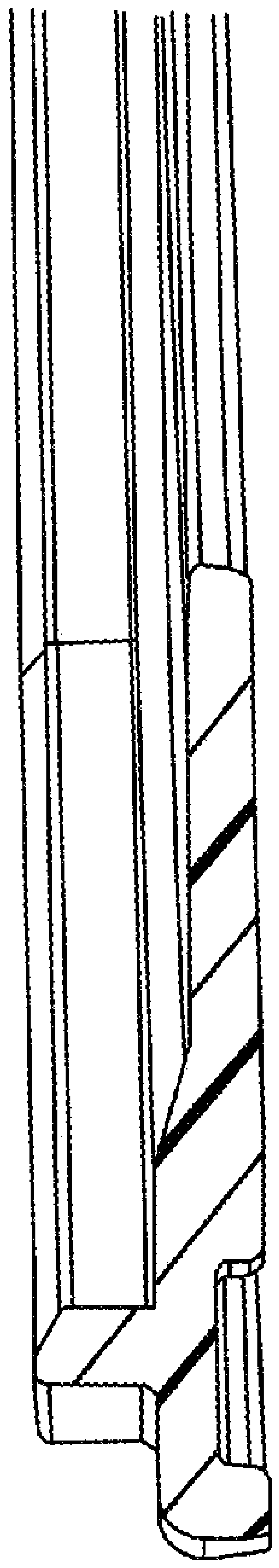


Fig. 7