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Kang et al.

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(45) **Date of Patent: ** Sep. 1, 2020**

(54) **SEAL MEMBER FOR SEMICONDUCTOR PRODUCTION APPARATUS**

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(73) Assignee: **Valqua, Ltd.**, Tokyo (JP)

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (12) Cl.** **23-01**
(52) **U.S. Cl.**
USPC **D23/269**
(58) **Field of Classification Search**
USPC D23/269; D8/382
CPC F16J 15/32; Y10T 428/215
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,622,905 A *	12/1952	Heinrich	F16J 15/32 277/380
3,990,711 A *	11/1976	Hill	F16J 15/32 277/451
4,421,330 A *	12/1983	Burke	F16J 15/166 277/572
4,466,624 A *	8/1984	Panigati	F16J 15/48 277/448

(Continued)

FOREIGN PATENT DOCUMENTS

JP	D1612684 S	9/2017
JP	D1589474 S	10/2017

(Continued)

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(57) **CLAIM**

The ornamental design for a seal member for semiconductor production apparatus, as shown and described.

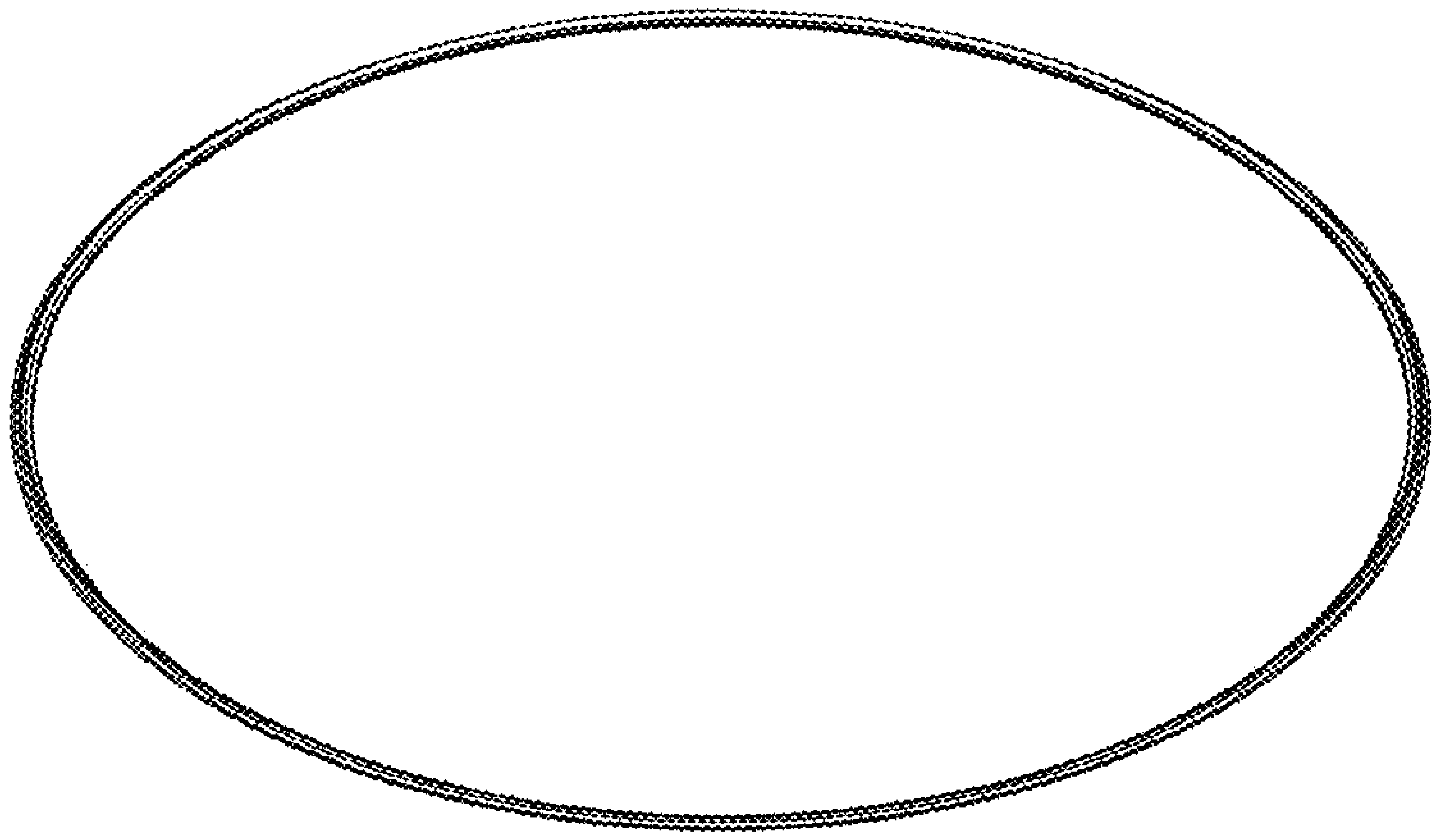
DESCRIPTION

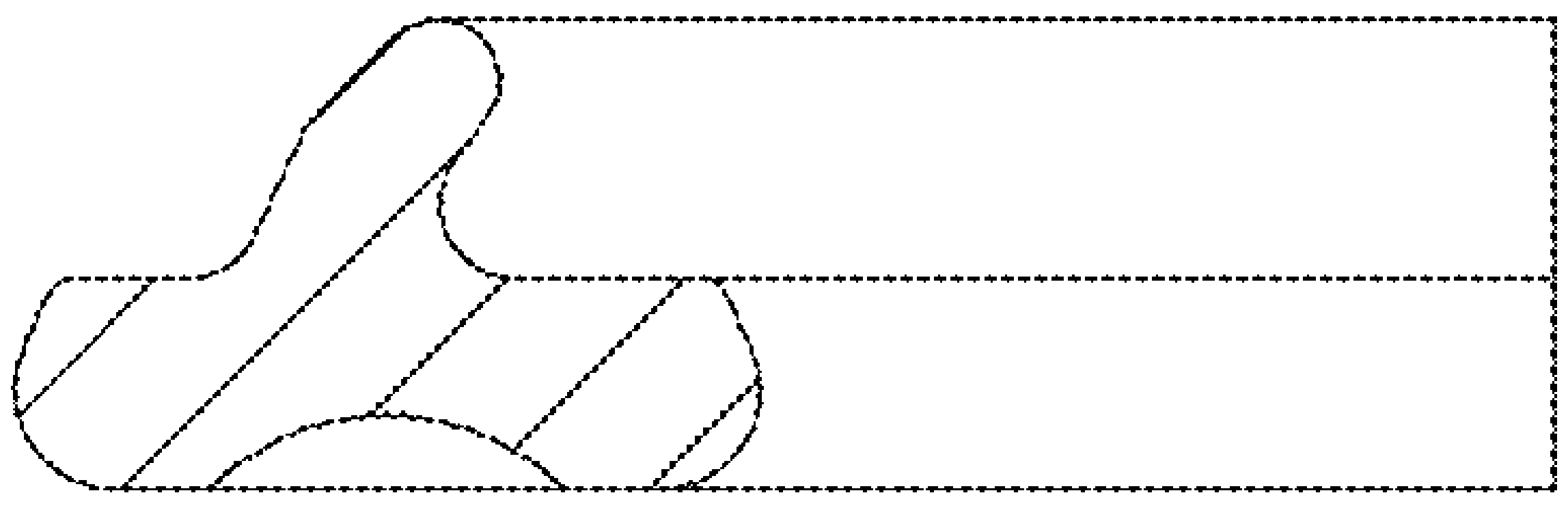
1.1 : Perspective
1.2 : Front
1.3 : Back
1.4 : Left
1.5 : Right
1.6 : Top
1.7 : Bottom
1.8 : Cross-sectional
1.9 : Partial enlargement of cross-sectional view **1.8**
1.10 : Reference

The present article is a seal member for semiconductor production apparatuses, such as chemical vapor deposition apparatuses and dry etching apparatuses; as illustrated in the reproduction **1.10**, the article is to be inserted into the groove of a semiconductor production apparatus; the semiconductor production apparatus itself forms no part of the claimed design; the reproduction **1.8** shows a transverse cross-sectional front view taken along the horizontal center of the reproduction **1.6**; and the reproduction **1.9** is an enlarged view showing a left end portion of the cross-sectional view **1.8**.

The broken lines shown in Reproduction **1.10** are for the purposes of illustrating environmental structure and form no part of the claimed design.

1 Claim, 10 Drawing Sheets





(56) References Cited

U.S. PATENT DOCUMENTS

4,582,366	A	*	4/1986	Burfield	B62D 55/0887 277/402
D289,078	S	*	3/1987	Vassallo	D23/269
5,261,677	A	*	11/1993	Gotoh	F16J 15/32 277/438
D379,493	S	*	5/1997	Woods	D23/269
D498,826	S	*	11/2004	Takahiro	D23/269
D646,764	S	*	10/2011	Rusconi	D23/269
D696,751	S	*	12/2013	Beagen, Jr.	D23/269
D728,182	S	*	4/2015	Cook	D32/54
D728,757	S	*	5/2015	Graham	D23/269
D796,012	S	*	8/2017	Hagano	D23/269
D818,089	S	*	5/2018	Kim	D23/269
D821,552	S	*	6/2018	Nakagawa	D23/269
D822,181	S	*	7/2018	Nakagawa	D23/269
D846,095	S	*	4/2019	Copeland	D23/269
D846,096	S	*	4/2019	Copeland	D23/269
D846,097	S	*	4/2019	Copeland	D23/269
D846,098	S	*	4/2019	Copeland	D23/269
D852,335	S	*	6/2019	Copeland	D23/269
D852,935	S	*	7/2019	Copeland	D23/269
D857,859	S	*	8/2019	Copeland	D23/269
2015/0362075	A1	*	12/2015	Kubota	F16F 9/36 280/276

FOREIGN PATENT DOCUMENTS

JP	D1612685	S	9/2018
TW	D150427	S	11/2012
TW	D163769	S	10/2014
TW	D183446	S	6/2017

* cited by examiner

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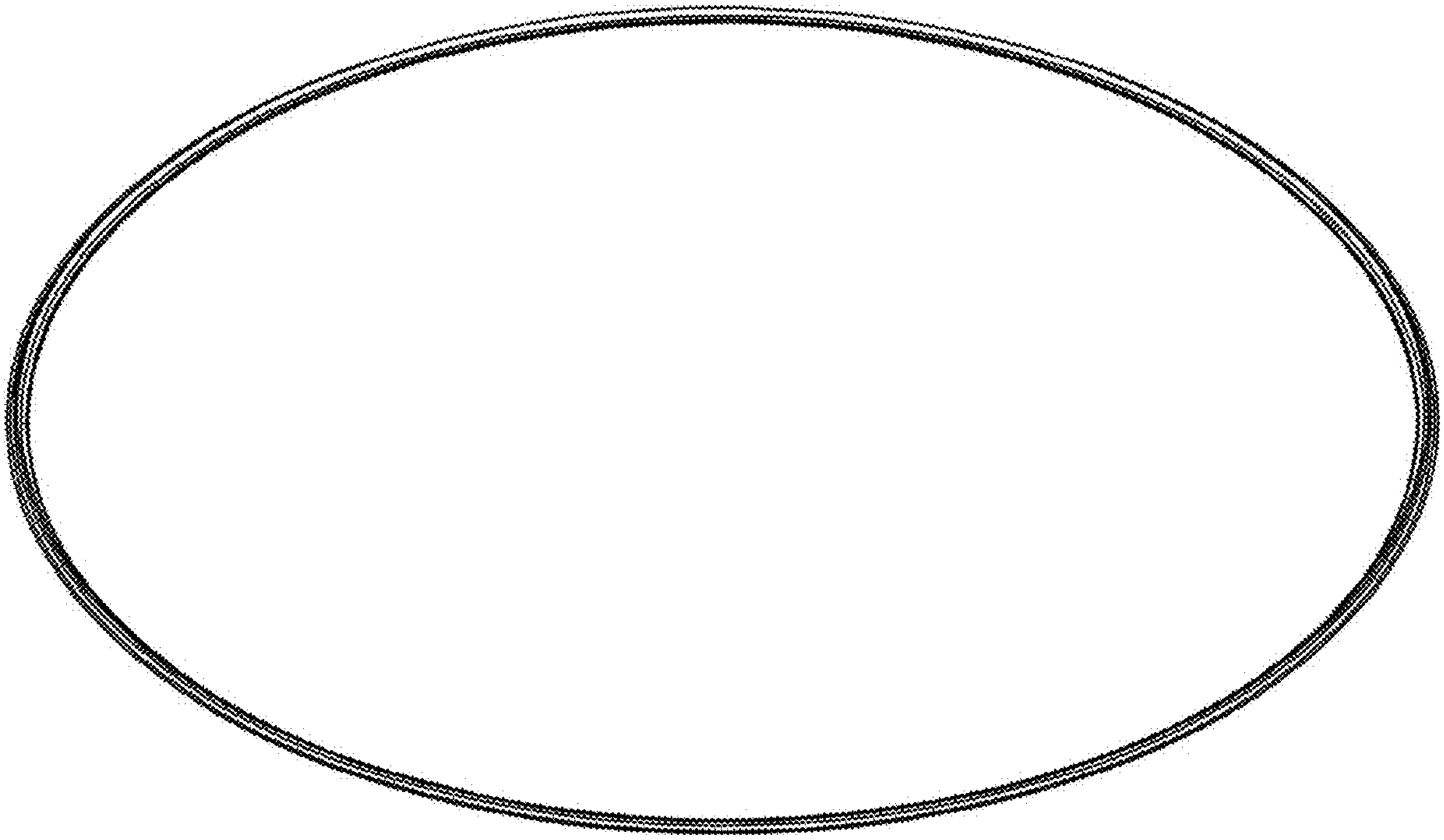

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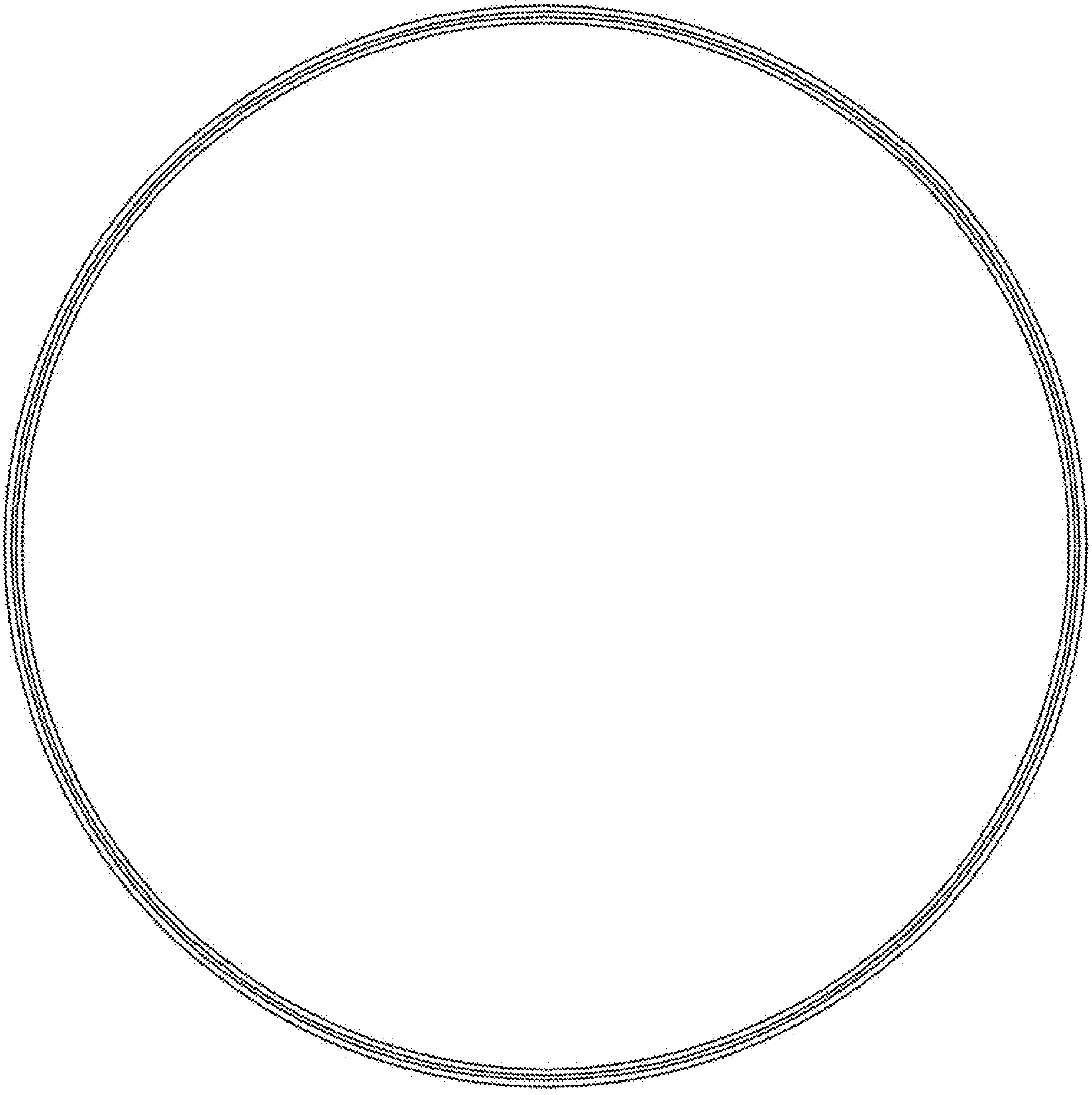

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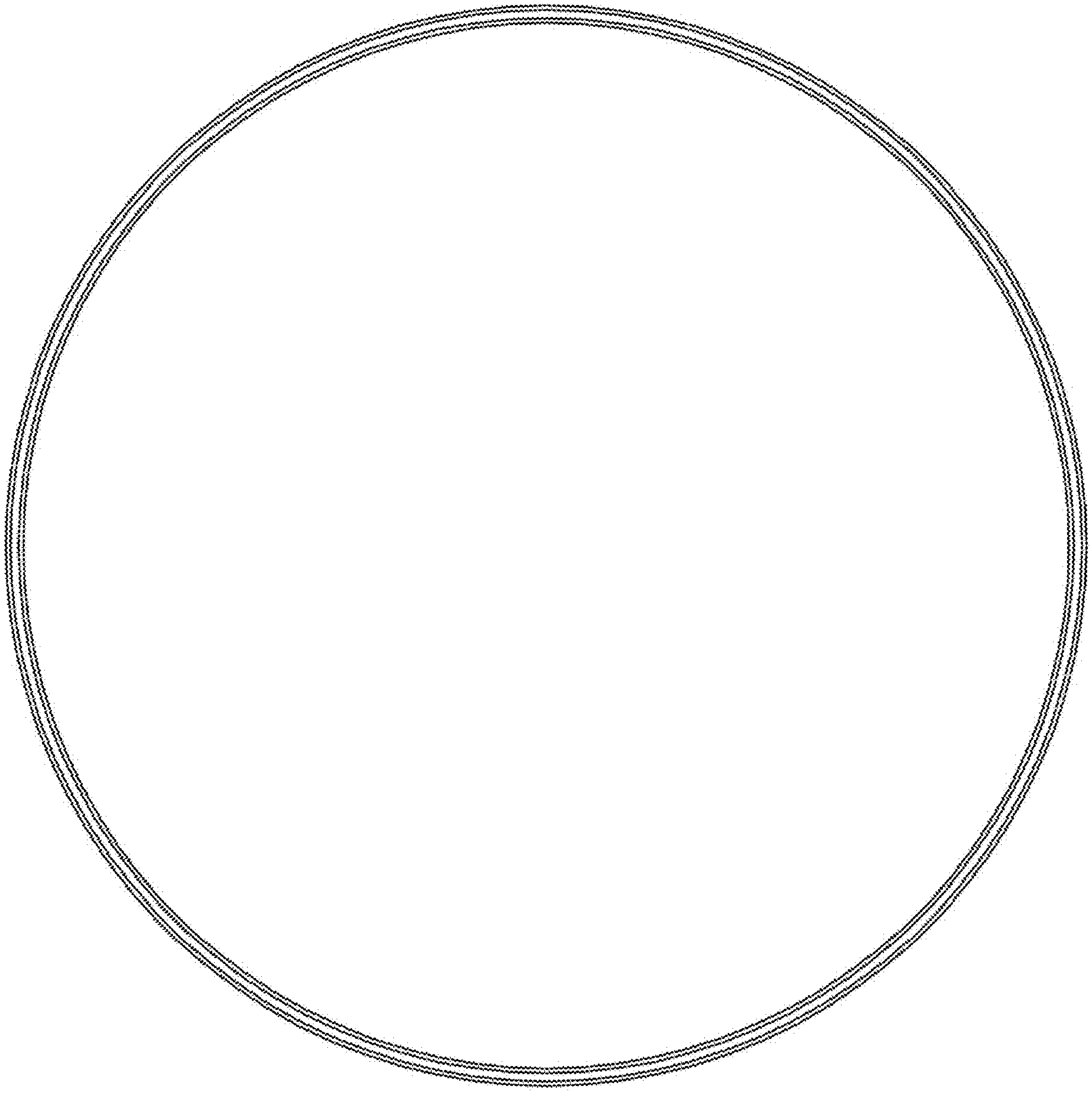

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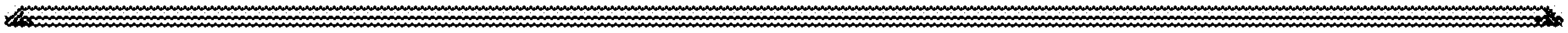

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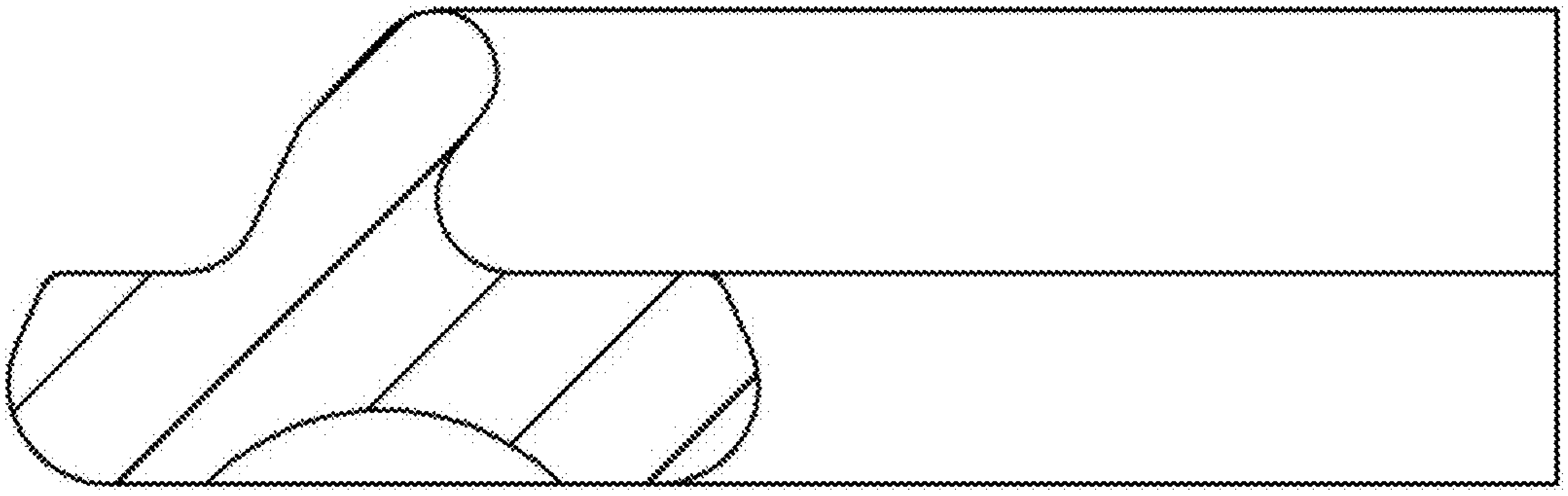

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