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(12) **United States Design Patent** (10) **Patent No.:** **US D985,741 S**  
**Tanaka et al.** (45) **Date of Patent:** **\*\* May 9, 2023**

(54) **GLAND FOR PIPE JOINTS**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **KUBOTA CORPORATION**, Osaka (JP)

CN 305104893 \* 4/2019  
ES 004013449-0001 5/2017

(Continued)

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OTHER PUBLICATIONS

(73) Assignee: **KUBOTA CORPORATION**, Osaka (JP)

E Sigma One-Lok Model Slice Wedge Restraint for PVC Pipe Product Specification Sheet; Publish Date Sep. 2019; Visited Online Sep. 1, 2022; [https://api.ferguson.com/dar-step-service/Query?ASSET\\_ID=6292763&USE\\_TYPE=SPECIFICATION&PRODUCT\\_ID=1775659&\\_gl=1\\*11rkvyp\\*\\_ga\\*OTI2NTkxMjMwLjE2Nj1wNj10MTg.\\*\\_ga\\_E1N3E6YBCR\\*M TY2MjA2MjQxNy4xLjEuMTY2MjA2MjQ0NS4zMi4wLjA.&\\_ga=2.262627148.1510863686.1662062418-QIVQYJbCh1iEQ3cEAQYDCABEgLfD\\_BwE#xd\\_co\\_f=MjdmM2NmYjQtZG926591230.1662062418&\\_gac=1.243067318.1662062418.EAIaIqobChMI8sK6mrD0-QIVQYJbCh1iEQ3cEAQYDCABEgLfD\\_BwE#xd\\_co\\_f=MjdmM2NmYjQtZGQ0OC00YzMIILkyZktMjE4ZWE1MzQ3NzE3~](https://api.ferguson.com/dar-step-service/Query?ASSET_ID=6292763&USE_TYPE=SPECIFICATION&PRODUCT_ID=1775659&_gl=1*11rkvyp*_ga*OTI2NTkxMjMwLjE2Nj1wNj10MTg.*_ga_E1N3E6YBCR*M TY2MjA2MjQxNy4xLjEuMTY2MjA2MjQ0NS4zMi4wLjA.&_ga=2.262627148.1510863686.1662062418-QIVQYJbCh1iEQ3cEAQYDCABEgLfD_BwE#xd_co_f=MjdmM2NmYjQtZG926591230.1662062418&_gac=1.243067318.1662062418.EAIaIqobChMI8sK6mrD0-QIVQYJbCh1iEQ3cEAQYDCABEgLfD_BwE#xd_co_f=MjdmM2NmYjQtZGQ0OC00YzMIILkyZktMjE4ZWE1MzQ3NzE3~) (Year: 2019).\*

(Continued)

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

(21) Appl. No.: **35/512,846**

(22) Filed: **Apr. 30, 2021**

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Primary Examiner — Amy C Wierenga

(30) **Foreign Application Priority Data**

Nov. 6, 2020 (JP) ..... 2020-23928

Nov. 6, 2020 (JP) ..... 2020-23929

(74) Attorney, Agent, or Firm — Potomac Law Group, PLLC; John J. Penny, Jr.

(51) **LOC (14) Cl.** ..... **23-01**

(57) **CLAIM**

(52) **U.S. Cl.**

USPC ..... **D23/269**

The ornamental design for a gland for pipe joints, as shown and described.

(58) **Field of Classification Search**

USPC ..... D23/259, 262, 269, 233, 303, 322, 341,  
D23/363, 386; 277/351–353, 477,  
277/479–482

**DESCRIPTION**

(Continued)

- 1. Gland for pipe joints
- 2. Gland for pipe joints
- 3. Gland for pipe joints
- 4. Gland for pipe joints
- 5. Gland for pipe joints
- 6. Gland for pipe joints
- 1.1 : Perspective
- 1.2 : Rear perspective view
- 1.3 : Front

(Continued)

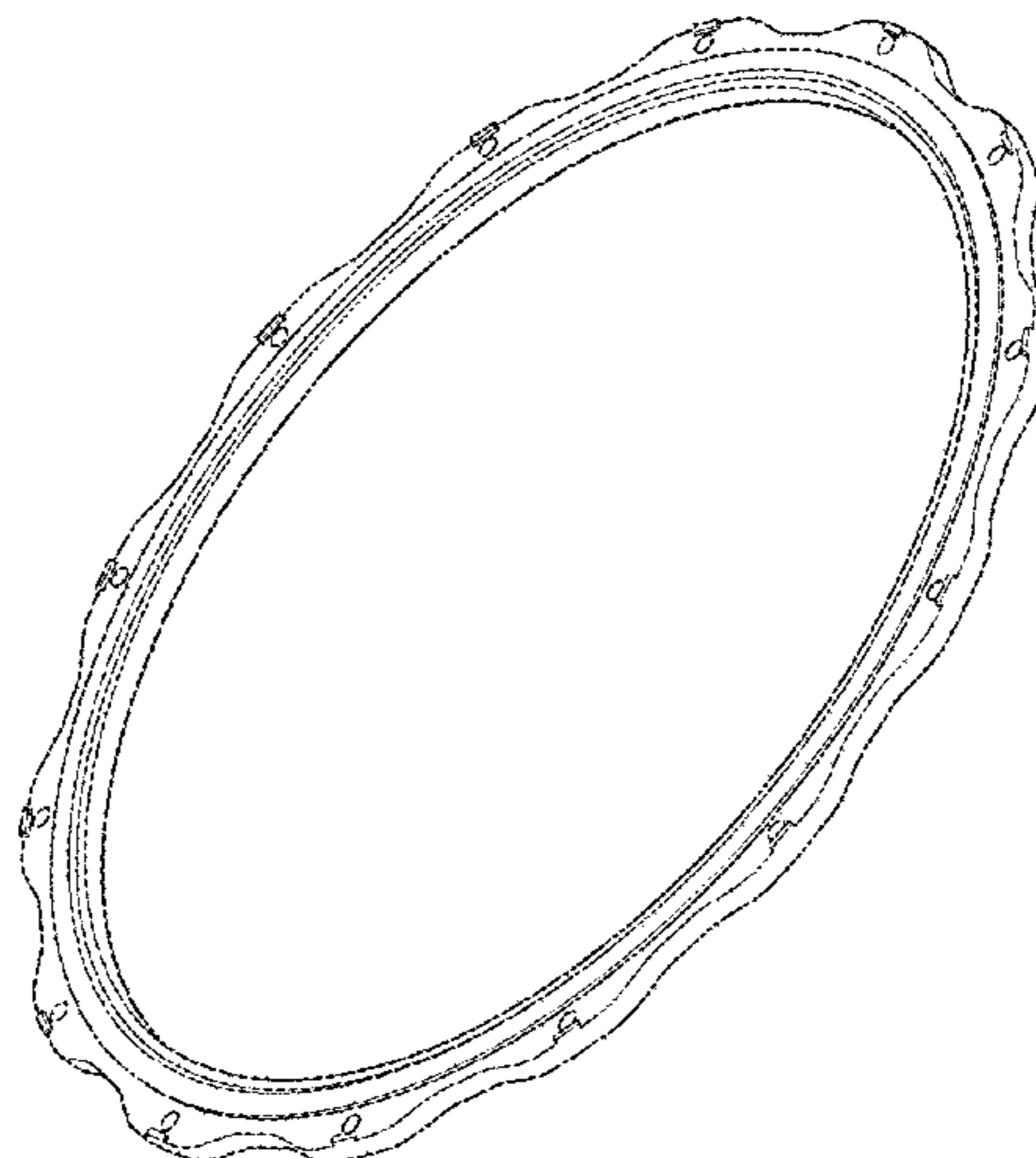
(56) **References Cited**

U.S. PATENT DOCUMENTS

D35,064 S \* 9/1901 Pulcifer ..... 277/921

D47,989 S \* 10/1915 Breuer ..... D23/269

(Continued)



1.4 : Back  
 1.5 : Left  
 1.6 : Top  
 1.7 : Cross sectional  
 1.8 : Enlarged  
 2.1 : Perspective  
 2.2 : Rear perspective view  
 2.3 : Front  
 2.4 : Back  
 2.5 : Left  
 2.6 : Top  
 2.7 : Cross sectional  
 2.8 : Enlarged  
 3.1 : Perspective  
 3.2 : Rear perspective view  
 3.3 : Front  
 3.4 : Back  
 3.5 : Left  
 3.6 : Top  
 3.7 : Bottom  
 3.8 : Cross sectional  
 3.9 : Enlarged  
 4.1 : Perspective  
 4.2 : Rear perspective view  
 4.3 : Front  
 4.4 : Back  
 4.5 : Left  
 4.6 : Top  
 4.7 : Cross sectional  
 4.8 : Enlarged  
 5.1 : Perspective  
 5.2 : Rear perspective view  
 5.3 : Front  
 5.4 : Back  
 5.5 : Left  
 5.6 : Top  
 5.7 : Cross sectional  
 5.8 : Enlarged  
 6.1 : Perspective  
 6.2 : Rear perspective view  
 6.3 : Front  
 6.4 : Back  
 6.5 : Left  
 6.6 : Top  
 6.7 : Bottom  
 6.8 : Cross sectional  
 6.9 : Enlarged

The article is a gland for pipe joints used for joining cast iron pipes for water supply; the right views of designs 1 to 6 are omitted because they are mirror images of the left views (Figs. 1.5, 2.5, 3.5, 4.5, 5.5, 6.5) respectively; the bottom views of designs 1, 2, 4, and 5 are omitted because they are mirror images of the top views (Figs. 1.6, 2.6, 4.6, 5.6) respectively; Figs. 1.7, 2.7, 3.8, 4.7, 5.7, 6.8 are cross-sectional views taken along the A-A' line shown in the front views (Figs. 1.3, 2.3, 3.3, 4.3, 5.3, 6.3) respectively; Figs. 1.8, 2.8, 3.9, 4.8, 5.8, 6.9 are enlarged views of the B-B'

portion shown in the cross-sectional views (Figs. 1.7, 2.7, 3.8, 4.7, 5.7, 6.8).

### 1 Claim, 50 Drawing Sheets

#### (58) Field of Classification Search

CPC ..... E04D 113/1047; F16L 23/032  
See application file for complete search history.

#### (56) References Cited

##### U.S. PATENT DOCUMENTS

D50,389	S *	2/1917	Joslin	.....	D23/269
D51,579	S *	12/1917	Beynon	.....	D23/269
2,738,995	A *	3/1956	Risley	.....	F16L 21/04 285/356
3,352,579	A *	11/1967	Hoke	.....	F16L 21/08 277/621
4,544,188	A *	10/1985	Dugger	.....	F16L 21/04 285/337
4,874,192	A *	10/1989	Key	.....	F16L 21/04 285/337
4,896,903	A *	1/1990	Shumard	.....	F16L 21/04 285/364
D513,793	S *	1/2006	Copeland	.....	D23/262
D529,145	S *	9/2006	Wortmann	.....	D23/269
7,185,924	B1 *	3/2007	Longacre	.....	F16L 25/065 285/337
D560,660	S *	1/2008	Brassard	.....	D23/269
D620,086	S *	7/2010	Copeland	.....	D23/266
D638,522	S *	5/2011	Yoshida	.....	D23/269
D784,498	S *	4/2017	LaCroix	.....	D23/269
D873,981	S *	1/2020	Yoshida	.....	D23/269
D888,903	S *	6/2020	Gunther	.....	D23/269
D890,310	S *	7/2020	Yoshida	.....	D23/269
2015/0292656	A1 *	10/2015	Kishi	.....	F16K 3/30 285/356
2016/0281890	A1 *	9/2016	Hicks	.....	F16J 15/021

##### FOREIGN PATENT DOCUMENTS

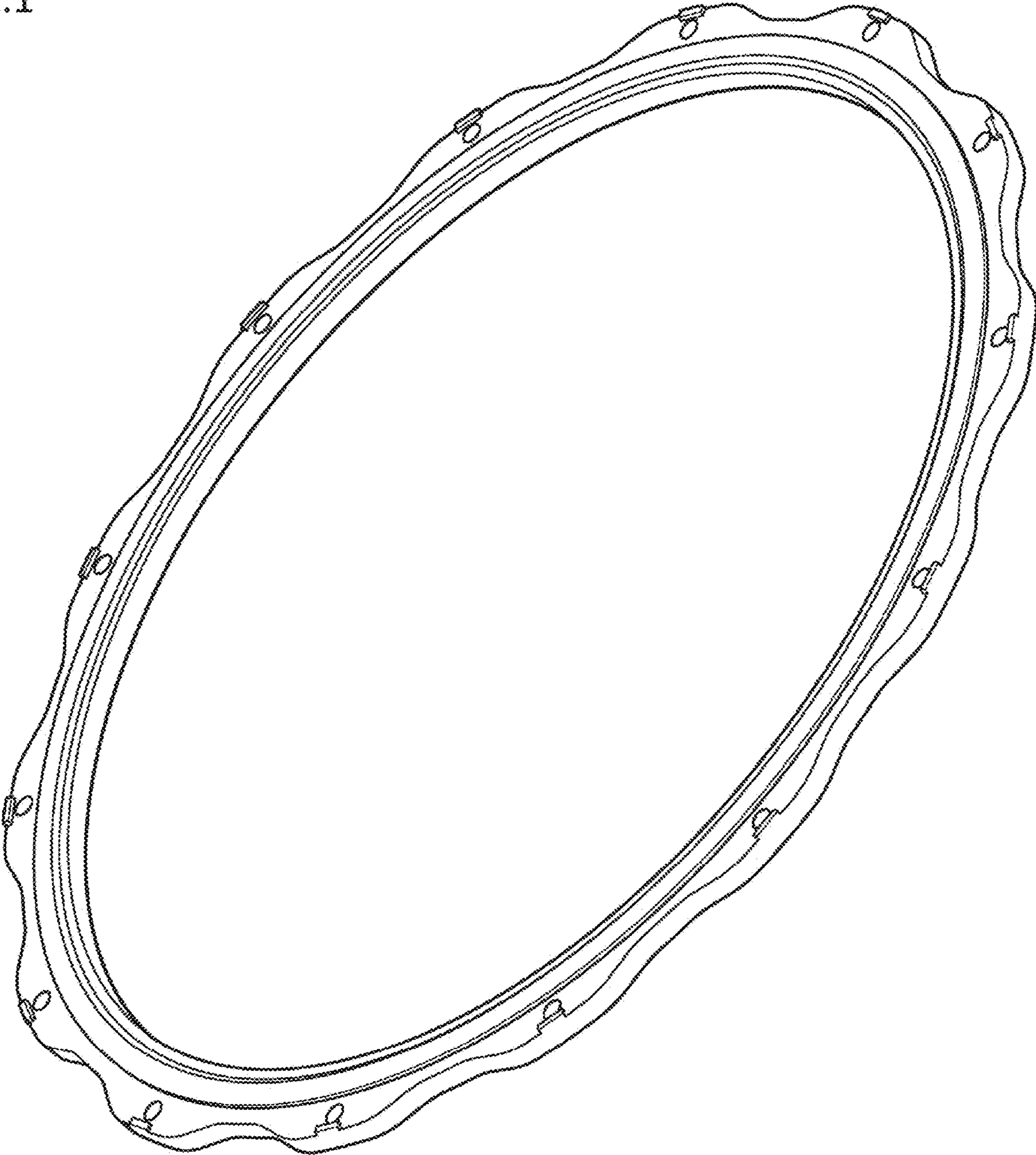
JP	1404384	11/2010
JP	1404385	11/2010
JP	1404450	11/2010
JP	1404451	11/2010
JP	D1464760	* 3/2013

##### OTHER PUBLICATIONS

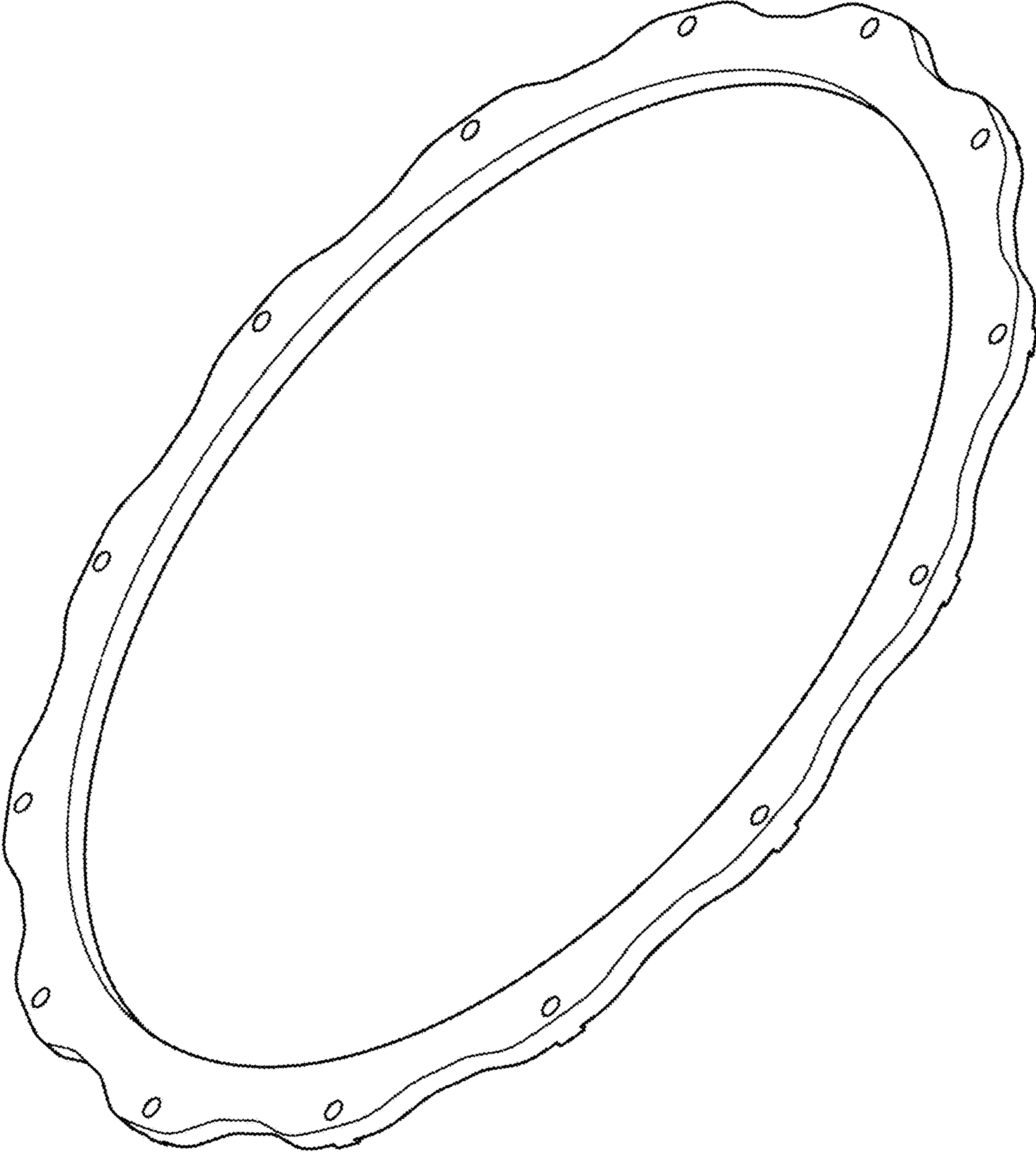
Proselect Compact Mechanical Joint Gland Product Specification Sheet; Publish Date 2010; Visited Online Sep. 1, 2022; [Jointing instructions, "GX-typed Ductile iron pipes," Sep. 2016, translation of excerpts pp. 30 and 32.](https://api.ferguson.com/dar-step-service/QueryASSET_ID=1254368&USE_TYPE=SPECIFICATION&PRODUCT_ID=3953598&_ga=2.52322025.1510863686.1662062418-926591230.1662062418&_gac=1.238313780.1662063367.EAIAIqobChMI8sK6mrD0-QIVQYJbCh1iEQ3cEAKYCCABEgJlh_D_BwE&_gl=1*a66lrs*_ga*OTI2NTkxMjMwLjE2NjIwNjI0MTg.*_ga_E1N3 (Year: 2010).*</p>
<p>E Sigma One-Lok Series SLDE for Ductile Iron Pipe Specification Sheet; Publish Date Dec. 2018; Visited Online Sep. 1, 2022; <a href=)

\* cited by examiner

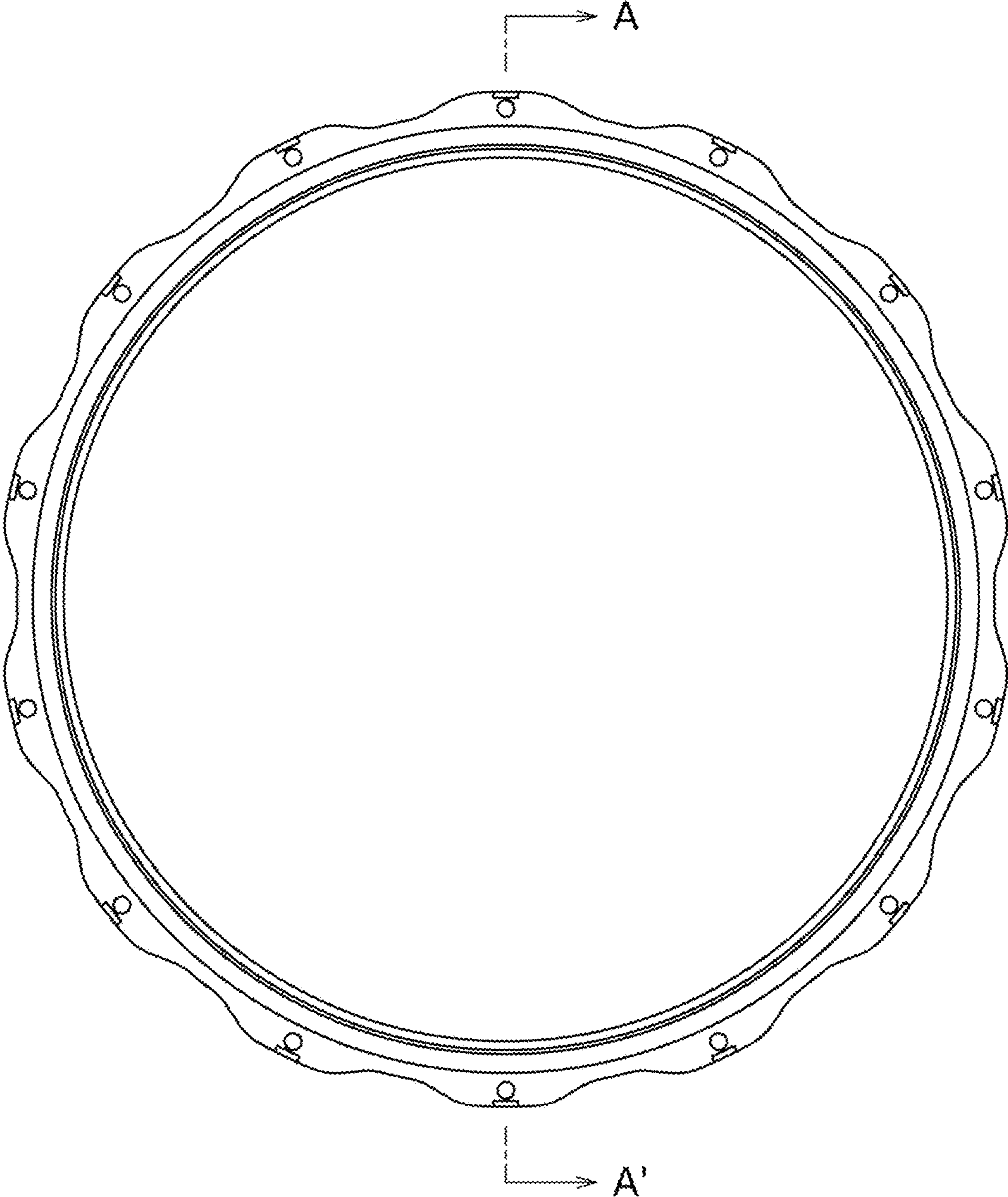
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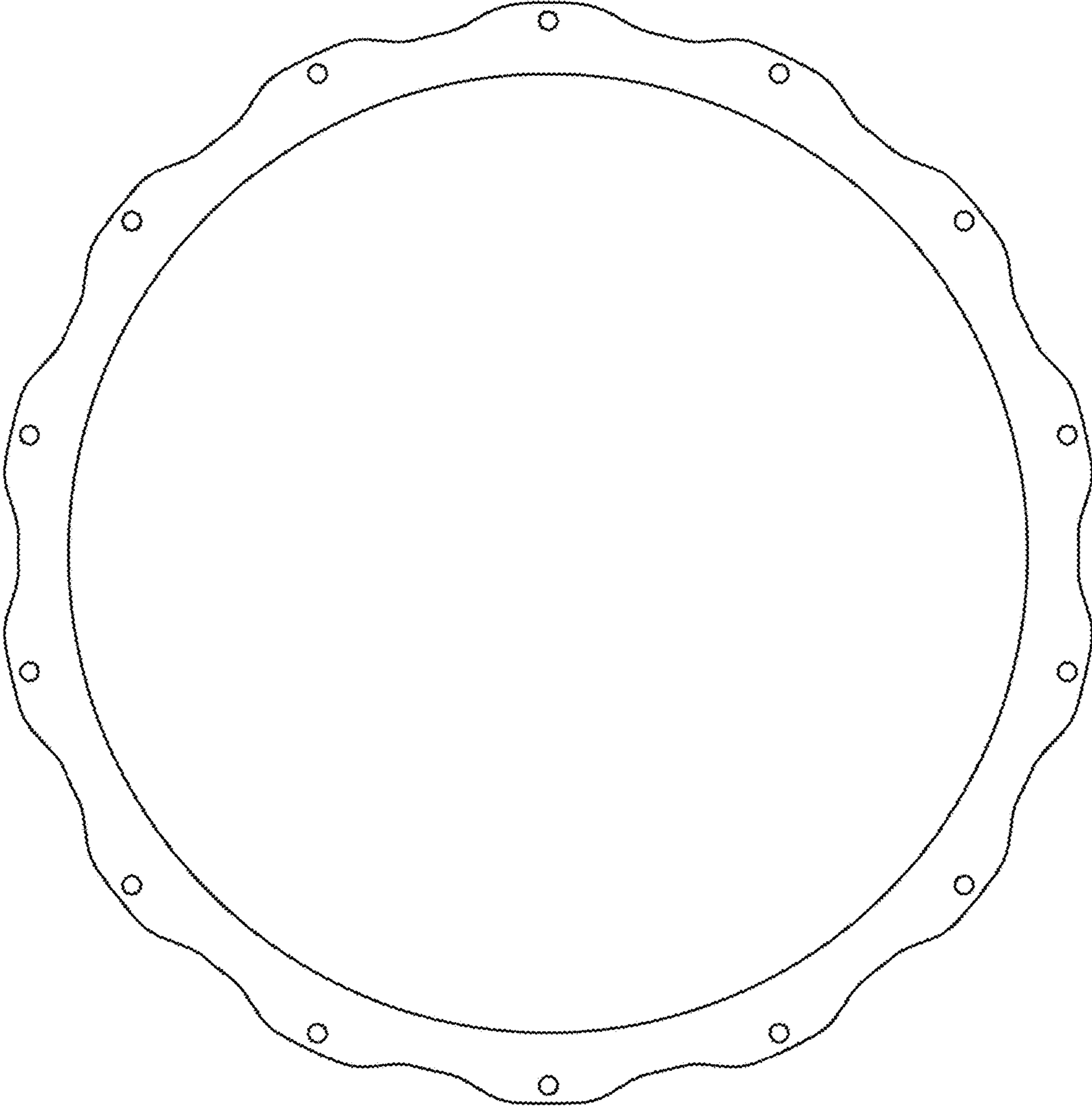
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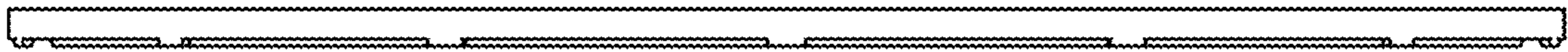
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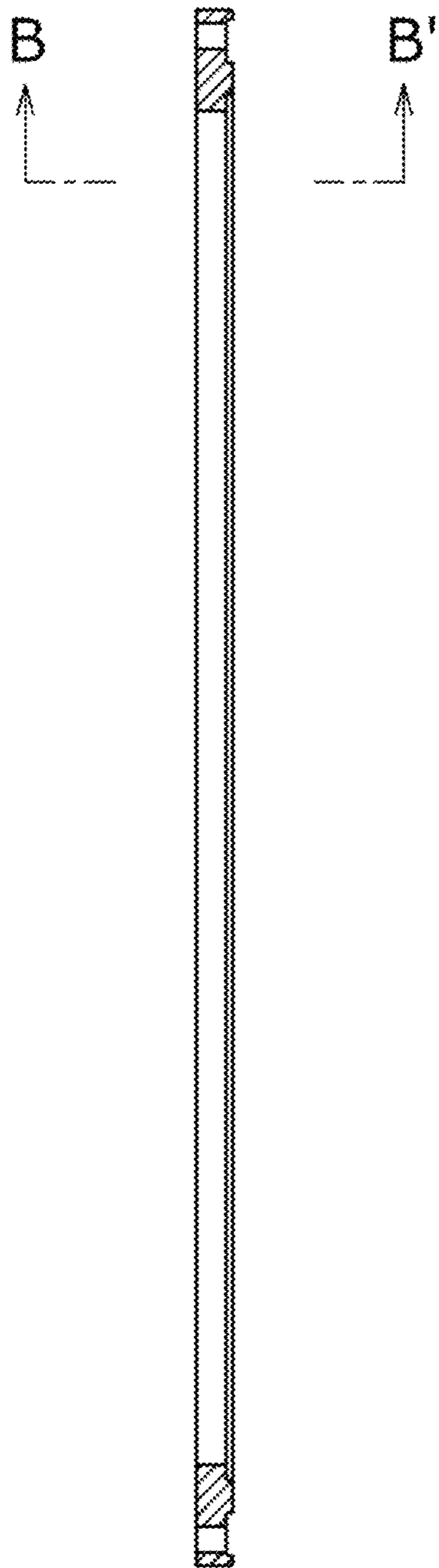


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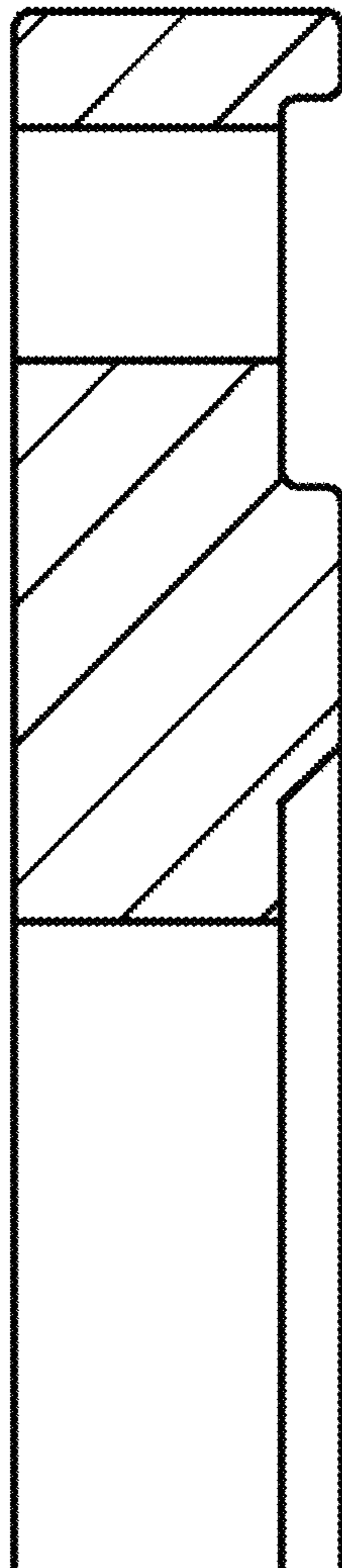




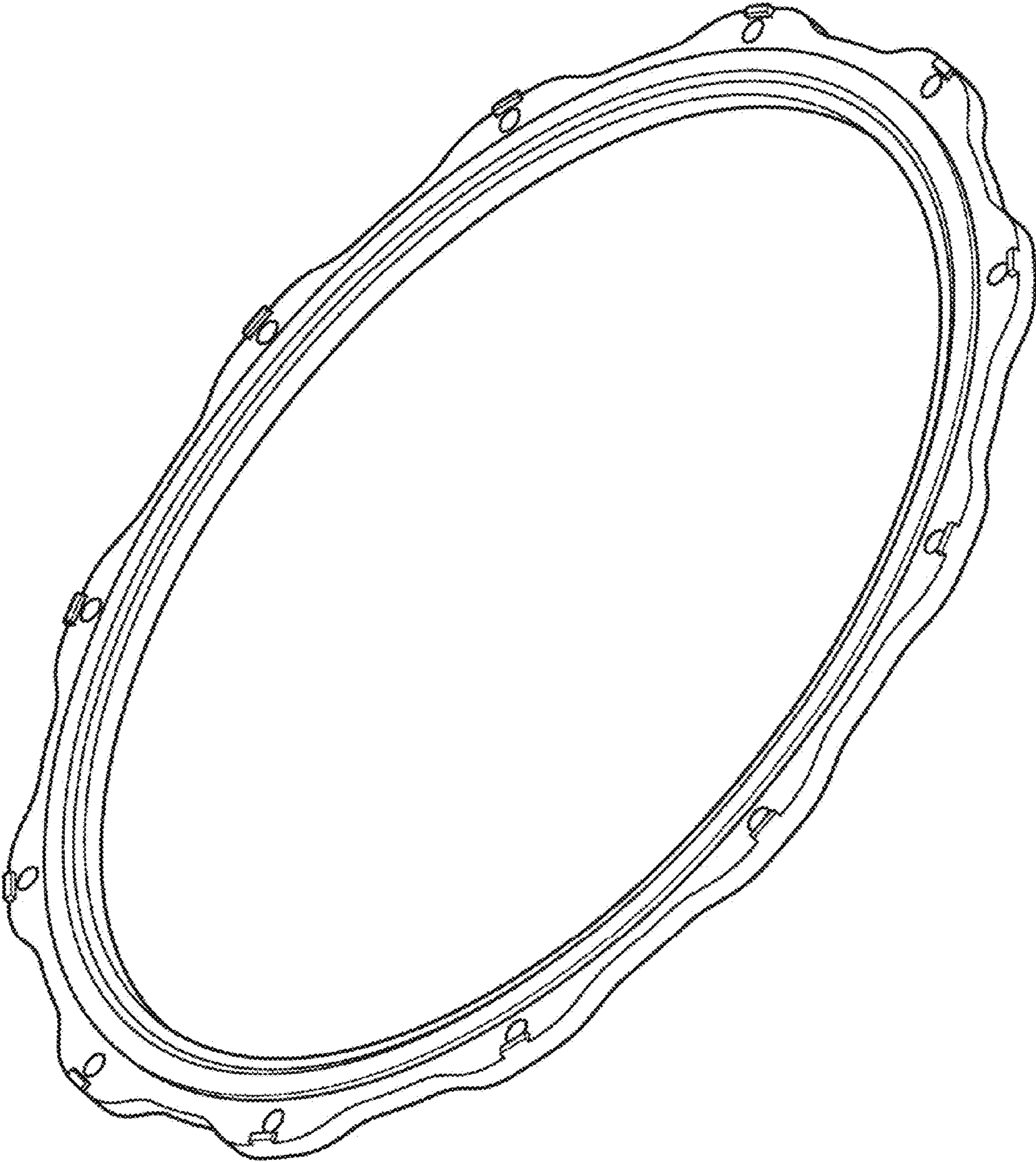
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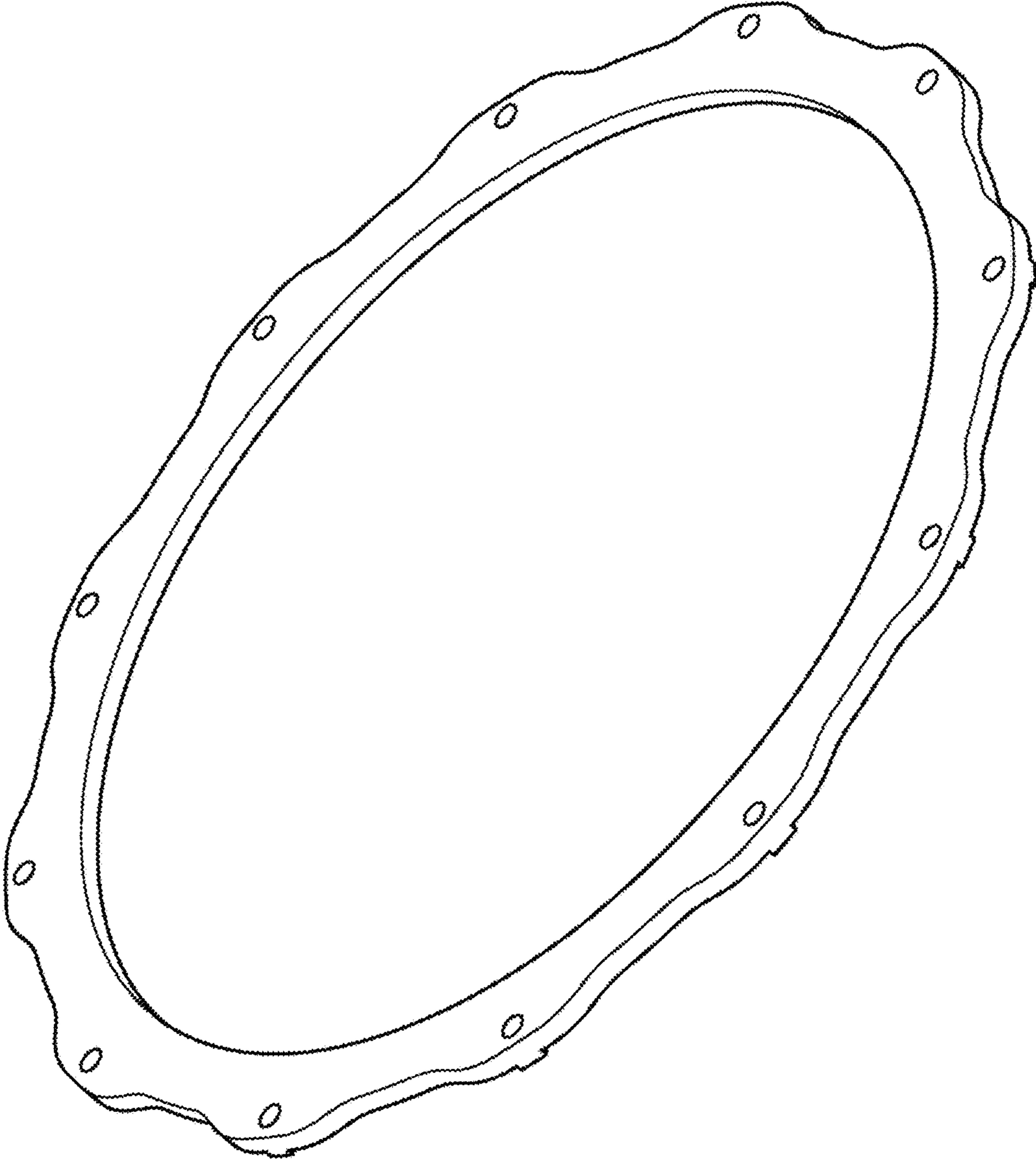
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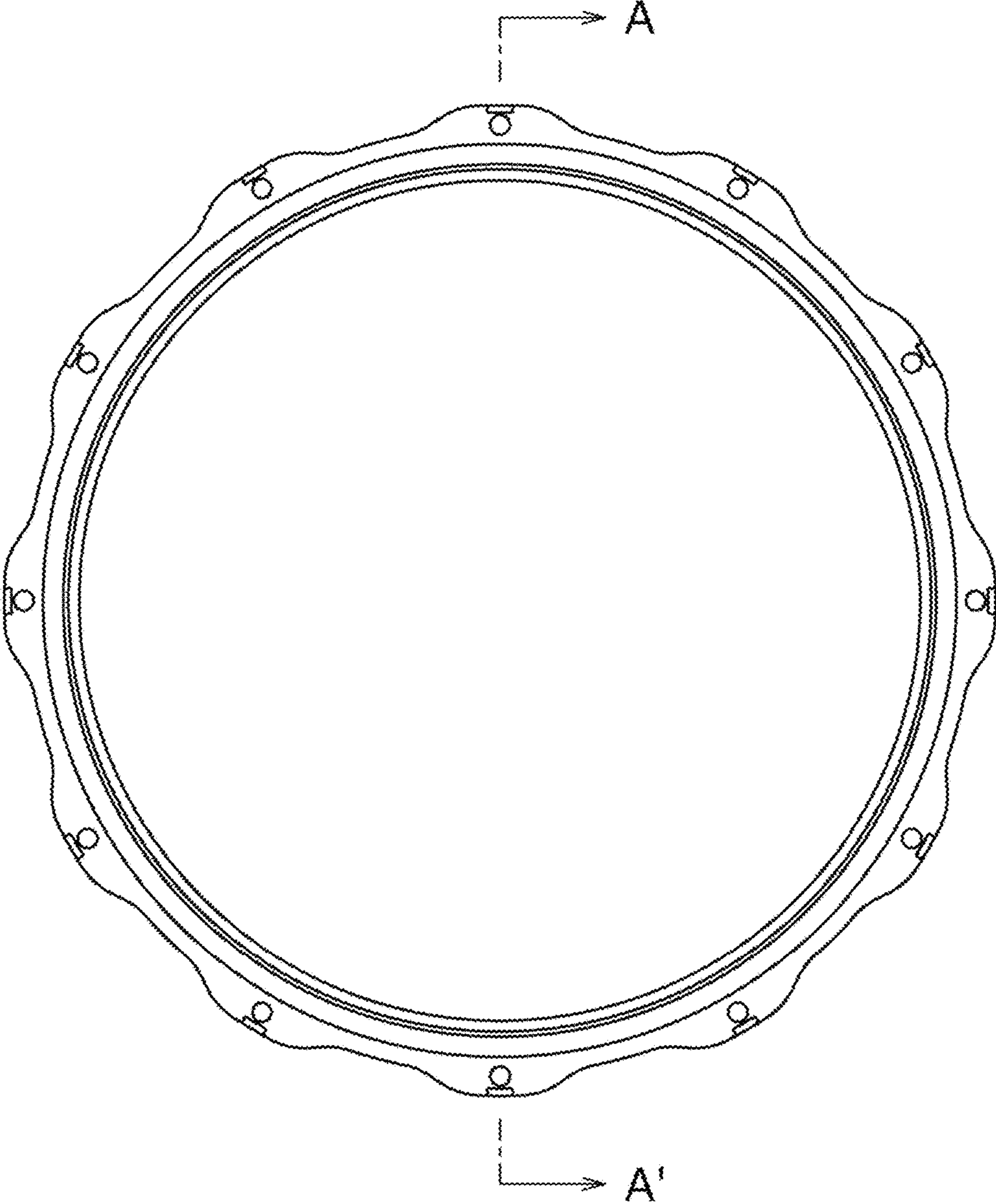
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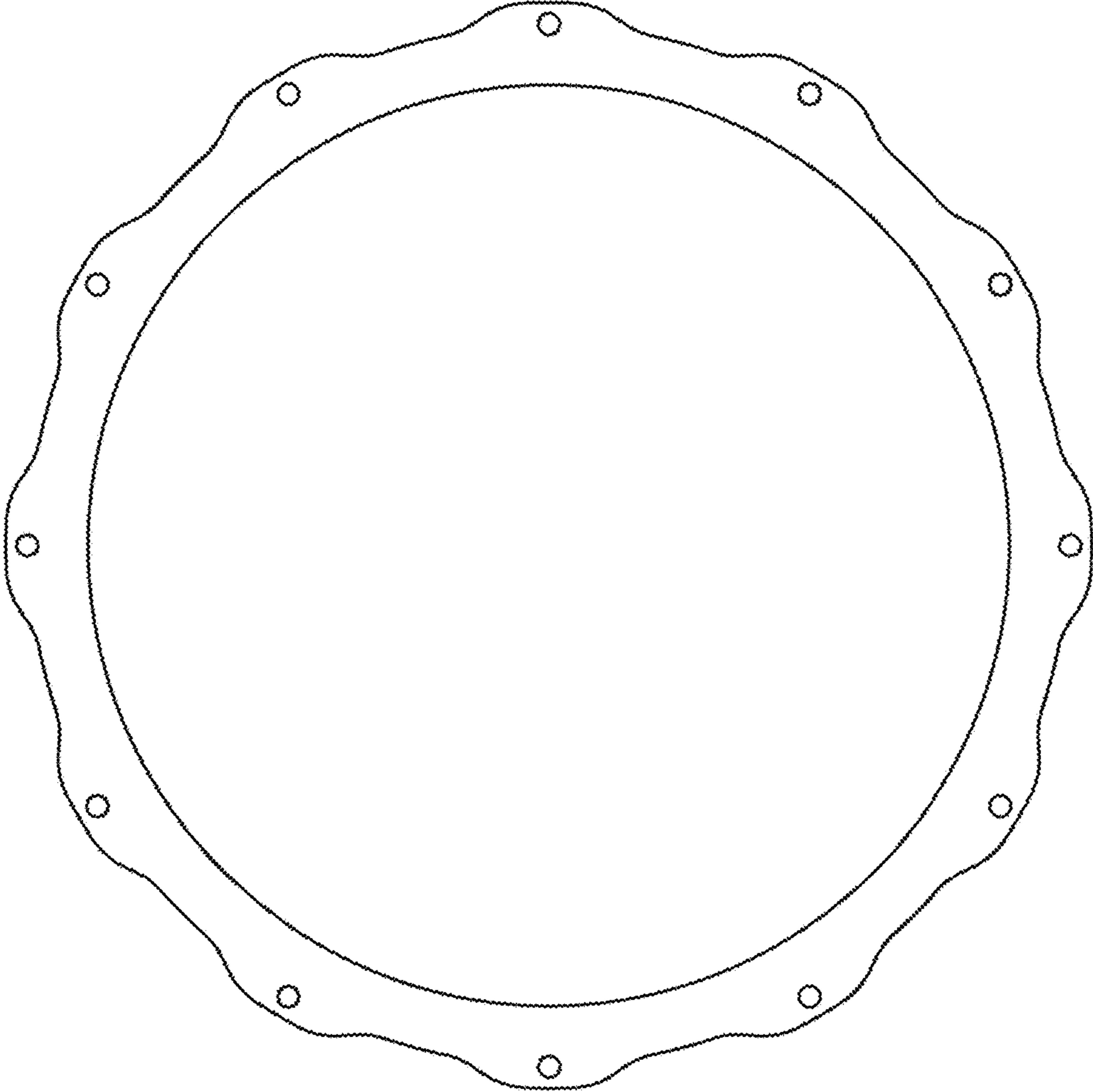
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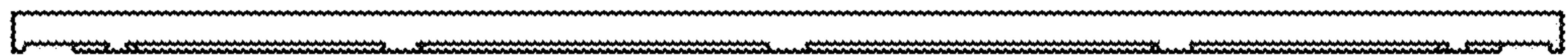
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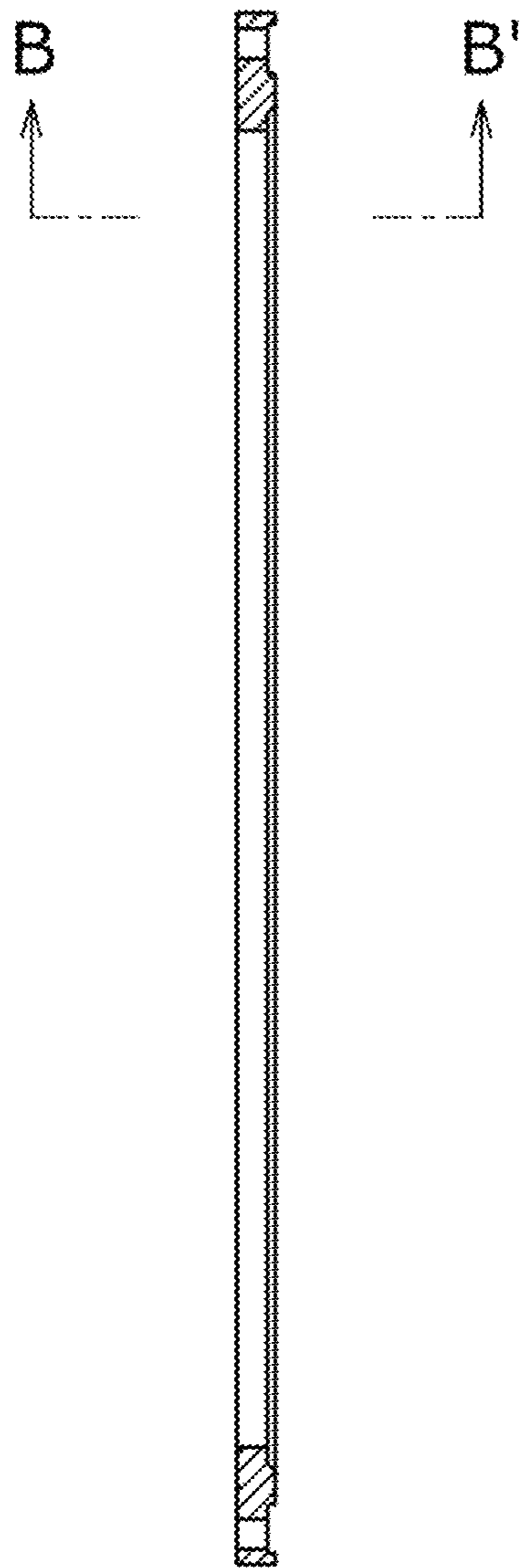


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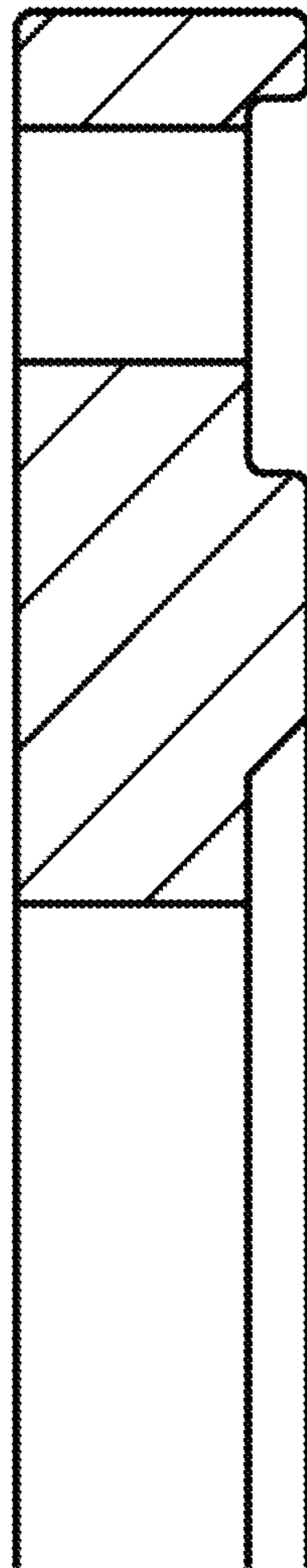




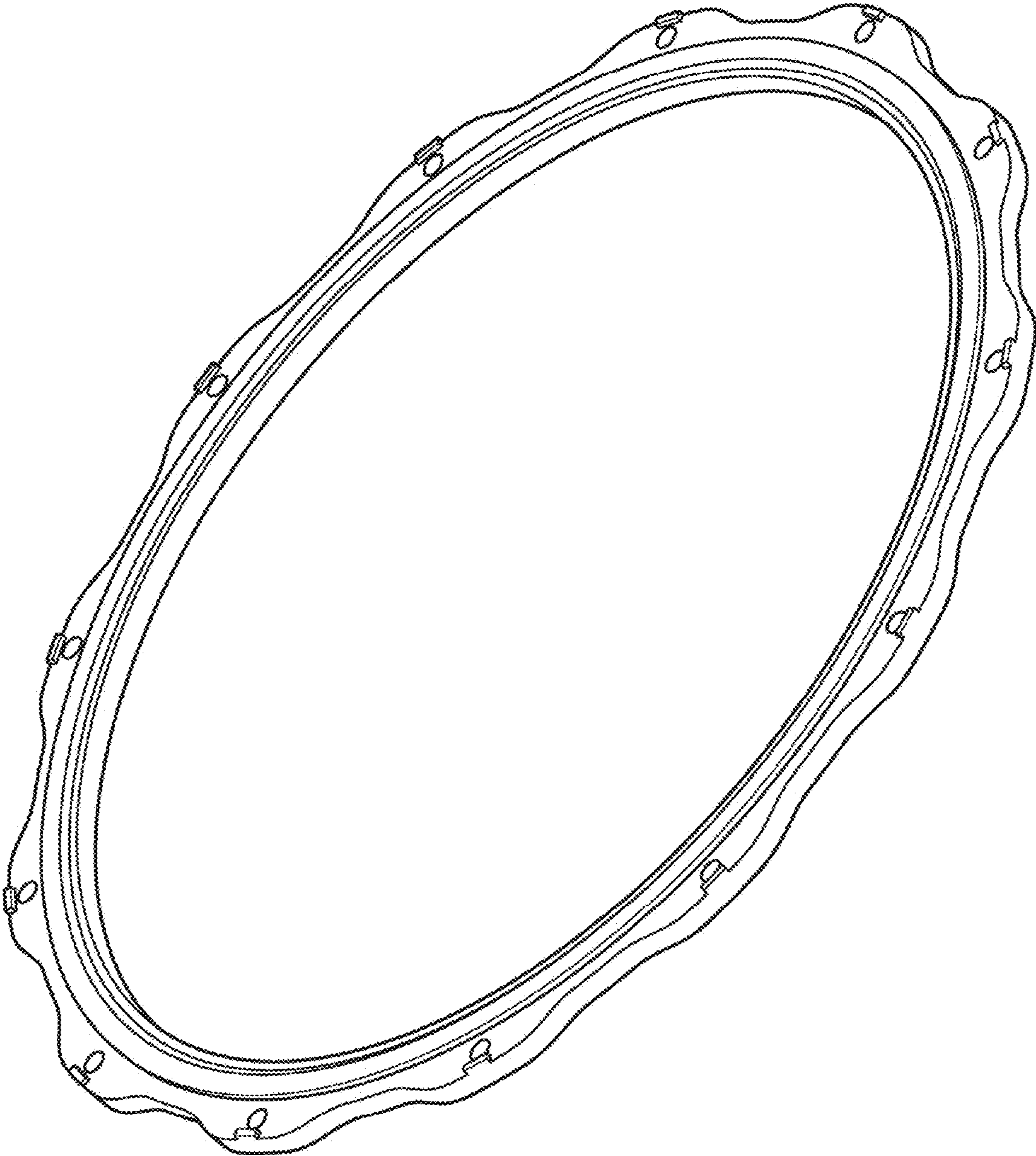
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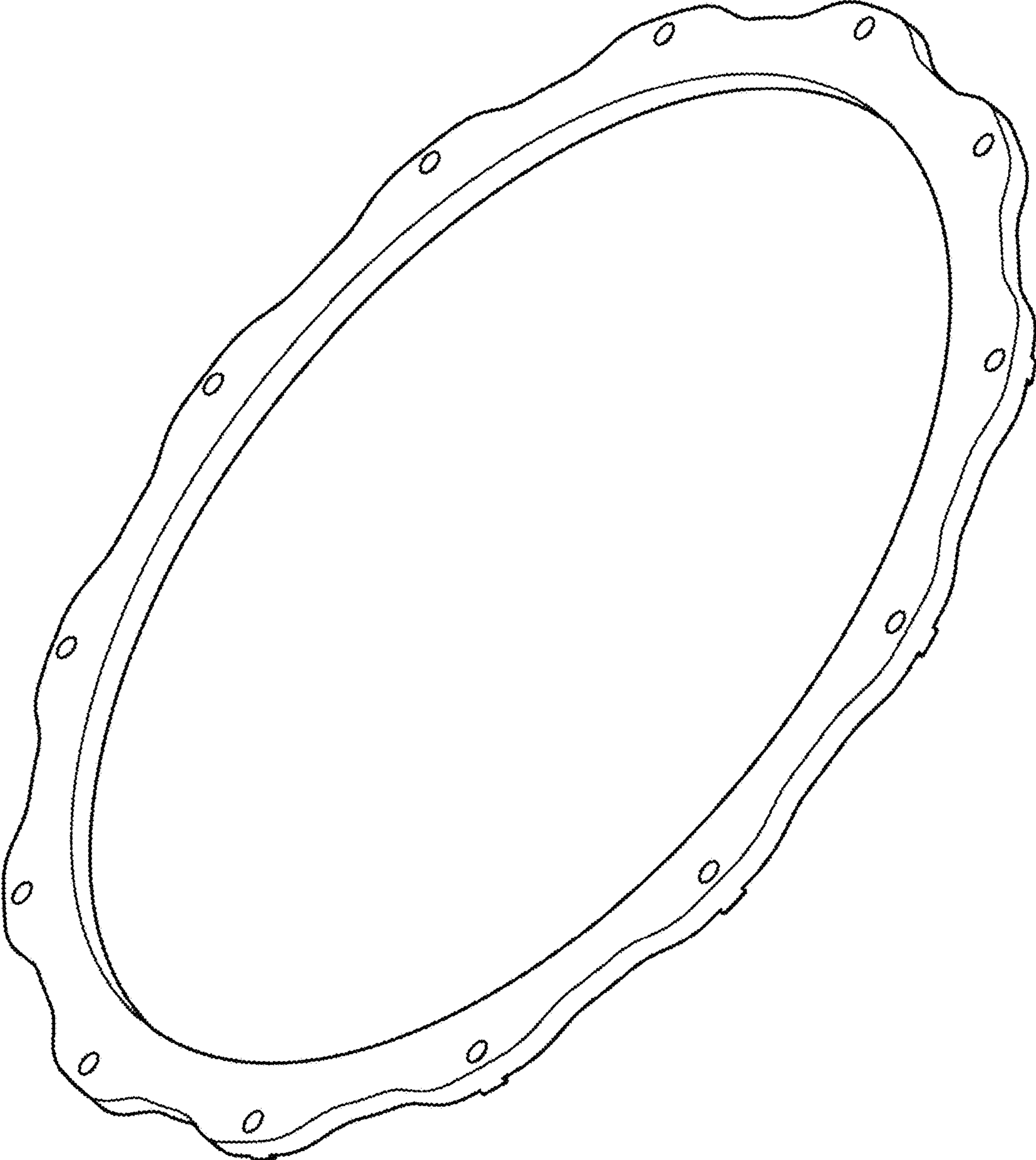
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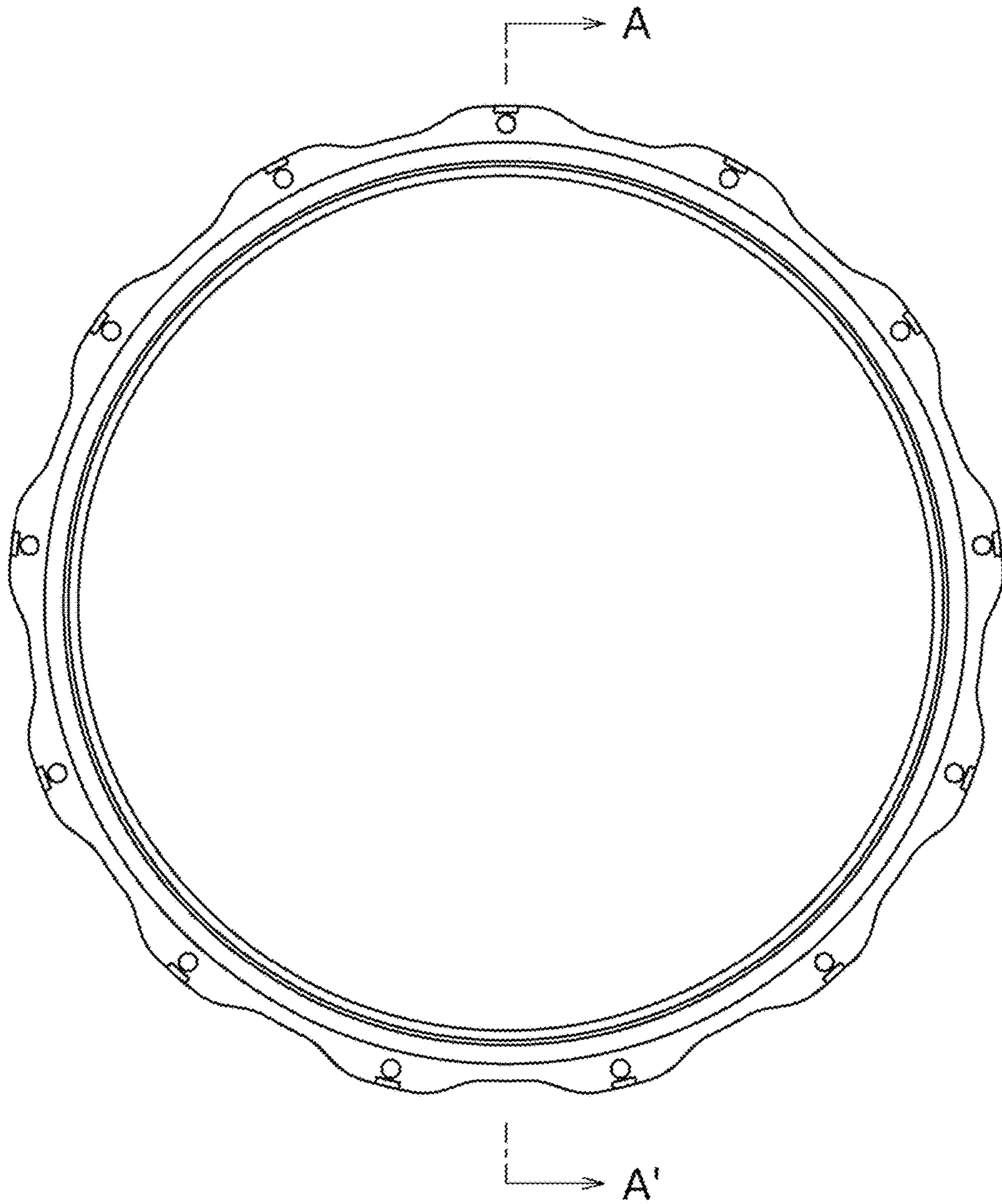
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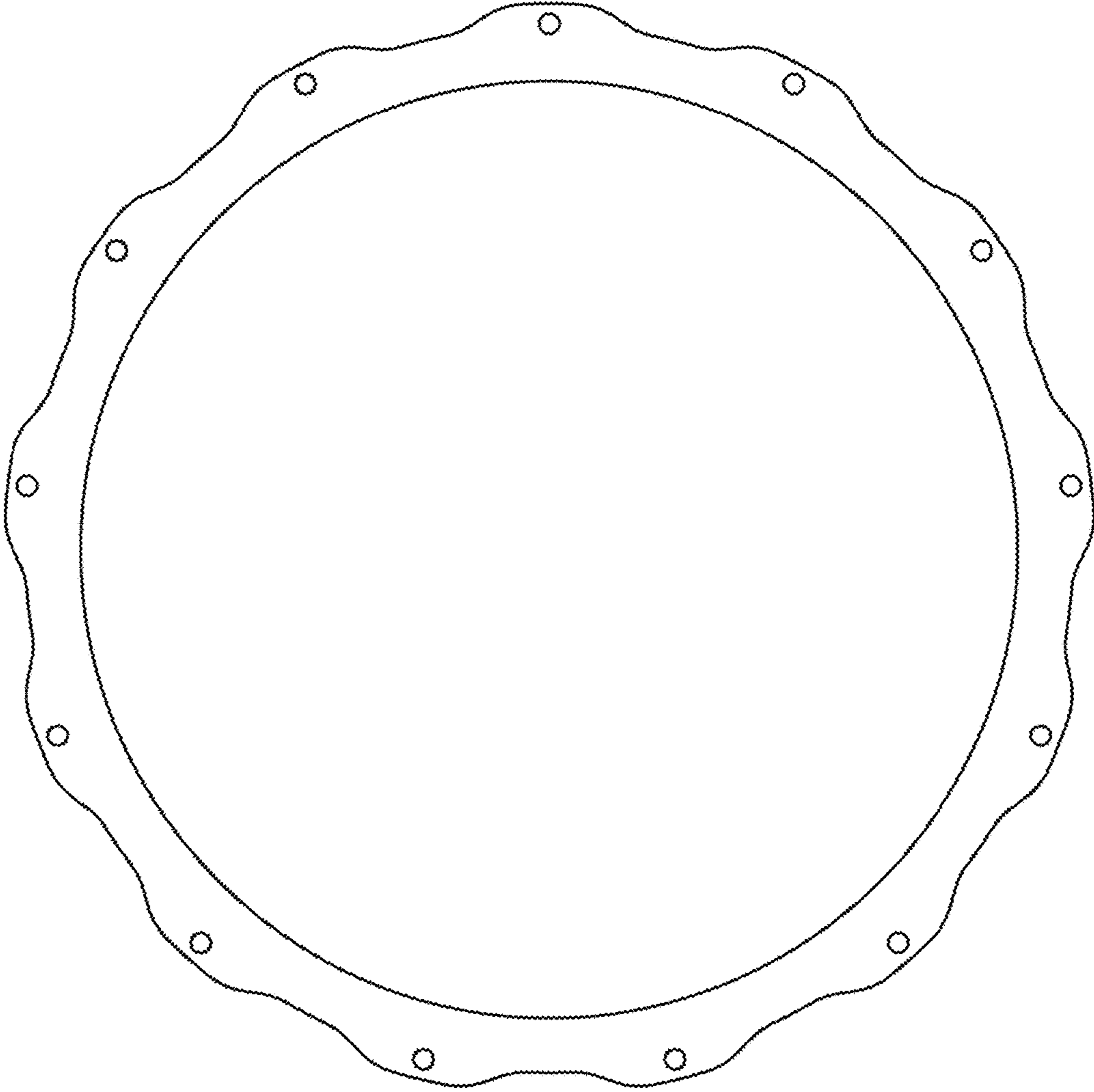
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3.3



3.4



3.5

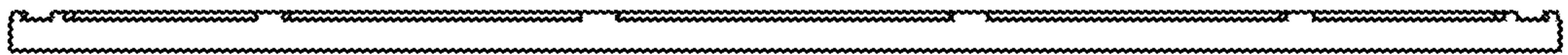


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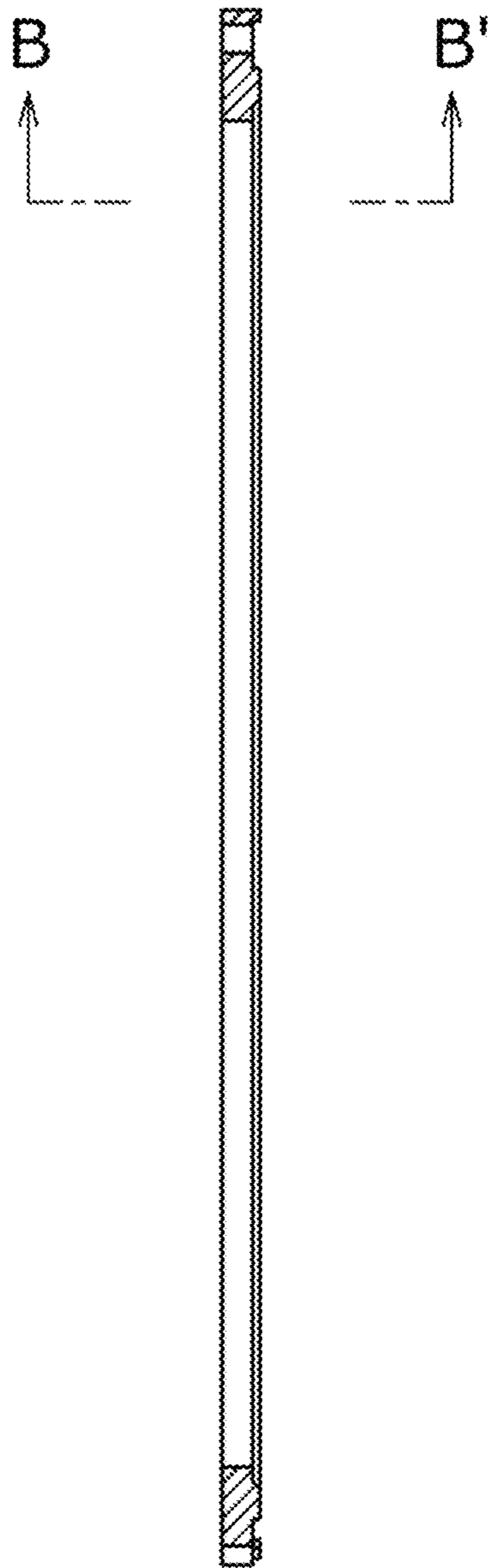




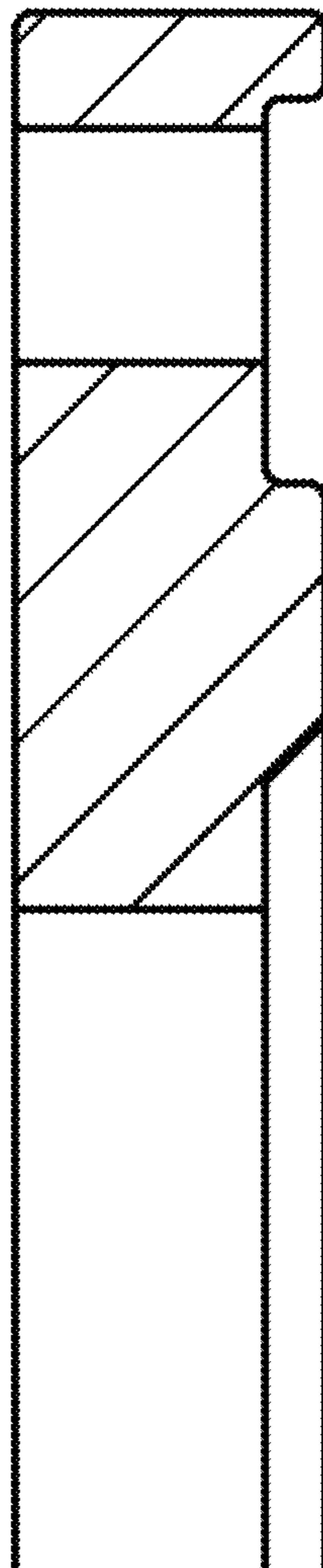
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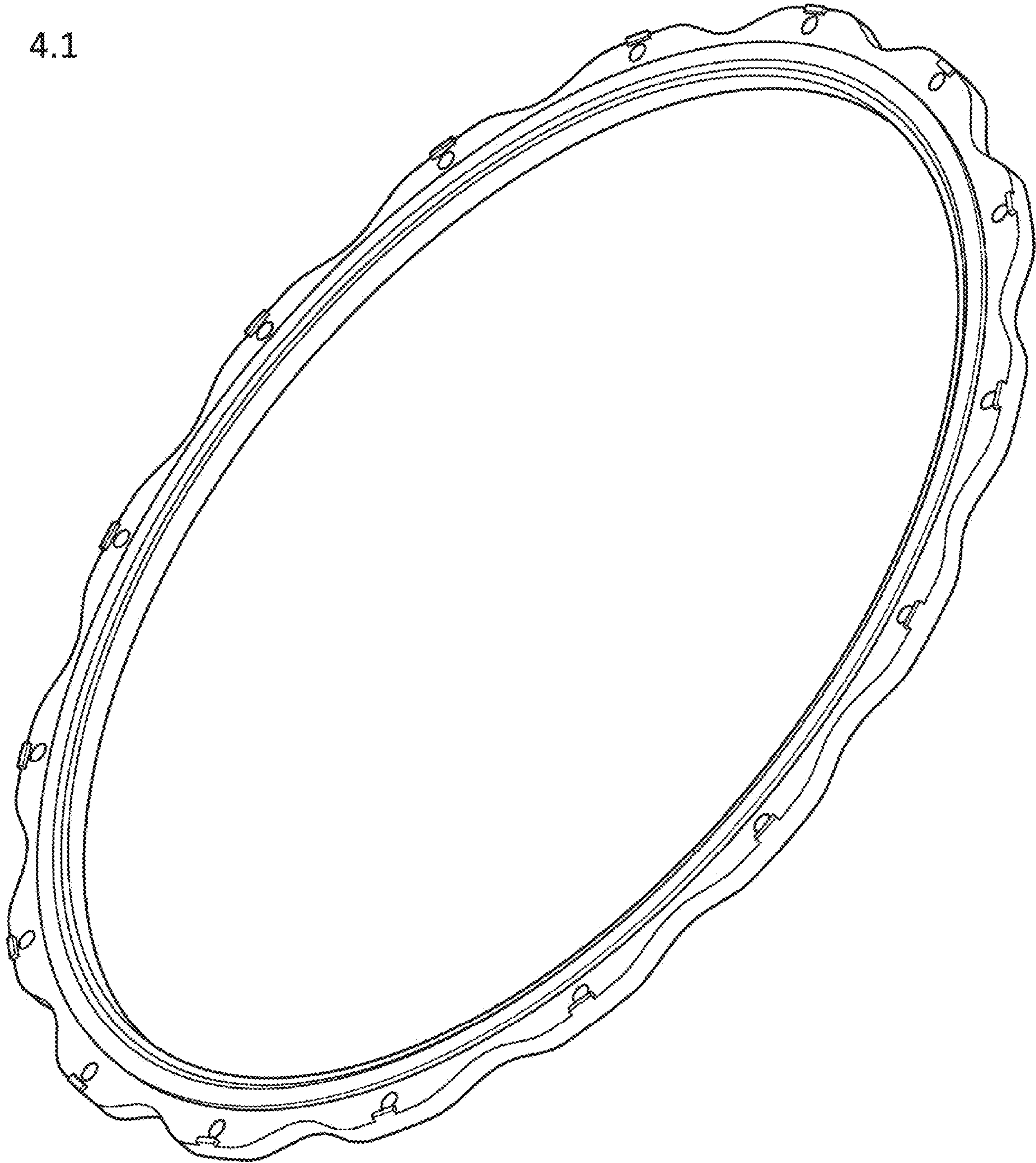
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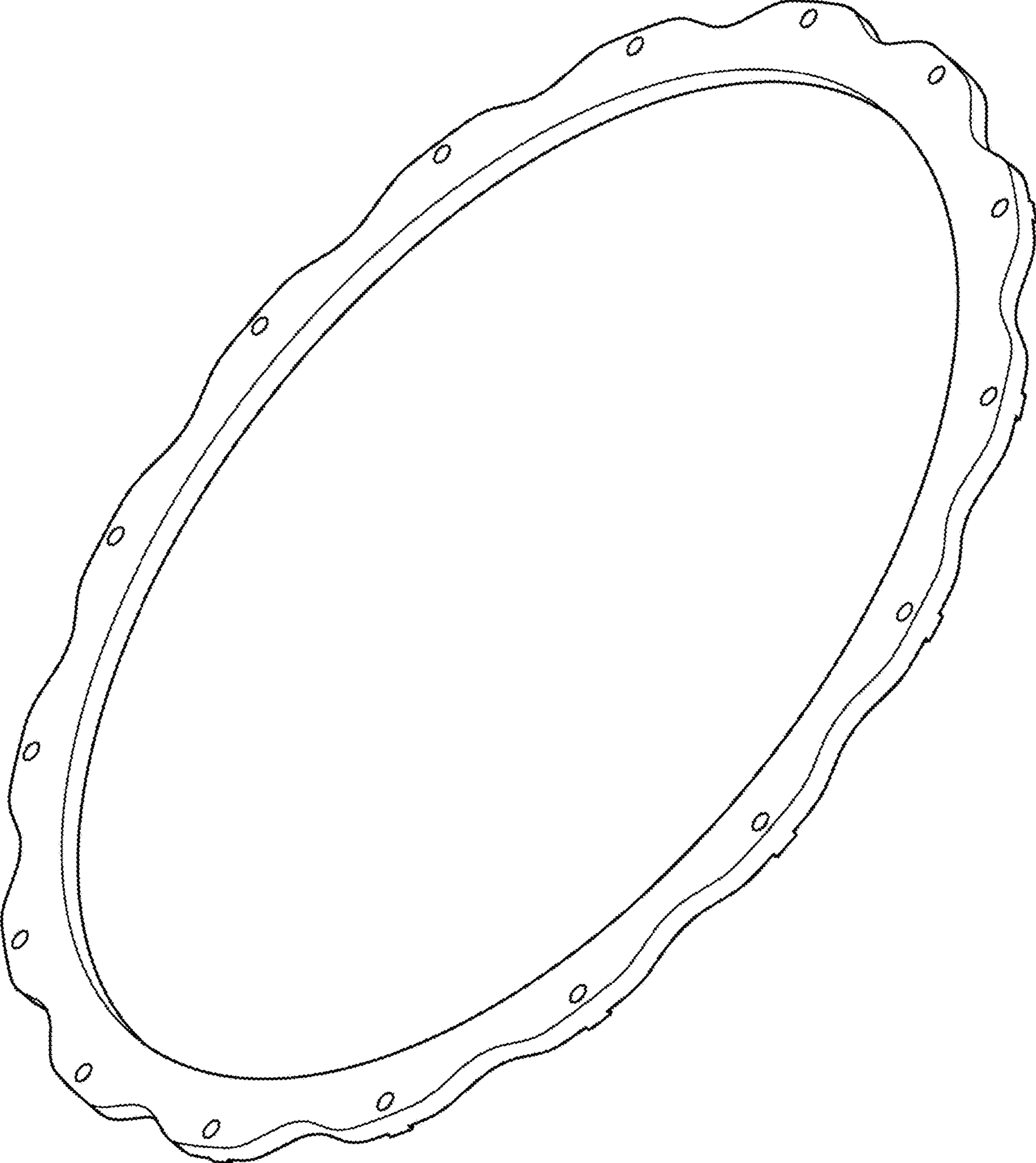
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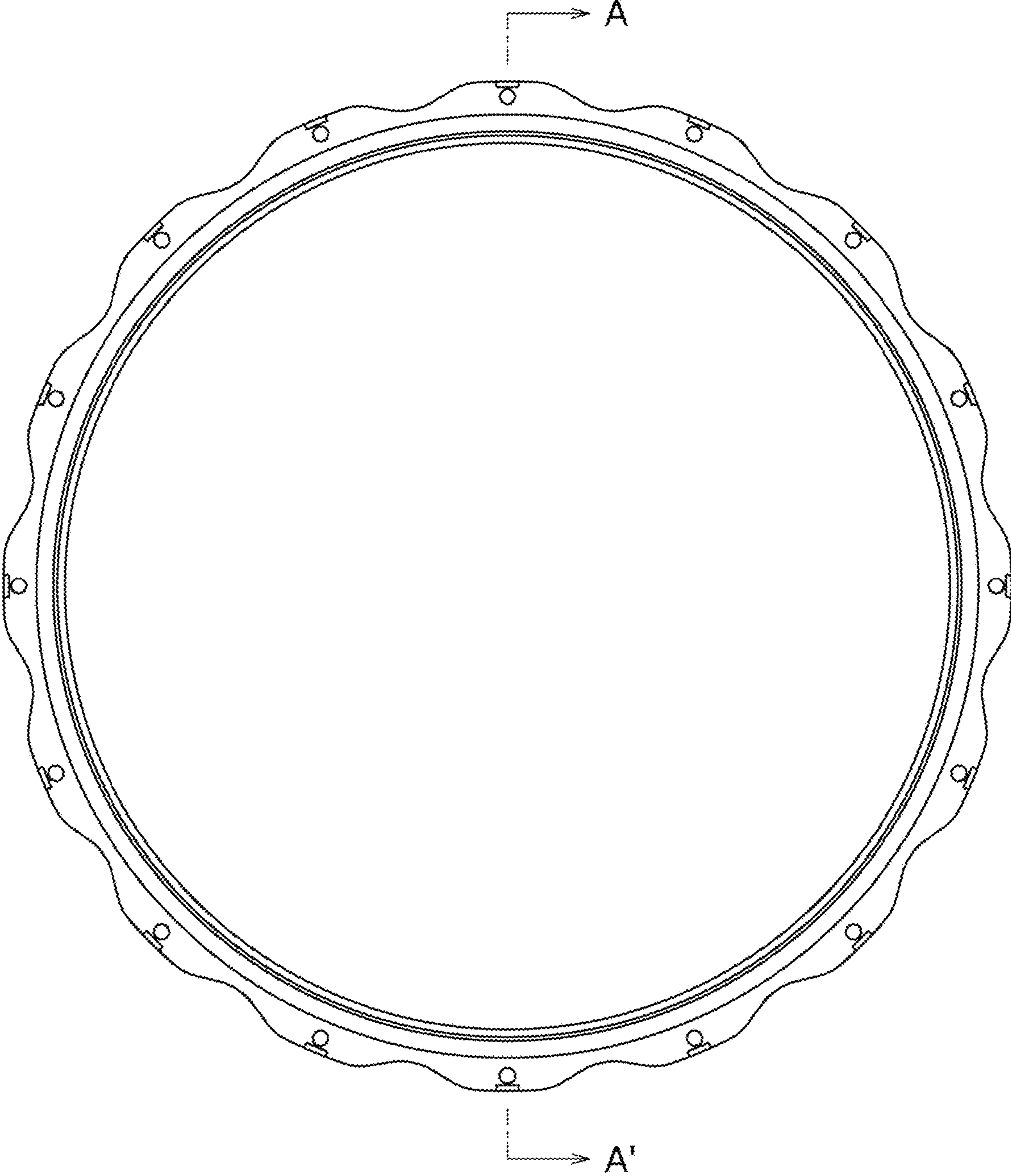
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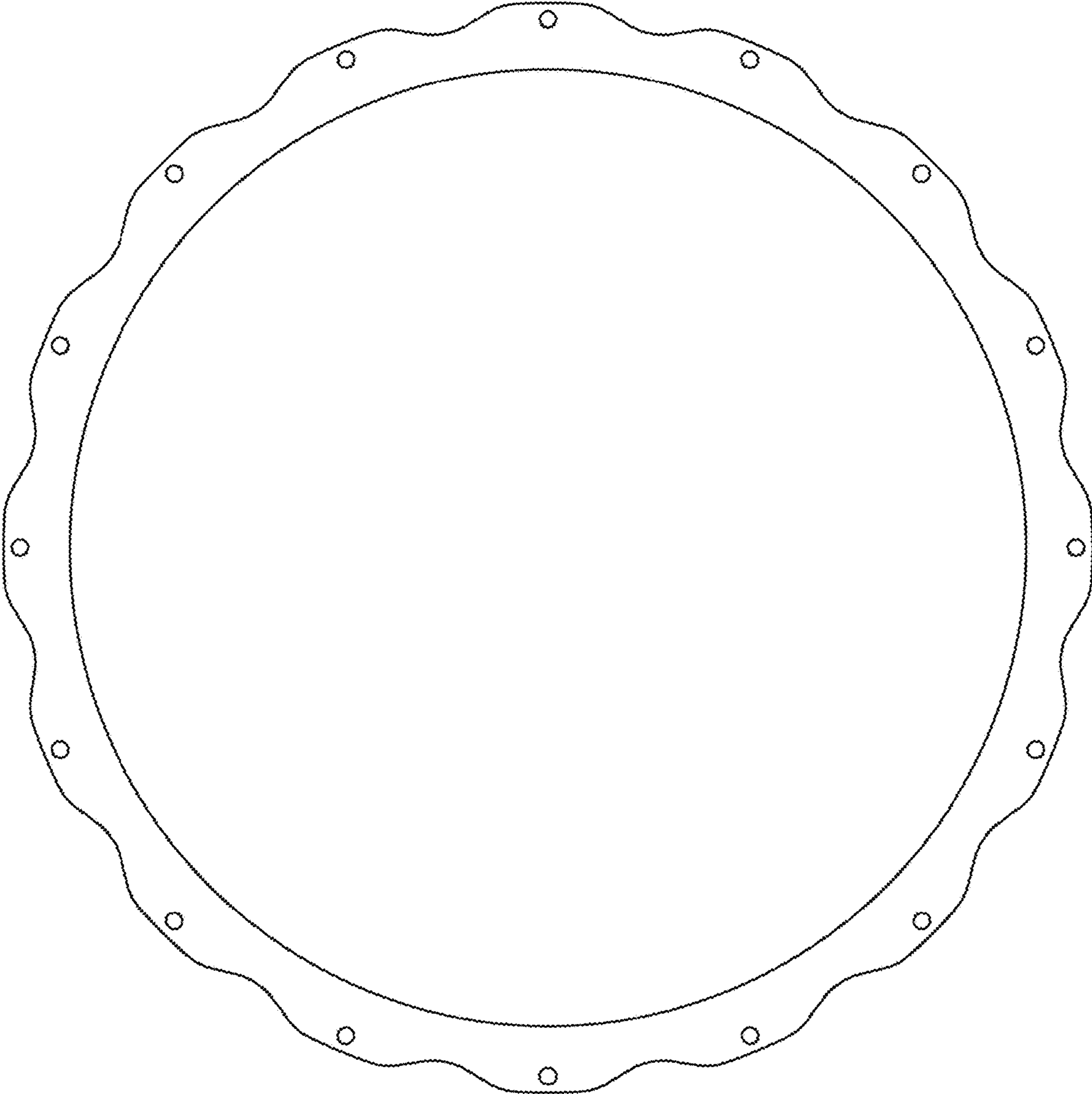
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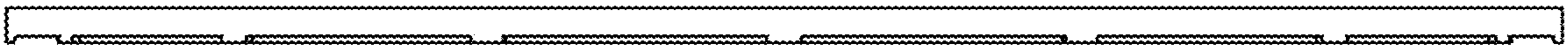


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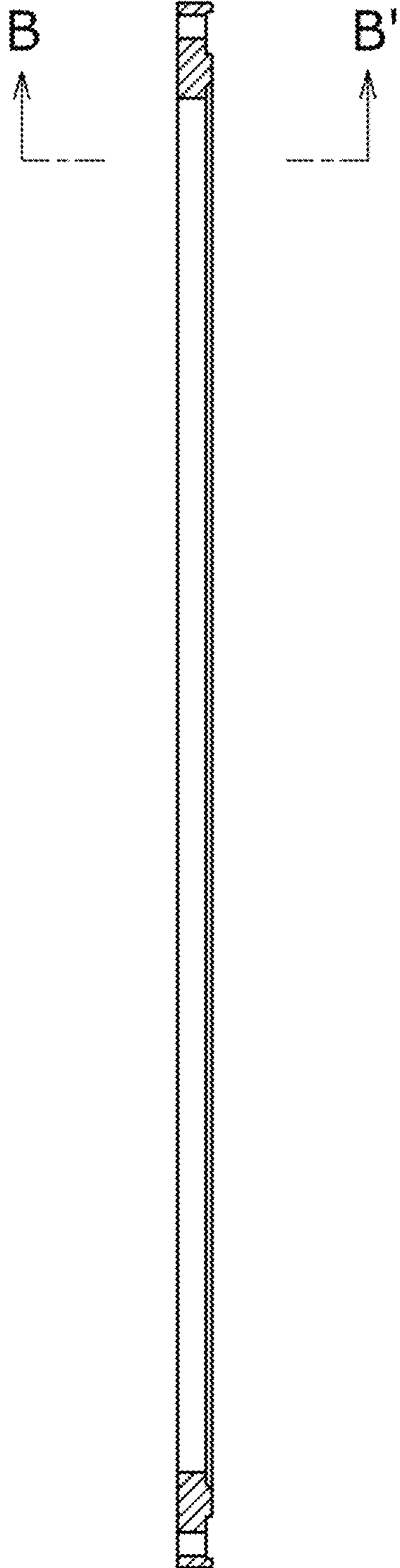




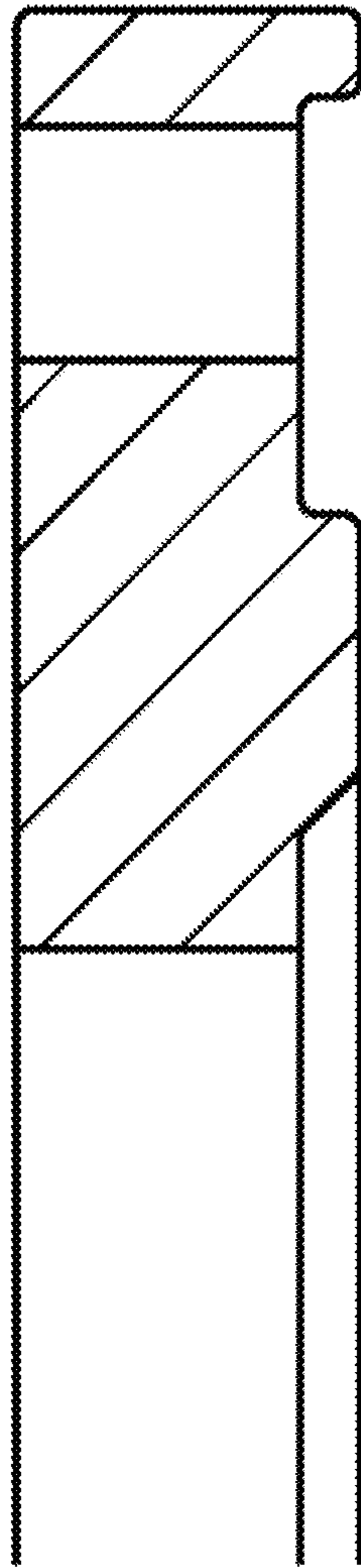
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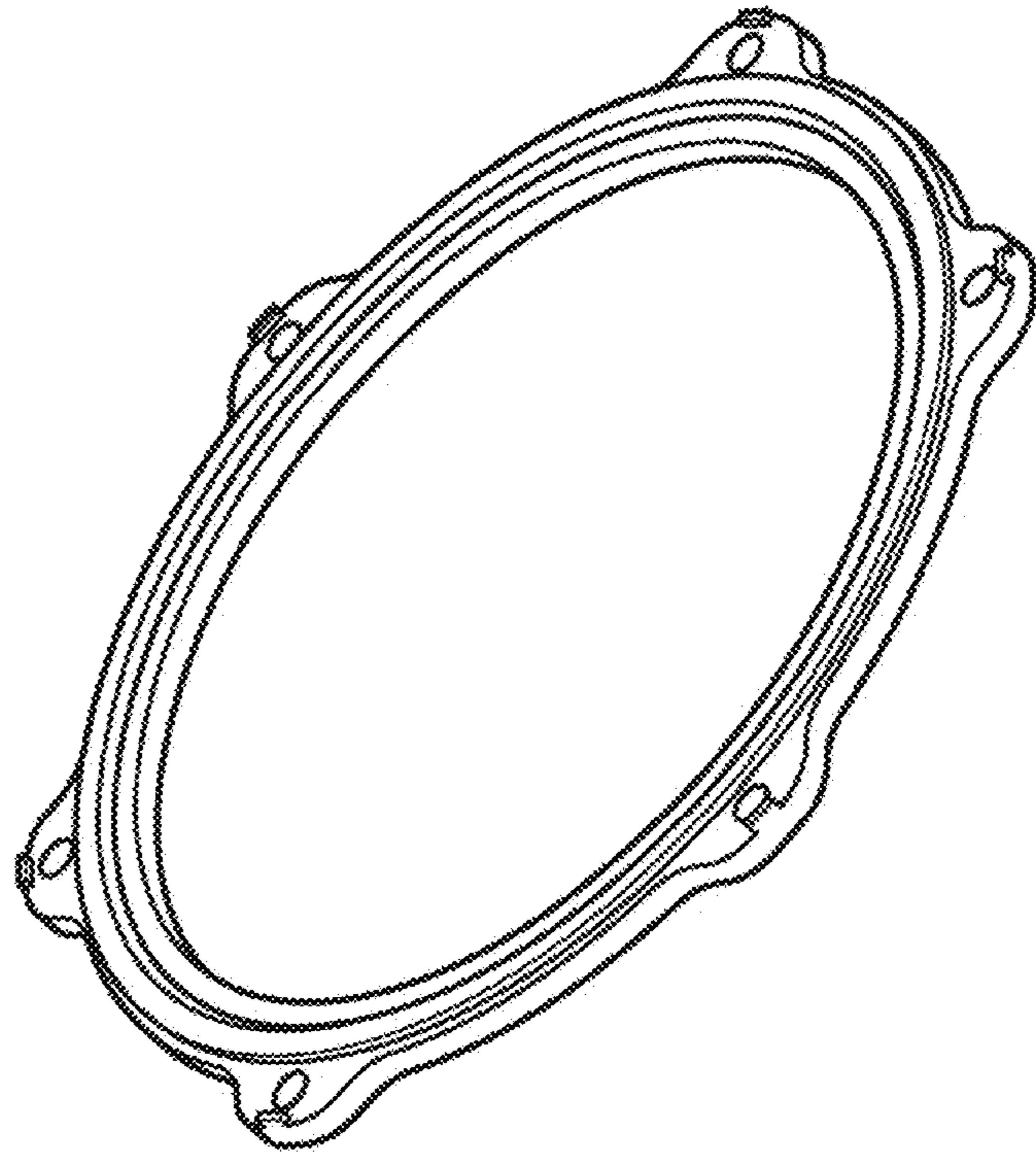
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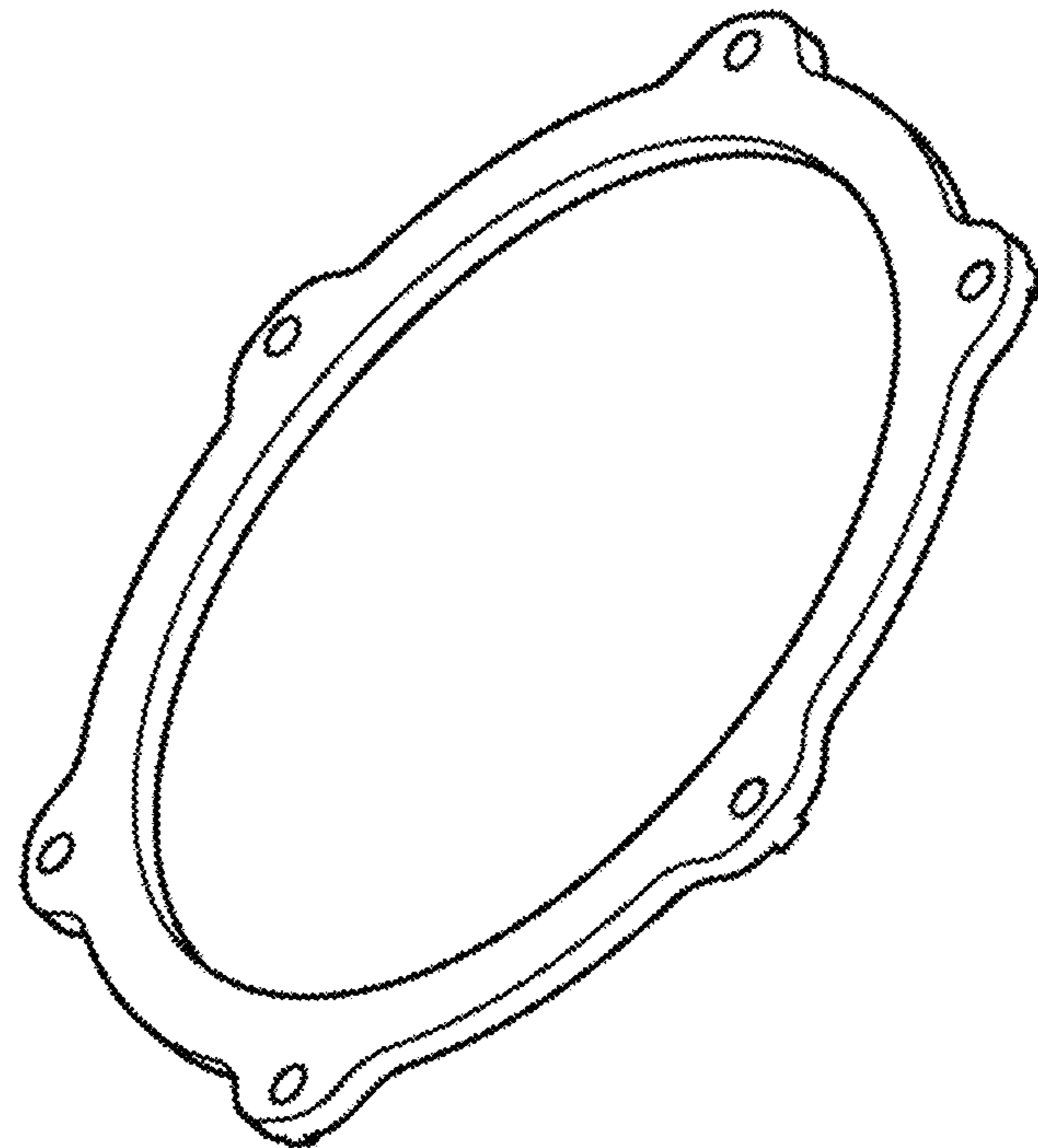
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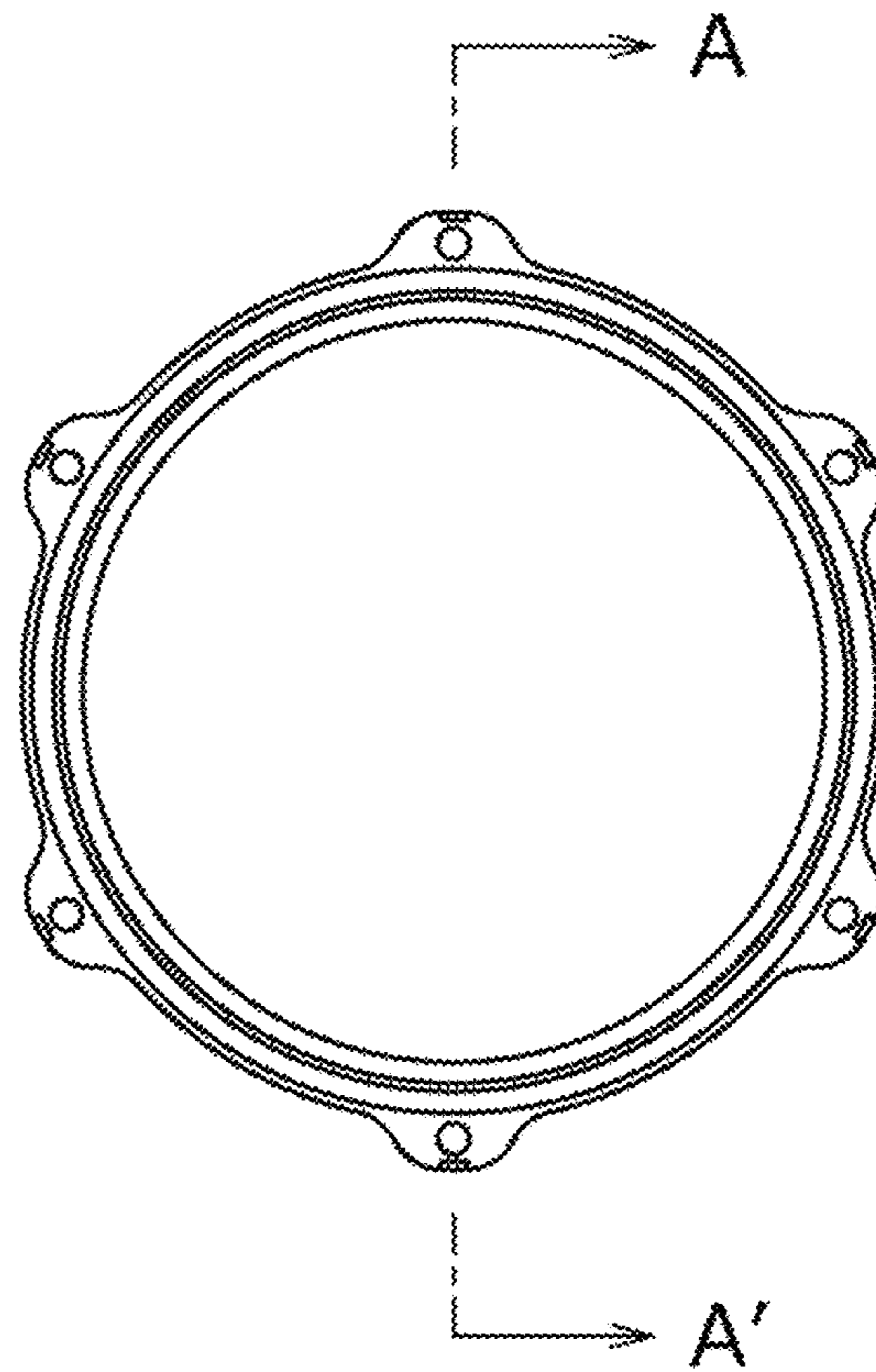
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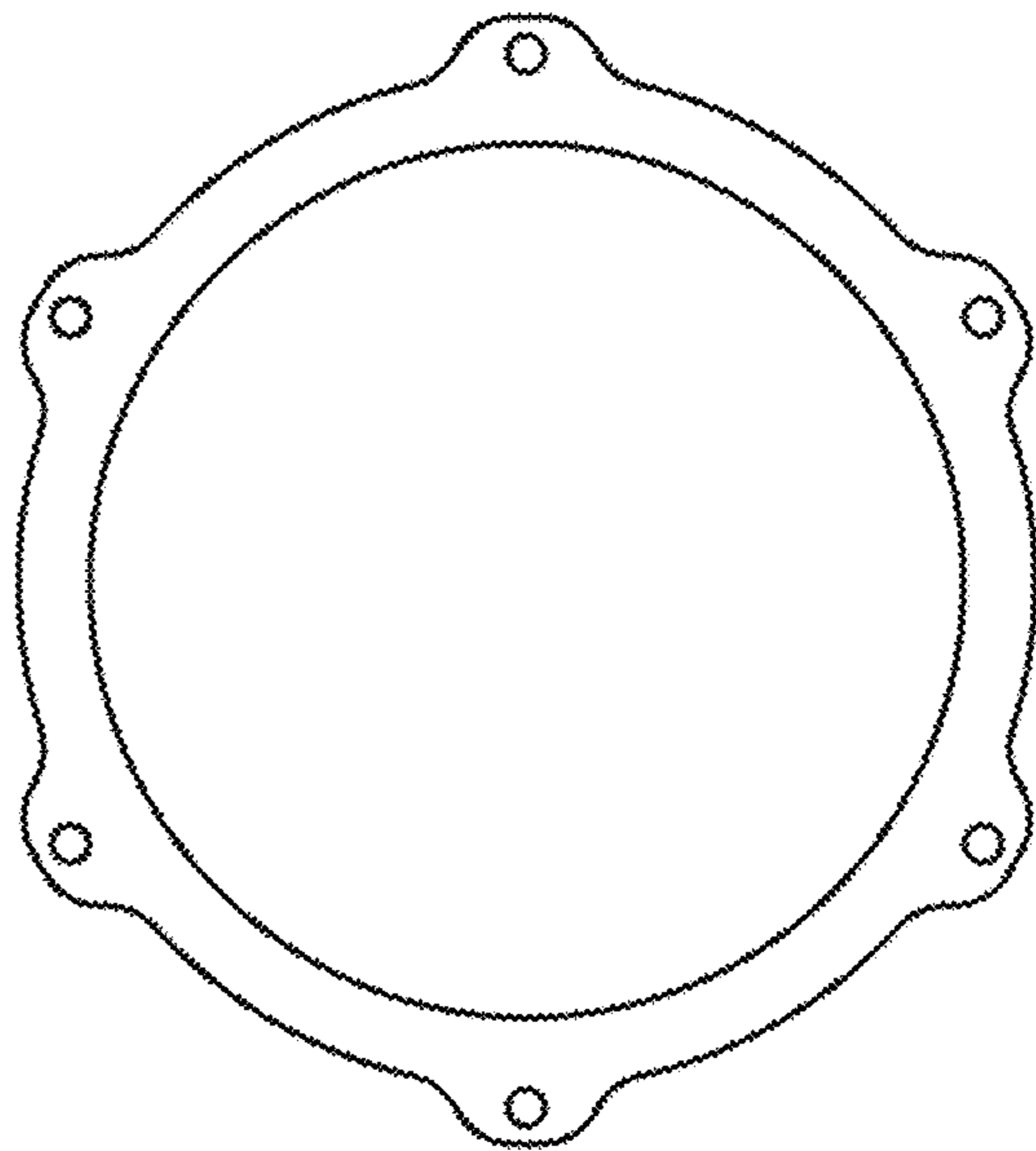
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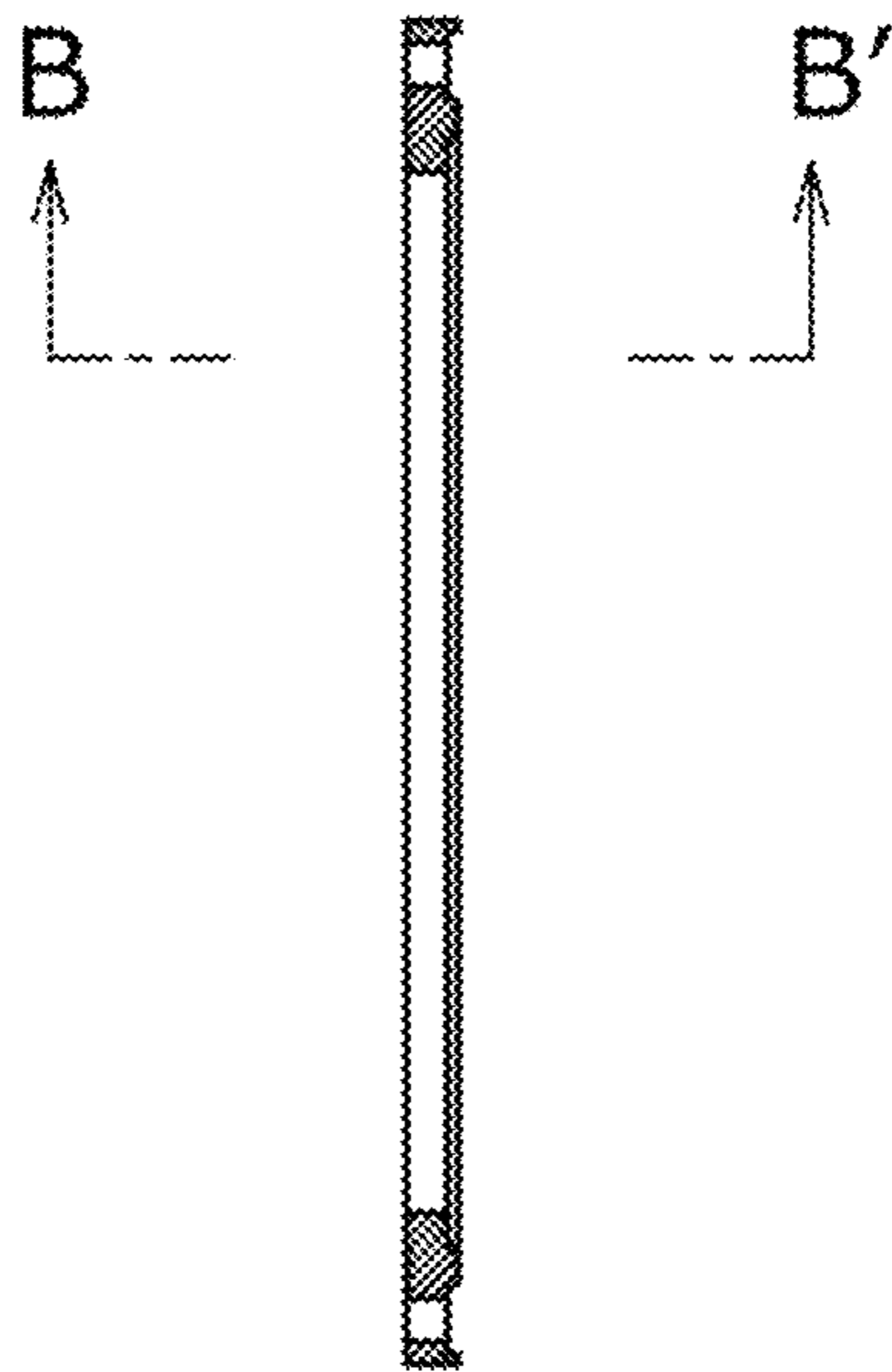




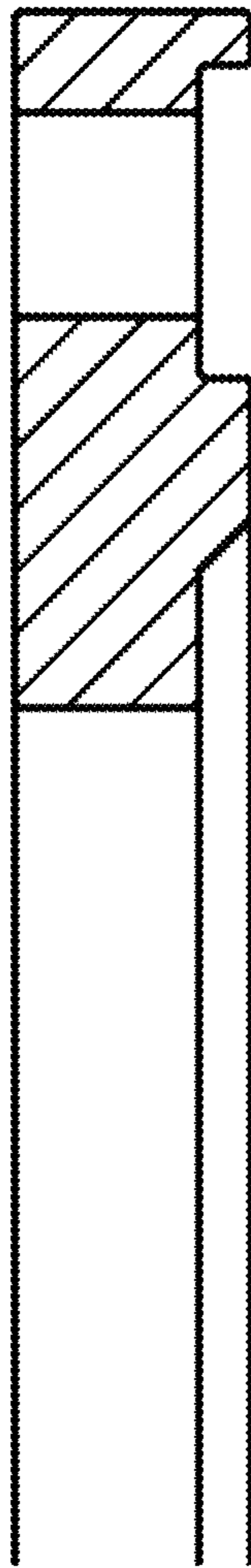
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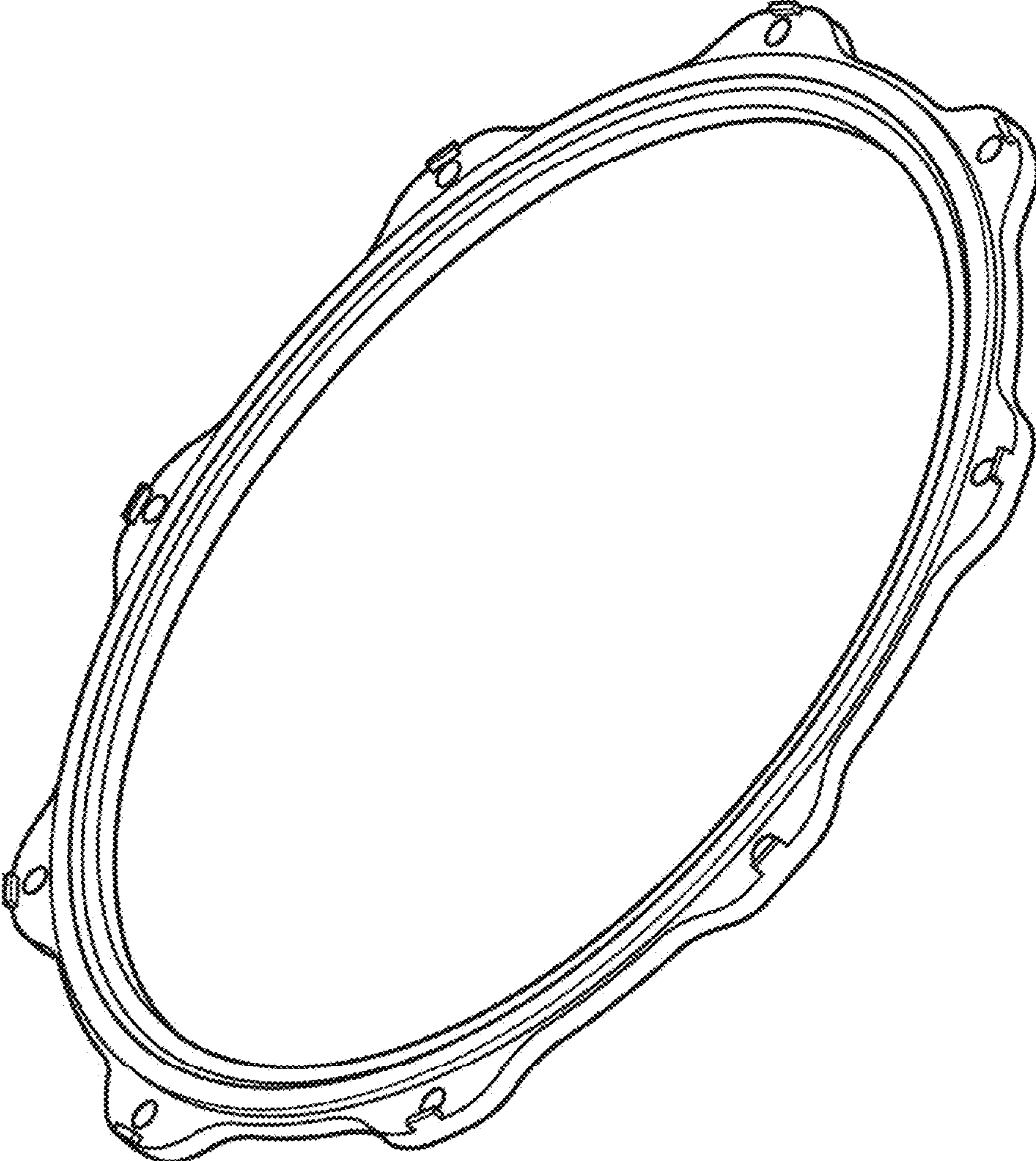
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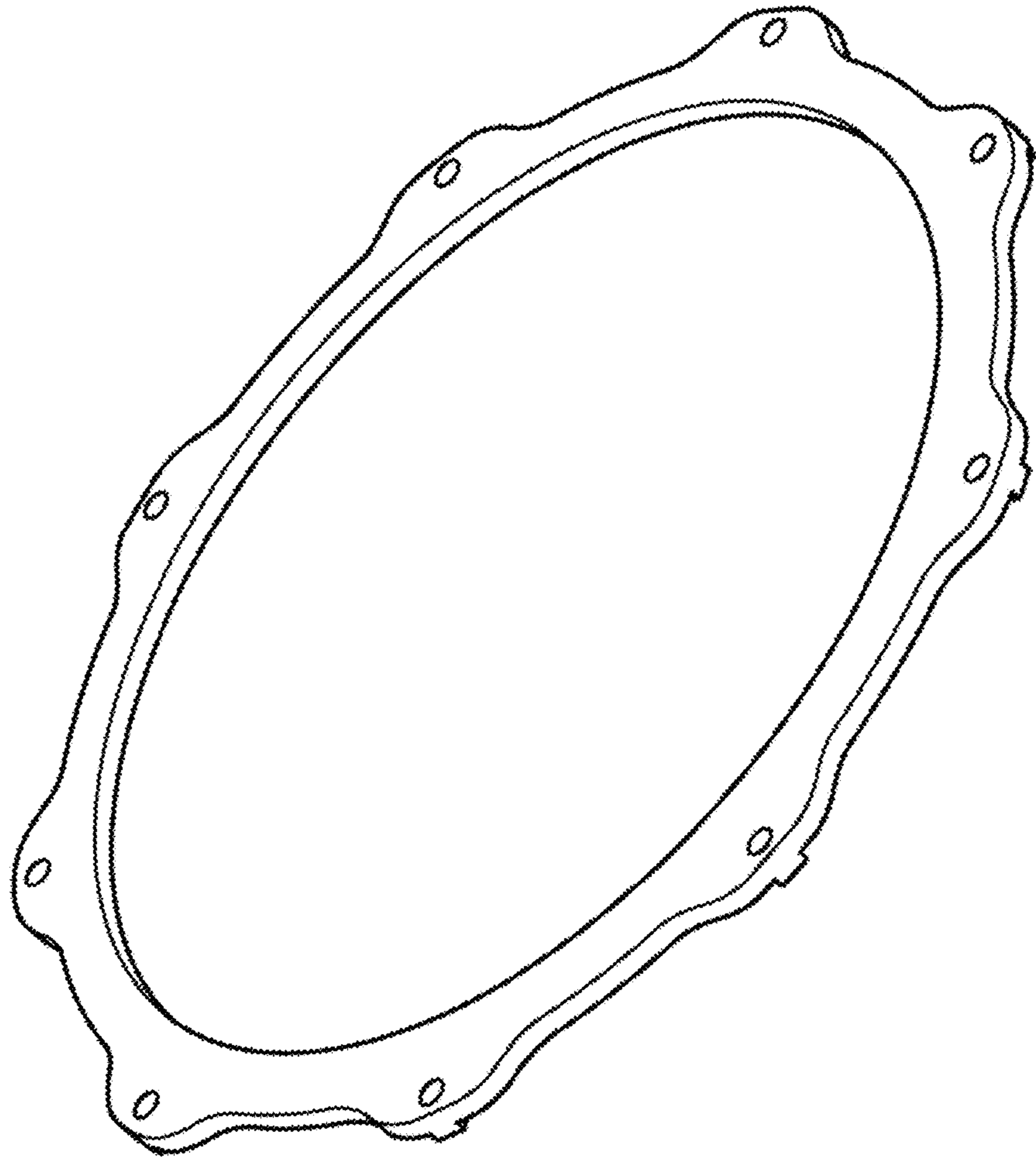
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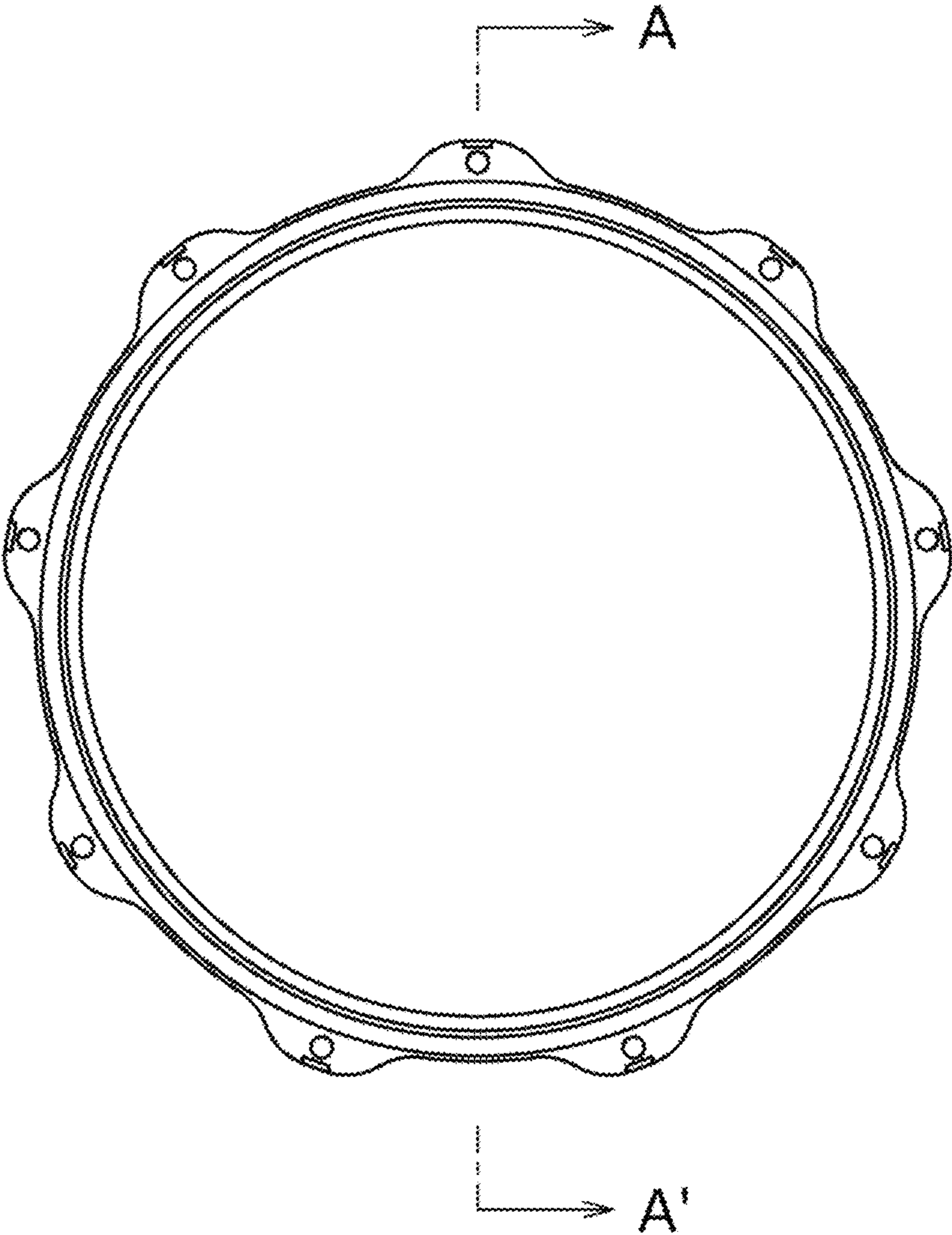
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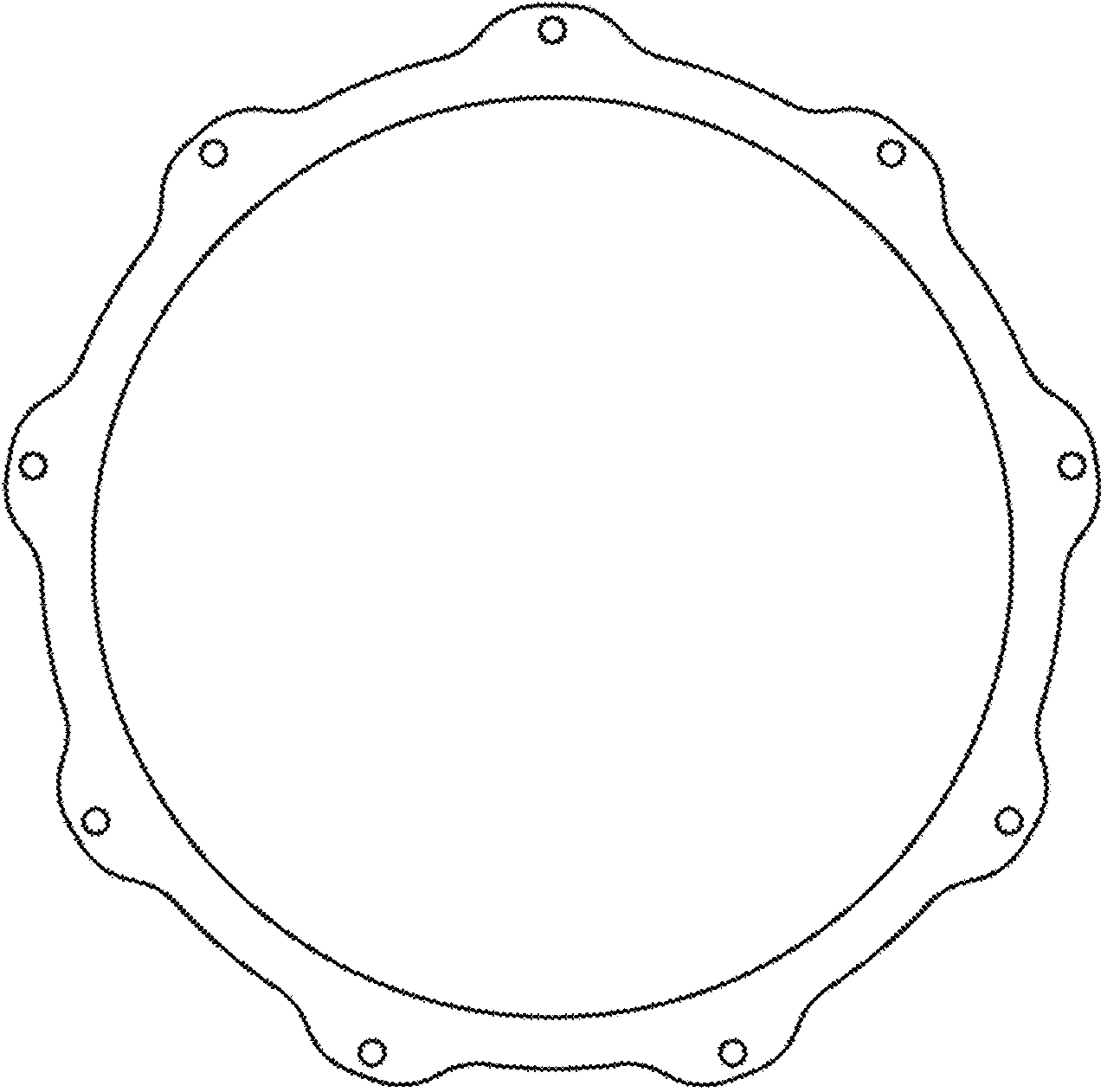
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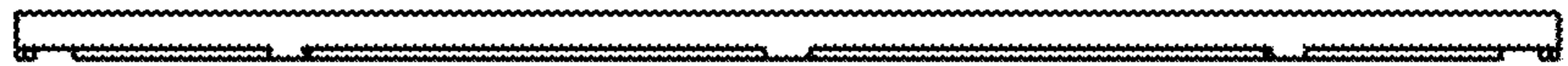


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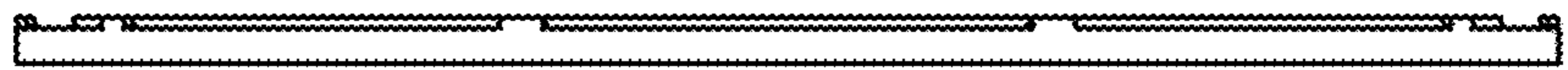




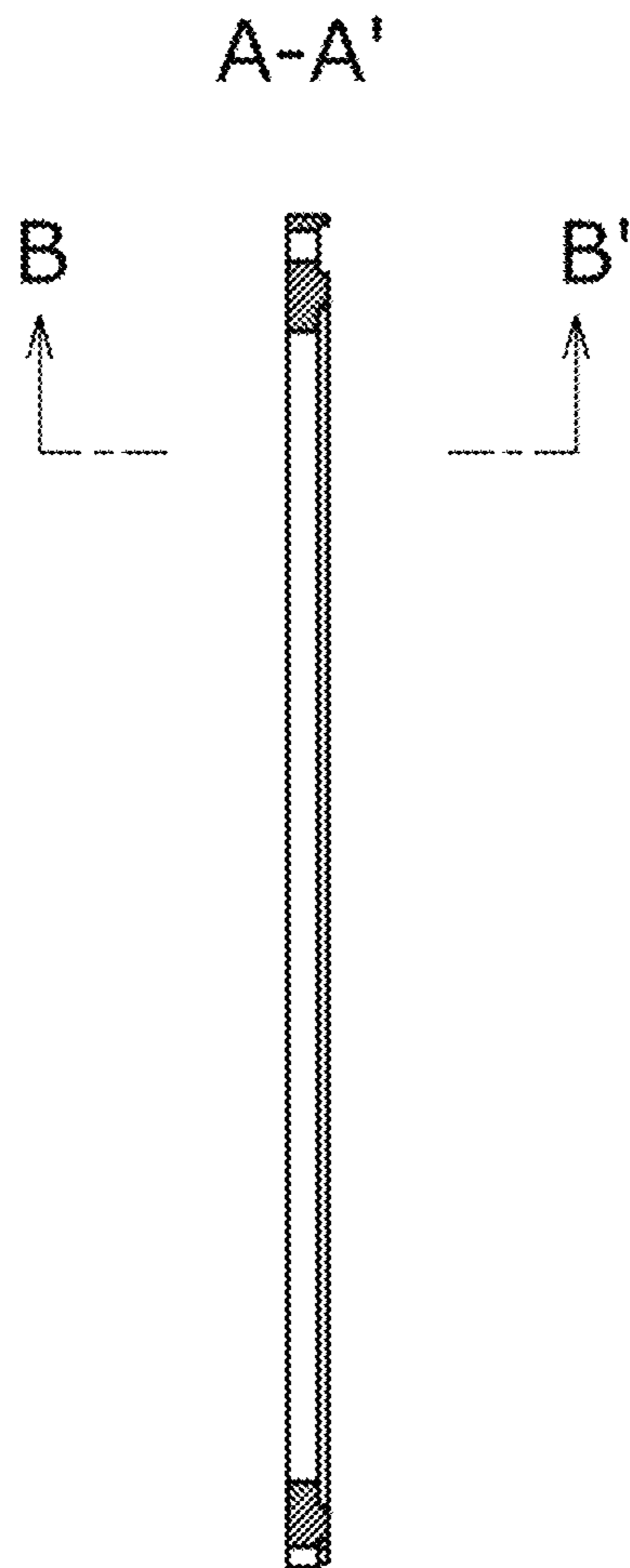
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6.7



6.8



6.9

