



US00D811603S

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

(10) **Patent No.:** **US D811,603 S**  
(45) **Date of Patent:** **\*\* Feb. 27, 2018**

(54) **PRESSURE DETECTOR FOR AN  
EXTRACORPOREAL CIRCULATION  
CIRCUIT**

G02B 27/017; G02B 2027/0134; A61M  
2021/0027; A61N 2005/0647

See application file for complete search history.

(71) Applicant: **TORAY INDUSTRIES, INC.**, Tokyo  
(JP)

(56) **References Cited**

U.S. PATENT DOCUMENTS

(72) Inventors: **Kazuyuki Hashimoto**, Otsu (JP); **Yumi  
Oka**, Otsu (JP)

D498,535 S *	11/2004	Genau	.....	D24/186
D632,397 S *	2/2011	Edwards	.....	D24/186
D742,509 S *	11/2015	Anderson	.....	D24/129
D742,528 S *	11/2015	Huffman	.....	D24/186
D742,529 S *	11/2015	Huffman	.....	D24/186

(Continued)

(73) Assignee: **TORAY INDUSTRIES, INC.**, Tokyo  
(JP)

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

(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch  
& Birch, LLP

(21) Appl. No.: **35/501,143**

(57) **CLAIM**

(22) Filed: **Dec. 28, 2015**

The ornamental design for a pressure detector for an extra-  
corporeal circulation circuit, as shown and described.

(80) **Hague Agreement Data**

**DESCRIPTION**

Int. Filing Date: **Dec. 28, 2015**

Int. Reg. No.: **DM/089567**

Int. Reg. Date: **Dec. 28, 2015**

Int. Reg. Pub. Date: **Jul. 1, 2016**

1. Pressure detector for an extracorporeal circulation circuit  
Fig. 1.1 is a front view;  
Fig. 1.2 is a rear view;  
Fig. 1.3 is a top view;  
Fig. 1.4 is a bottom view;  
Fig. 1.5 is left side view;  
Fig. 1.6 is a right side view;  
Fig. 1.7 is a cross-sectional view of the claimed design taken  
along the line 1.7-1.7 in Fig. 1.1;  
Fig. 1.8 is a cross-sectional view of the claimed design taken  
along the line 1.8-1.8 in Fig. 1.1;  
Fig. 1.9 is a cross-sectional view of the claimed design taken  
along the line 1.9-1.9 in Fig. 1.1;  
Fig. 1.10 is a cross-sectional view of the claimed design  
taken along the line 1.10-1.10 in Fig. 1.4;  
Fig. 1.11 is a cross-sectional view of the claimed design  
taken along the line 1.11-1.11 in Fig. 1.4;  
The portions of the pressure detector for an extracorporeal  
circulation circuit shown in broken lines do not form part of  
the claimed design.

(Continued)

(30) **Foreign Application Priority Data**

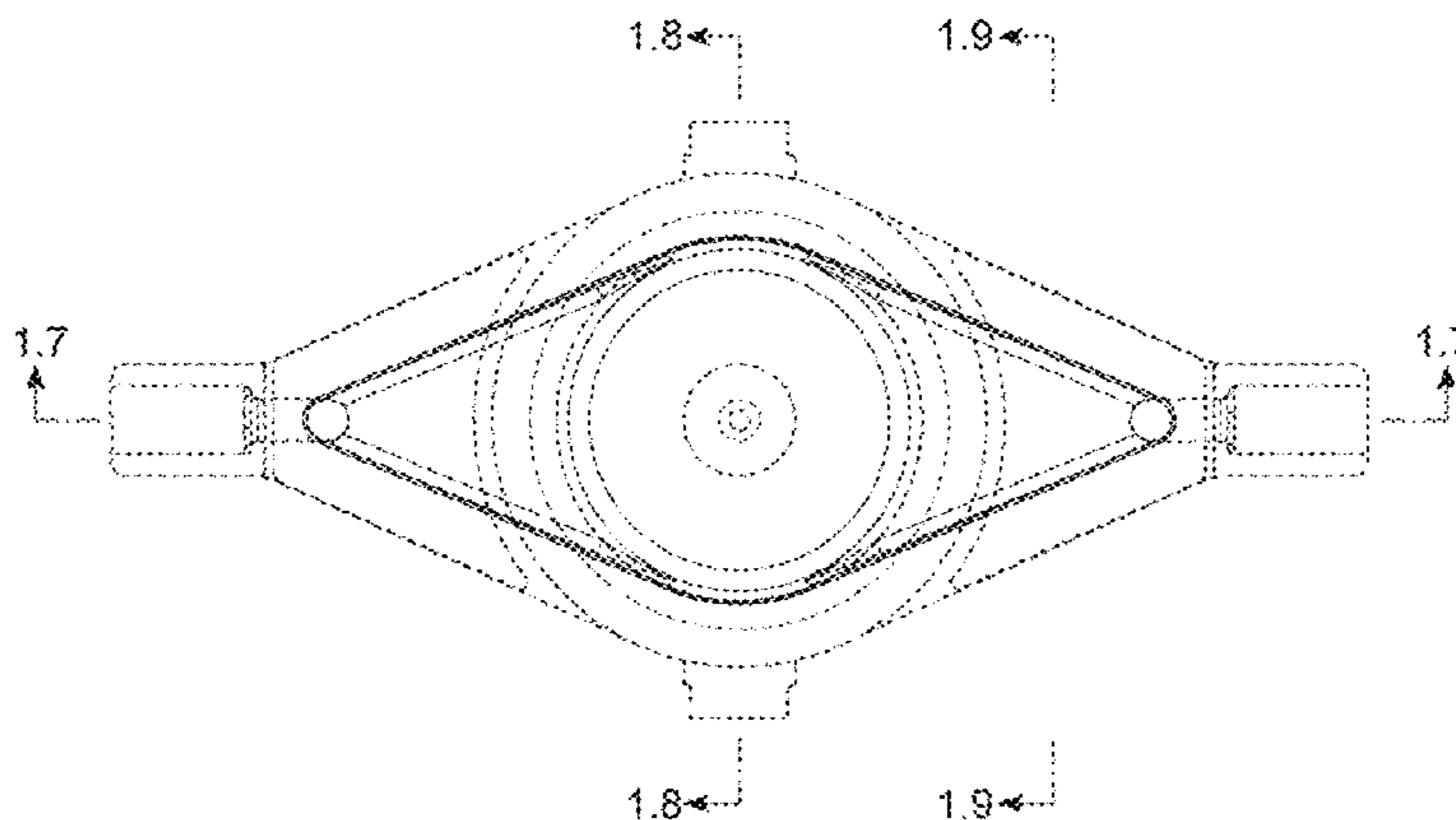
Jun. 29, 2015 (JP) ..... 2015-014296

(51) **LOC (11) Cl.** ..... **24-01**

(52) **U.S. Cl.**  
USPC ..... **D24/186**

(58) **Field of Classification Search**  
USPC ..... D24/184-187, 167-169, 165, 214-215,  
D24/129, 111, 100, 200, 106; D14/147,  
D14/206, 344

CPC ..... H04M 2250/02; H04M 1/6066; H04M  
1/6033; H04M 1/6058; H04M 1/6075;



The article is transparent.

The thin contour lines shown on the surface of the design illustrate the shape of the three-dimensional surface.

**1 Claim, 11 Drawing Sheets**

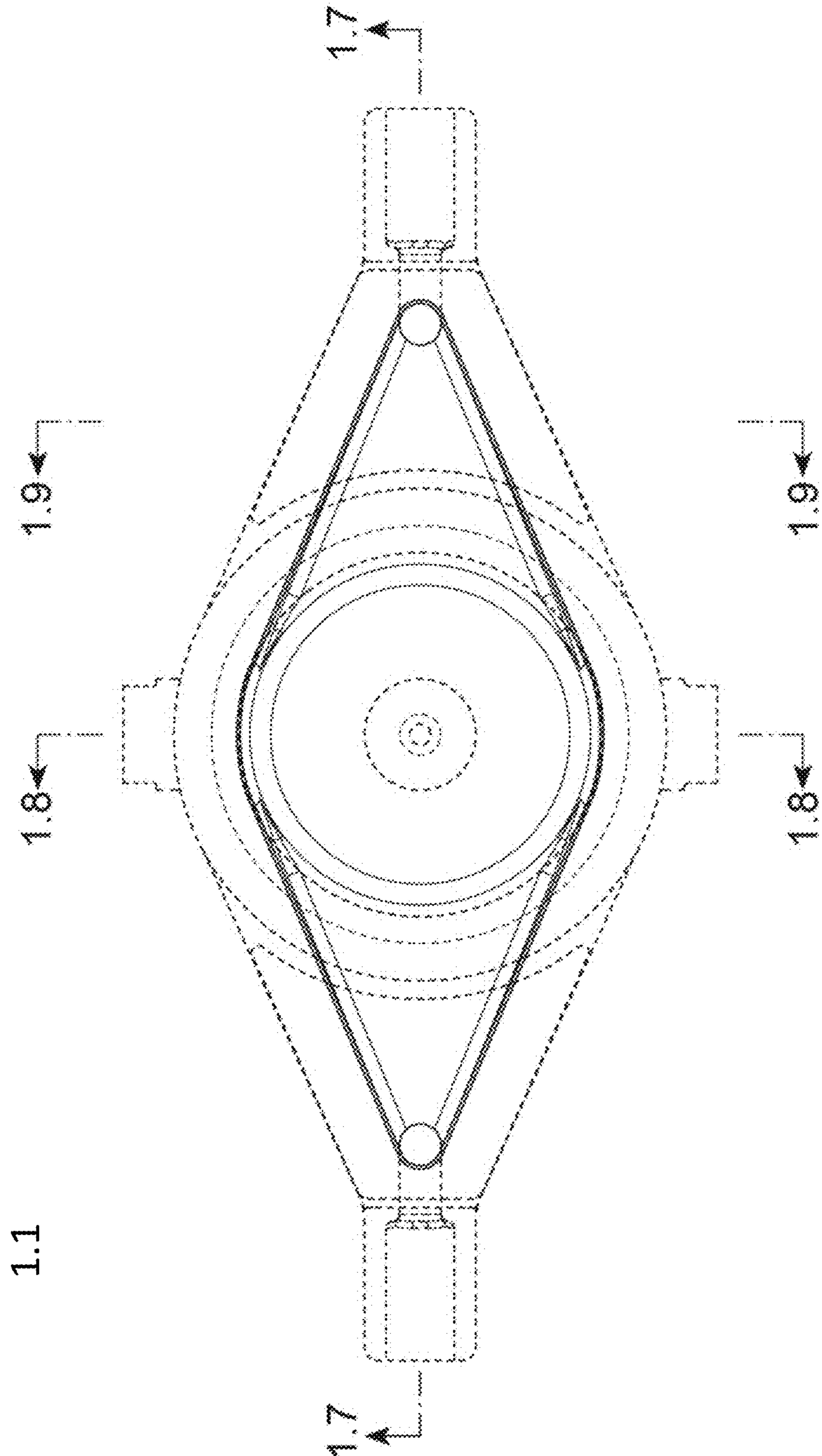
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**References Cited**

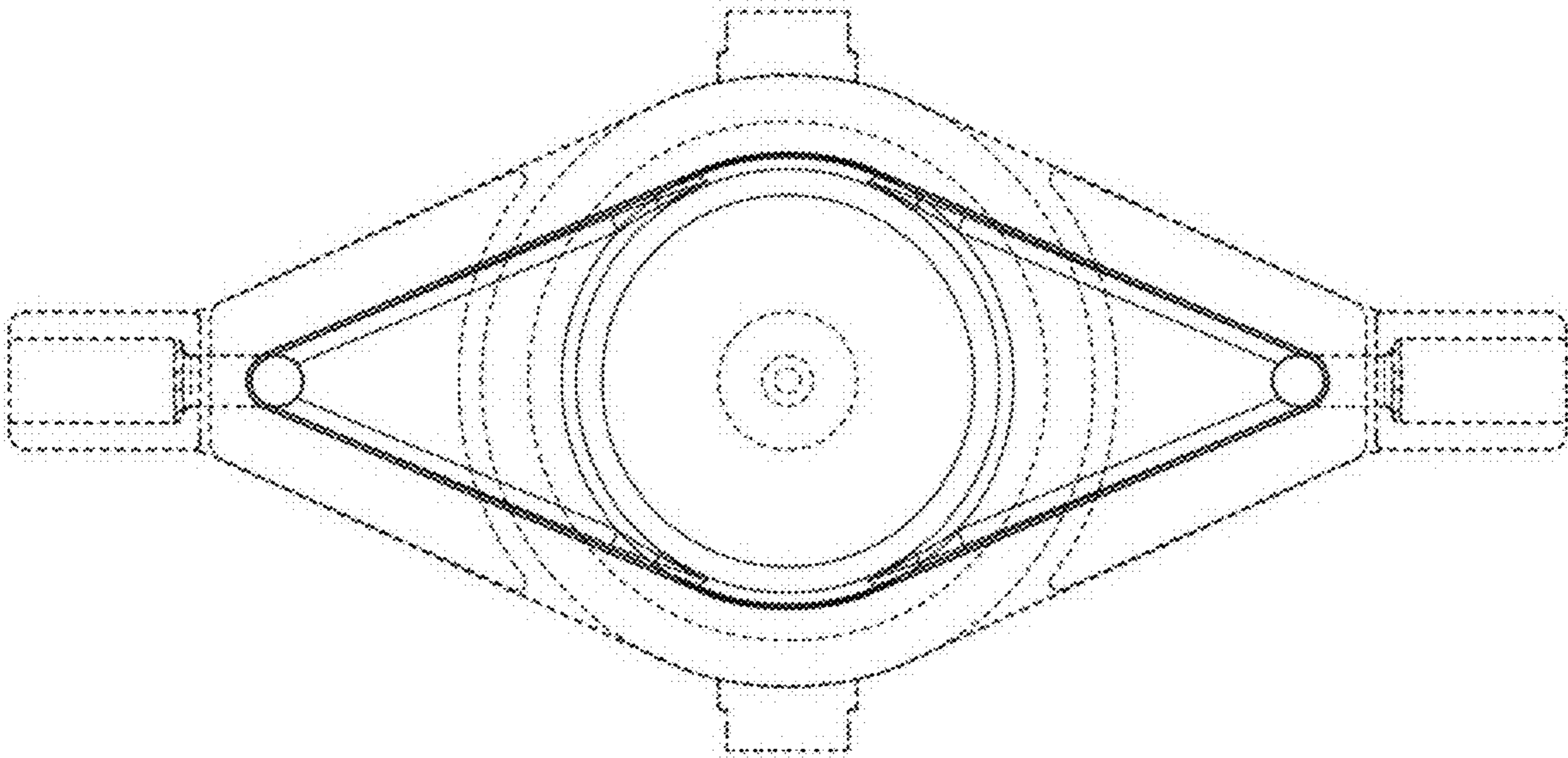
U.S. PATENT DOCUMENTS

D745,153 S	*	12/2015	Dowdell .....	D24/108
D754,843 S	*	4/2016	Sonderegger .....	D24/108
D756,504 S	*	5/2016	Sonderegger .....	D24/108
D776,820 S	*	1/2017	Rouillac .....	D24/167
D778,450 S	*	2/2017	Min .....	D24/186
D782,051 S	*	3/2017	Ryu .....	D24/186

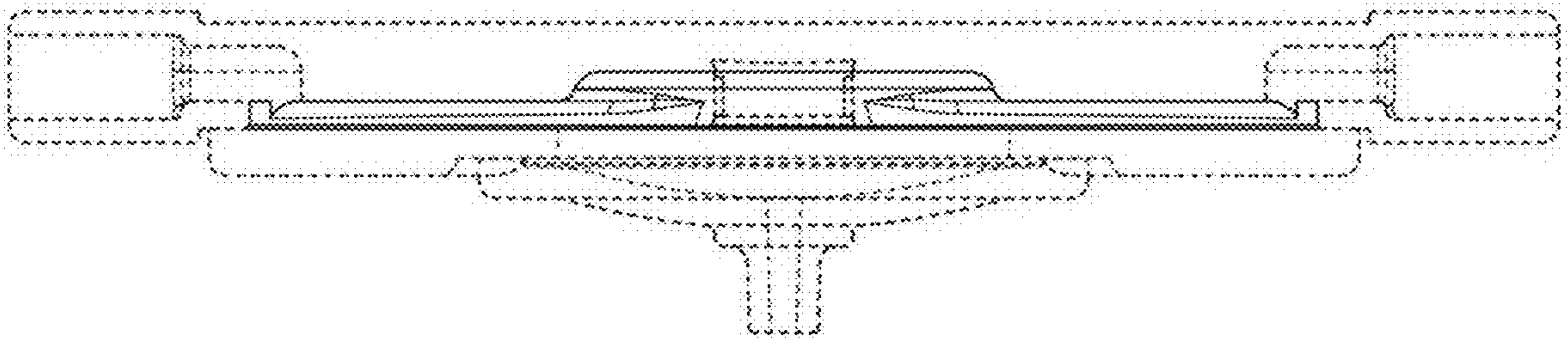
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1.2

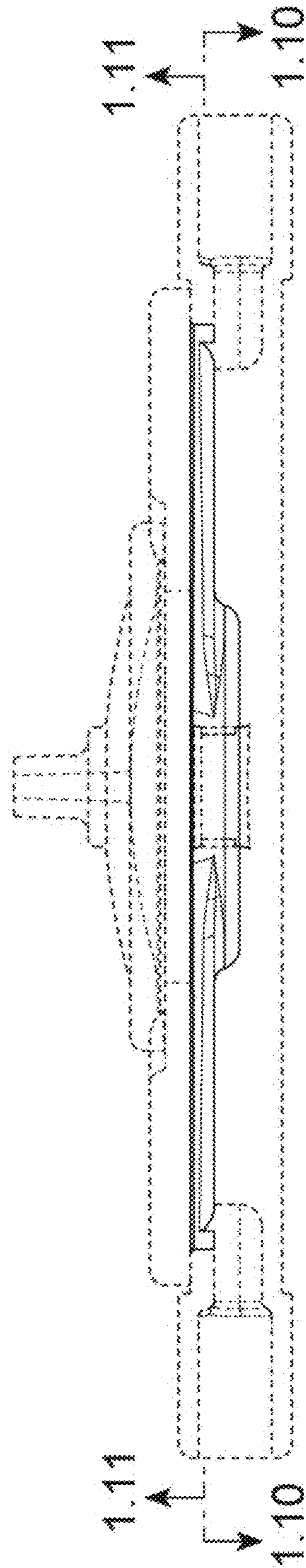


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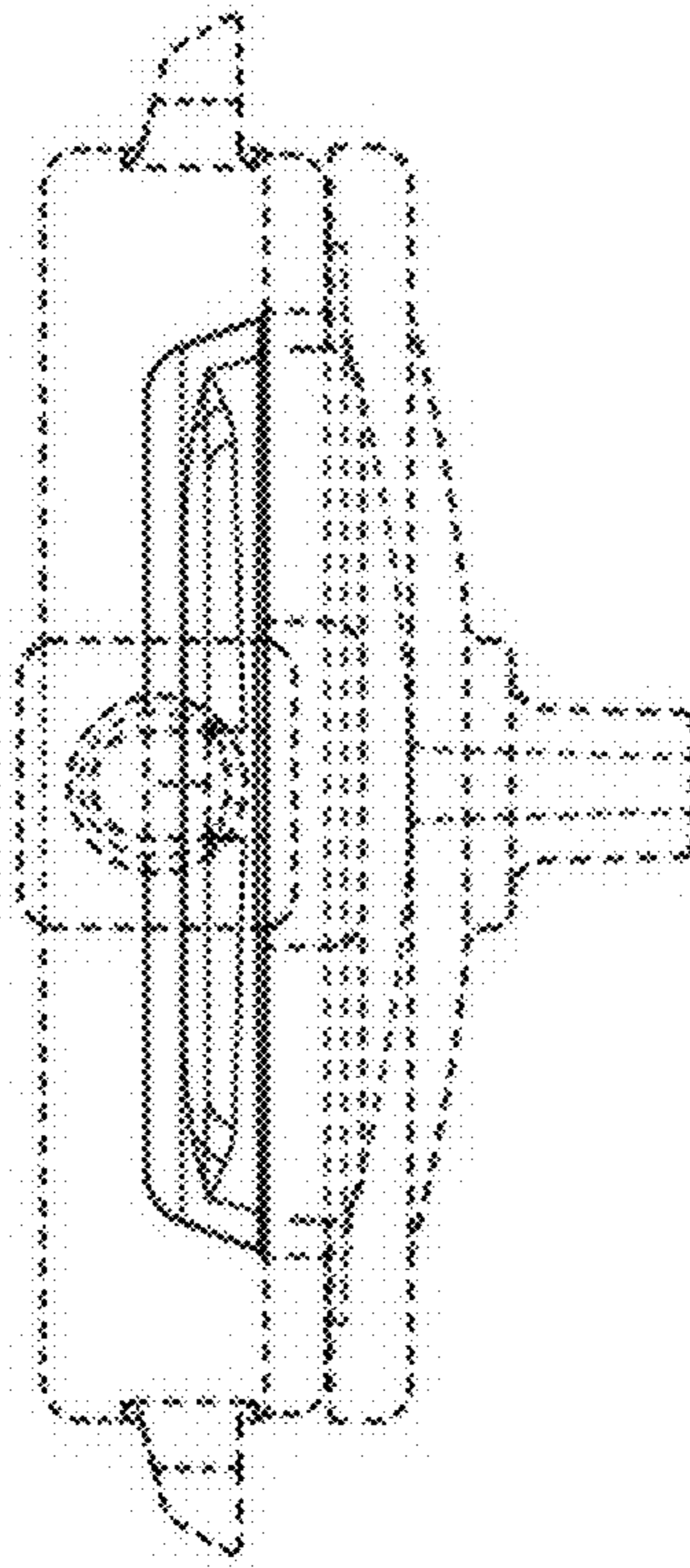




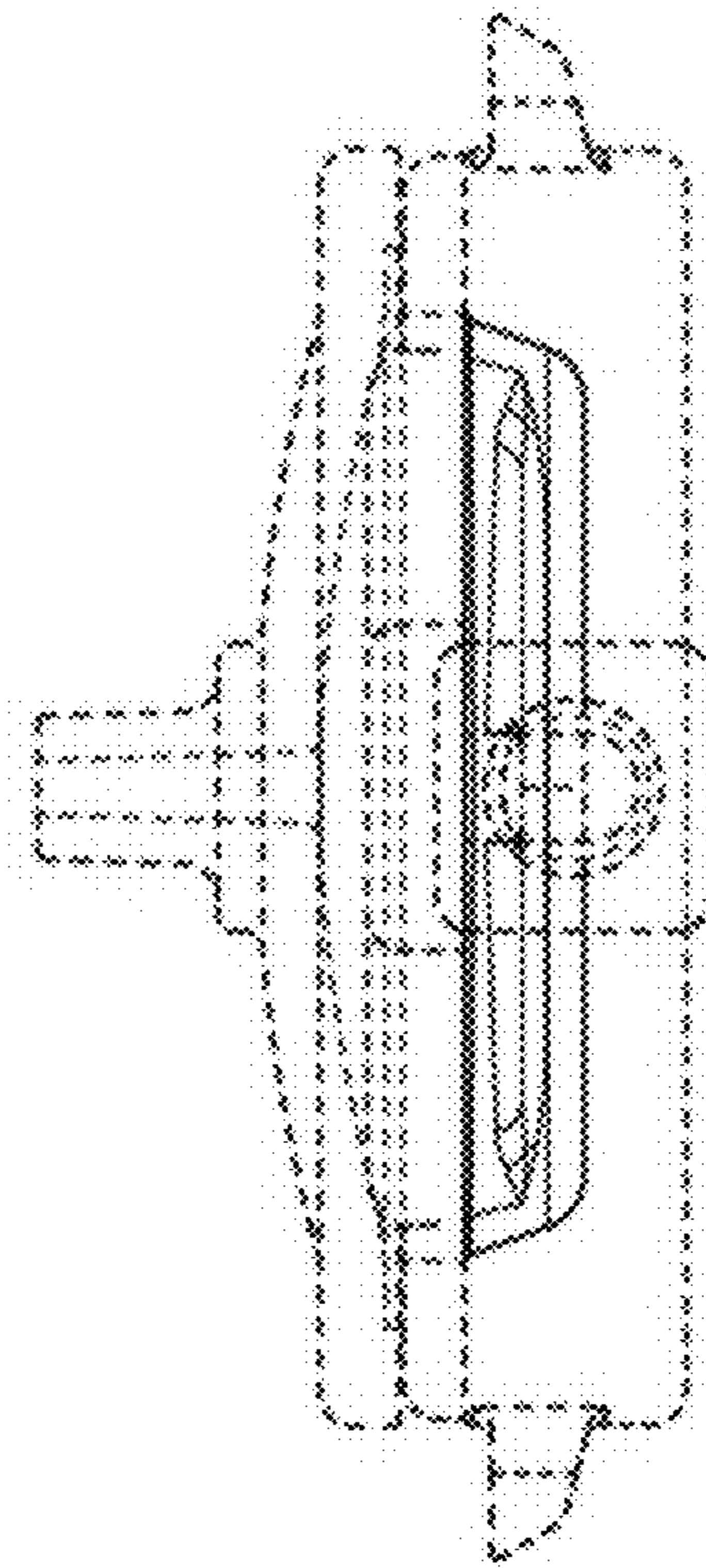
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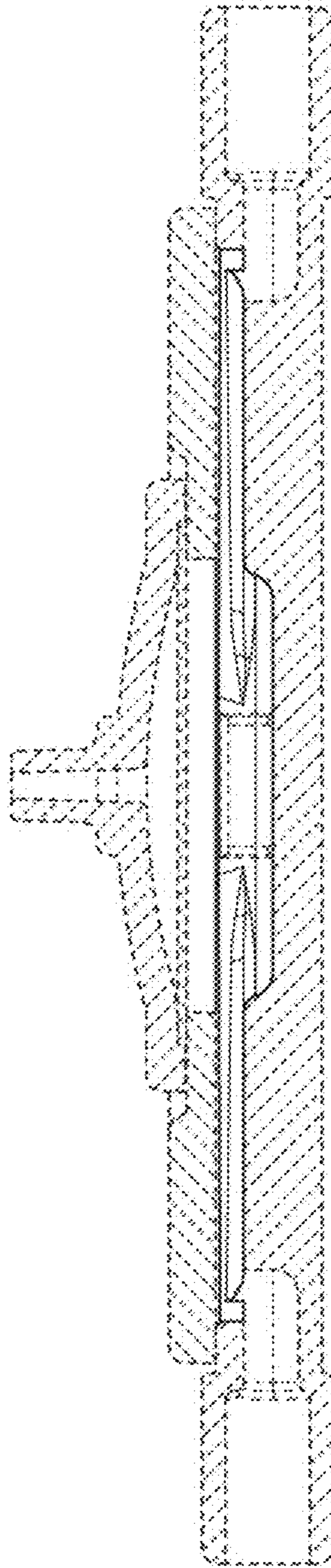
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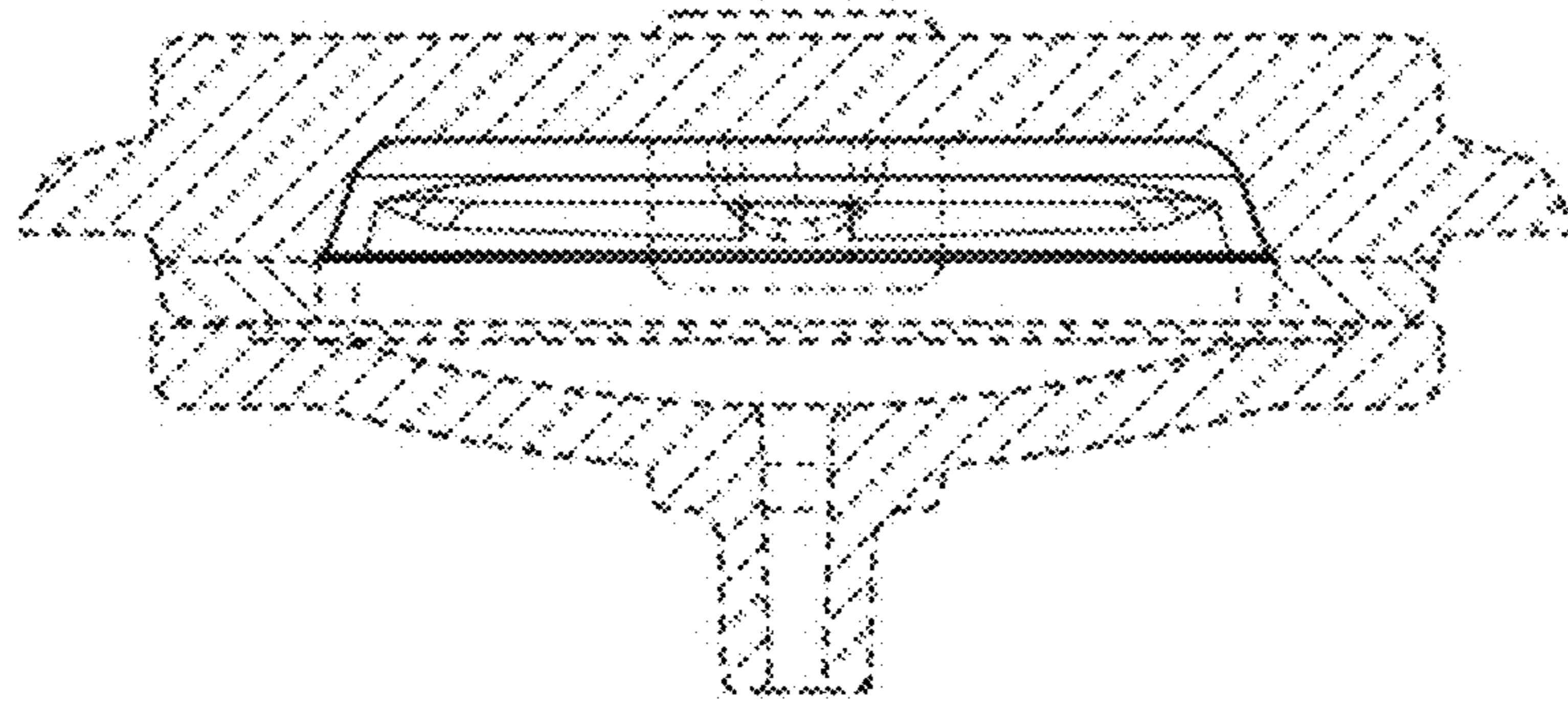
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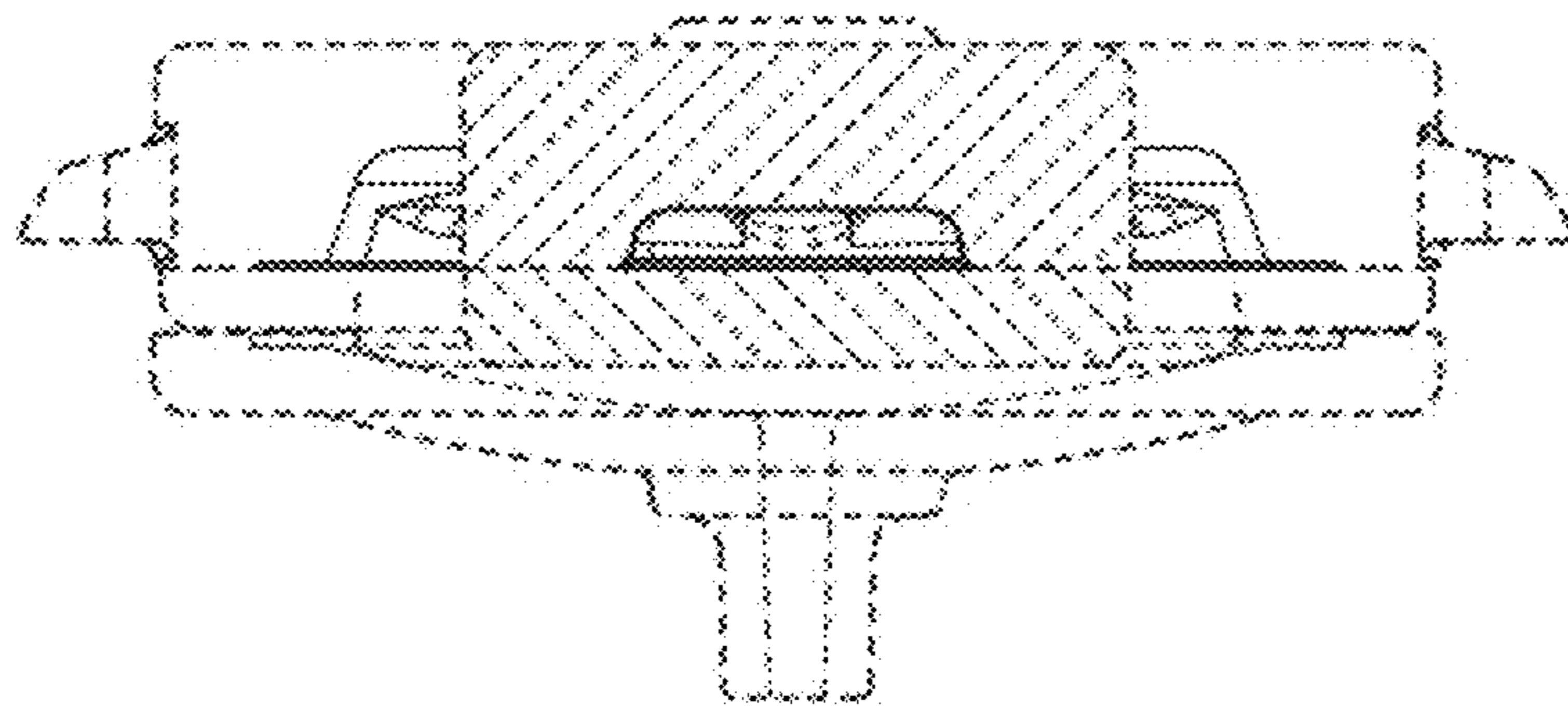




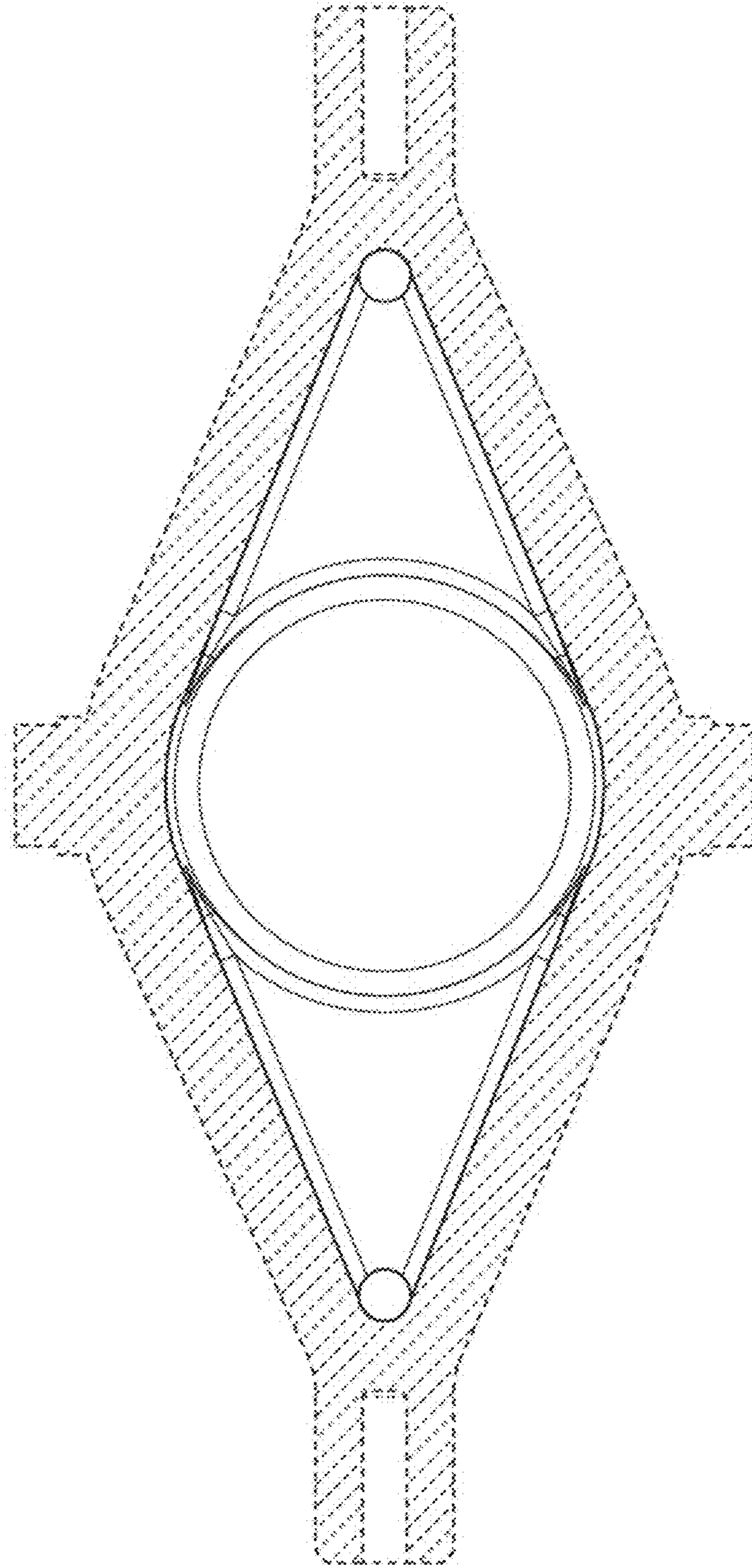
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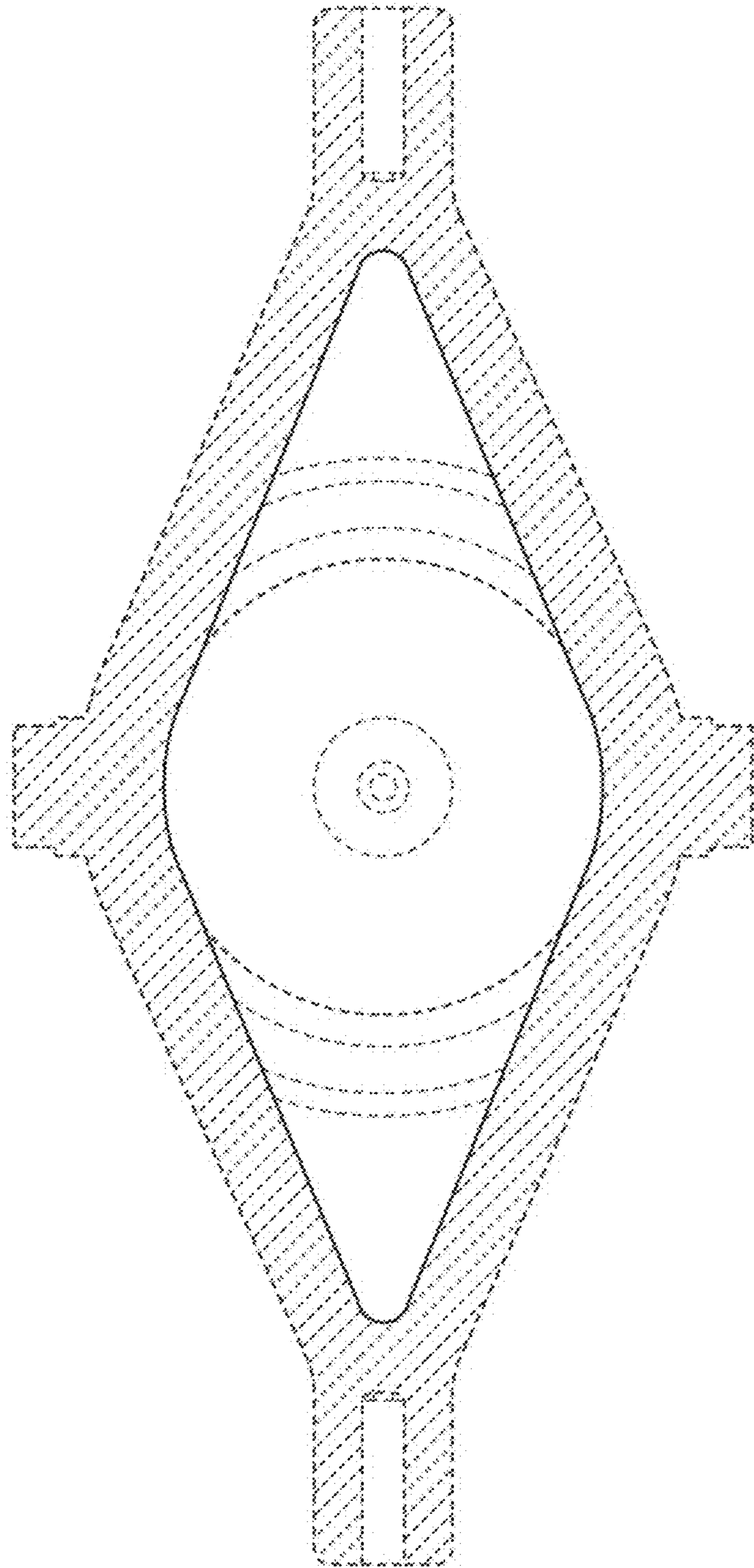
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1.9



1.10



1.11