



US00D733776S

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

(10) **Patent No.:** **US D733,776 S**
(45) **Date of Patent:** **** Jul. 7, 2015**

(54) **SONOTRODE**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

(73) Assignee: **TELSONIC HOLDING AG**,
Bronschhofen (CH)

D255,318	S	*	6/1980	Bakkeren	D15/144
D365,345	S	*	12/1995	Carkhuff	.....	D15/144
5,603,444	A	*	2/1997	Sato	.....	228/1.1
5,645,681	A	*	7/1997	Gopalakrishna et al.	..	156/580.2
D409,211	S	*	5/1999	Hidaka	.....	D15/144
D465,798	S	*	11/2002	Hill et al.	.....	D15/144
7,108,764	B2	*	9/2006	Schneider	.....	156/580.2
D697,956	S	*	1/2014	Davis et al.	.....	D15/144
8,657,182	B2	*	2/2014	Buettiker	.....	228/110.1
2005/0199676	A1	*	9/2005	Stroh et al.	.....	228/1.1
2011/0042014	A1	*	2/2011	Vogler	.....	156/580.1
2012/0012258	A1	*	1/2012	Vogler	.....	156/510
2013/0075454	A1	*	3/2013	Buettiker	.....	228/110.1

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

(21) Appl. No.: **29/421,005**

(22) Filed: **May 3, 2012**

FOREIGN PATENT DOCUMENTS

(30) **Foreign Application Priority Data**

EM	001942251-0001	*	11/2011
EM	001942251-0004	*	11/2011

Nov. 3, 2011 (EM) 001942251

* cited by examiner

(51) **LOC (10) CL.** **15-09**

Primary Examiner — Deanna L Pratt

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

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USPC **D15/144**

CPC **H01T 13/02** (2013.01); **H01T 13/00**
(2013.01)

(57) **CLAIM**

The ornamental design for a sonotrode, as shown and described.

(58) **Field of Classification Search**

DESCRIPTION

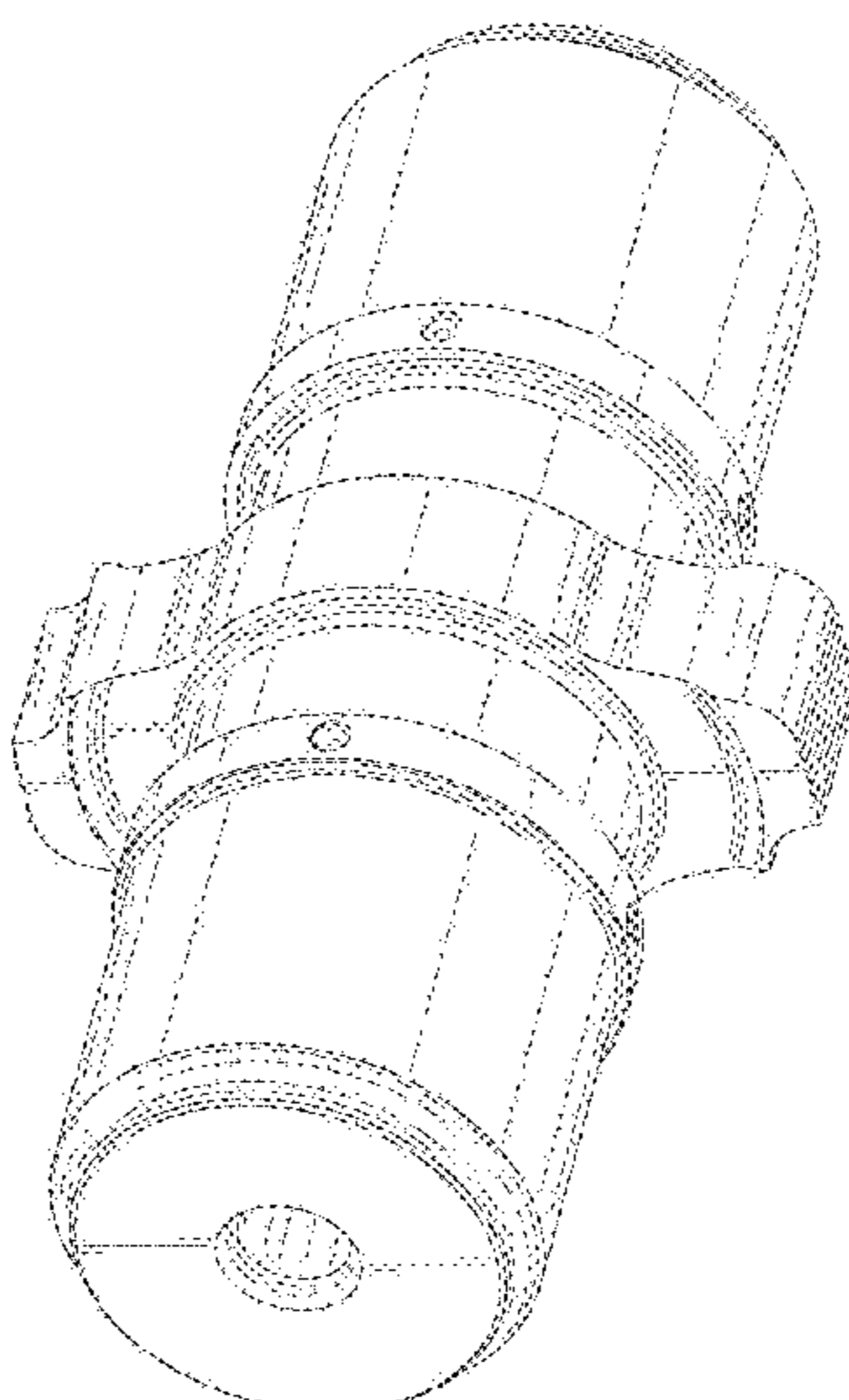
USPC 156/73.1, 73.3, 580.1, 580.2; 181/139,
181/142; 209/346, 365.1; 228/1.1, 110.1;
310/323.19, 325; 333/145; 604/22;
D15/144-144.2

CPC B01J 19/008; B01J 19/10; B06B 1/00;
B06B 3/00; B06B 2201/72; B23K 1/06;
B23K 20/10; B23K 20/106; B29C 65/08;
H01L 24/78; H01L 2224/48; H01L 2224/78;
H01L 2924/00014; H01L 2924/01005; H01L
2924/01006; H01L 2924/01013; H01L
2924/01033; H01L 2924/01039; H01L
2924/01082

FIG. 1 is a perspective view of a sonotrode showing my new design;
FIG. 2 is a bottom view thereof, a plan view being symmetrical to the front view;
FIG. 3 is a front view thereof, a rear view being identical to the front view;
FIG. 4 is a right side view thereof, a left view being identical to the right side view;
FIG. 5 is a cross-sectional view thereof taken along line 5-5 in FIG. 3; and,
FIG. 6 is a cross-sectional view thereof taken along line 6-6 in FIG. 4.

See application file for complete search history.

1 Claim, 6 Drawing Sheets



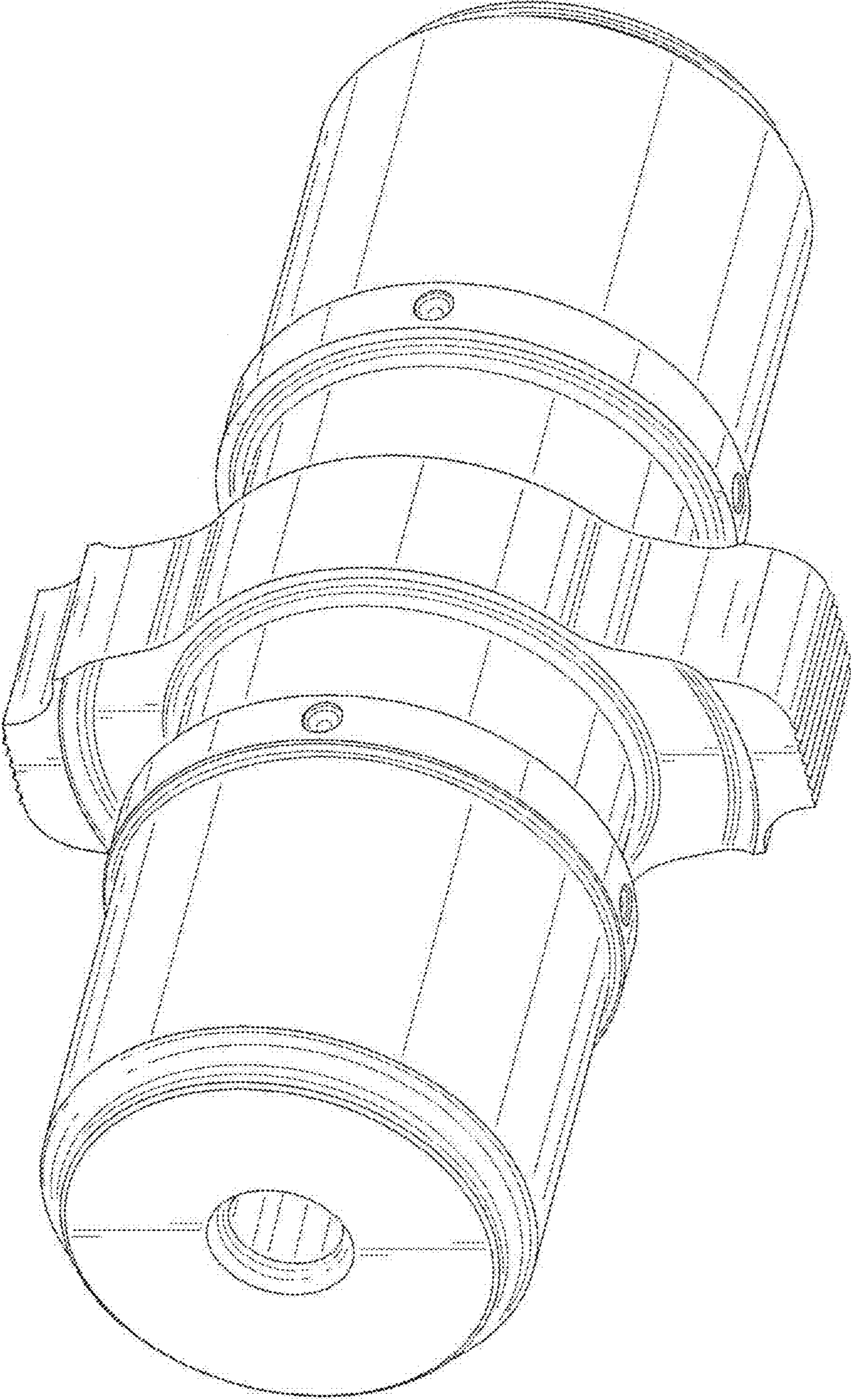


FIG. 1

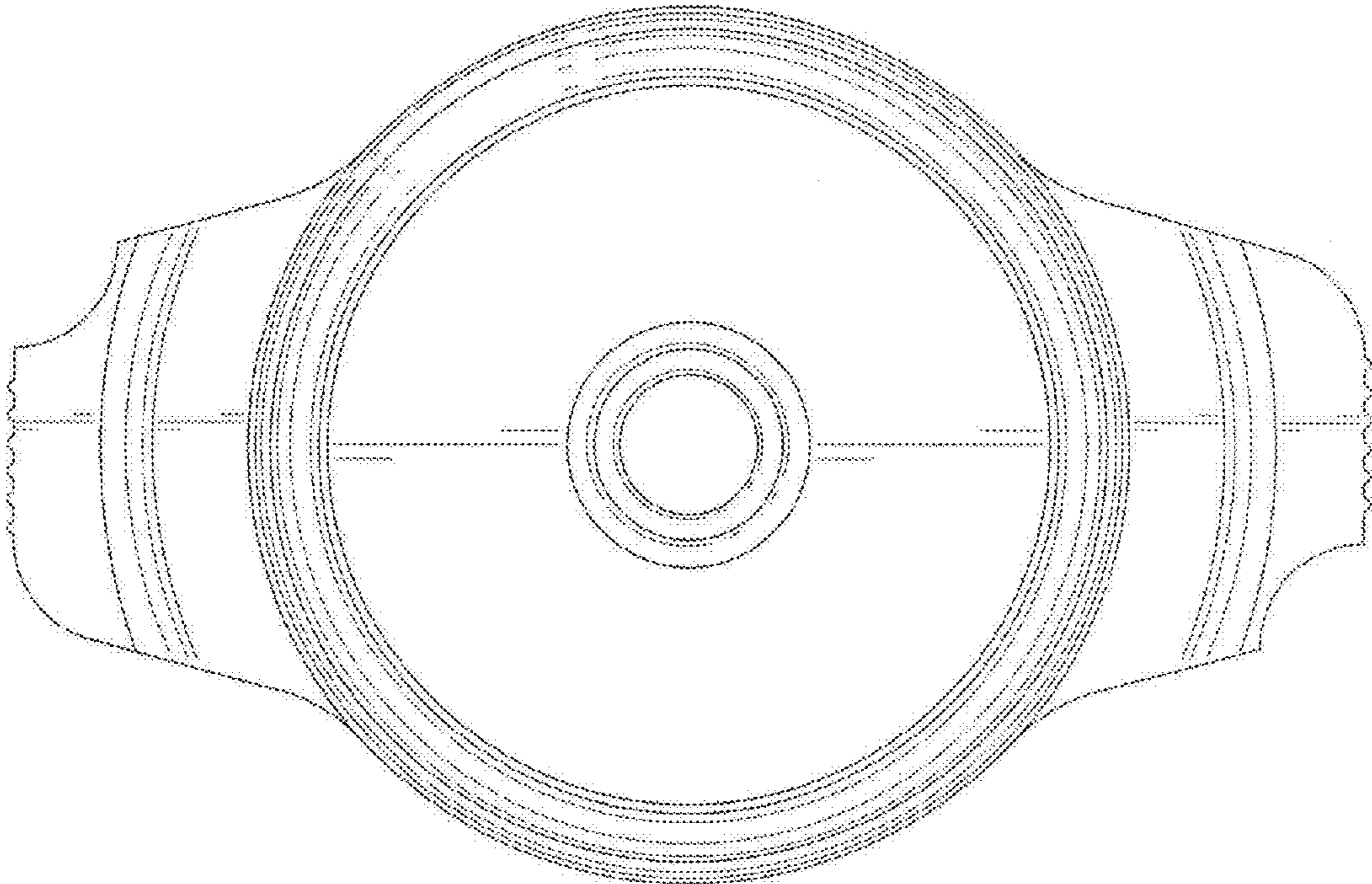


FIG. 2

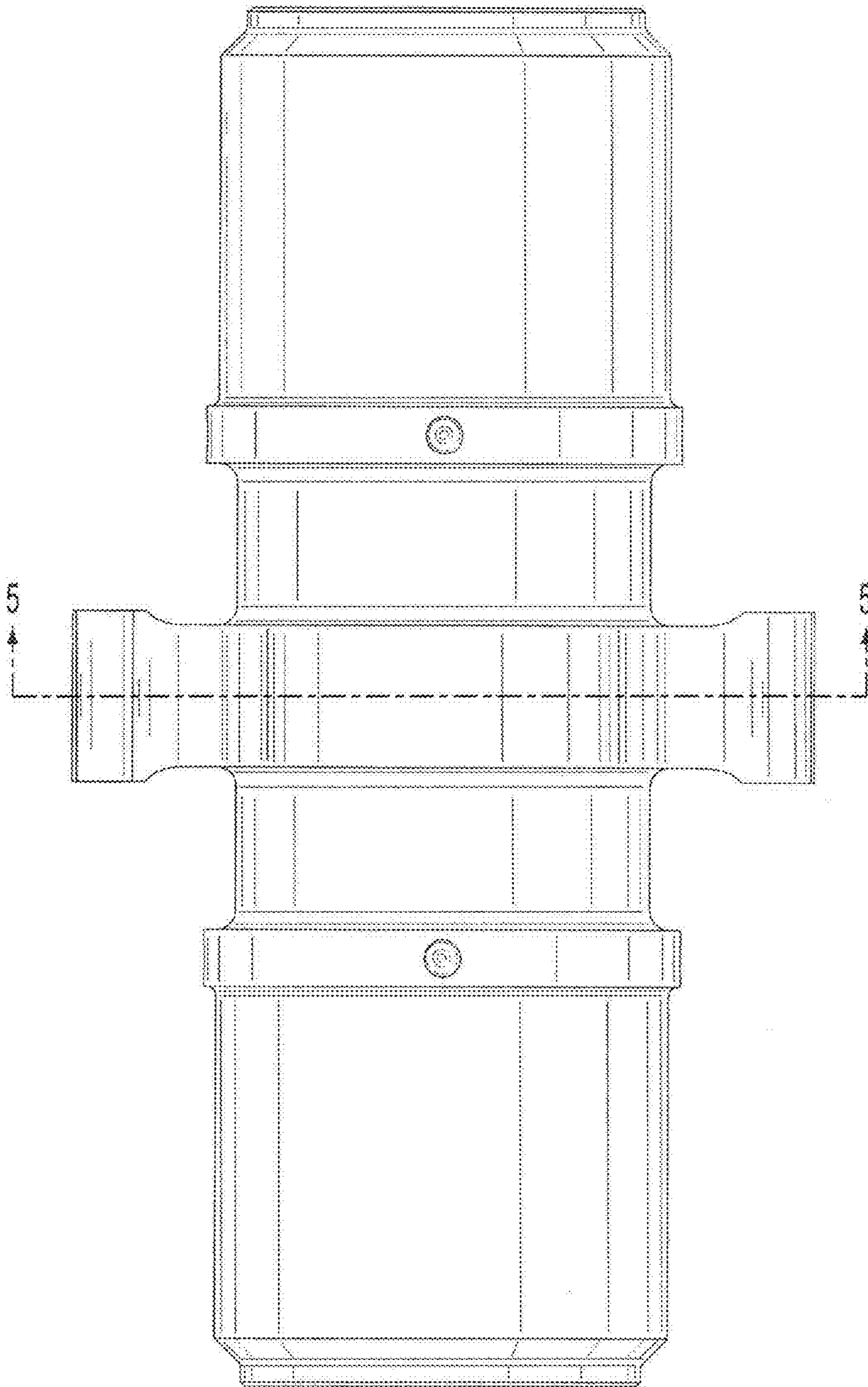


FIG. 3

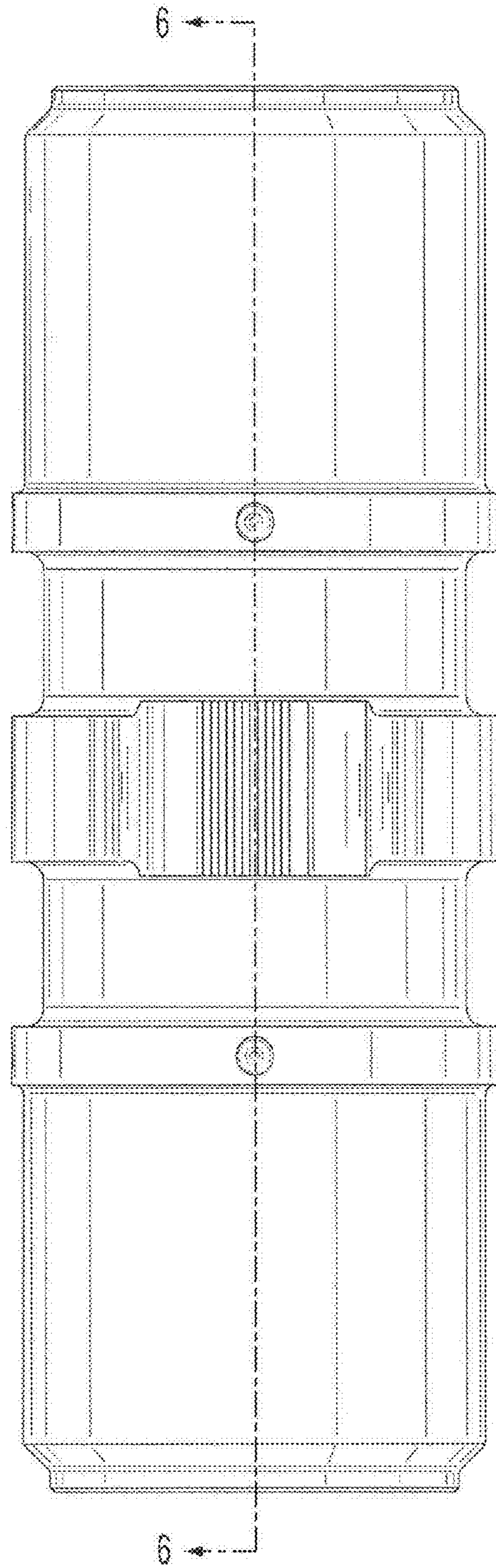


FIG. 4

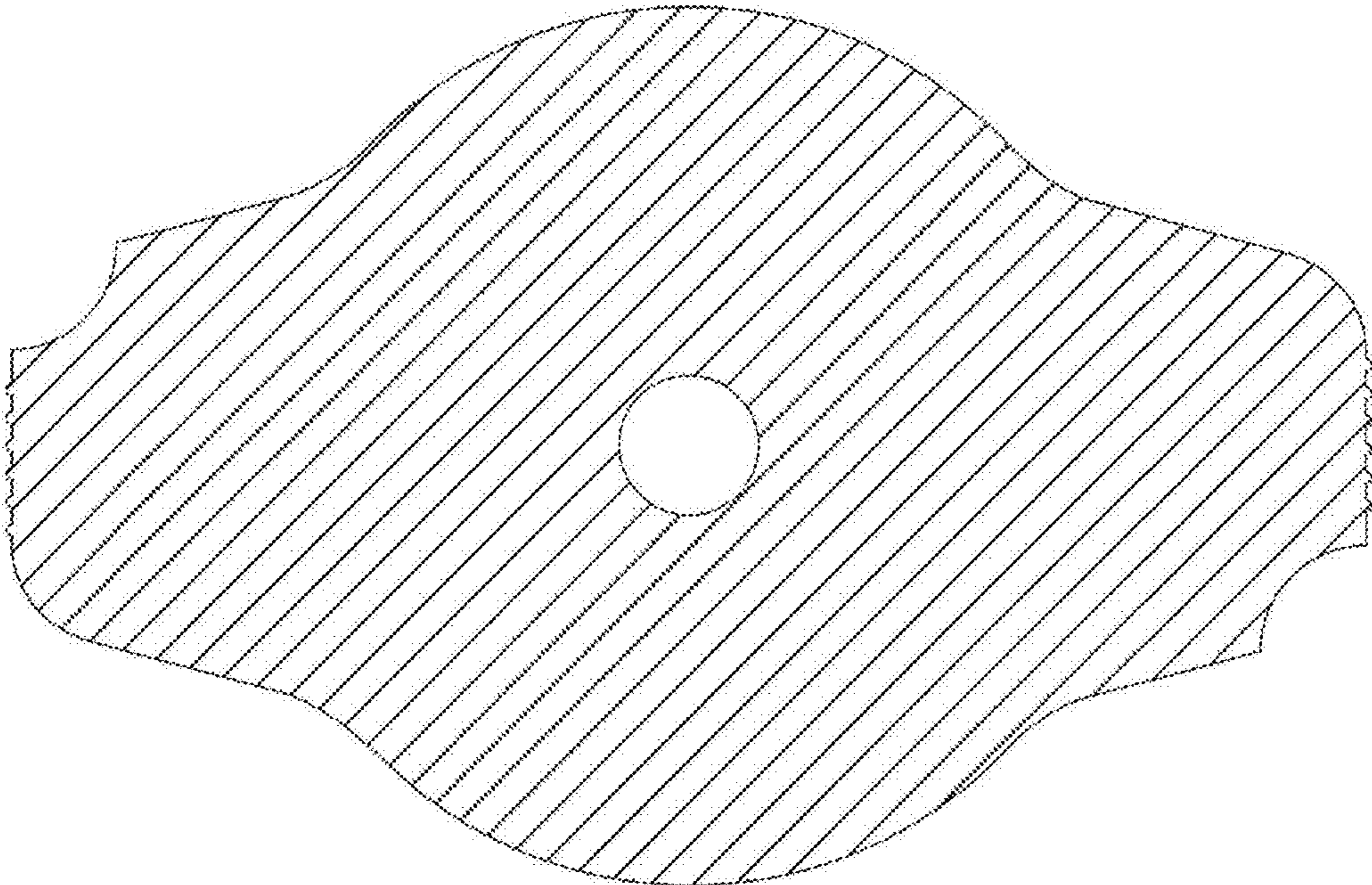


FIG. 5

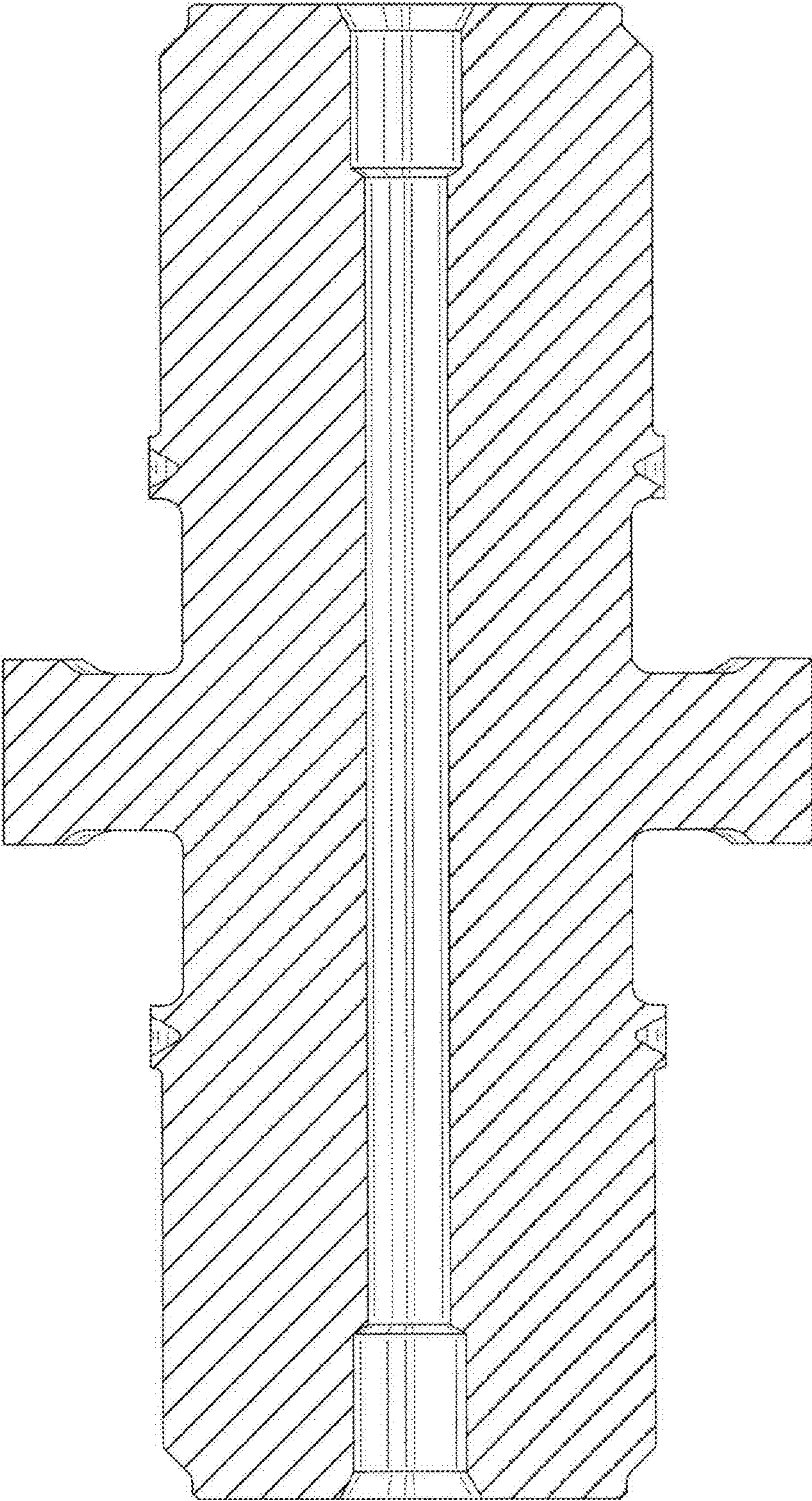


FIG. 6