



US00D896353S

(12) **United States Design Patent** (10) **Patent No.:** **US D896,353 S**  
**Nakagawa** (45) **Date of Patent:** **\*\* Sep. 15, 2020**

(54) **COMPOSITE SEAL**  
(71) Applicant: **VALQUA, LTD.**, Tokyo (JP)  
(72) Inventor: **Ippei Nakagawa**, Gojo (JP)  
(73) Assignee: **VALQUA, LTD.**, Tokyo (JP)  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/631,185**  
(22) Filed: **Dec. 28, 2017**

**Related U.S. Application Data**

(62) Division of application No. 29/596,883, filed on Mar. 13, 2017, now Pat. No. Des. 818,089.

(30) **Foreign Application Priority Data**

Sep. 14, 2016 (JP) ..... 2016-019890  
Sep. 14, 2016 (JP) ..... 2016-019891  
Sep. 14, 2016 (JP) ..... 2016-019892

(51) **LOC (12) Cl.** ..... **23-01**  
(52) **U.S. Cl.**

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

(58) **Field of Classification Search**

USPC ..... D23/259–260, 269, 262; 285/901,  
285/42–50; 417/454; 277/314–316,  
277/351–359, 361–364, 382, 392,  
277/394–395, 504, 553, 549, 562–563,  
277/572, 602–603, 605–607, 609,  
277/616–617, 623, 641–644, 650–652  
CPC .. E03C 1/30; E03C 1/222; E03C 1/286; F16L  
55/07; F16L 55/1007; F16L 55/1015;  
F16L 55/1108; F16L 55/1152; F16L 5/02;  
F16L 5/10; F04B 53/16; F04B 53/143;  
F16J 15/3268; F16J 15/106; E04D  
13/1406; E04D 13/1407; F16K 3/0227;  
F16K 35/00; F16K 49/00; F16K 51/02;  
E03B 7/12

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D31,451 S \* 8/1899 Norris ..... D23/269  
D196,724 S 10/1963 Forrest, Jr.  
3,472,523 A \* 10/1969 Carlson, Jr. .... F16J 15/024  
277/649

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2005036926 A 2/2005  
JP 2005164027 A 6/2005

(Continued)

OTHER PUBLICATIONS

Japanese Search Notice issued in JP Application No. JP 2016-019892 dated Mar. 28, 2017, including English translation.

(Continued)

*Primary Examiner* — Amy C Wierenga

(74) *Attorney, Agent, or Firm* — Dickinson Wright PLLC

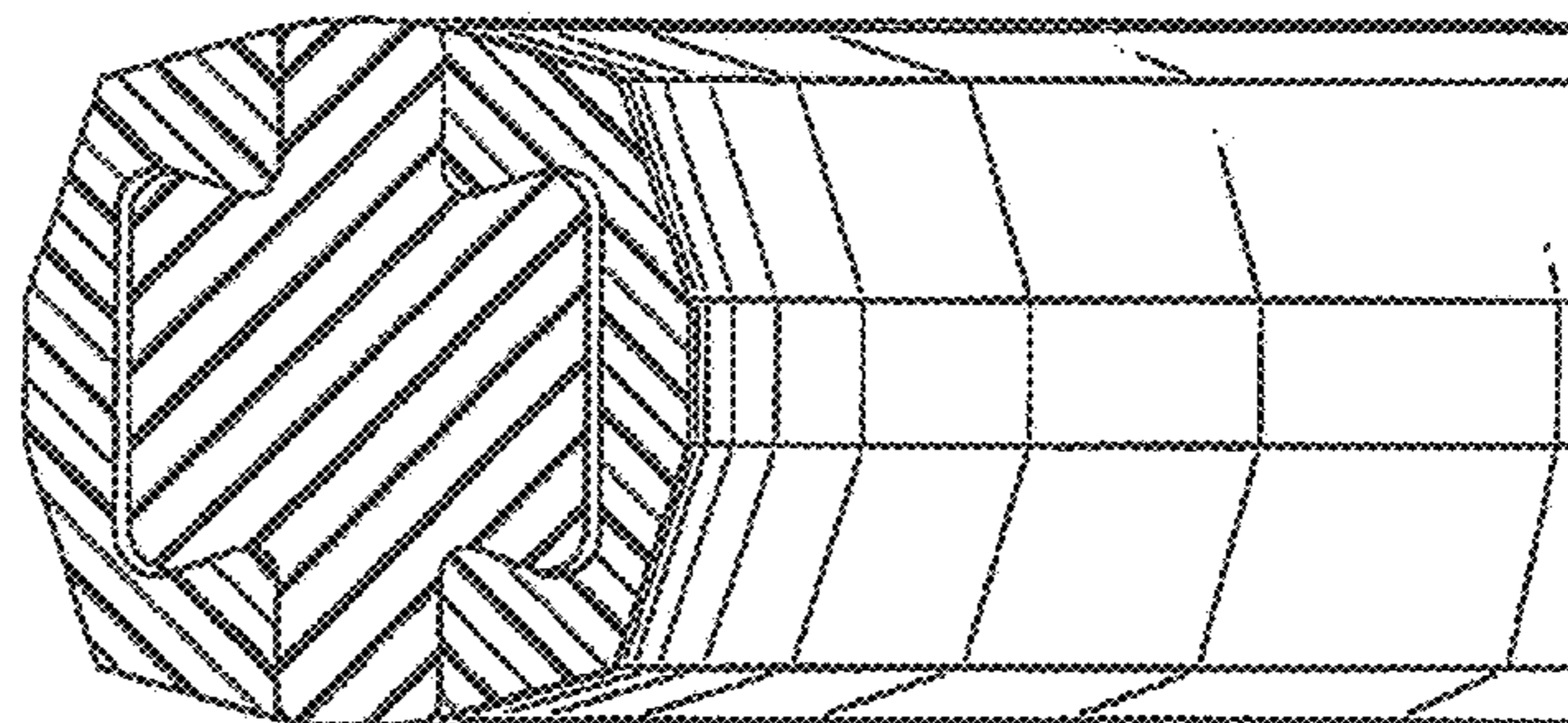
(57) **CLAIM**

The ornamental design for the composite seal, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of a composite seal;  
FIG. 2 is a rear view thereof;  
FIG. 3 is a top view thereof;  
FIG. 4 is a bottom view thereof;  
FIG. 5 is a right side view thereof;  
FIG. 6 is a left side view thereof;  
FIG. 7 is a cross-sectional view of the portion 7-7 of Fig. 3 thereof; and,  
FIG. 8 is a cross-sectional view of the portion 8-8 of FIG. 7 thereof.

**1 Claim, 3 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

3,550,990 A \* 12/1970 Carlson, Jr. .... F16J 15/106  
277/566  
D243,406 S \* 2/1977 Mooney ..... D13/154  
4,557,487 A \* 12/1985 Banas ..... F16J 15/32  
277/566  
D289,078 S 3/1987 Vassallo et al.  
4,693,343 A 9/1987 Boyd  
D368,516 S 4/1996 Matsumura  
D380,039 S \* 6/1997 Sutherland ..... D23/269  
5,833,245 A \* 11/1998 Gallagher ..... F16J 15/3236  
277/549  
D563,531 S \* 3/2008 Katsura ..... D23/269  
D572,348 S 7/2008 Arosio  
D598,988 S 8/2009 Jaccoby et al.  
D607,091 S 12/2009 Weston  
D614,271 S 4/2010 Weston  
D633,991 S \* 3/2011 Nakagawa ..... D23/269  
7,909,057 B1 \* 3/2011 Vicars ..... F16J 15/106  
137/516.29  
D643,912 S \* 8/2011 Bowman ..... D23/269  
D646,764 S \* 10/2011 Rusconi ..... D23/269  
D648,427 S 11/2011 Bowman et al.  
D655,401 S \* 3/2012 Muramatsu ..... D23/269  
D655,797 S \* 3/2012 Muramatsu ..... D23/269  
D692,391 S 10/2013 Kim  
D760,992 S 7/2016 Martin et al.  
D766,704 S \* 9/2016 Hill ..... D8/354  
D776,529 S 1/2017 Torrison et al.  
D795,693 S 8/2017 Zabeleta et al.  
D799,657 S 10/2017 Sullivan et al.

D819,187 S 5/2018 Yamamoto  
D828,753 S 9/2018 Zabeleta et al.  
2008/0018058 A1 1/2008 Kobayashi et al.

FOREIGN PATENT DOCUMENTS

JP 2006118704 A 5/2006  
JP S-001272633 6/2006  
JP 2007092892 A 4/2007  
JP S-001349982 2/2009  
JP S-001349983 2/2009  
JP S-001361604 6/2009  
JP S-001361605 6/2009  
JP S-001397980 10/2010  
JP S-001397981 10/2010  
JP S-001421969 8/2011  
JP S-001430418 12/2011  
JP 2012132476 A 7/2012  
JP 2012137103 A 7/2012  
JP S-001549270 5/2016  
KR 30-0545136 11/2009

OTHER PUBLICATIONS

Japanese Search Notice issued in JP Application No. JP 2016-019891 dated Mar. 28, 2017, including English translation.  
Japanese Search Notice issued in JP Application No. JP 2016-019890 dated Mar. 28, 2017, including English translation.  
U.S. Office Action dated Feb. 19, 2019, which issued in the U.S. Appl. No. 29/631,179, filed Dec. 28, 2017.  
U.S. Office Action dated Aug. 19, 2019, which issued in the corresponding U.S. Appl. No. 29/631,179.

\* cited by examiner

FIG. 1



FIG. 2



FIG. 3

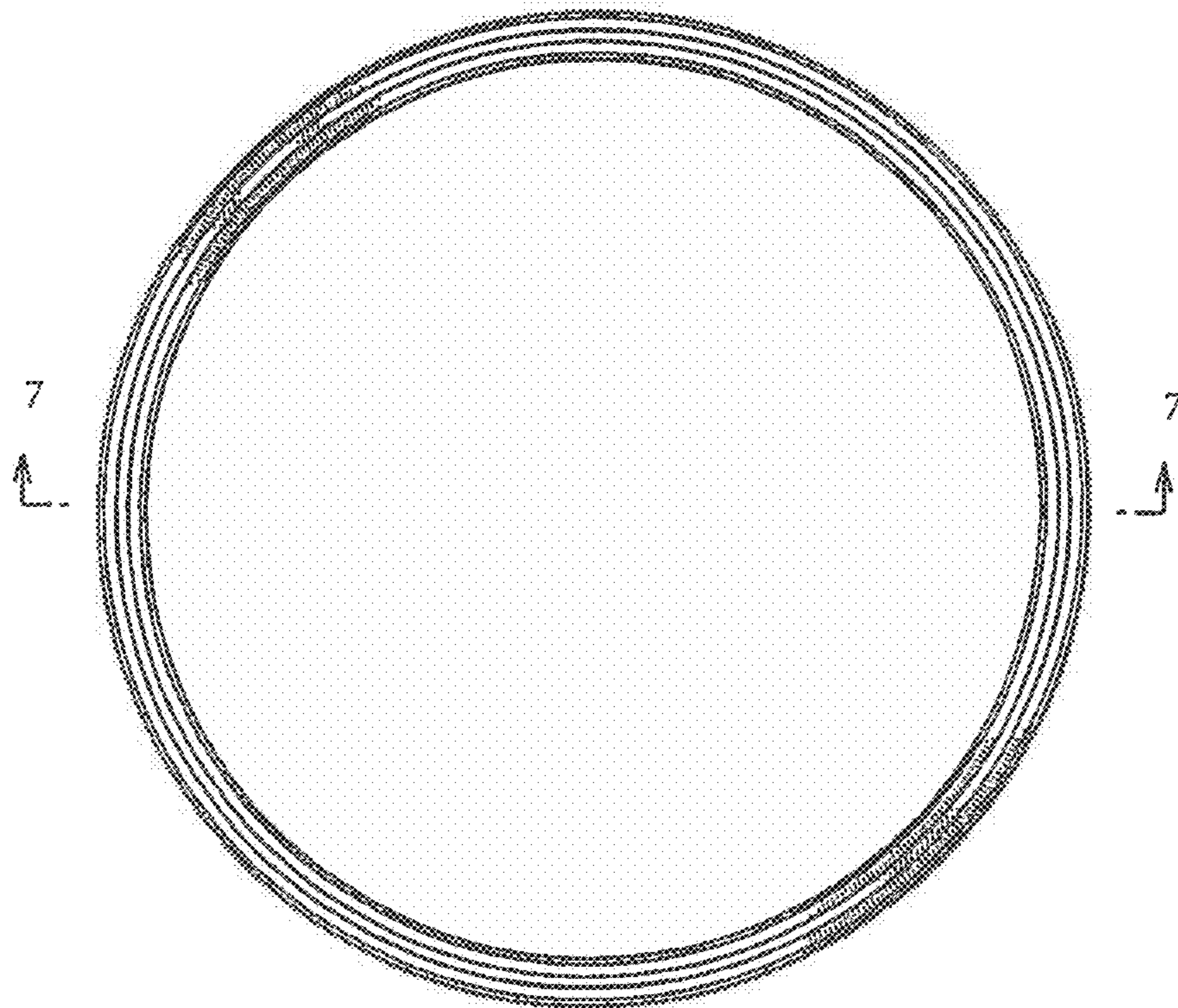




FIG. 4

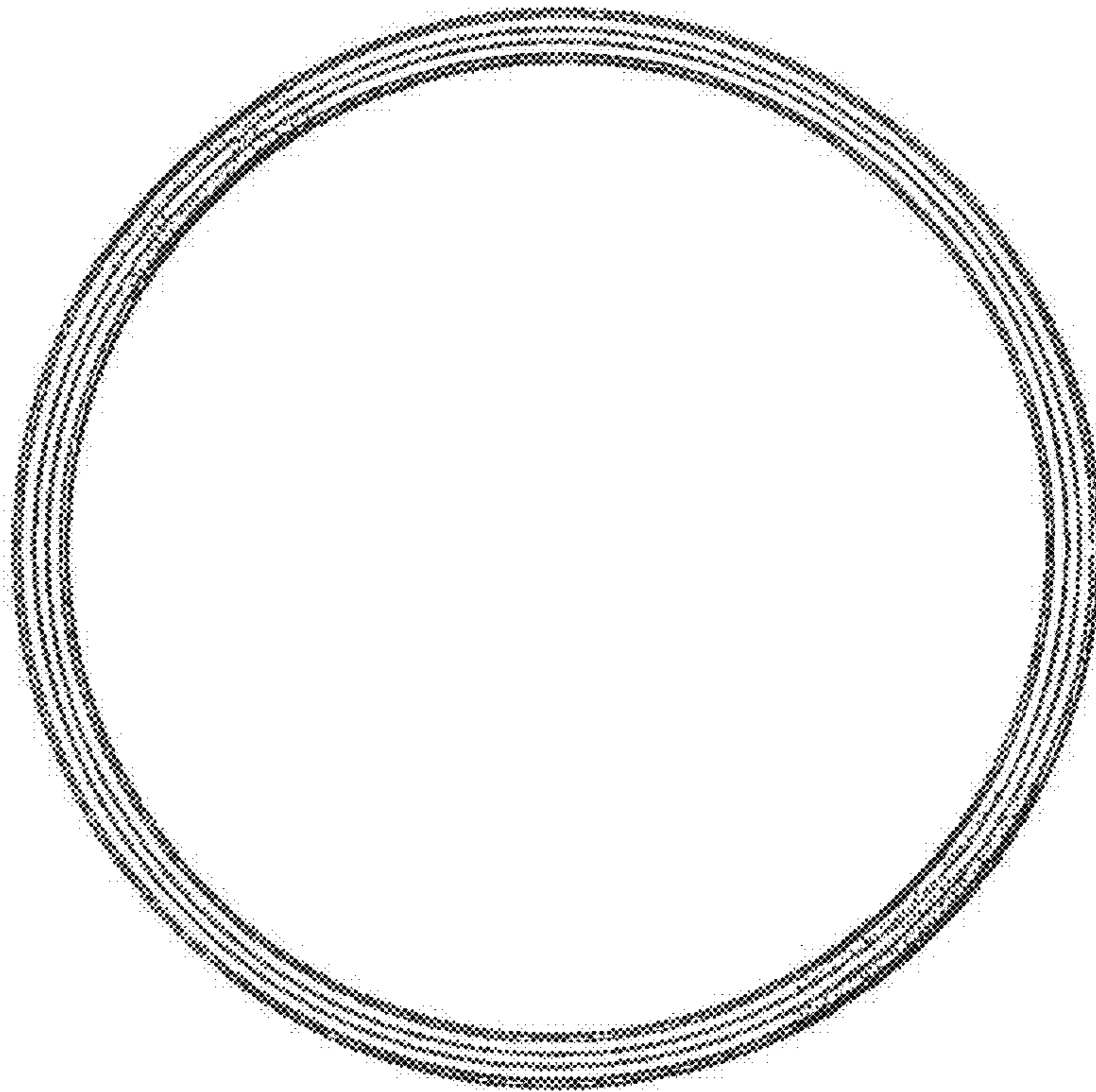


FIG. 5



FIG. 6



FIG. 7

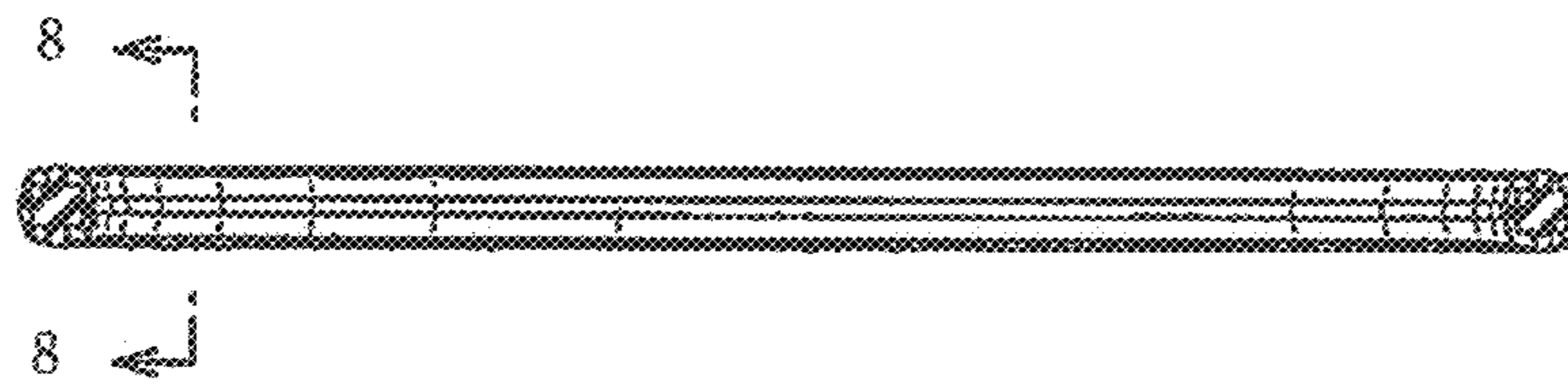


FIG. 8

