



US00D887003S

(12) **United States Design Patent** (10) **Patent No.:** **US D887,003 S**  
**Garza et al.** (45) **Date of Patent:** **\*\* Jun. 9, 2020**

(54) **HYBRID PATTERNED STENT DEVICE**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **Vactronix Scientific, LLC**, Fremont, CA (US)

WO WO 1999/23977 5/1999 ..... A61F 2/06  
WO WO 2010/124286 10/2010 ..... A61F 2/06  
WO WO 2013/134560 9/2013 ..... A61F 2/06

(72) Inventors: **Armando Garza**, San Jose, CA (US);  
**Julio C. Palmaz**, Napa, CA (US);  
**Michael Poor**, San Jose, CA (US)

OTHER PUBLICATIONS

(73) Assignee: **Vactronix Scientific, LLC**, Fremont, CA (US)

Office Action issued in corresponding foreign application, CA 2891624, pp. 1-4 (dated Sep. 25, 2019).  
(Continued)

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

*Primary Examiner* — Charles D Hanson

(21) Appl. No.: **29/676,844**

(74) *Attorney, Agent, or Firm* — David G. Rosenbaum; Benjamin D. Rotman; Rosenbaum IP, P.C.

(22) Filed: **Jan. 15, 2019**

(57) **CLAIM**

**Related U.S. Application Data**

The ornamental design for a hybrid patterned stent device, as shown and described.

(60) Continuation of application No. 15/432,087, filed on Feb. 14, 2017, now Pat. No. 10,433,989, which is a division of application No. 13/678,335, filed on Nov. 15, 2012, now Pat. No. 9,566,633.

**DESCRIPTION**

(51) **LOC (12) Cl.** ..... **24-03**

(52) **U.S. Cl.**  
USPC ..... **D24/155**

(58) **Field of Classification Search**  
USPC ..... D24/155  
CPC .... A61F 2/07; A61F 2/90; A61F 2/958; A61F 2002/016; A61F 2002/072; A61F 2002/075; A61F 2002/91541; A61F 2220/0075; A61F 2230/0069  
See application file for complete search history.

FIG. 1 is a top perspective view of a cylindrically symmetrical hybrid patterned stent device in accordance with a first embodiment of the invention;  
FIG. 2 is a left elevation view of FIG. 1;  
FIG. 3 is a right elevation view of FIG. 1;  
FIG. 4 is a top plan view of FIG. 1;  
FIG. 5 is a bottom plan view of FIG. 1;  
FIG. 6 is an expanded side elevation view of a flattened section of the hybrid patterned stent device of FIG. 1;  
FIG. 7 is a top perspective view of a cylindrically symmetrical hybrid patterned stent device in accordance with a second embodiment of the invention;  
FIG. 8 is a left elevation view of FIG. 7;  
FIG. 9 is a right elevation view of FIG. 7;  
FIG. 10 is a top plan view of FIG. 7;  
FIG. 11 is a bottom plan view of FIGS. 7; and,  
FIG. 12 is an expanded side elevation view of a flattened section of the hybrid patterned stent device of FIG. 7.

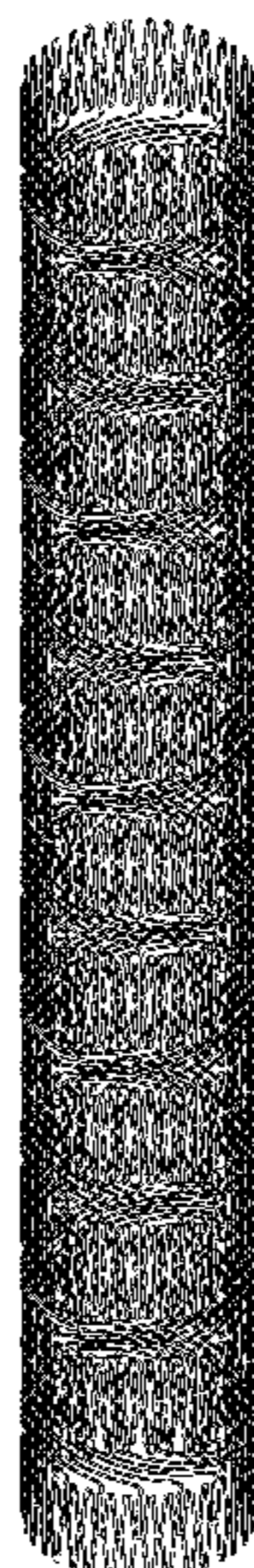
(56) **References Cited**

U.S. PATENT DOCUMENTS

4,733,665 A 3/1988 Palmaz ..... 128/343  
5,102,417 A 4/1992 Palmaz ..... 606/195  
5,195,984 A 3/1993 Schatz ..... 606/195  
5,879,381 A 3/1999 Moriuchi et al. .... 623/1  
6,432,132 B1 8/2002 Cottone et al. .... 623/1.15

(Continued)

**1 Claim, 6 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

6,589,276 B2 7/2003 Pinchasik et al. .... 623/1.16  
 7,556,644 B2 7/2009 Burpee et al. .... 623/1.22  
 7,691,461 B1 4/2010 Prabhu ..... 428/36.9  
 7,803,180 B2 9/2010 Burpee et al. .... 623/1.15  
 7,988,723 B2 8/2011 Beach et al. .... 623/1.22  
 D665,079 S \* 8/2012 Zago ..... D24/155  
 D665,080 S \* 8/2012 Zago ..... D24/155  
 D723,165 S \* 2/2015 Chanduszko ..... D24/155  
 D723,166 S \* 2/2015 Igaki ..... D24/155  
 D740,427 S \* 10/2015 McDonnell ..... D24/171  
 2002/0156525 A1 10/2002 Smith et al. .... 623/1.22  
 2003/0055485 A1 \* 3/2003 Lee ..... A61F 2/91  
 2003/0114921 A1 6/2003 Yoon ..... 623/1.15  
 2004/0127972 A1 7/2004 Kitaoka et al. .... 623/1.15  
 2004/0186551 A1 9/2004 Kao et al. .... 623/1.15  
 2005/0216076 A1 9/2005 Kveen et al. .... 623/1.22  
 2007/0129786 A1 6/2007 Beach et al. .... 623/1.15  
 2007/0185564 A1 8/2007 Pacetti et al. .... 623/1.15  
 2007/0208416 A1 9/2007 Burpee et al. .... 623/1.22  
 2008/0051875 A1 2/2008 Cottone et al. .... 623/1.16  
 2008/0097571 A1 4/2008 Denison et al. .... 623/1.11  
 2009/0036964 A1 2/2009 Heringes et al. .... 623/1.12

2009/0036976 A1 2/2009 Beach et al. .... 623/1.22  
 2009/0088831 A1 4/2009 Goto ..... 623/1.11  
 2009/0240319 A1 9/2009 Craven ..... 623/1.16  
 2010/0094394 A1 4/2010 Beach et al. .... 623/1.11  
 2010/0121430 A1 5/2010 Kveen et al. .... 623/1.16  
 2010/0286760 A1 11/2010 Beach et al. .... 623/1.22  
 2011/0029064 A1 2/2011 Burpee et al. .... 623/1.22  
 2011/0106239 A1 \* 5/2011 Goto ..... A61F 2/91  
 2011/0210108 A1 9/2011 Bialas et al. .... 219/121.72  
 2011/0245910 A1 10/2011 Beach et al. .... 623/1.15  
 2013/0268055 A1 10/2013 Cottone et al. .... 623/1.16

OTHER PUBLICATIONS

International Search Report issued in corresponding foreign application, PCT/US2013/070098, pp. 1-6 (dated Mar. 21, 2014).  
 Written Opinion issued in corresponding foreign application, PCT/US2013/070098, pp. 1-9 (dated Mar. 21, 2014).  
 International Preliminary Report on Patentability issued in corresponding foreign application, PCT/US2013/070098, pp. 1-10 (dated May 28, 2015).  
 European Search Report issued in corresponding foreign application, EP 13855724.4, pp. 1-8 (dated Sep. 21, 2016).

\* cited by examiner

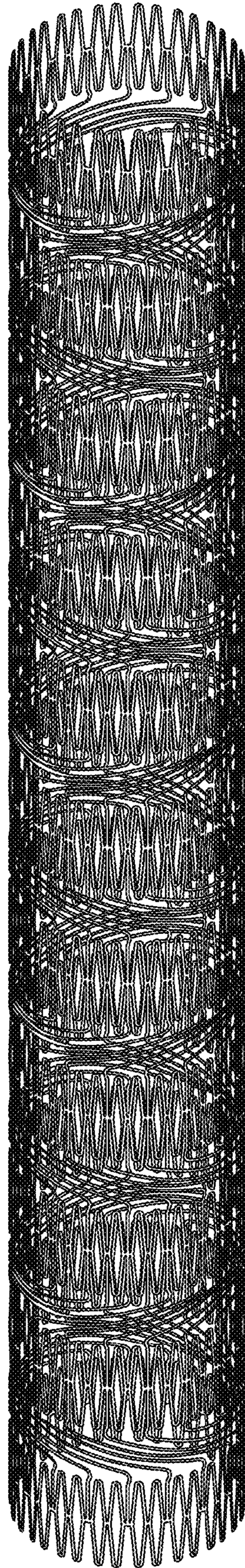


FIG. 1

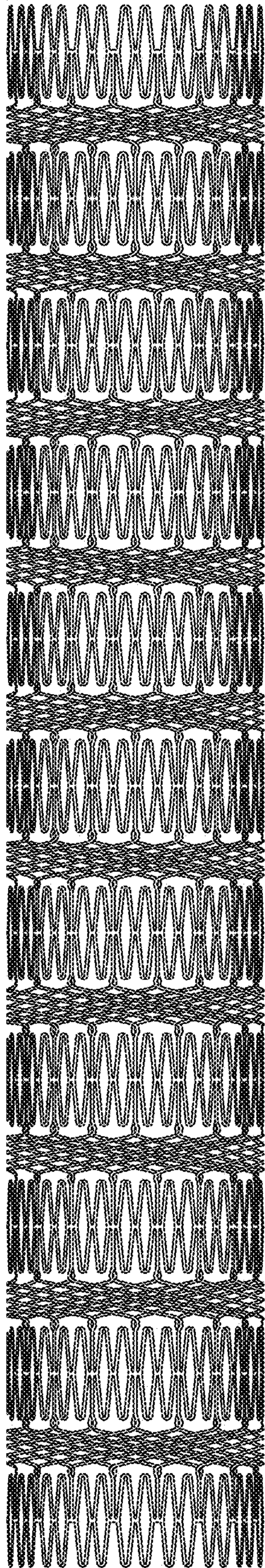


FIG. 2

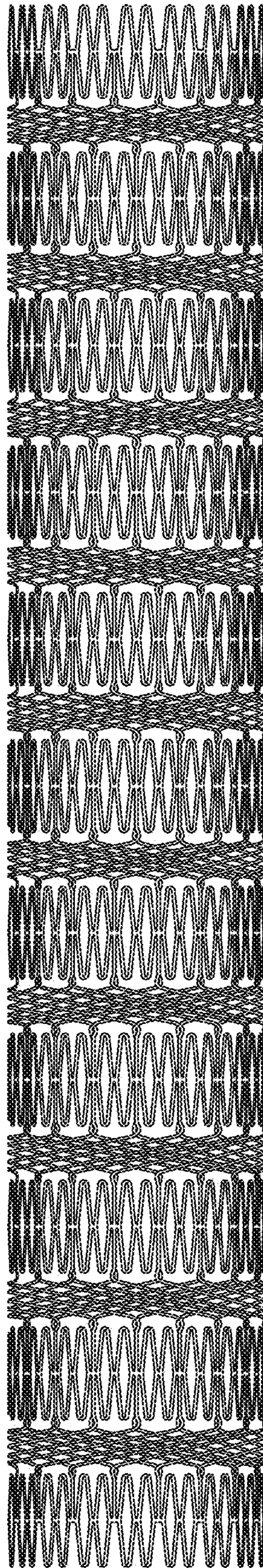


FIG. 3

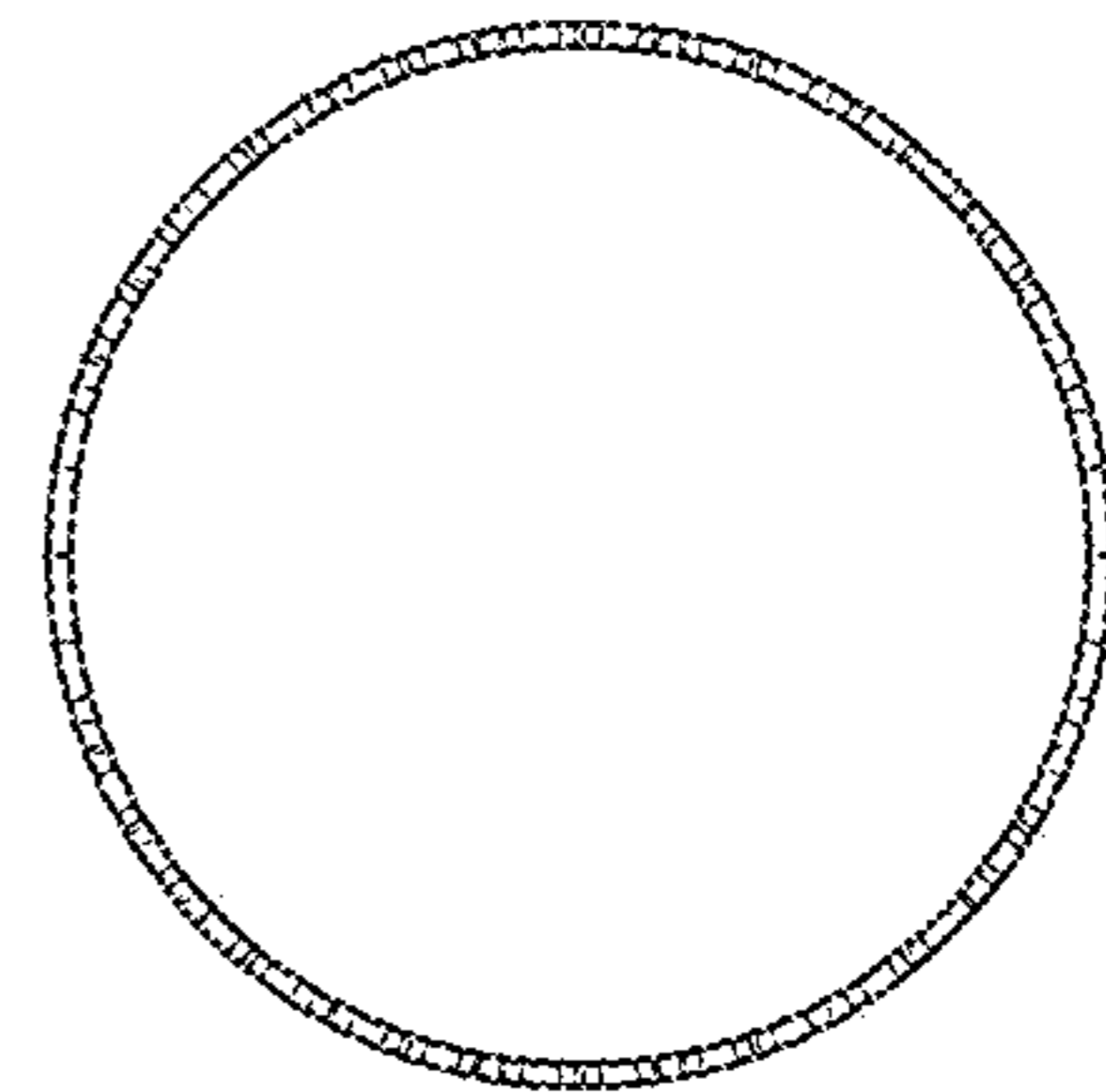


FIG. 4

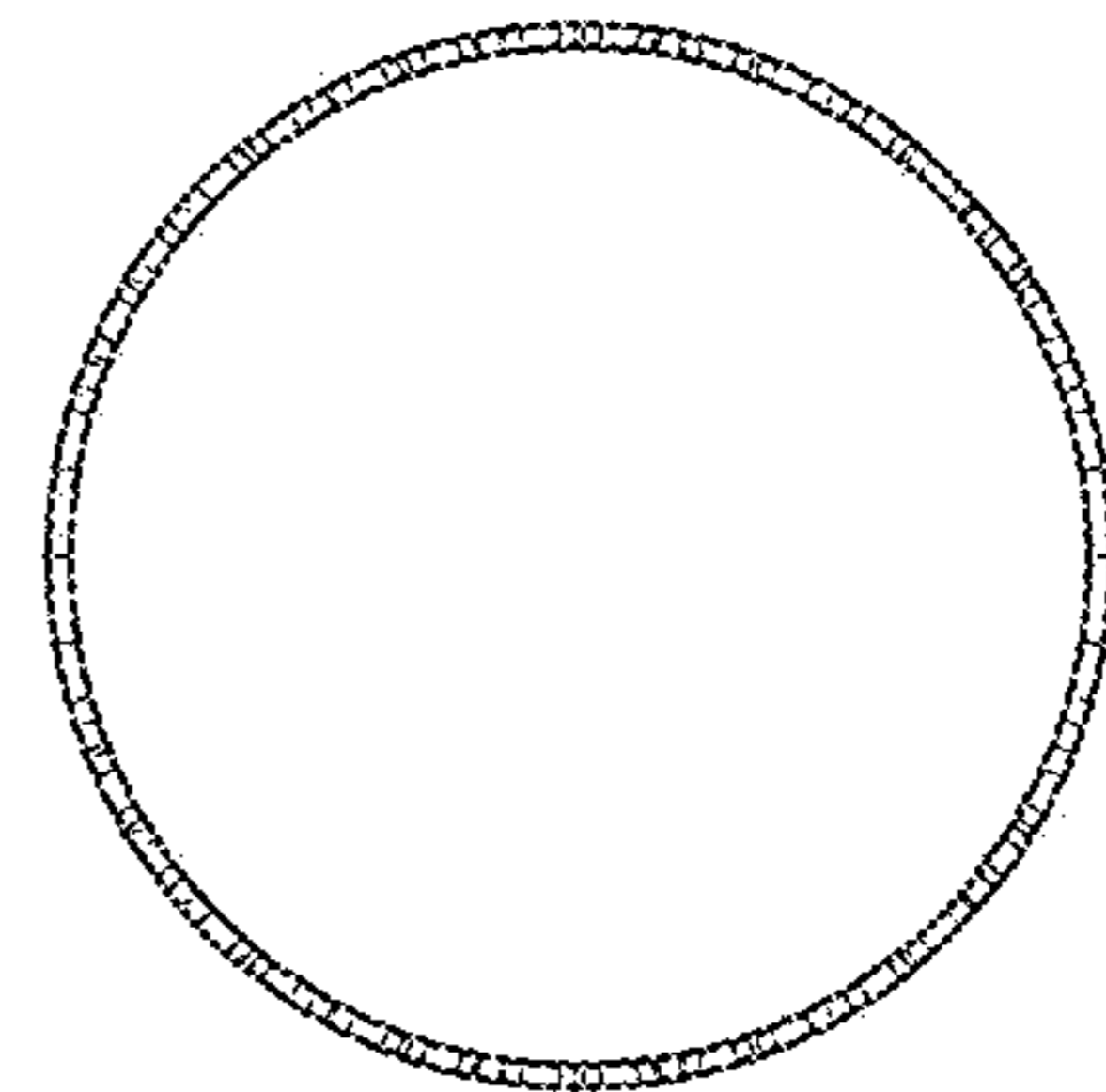


FIG. 5

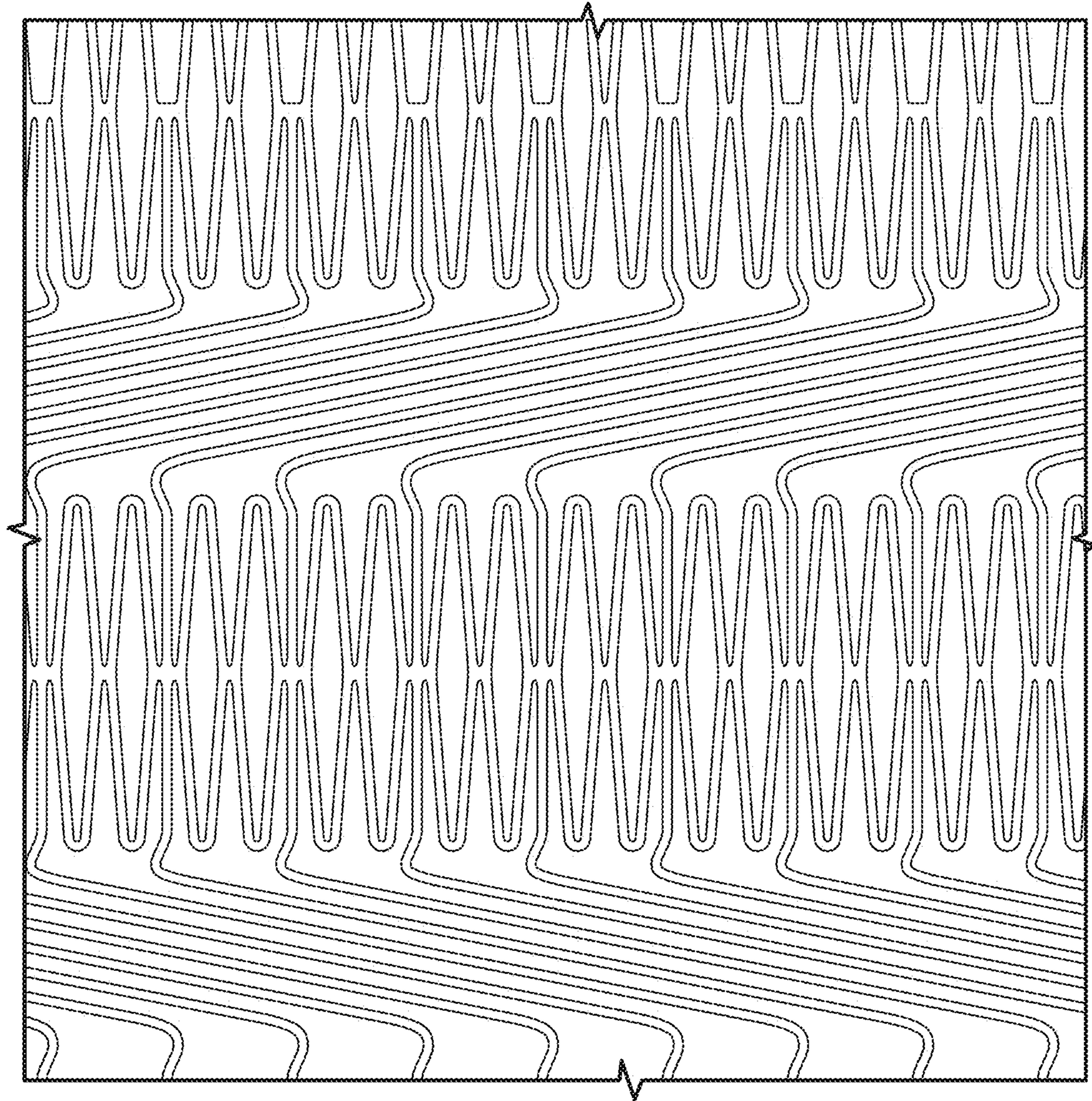


FIG. 6

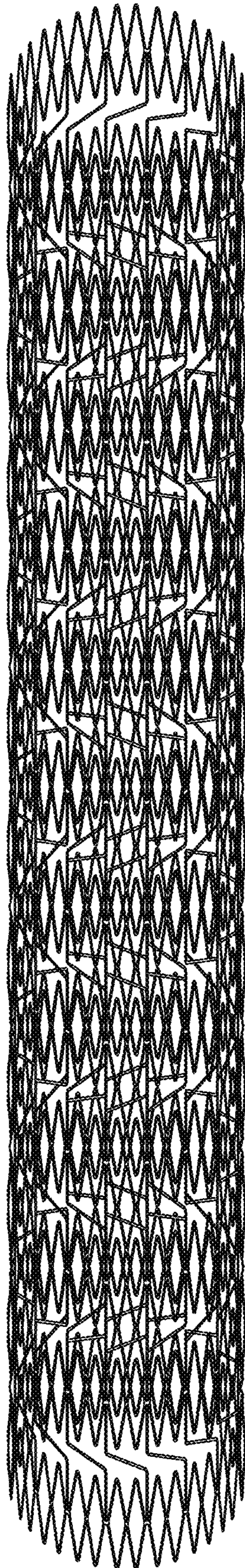


FIG. 7

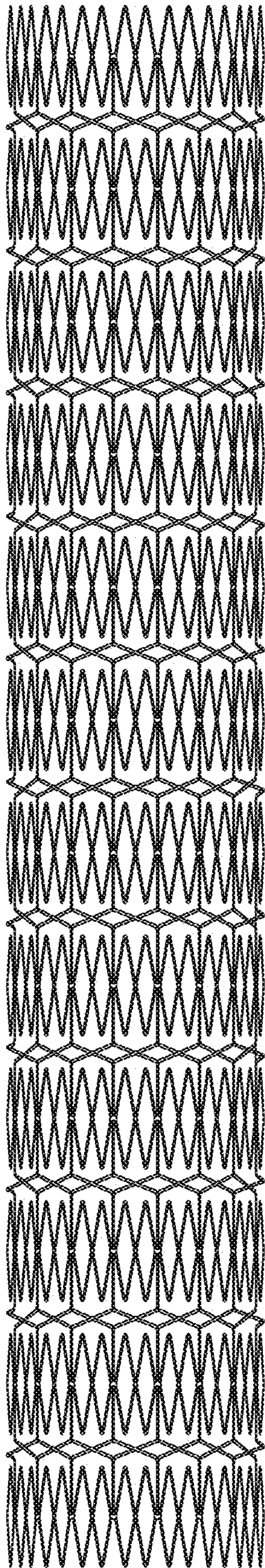


FIG. 8

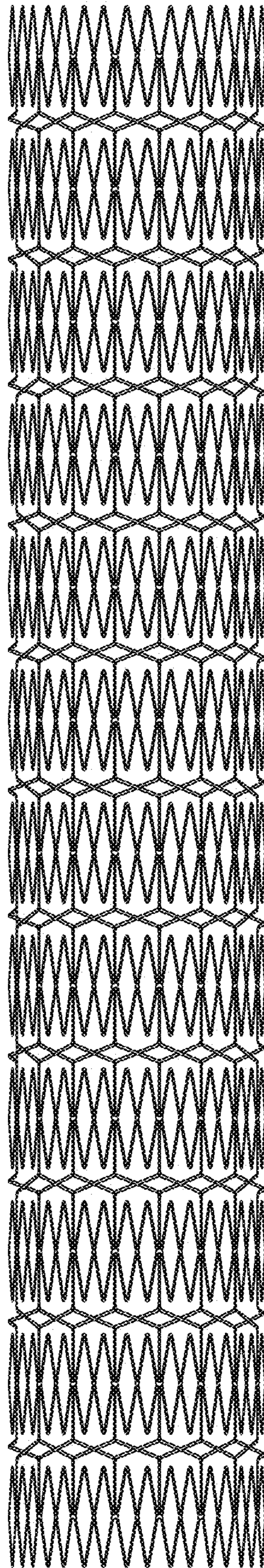


FIG. 9

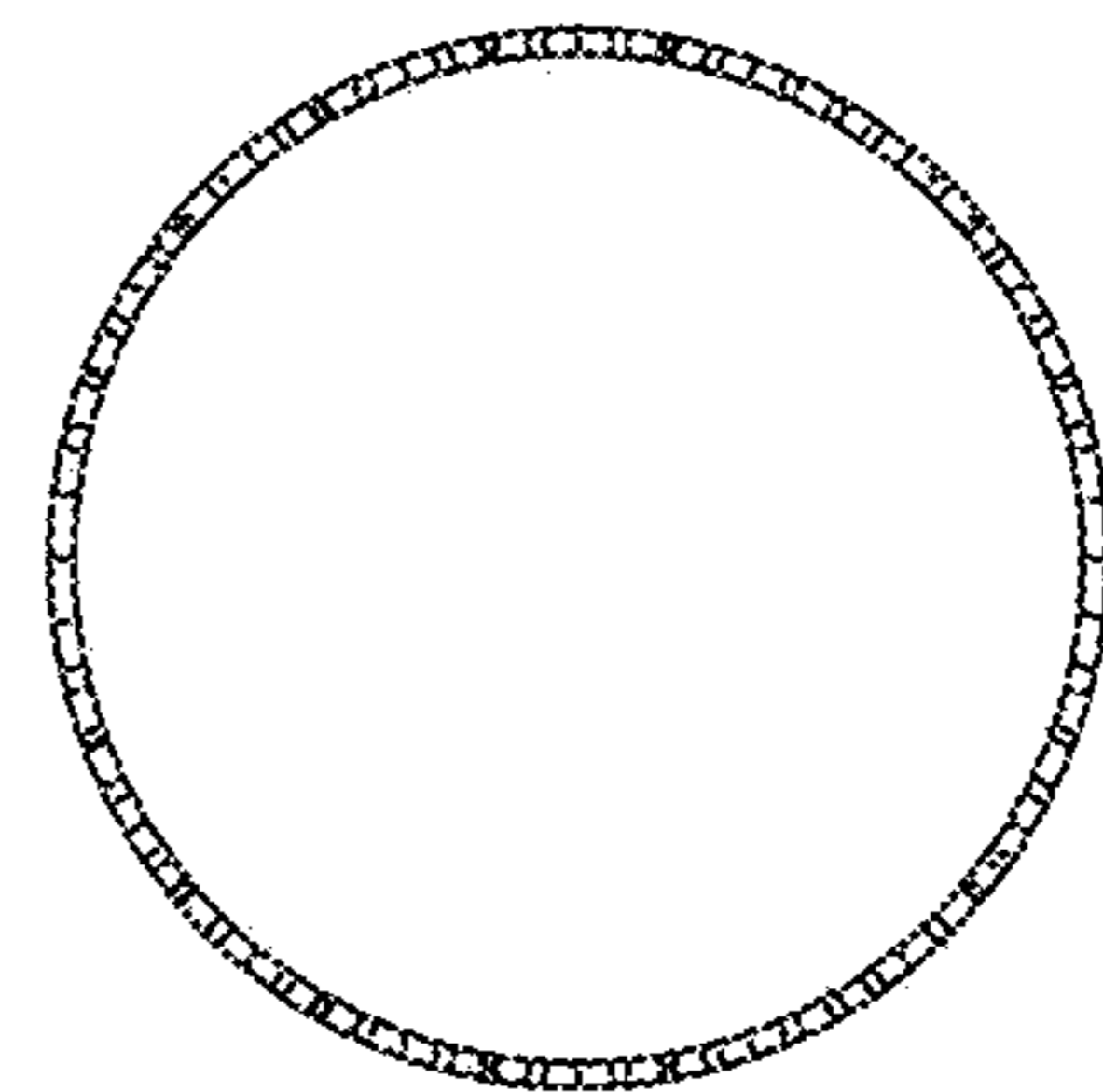


FIG. 10

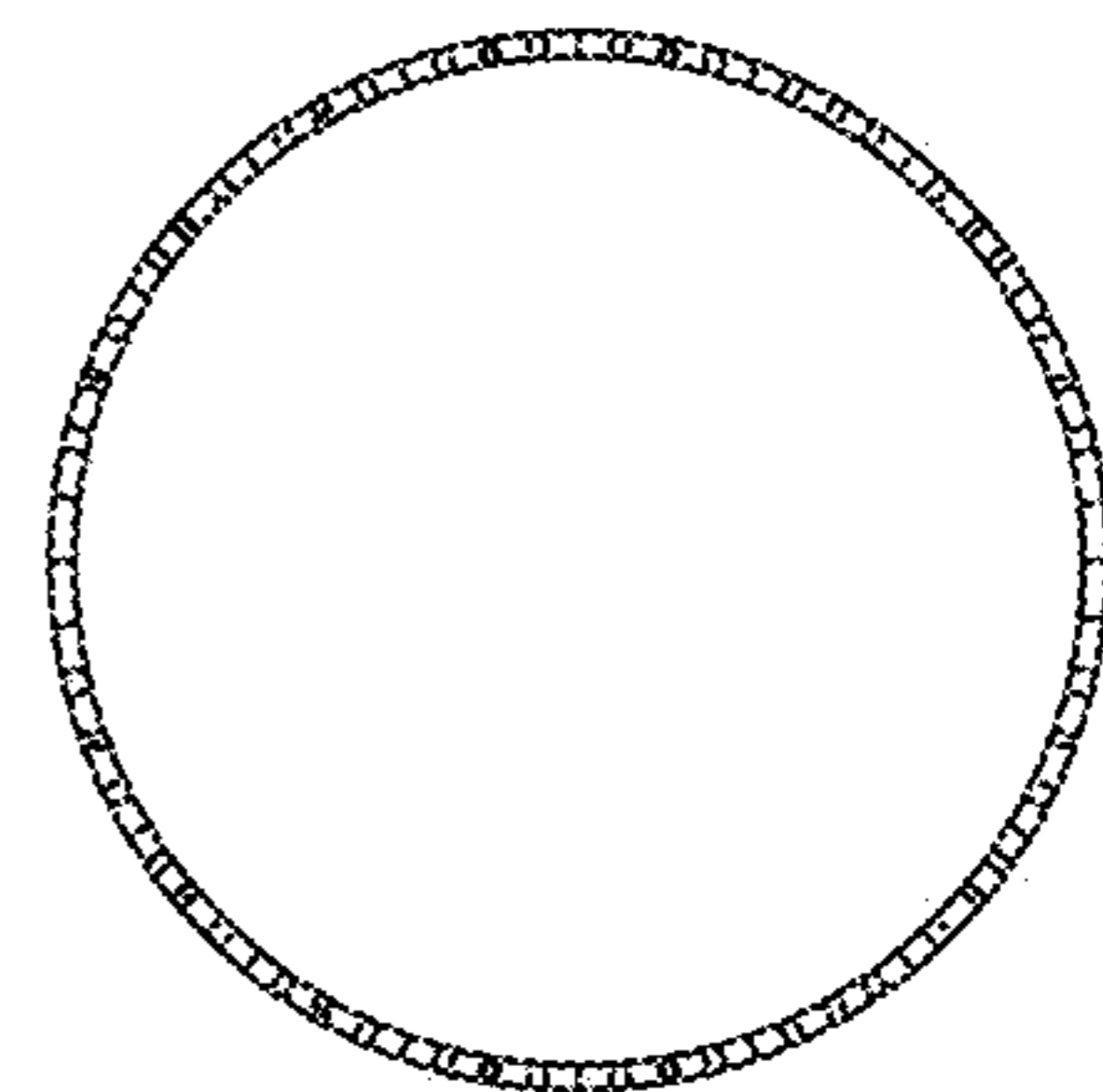


FIG. 11

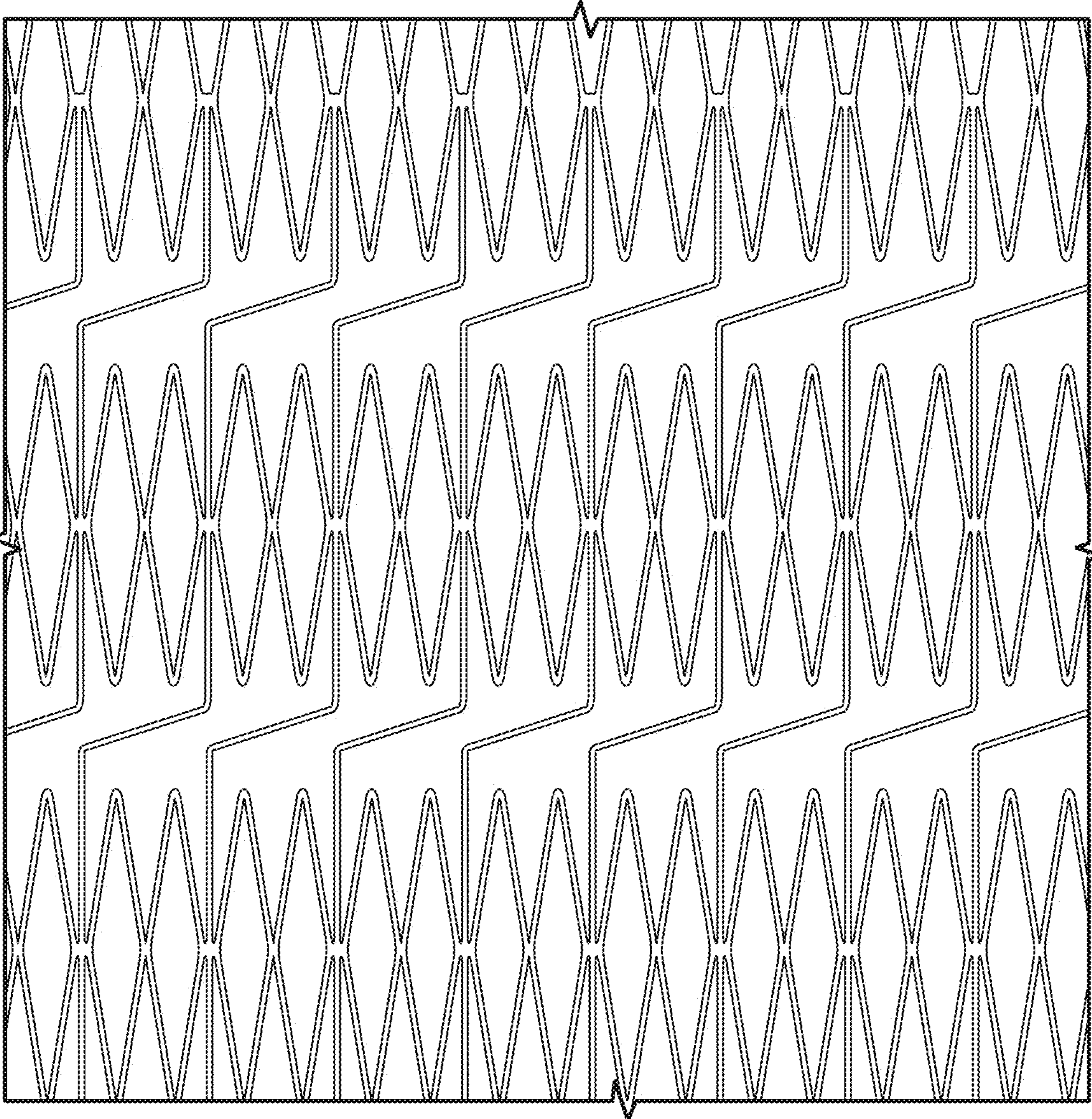


FIG. 12