



US00D737785S

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

(10) **Patent No.:** **US D737,785 S**  
(45) **Date of Patent:** **\*\* Sep. 1, 2015**

(54) **BOAT FOR SUBSTRATE PROCESSING APPARATUS**

(71) Applicant: **Hitachi Kokusai Electric Inc.**, Tokyo (JP)

(72) Inventors: **Hidenari Yoshida**, Toyama (JP);  
**Tomoshi Taniyama**, Toyama (JP)

(73) Assignee: **HITACHI KOKUSAI ELECTRIC INC.**, Tokyo (JP)

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

(21) Appl. No.: **29/480,457**

(22) Filed: **Jan. 27, 2014**

(30) **Foreign Application Priority Data**

Jul. 29, 2013 (JP) ..... 2013-017235

(51) **LOC (10) Cl.** ..... **13-03**

(52) **U.S. Cl.**  
USPC ..... **D13/182**

(58) **Field of Classification Search**  
USPC ..... D13/182; D15/144, 144.1, 199;  
118/715, 500, 728, 729; 211/41.18;  
432/253, 258; 156/345.51, 345.52,  
156/345.53, 345.55; 414/217, 220.01,  
414/935-941  
CPC ..... C23C 16/458; C23C 16/4581; C23C  
16/4582; C23C 16/4583; C23C 16/4584;  
C23C 16/4586; C23C 16/4587; C23C  
16/4588; C30B 31/14; H01L 21/673; H01L  
21/67303; H01L 21/67306; H01L 21/67309;  
H01L 21/67313; H01L 21/67316; H01L  
21/67323; H01L 21/67326; H01L 21/6733  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D361,752 S *	8/1995	Yamaga .....	D13/182
D366,868 S *	2/1996	Ohsawa .....	D13/182
D378,675 S *	4/1997	Iwai .....	D13/182
D378,823 S *	4/1997	Watanabe et al. ....	D15/140
D380,454 S *	7/1997	Iwai et al. ....	D13/182
5,752,609 A *	5/1998	Kato et al. ....	211/41.18
D404,015 S *	1/1999	Honma .....	D13/182
D404,371 S *	1/1999	Shimazu .....	D13/182
5,897,311 A *	4/1999	Nishi .....	432/239
D409,158 S *	5/1999	Shimazu .....	D13/182
D411,176 S *	6/1999	Shimazu .....	D13/182
6,062,853 A *	5/2000	Shimazu et al. ....	432/258
6,065,615 A *	5/2000	Uchiyama et al. ....	211/41.18

(Continued)

FOREIGN PATENT DOCUMENTS

JP	1386309 S	4/2010
JP	1386461 S	4/2010

(Continued)

*Primary Examiner* — Elizabeth J Oswecki

(74) *Attorney, Agent, or Firm* — Fitch, Even, Tabin and Flannery LLP

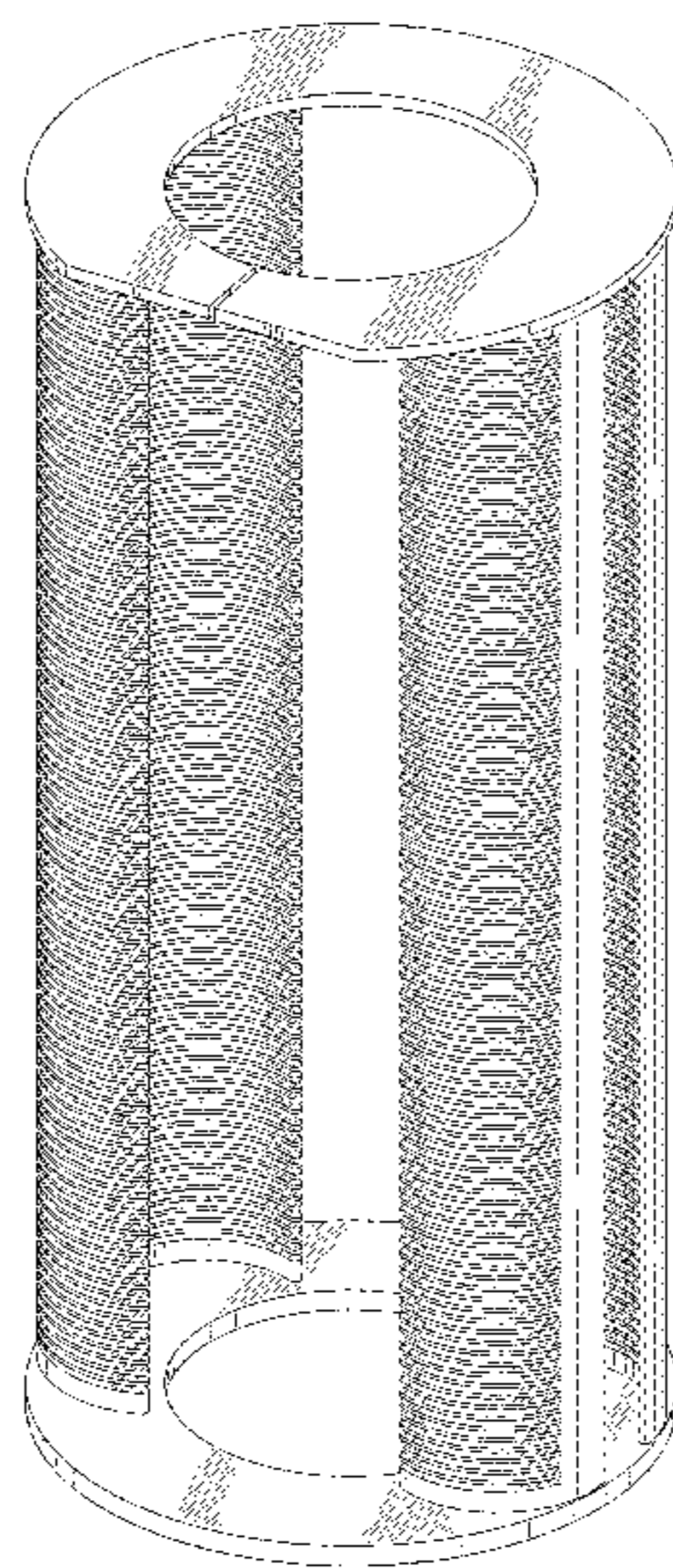
(57) **CLAIM**

The ornamental design for a boat for substrate processing apparatus, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, top and right side perspective view of a boat for substrate processing apparatus showing our new design; FIG. 2 is a front elevational view thereof; FIG. 3 is a rear elevational view thereof; FIG. 4 is a left side elevational view thereof; FIG. 5 is a right side elevational view thereof; FIG. 6 is a top plan view thereof; FIG. 7 is a bottom plan view thereof; FIG. 8 is a cross sectional view taken along line 8-8 in FIG. 2; and, FIG. 9 is a cross sectional view taken along line 9-9 in FIG. 2.

**1 Claim, 8 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

6,095,806 A \* 8/2000 Suzuki et al. .... 432/241  
6,099,302 A \* 8/2000 Hong et al. .... 432/259  
6,099,645 A \* 8/2000 Easley et al. .... 118/500  
6,287,112 B1 \* 9/2001 Van Voorst Vader et al. . 432/258  
6,341,935 B1 \* 1/2002 Tseng ..... 414/800  
D570,308 S \* 6/2008 Sato ..... D13/182  
D570,309 S \* 6/2008 Sato et al. .... D13/182  
D580,894 S \* 11/2008 Sato ..... D13/182  
7,484,958 B2 \* 2/2009 Kobayashi ..... 432/258  
D600,221 S \* 9/2009 Sato ..... D13/182

D600,222 S \* 9/2009 Sato ..... D13/182  
D616,394 S \* 5/2010 Sato ..... D13/182  
D616,395 S \* 5/2010 Sato ..... D13/182  
D616,396 S \* 5/2010 Sato ..... D13/182  
D655,255 S \* 3/2012 Takebayashi et al. .... D13/182  
D655,682 S \* 3/2012 Takebayashi et al. .... D13/182

FOREIGN PATENT DOCUMENTS

JP 1387610 S 5/2010  
JP 1437342 S 4/2012  
JP 1437592 S 4/2012

\* cited by examiner

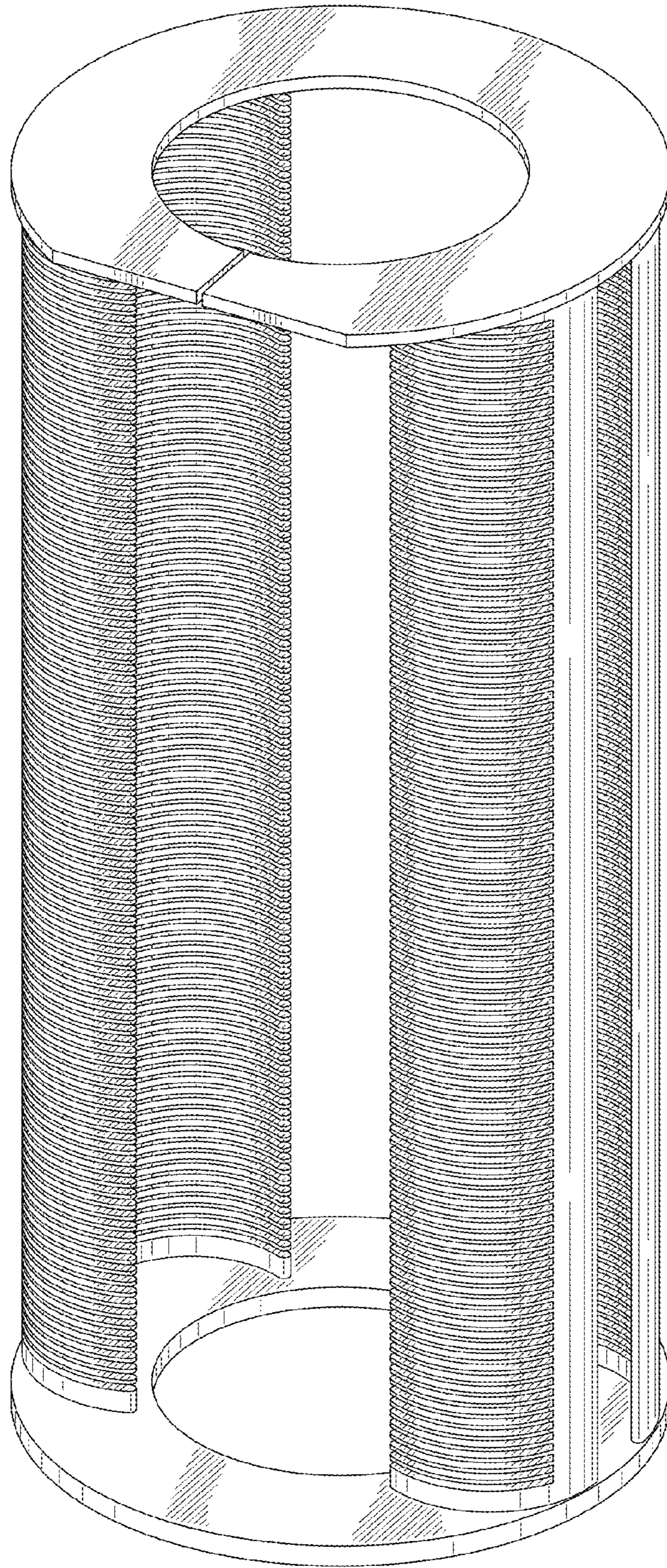
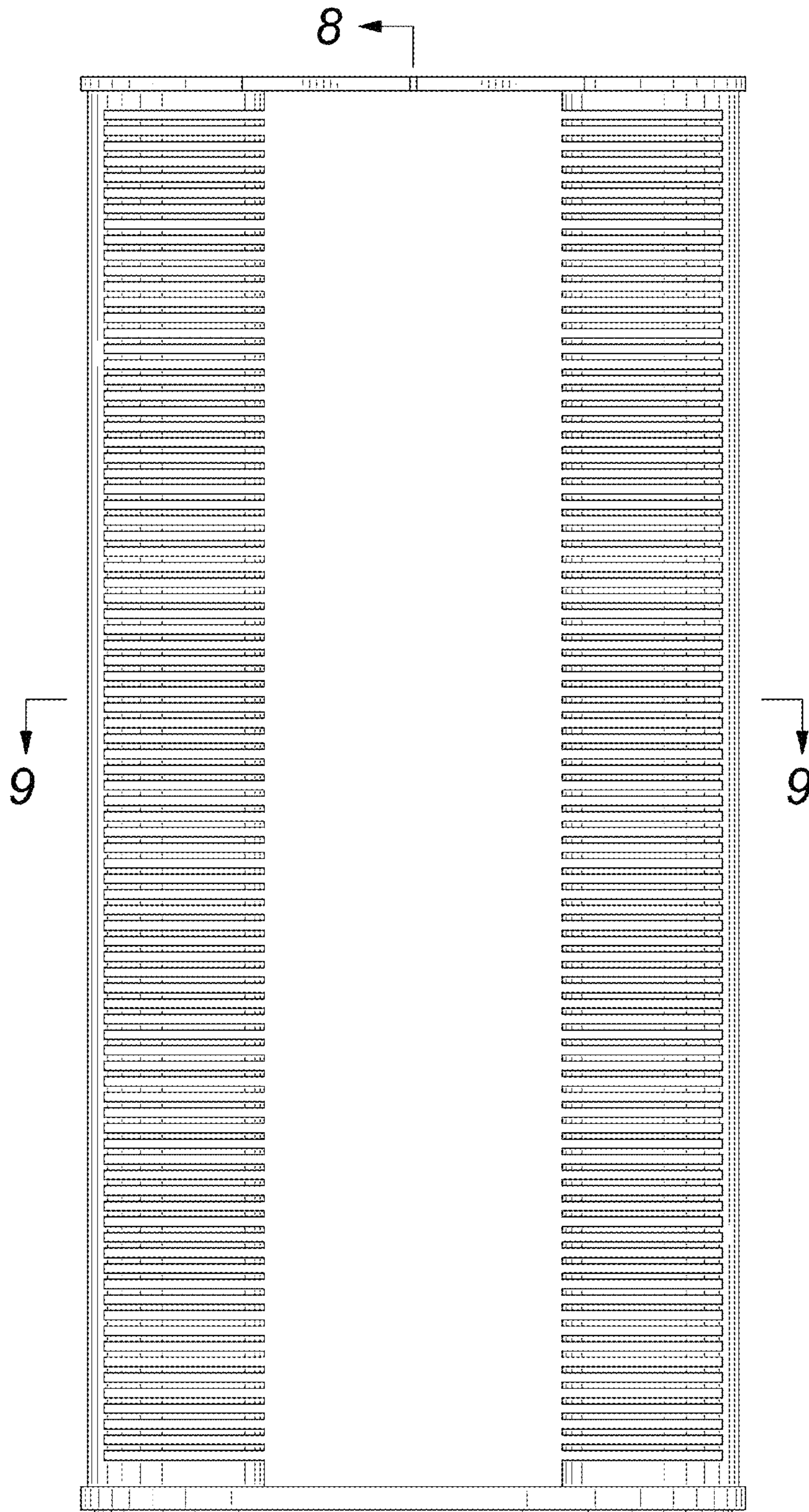


FIG. 1



8  
*FIG. 2*

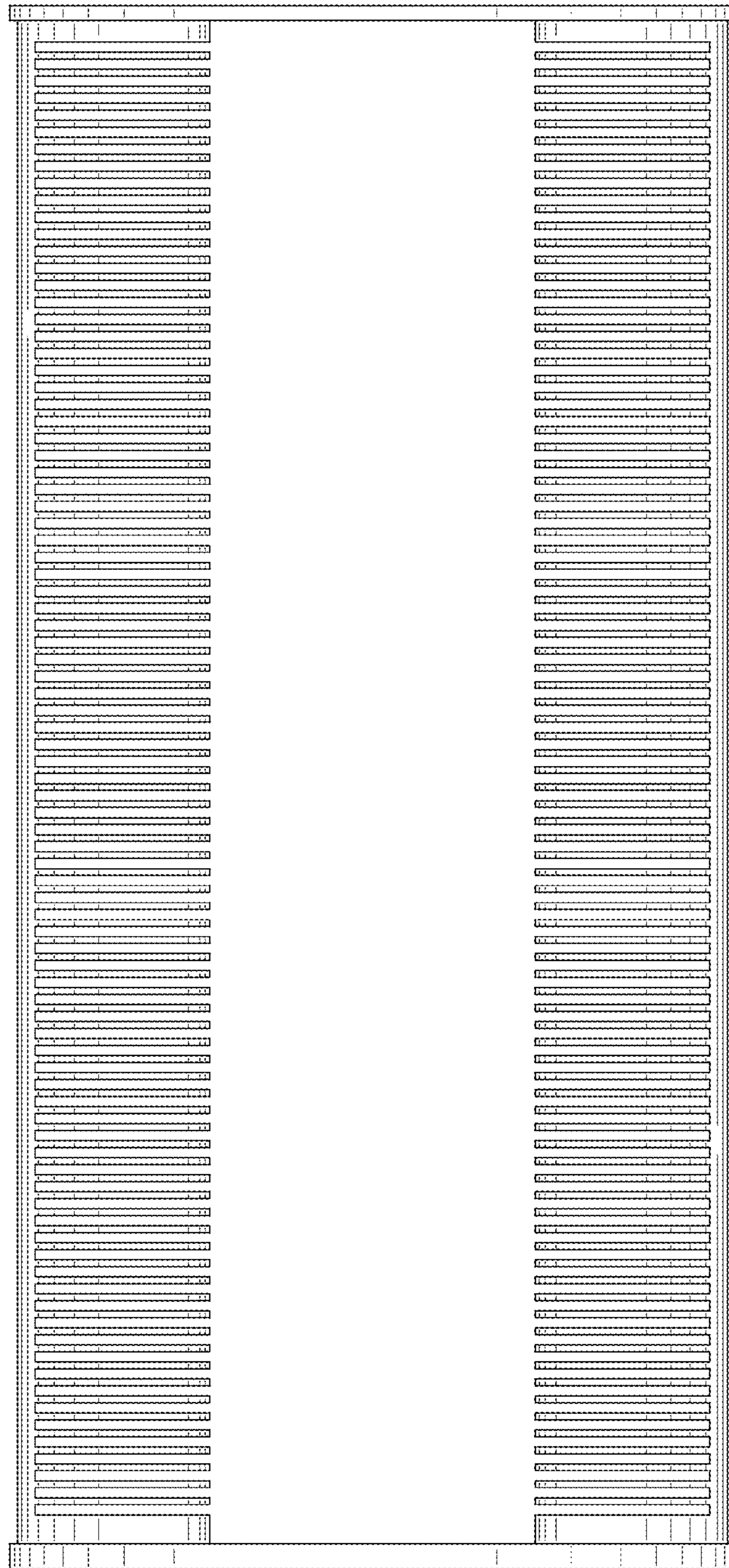


FIG. 3

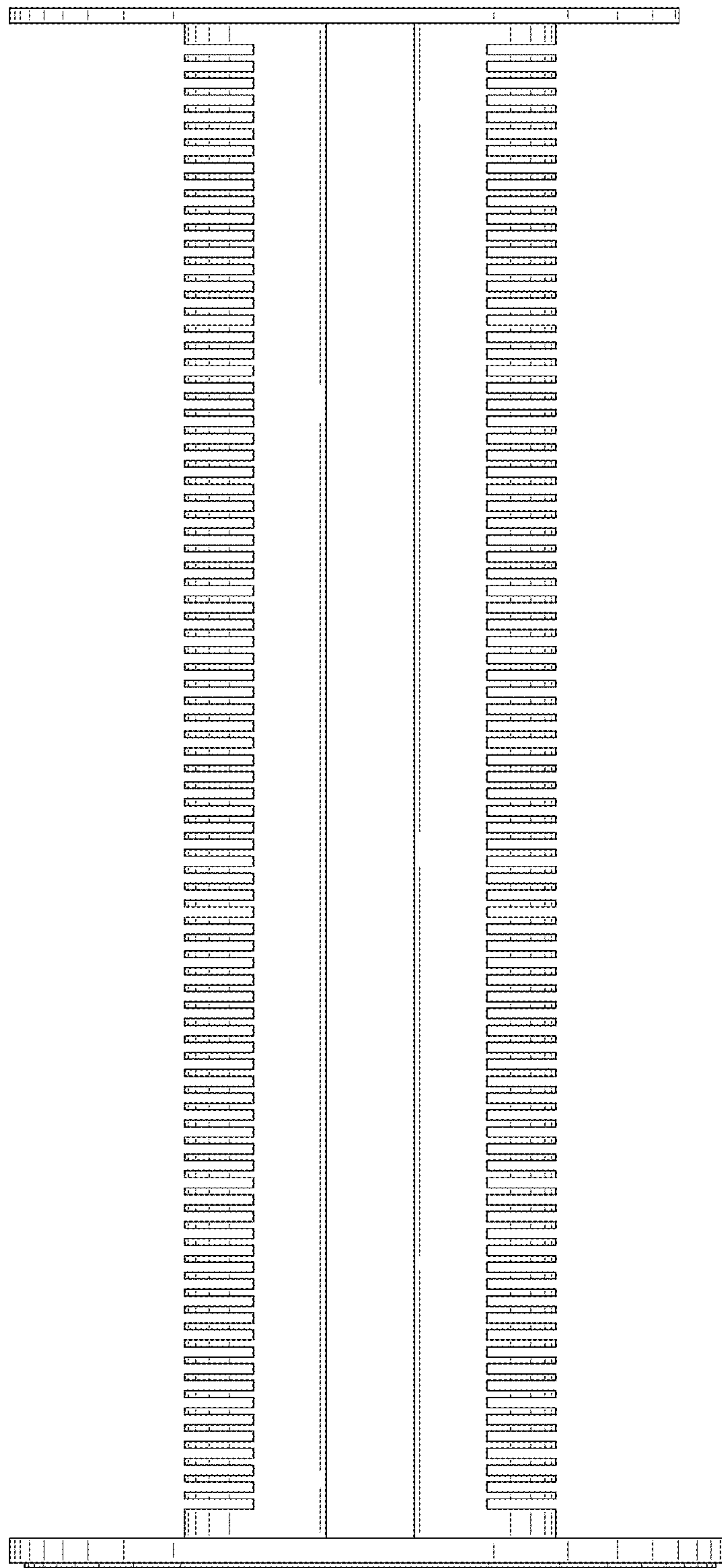


FIG. 4

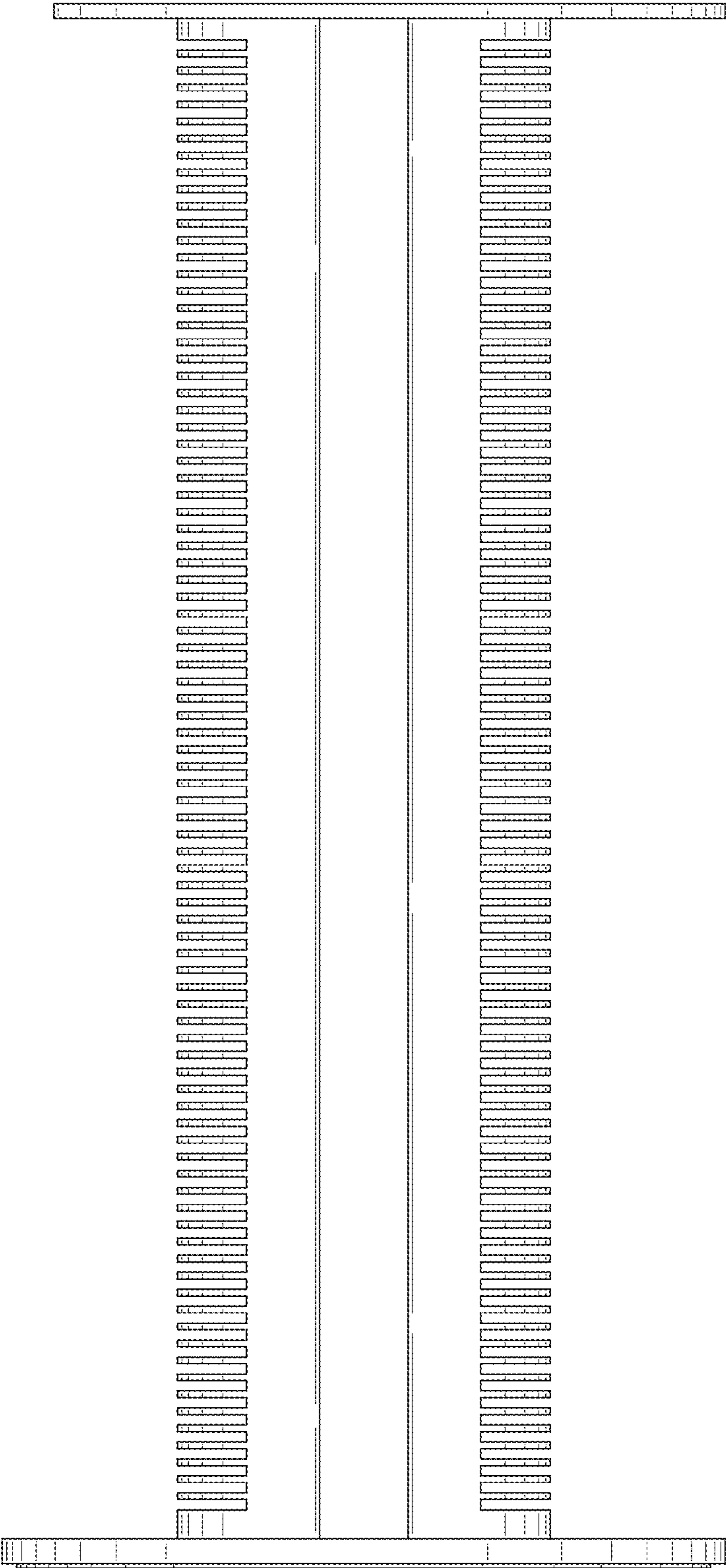
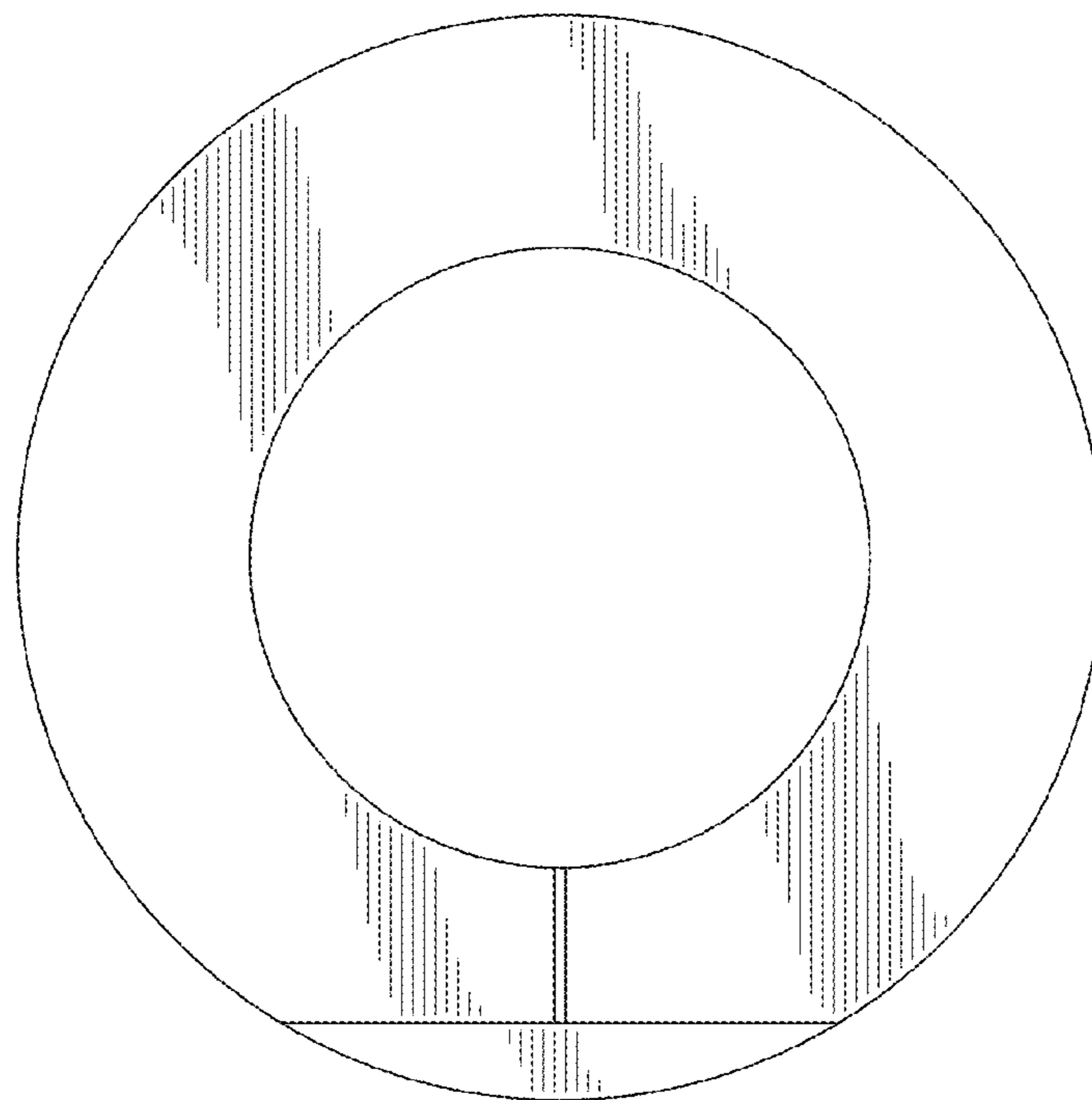
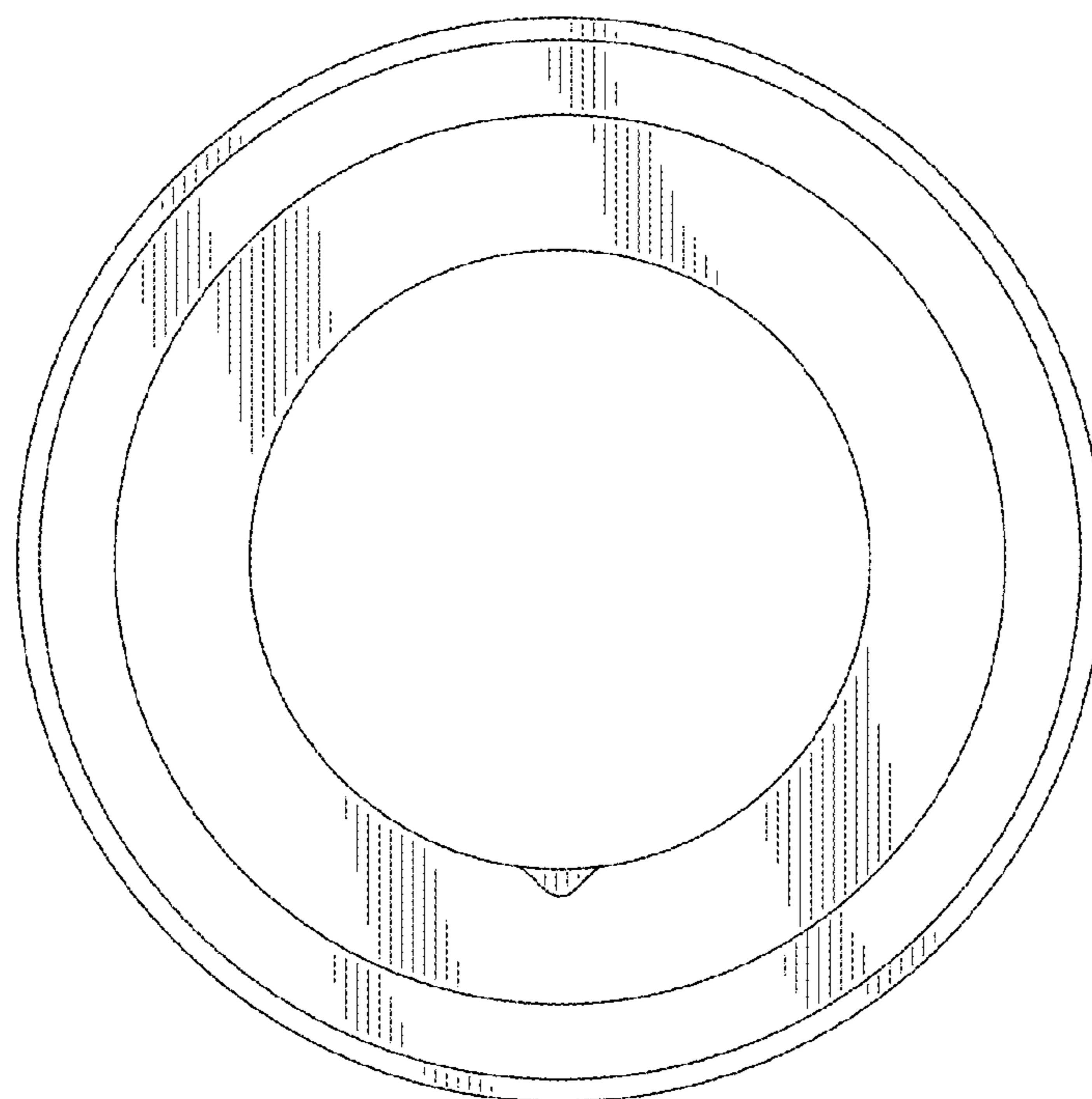


FIG. 5



*FIG. 6*



*FIG. 7*



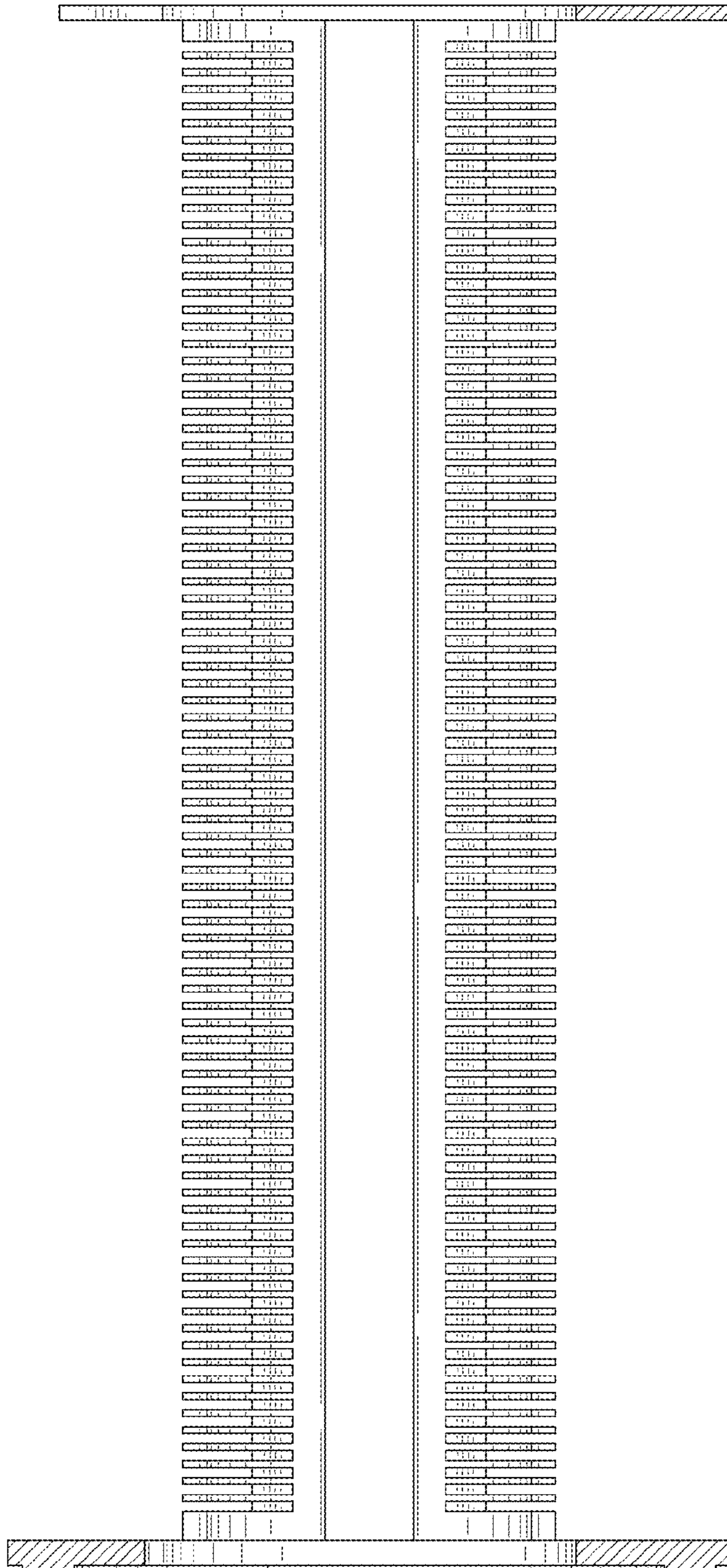


FIG. 8

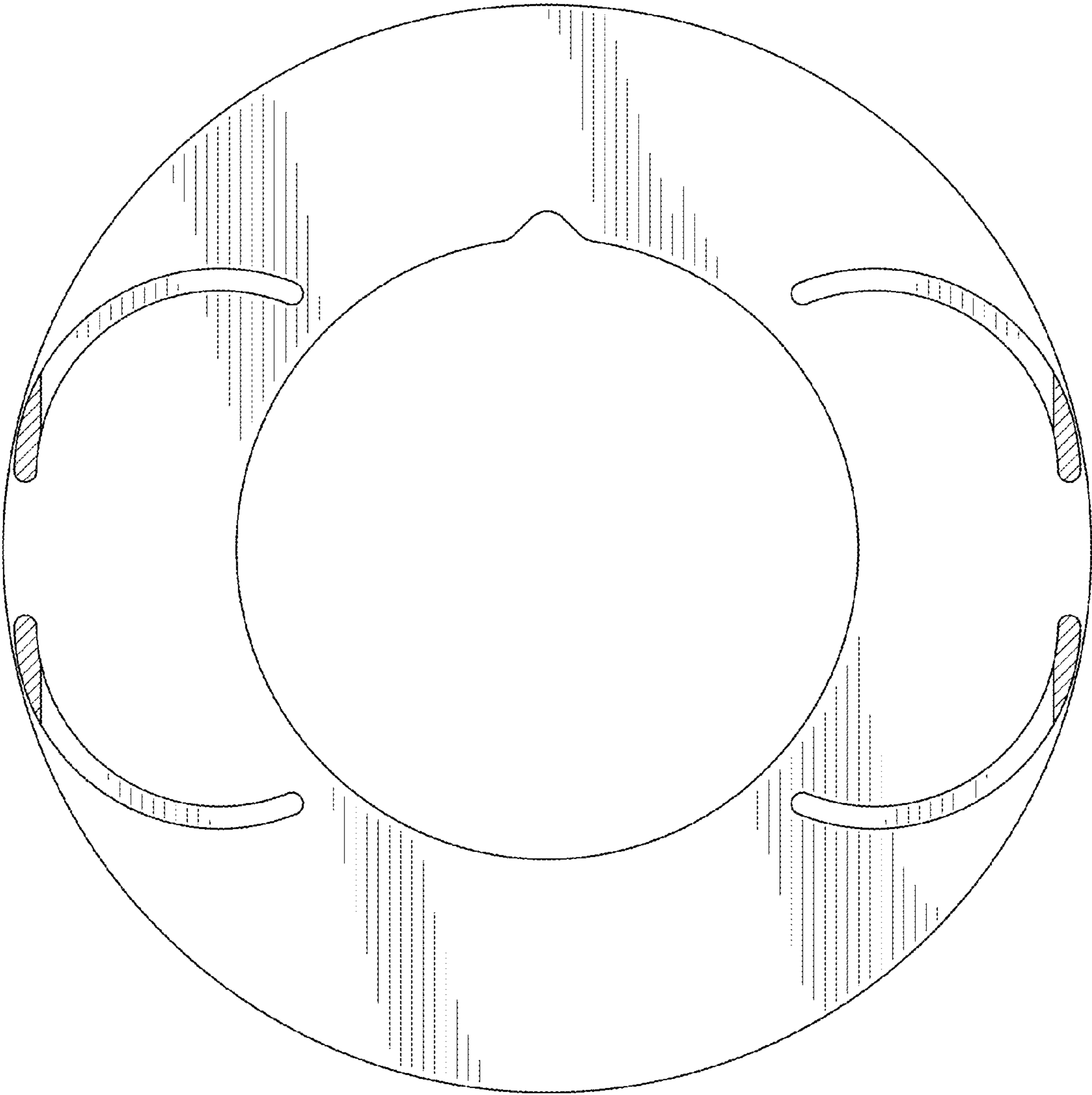


FIG. 9