



US00D713492S

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

(10) **Patent No.:** **US D713,492 S**
(45) **Date of Patent:** **** Sep. 16, 2014**

(54) **FLOW CONDITIONER WITH INTERNAL VANES**

D682,987 S 5/2013 Blum
2005/0178455 A1 8/2005 Cancade et al.
2008/0246277 A1 10/2008 Gallagher et al.

(71) Applicant: **Canada Pipeline Accessories, Co. Ltd.**,
Calgary (CA)

FOREIGN PATENT DOCUMENTS

(72) Inventors: **Daniel A. Sawchuk**, Chestermere (CA);
Reginald Selirio, Calgary (CA)

CA 2171828 3/1995
CA 2228928 8/1995
CA 2787659 7/2011

(73) Assignee: **Canada Pipeline Accessories, Co. Ltd.**,
Calgary, Alberta (CA)

OTHER PUBLICATIONS

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

U.S. Appl. No. 61/700,421, filed Sep. 13, 2012.

(21) Appl. No.: **29/441,981**

Primary Examiner — Robin V Webster

(22) Filed: **Jan. 11, 2013**

(74) *Attorney, Agent, or Firm* — Cahn & Samuels, LLP

Related U.S. Application Data

(63) Continuation-in-part of application No. 29/432,051,
filed on Sep. 13, 2012.

(51) **LOC (10) Cl.** **23-01**

(52) **U.S. Cl.**
USPC **D23/213; D23/249**

(58) **Field of Classification Search**
USPC D23/213, 249; 239/428.5, 437;
261/DIG. 22; 138/39

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D198,356 S 6/1964 Wahlin et al.
D200,088 S 1/1965 Earnshaw
3,232,550 A 2/1966 Cuva
5,341,848 A 8/1994 Laws
5,495,872 A 3/1996 Gallagher et al.
5,762,107 A 6/1998 Laws
5,959,216 A 9/1999 Hocquet et al.
7,073,534 B2 7/2006 Sawchuk et al.
7,089,963 B2 8/2006 Meheen
D577,100 S 9/2008 Brown et al.
D577,101 S 9/2008 Kong et al.
8,132,961 B1 3/2012 England et al.
D674,878 S 1/2013 Jones et al.

(57) **CLAIM**

The ornamental design for a flow conditioner with internal vanes, as shown and described.

DESCRIPTION

FIG. 1 illustrates a rear perspective view of a flow conditioner with internal vanes having 1) a flange on a first side; and 2) integral vanes on the first side at least partly following contours of an outer ring of holes or apertures according to another embodiment of the invention.

FIG. 2 illustrates a front perspective view of a flow conditioner with internal vanes of FIG. 1.

FIG. 3 illustrates a front view of the flow conditioner with internal vanes of FIG. 1.

FIG. 4 illustrates a rear view of the flow conditioner with internal vanes of FIG. 1.

FIG. 5 illustrates a side view of the flow conditioner with internal vanes of FIG. 1.

FIG. 6 illustrates a rear perspective view of a flow conditioner with internal vanes having 1) a flange on a first side; 2) integral vanes on a first side at least partly following contours of an outer ring of holes or apertures; and 3) integral vanes on a first side at least partly following contours of an inner ring of holes or apertures according to another embodiment of the present invention.

FIG. 7 illustrates a front perspective view of a flow conditioner with internal vanes of FIG. 6.

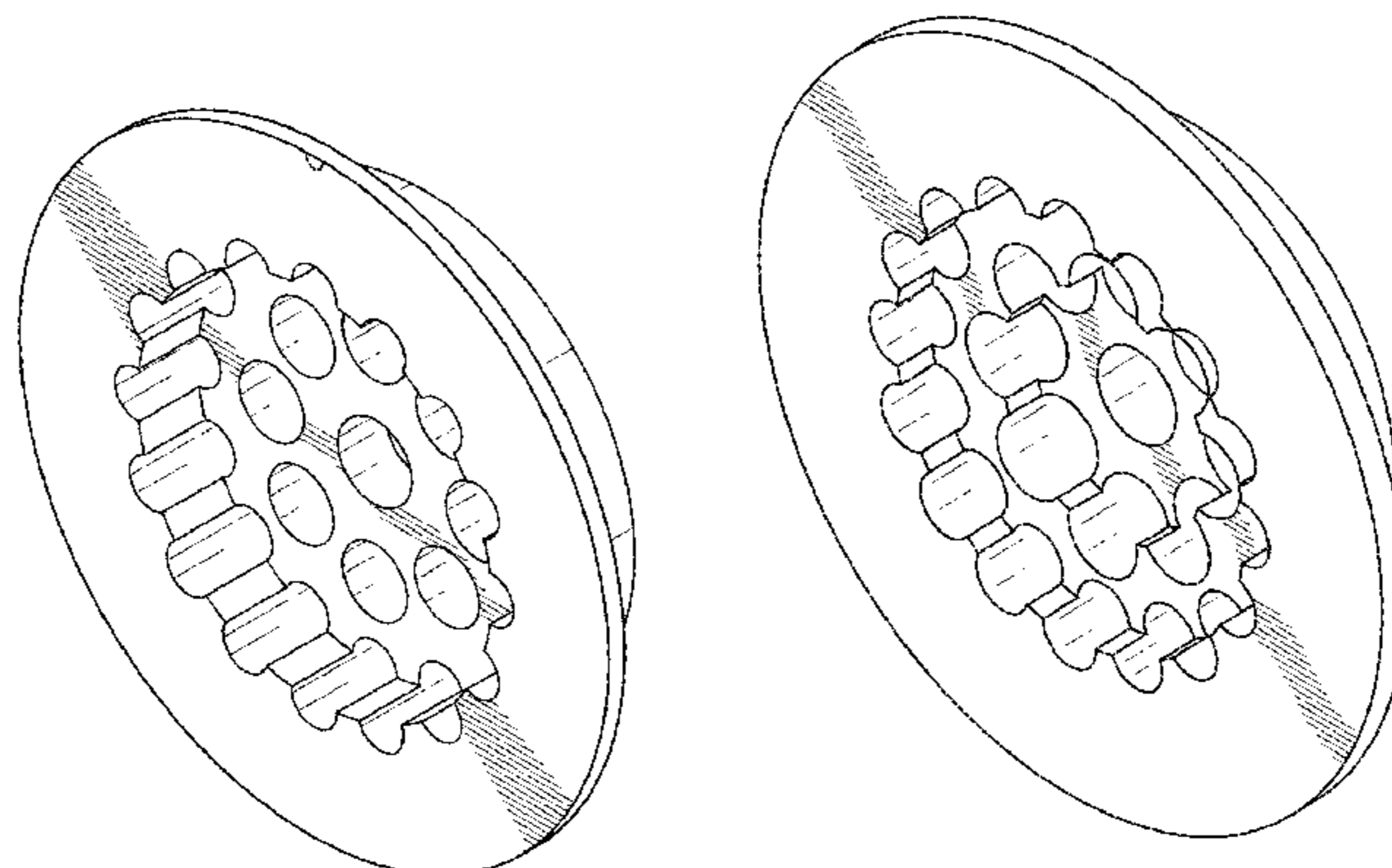


FIG. 8 illustrates a front view of the flow conditioner with internal vanes of FIG. 6.

FIG. 9 illustrates a rear view of the flow conditioner with internal vanes of FIG. 6.

FIG. 10 illustrates a side view of the flow conditioner with internal vanes of FIG. 6.

FIG. 11 illustrates a rear perspective view of a flow conditioner with internal vanes having 1) a flange on a second side; 2) integral vanes on a first side at least partly following contours of an outer ring of holes or apertures; and 3) integral vanes on a first side at least partly following contours of an inner ring of holes or apertures according to another embodiment of the present invention.

FIG. 12 illustrates a front perspective view of a flow conditioner with internal vanes of FIG. 11.

FIG. 13 illustrates a front view of the flow conditioner with internal vanes of FIG. 11.

FIG. 14 illustrates a rear view of the flow conditioner with internal vanes of FIG. 11; and,

FIG. 15 illustrates a side view of the flow conditioner with internal vanes of FIG. 11.

1 Claim, 6 Drawing Sheets

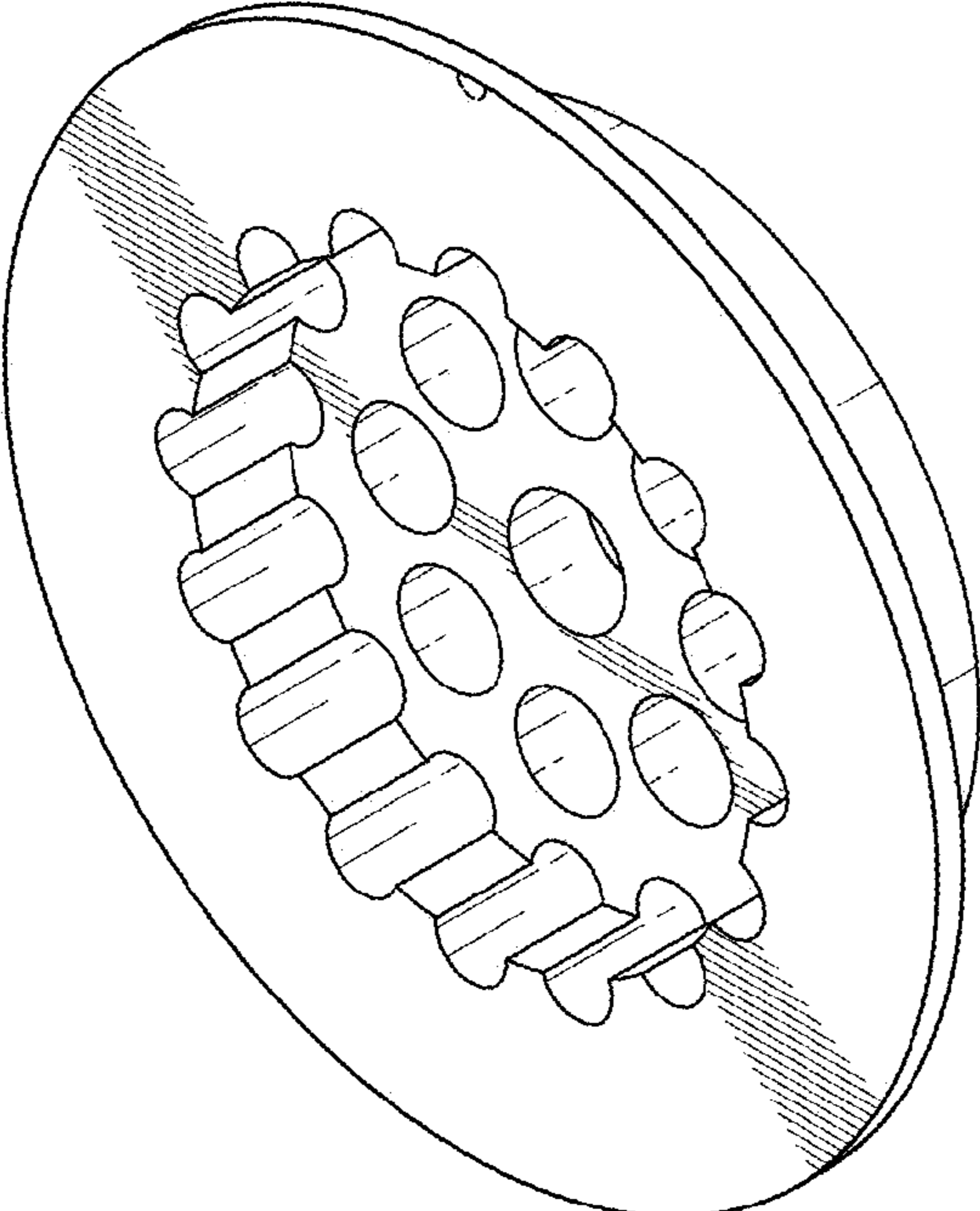


FIG. 1

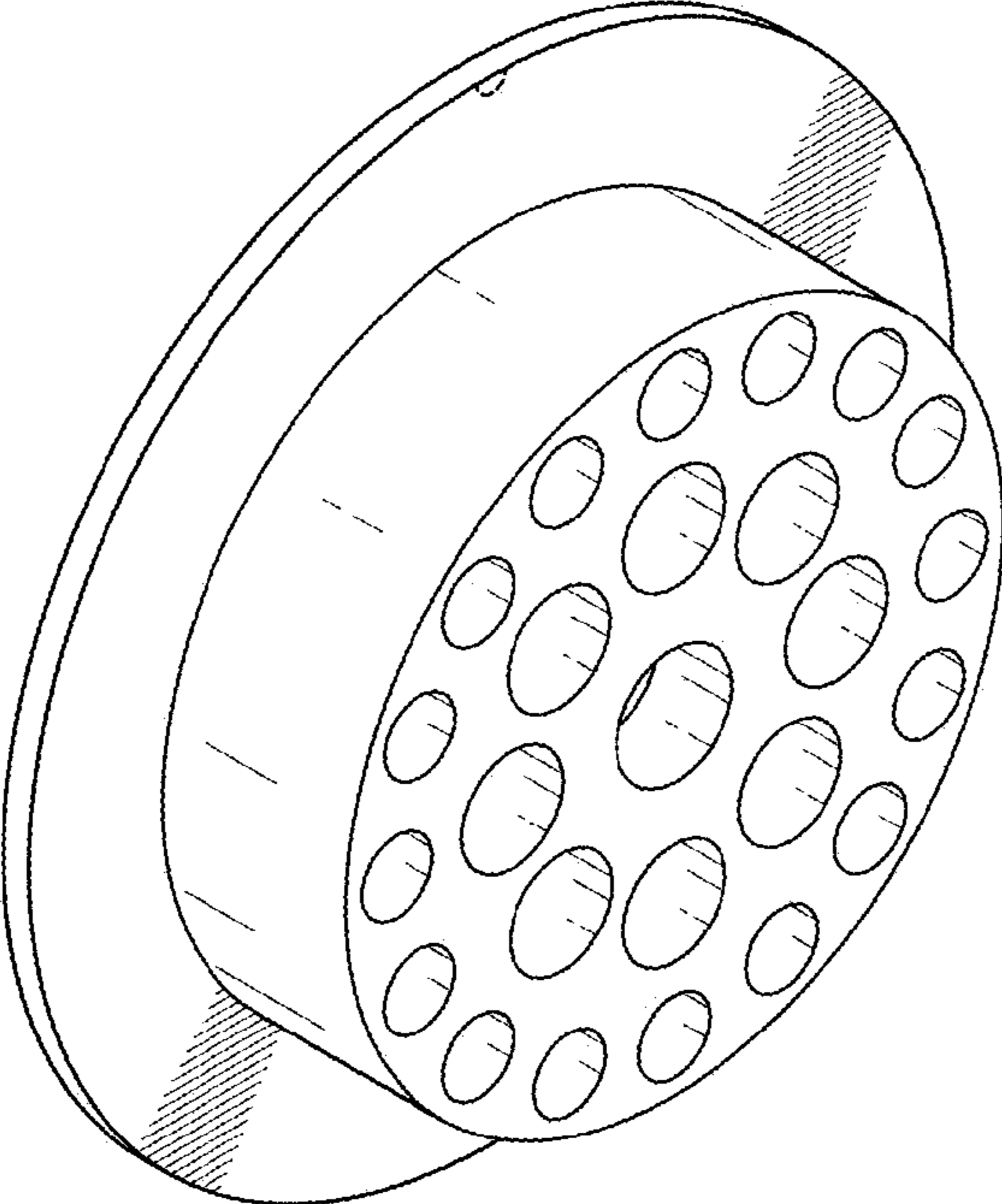


FIG. 2

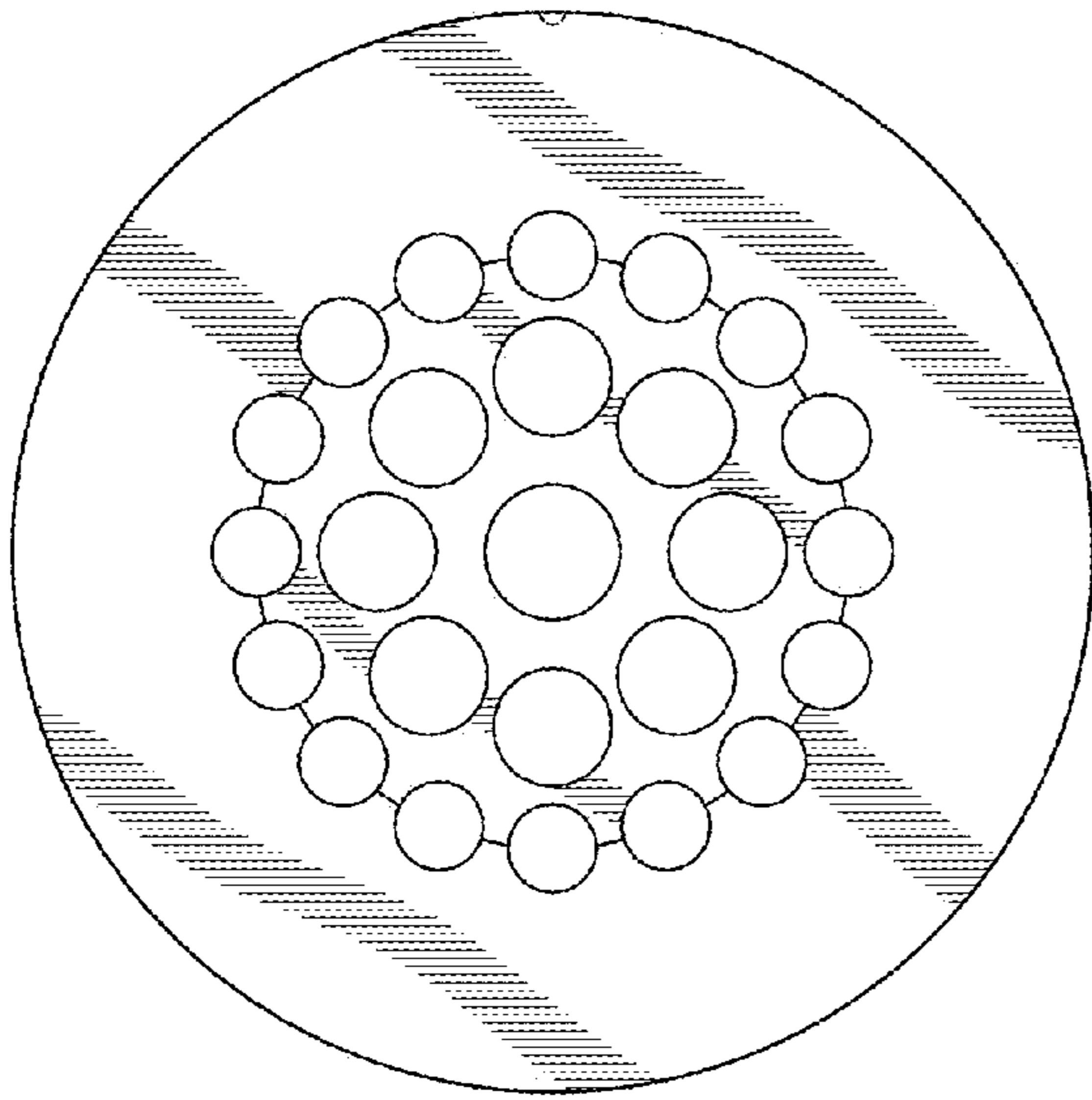


FIG. 3

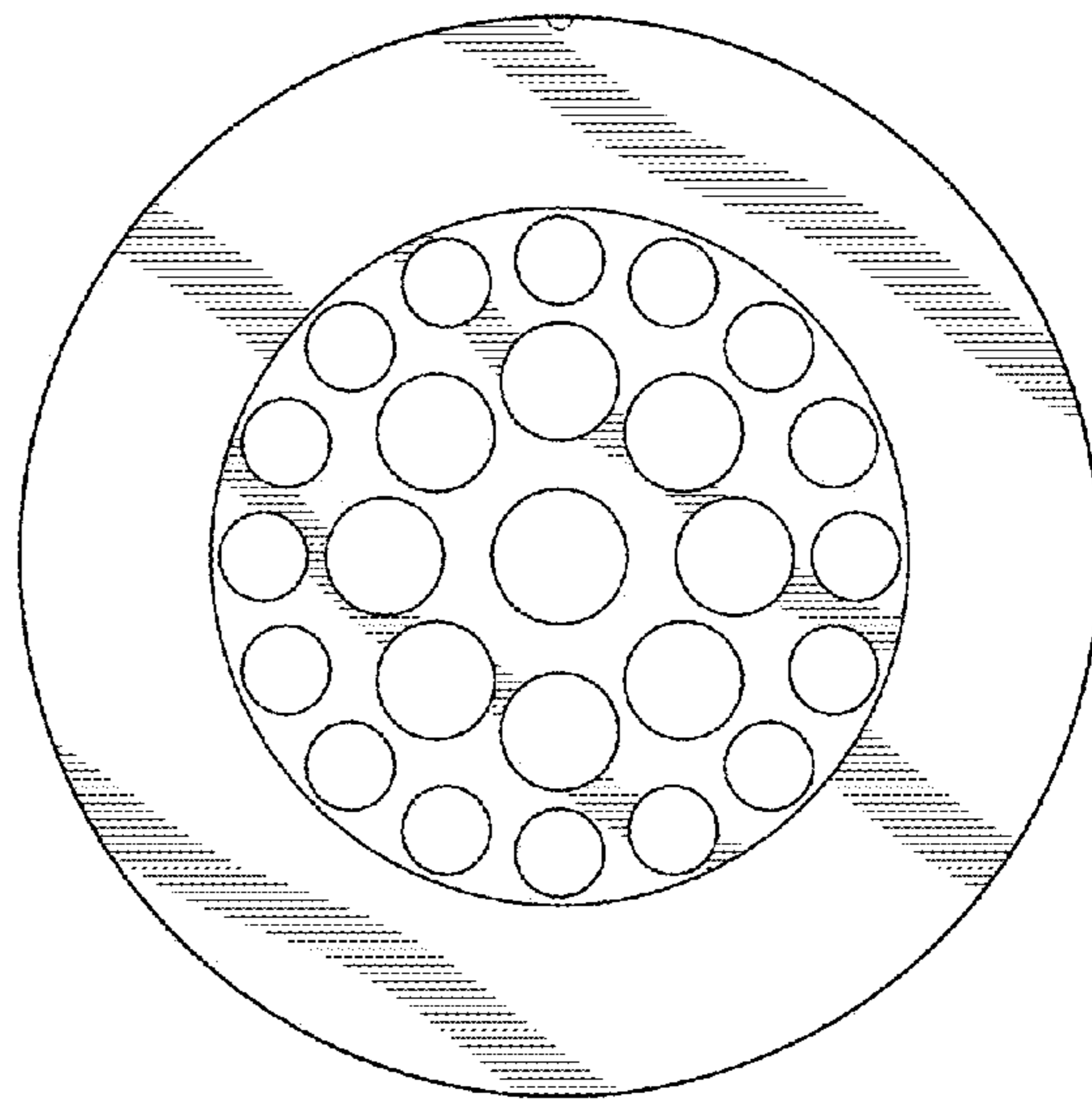


FIG. 4

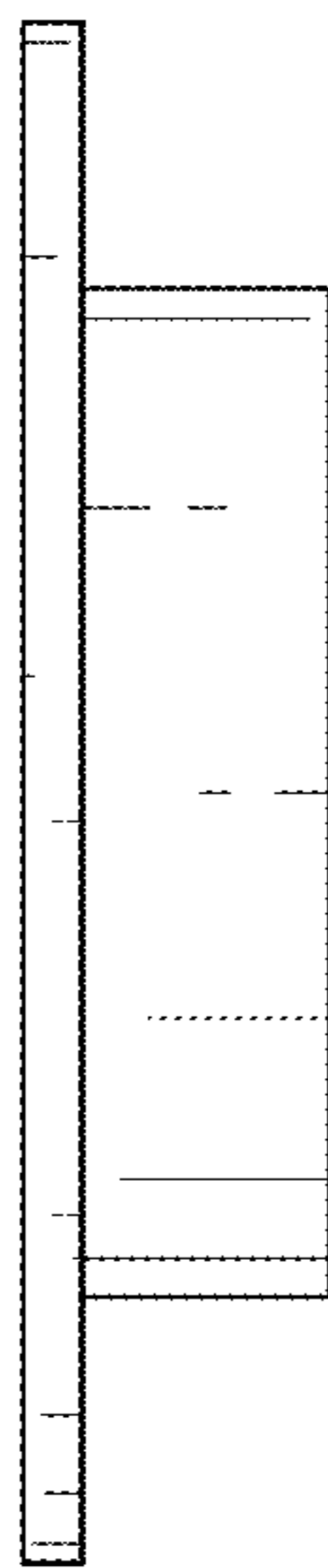


FIG. 5

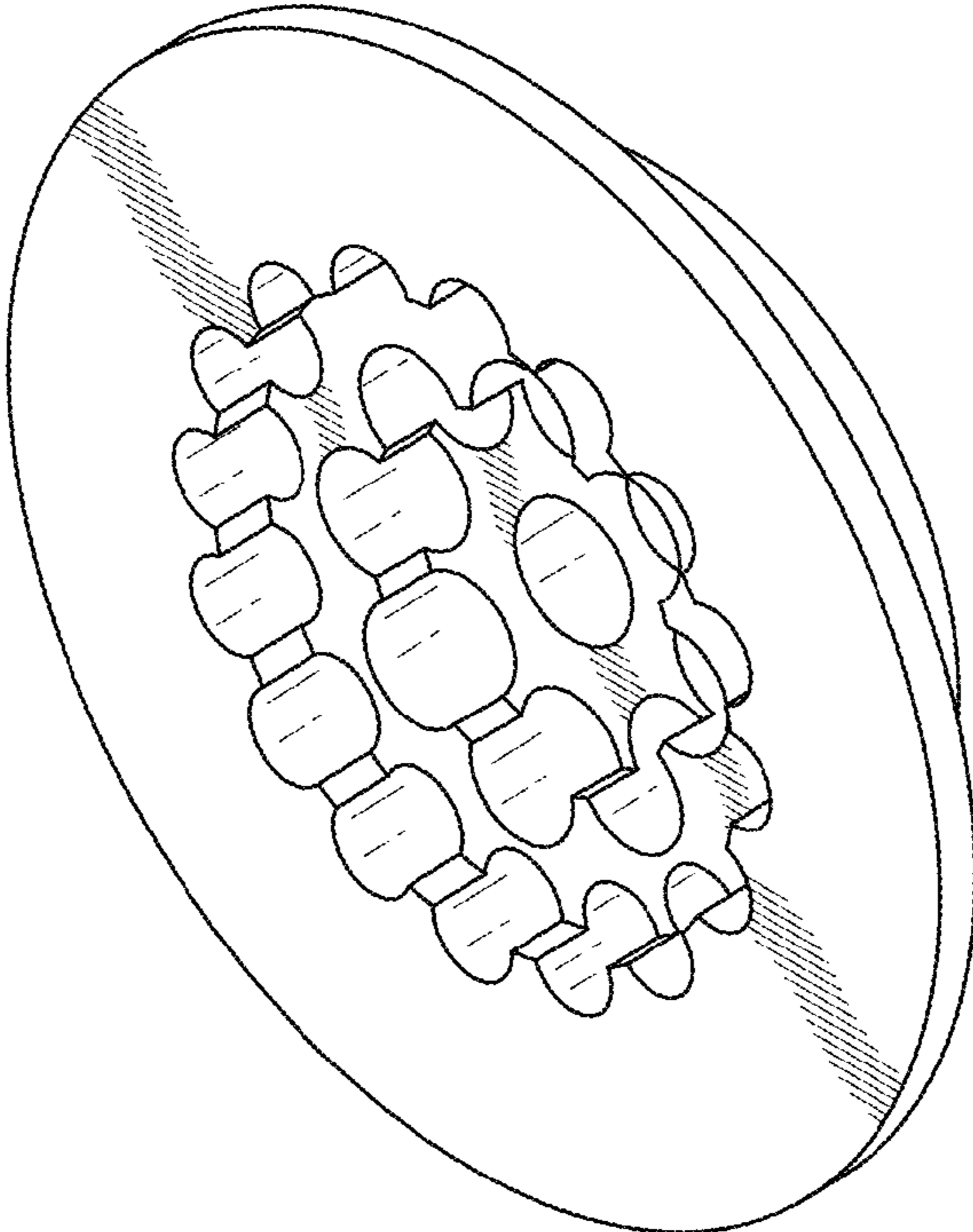


FIG. 6

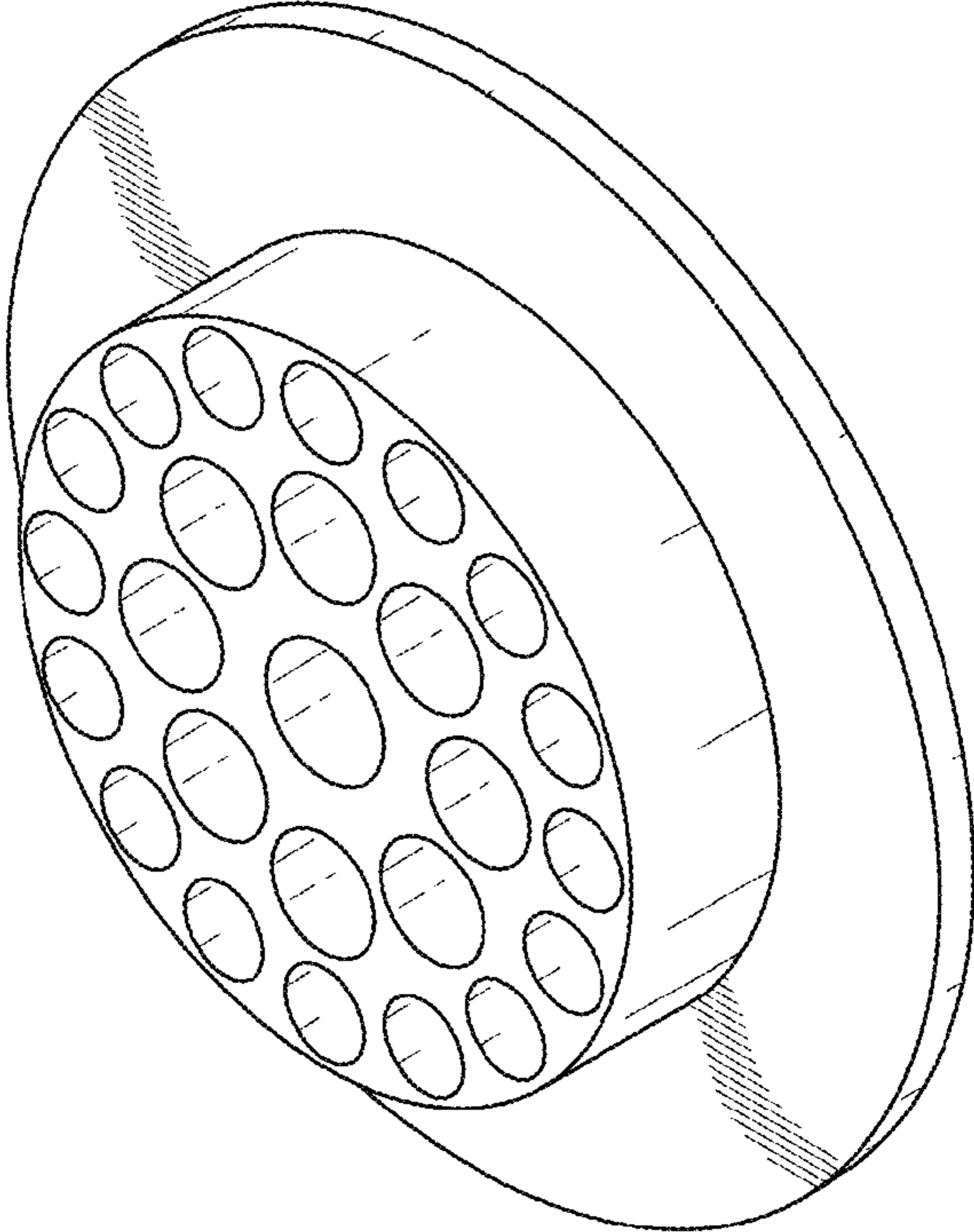


FIG. 7

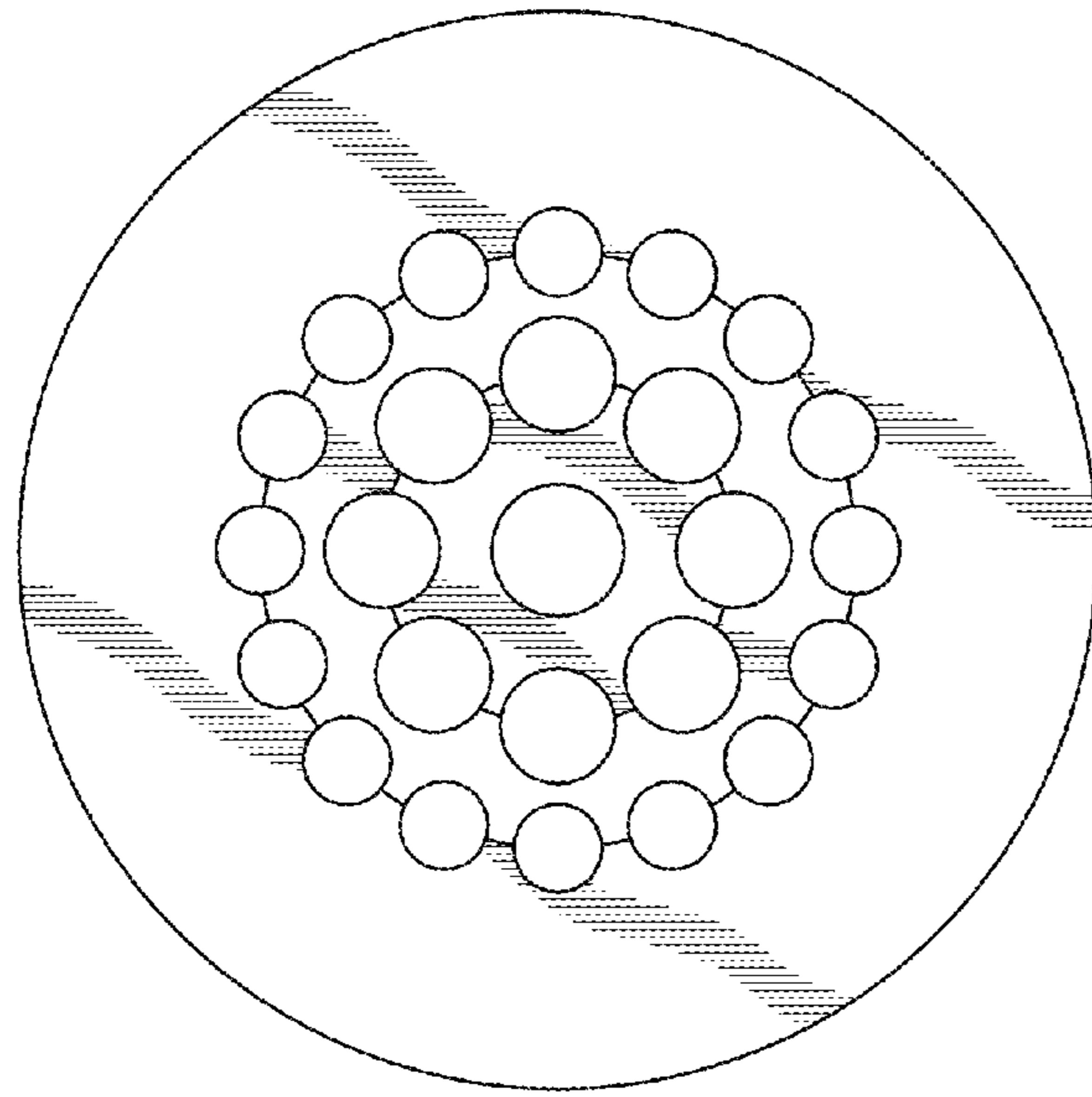


FIG. 8

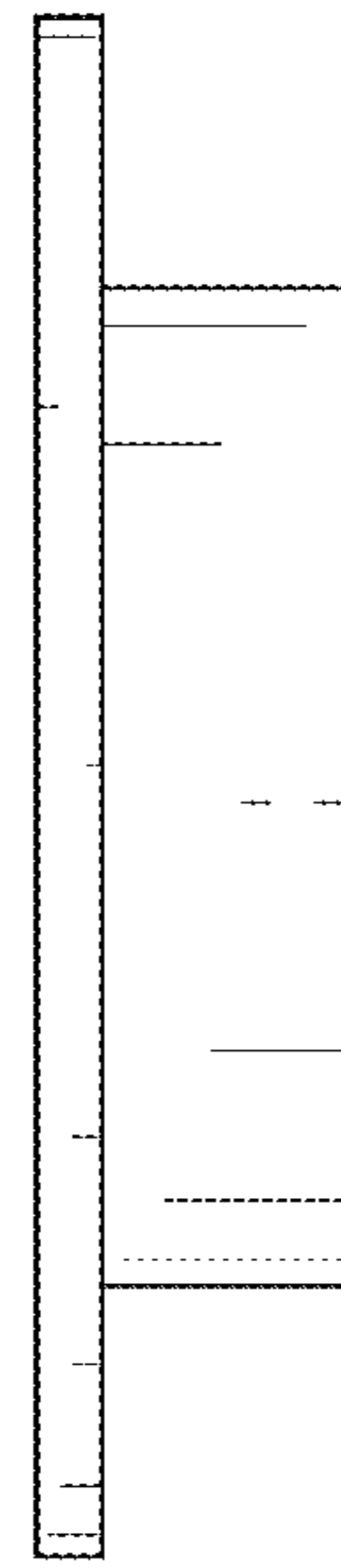


FIG. 9

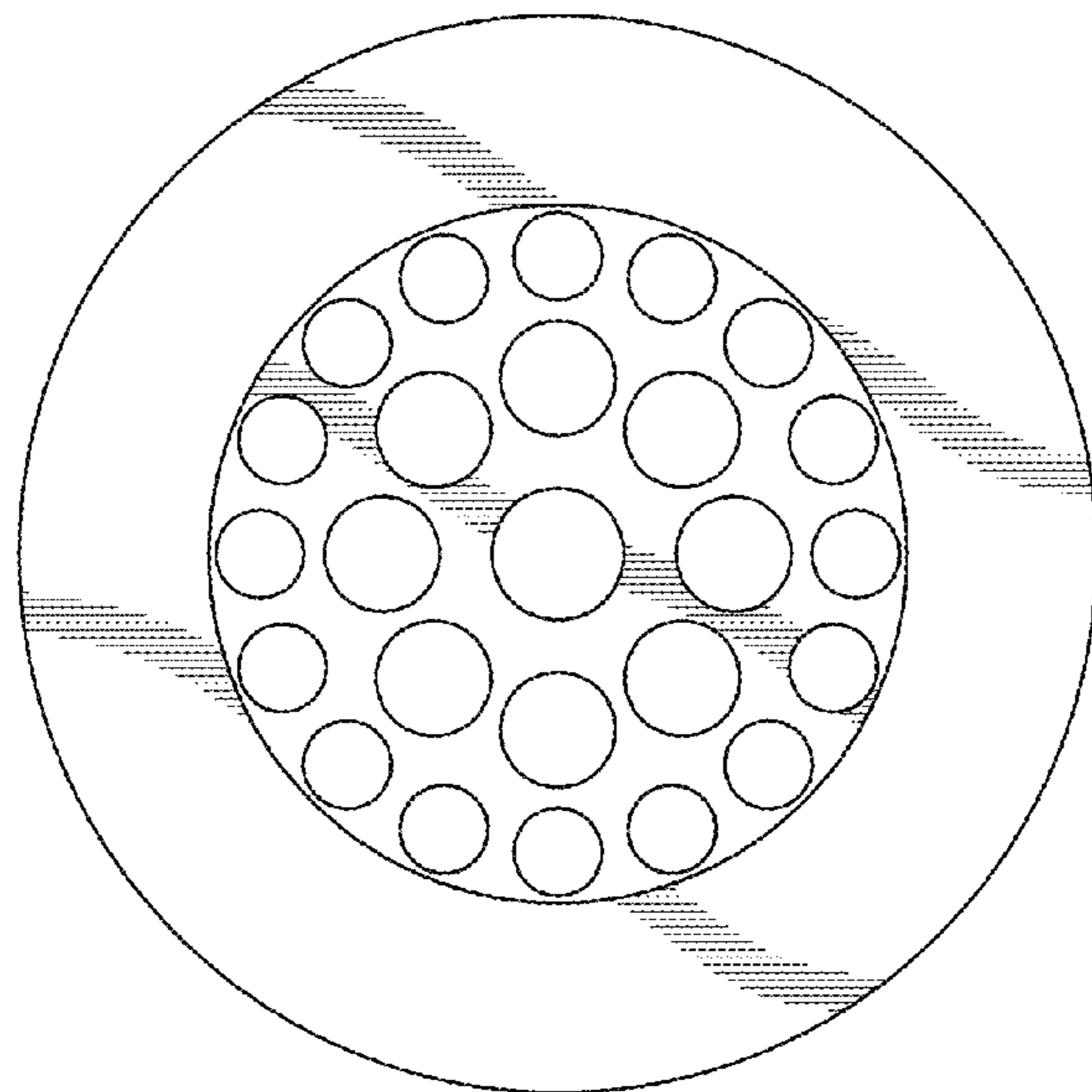


FIG. 10

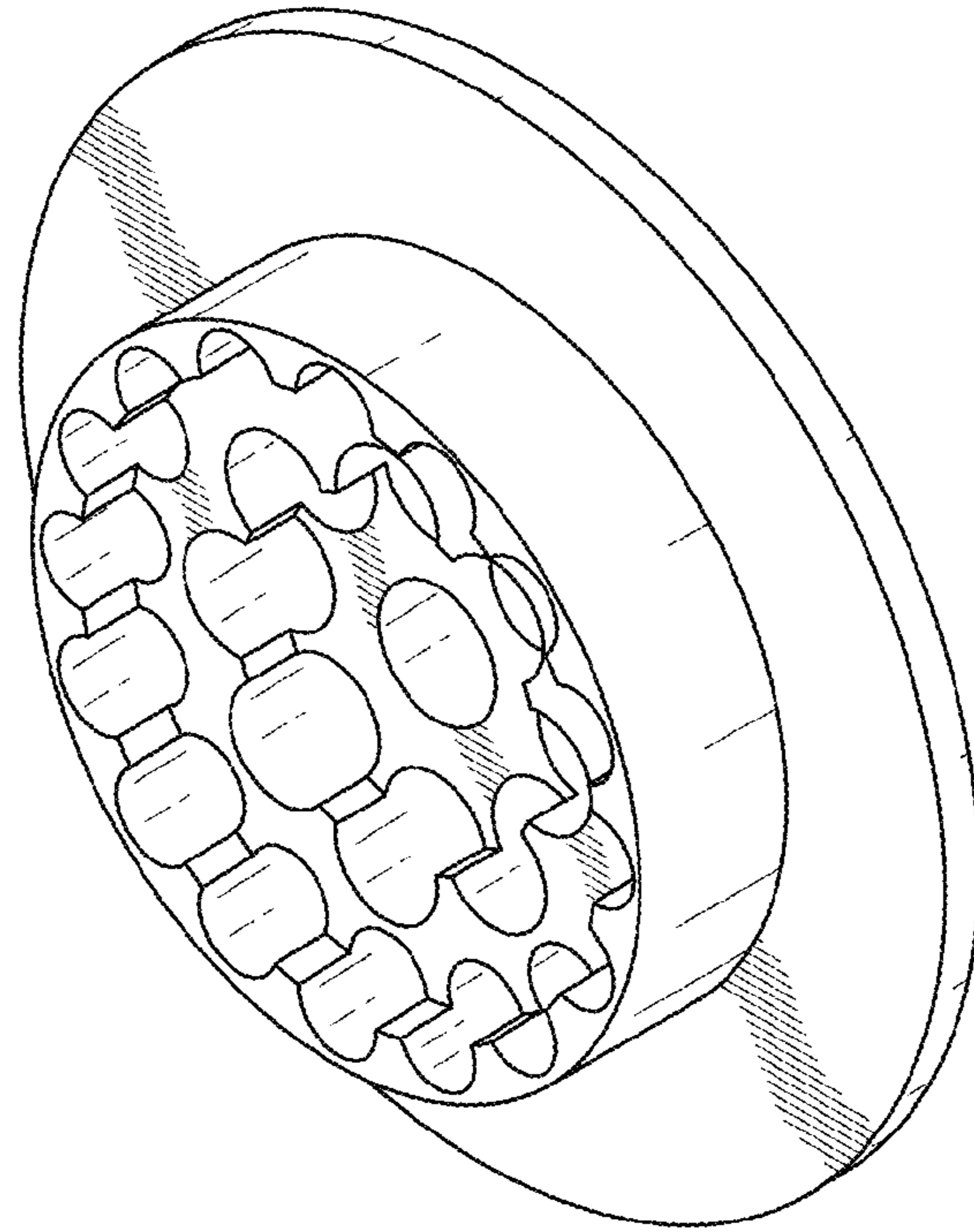


FIG. 11

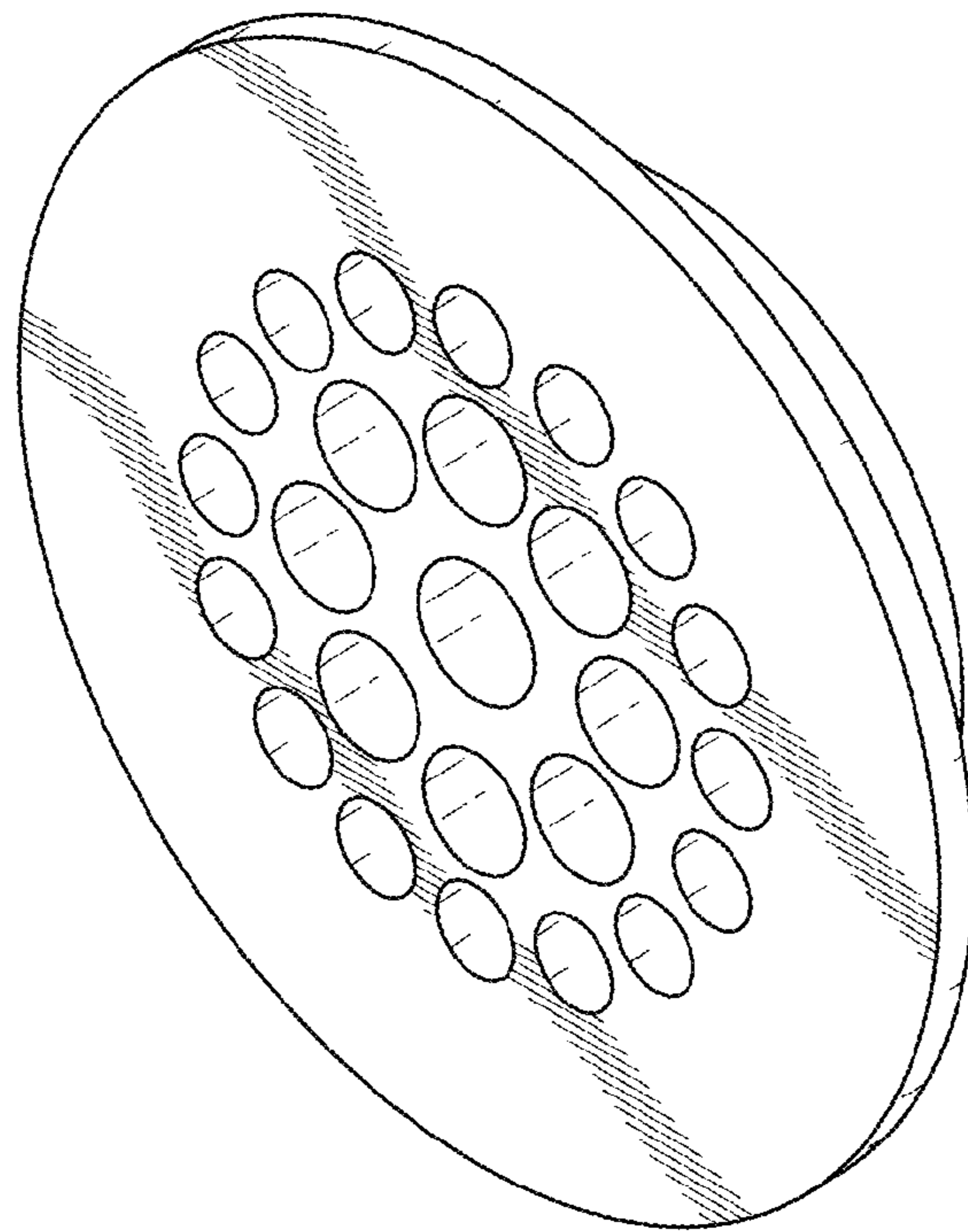


FIG. 12

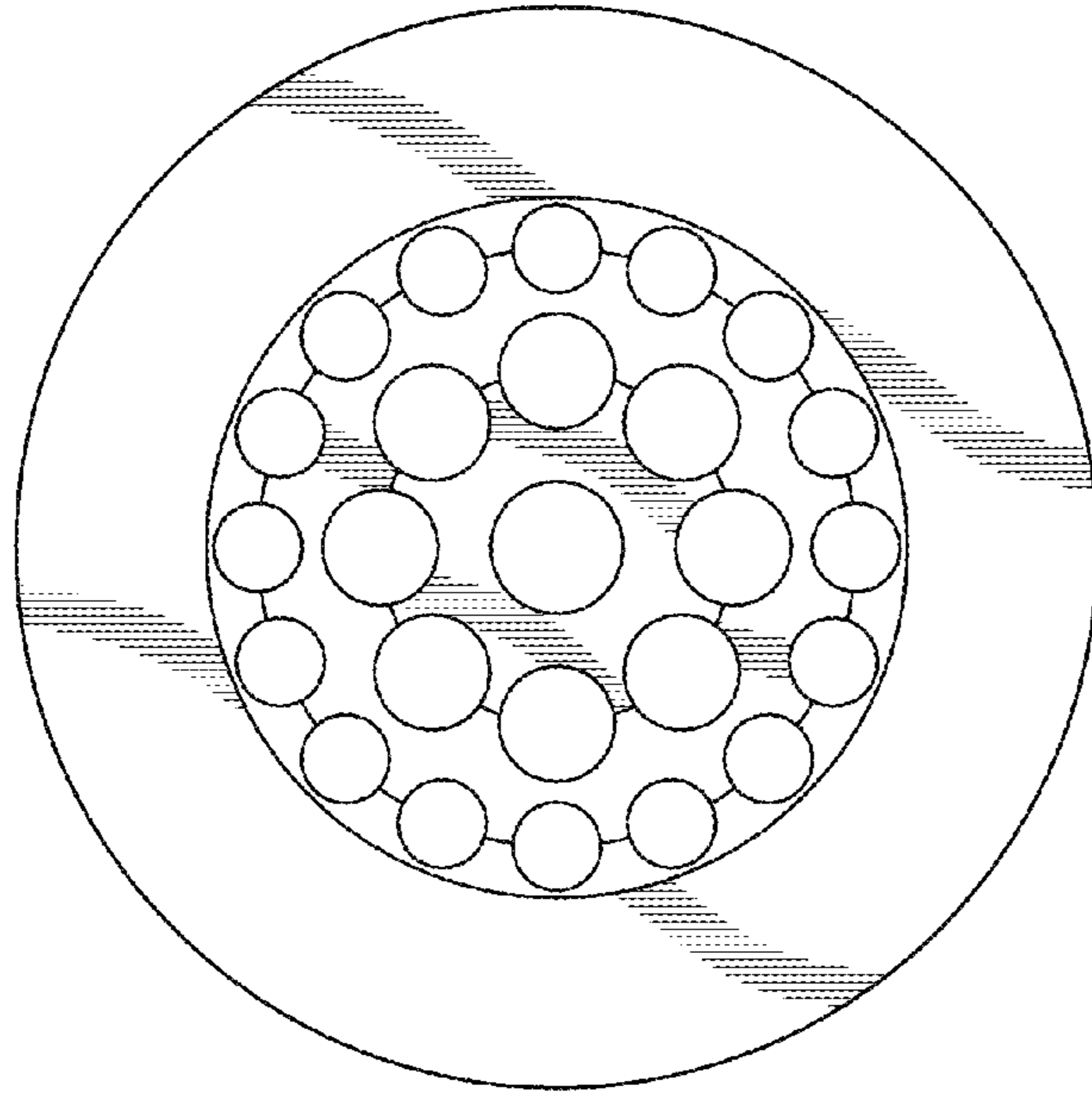


FIG. 13

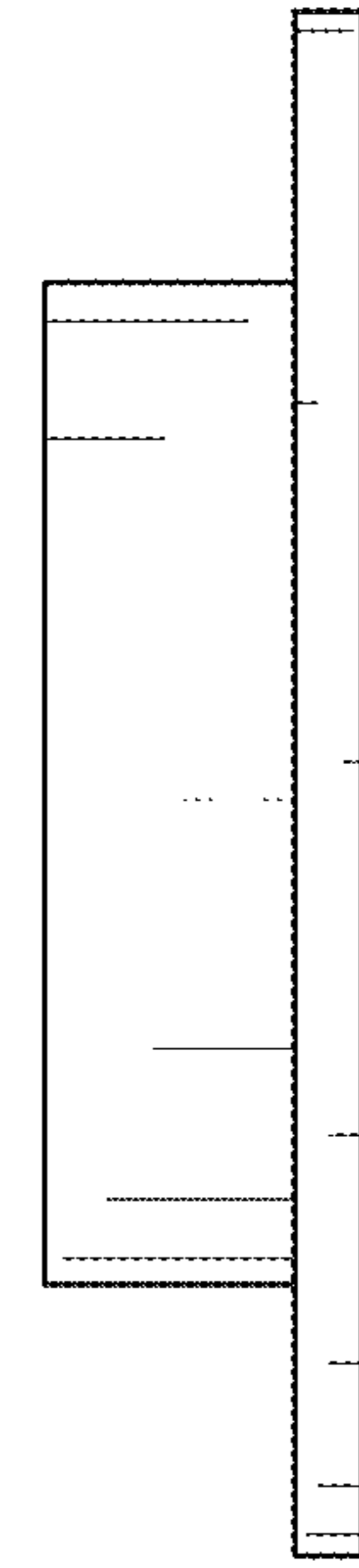


FIG. 15

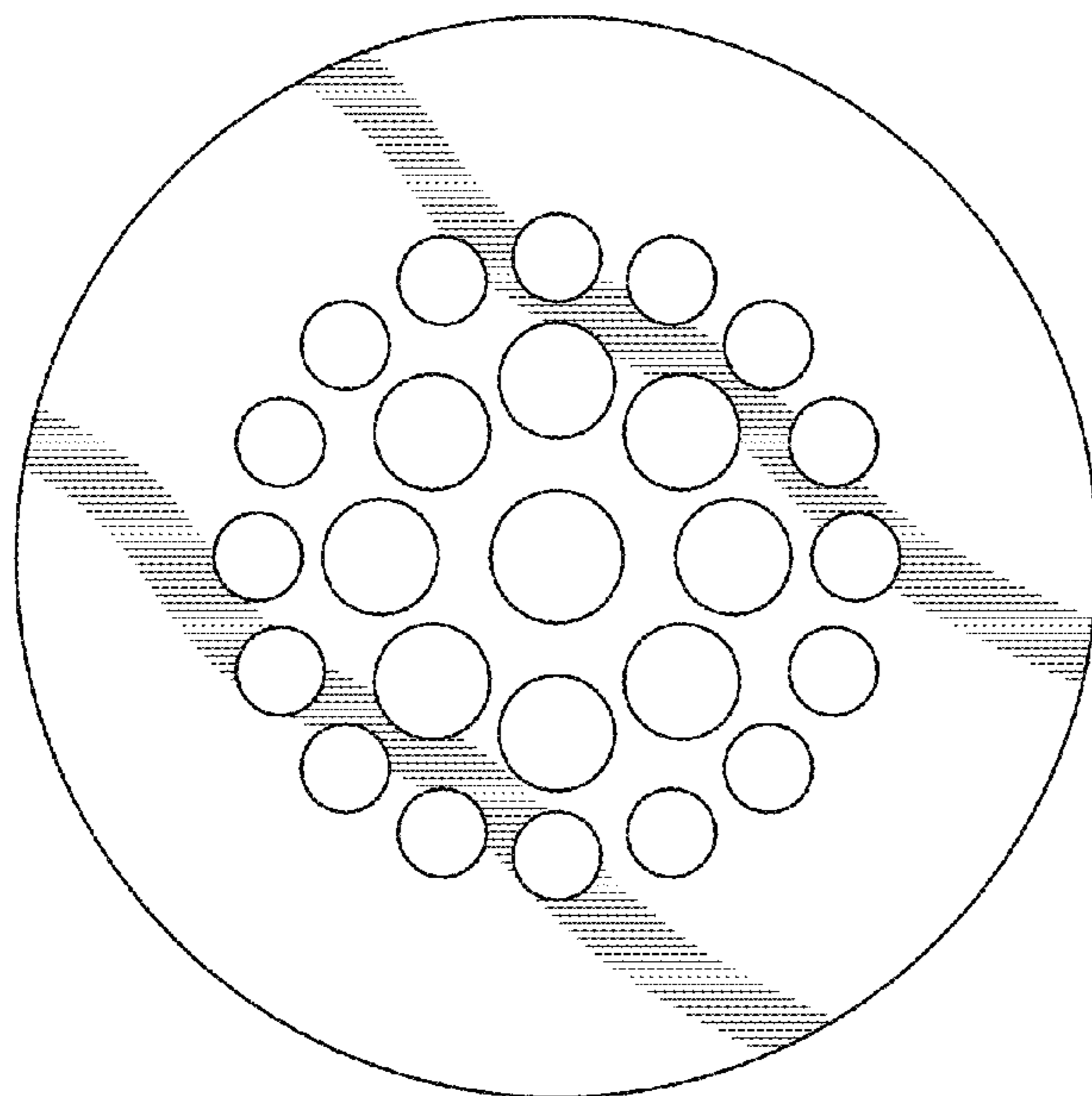


FIG. 14

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : D713,492 S
APPLICATION NO. : 29/441981
DATED : September 16, 2014
INVENTOR(S) : Sawchuk et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the title page, item (54), and in the Specification, Column 1, should read:

From

FLOW CONDITIONER WITH ~~[[INTERNAL]]~~ VANES

To

--FLOW CONDITIONER WITH INTEGRAL VANES--

Signed and Sealed this
Ninth Day of December, 2014



Michelle K. Lee
Deputy Director of the United States Patent and Trademark Office