



US00D888122S

(12) **United States Design Patent** (10) **Patent No.:** **US D888,122 S**  
**Bynum** (45) **Date of Patent:** **\*\* Jun. 23, 2020**

(54) **BORESCOPE PLUG LOCKRING**  
(71) Applicant: **Moeller Mfg. Company, LLC**, Wixom, MI (US)  
(72) Inventor: **Kurt Kevin Bynum**, Brighton, MI (US)  
(73) Assignee: **Moeller Mfg. Company, LLC**  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/666,261**  
(22) Filed: **Oct. 11, 2018**  
(51) **LOC (12) Cl.** ..... **16-99**  
(52) **U.S. Cl.**  
USPC ..... **D16/130**  
(58) **Field of Classification Search**  
USPC ..... D16/130, 131, 136, 221, 223, 225, 232,  
D16/235, 248, 250; D13/180, 134;  
D24/138, 127, 113  
(Continued)

(56) **References Cited**  
U.S. PATENT DOCUMENTS  
2,479,007 A \* 8/1949 Gruben ..... G01F 19/005  
73/429  
5,083,819 A 1/1992 Bynum  
(Continued)

FOREIGN PATENT DOCUMENTS  
CN 202994190 U 6/2013

OTHER PUBLICATIONS  
JPB Système—Self-locking borescope plug; <https://www.flickr.com/photos/jpb-systeme/7793496280/in/photostream/> Date: Jul. 2010.  
(Continued)

*Primary Examiner* — Mark A Goodwin  
*Assistant Examiner* — Benjamin M Weeks

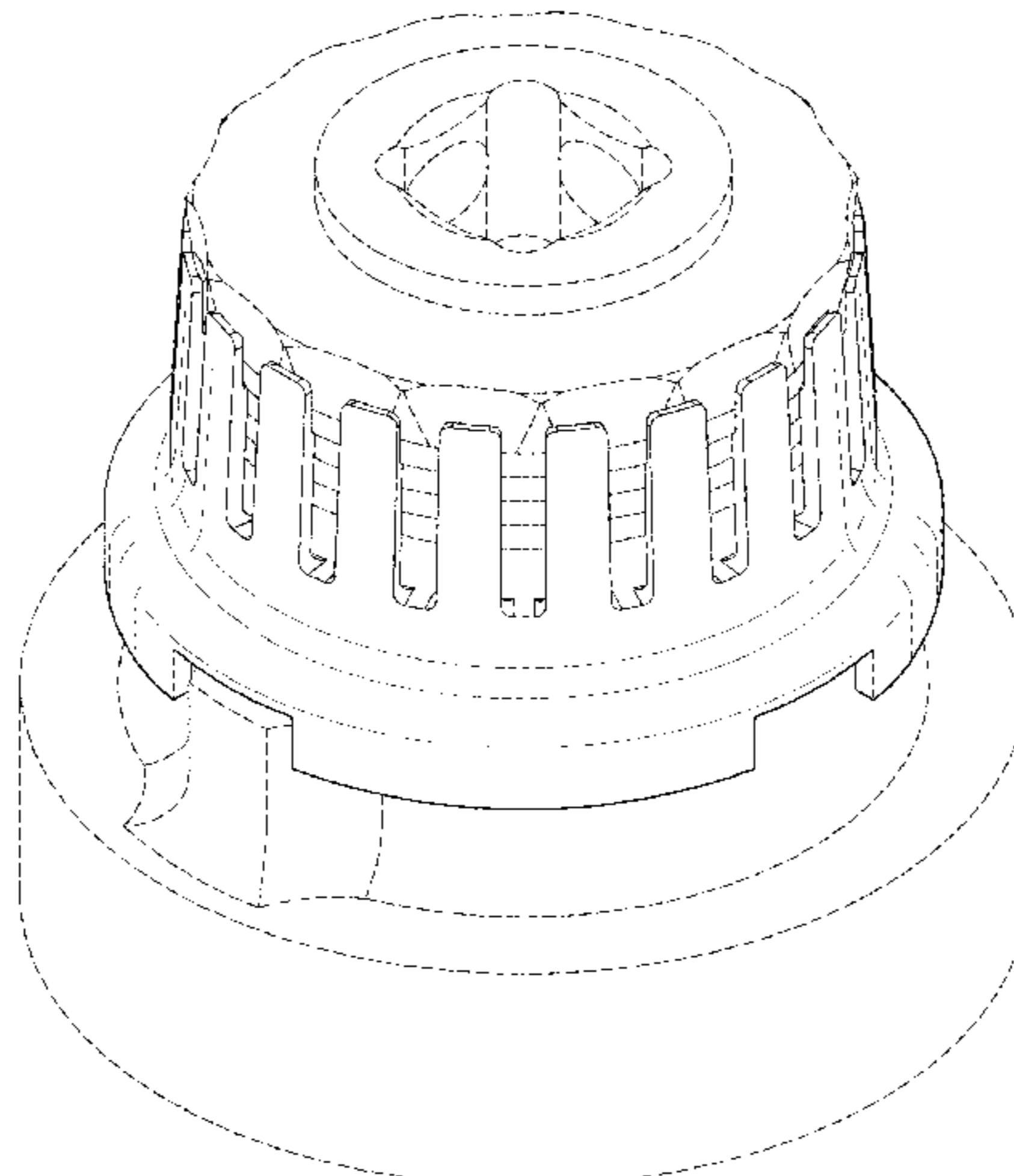
(74) *Attorney, Agent, or Firm* — Harness, Dickey & Pierce, P.L.C.

(57) **CLAIM**  
The ornamental design for a borescope plug lockring, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a borescope plug including the borescope plug lockring of the claimed design, the broken lines in the drawing illustrating the environmental structure of the borescope plug lockring which is not part of the design sought to be patented;  
FIG. 2 is an exploded perspective view of the borescope plug including the borescope plug lockring of FIG. 1, the broken lines in the drawing illustrating the environmental structure of the borescope plug lockring which is not part of the design sought to be patented;  
FIG. 3 is a front perspective view of the borescope plug lockring of the disclosure;  
FIG. 4 is a front elevational view thereof, the right side elevational view, the left side elevational view and the back elevational view being the same as the front elevational view;  
FIG. 5 is a top view thereof;  
FIG. 6 is a bottom view side view thereof;  
FIG. 7 is a front perspective view of a second embodiment of the borescope plug lockring of the disclosure;  
FIG. 8 is a front elevational view thereof, the back elevational view being the same as the front elevational view;  
FIG. 9 is the right side elevational view thereof, the left side elevational view being the same as the right side elevational view;  
FIG. 10 is a top view thereof; and  
FIG. 11 is a bottom view thereof;  
FIG. 12 is a front perspective view of a third embodiment of the borescope plug lockring of the disclosure;  
FIG. 13 is a front elevational view thereof, the right side elevational view, the left side elevational view and the back elevational view being the same as the front elevational view;  
FIG. 14 is a top view thereof; and  
FIG. 15 is a bottom view thereof.

(Continued)



The broken lines in the drawings represent the environment for the borescope plug lockring that form no part of the claimed design.

**1 Claim, 11 Drawing Sheets**

(58) **Field of Classification Search**

CPC ..... F16B 2/06; F16B 2/10; F01D 21/003  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,362,110 A 11/1994 Bynum  
5,586,790 A 12/1996 Bynum  
5,823,702 A 10/1998 Bynum  
D415,103 S \* 10/1999 Klaus ..... D13/134  
D415,104 S \* 10/1999 Klaus ..... D13/134  
D436,118 S \* 1/2001 London ..... D16/130  
D444,158 S \* 6/2001 Saldana ..... D16/130  
6,468,033 B1 10/2002 Weidlich  
D496,101 S \* 9/2004 Davison ..... D24/112  
D523,362 S \* 6/2006 Wu ..... D10/102  
D688,796 S \* 8/2013 Niunoya ..... D24/127  
D700,577 S \* 3/2014 Ding ..... D13/134  
8,840,348 B2 9/2014 Marc  
8,882,384 B2 11/2014 Bynum  
9,046,003 B2 6/2015 Twell  
D755,967 S \* 5/2016 Ahluwalia ..... D24/133

D757,935 S \* 5/2016 Solingen ..... D24/133  
D768,848 S \* 10/2016 Cooper ..... D24/113  
9,494,052 B2 11/2016 Feindel et al.  
9,574,599 B2 2/2017 Marc  
9,593,700 B2 3/2017 Bynum  
D788,201 S \* 5/2017 Pilz ..... D10/46  
D788,831 S \* 6/2017 Pilz ..... D10/46  
9,765,649 B2 9/2017 Snyder et al.  
9,880,070 B2 1/2018 Feindel et al.  
9,988,929 B2 6/2018 Smith  
D850,964 S \* 6/2019 Maggard ..... D10/103  
D860,442 S \* 9/2019 Ostrovsky ..... D24/138  
D865,960 S \* 11/2019 Hahn ..... D24/138  
D866,757 S \* 11/2019 Diluzio ..... D24/133  
D867,590 S \* 11/2019 Engler ..... D24/138  
D870,886 S \* 12/2019 Funakoshi ..... D24/138  
D872,860 S \* 1/2020 Funakoshi ..... D24/138  
D874,647 S \* 2/2020 Cranfield ..... D24/138  
2006/0281972 A1 \* 12/2006 Pease ..... A61B 1/00052  
600/109  
2011/0318098 A1 \* 12/2011 Gloaguen ..... F16L 19/005  
403/350  
2013/0340443 A1 12/2013 Salles  
2016/0169032 A1 6/2016 Porter et al.

OTHER PUBLICATIONS

JPB Système—Self-locking borescope plug; <https://www.flickr.com/photos/jpb-systeme/7793502540/in/photostream/> Date: Jul. 2010.  
JPB Système—Self-locking borescope plug; <https://www.flickr.com/photos/jpb-systeme/7533695000/in/photostream/> Date: Jul. 2010.

\* cited by examiner

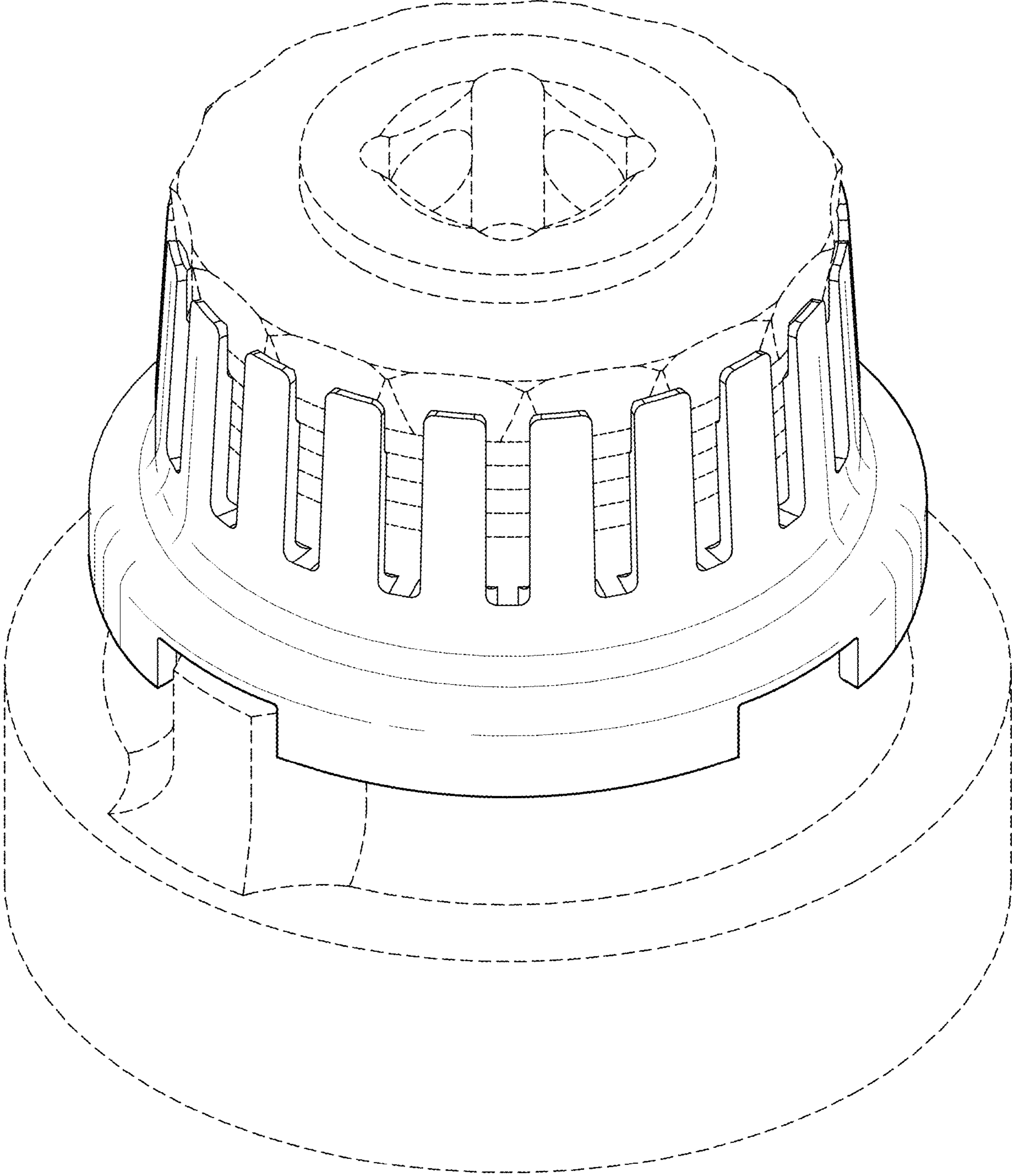


Fig-1

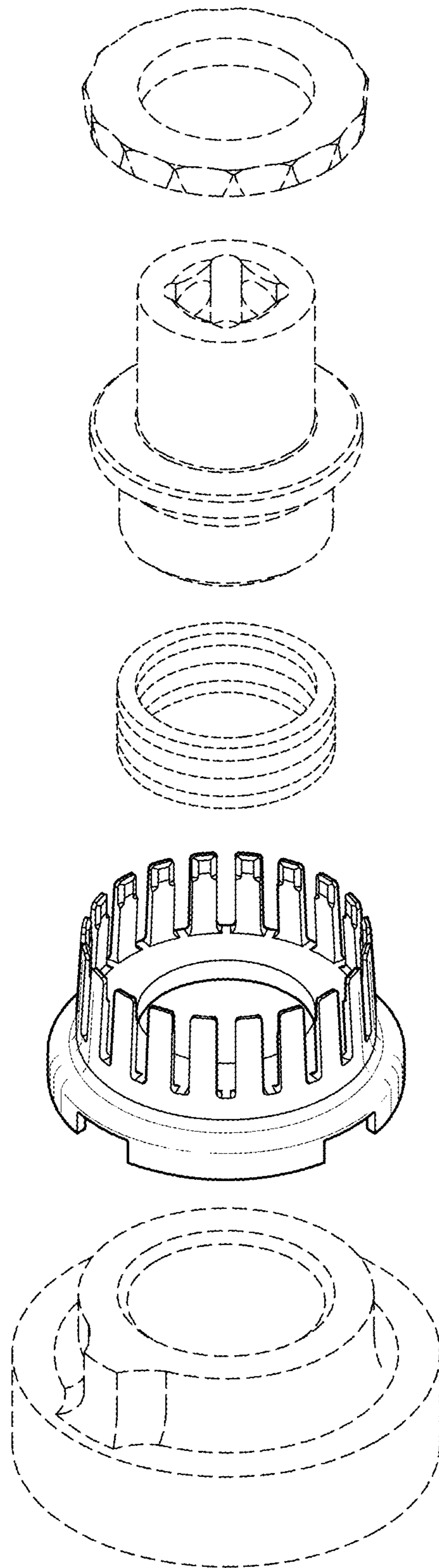


Fig-2

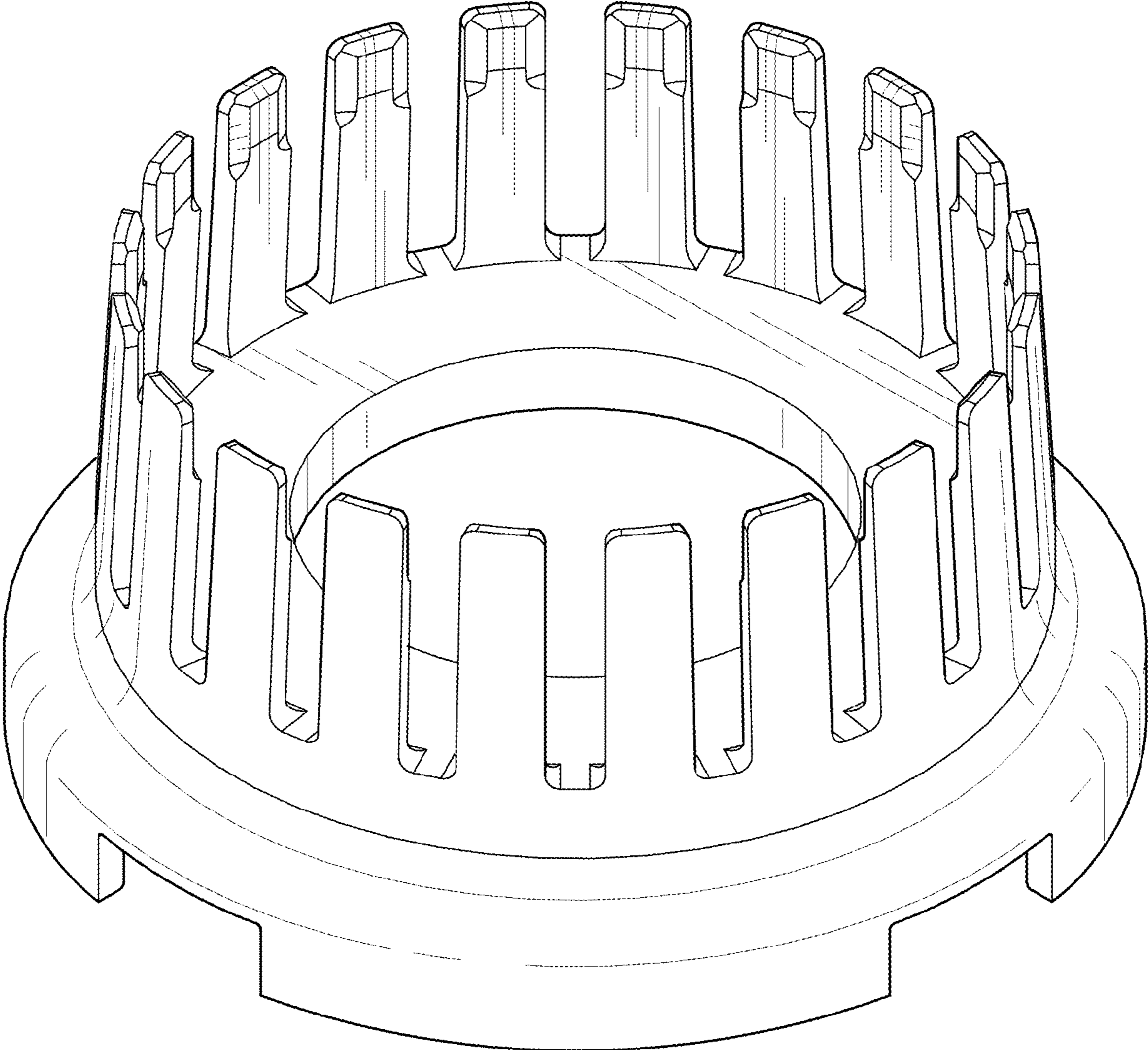


Fig-3

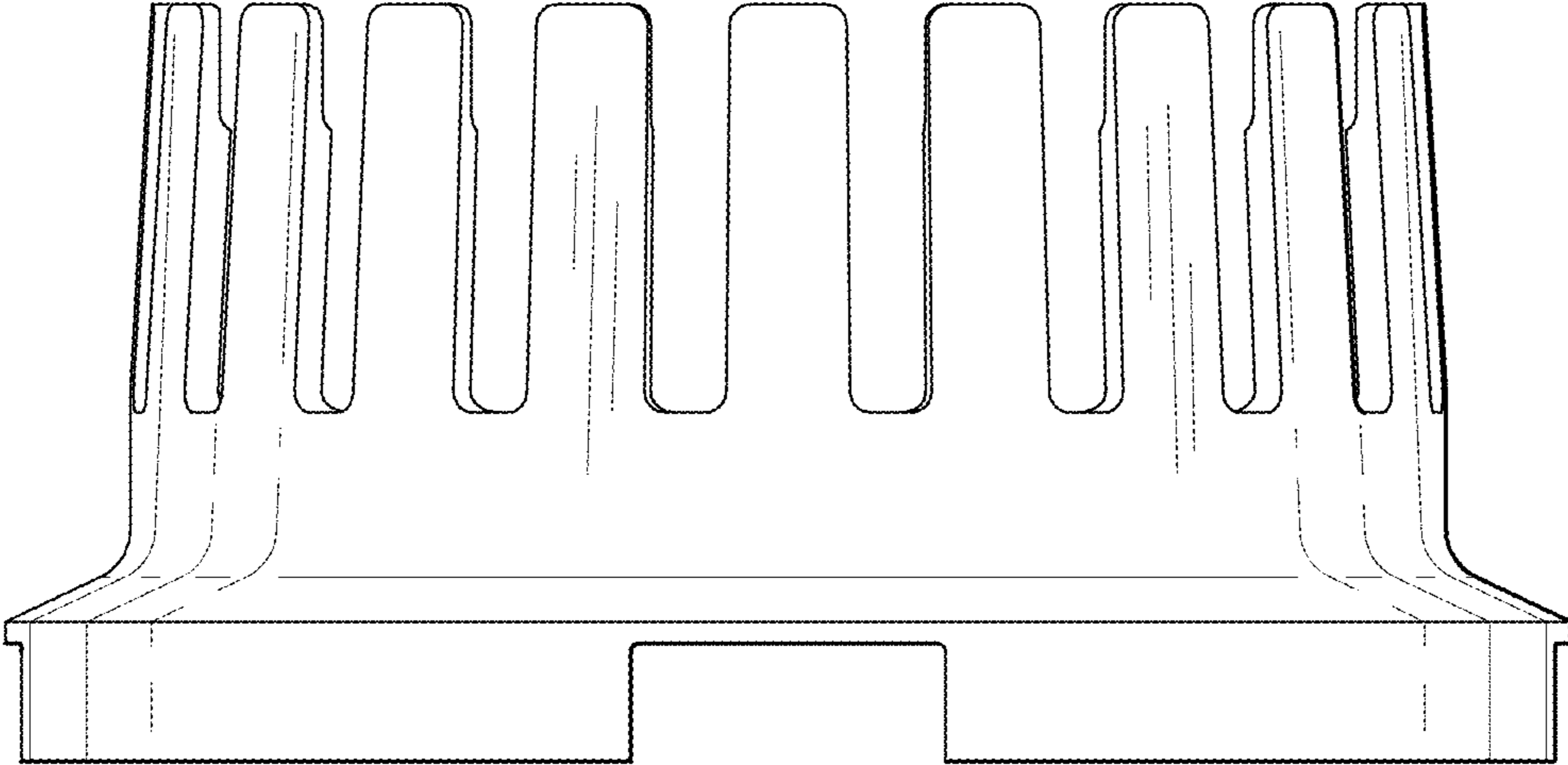


Fig-4

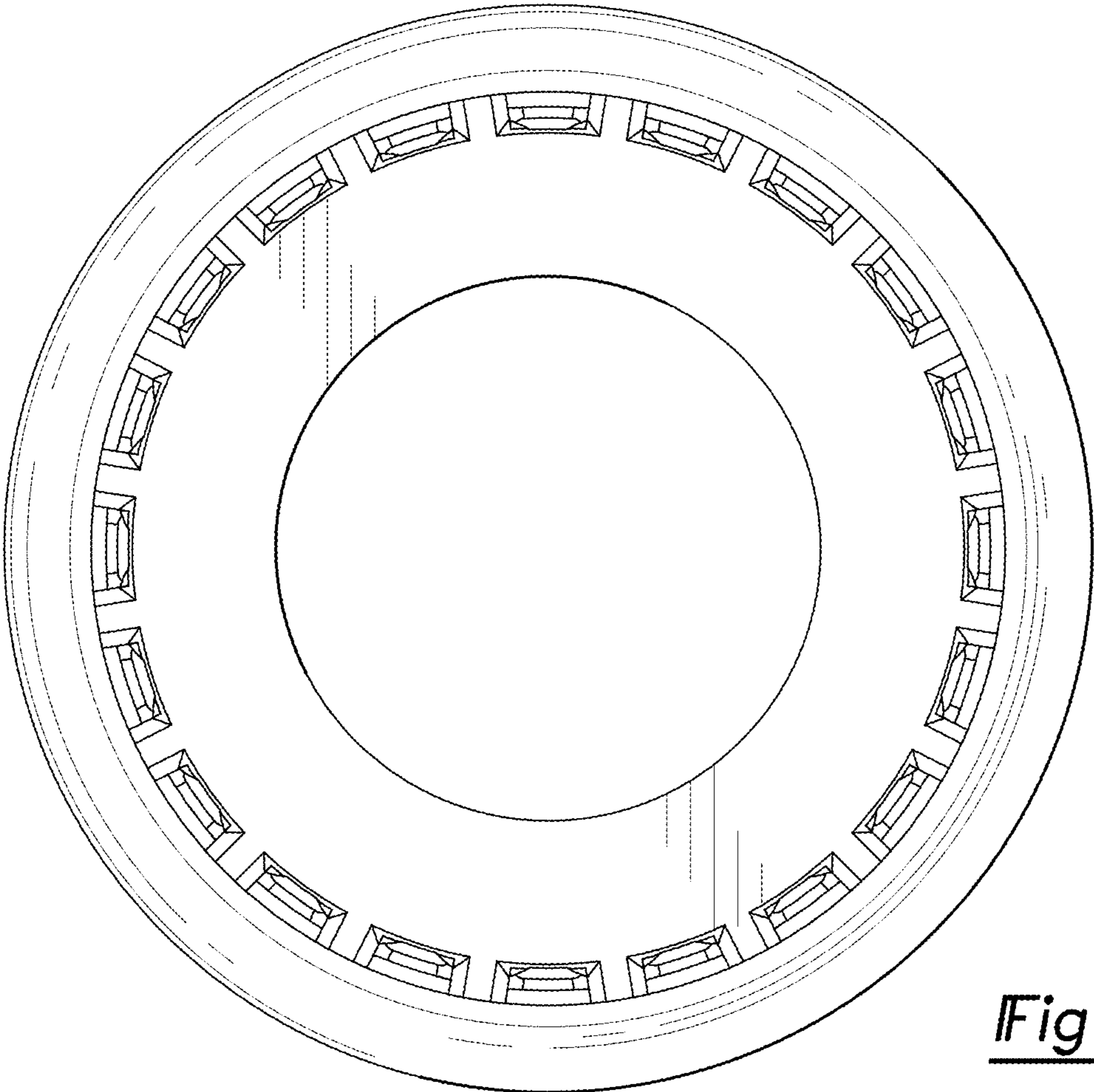


Fig-5

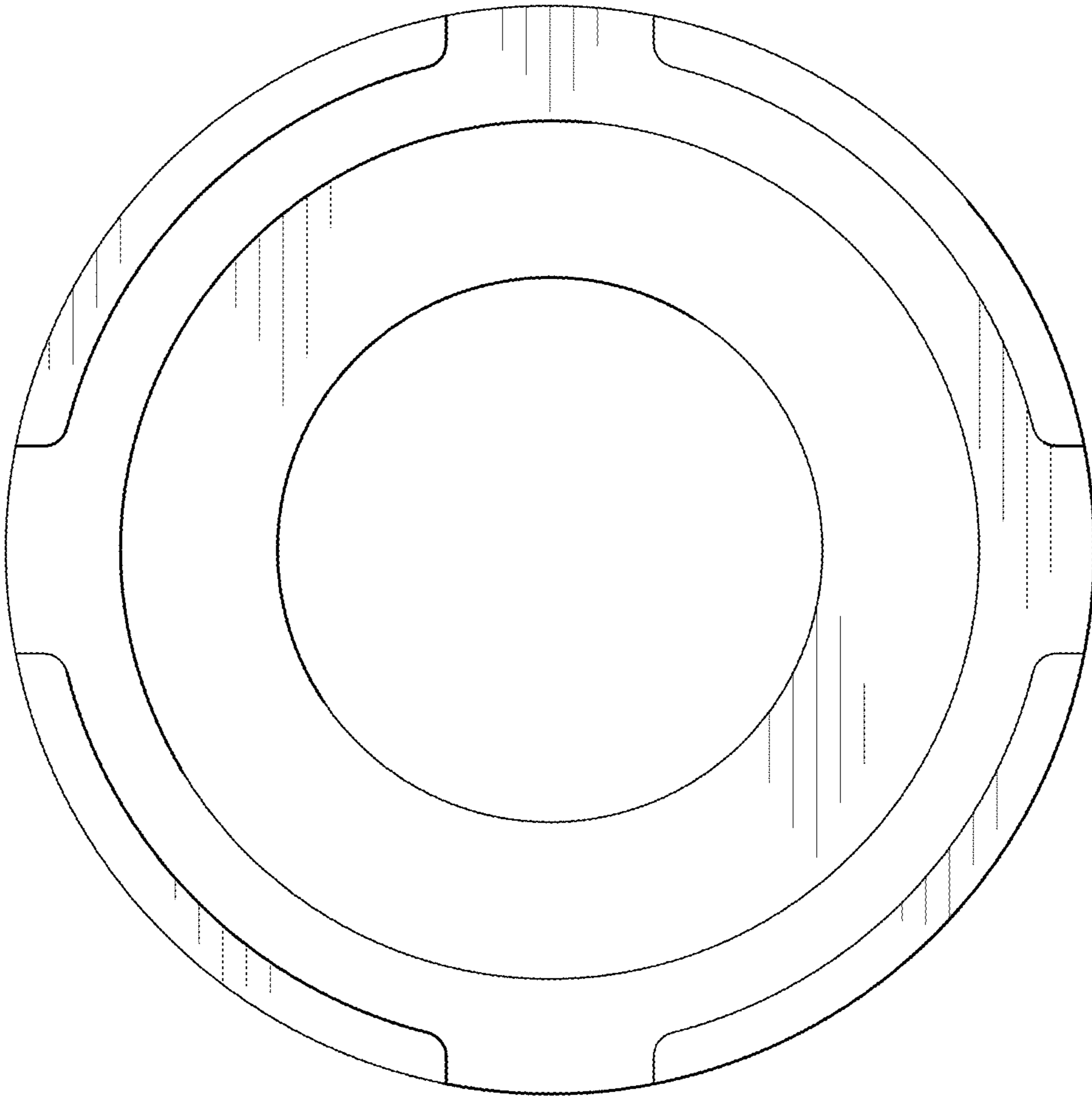


Fig-6

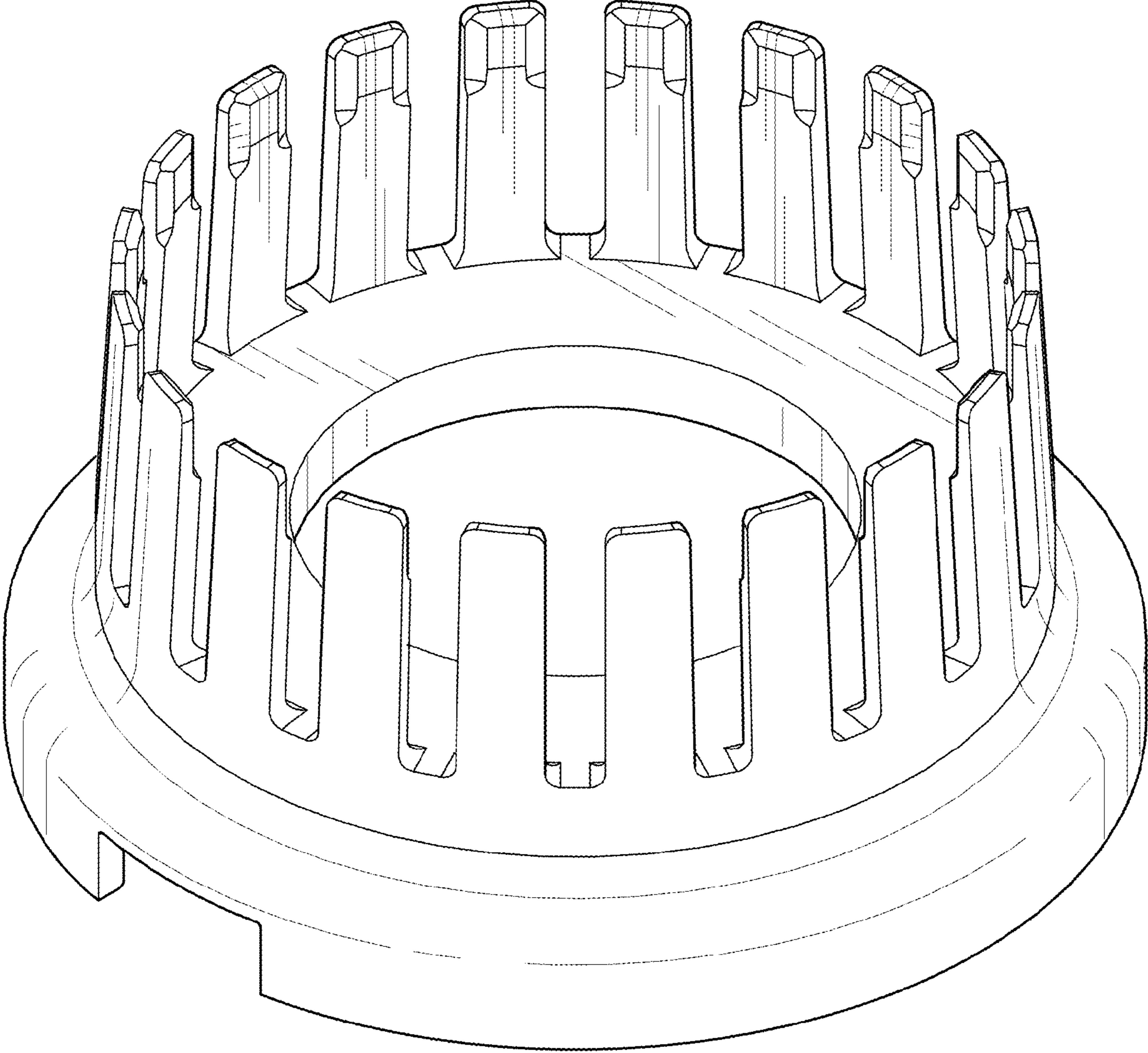


Fig-7



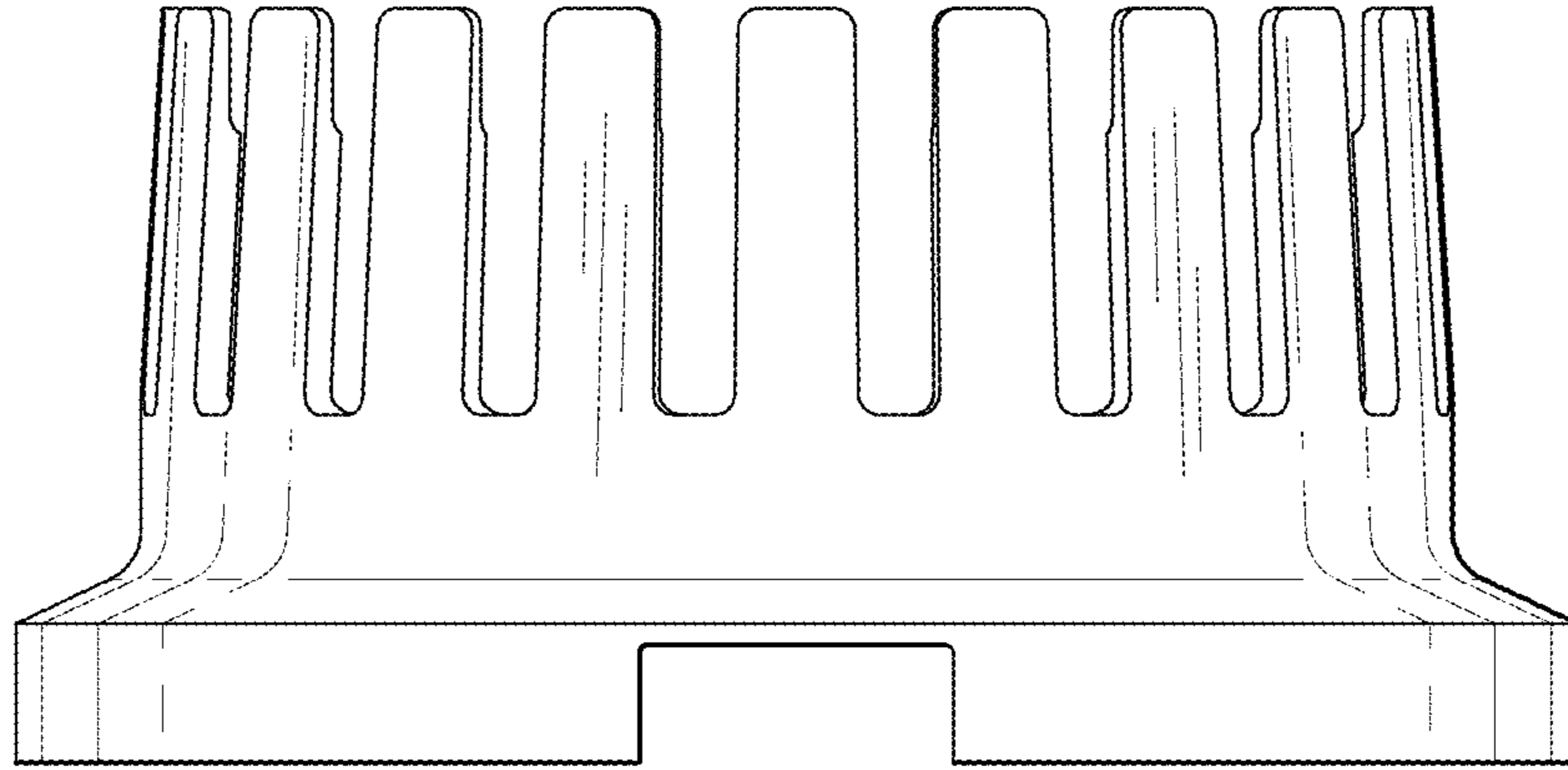


Fig-8

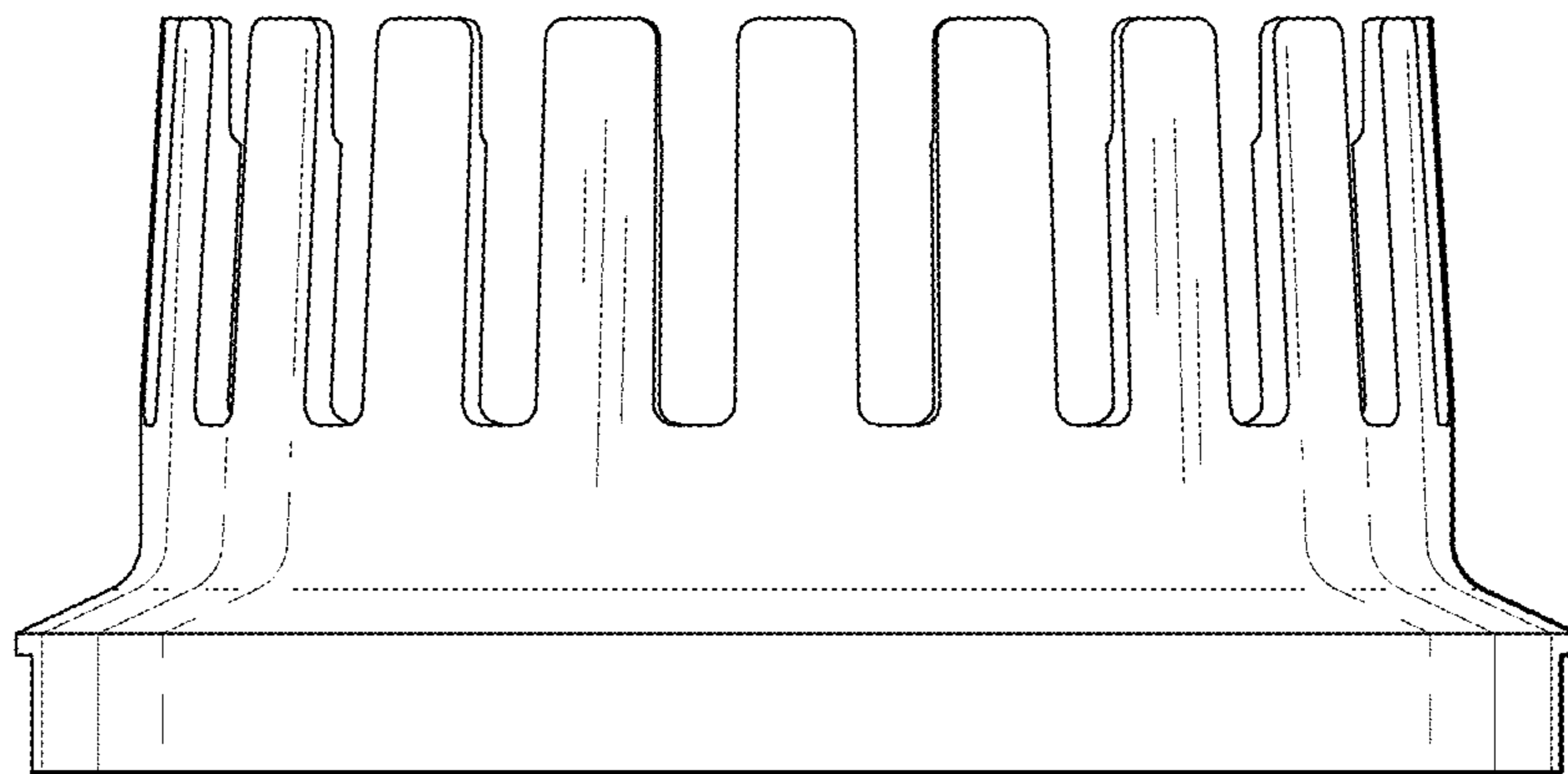


Fig-9

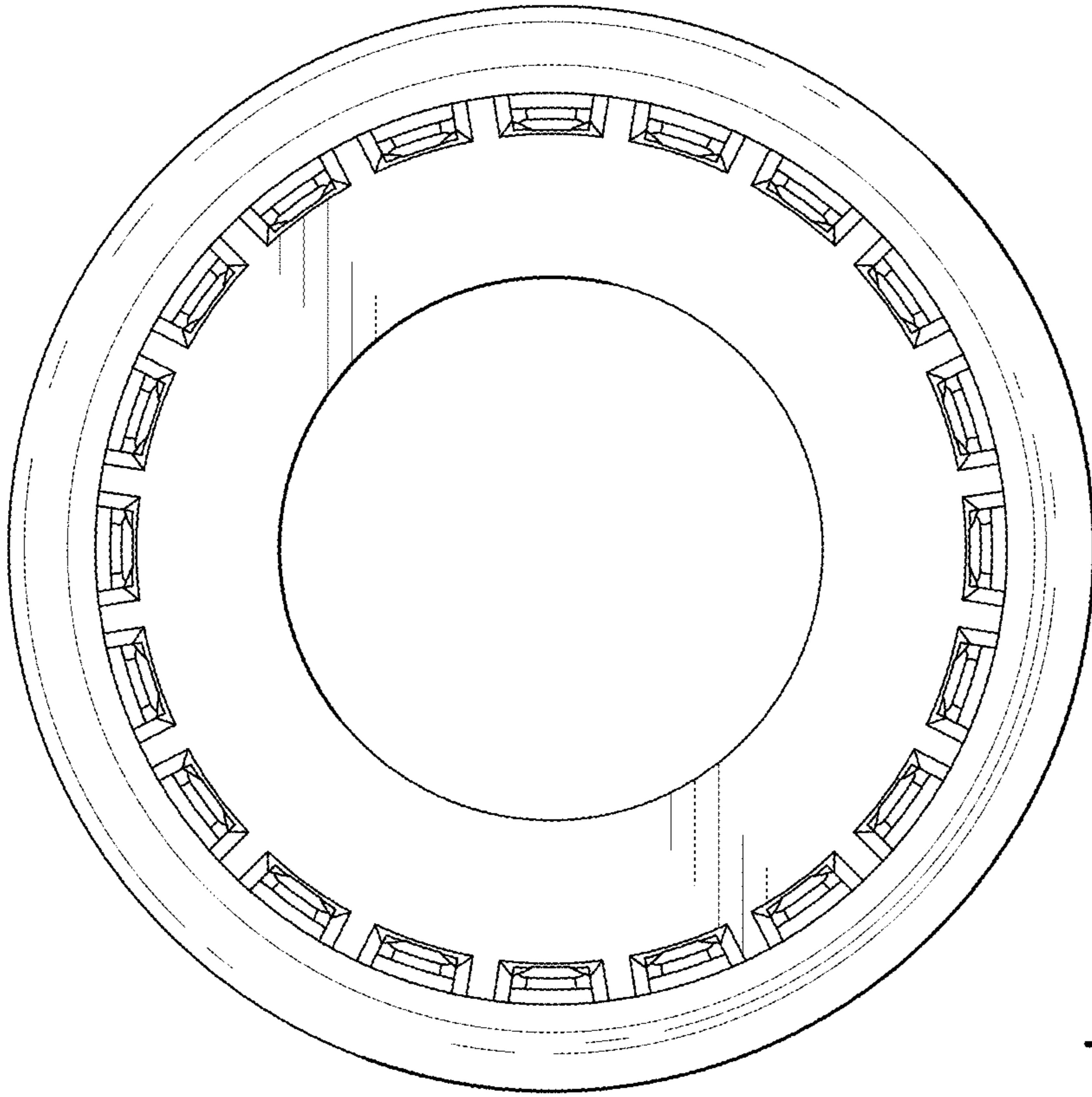


Fig-10

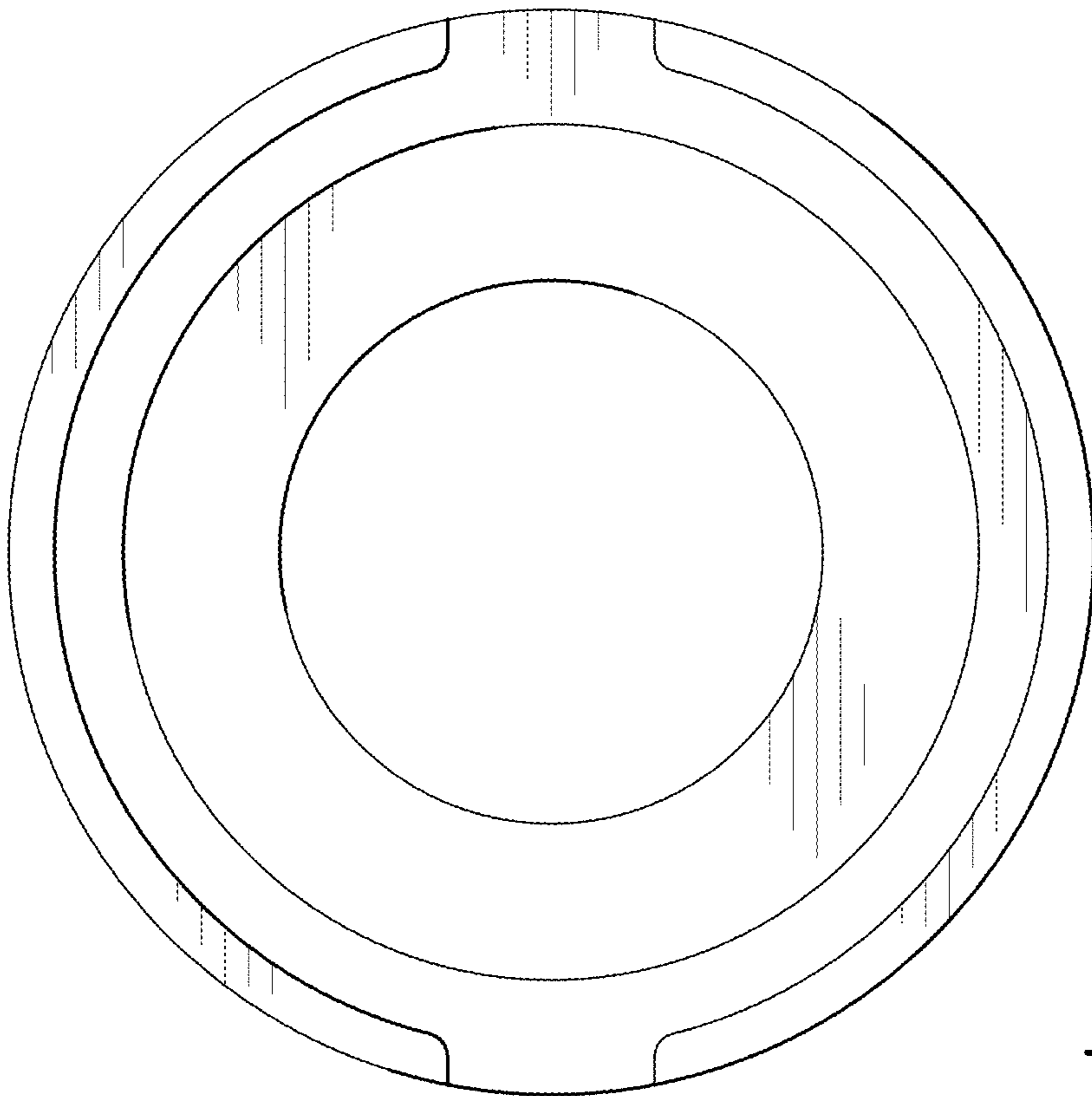


Fig-11

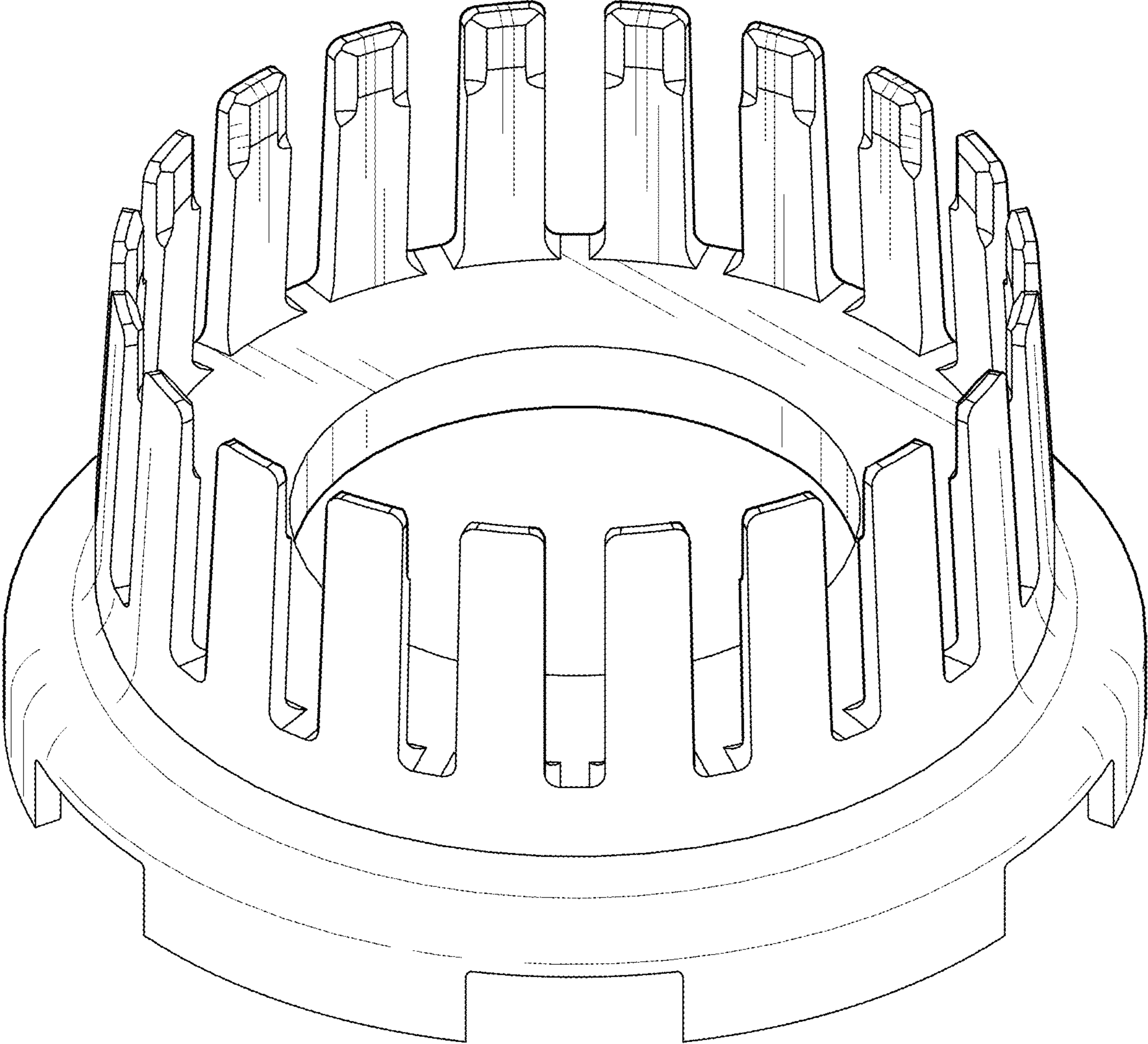


Fig-12

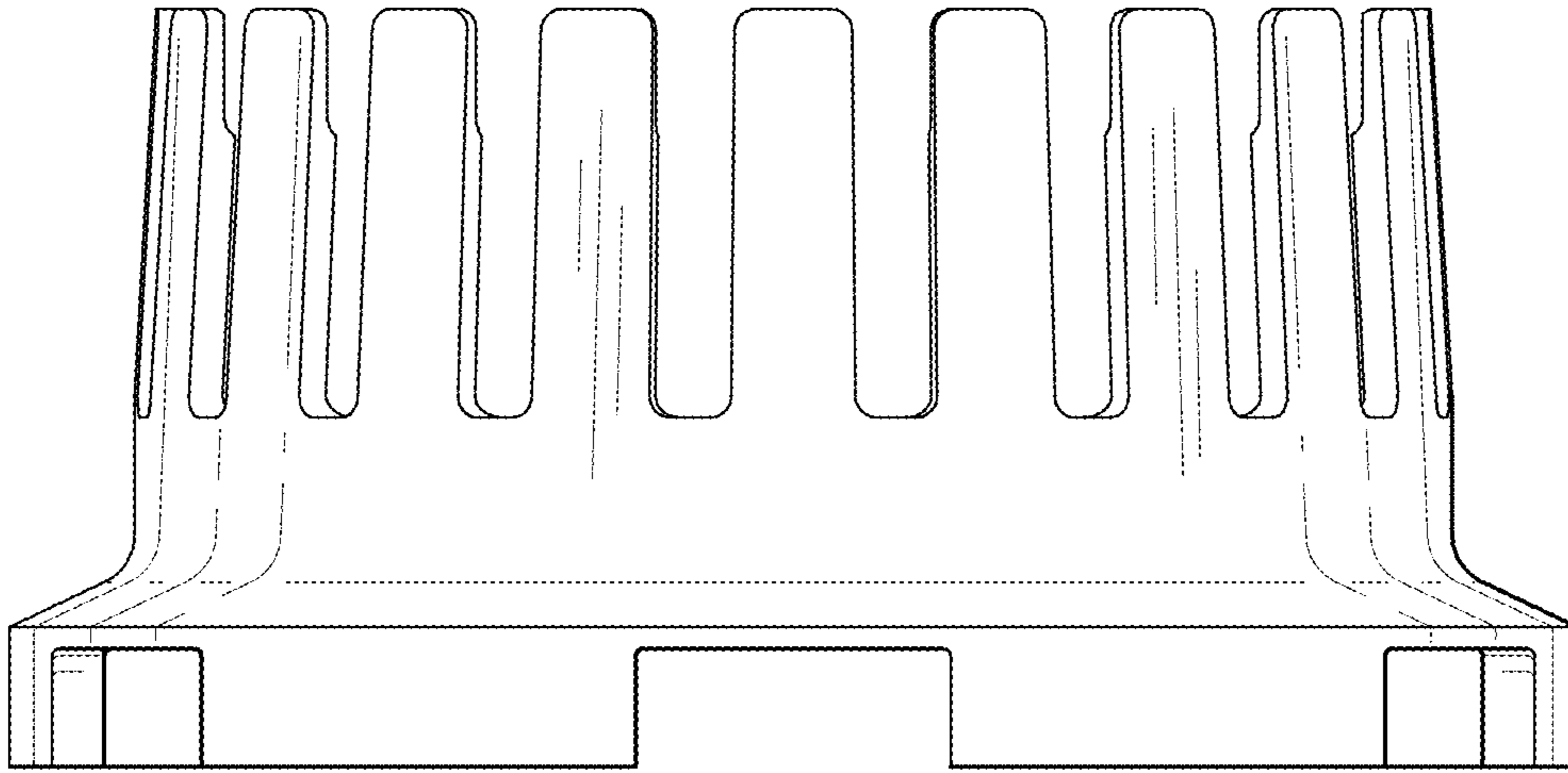


Fig-13

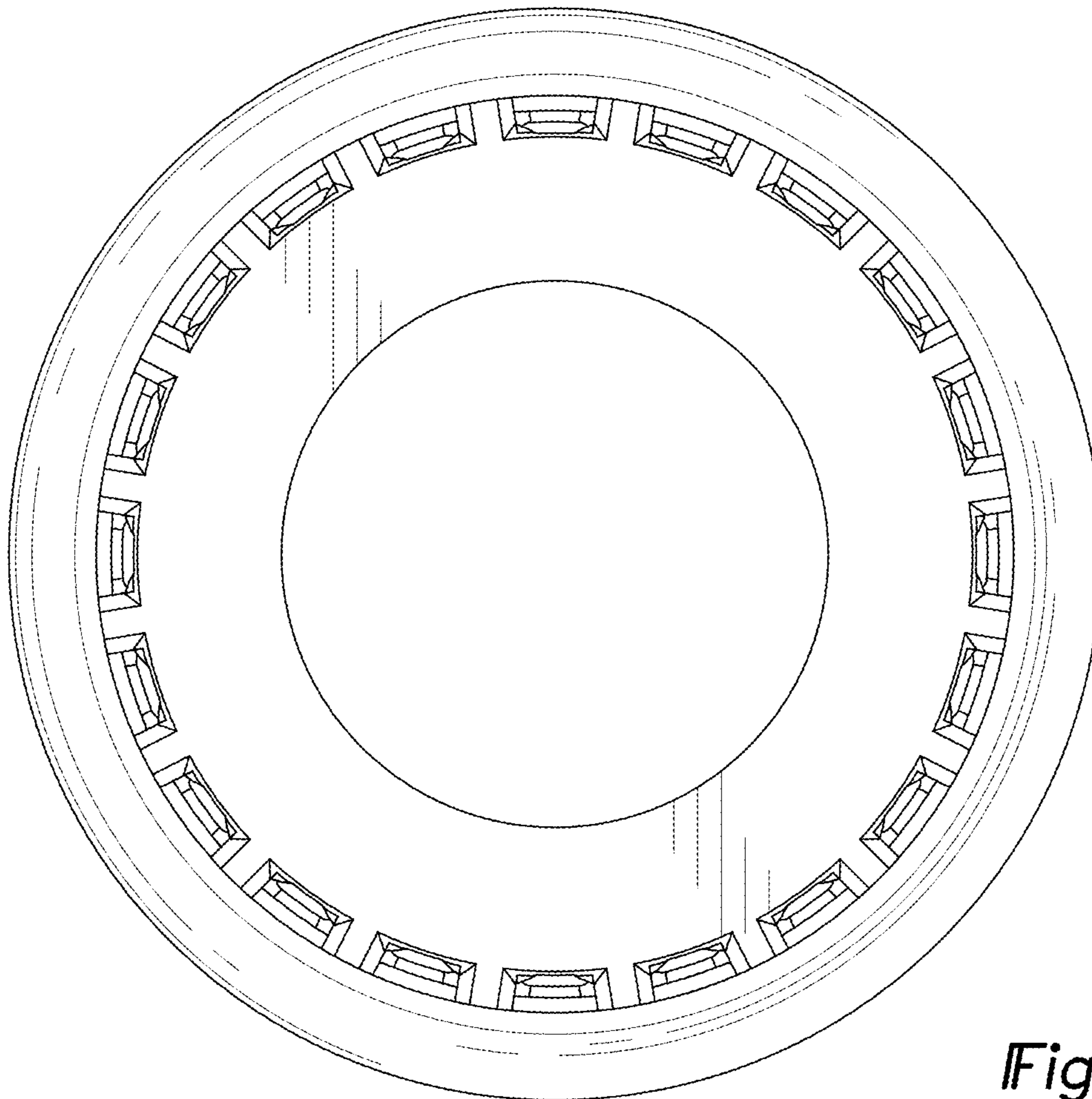


Fig-14

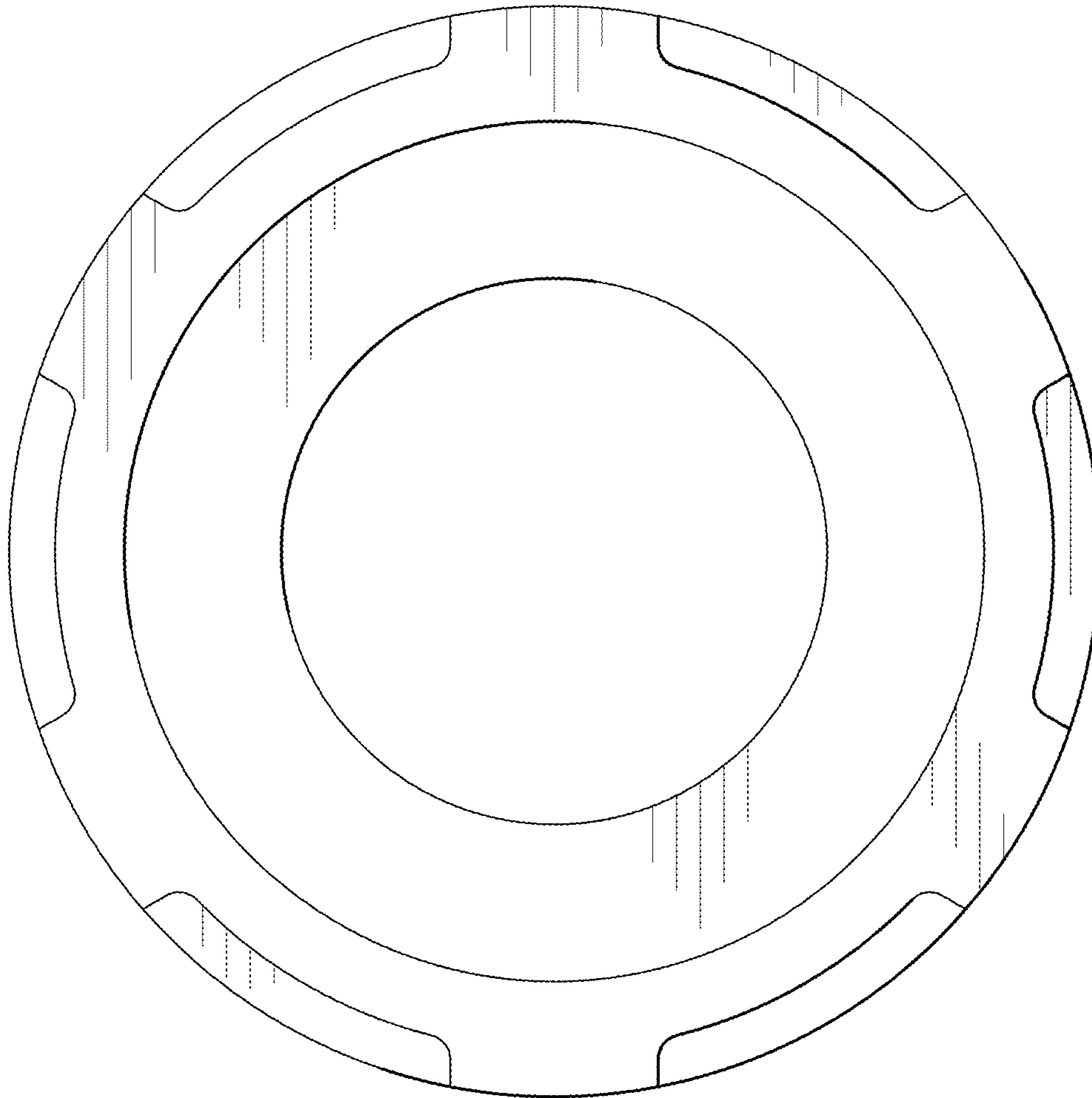


Fig-15