

US00D600218S

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

(10) **Patent No.:** **US D600,218 S**  
(45) **Date of Patent:** **\*\* Sep. 15, 2009**

(54) **HEAT SINK**

2006/0126303 A1\* 6/2006 Wang et al. .... 361/704

(75) Inventors: **Takaya Otsuki**, Kyoto (JP); **Takamasa Yamashita**, Kyoto (JP); **Akira Hirakawa**, Kyoto (JP)

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(73) Assignee: **Nidec Corporation**, Kyoto (JP)

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

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(21) Appl. No.: **29/299,170**

Otsuki et al.; "Heat Sink, Heat Sink Fan, and Method for Manufacturing the Same"; U.S. Appl. No. 11/961,050, filed Dec. 20, 2007.

(22) Filed: **Dec. 20, 2007**

(30) **Foreign Application Priority Data**

Jun. 20, 2007	(JP)	.....	2007-016489
Jul. 23, 2007	(JP)	.....	2007-019935

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*Primary Examiner*—Selina Sikder

(74) *Attorney, Agent, or Firm*—Keating & Bennett, LLP

(51) **LOC (9) Cl.** ..... **13-03**

(52) **U.S. Cl.** ..... **D13/179**

(58) **Field of Classification Search** ..... D13/179;  
165/80.3, 104.33, 151, 122, 185; 257/706,  
257/707, 718-722; 361/687, 695, 697, 700,  
361/702, 704, 709, 710, 711, 719

(57) **CLAIM**

See application file for complete search history.

The ornamental design for a heat sink, as shown and described.

**DESCRIPTION**

(56) **References Cited**

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FIG. 1 is a front elevation view of a first embodiment of a heat sink according to our new design;

FIG. 2 is a rear elevation view thereof;

FIG. 3 is a right side elevation view thereof;

FIG. 4 is a left side elevation view thereof;

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

FIG. 7 is a perspective view thereof;

FIG. 8 is another perspective view thereof;

FIG. 9 is another front elevation view thereof;

FIG. 10 is a sectional view along A—A' in FIG. 9;

FIG. 11 is a front elevation view of a second embodiment of a heat sink according to a modification of our new design;

FIG. 12 is a rear elevation view thereof;

FIG. 13 is a right side elevation view thereof;

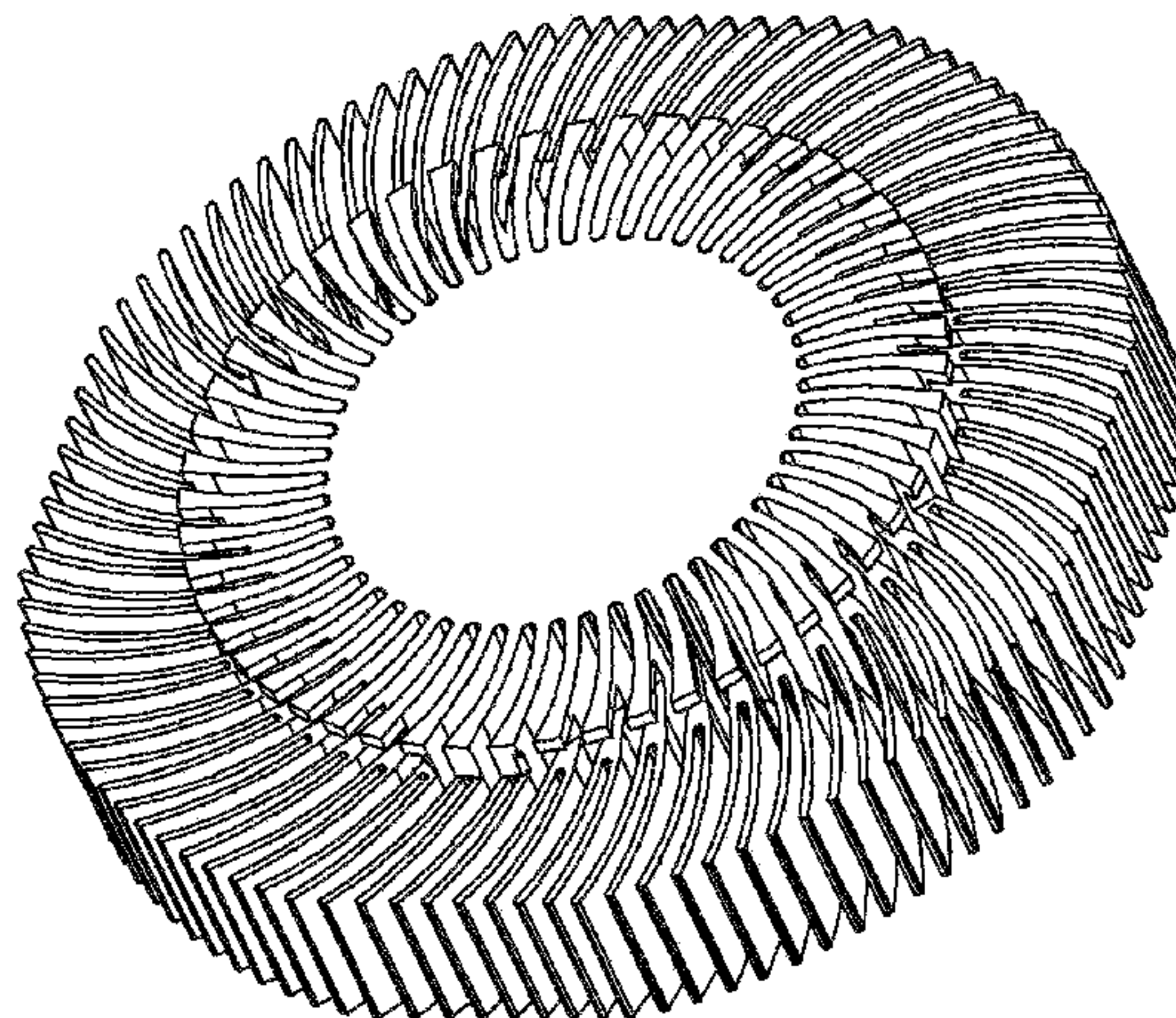
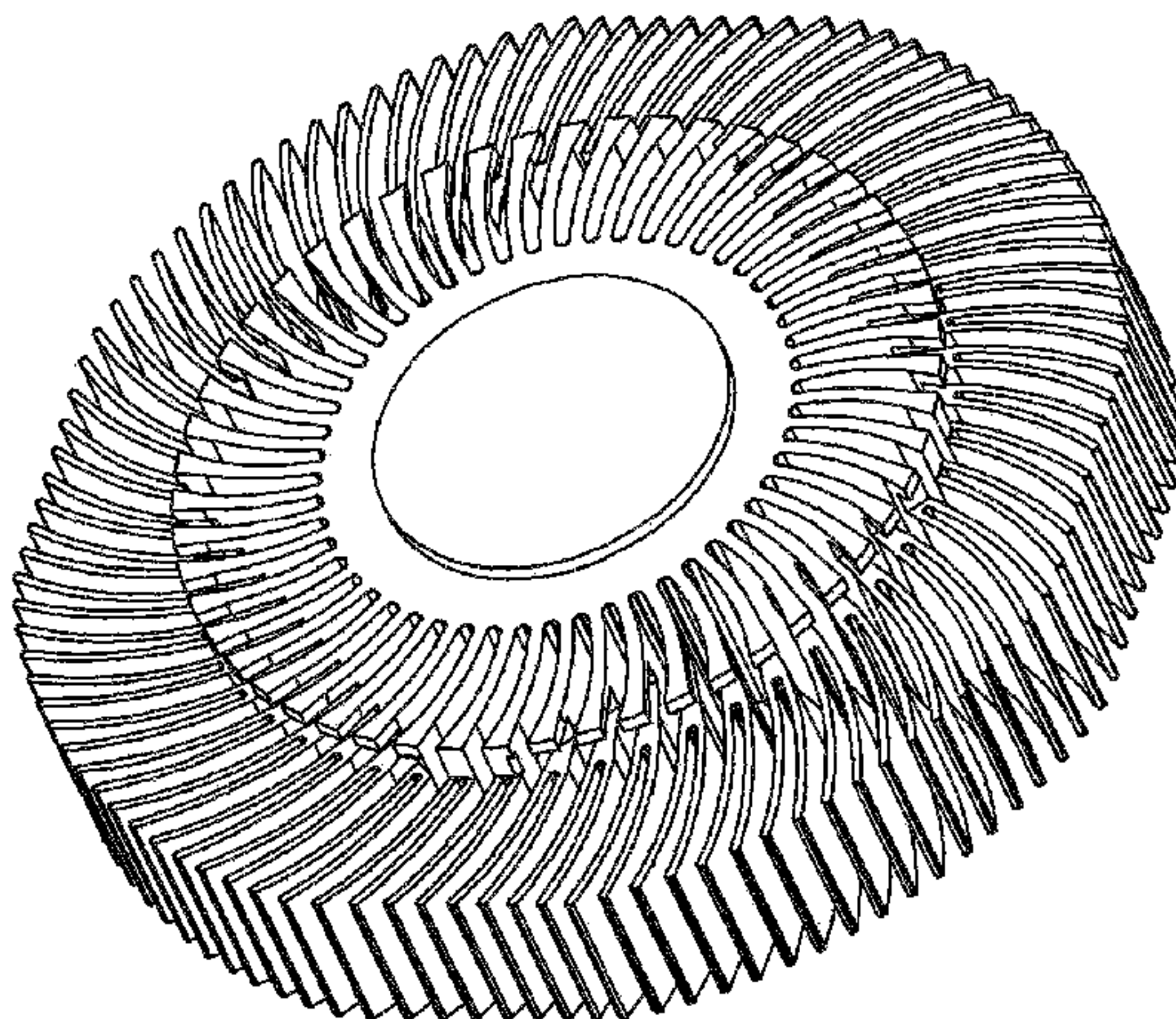


FIG. **14** is a left side elevation view thereof;

FIG. **15** is a top plan view thereof;

FIG. **16** is a bottom plan view thereof;

FIG. **17** is a perspective view thereof;

FIG. **18** is another perspective view thereof;

FIG. **19** is another front elevation view thereof;

FIG. **20** is a sectional view along A—A' in FIG. **19**;

FIG. **21** is a front elevation view of a third embodiment of a heat sink according to another modification of our new design;

FIG. **22** is a rear elevation view thereof;

FIG. **23** is a right side elevation view thereof;

FIG. **24** is a left side elevation view thereof;

FIG. **25** is a top plan view thereof;

FIG. **26** is a bottom plan view thereof;

FIG. **27** is a perspective view thereof;

FIG. **28** is another perspective view thereof;

FIG. **29** is a front elevation view of a fourth embodiment of a heat sink according to another modification of our new design;

FIG. **30** is a rear elevation view thereof;

FIG. **31** is a right side elevation view thereof;

FIG. **32** is a left side elevation view thereof;

FIG. **33** is a top plan view thereof;

FIG. **34** is a bottom plan view thereof;

FIG. **35** is a perspective view thereof; and,

FIG. **36** is another perspective view thereof.

**1 Claim, 36 Drawing Sheets**

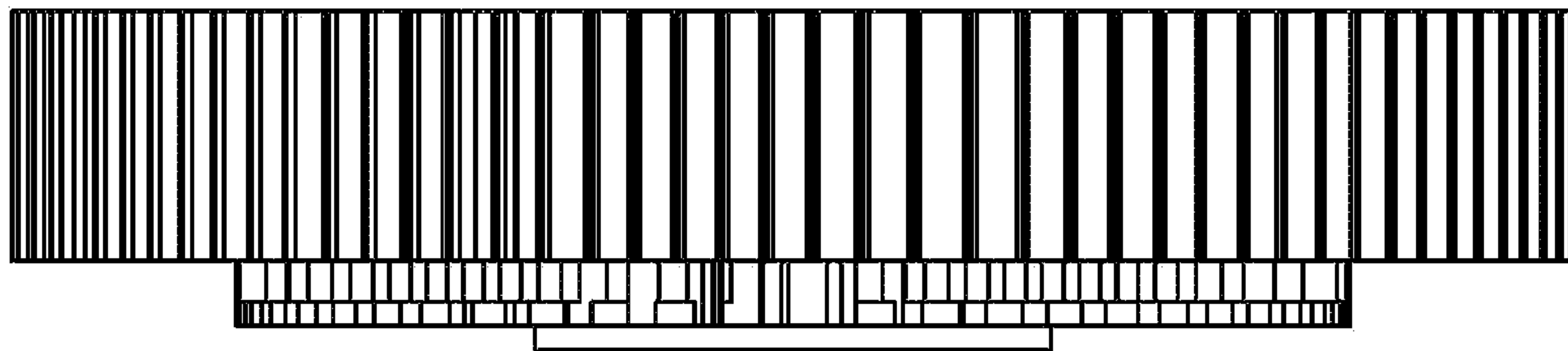


FIG. 1

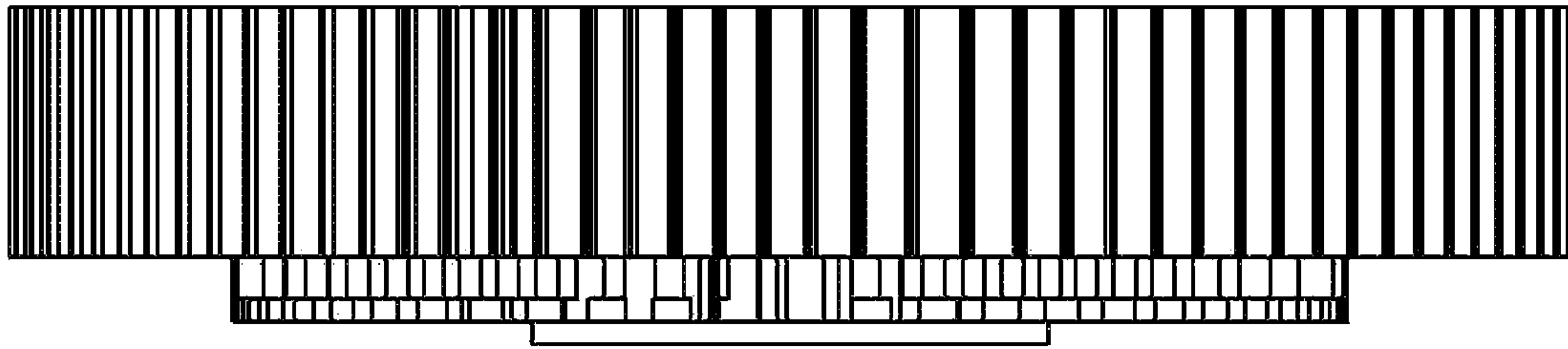


FIG. 2

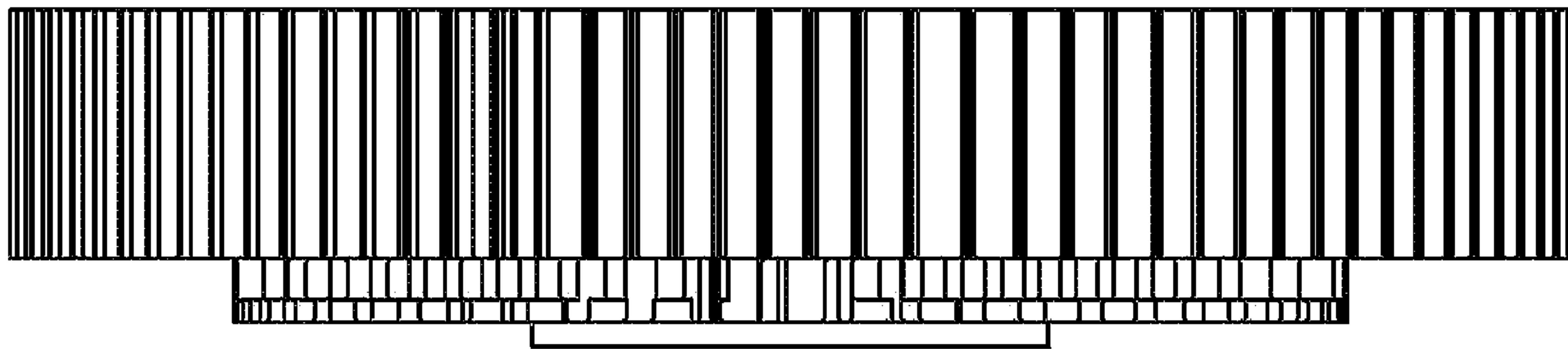


FIG. 3



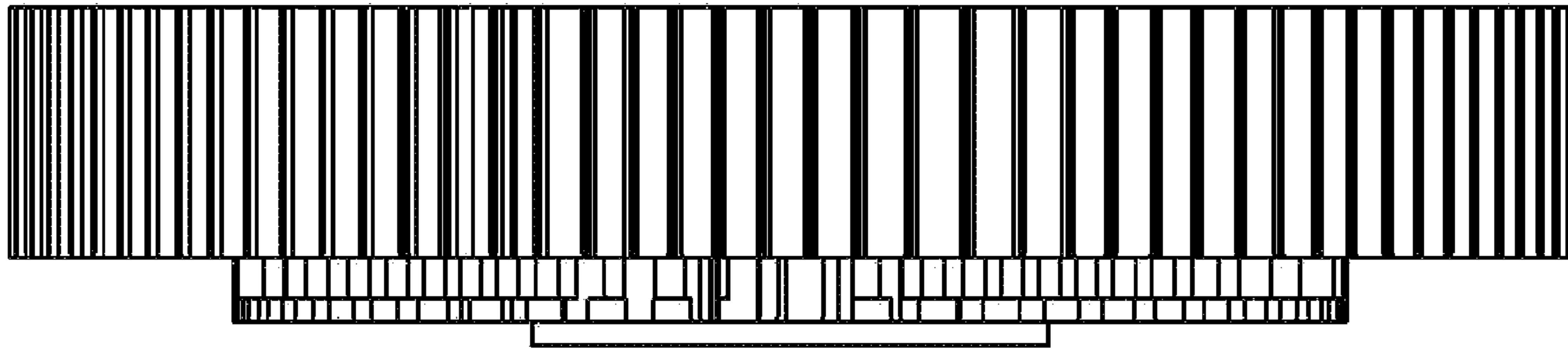


FIG. 4

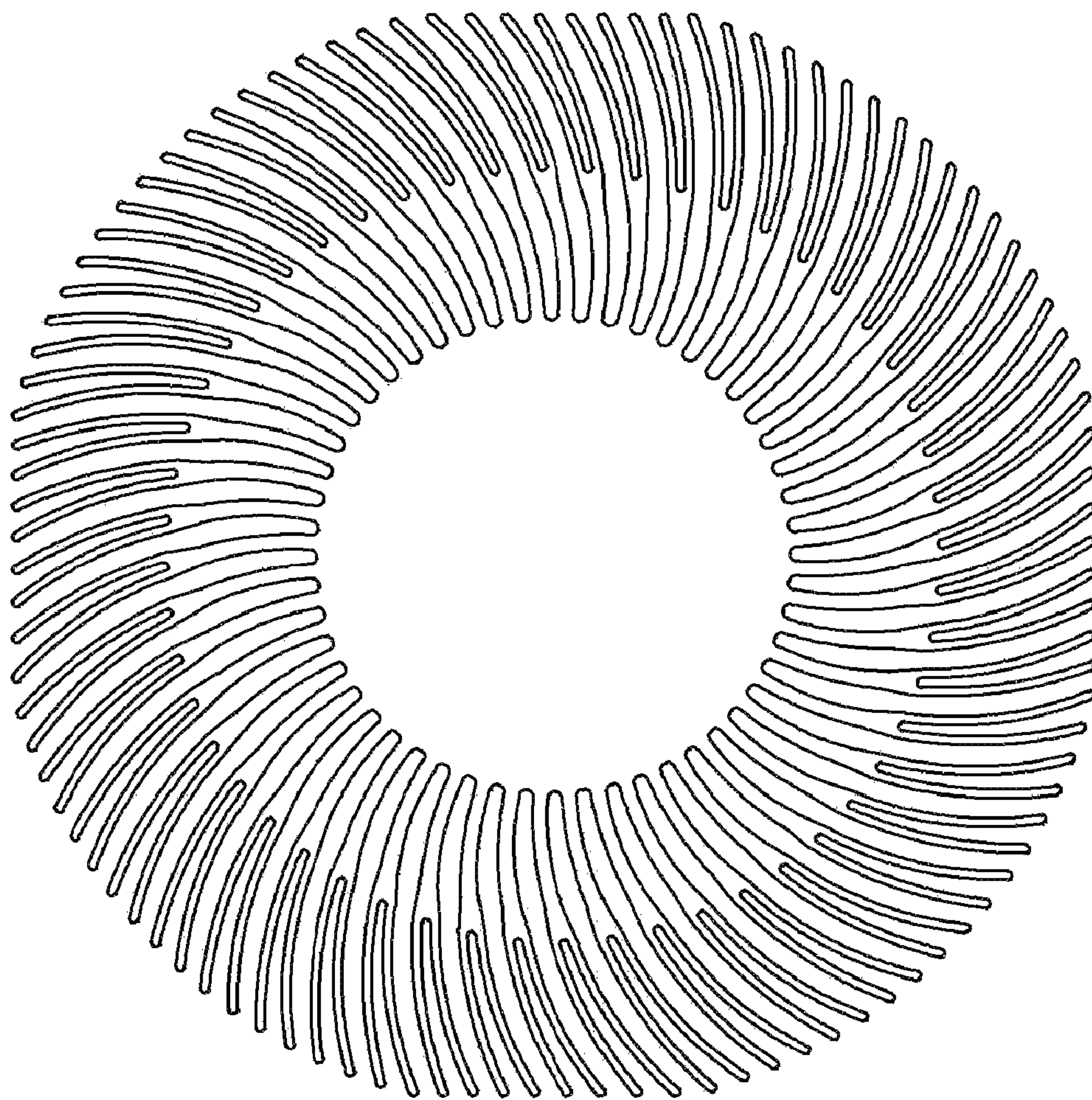


FIG. 5

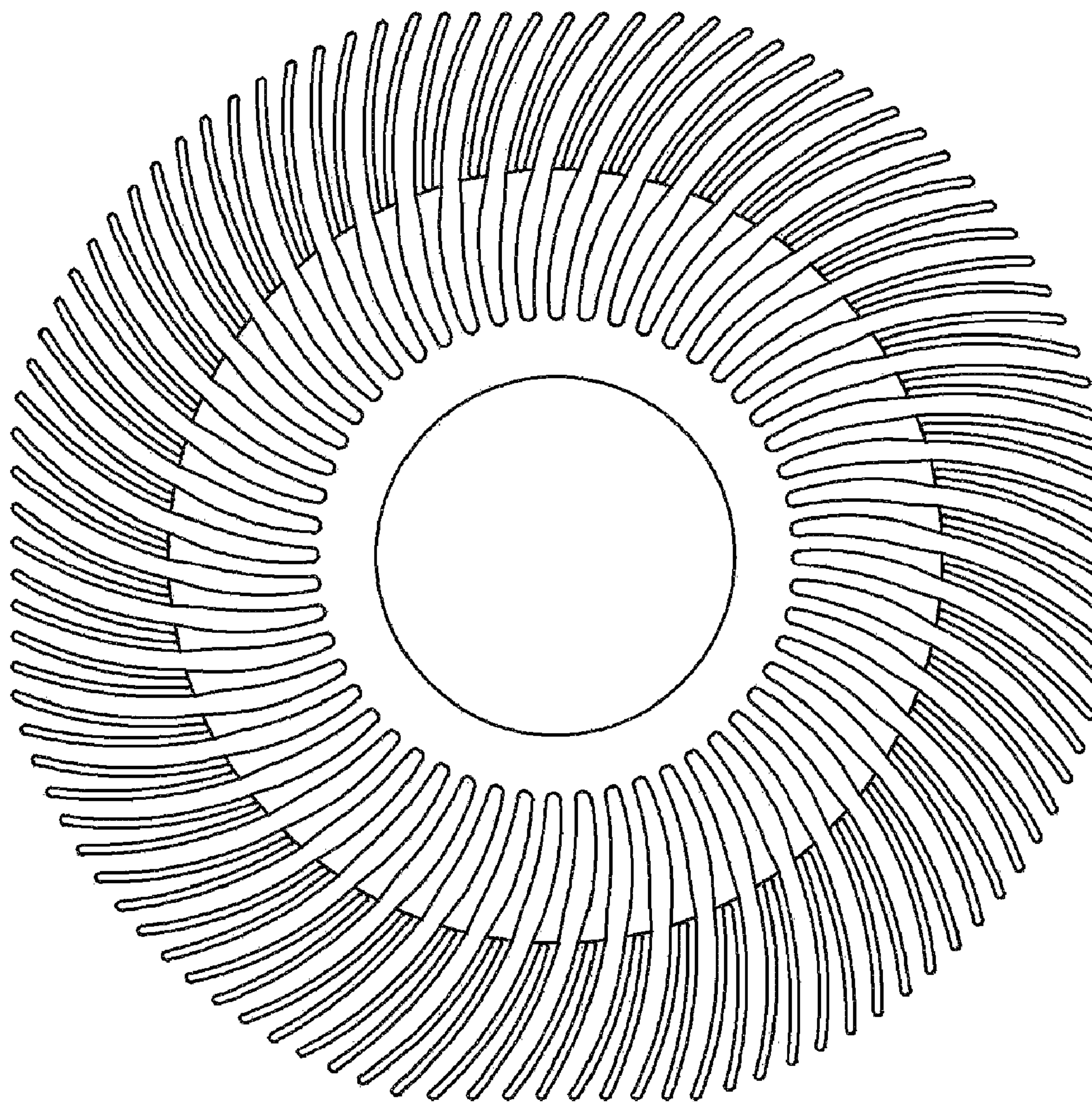


FIG. 6



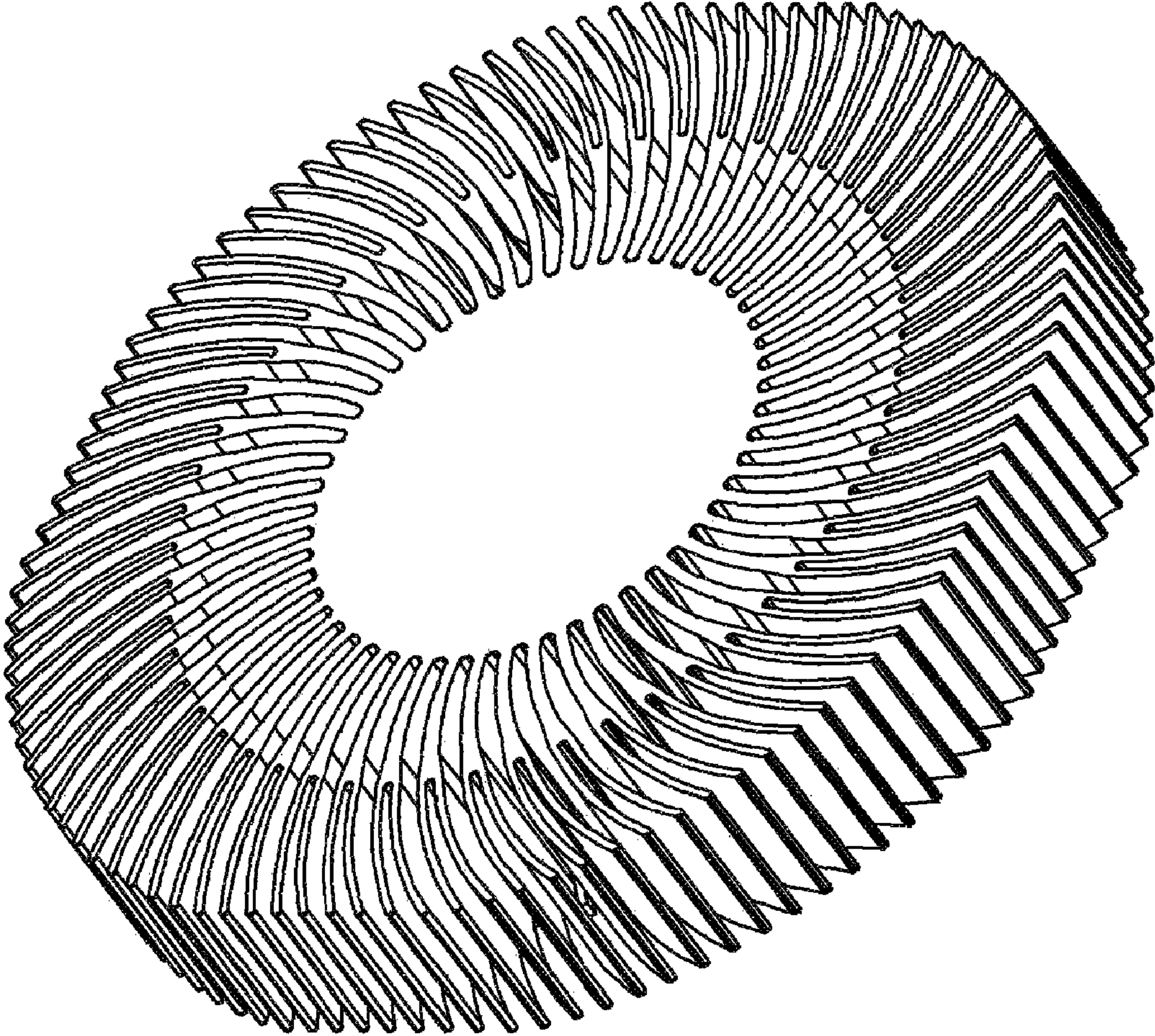


FIG. 7

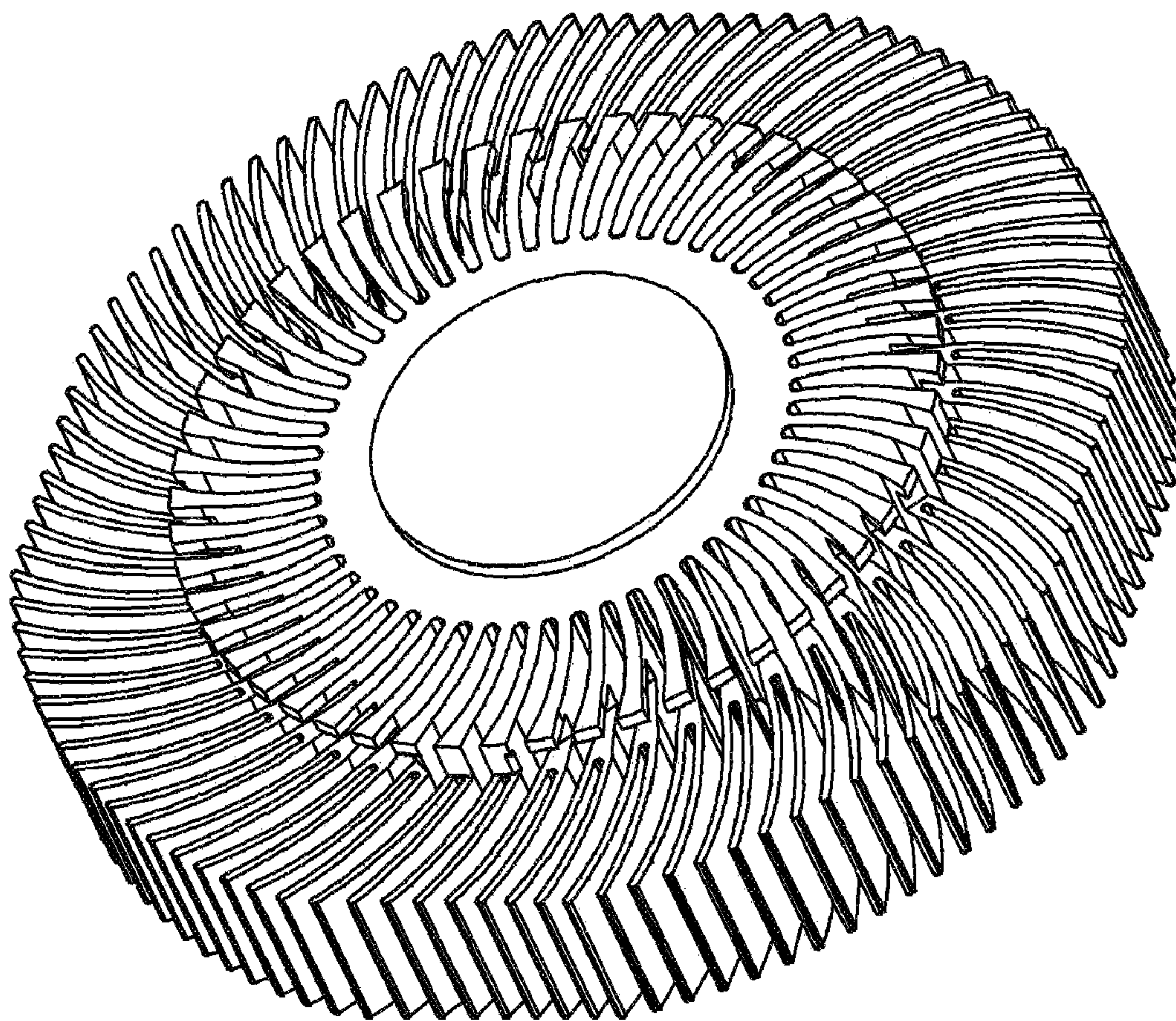


FIG. 8

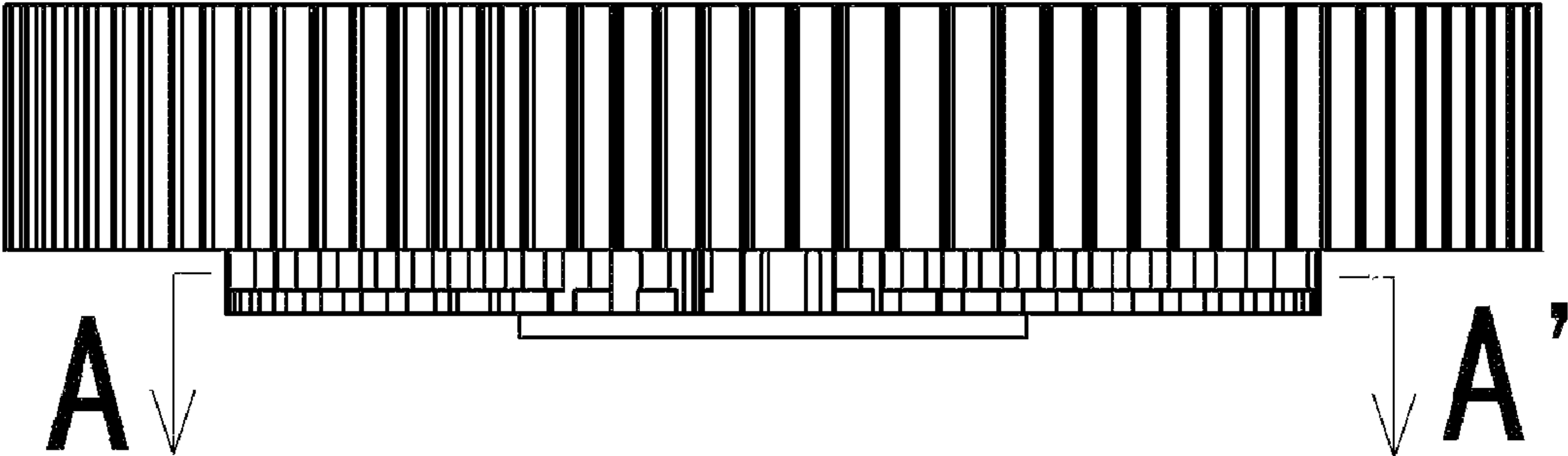


FIG. 9



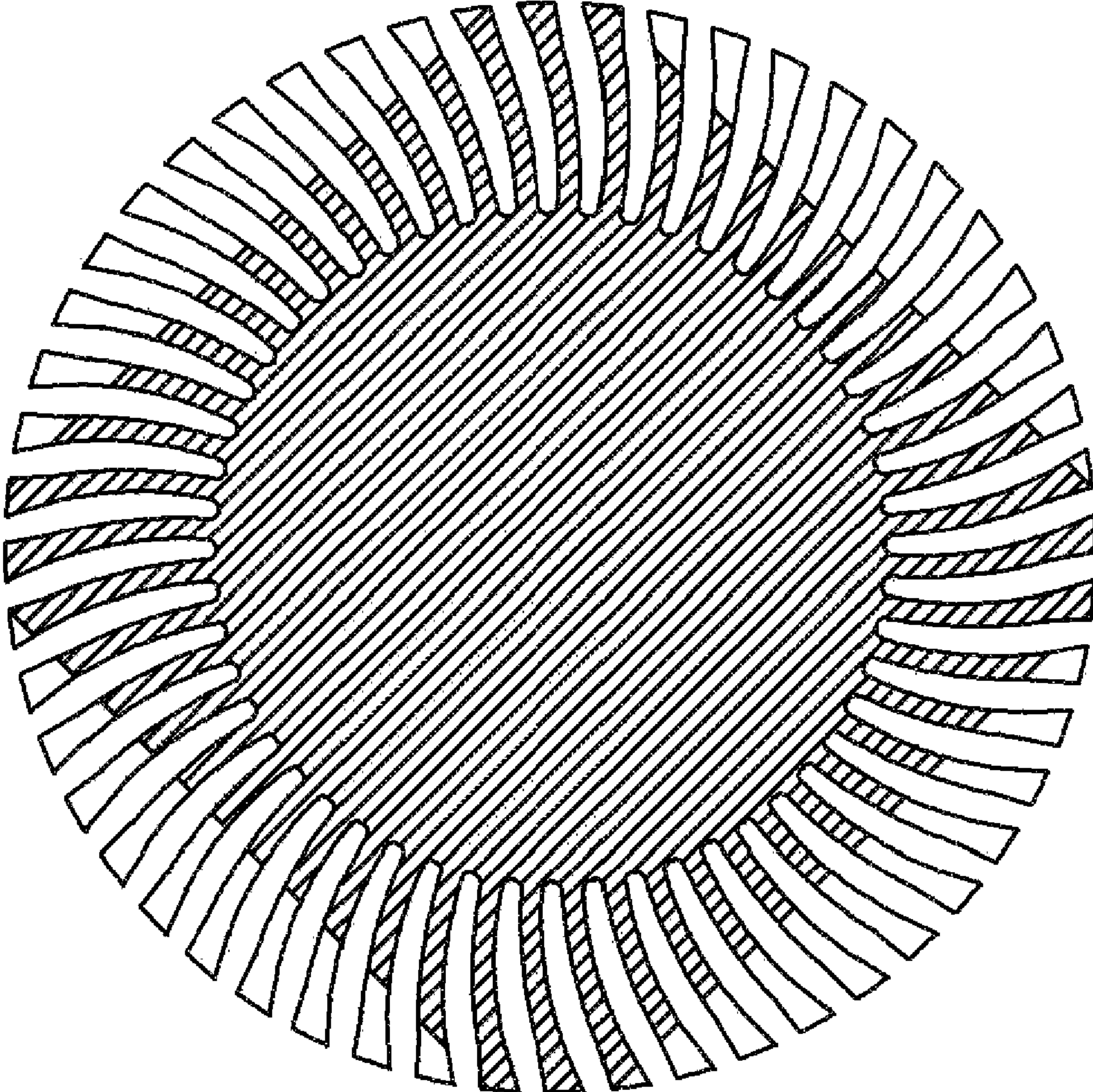


FIG. 10



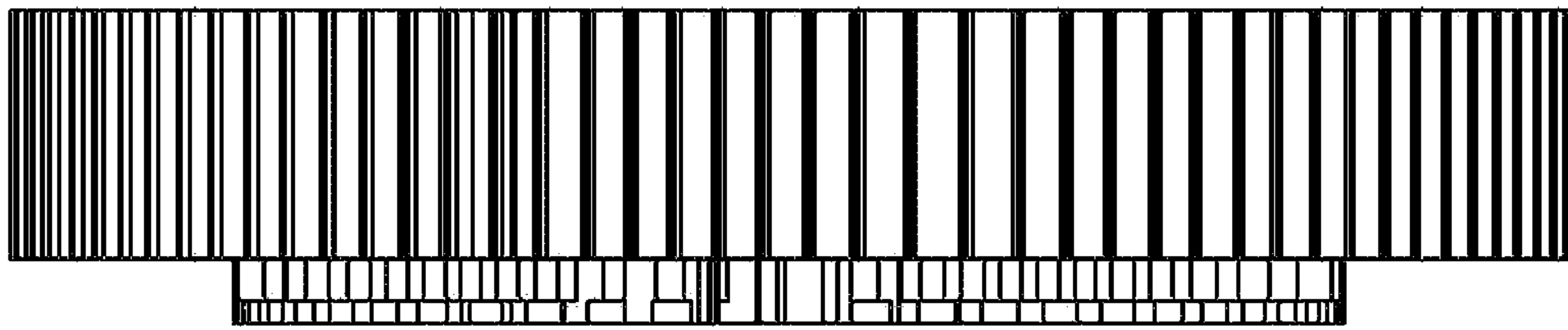


FIG. 11

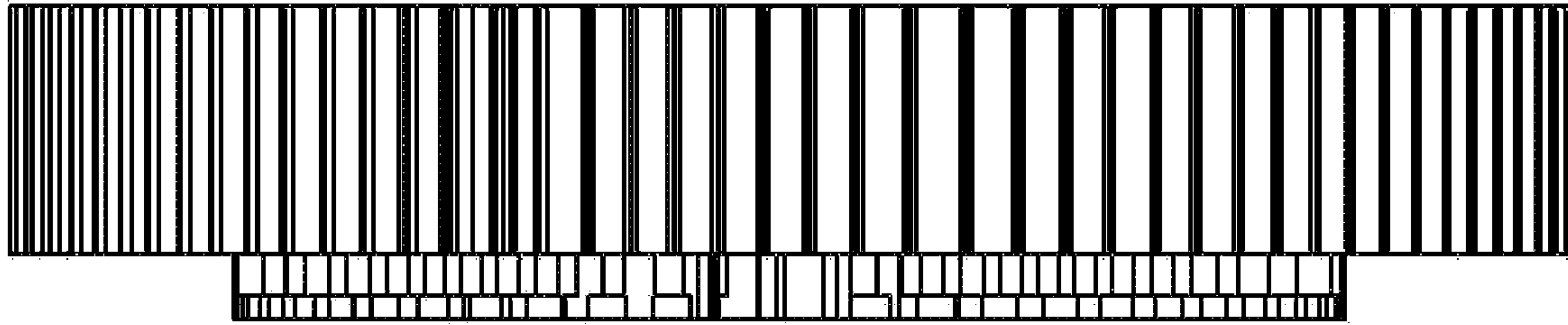


FIG. 12

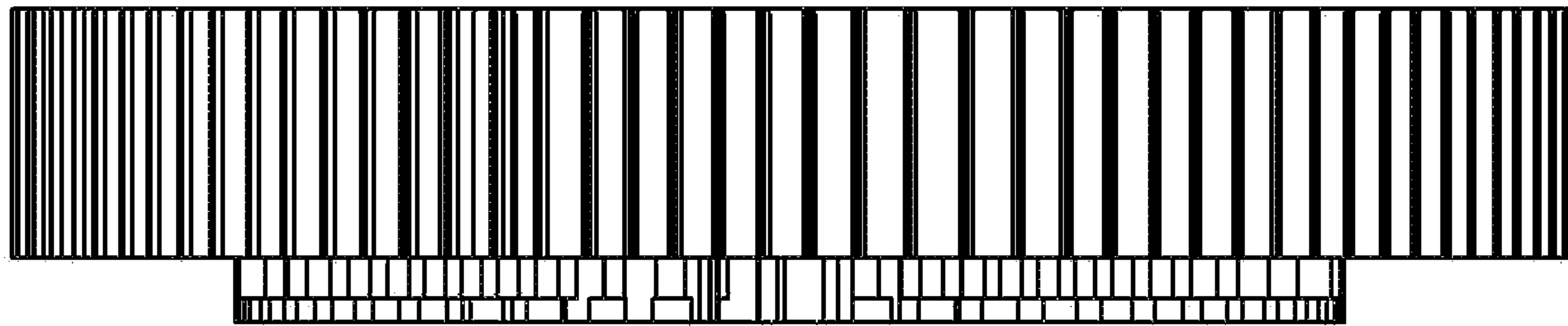


FIG. 13

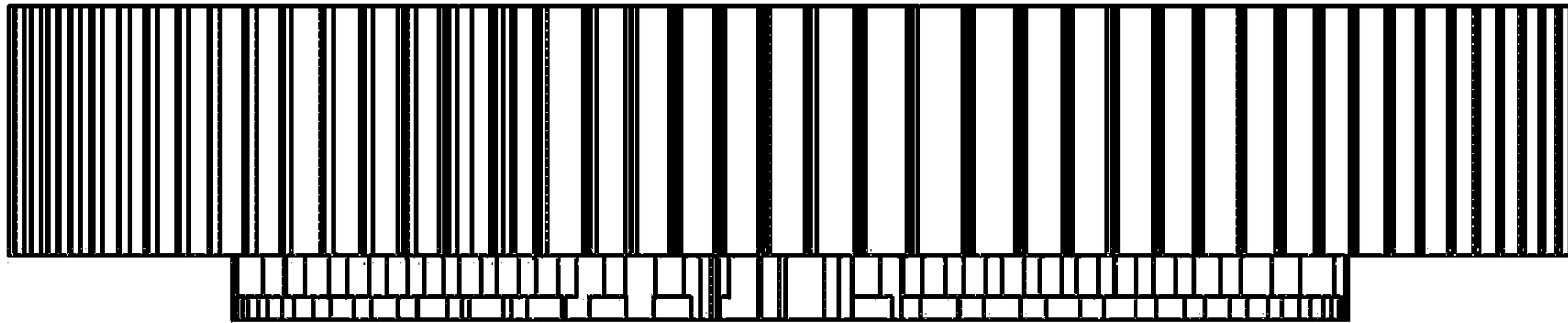


FIG. 14



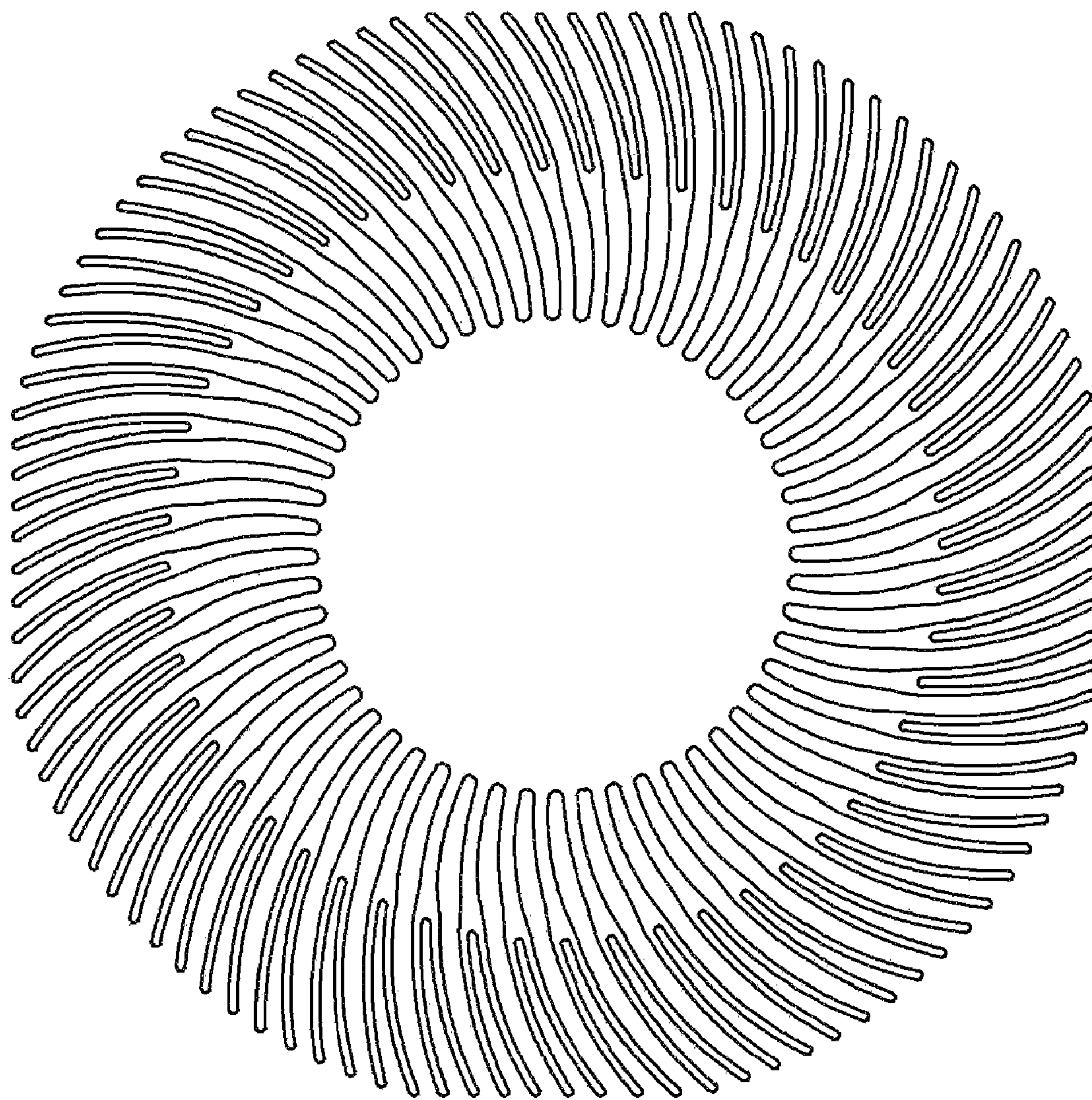


FIG. 15

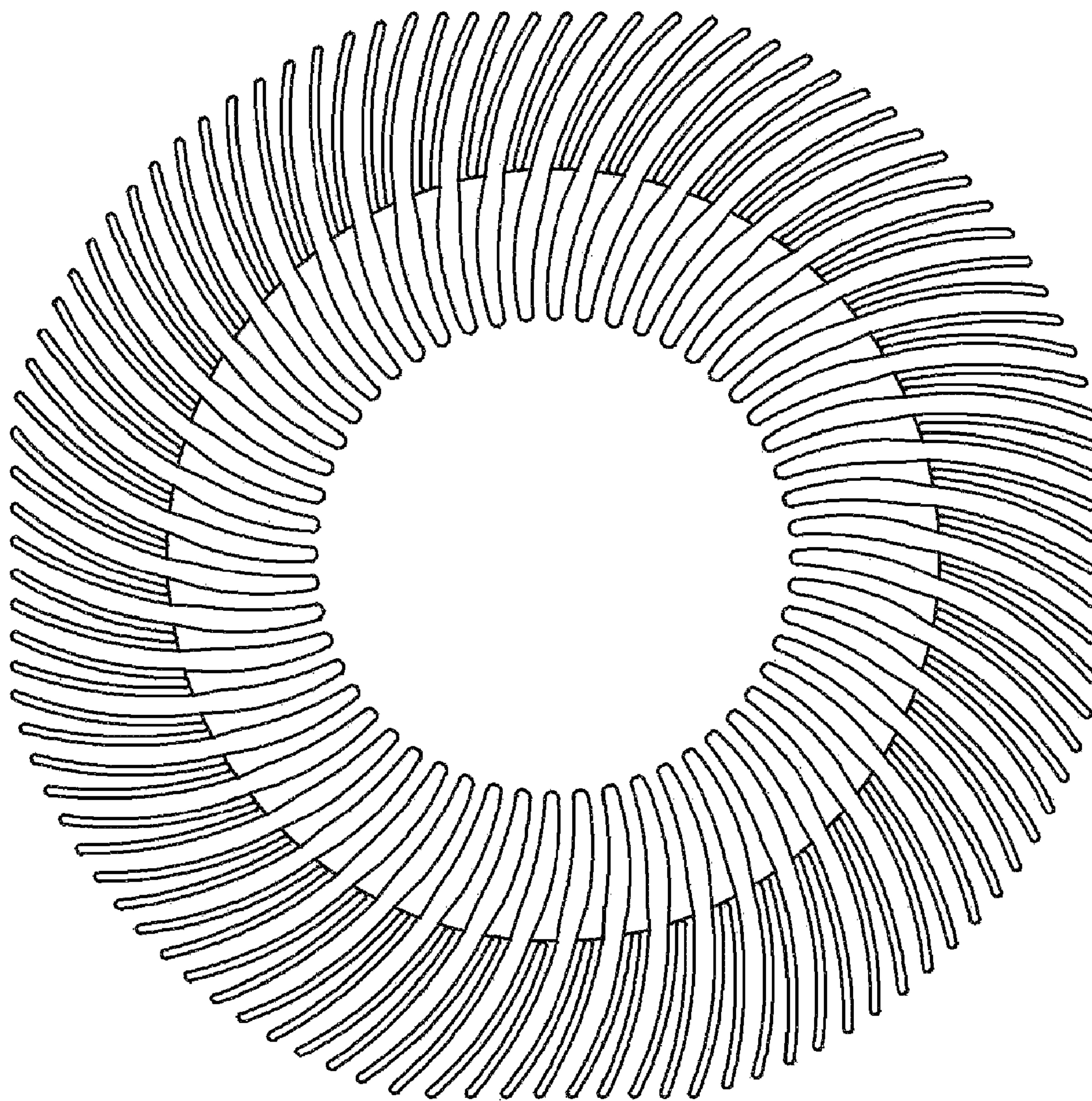


FIG. 16



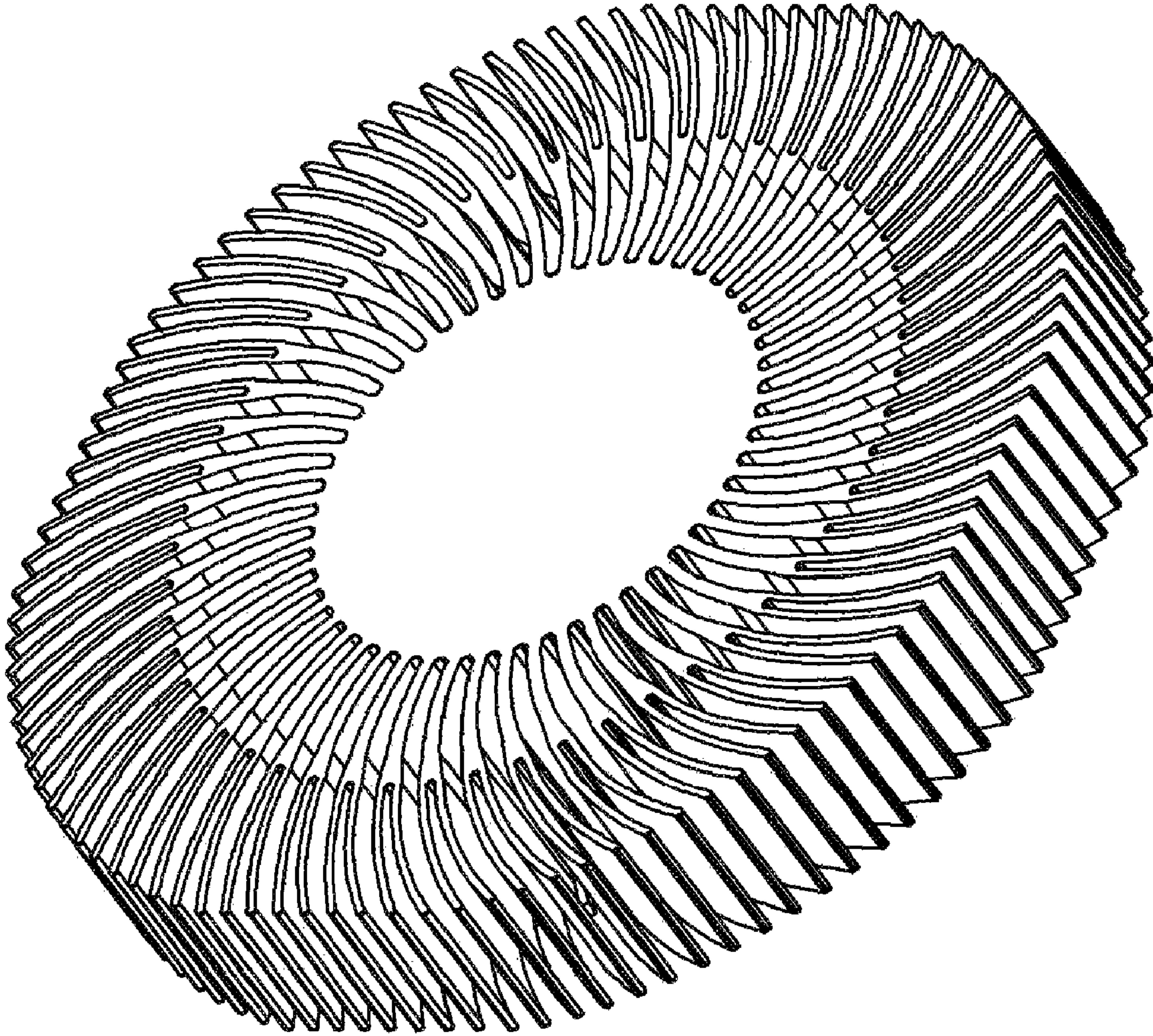


FIG. 17

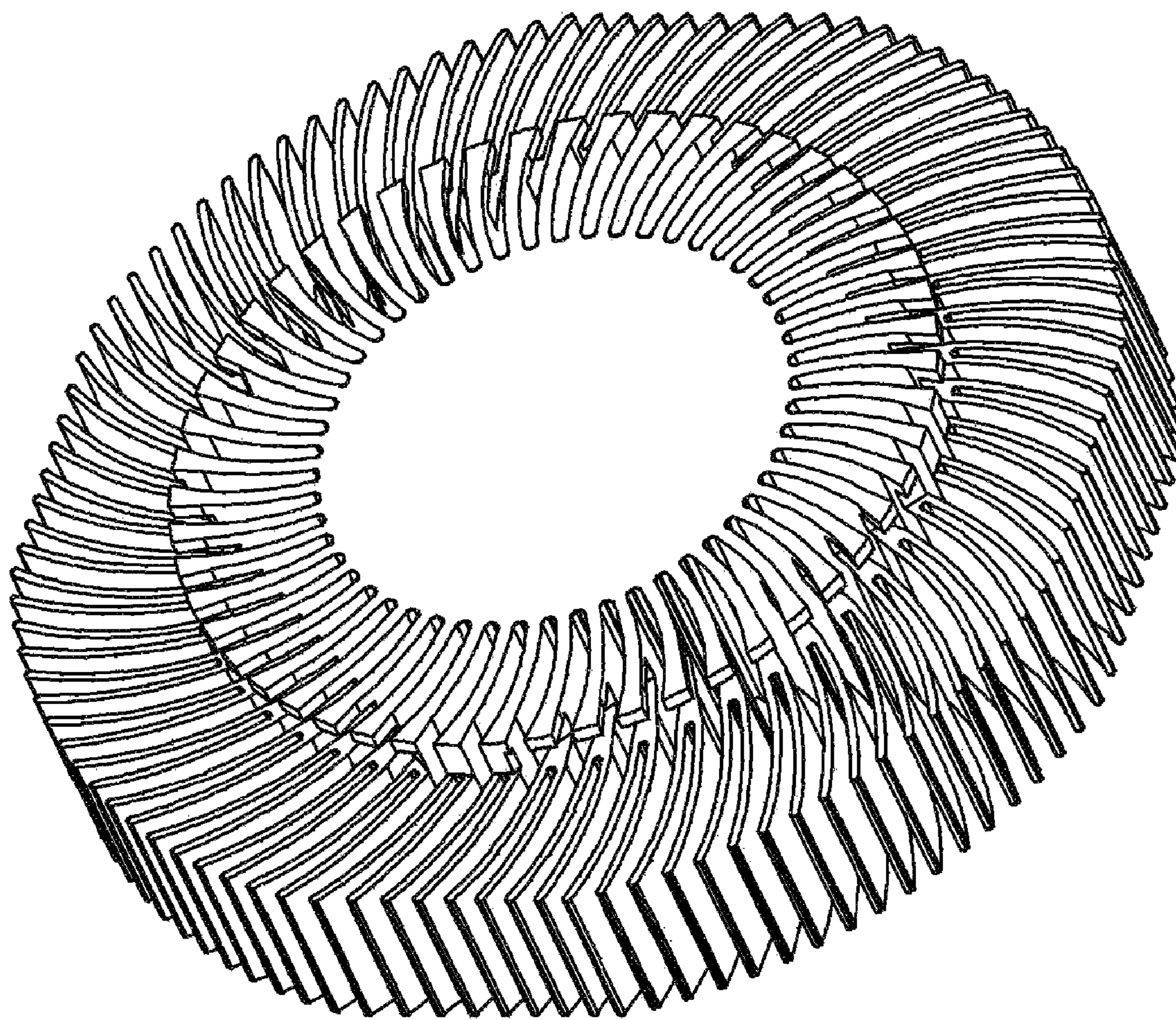


FIG. 18



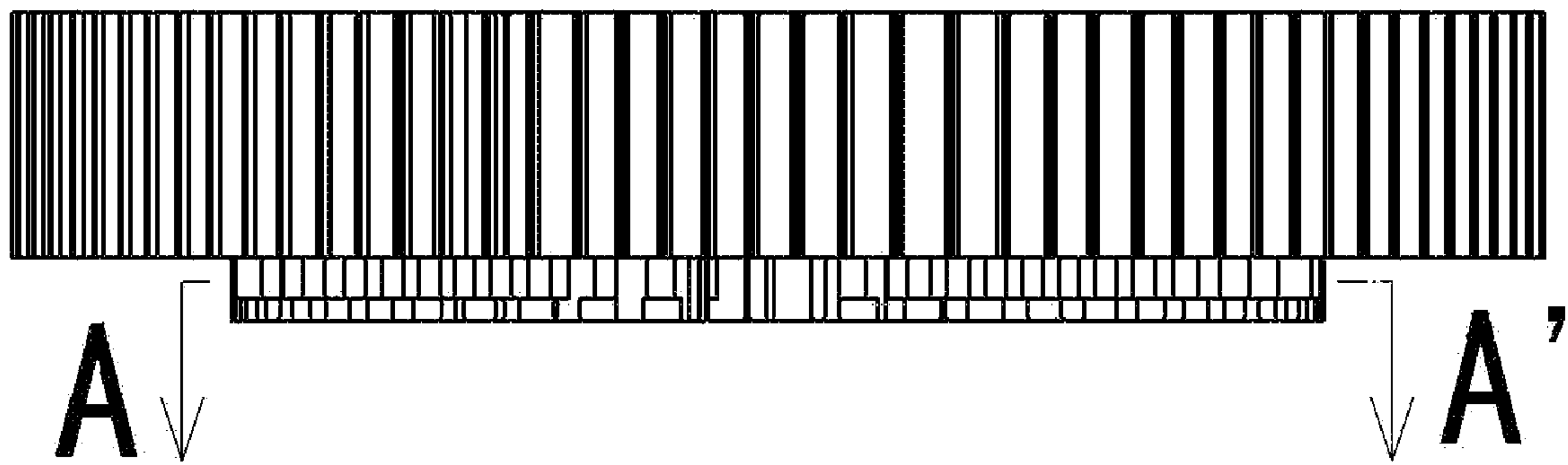


FIG. 19

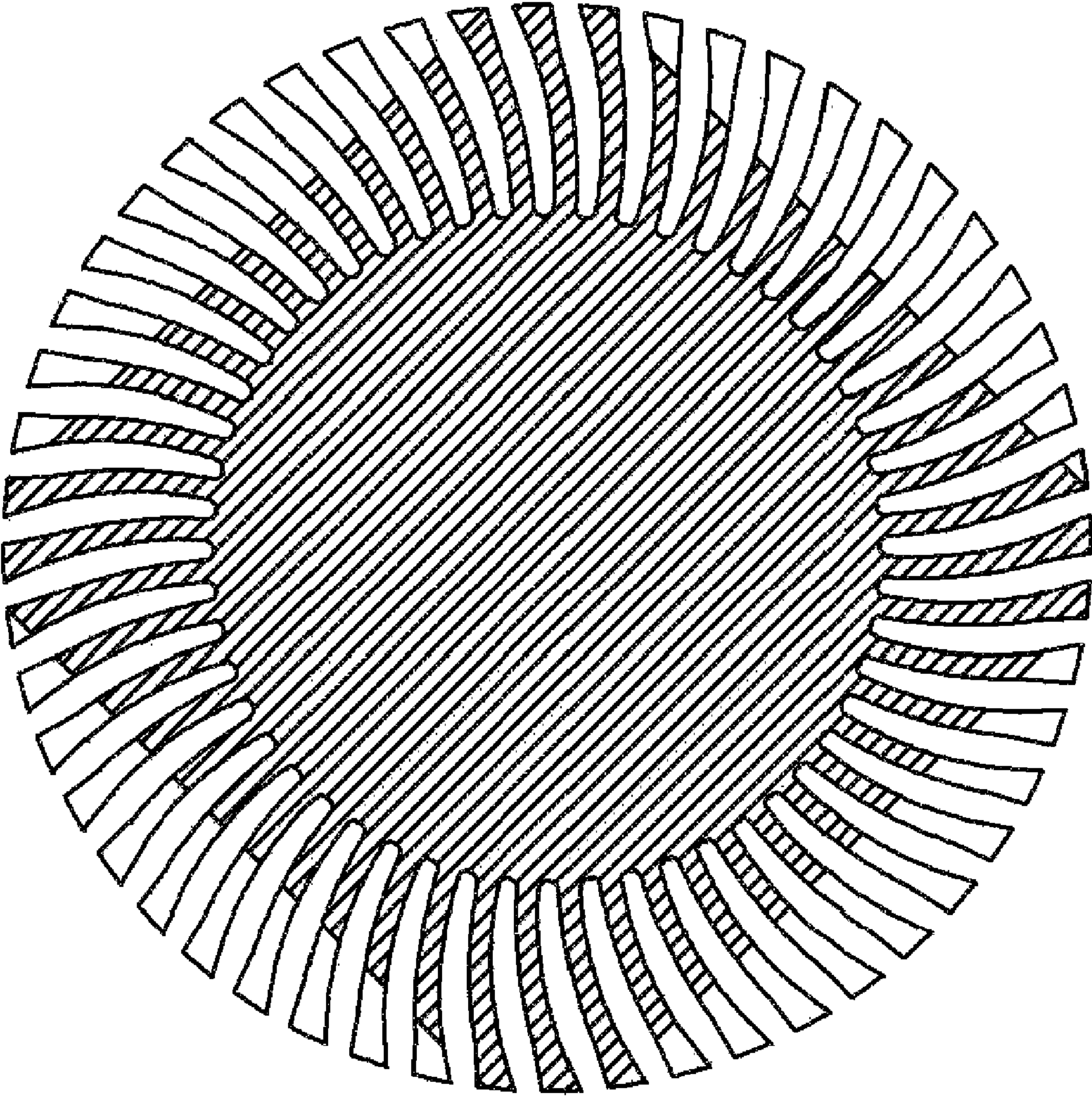


FIG. 20

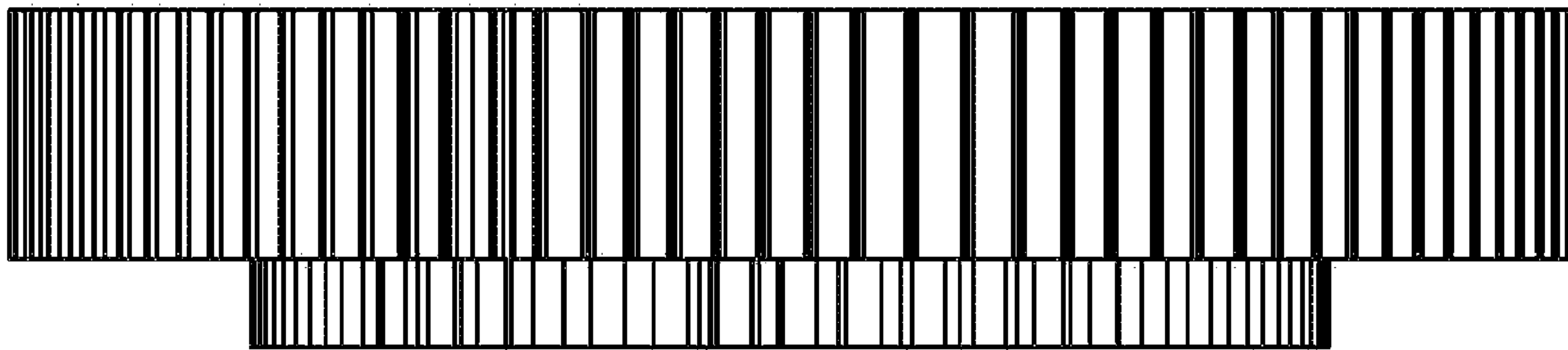


FIG. 21

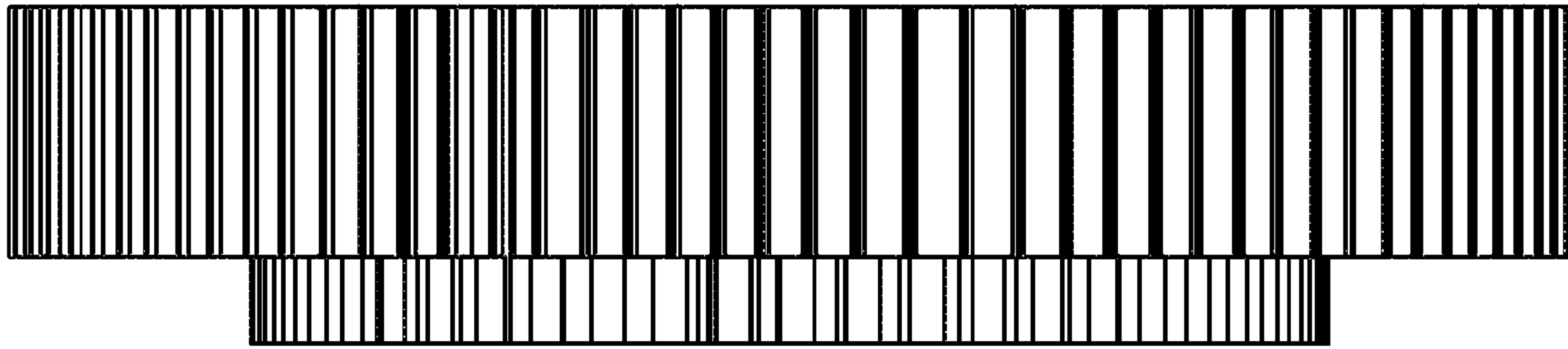


FIG. 22



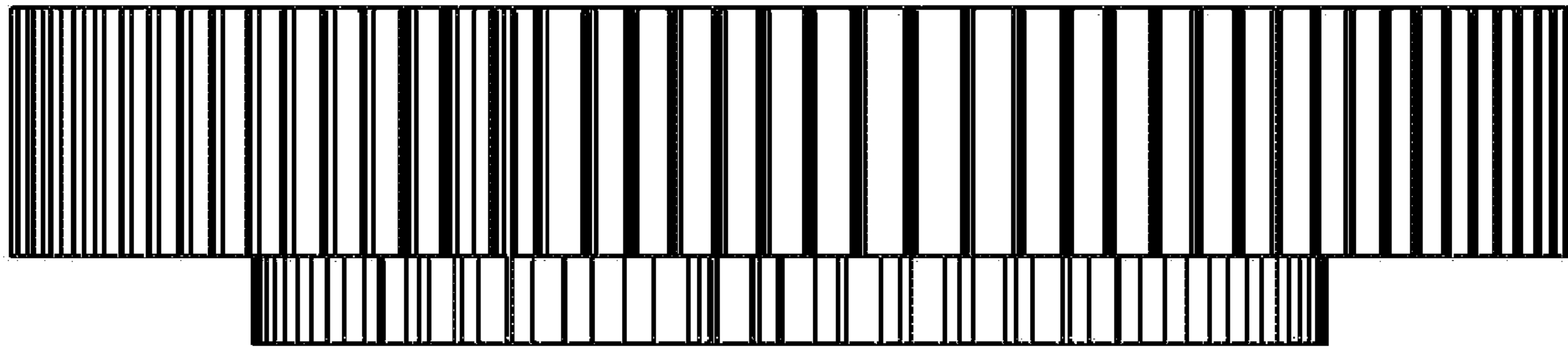


FIG. 23

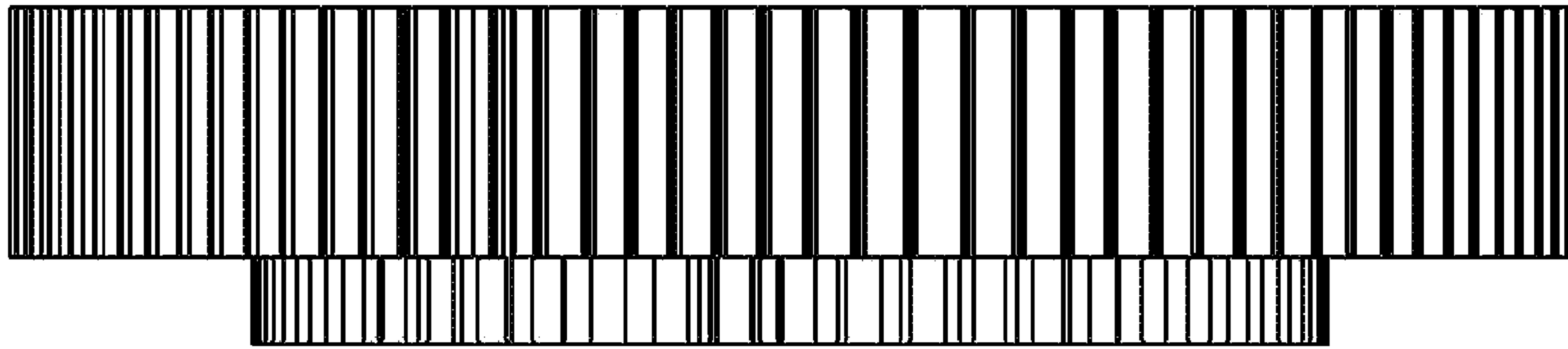


FIG. 24

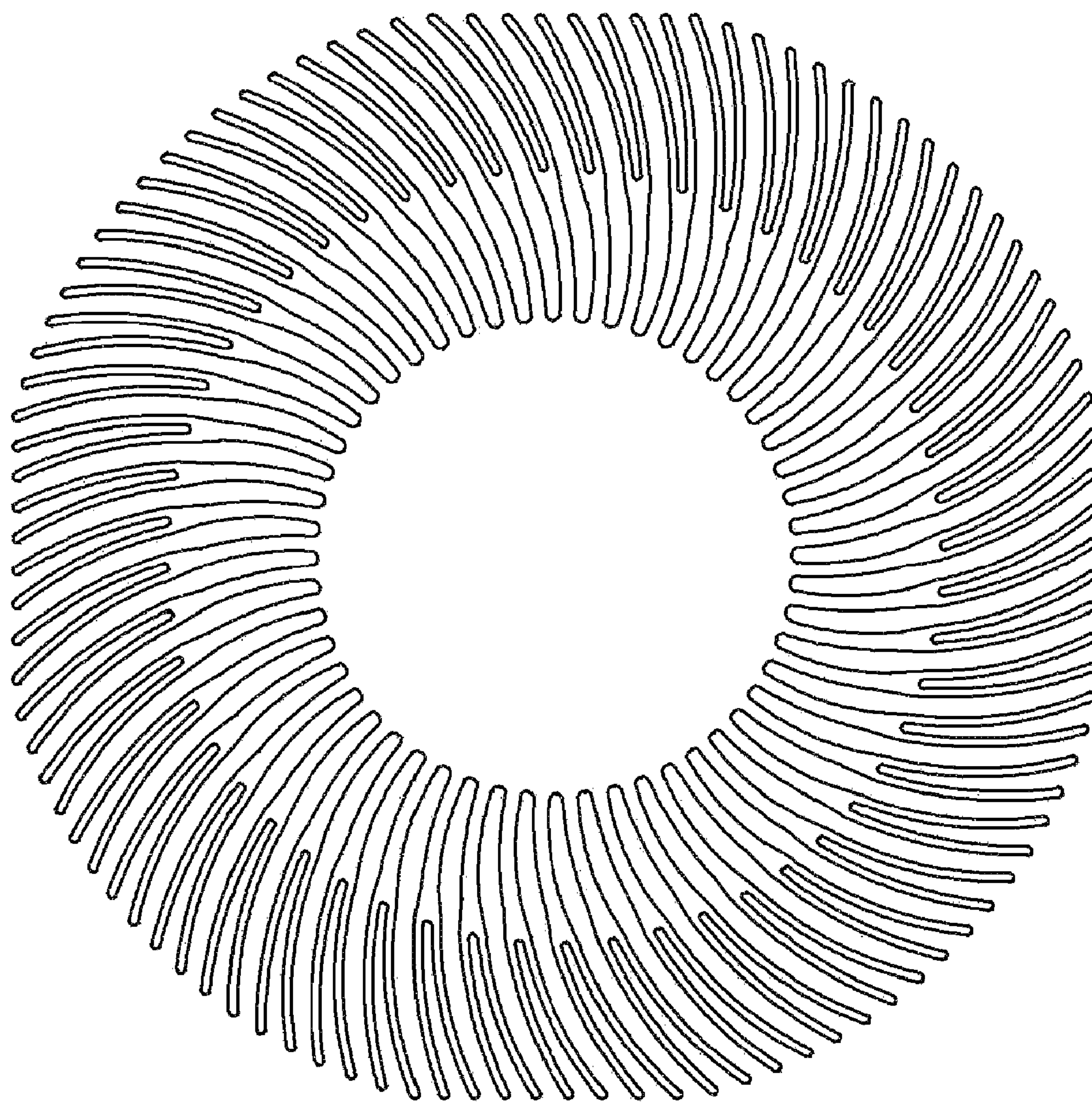


FIG. 25

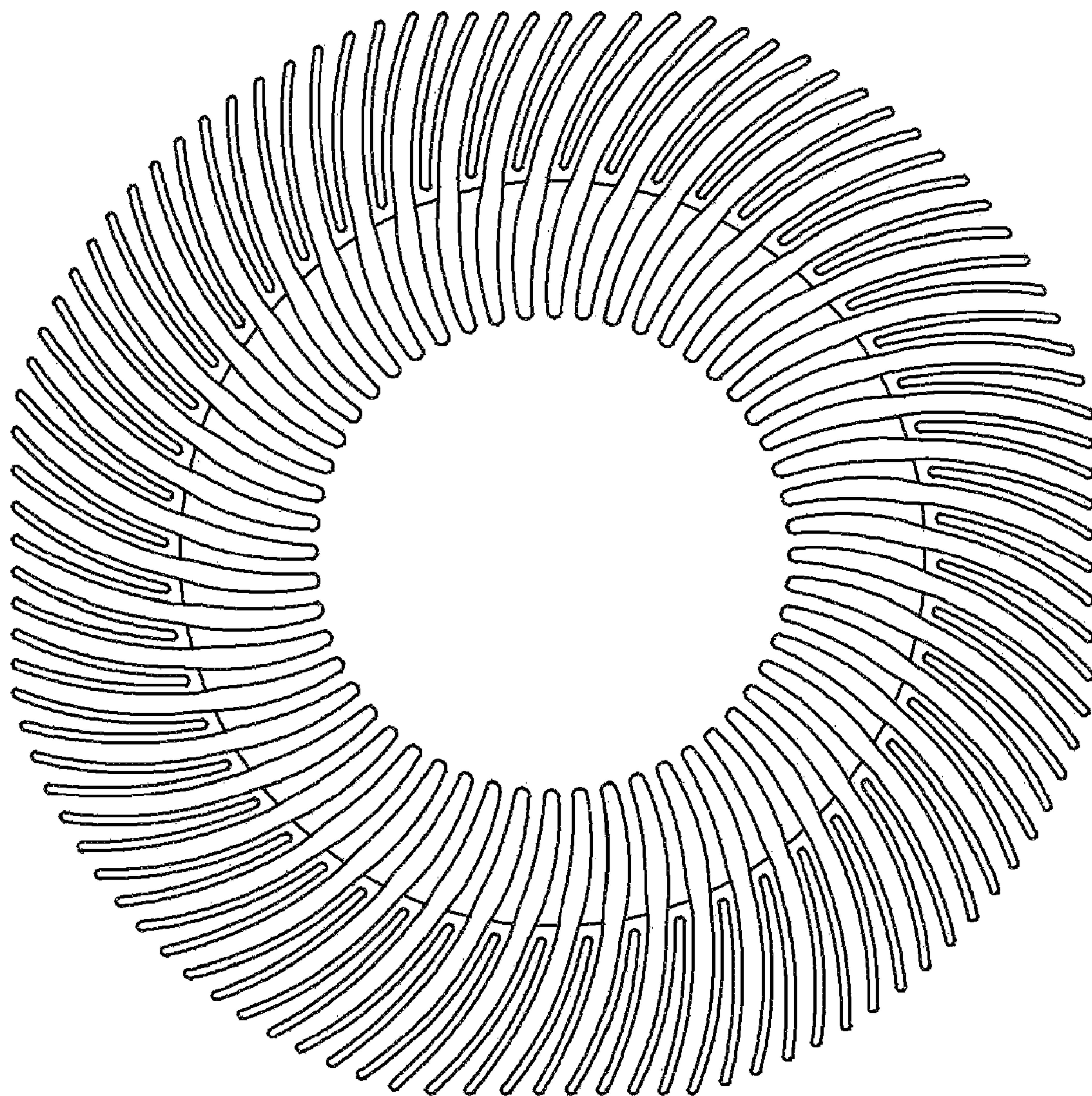


FIG. 26



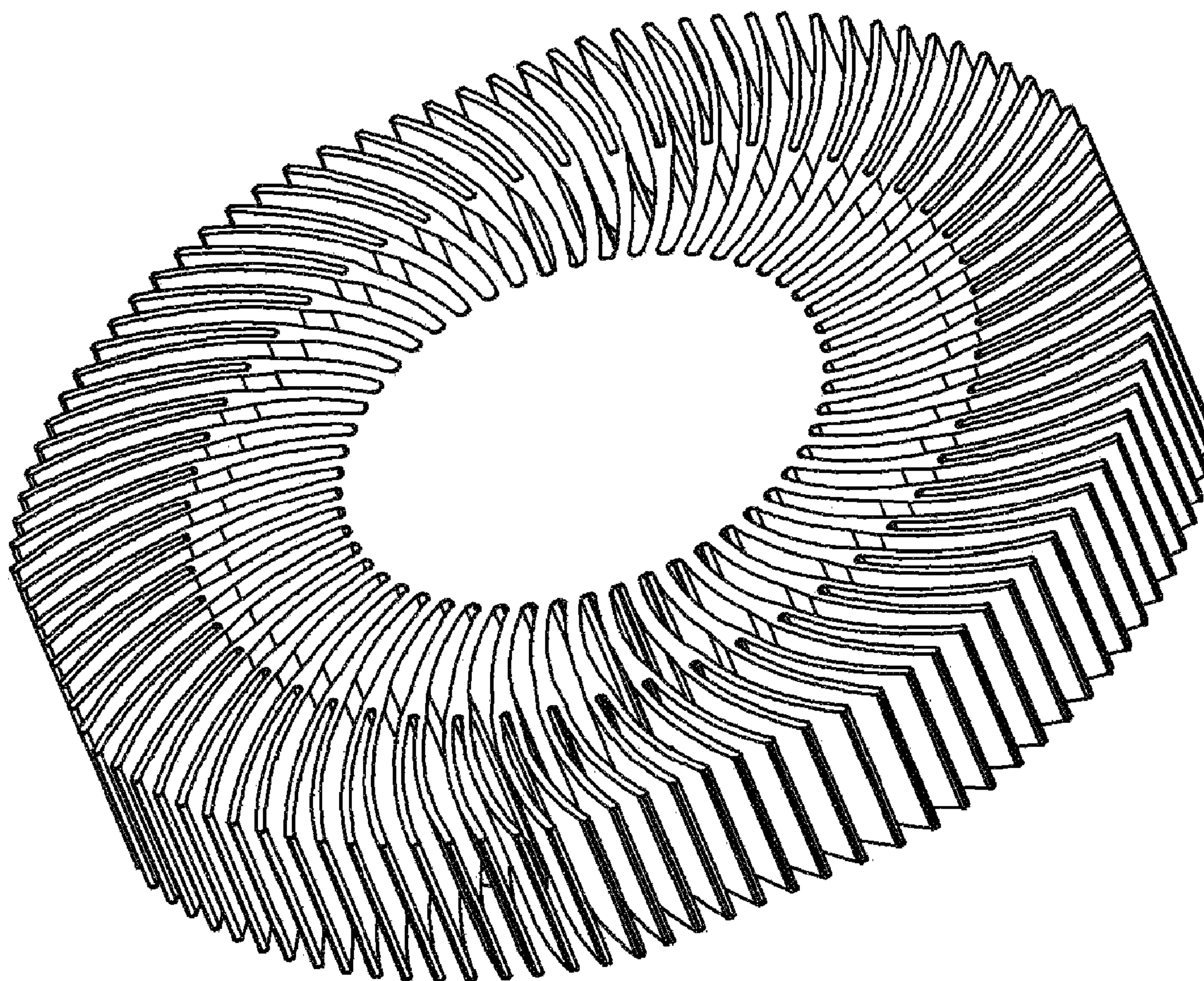


FIG. 27

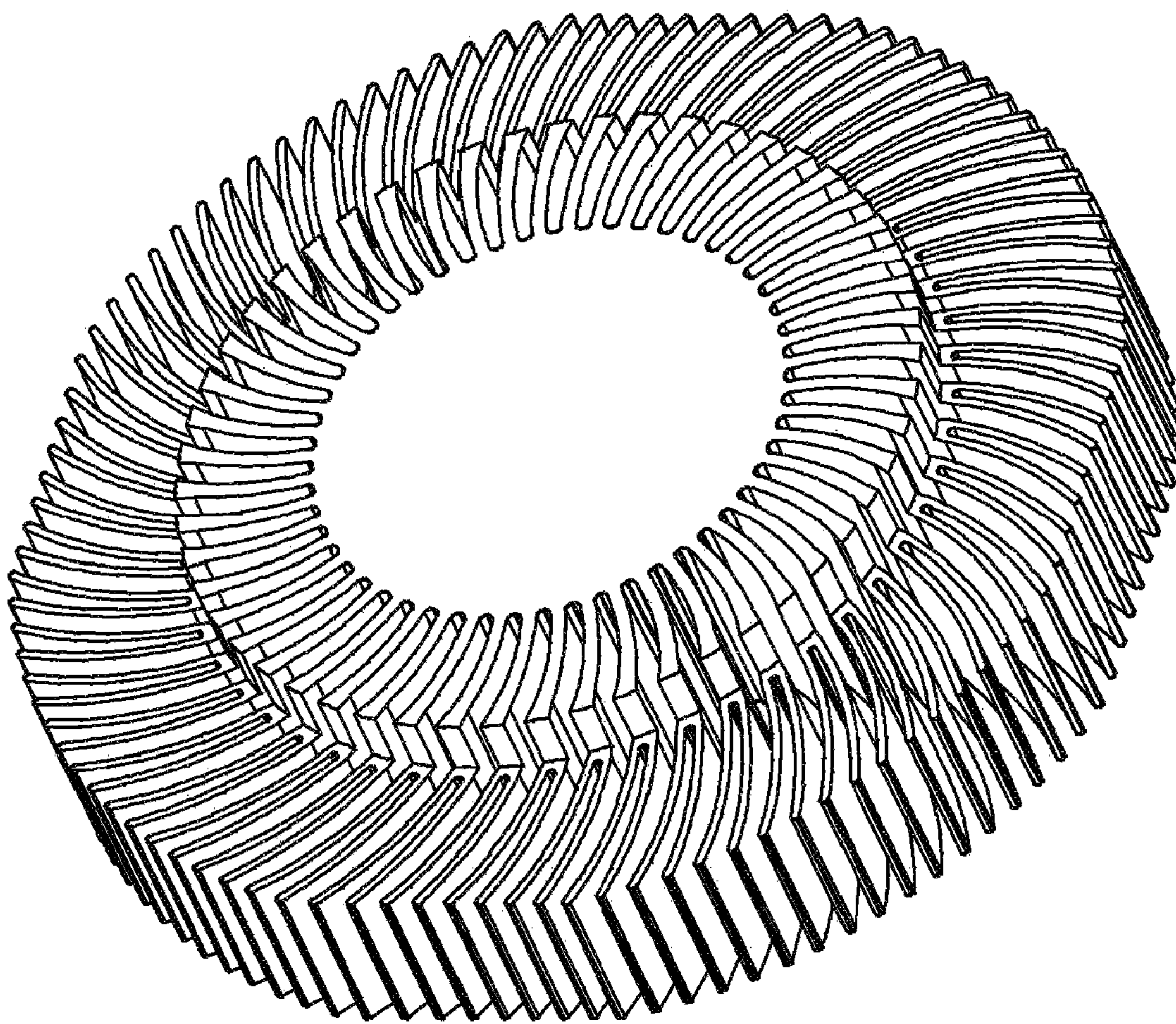


FIG. 28



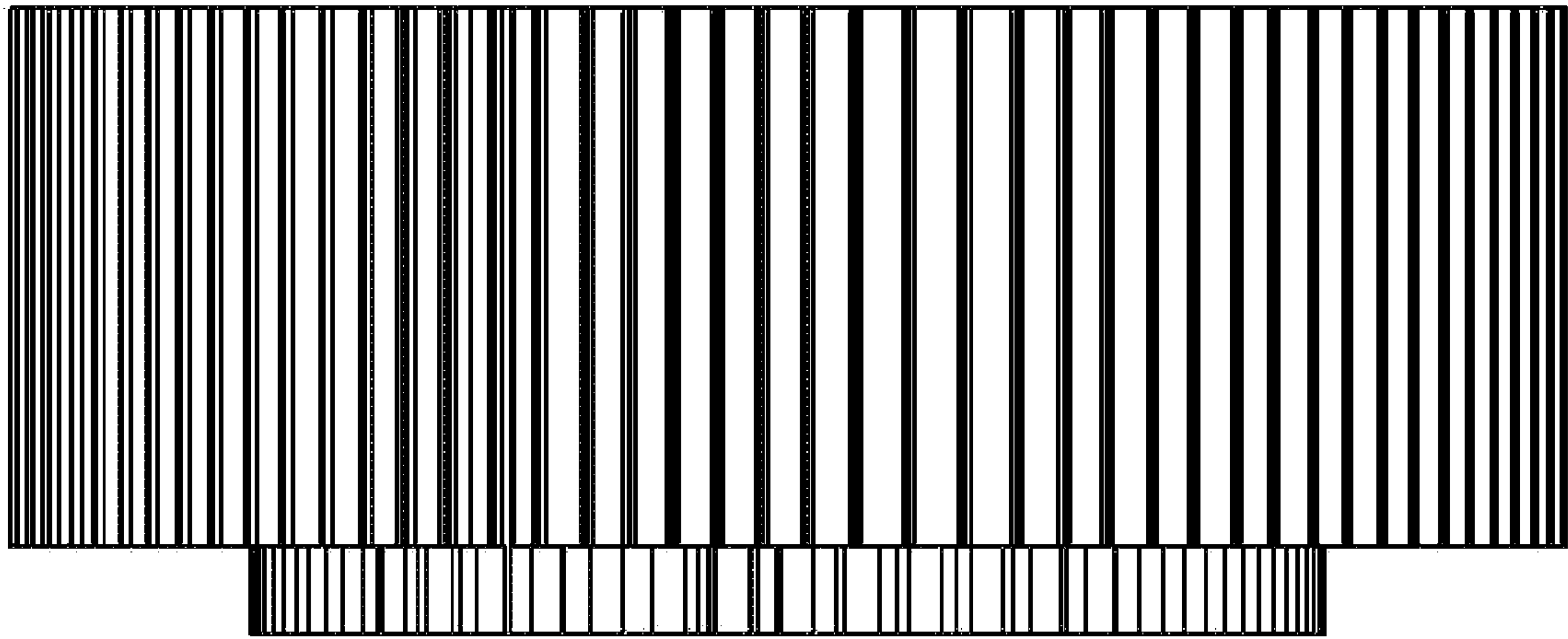


FIG. 29

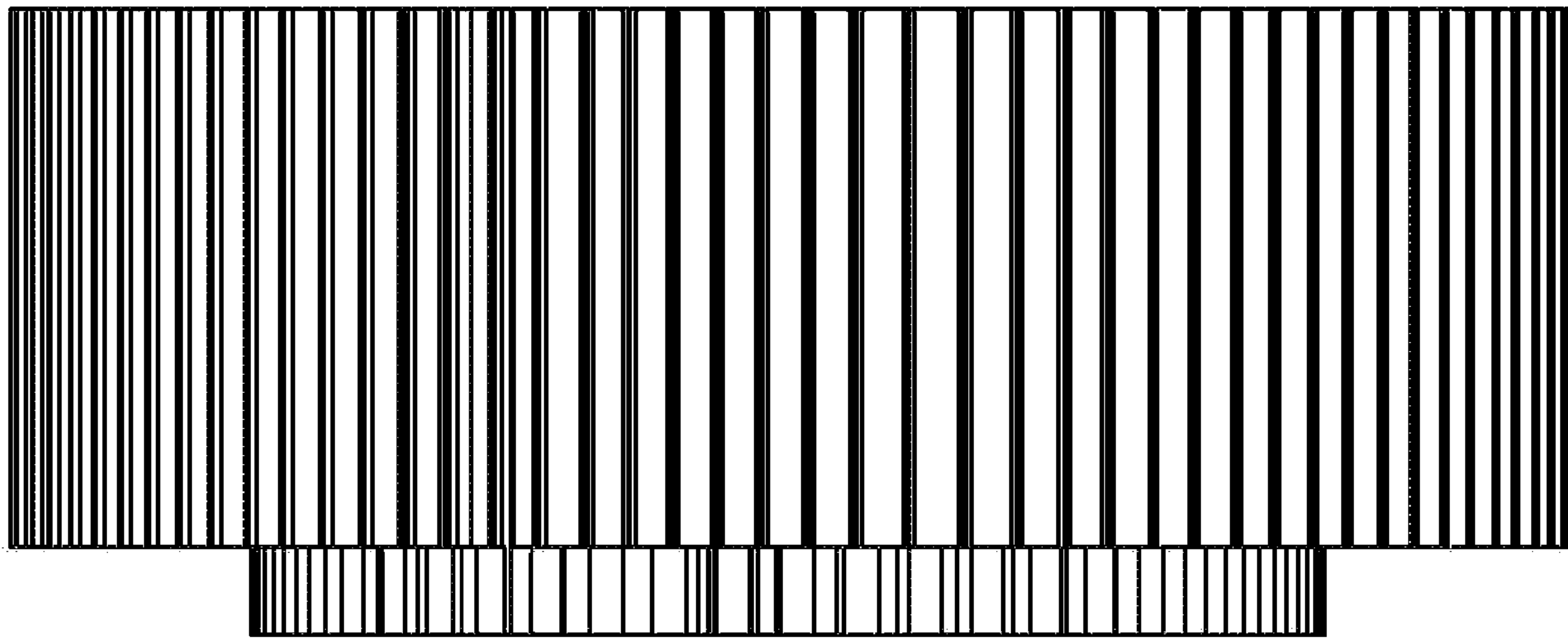


FIG. 30

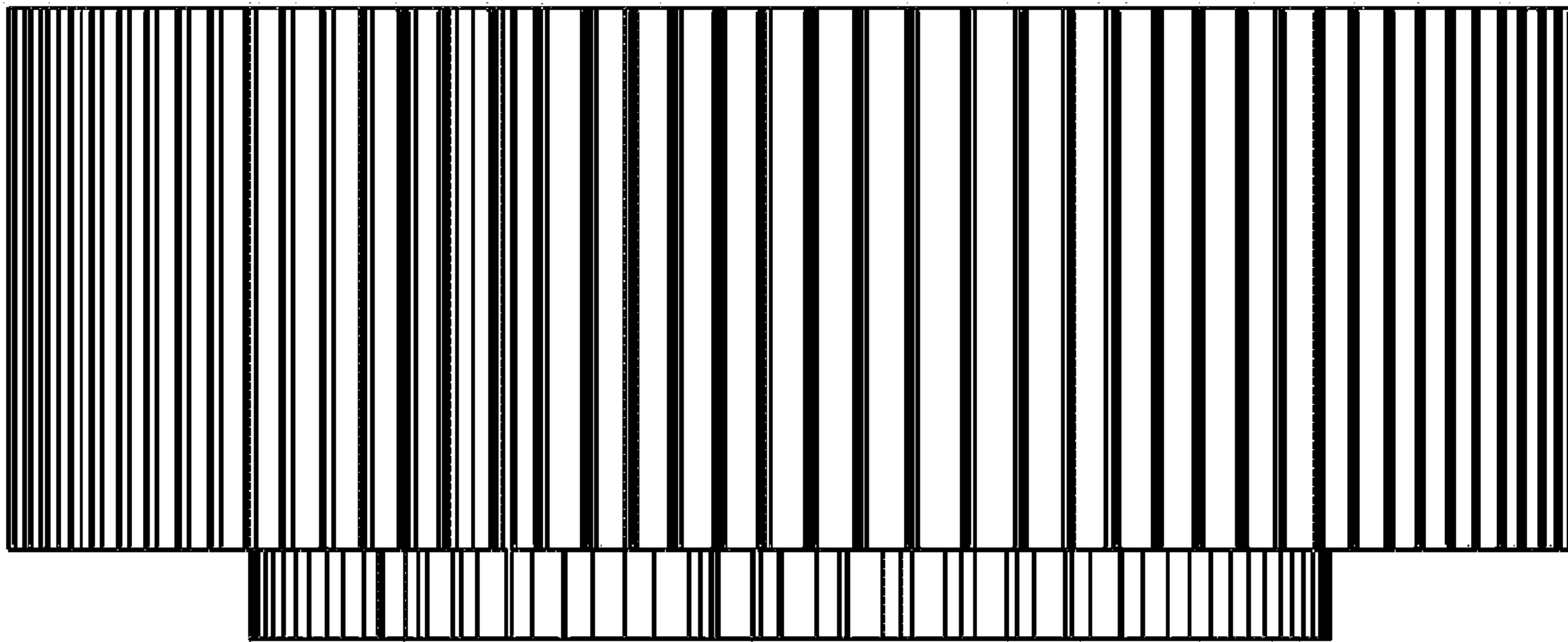


FIG. 31

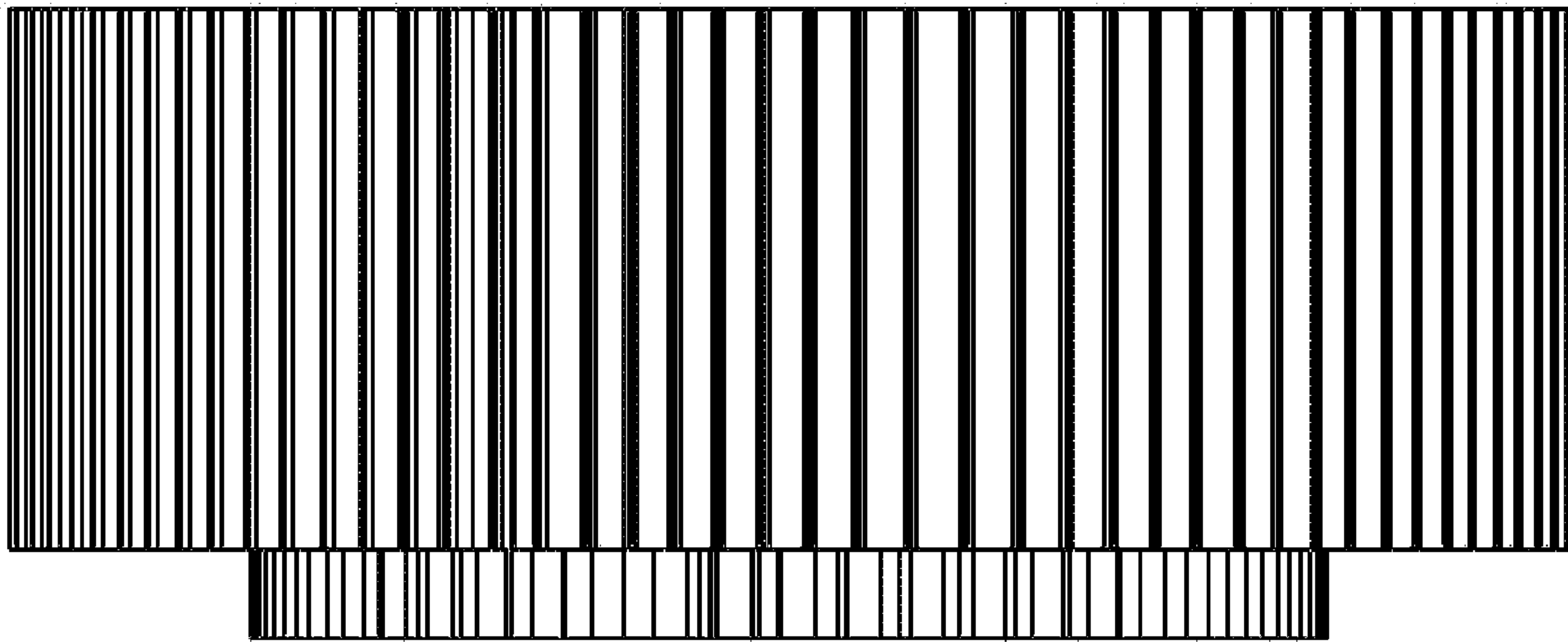


FIG. 32

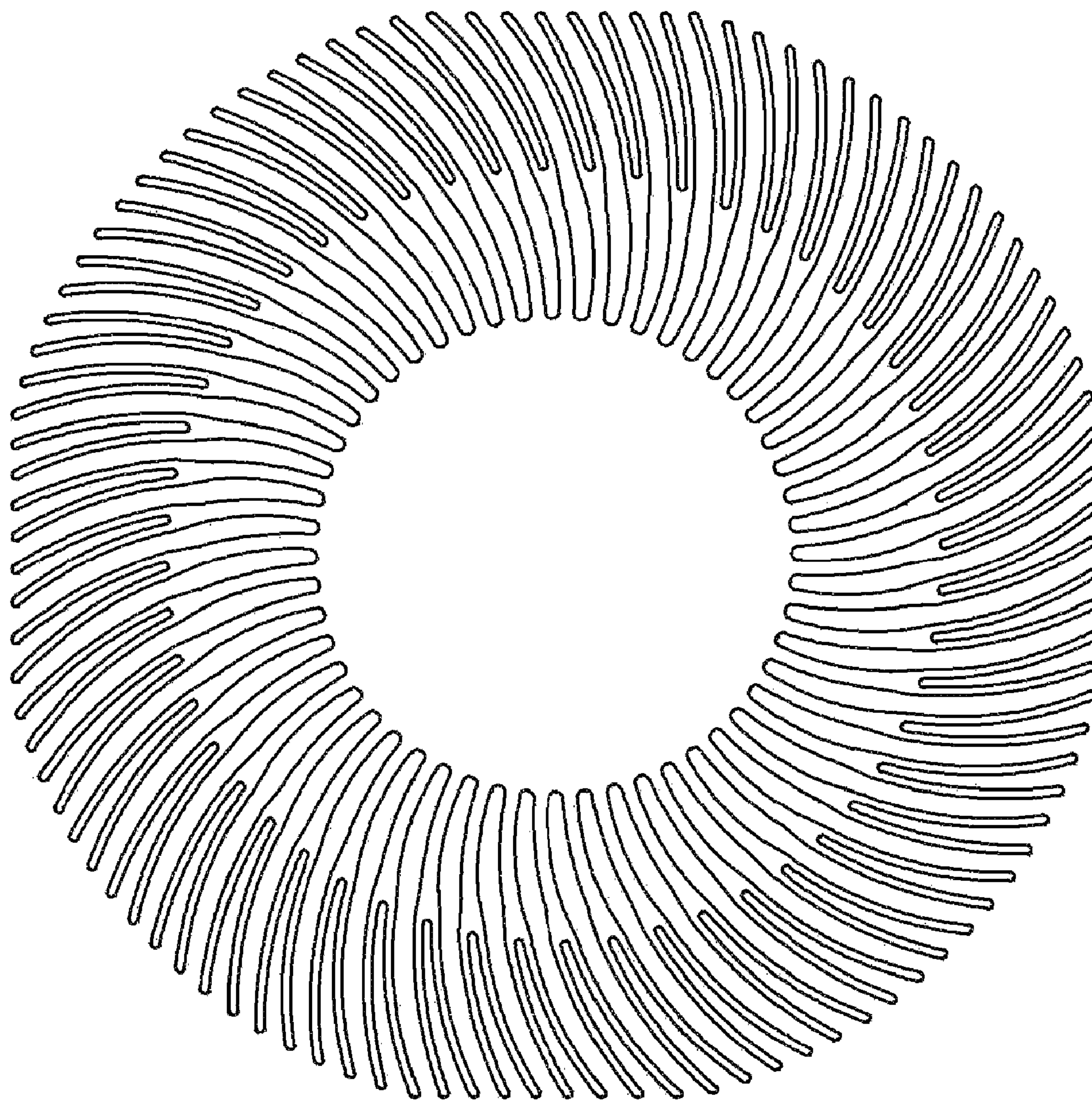


FIG. 33



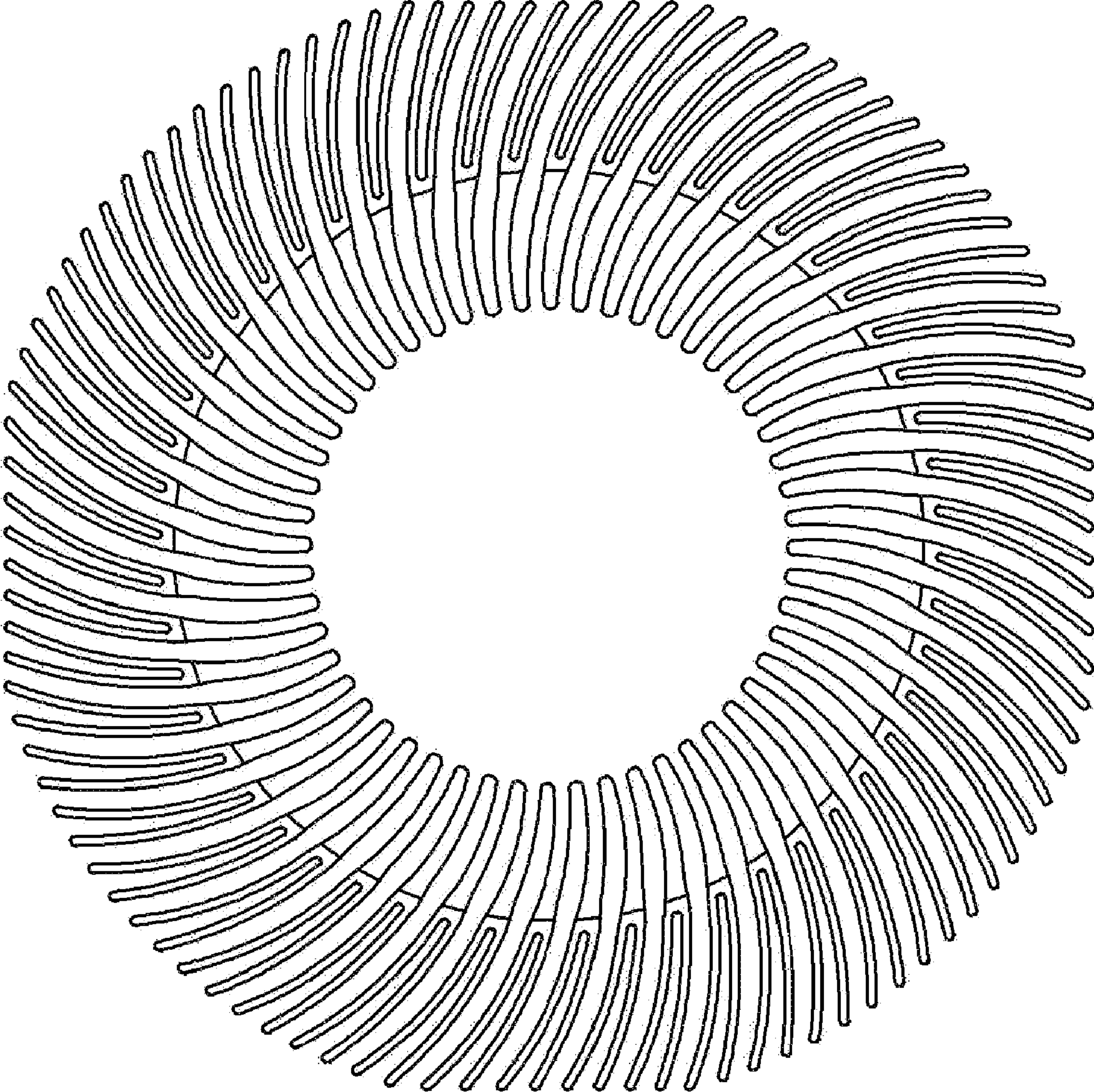


FIG. 34



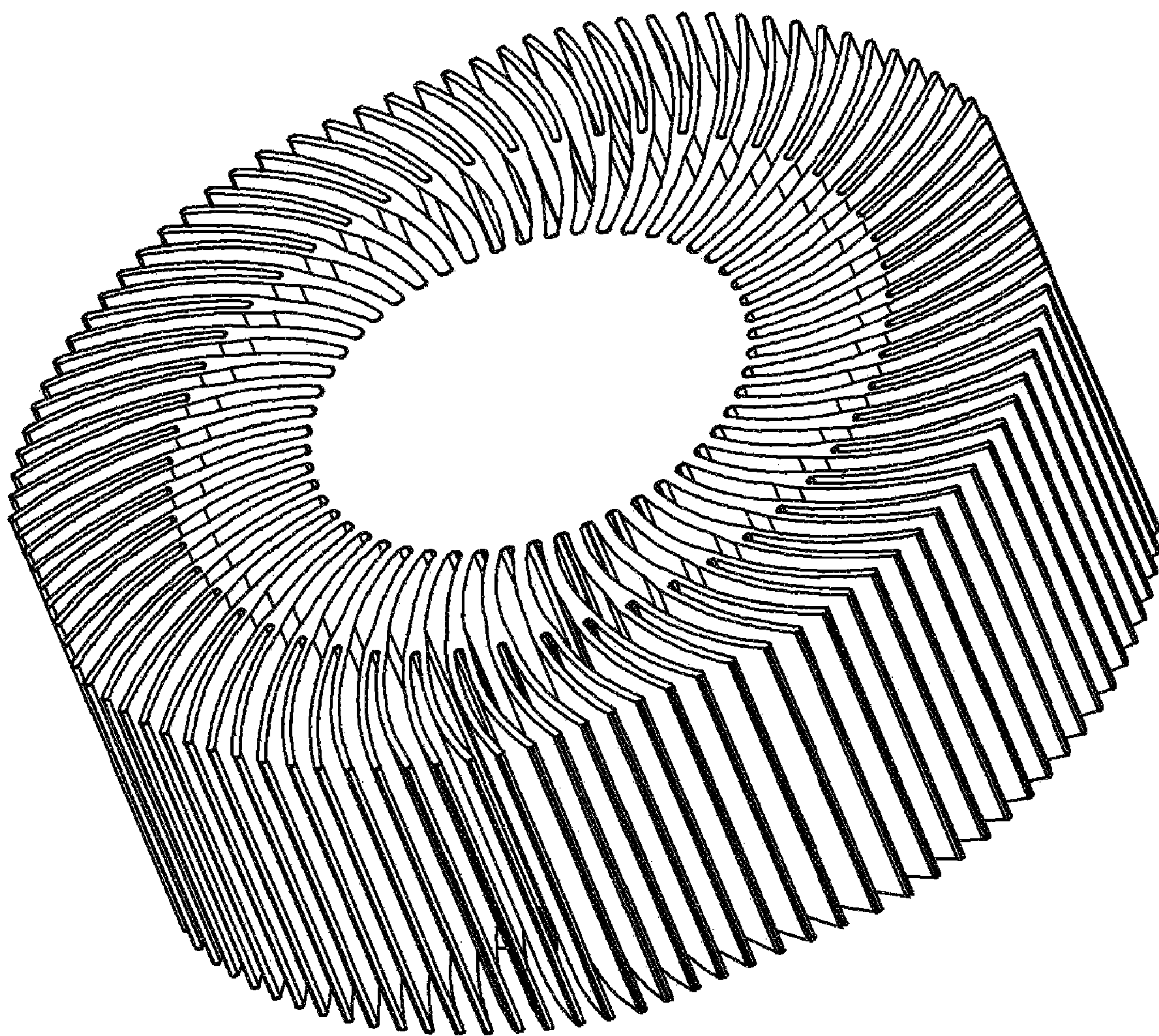


FIG. 35



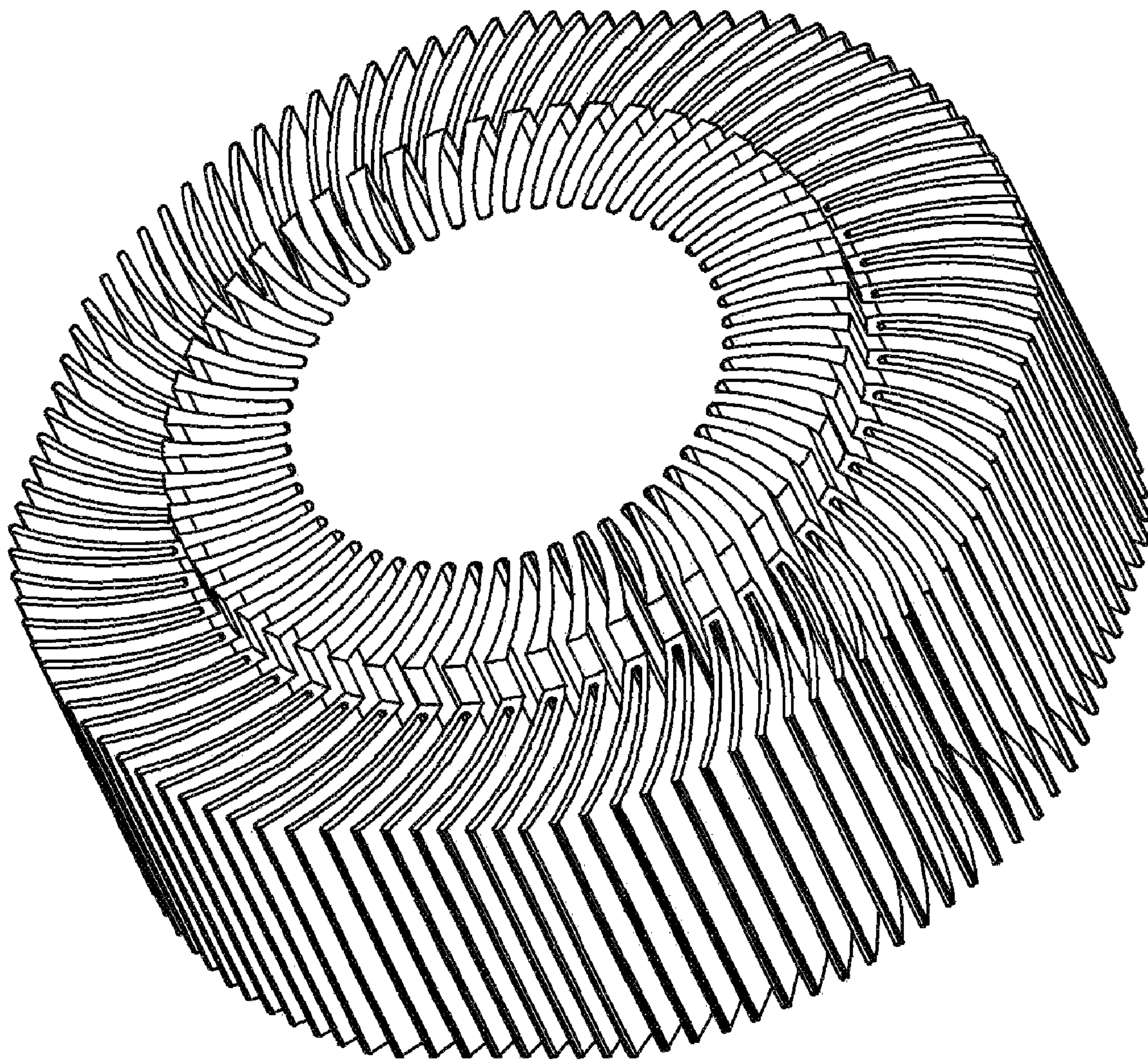


FIG. 36