



US00D993169S

(12) **United States Design Patent** (10) **Patent No.:** **US D993,169 S**
Watanabe et al. (45) **Date of Patent:** **** Jul. 25, 2023**

(54) **SECONDARY BATTERY**

(71) Applicant: **MURATA MANUFACTURING CO., LTD.**, Kyoto (JP)

(72) Inventors: **Rie Watanabe**, Kyoto (JP); **Yoshiichi Horikoshi**, Kyoto (JP); **Taichi Katsumoto**, Kyoto (JP); **Moriaki Okuno**, Kyoto (JP)

(73) Assignee: **Murata Manufacturing Co., Ltd.**, Kyoto (JP)

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

(21) Appl. No.: **29/795,547**

(22) Filed: **Jun. 18, 2021**

(30) **Foreign Application Priority Data**

Dec. 23, 2020 (JP) 2020-027827 D

(51) **LOC (14) Cl.** **13-02**

(52) **U.S. Cl.**
USPC **D13/103**

(58) **Field of Classification Search**

USPC D13/102–106, 110, 118–119, 184
CPC . Y02E 60/10; H01M 2220/30; H01M 50/209;
H01M 50/213; H01M 50/183; H01M 50/10;
H01M 50/529; H01M 50/531; H01M 10/0525;
H01M 10/0436; H01M 10/052; H01M 10/0565;
H01M 10/30; H01M 10/345; H01M 10/425; H01M 2010/0495;
B25F 5/02; B25F 5/00; A61B 2017/00734

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D388,051 S * 12/1997 Harada D13/103
5,904,998 A * 5/1999 Dopp H01M 4/62
429/405

D427,141 S * 6/2000 Luh D13/103
D457,131 S * 5/2002 Kitoh D13/103
6,541,153 B2 * 4/2003 Hessabi H01M 50/121
429/161
D539,216 S * 3/2007 Hamaguchi D13/103
D664,092 S * 7/2012 Gea Suarez D13/103
8,524,386 B2 * 9/2013 Petrie H01M 50/216
429/96

(Continued)

Primary Examiner — Nathaniel D. Buckner

(74) *Attorney, Agent, or Firm* — K&L Gates LLP

(57) **CLAIM**

The ornamental design for a secondary battery, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a secondary battery 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;

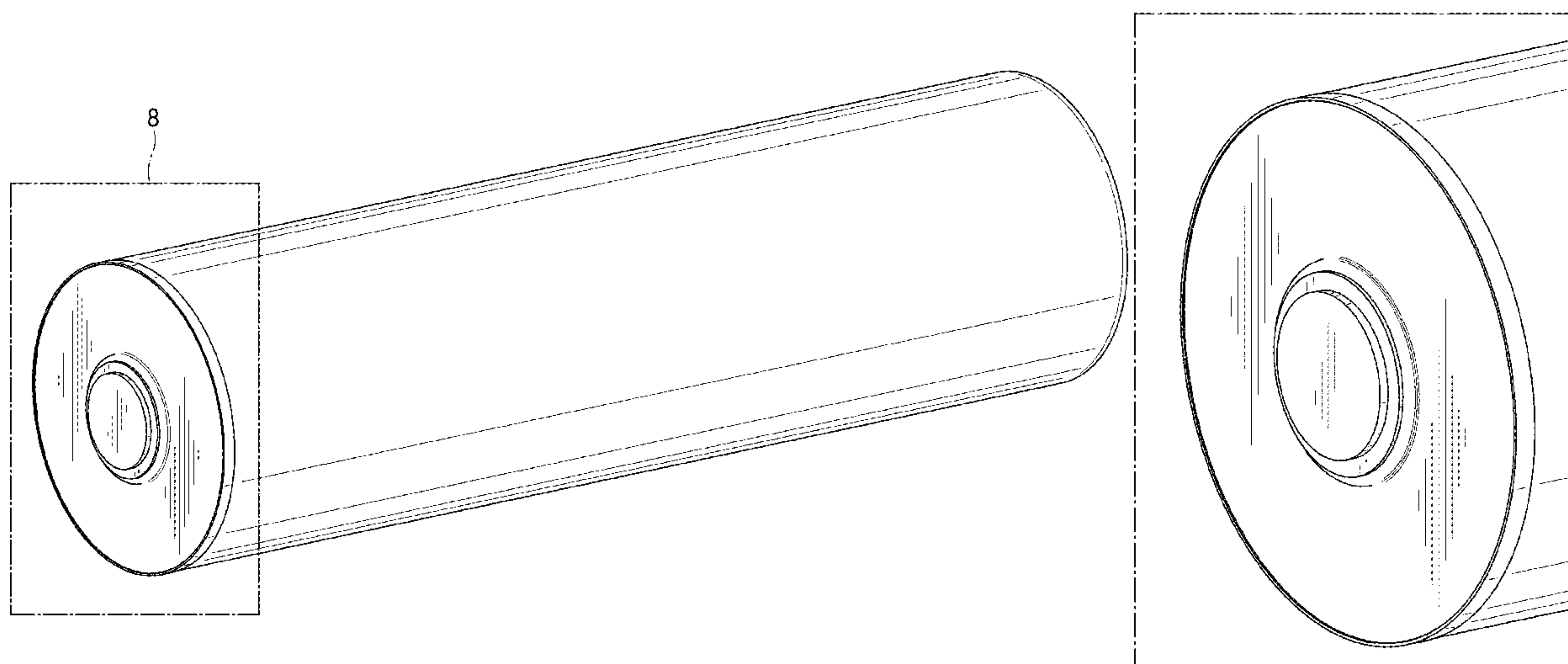
FIG. 7 is a bottom plan view thereof;

FIG. 8 is an enlarged view of area 8 designated by the dot-dash broken lines in FIG. 1; and,

FIG. 9 is an enlarged cross sectional view taken along line 9-9 in FIG. 4 in the direction of line 9'-9' in FIG. 2.

The rectangle and splined curve indicated by the dot-dash broken lines shown in FIG. 1 and FIG. 8 illustrate the boundary of enlarged area of the design. The dot-dash broken lines shown in FIG. 1 and FIG. 8 form no part of the claimed design. The even spaced broken lines in FIG. 9 depict portions of the secondary battery that form no part of the claimed design. The dot- dash broken line shown in FIG. 9 indicates the section line and forms no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

D720,688	S	*	1/2015	Popper		D13/103
D740,221	S	*	10/2015	Popper		D13/103
D850,595	S	*	6/2019	Li		D23/366
D926,120	S	*	7/2021	Richard		D13/103
D941,751	S	*	1/2022	Boris		D13/103

* cited by examiner

FIG. 1

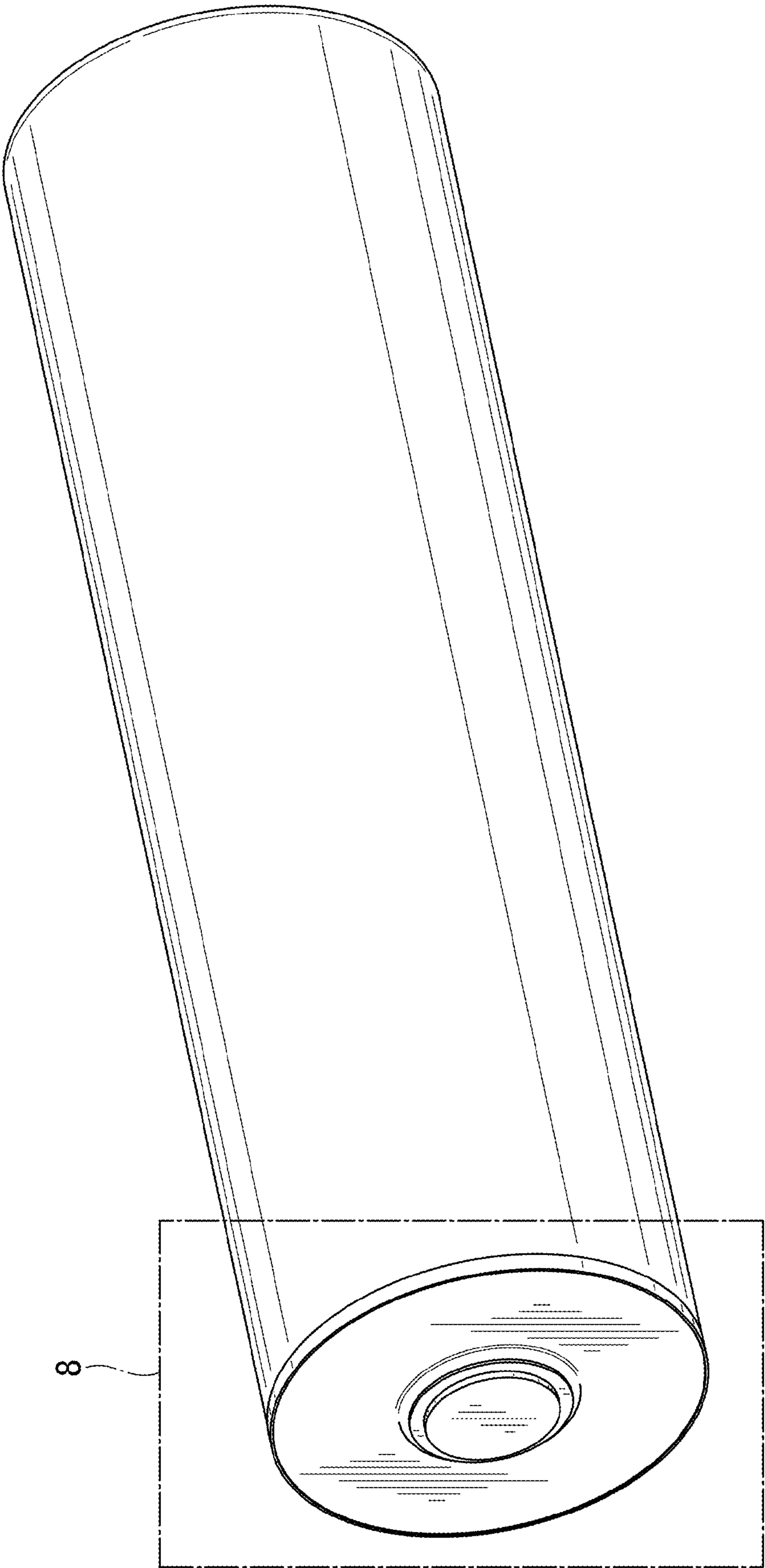


FIG. 2

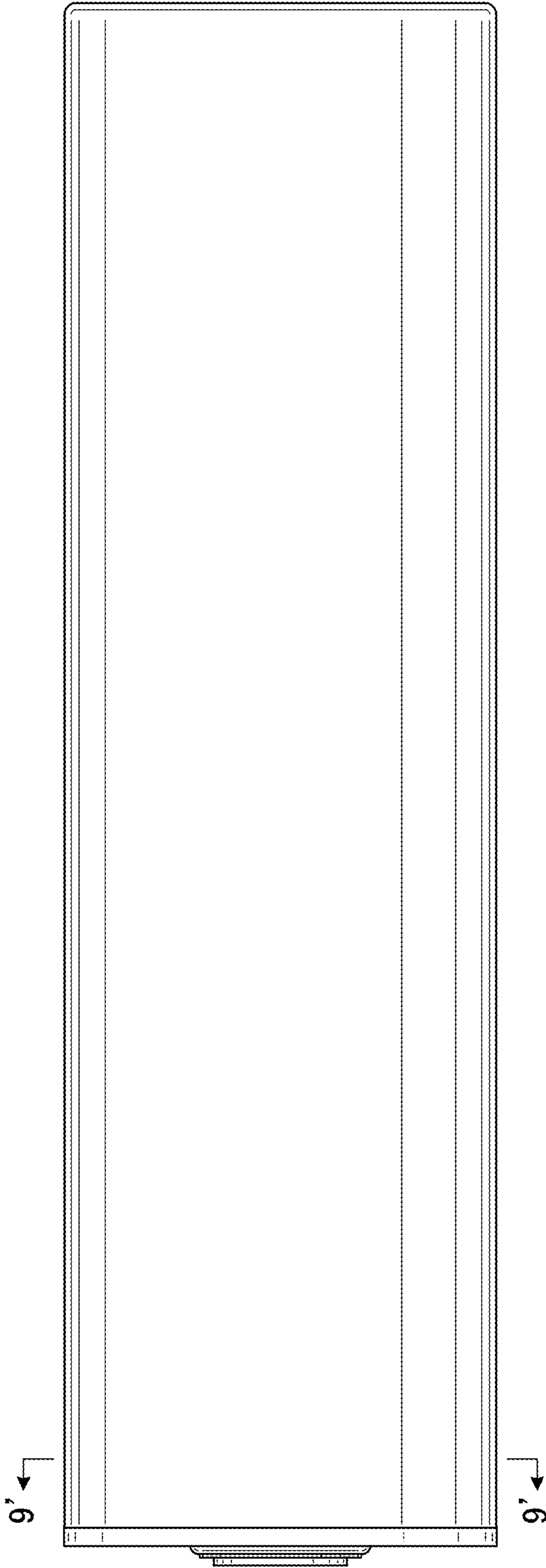


FIG. 3

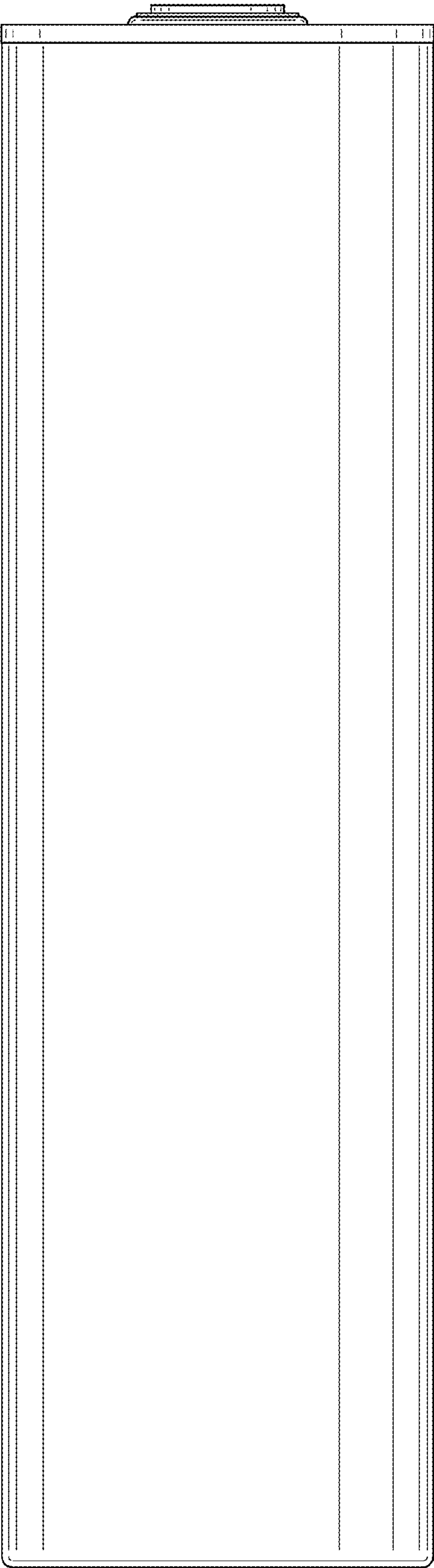


FIG. 5

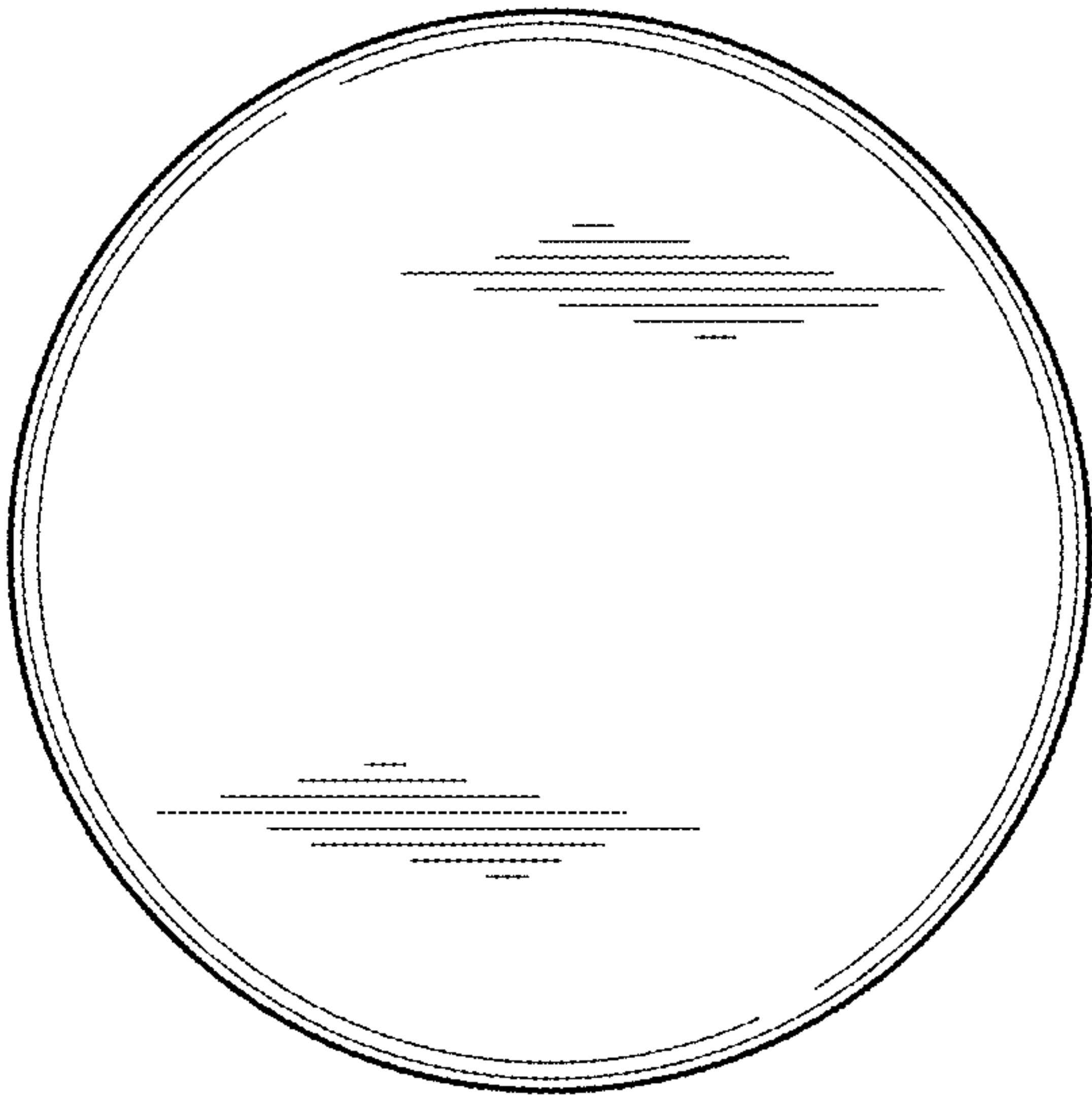


FIG. 4

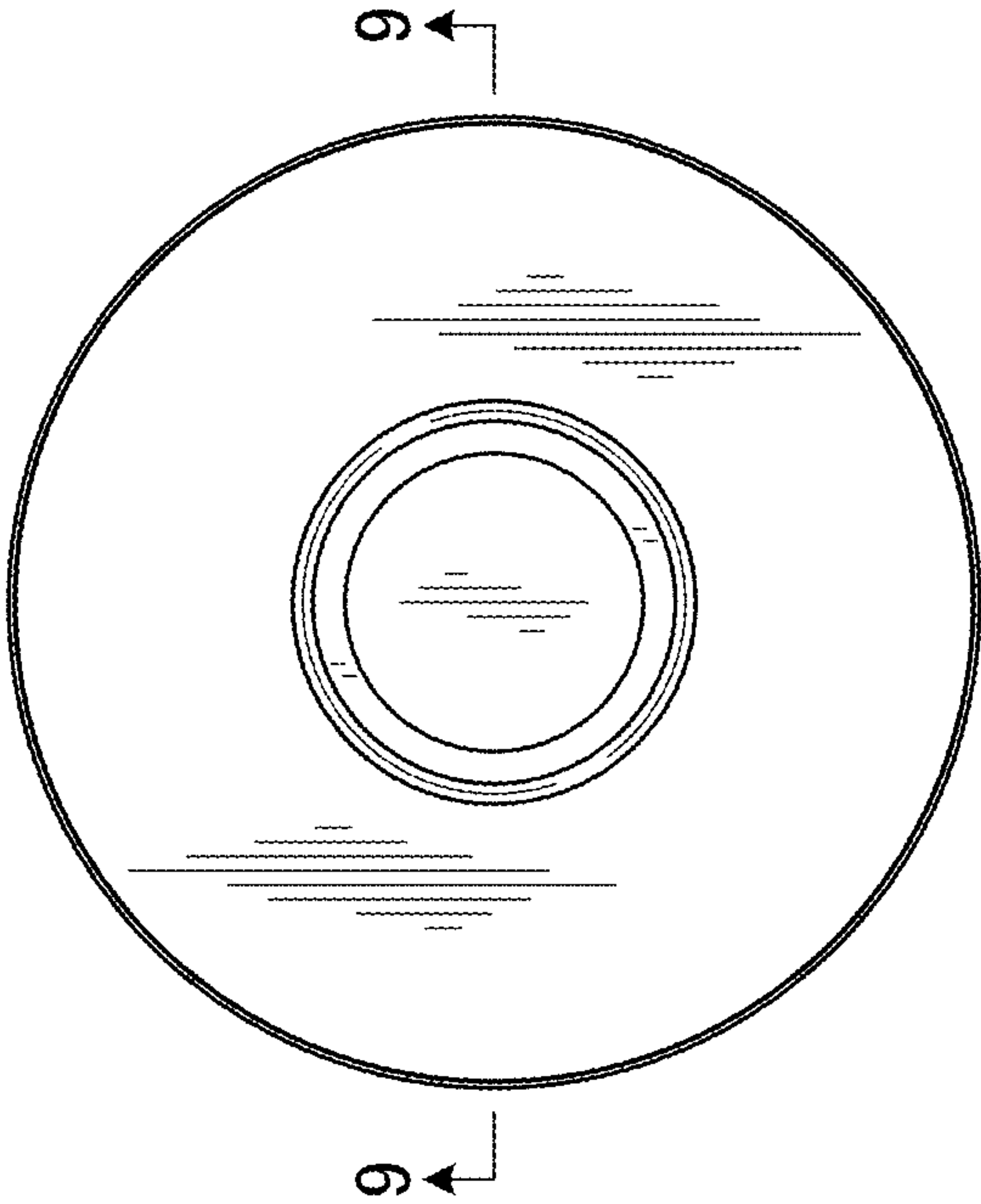


FIG. 6

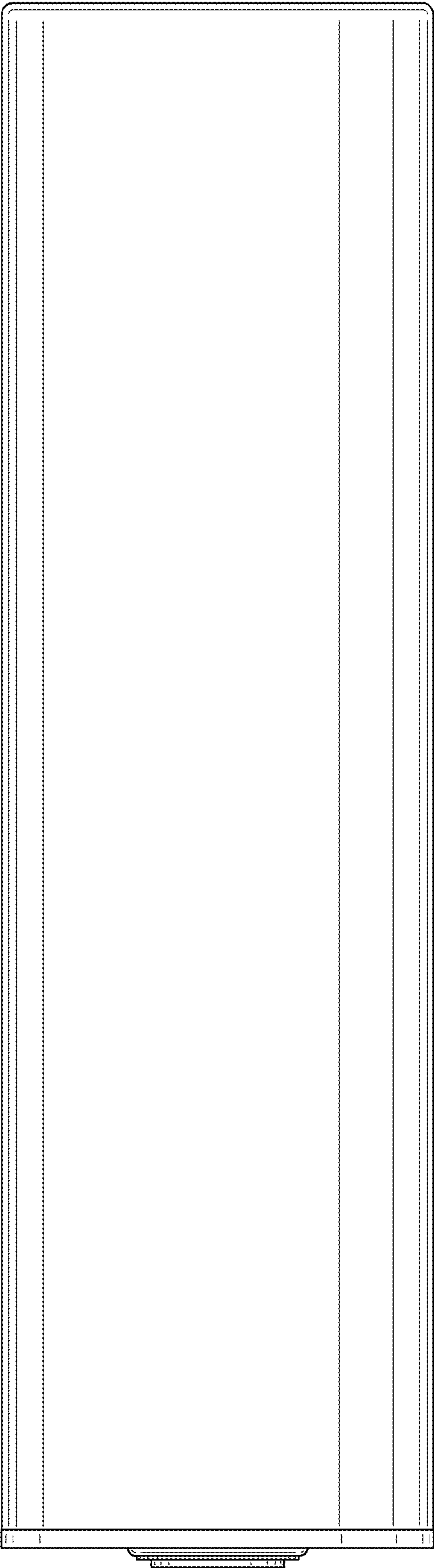


FIG. 7

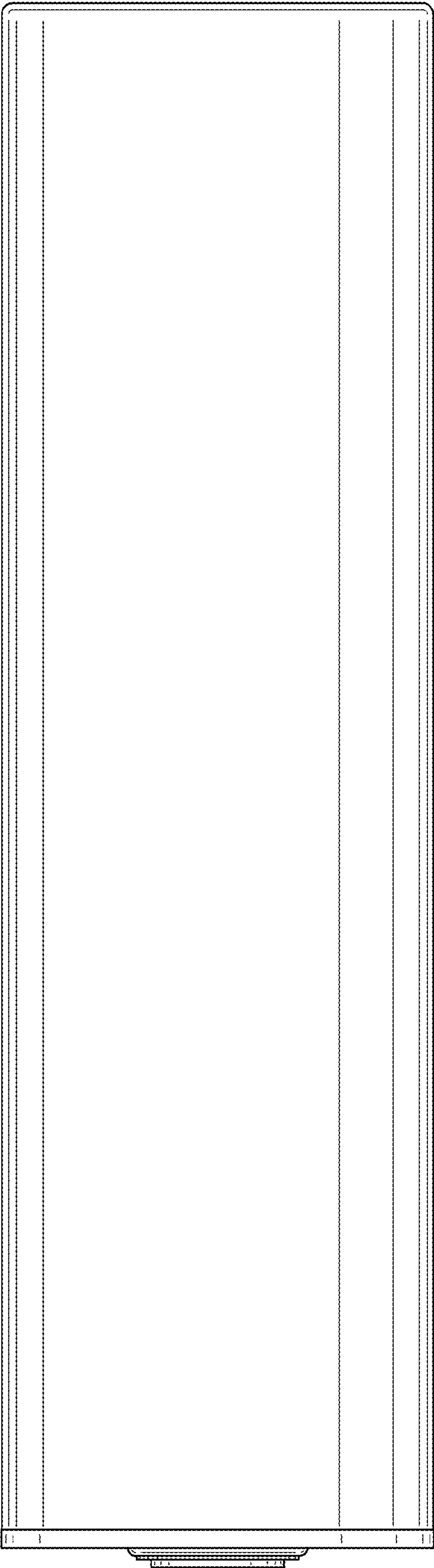


FIG. 8

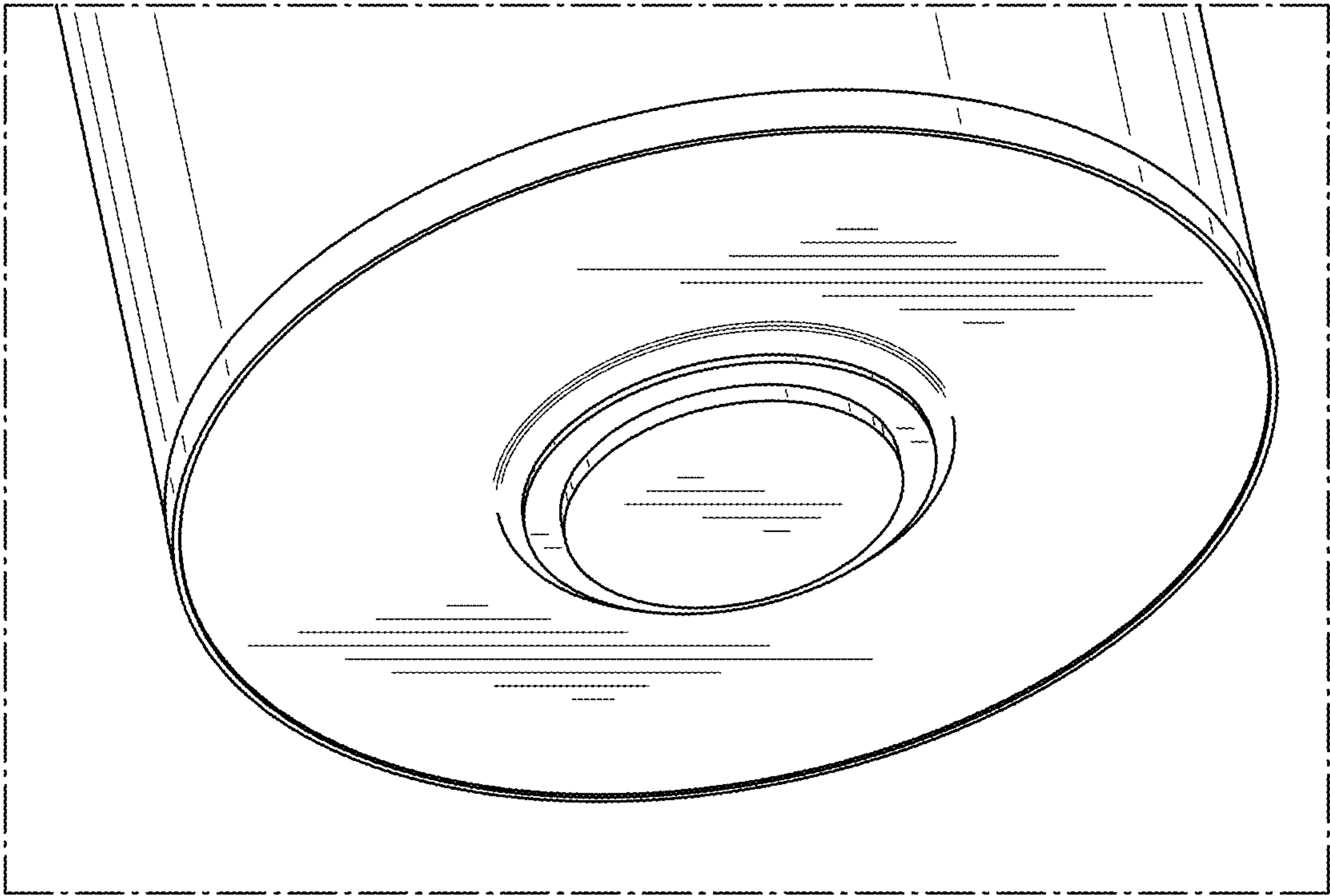


FIG. 9

