



US00D896948S

(12) **United States Design Patent** (10) **Patent No.:** **US D896,948 S**
Tokoi (45) **Date of Patent:** **** Sep. 22, 2020**

(54) **VERTICAL FAN**

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

(21) Appl. No.: **29/662,934**

(22) Filed: **Sep. 10, 2018**

(30) **Foreign Application Priority Data**

Mar. 12, 2018 (JP) 2018-005109

(51) **LOC (12) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/378**

(58) **Field of Classification Search**
USPC D23/370-386, 393, 411-414, 332-337,
D23/366-369, 351-354, 387-392
CPC F04D 5/00; F04D 27/00; F04D 29/329
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D389,567 S * 1/1998 Gudfin D23/370
- 7,118,323 B2 * 10/2006 Iyer F04D 17/04
- 415/53.1
- D539,410 S * 3/2007 Fok D23/378
- D588,686 S * 3/2009 Spiegel D23/364
- D603,036 S * 10/2009 Boswell D23/378
- D799,671 S * 10/2017 Deffrennes D23/378
- D804,007 S * 11/2017 Cartwright D23/378
- D829,319 S * 9/2018 Chen D23/378
- D841,795 S * 2/2019 Chen D23/378
- D854,670 S * 7/2019 Fang D23/333
- D854,672 S * 7/2019 Fang D23/333

- D858,736 S * 9/2019 Lewis D23/378
- 2004/0197091 A1 * 10/2004 Orr F24H 3/0417
- 392/365
- 2016/0281742 A1 * 9/2016 Rivera F04D 29/601

FOREIGN PATENT DOCUMENTS

- JP 1406947 S 2/2011
- JP 1420106 S 8/2011
- JP 1488099 S 1/2014
- JP 1590136 S 11/2017

OTHER PUBLICATIONS

An Office Action, "Notice of Allowance", mailed by the Japanese Patent Office dated Dec. 25, 2018, which corresponds to Japanese Patent Application No. 2018-005109 and is related to U.S. Appl. No. 29/662,934, with English language Concise Explanation.

* cited by examiner

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(57) **CLAIM**

The ornamental design for a vertical fan, as shown and described.

DESCRIPTION

FIG. 1 is a front, top and right-side perspective view of a vertical fan showing my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a top view thereof;
FIG. 5 is a bottom view thereof;
FIG. 6 is a right-side view thereof; and,
FIG. 7 is a left-side view thereof.
The light and closely spaced dotted lines illustrate portions of the vertical fan and form no part of the claimed design.

1 Claim, 6 Drawing Sheets

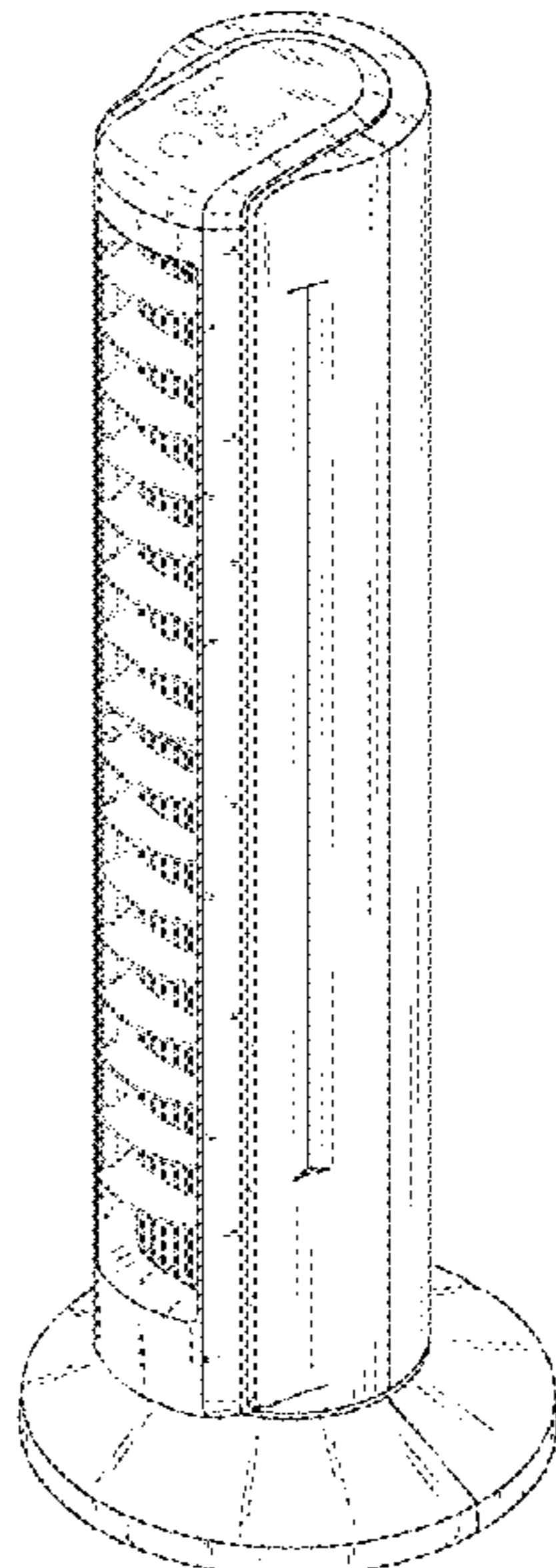


FIG. 1

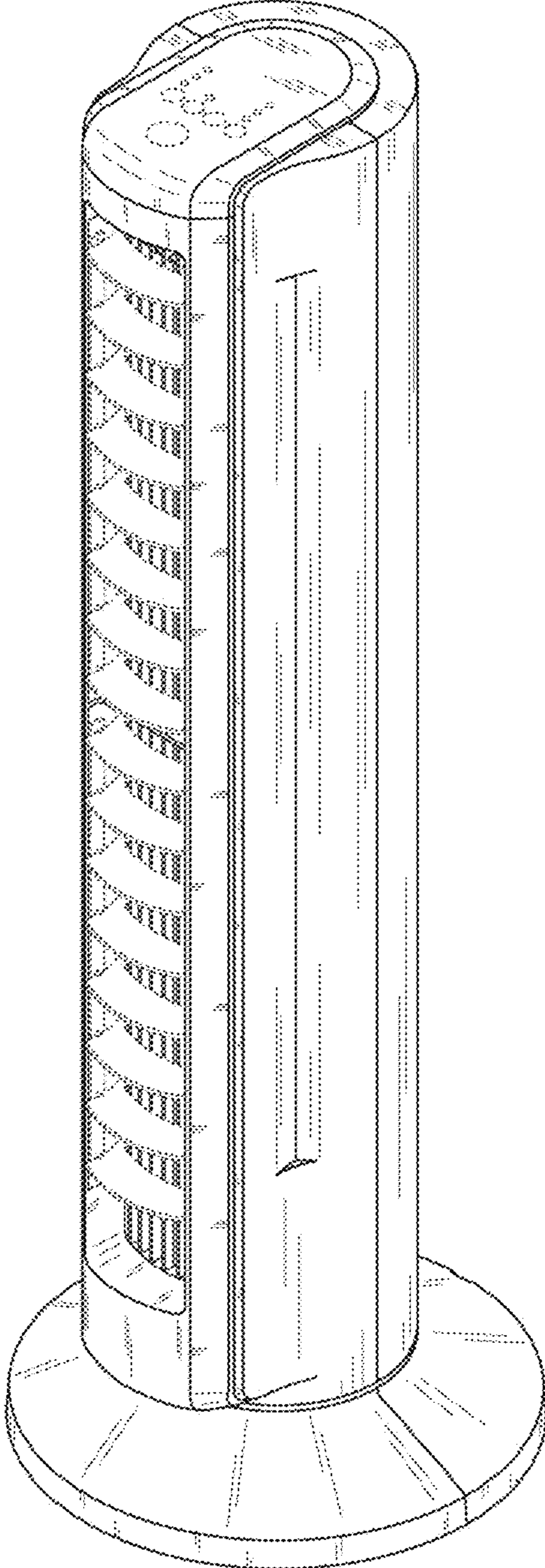


FIG.2

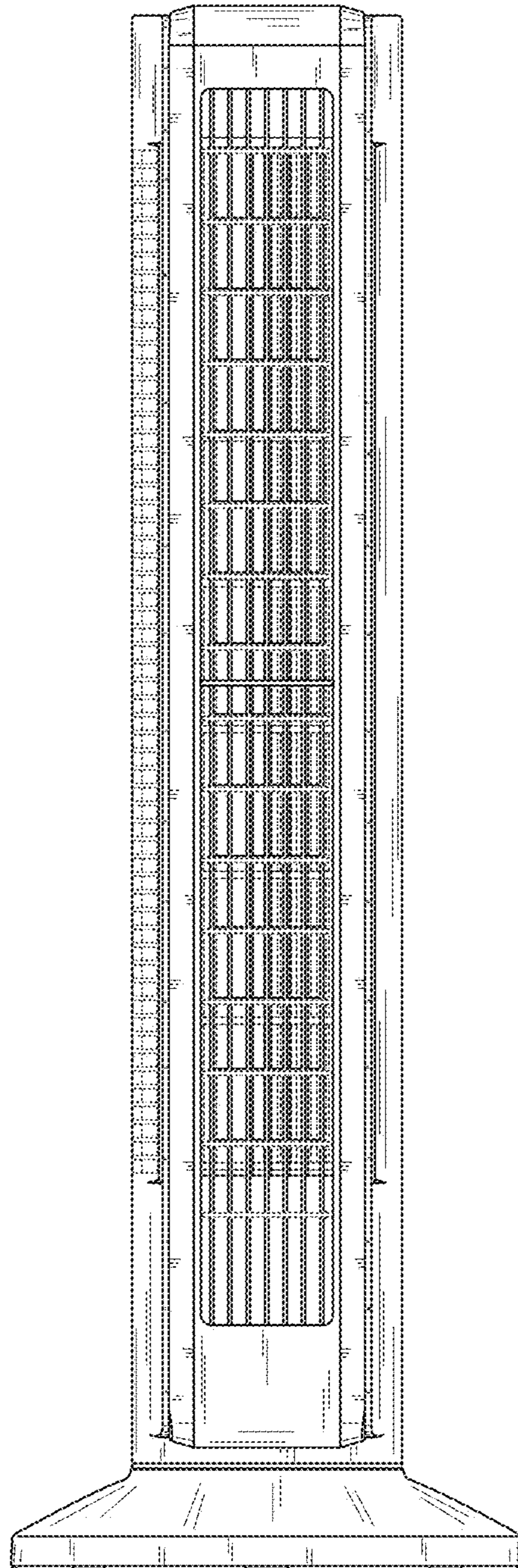


FIG. 3

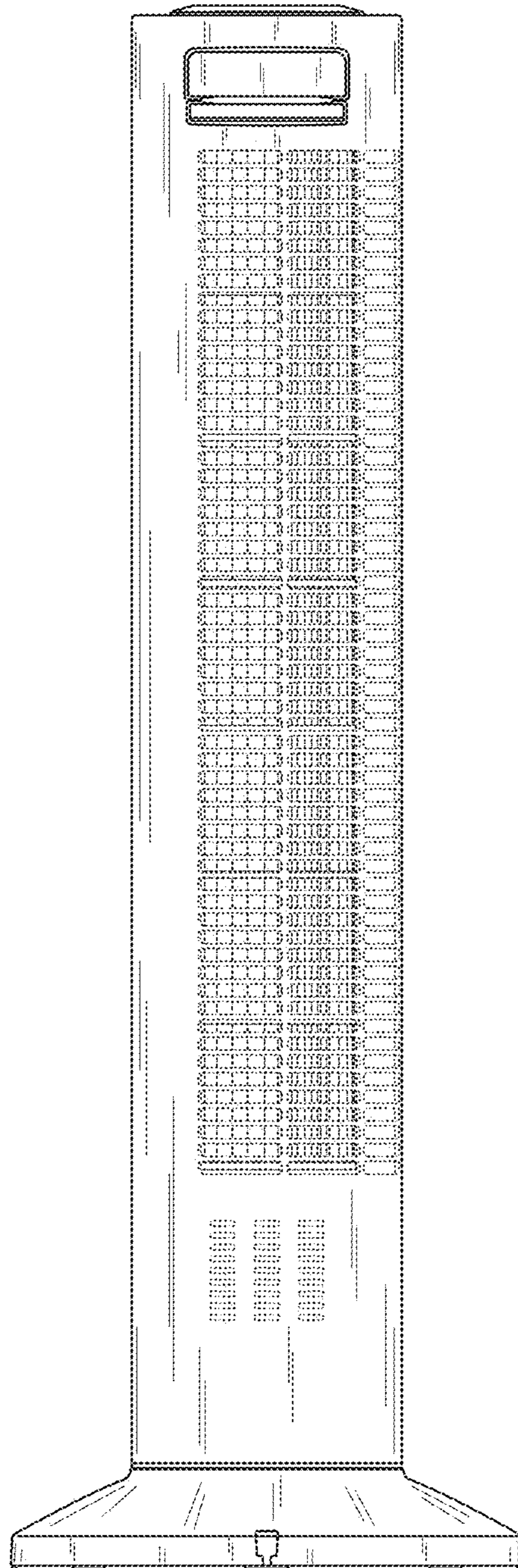


FIG. 4

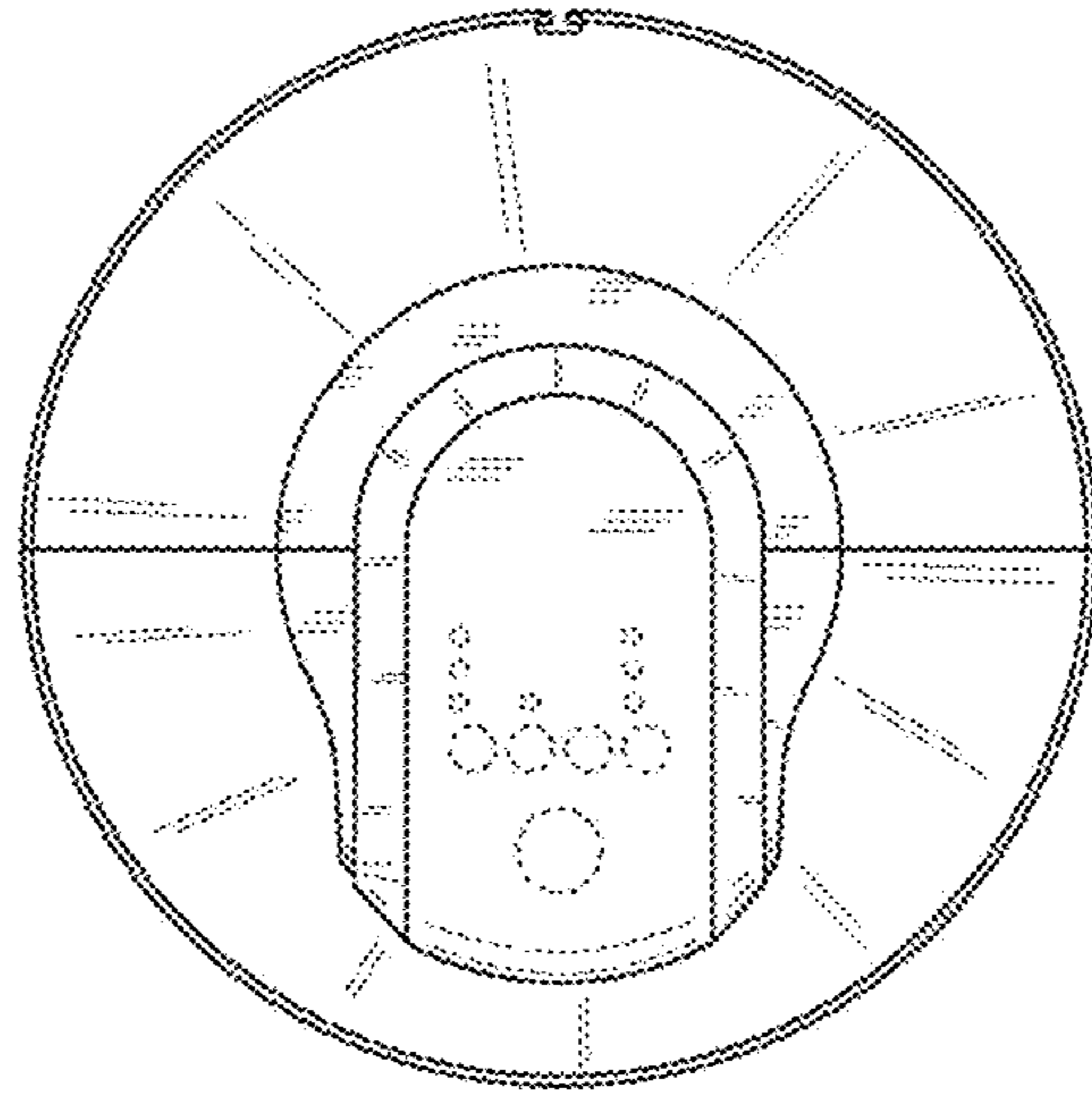


FIG. 5

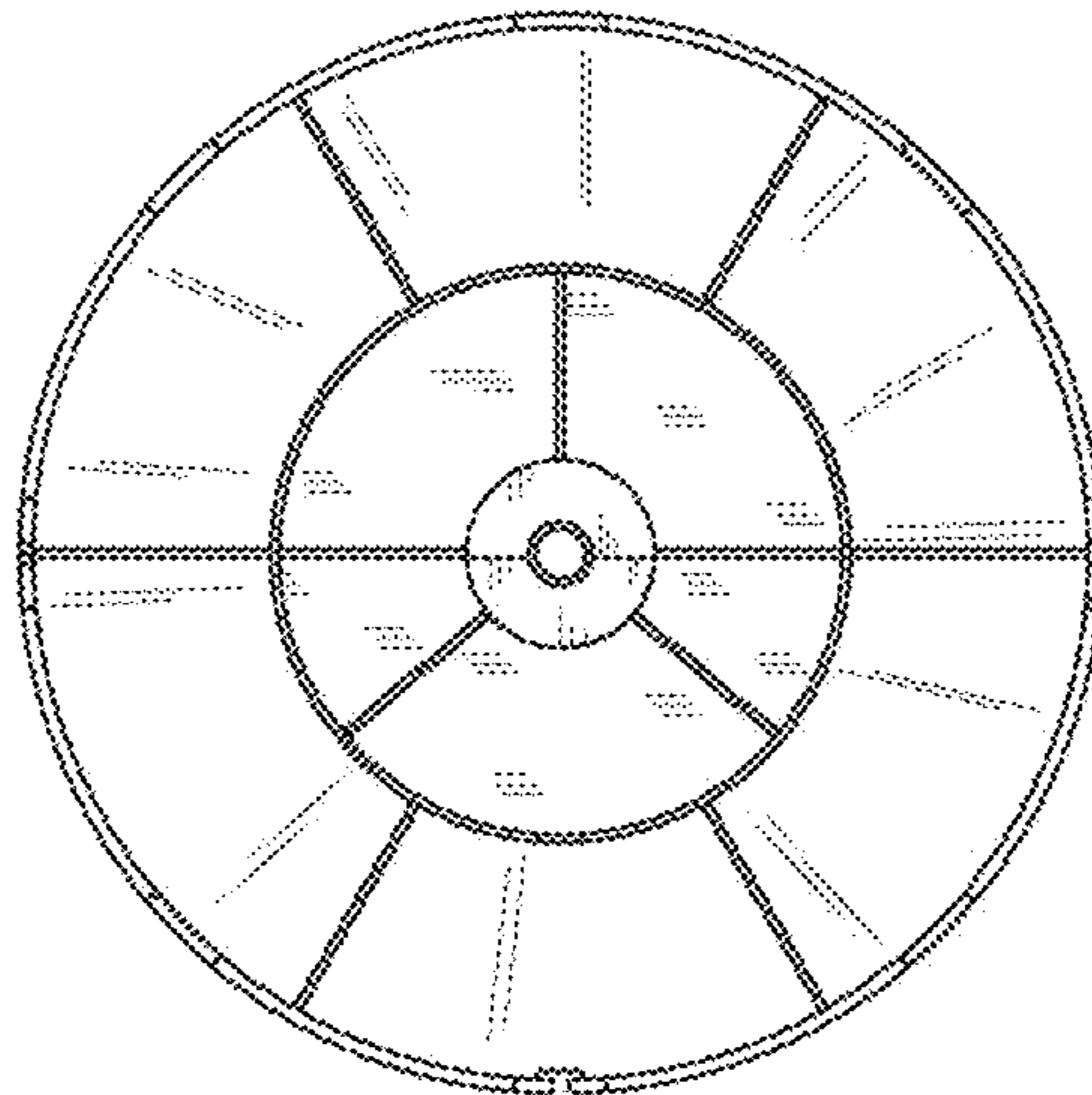


FIG. 6

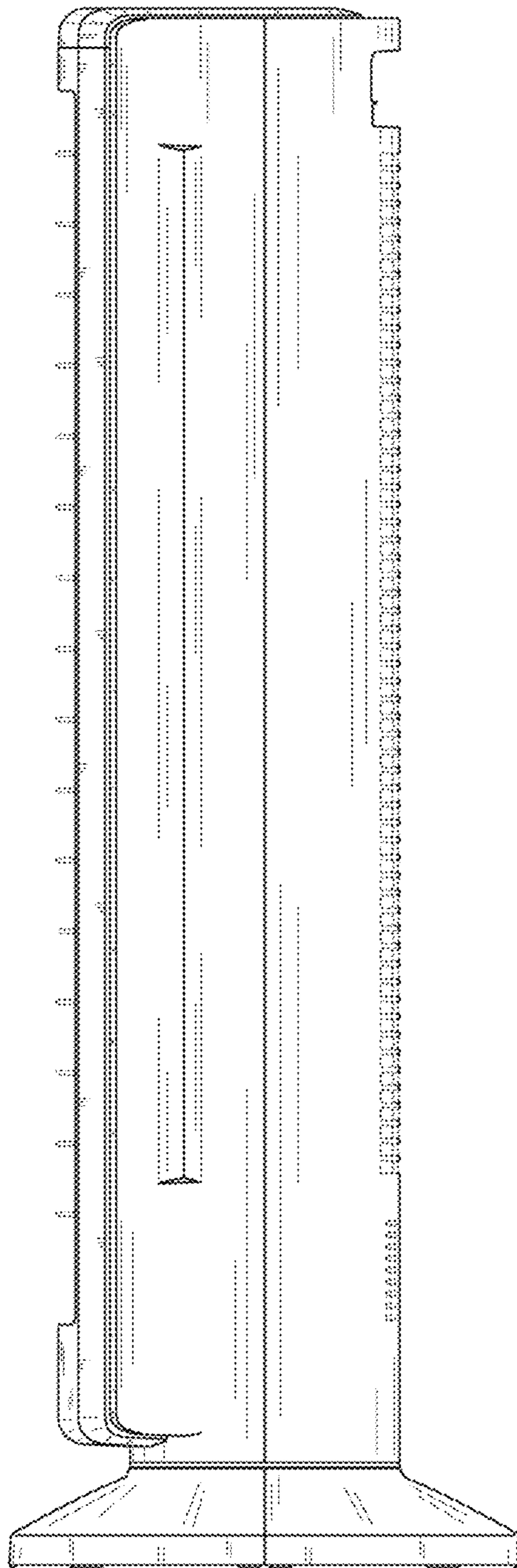


FIG.7

