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(12) **United States Design Patent** (10) **Patent No.:** **US D951,414 S**  
**Yoo** (45) **Date of Patent:** **\*\* May 10, 2022**

(54) **AIR STERILIZING AND CLEANING APPARATUS**

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(73) Assignee: **WELLIS CO. LTD.**, Seoul (KR)

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

(21) Appl. No.: **29/730,673**

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(51) **LOC (13) Cl.** ..... **23-04**

(52) **U.S. Cl.**  
USPC ..... **D23/364**

(58) **Field of Classification Search**  
USPC ..... D23/355-366, 352, 369, 332, 333, 335,  
D23/336, 342, 351; 422/120, 122;  
55/356, 473, 504; 96/97; 261/DIG. 17,  
261/DIG. 65, DIG. 88, DIG. 31  
CPC .. A61L 9/16; A61L 9/22; B01D 47/00; B01D  
47/027; B01D 2221/02; B01D 2259/4508;  
B03C 3/155; B03C 3/368; F24F 3/16;  
F24F 13/20; F24F 13/28  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 7,878,418 B2 \* 2/2011 Sevy ..... A61M 21/00  
239/8
- D791,292 S \* 7/2017 Kim ..... D23/333
- D824,008 S \* 7/2018 De' Longhi ..... D23/335
- D825,047 S \* 8/2018 Brooks ..... D23/366

- D838,823 S \* 1/2019 Yu ..... D23/364
- D872,244 S \* 1/2020 Peng ..... D23/360
- D879,275 S \* 3/2020 Mano ..... D23/359
- D900,290 S \* 10/2020 Shin ..... D23/364
- D907,751 S \* 1/2021 Chan ..... D23/316
- D908,852 S \* 1/2021 Zhao ..... D23/333
- D910,824 S \* 2/2021 Zhao ..... D23/360
- 2006/0015974 A1 \* 1/2006 Ike ..... F24F 3/1423  
62/113
- 2018/0328605 A1 \* 11/2018 Bae ..... F24F 3/16

\* cited by examiner

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(57) **CLAIM**

I claim, the ornamental design for an air sterilizing and cleaning apparatus, as shown and described.

**DESCRIPTION**

FIG. 1 is a top and front perspective view of an air sterilizing and cleaning apparatus, showing my new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a left side view thereof;  
FIG. 5 is a right side view thereof;  
FIG. 6 is a top view thereof; and,  
FIG. 7 is a bottom view thereof.

The broken lines are shown for the purpose of depicting portions of the air sterilizing and cleaning apparatus that form no part of the claim.

**1 Claim, 6 Drawing Sheets**

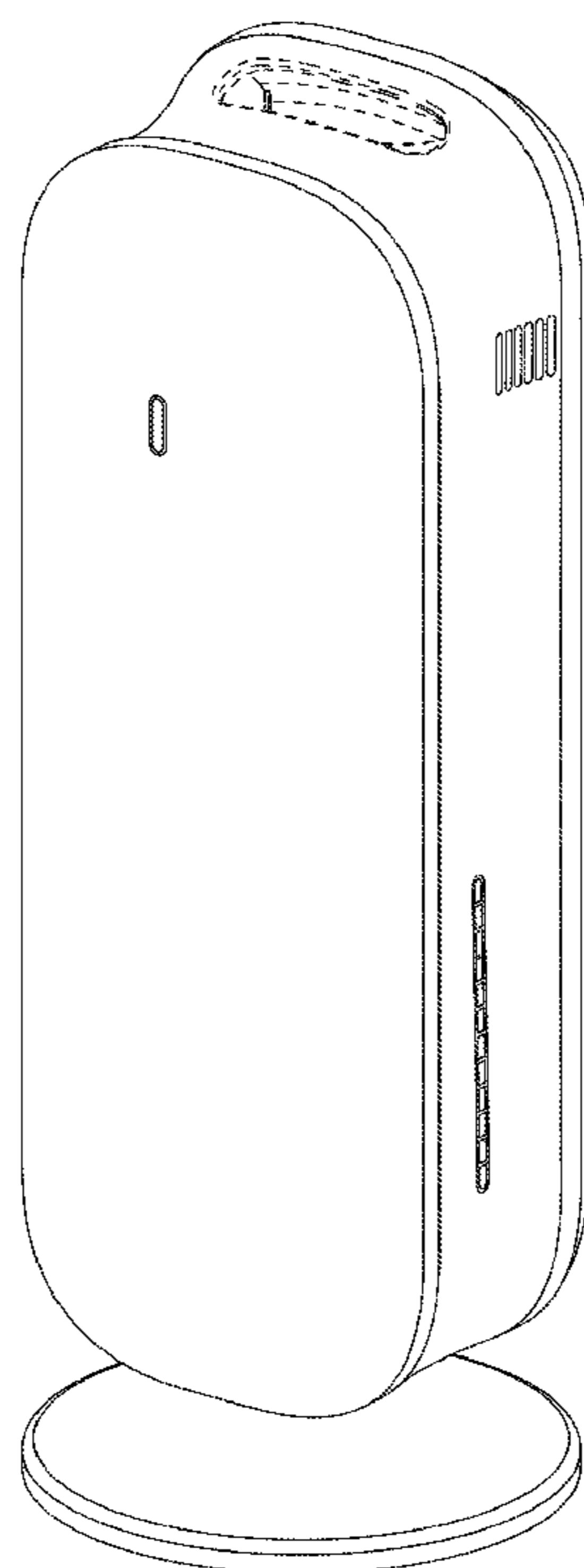


FIG. 1

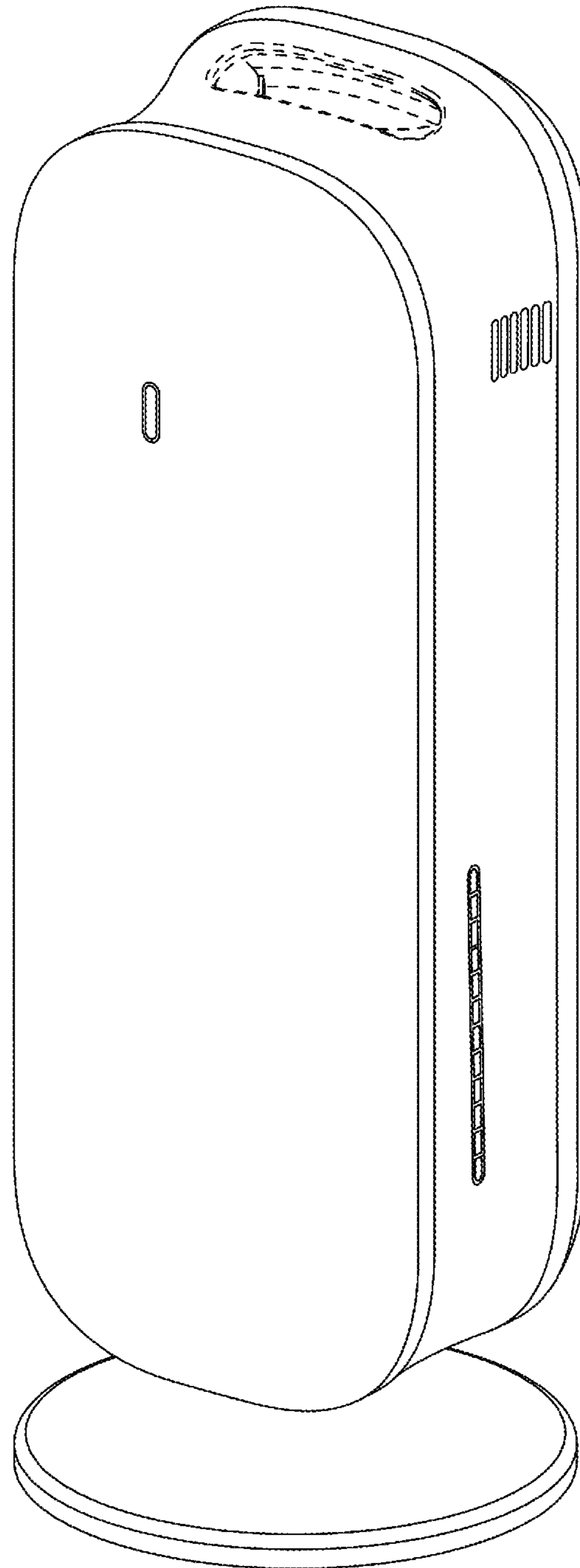


FIG. 2

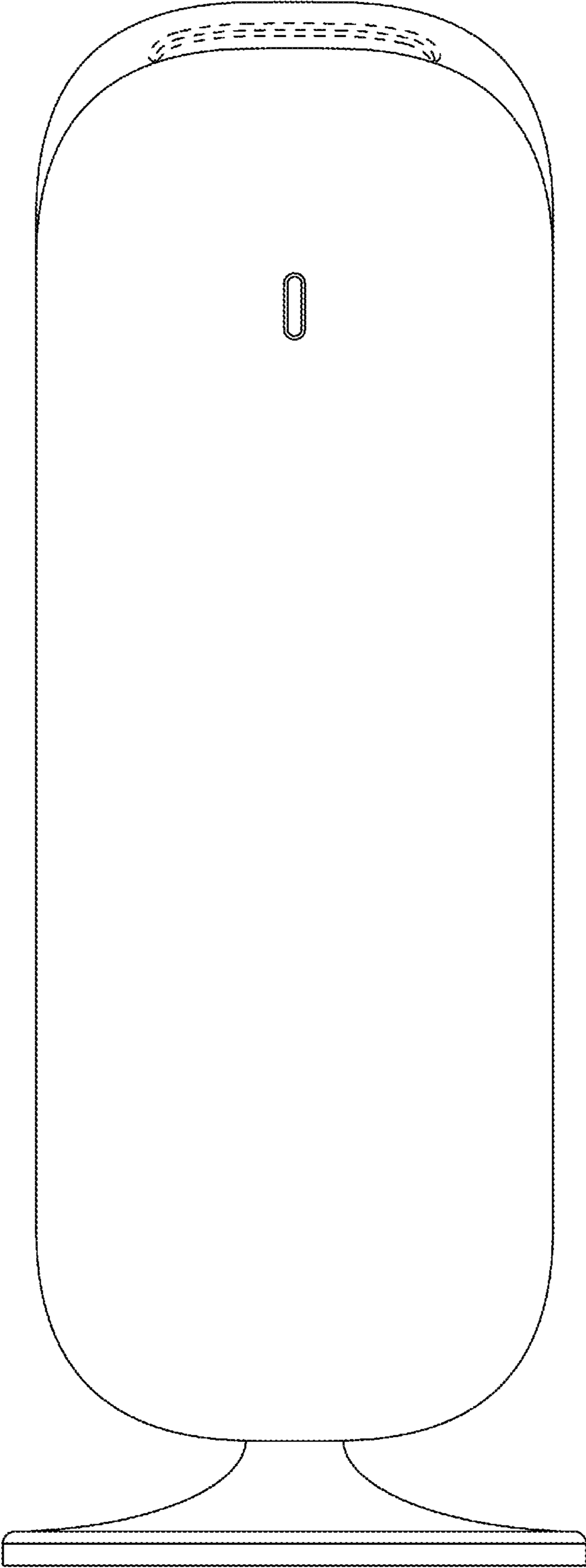


FIG. 3

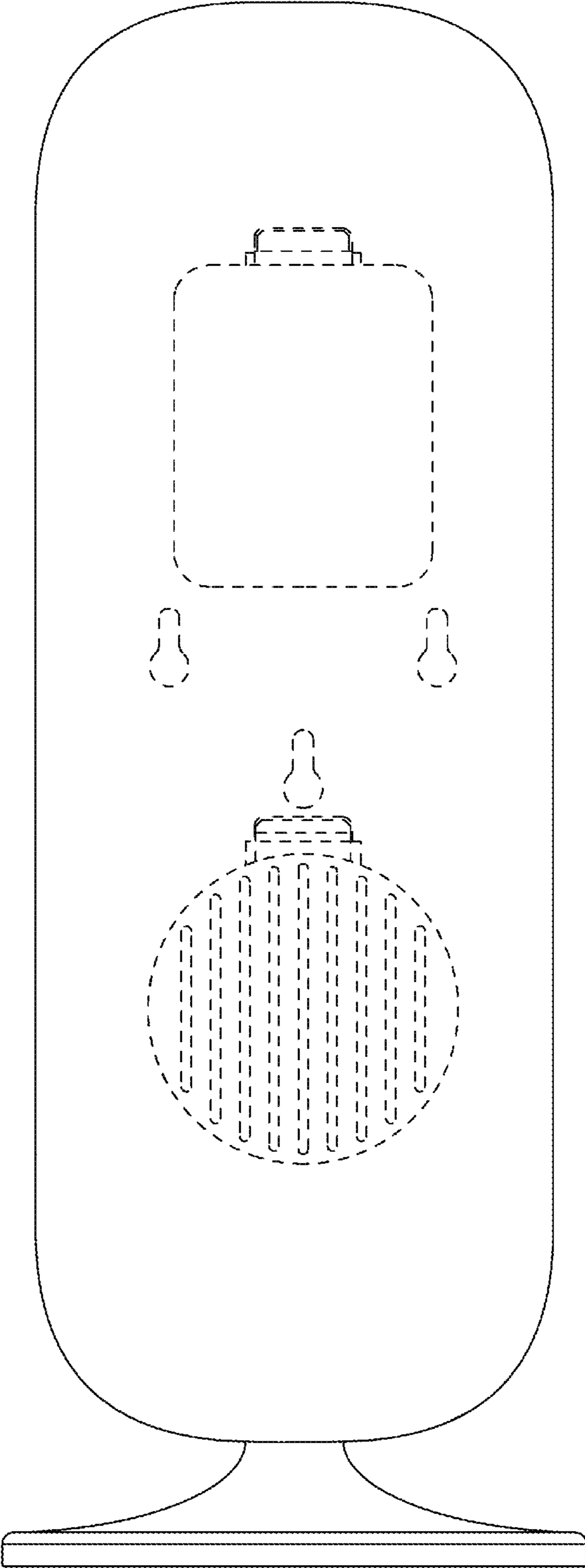


FIG. 4

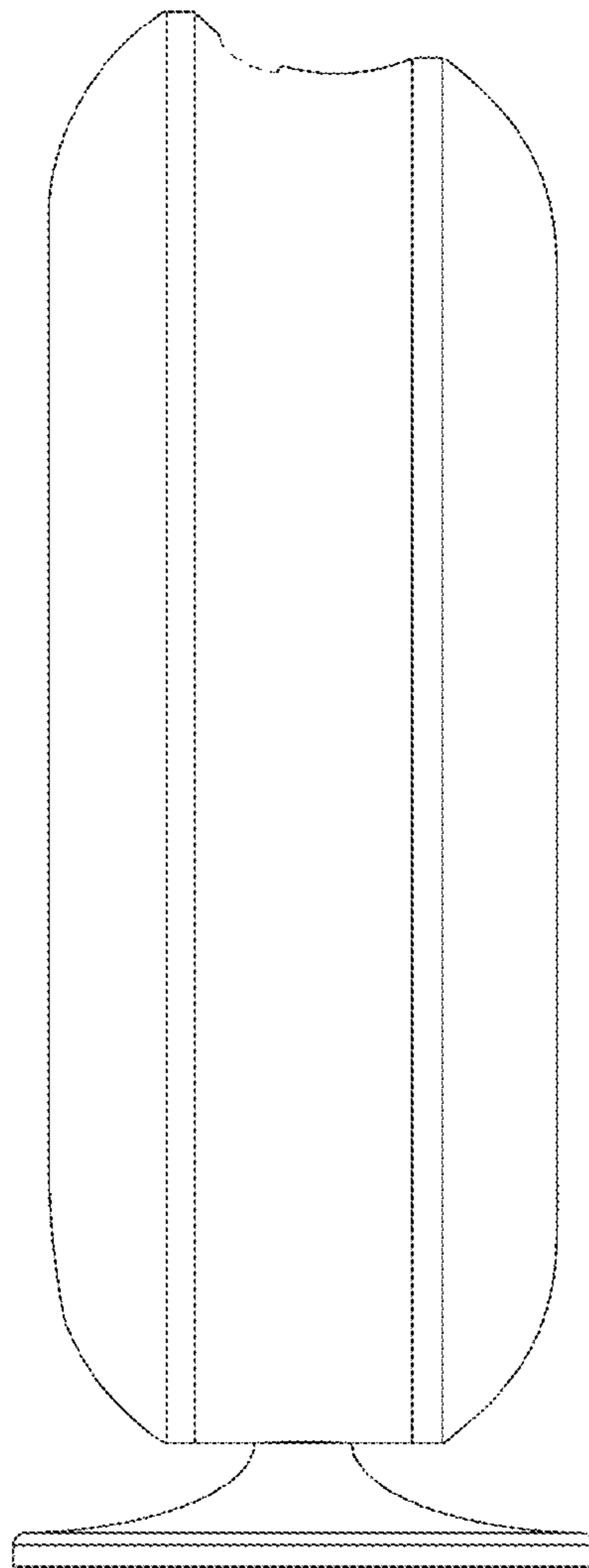


FIG. 5

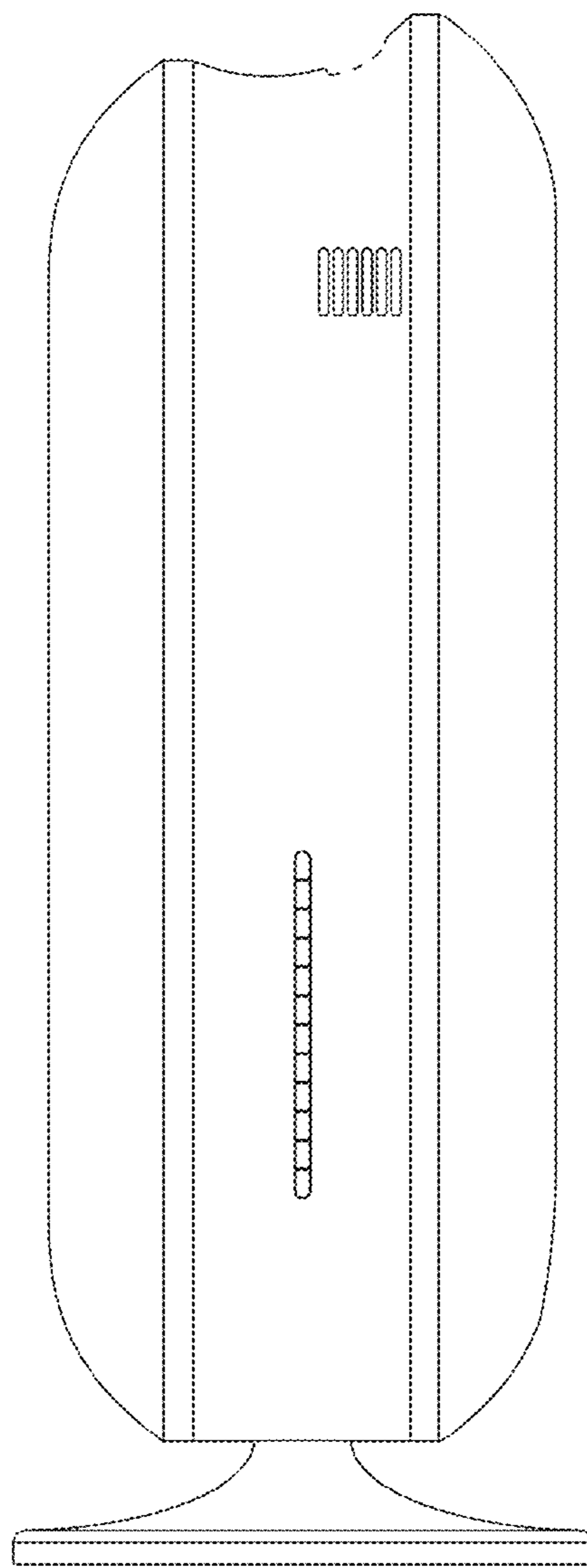


FIG. 6

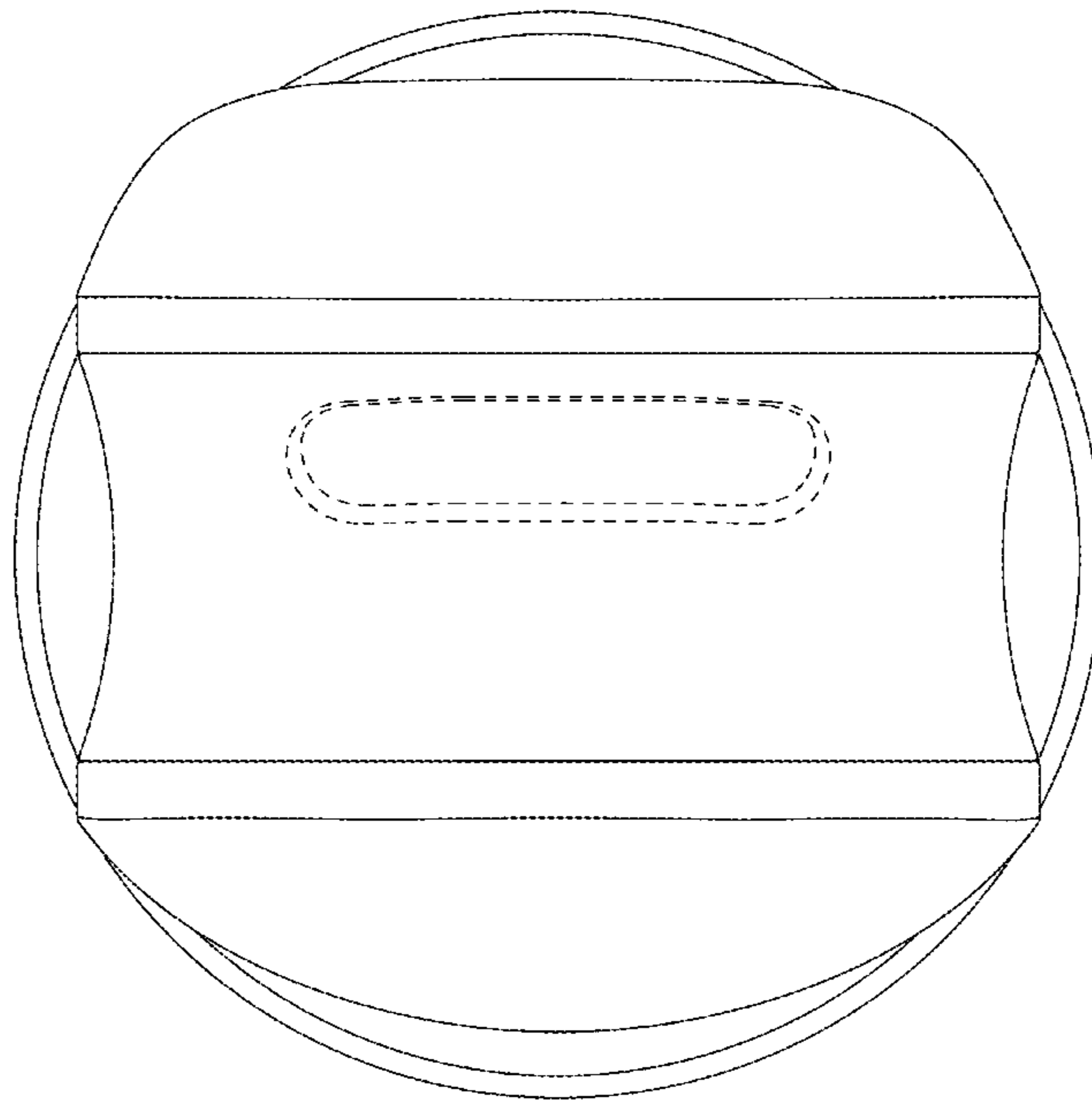


FIG. 7

