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

(10) **Patent No.:** **US D972,100 S**
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(54) **AIR PURIFIER**
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D818,097 S * 5/2018 Cho D23/364
D818,098 S * 5/2018 Cho D23/364
D829,313 S * 9/2018 Cho B01D 46/0047
D829,314 S * 9/2018 Cho D23/364
D832,414 S * 10/2018 Sharma B01D 53/0415
D941,980 S * 1/2022 Zhang D23/364
D942,604 S * 2/2022 Yang D23/364
D946,732 S * 3/2022 Xu D23/364

(Continued)

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

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(21) Appl. No.: **29/721,836**

(57) **CLAIM**

(22) Filed: **Jan. 23, 2020**

We claim the ornamental design for an air purifier, as shown and described.

(30) **Foreign Application Priority Data**

DESCRIPTION

Jul. 25, 2019 (KR) 30-2019-0035872

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

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

(58) **Field of Classification Search**
USPC .. D7/536, 538, 553.8, 554.2, 602–604, 612;
D9/428, 545, 738, 763–764, 767;
D23/332–335, 337, 342, 352, 355–366,
D23/369–370; D5/1–3, 56–63
CPC .. A61L 9/00; A61L 9/22; B01D 47/00; B01D
47/027; 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**

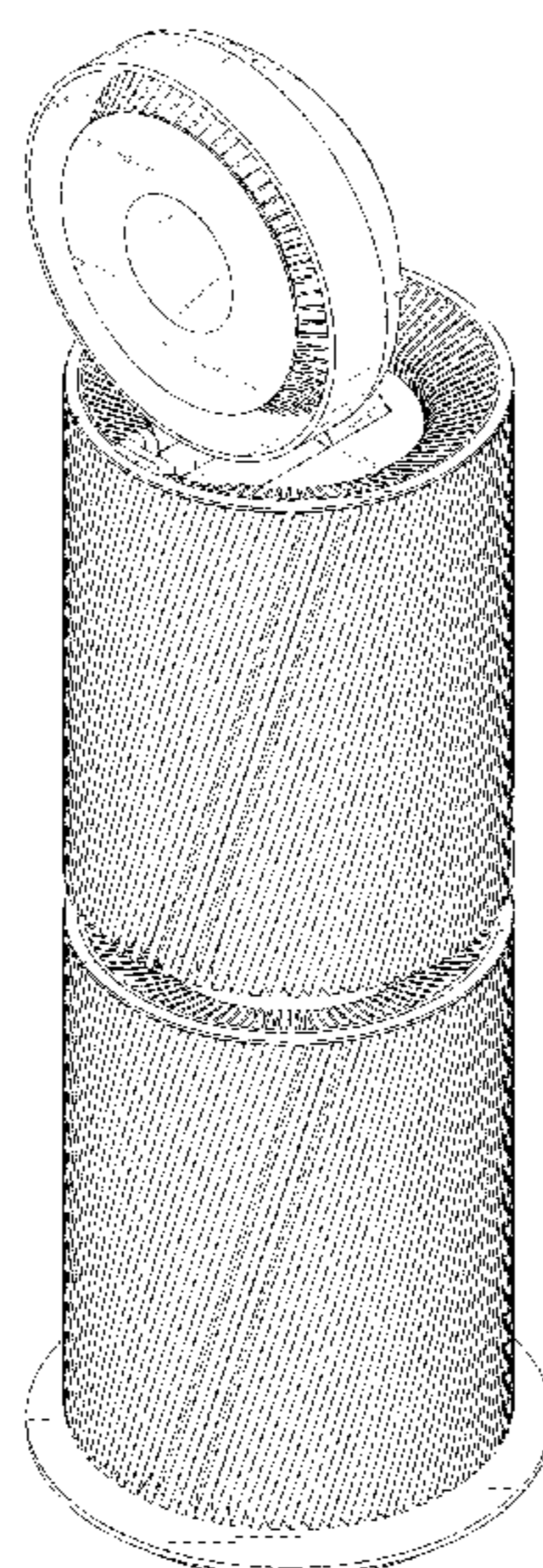
U.S. PATENT DOCUMENTS

D652,634 S * 1/2012 Leimbach D5/60
D805,622 S * 12/2017 Lee D23/364
D818,096 S * 5/2018 Cho D23/364

FIG. 1 is a perspective view of an air purifier showing the new design;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a left-side elevation view thereof;
FIG. 5 is a right-side elevation view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is a perspective view thereof showing the circulator part at an angle;
FIG. 9 is a perspective view thereof showing the circulator part at another angle; and,
FIG. 10 is a partial perspective view thereof showing the air purifier in a state of use.

The evenly spaced broken lines and unshaded areas within them depict portions of the air purifier that form no part of the claimed design. The dot dash dot broken line in FIG. 10 denotes the boundary of the partial view and forms no part of the claimed design.

1 Claim, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D947,341 S * 3/2022 Xia D23/364
D948,015 S * 4/2022 Shen D23/364
D948,016 S * 4/2022 Yoon D23/364
D948,691 S * 4/2022 Chen D23/359
D950,034 S * 4/2022 Peng D23/364
2018/0256770 A1* 9/2018 Jang A61L 9/12
2019/0264948 A1* 8/2019 Jung B01D 46/0047
2020/0188827 A1* 6/2020 Yang B01D 53/0415
2021/0278097 A1* 9/2021 Min F24F 13/20
2022/0011009 A1* 1/2022 Lee F24F 13/28
2022/0011011 A1* 1/2022 Yang F24F 13/082

* cited by examiner

FIG. 1

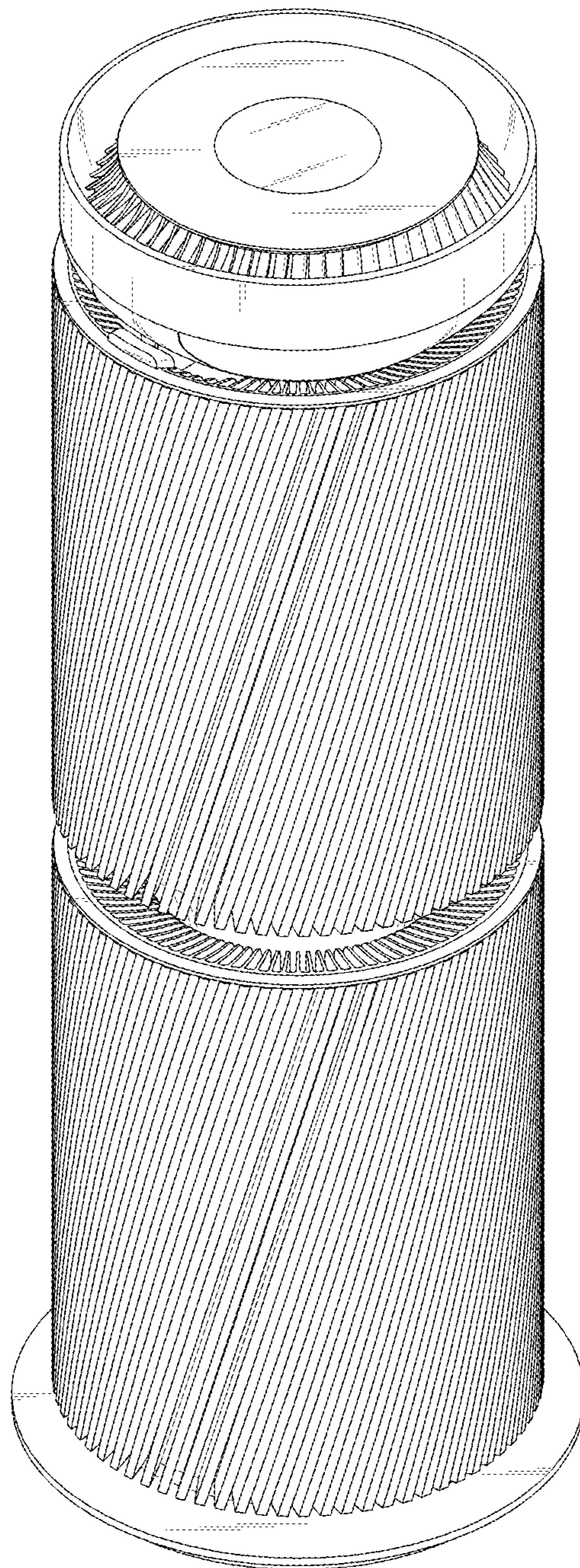


FIG. 2

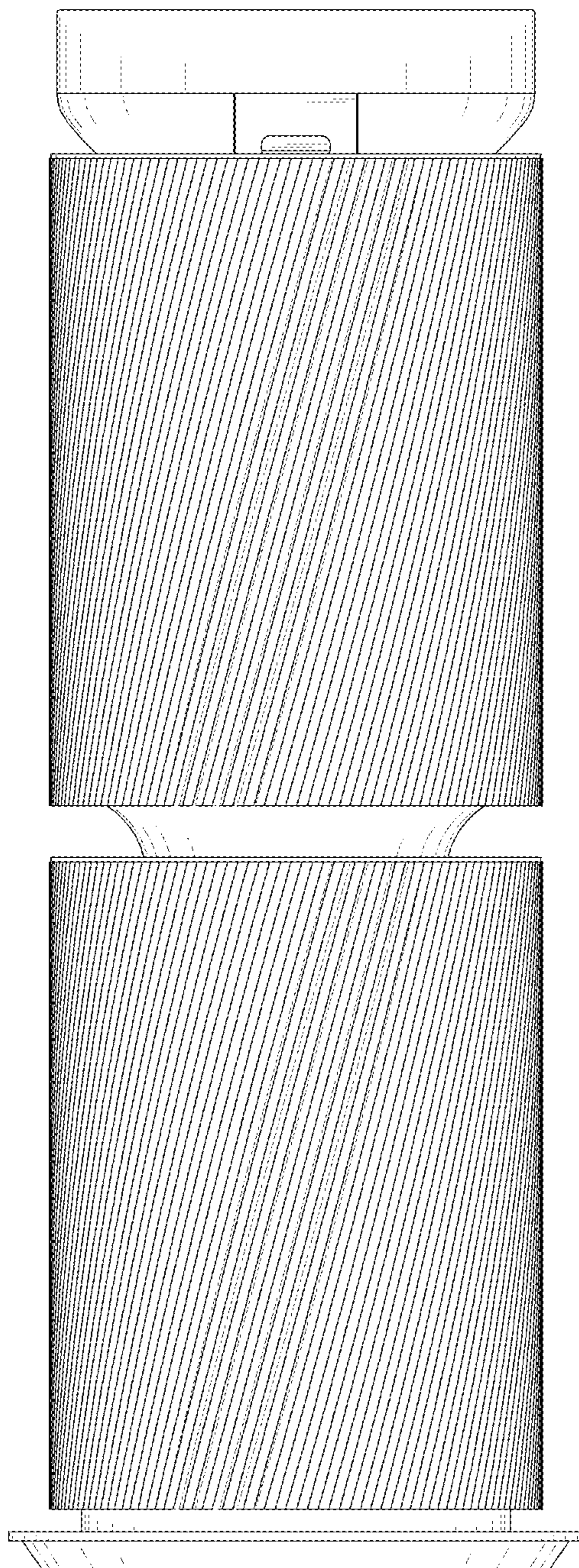


FIG. 3

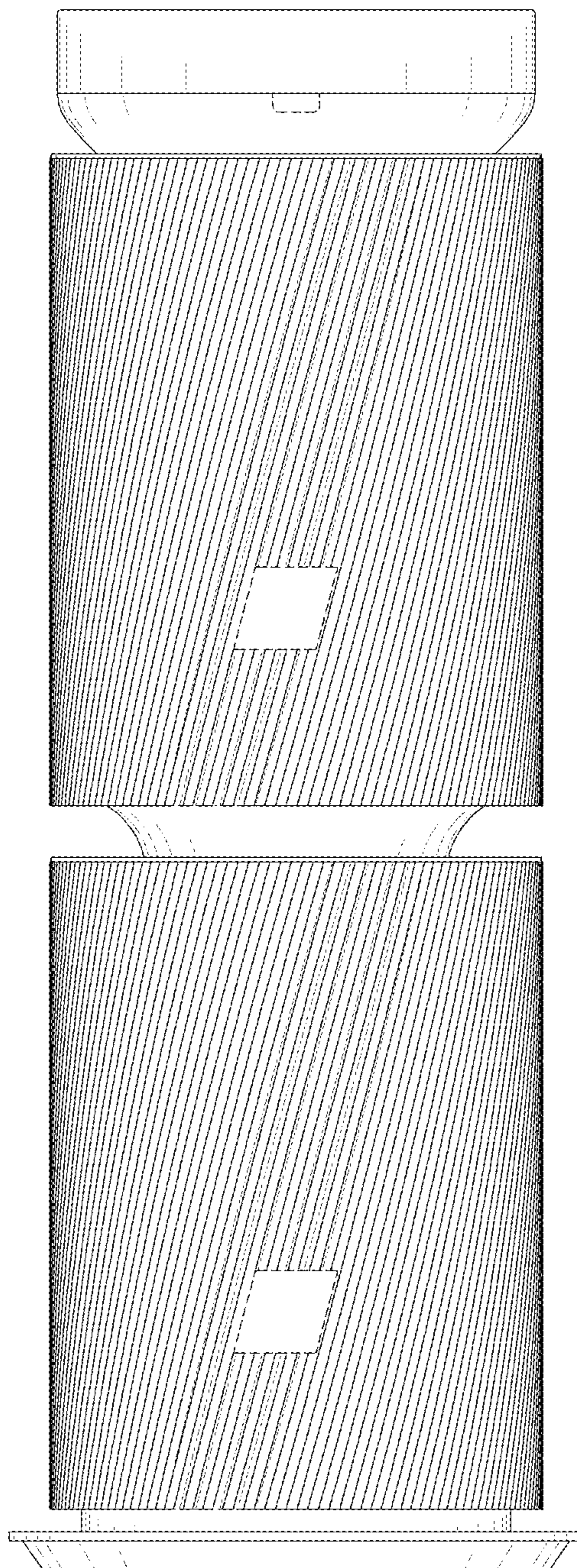


FIG. 4

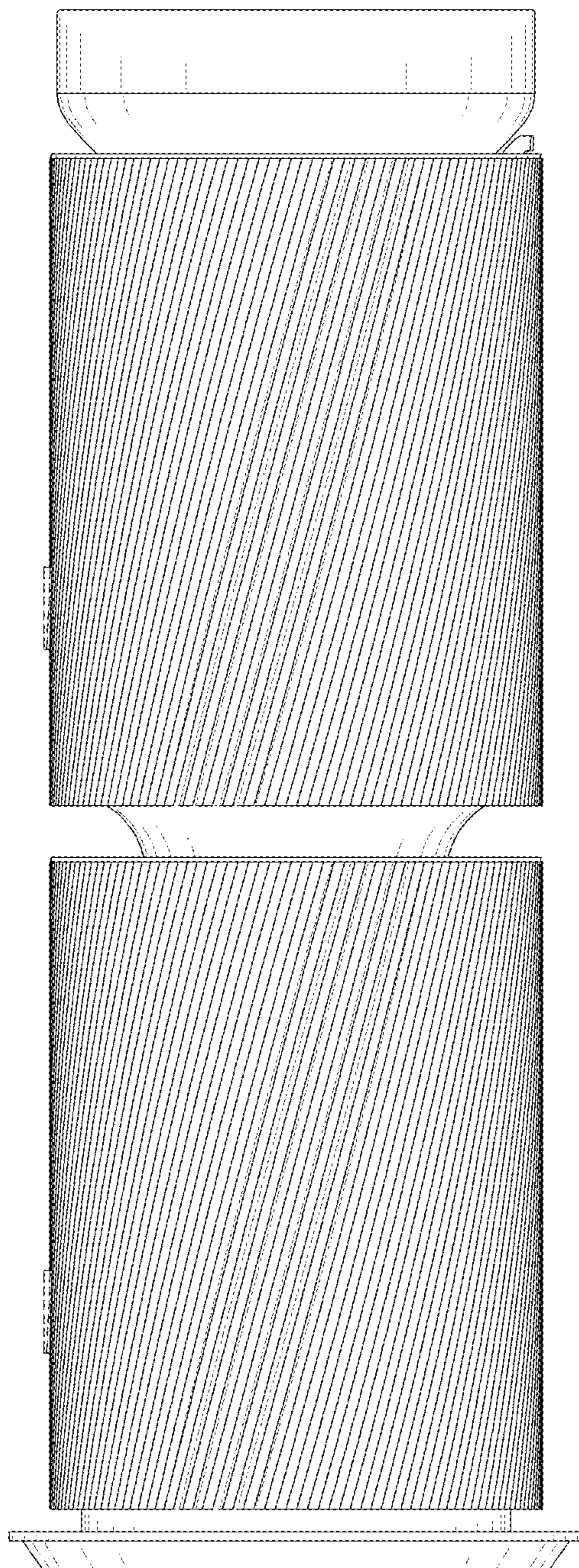


FIG. 5

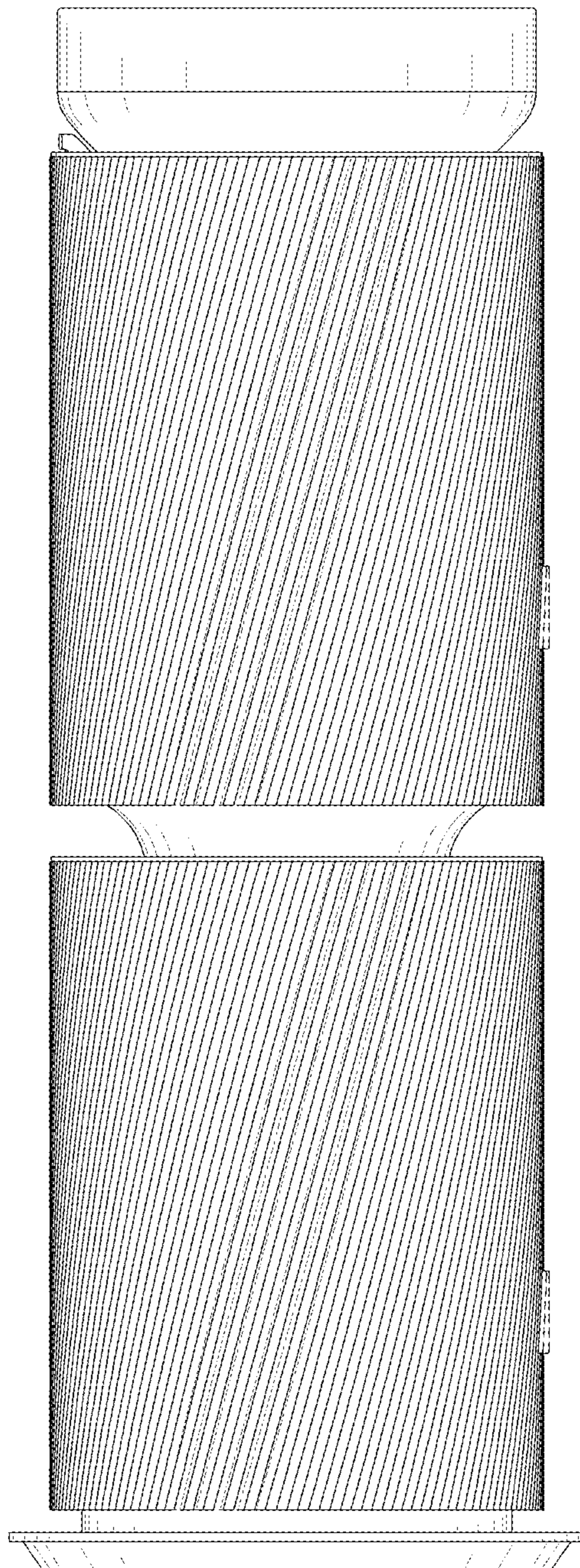


FIG. 6

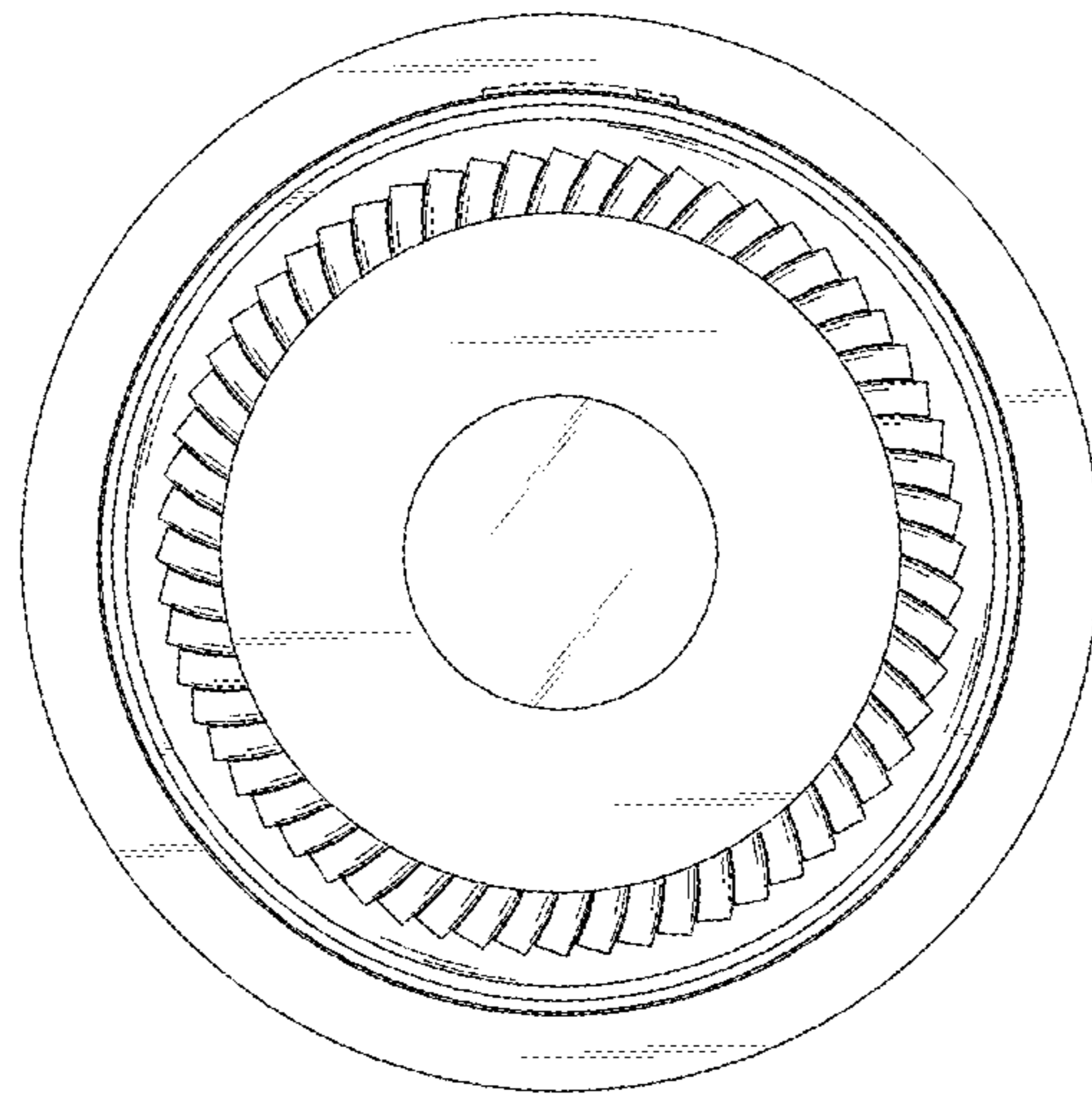


FIG. 7

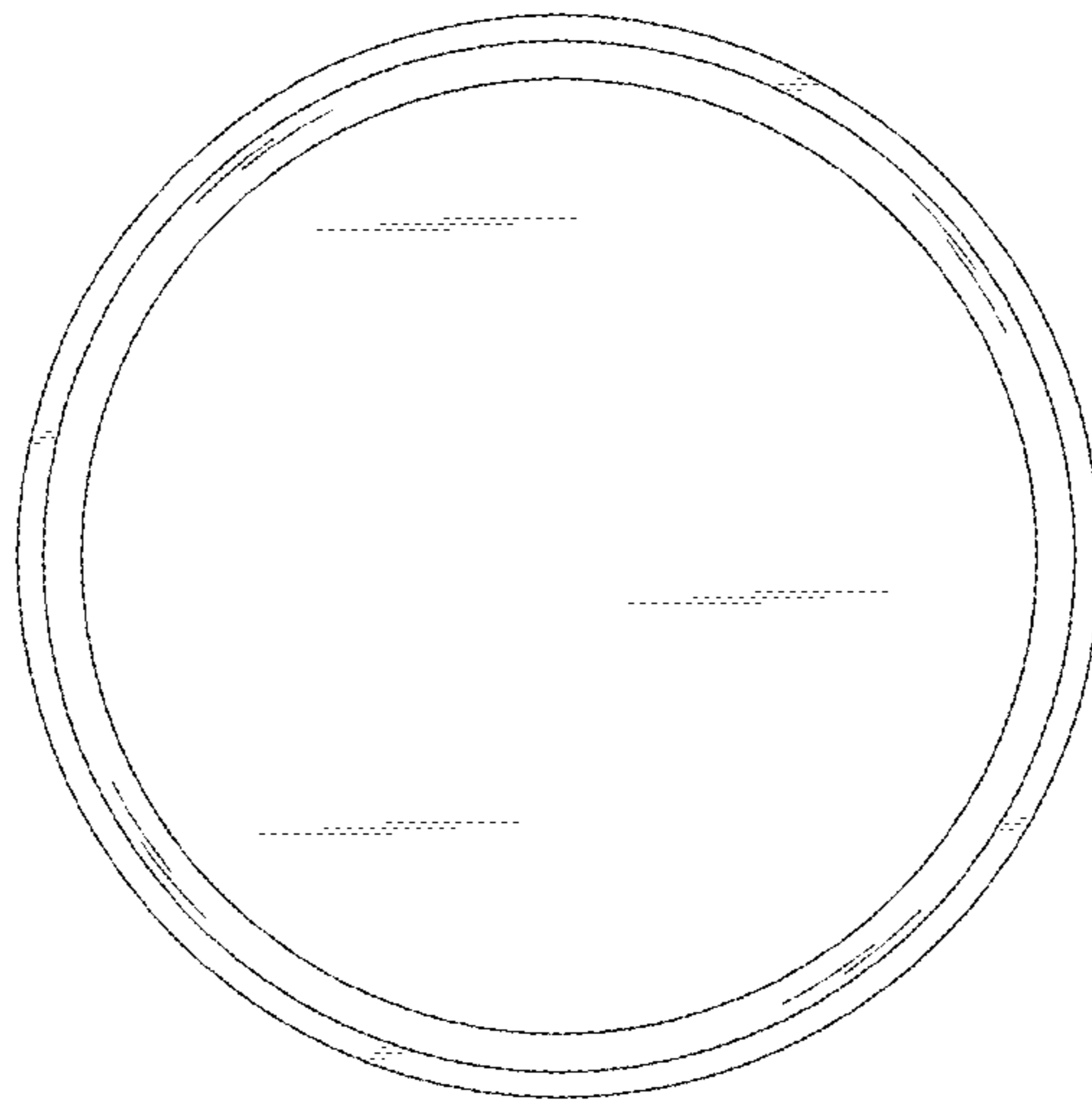


FIG. 8

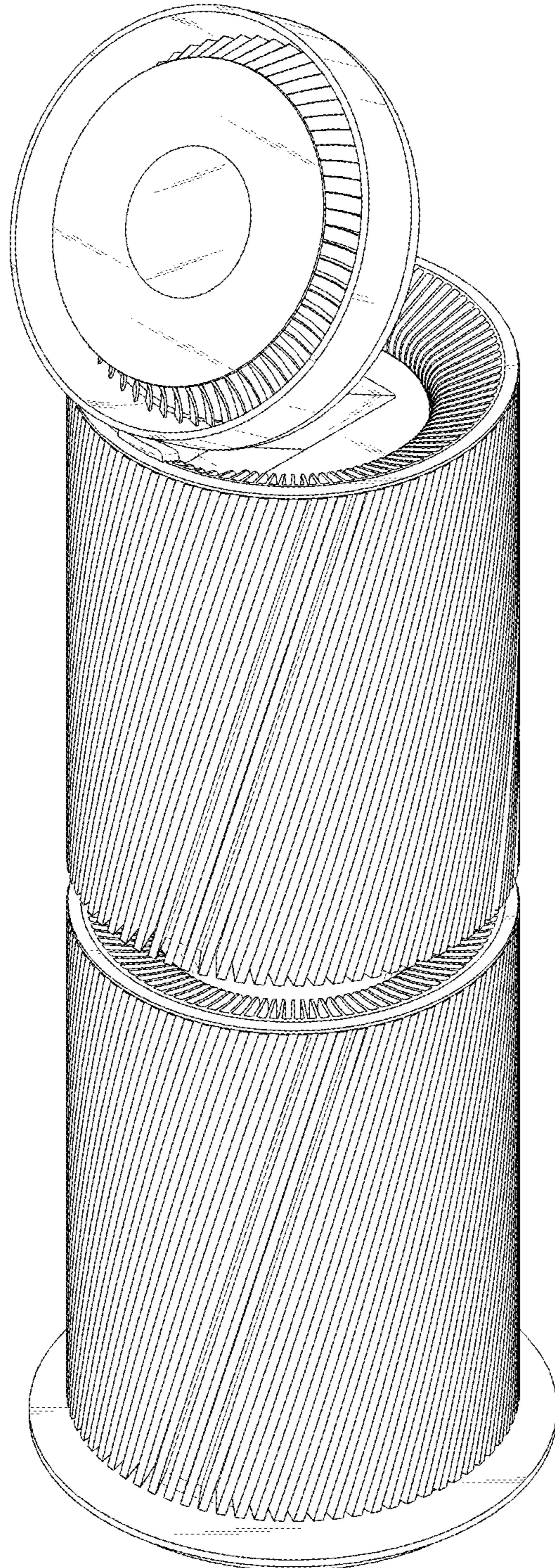


FIG. 9

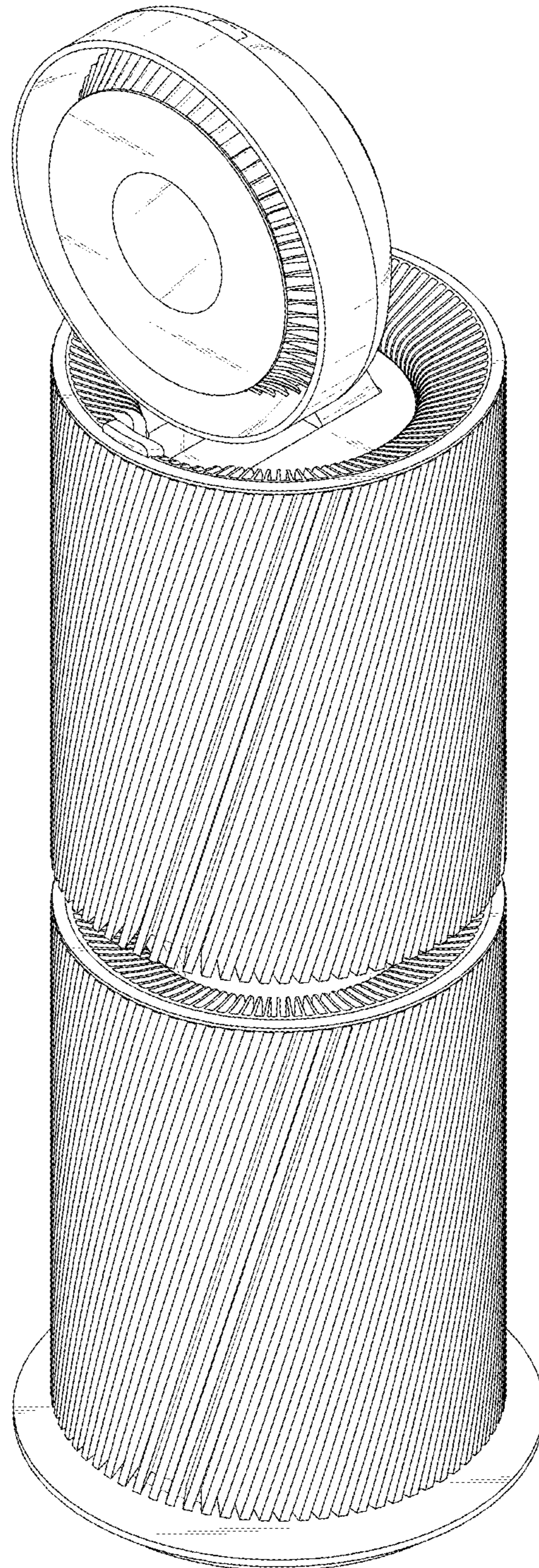


FIG. 10

