



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

(10) **Patent No.:** **US D1,002,829 S**
(45) **Date of Patent:** **** Oct. 24, 2023**

(54) **AIR PURIFIER**

D935,591 S * 11/2021 Xu D23/364
D941,980 S * 1/2022 Zhang D23/364
D944,379 S * 2/2022 Li D23/364

(71) Applicant: **BEIANG AIR TECH LTD.**, Suzhou (CN)

(Continued)

(72) Inventors: **Hongyu Ran**, Suzhou (CN); **Yaoyuan Lu**, Suzhou (CN); **Qi Chen**, Suzhou (CN); **Yigang Liu**, Suzhou (CN)

FOREIGN PATENT DOCUMENTS

CN 202030584350.3 * 3/2020
CN 202030602073.4 * 2/2021
CN 202130299588.6 * 8/2021

(73) Assignee: **SUZHOU BEIANG SMART TECHNOLOGY CO. LTD.**, Jiangsu (CN)

OTHER PUBLICATIONS

Airdog Mini Air Purifier. Amazon Standard ID# B0BC1P8LWM. Catalogue [Online]. Amazon.com 2022. [Date First Available: Oct. 25, 2022][Retrieved on Jun. 30, 2023]. Retrieved from the Internet: <URL:https://www.amazon.co.jp/-en/Airdog-Purifier-Plastic-Bottle-Filter/dp/B0BC1P8LWM> (Year: 2022).*

(Continued)

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

Primary Examiner — Janice Hallmark

(21) Appl. No.: **29/788,979**

Assistant Examiner — Adedoyin Taiwo Odeyale

(22) Filed: **Aug. 22, 2021**

(74) *Attorney, Agent, or Firm* — SYNCODA LLC; Feng Ma

(30) **Foreign Application Priority Data**

Mar. 2, 2021 (CN) 202130114231.6

(51) **LOC (14) Cl.** **23-04**

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

(58) **Field of Classification Search**
USPC D23/314, 332–333, 335–336, 355–356, D23/364–366, 378

CPC F24F 1/0022; F24F 3/14; F24F 6/06; F24F 8/80; B01D 46/00281; B01D 46/0043; A61L 2209/12; A61L 2209/14

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D338,520 S * 8/1993 Ito D23/364
D397,197 S * 8/1998 Ito D23/336
D539,406 S * 3/2007 Wang D23/364
D804,002 S * 11/2017 Huang D23/364
D855,787 S * 8/2019 Sakamoto D23/370
D865,931 S * 11/2019 Ha D23/356
D881,367 S * 4/2020 Kihm D23/366

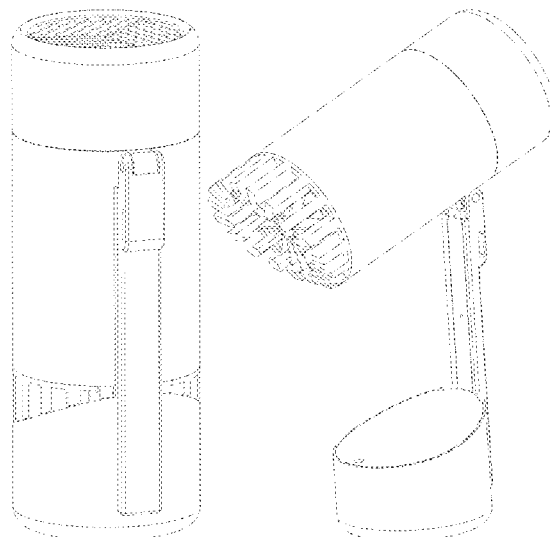
(57) **CLAIM**

The ornamental design for an air purifier, as shown and described.

DESCRIPTION

FIG. 1 is a front view of an air purifier showing our new design;
FIG. 2 is a rear view thereof;
FIG. 3 is a left side view thereof;
FIG. 4 is a right side view thereof;
FIG. 5 is a top view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a perspective view thereof; and,
FIG. 8 is a perspective view of the air purifier of FIG. 1 shown in a state of use.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D947,343	S *	3/2022	Xia	.....	D23/364
D947,345	S *	3/2022	Fitsch	.....	D23/364
11,590,249	B1 *	2/2023	Oh	.....	F21L 4/025
D981,544	S *	3/2023	Kim	.....	D23/364
D983,345	S *	4/2023	Momozaki	.....	D23/366
2006/0005703	A1 *	1/2006	Wang	.....	B03C 1/30 422/24
2018/0256770	A1 *	9/2018	Jang	.....	A61L 9/12
2019/0203960	A1 *	7/2019	Hoyda	.....	B01D 53/96
2020/0330637	A1 *	10/2020	Chang	.....	B01F 23/213
2022/0023789	A1 *	1/2022	Oh	.....	F24F 13/065
2022/0184542	A1 *	6/2022	Kim	.....	F24F 8/80
2023/0119625	A1 *	4/2023	Chunduri	.....	B01J 21/18 422/4

OTHER PUBLICATIONS

Airdog Mini Air Cleaner. Catalogue [Online]. aliexpress.com 2023. [Retrieved on Jun. 30, 2023]. Retrieved from the Internet: <URL: <https://www.aliexpress.com/i/3256804336753654.html>> (Year: 2023).*

Airdog Air Purifier. Meet Airdog Mini Aircap, announced in YouTube on Aug. 8, 2022. [Online] [Retrieved on Jun. 30, 2023]. Retrieved from the Internet: <URL: <https://www.youtube.com/watch?v=XRVsZ9M5nZw>> (Year: 2022).*

* cited by examiner

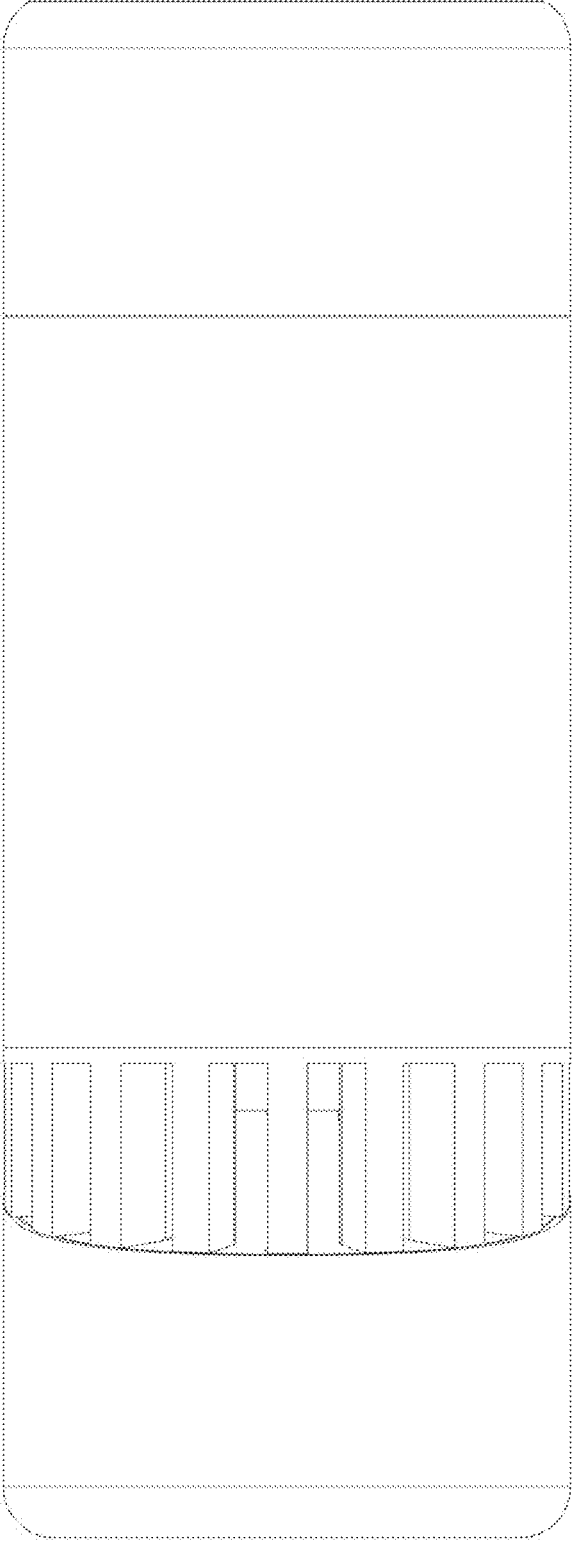


FIG. 1

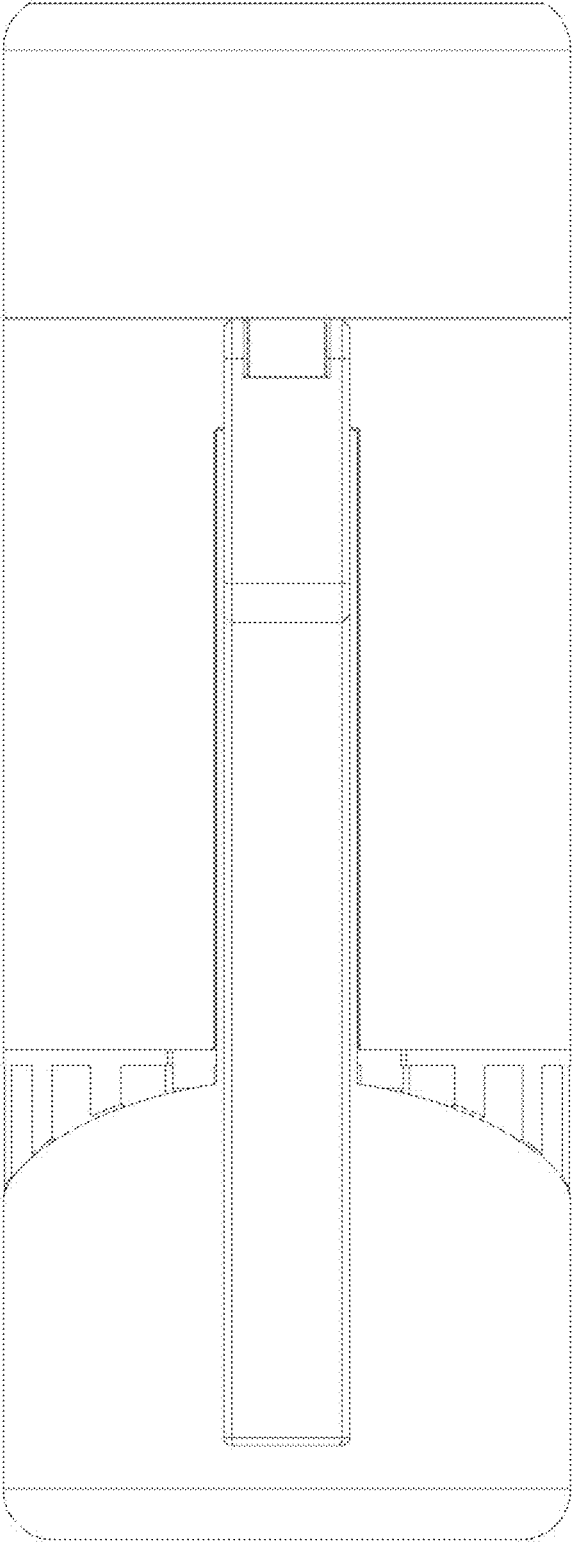


FIG. 2

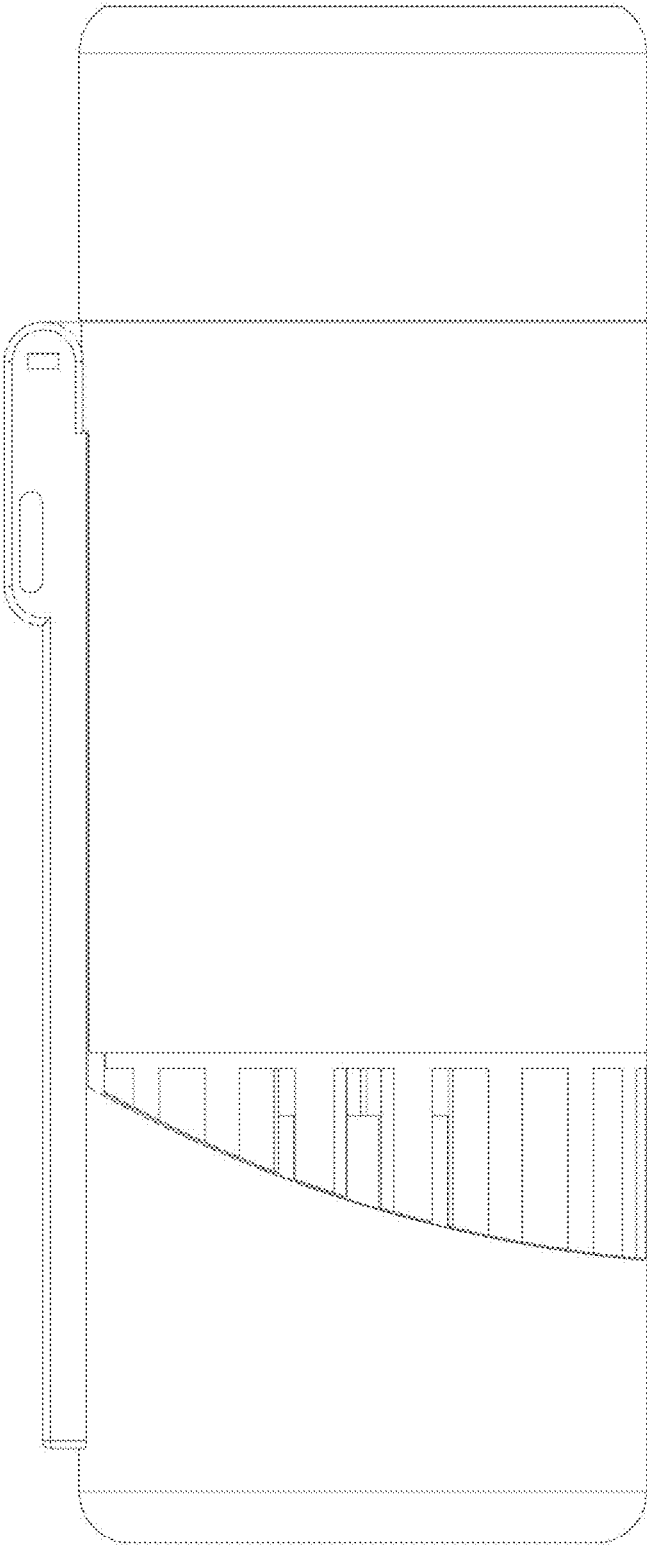


FIG. 3

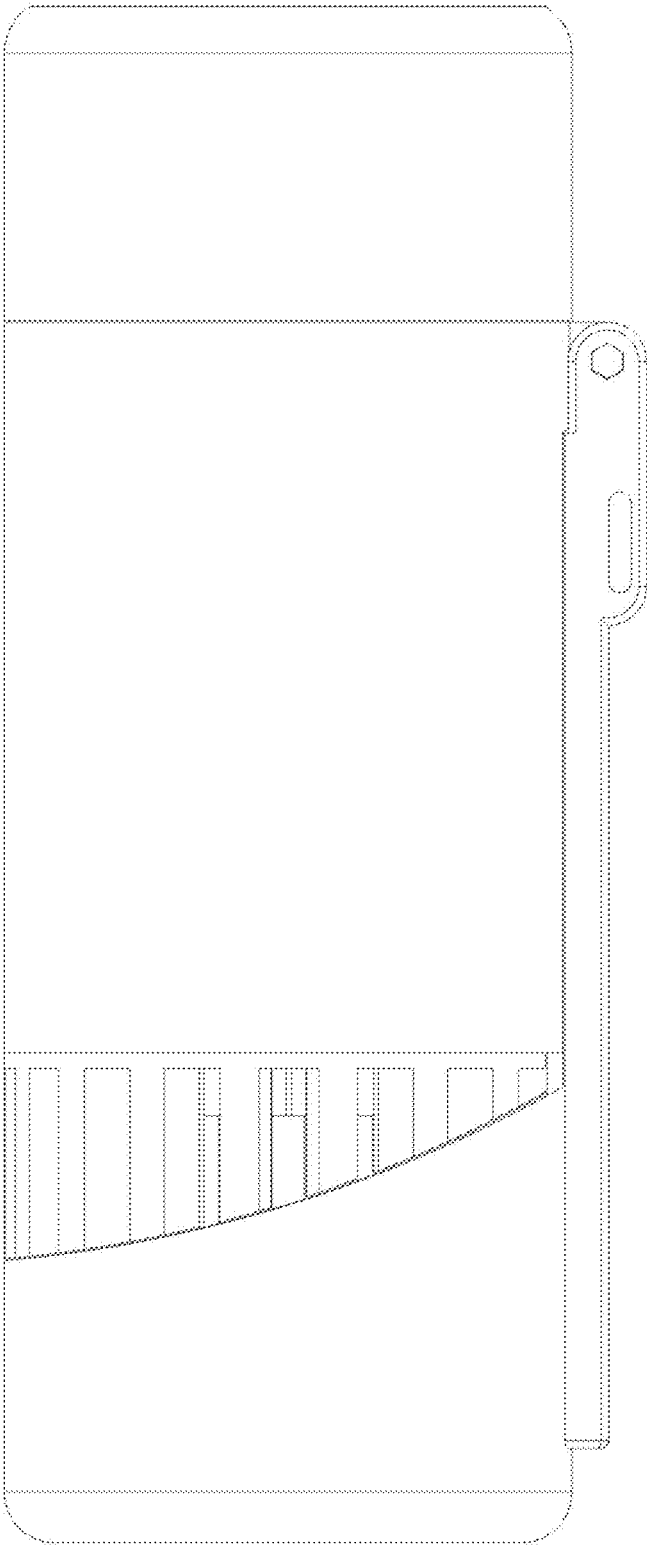


FIG. 4

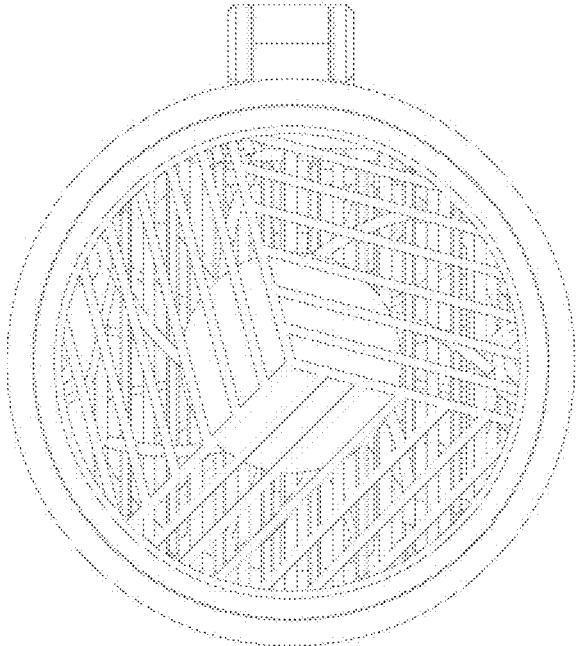


FIG. 5

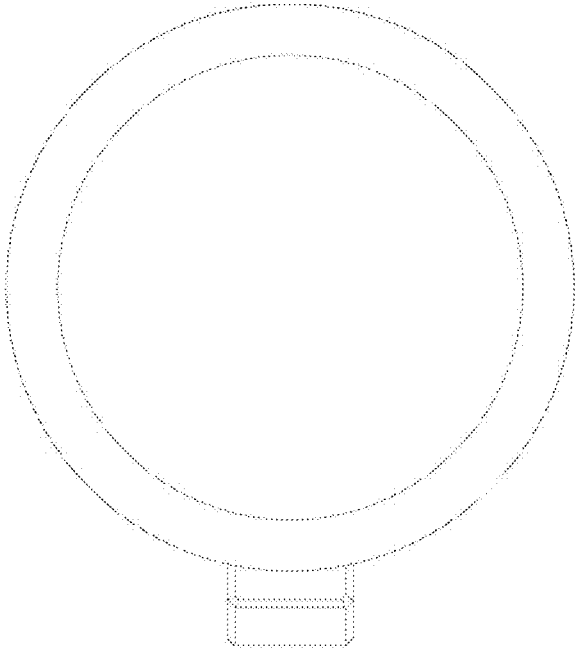


FIG. 6

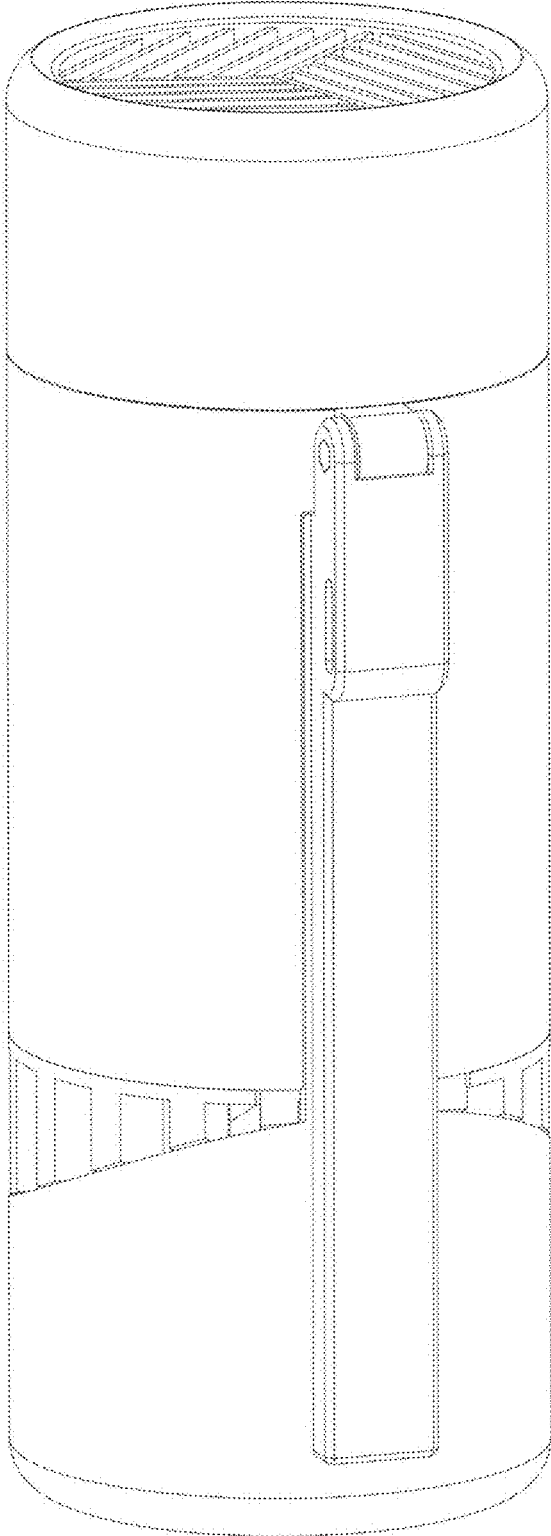


FIG. 7

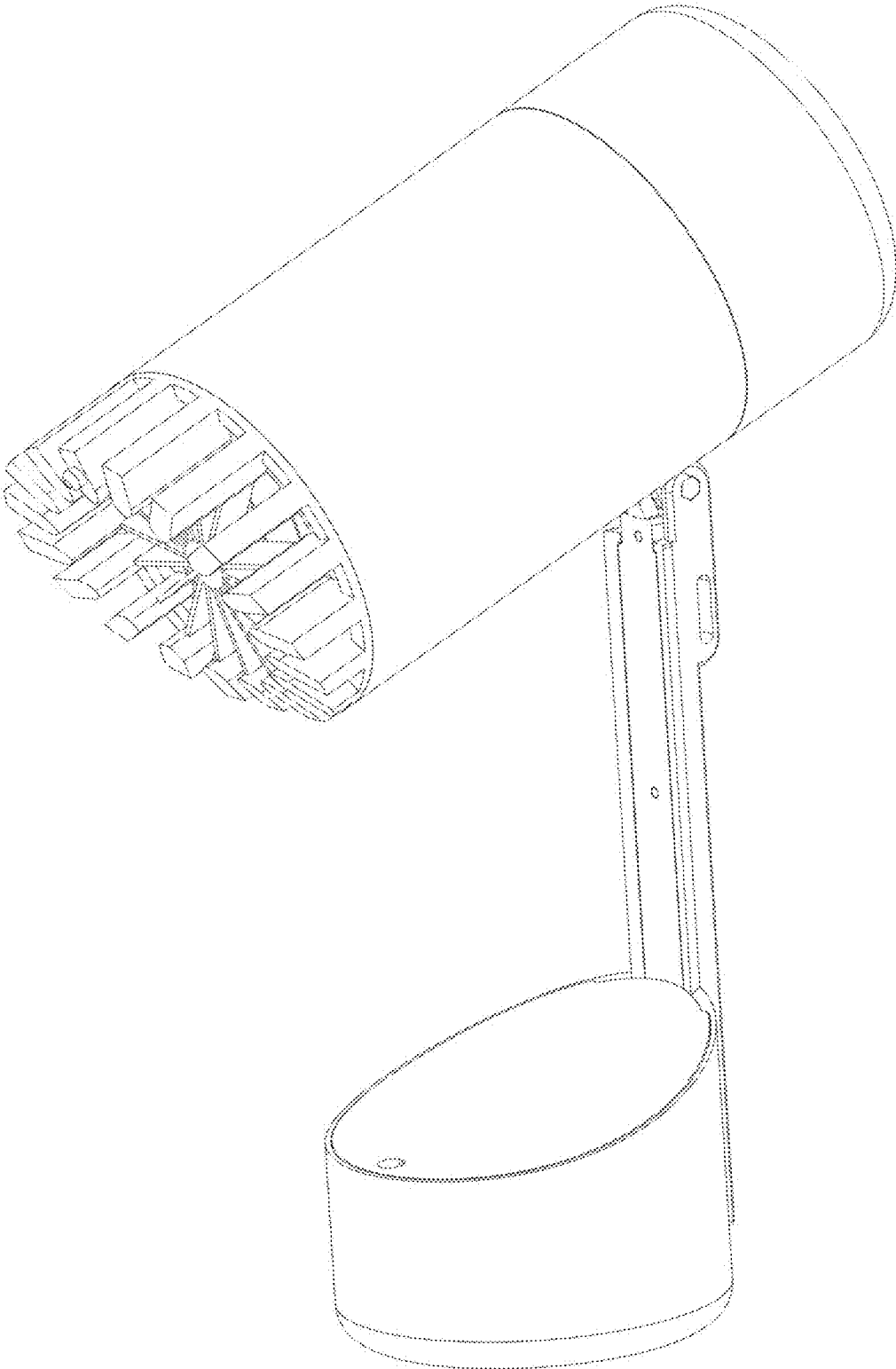


FIG. 8