



US0D1024944S

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

(10) **Patent No.:** **US D1,024,944 S**

(45) **Date of Patent:** **** Apr. 30, 2024**

(54) **CHARGING STATION FOR ROBOT**

(71) Applicant: **Locus Robotics Corp.**, Wilmington, MA (US)

(72) Inventors: **Hian Kai Kwa**, Reading, MA (US); **Colin Alexander Davis**, New Orleans, LA (US); **John Stephen Lanier**, New Orleans, LA (US); **Seth Edwards Allen**, Newton, NH (US); **Michael Sussman**, Winchester, MA (US); **Christina Nicole Fong**, Somerville, MA (US); **Keegan Burgess Smith**, Ipswich, MA (US); **Rafael Gregorio Chavez**, Boxborough, MA (US); **John Boezi, III**, Doraville, GA (US); **Scott Matthew Rydbeck**, Bedford, MA (US)

(73) Assignee: **Locus Robotics Corp.**, Wilmington, MA (US)

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

(21) Appl. No.: **29/815,913**

(22) Filed: **Nov. 17, 2021**

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

(52) **U.S. Cl.**
USPC **D13/108**; D32/31

(58) **Field of Classification Search**
USPC D13/103, 107, 108, 109, 118, 119, 184, D13/199; D14/432, 433, 434, 439, 447; D32/25, 30, 31; D34/7
CPC H02J 7/0044; H02J 7/0045; A47L 11/24
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D420,323 S 2/2000 Nakamura
6,389,329 B1 5/2002 Colens
6,764,373 B1 7/2004 Osawa et al.
D551,617 S * 9/2007 Houghton D13/108

D573,089 S 7/2008 Mandel et al.
7,430,462 B2 9/2008 Chiu et al.
7,729,801 B2 6/2010 Abramson
D621,345 S 8/2010 Tinius
D628,961 S * 12/2010 Kim D32/31
D639,237 S * 6/2011 Lee D32/31

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2006-231448 9/2006

OTHER PUBLICATIONS

“Charging Station”. Found online Feb. 8, 2023 at robotmower.en.made-in-china.com. Reference dated May 19, 2014. Retrieved from https://tineye.com/search/dd175555be0a5f7f064583727b37e780019a53ec?sort=crawl_date&order=asc&page=1. (Year: 2014).*

(Continued)

Primary Examiner — Kendra Leslie Hamilton

Assistant Examiner — Amanda Christensen

(74) *Attorney, Agent, or Firm* — Sunstein LLP

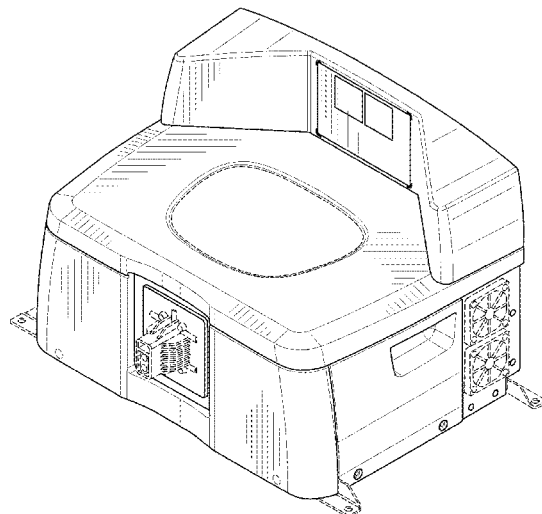
(57) **CLAIM**

The ornamental design for a charging station for robot, as shown and described.

DESCRIPTION

FIG. 1 is a top, front perspective view of a charging station for robot, showing our new design;
FIG. 2 is a front perspective view thereof;
FIG. 3 is a right side view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a top plan view thereof;
FIG. 6 is a bottom plan view thereof; and,
FIG. 7 is a rear view thereof.
In the drawings, the broken lines depict portions of the charging station for robot that form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D668,218 S 10/2012 Dai et al.
 8,352,114 B2 1/2013 More et al.
 8,452,450 B2 5/2013 Dooley et al.
 8,476,867 B2 7/2013 Li et al.
 D691,553 S 10/2013 Deoksang et al.
 D695,215 S 12/2013 Neidhart et al.
 D698,310 S 1/2014 Yun et al.
 D712,827 S 9/2014 Maeda et al.
 8,854,001 B2 10/2014 Cohen et al.
 D719,911 S * 12/2014 Lathrop D13/108
 D721,650 S 1/2015 Fauchet et al.
 D762,172 S 7/2016 Pignotti
 9,463,927 B1 10/2016 Theobald
 D782,412 S 3/2017 Kim et al.
 D835,579 S * 12/2018 Jones, III D13/108
 10,243,379 B1 * 3/2019 Kwa B60L 53/16
 D896,173 S * 9/2020 Zhang D13/108
 D965,517 S * 10/2022 Jones D14/434
 D977,420 S * 2/2023 Nakamura D13/108
 2010/0296908 A1 11/2010 Ko
 2011/0200420 A1 8/2011 Driskill et al.

2012/0330458 A1 12/2012 Weiss
 2013/0058036 A1 * 3/2013 Holzer H04M 1/72409
 361/679.44
 2013/0317642 A1 11/2013 Asaria
 2017/0072564 A1 3/2017 Cohen et al.
 2019/0092184 A1 * 3/2019 Sussman B60L 53/65
 2019/0155295 A1 * 5/2019 Moore G05D 1/0236
 2021/0376632 A1 * 12/2021 Chuang H02J 7/0042

OTHER PUBLICATIONS

“Locus Robotics”. Found online Feb. 8, 2023 at thenewwarehouse.com. Reference dated Dec. 2, 2019. Retrieved from <https://www.thenewwarehouse.com/2019/12/02/ep-38-visiting-locus-robotics-hq/>. (Year: 2019).*

“Locus Robotics”. Found online Feb. 8, 2023 at dvelocity.com. Reference dated Jun. 2, 2020. Retrieved from <https://www.dvelocity.com/articles/46186-locus-robotics-unveils-40-million-venture-investment-for-its-amrs.> (Year: 2020).* <https://www.thenewwarehouse.com/wp-content/uploads/2019/12/Charging-Stations-scaled.jpg>.

* cited by examiner

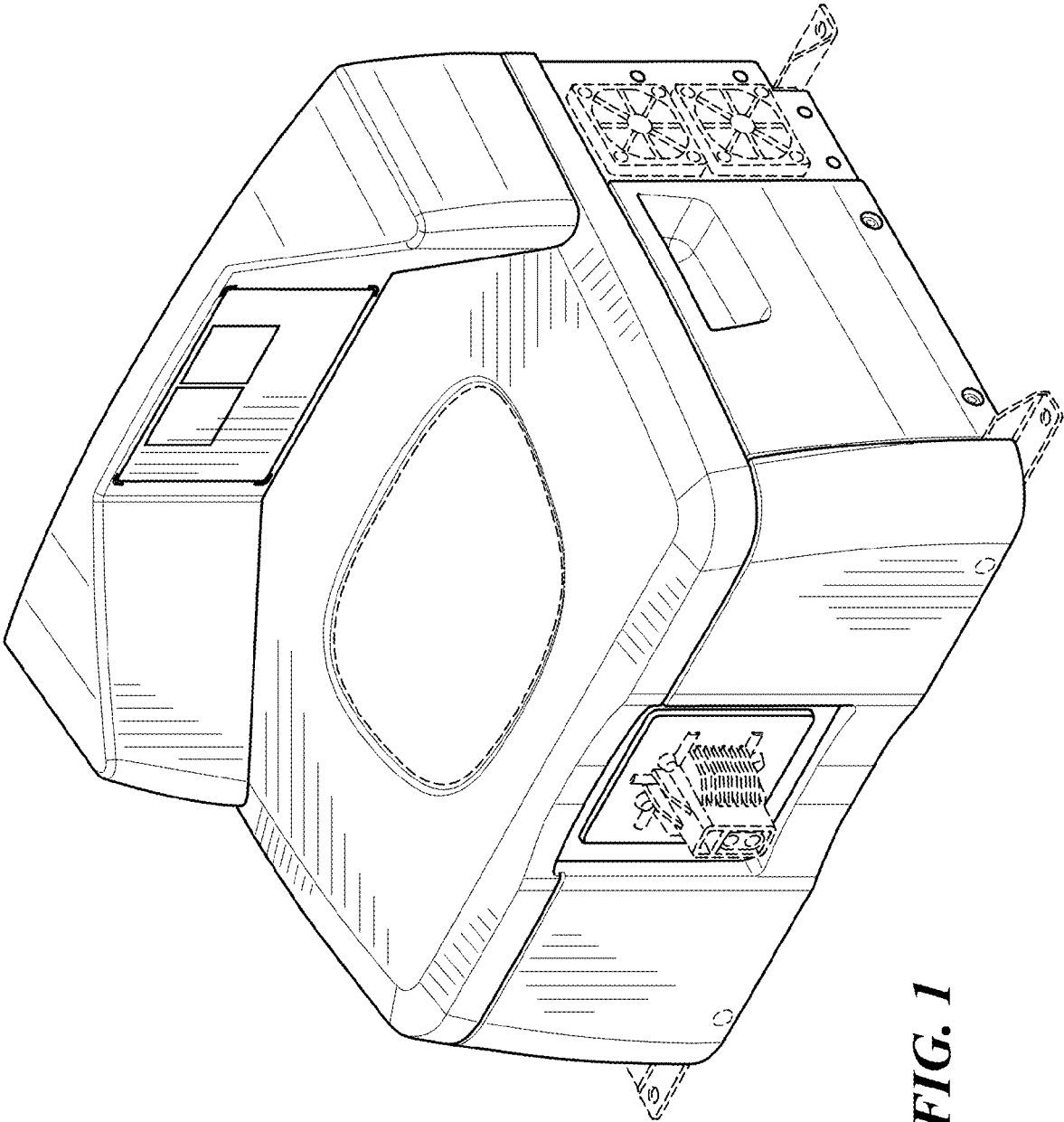


FIG. 1

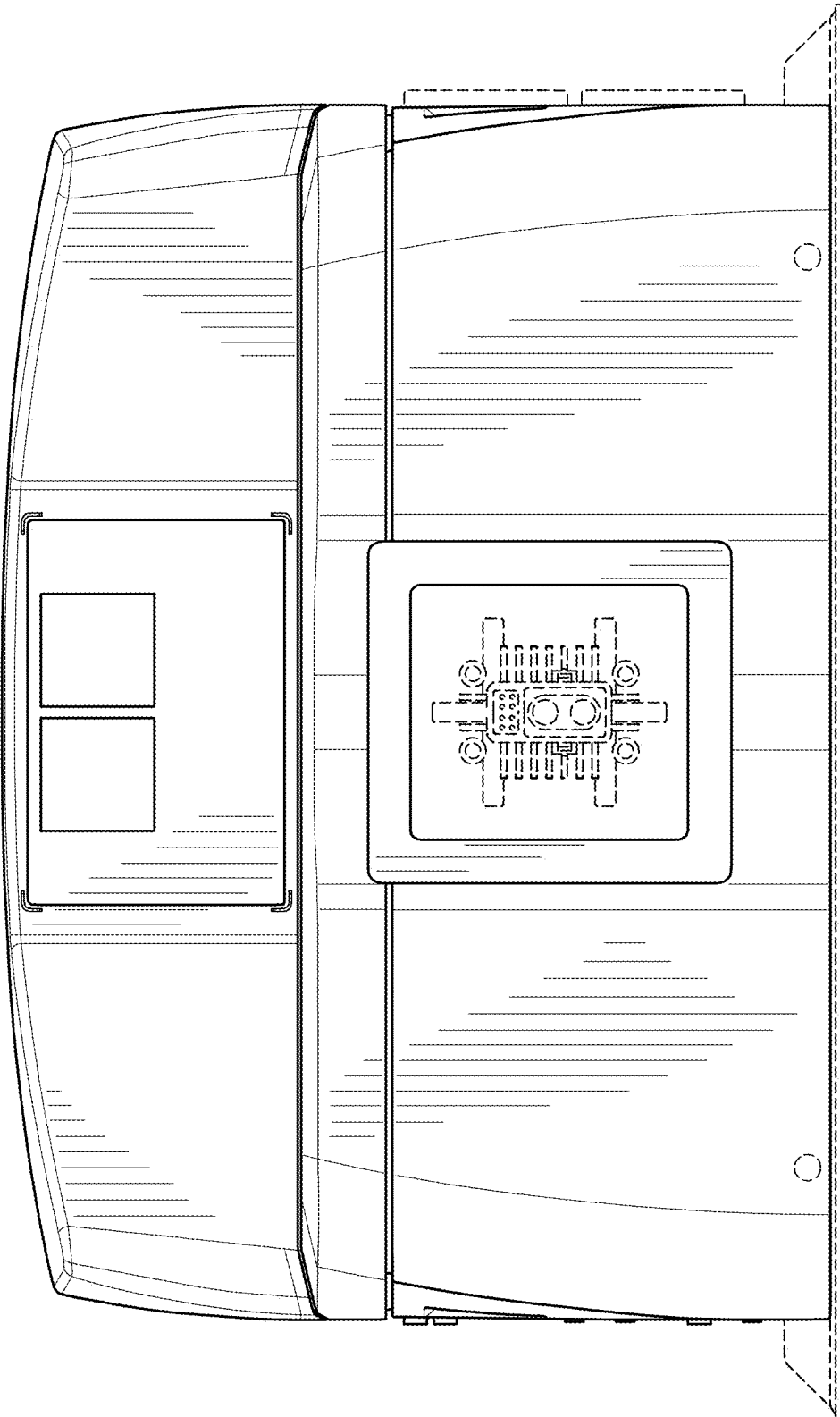


FIG. 2

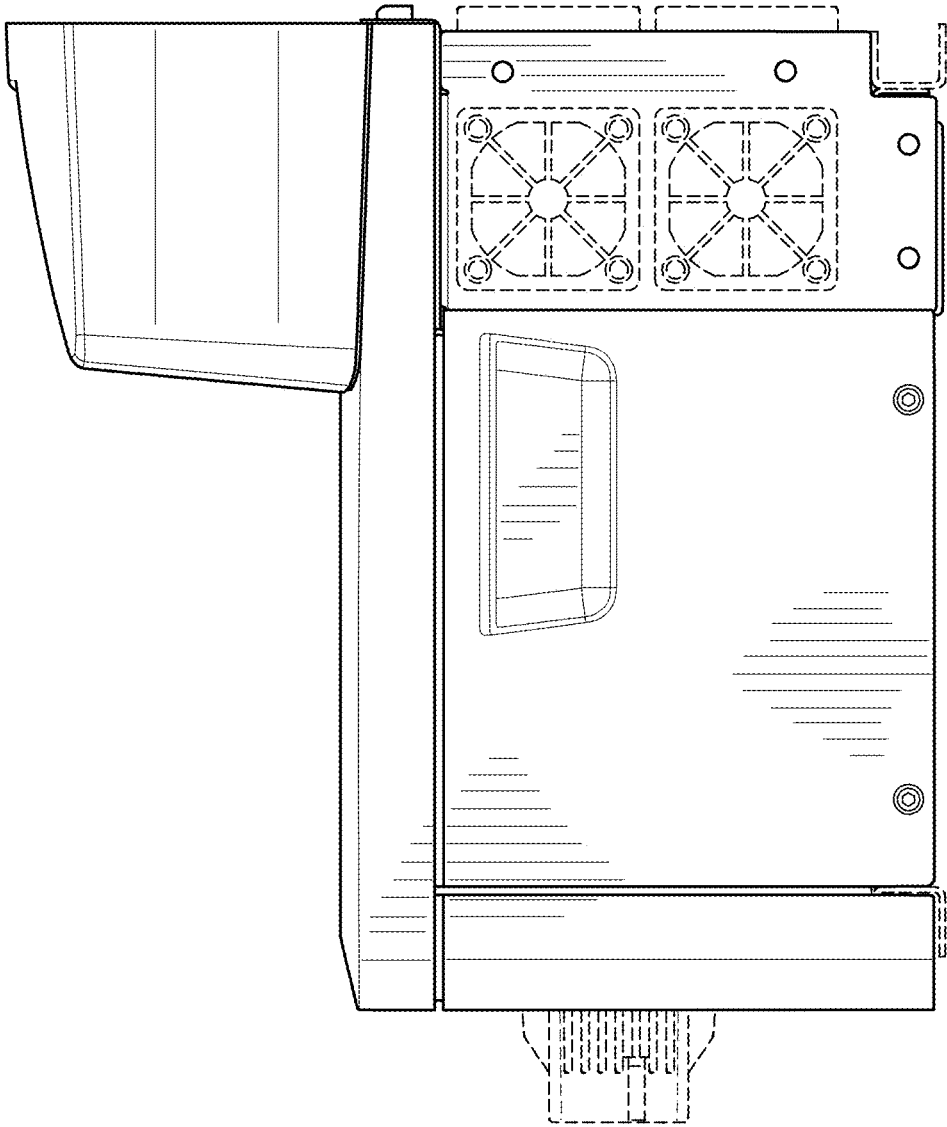


FIG. 3

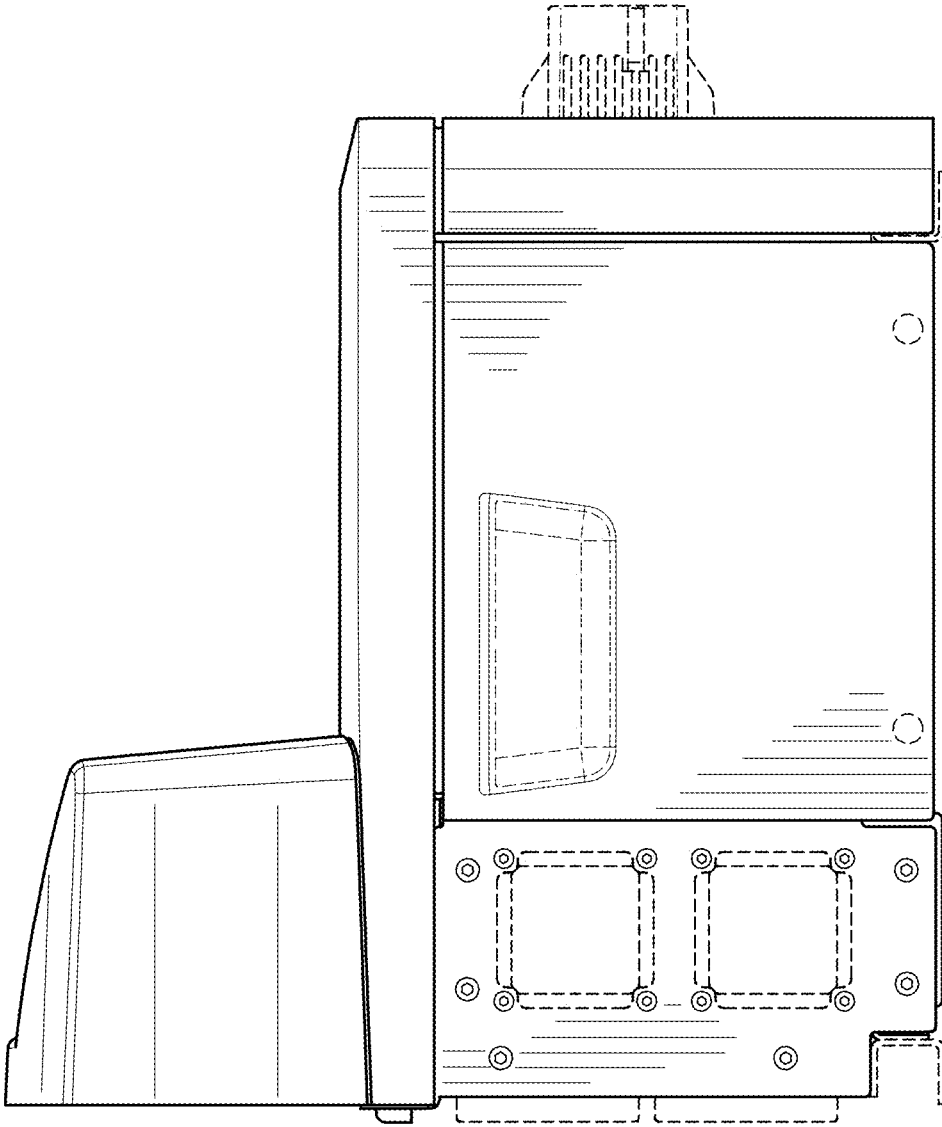


FIG. 4

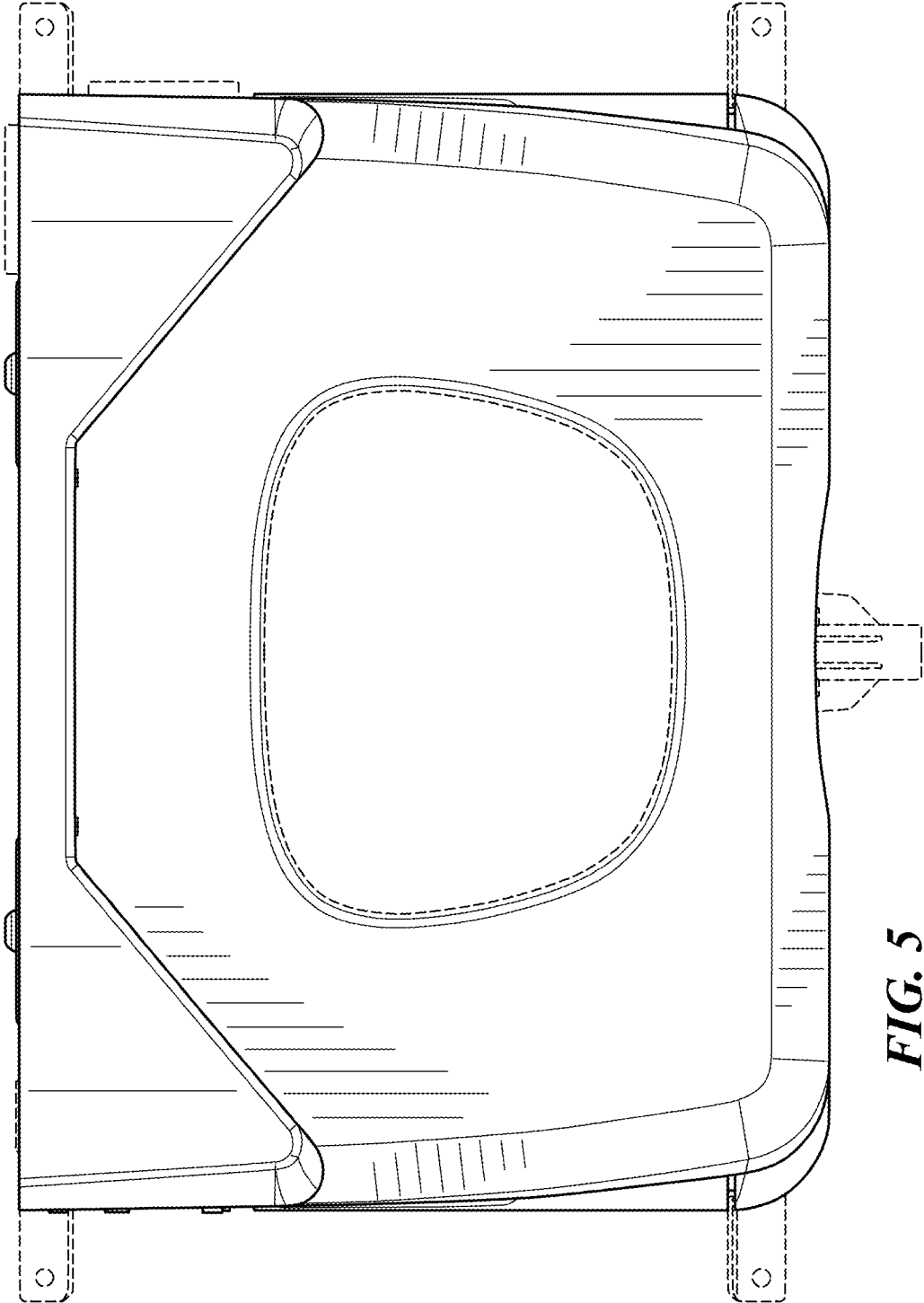
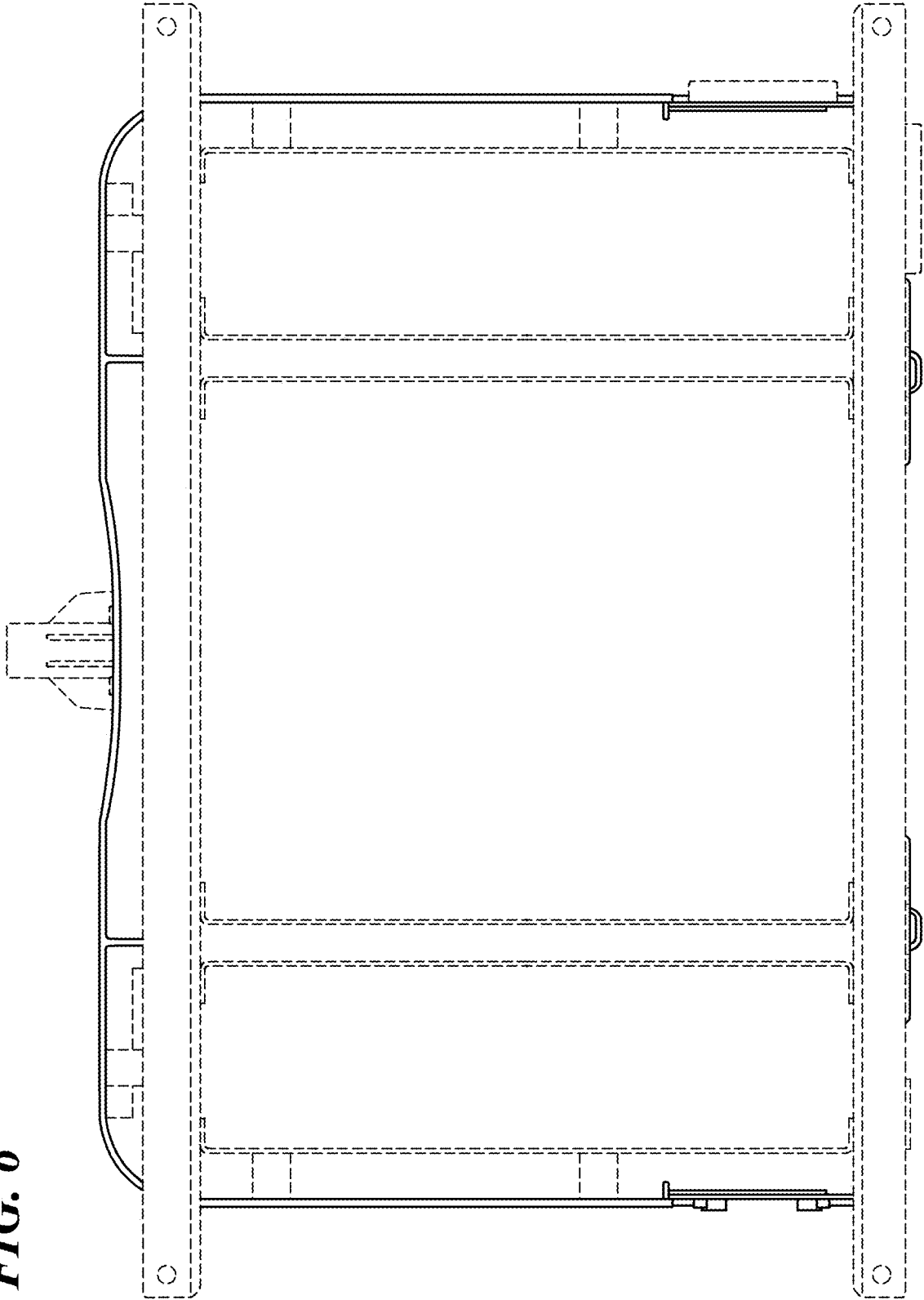


FIG. 5

FIG. 6



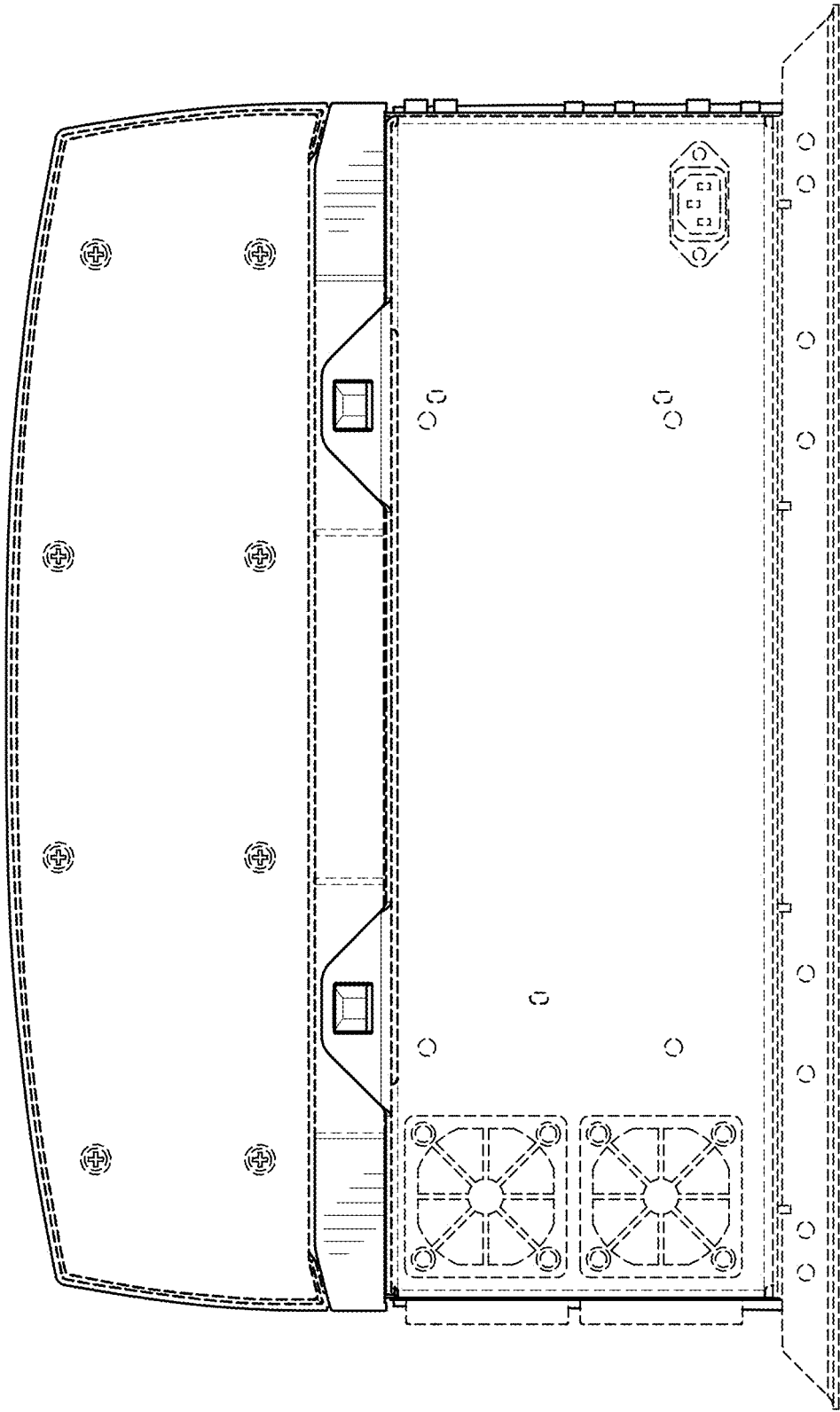


FIG. 7