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

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(54) **WAREHOUSE ROBOT**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

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D384,468 S 9/1997 Tobias
D873,174 S * 1/2020 Sokuza D12/1
D887,468 S * 6/2020 Hirvesaar D15/199
D898,790 S * 10/2020 Sokuza D15/199
D902,272 S * 11/2020 Cascajar Ordóñez D15/199
(Continued)

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FOREIGN PATENT DOCUMENTS

(*) Notice: This patent is subject to a terminal disclaimer.

CN 303126323 S 3/2015
CN 303986810 S 12/2016
(Continued)

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

OTHER PUBLICATIONS

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Related U.S. Application Data

(60) Continuation of application No. 29/839,764, filed on May 24, 2022, now Pat. No. Des. 970,576, which is a continuation of application No. 29/777,083, filed on Apr. 2, 2021, now Pat. No. Des. 961,646, which is a division of application No. 29/701,254, filed on Aug. 9, 2019, now Pat. No. Des. 918,281.

(57) **CLAIM**

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

Foreign Application Priority Data

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(51) **LOC (14) Cl.** **15-99**

(52) **U.S. Cl.** **D15/199**

USPC **D15/199**

(58) **Field of Classification Search**

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CPC B65G 1/0435; B65G 1/1373; B65G

2203/0216; B66F 9/063; G06Q 10/08;

G05D 2201/0216

See application file for complete search history.

DESCRIPTION

FIG. 1 is a front perspective view a warehouse robot showing our new design;

FIG. 2 is a rear perspective view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a rear elevational view thereof;

FIG. 5 is a left side elevational view thereof;

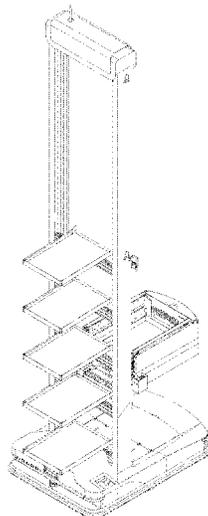
FIG. 6 is a right side elevational view thereof; and,

FIG. 7 is a top plan view thereof.

No bottom plan view is included because the bottom of the warehouse robot will not be visible in use.

The broken lines in the figures illustrate portions of the warehouse robot that form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D902,277 S * 11/2020 Sakaguchi D15/199
 D918,281 S * 5/2021 Kong D15/199
 D924,955 S * 7/2021 Hoshino D15/199
 D959,529 S * 8/2022 Kong D15/199
 D961,646 S * 8/2022 Kong D15/199
 11,465,840 B2 * 10/2022 Cheng B25J 15/0014
 D969,896 S * 11/2022 Kong D15/199
 D969,899 S * 11/2022 Kong D15/199
 D970,575 S * 11/2022 Kong D15/199
 D970,576 S * 11/2022 Kong D15/199
 D974,437 S * 1/2023 Kong D15/199
 D974,438 S * 1/2023 Kong D15/199
 D974,439 S * 1/2023 Kong D15/199
 D976,978 S * 1/2023 Kong D15/199
 D976,979 S * 1/2023 Kong D15/199
 D976,980 S * 1/2023 Kong D15/199
 D981,463 S * 3/2023 Kong D15/199
 2017/0120443 A1 * 5/2017 Kang B25J 13/085
 2017/0121109 A1 5/2017 Behling
 2018/0096299 A1 4/2018 Jarvis et al.
 2018/0127212 A1 5/2018 Jarvis et al.
 2018/0259975 A1 * 9/2018 Dold G05D 1/0297
 2019/0033837 A1 1/2019 Zanger et al.
 2019/0263250 A1 * 8/2019 Lord B60K 7/0007
 2019/0352092 A1 * 11/2019 Zheng G06Q 10/08
 2021/0354966 A1 11/2021 Kong et al.

FOREIGN PATENT DOCUMENTS

CN 106379681 A 2/2017
 CN 304144857 S 5/2017

CN 106927179 A 7/2017
 CN 206569571 U 10/2017
 CN 206885961 U 1/2018
 CN 304460809 S 1/2018
 CN 304541348 S 3/2018
 CN 108313606 A 7/2018
 CN 108726061 A 11/2018
 CN 208150249 U 11/2018
 CN 304918626 S 11/2018
 CN 109264627 A 1/2019
 CN 304998633 S 1/2019
 CN 305009308 S 1/2019
 CN 305009309 S 1/2019
 CN 305010573 S 1/2019
 CN 305053096 S 3/2019
 CN 208746865 U 4/2019
 CN 305372670 S 10/2019
 CN 209684551 U 11/2019
 CN 209684554 U 11/2019
 CN 305611506 S 2/2020
 CN 112607293 A 4/2021
 GB 2080265 A 2/1982
 IN 939CHE2015 A 8/2016
 JP D1290893 1/2007
 KR 30-0563974 6/2010
 SU 867871 A1 9/1981
 WO WO2016151504 A1 9/2016
 WO WOD096716-0005 8/2018
 WO WO2020133641 A1 7/2020

* cited by examiner

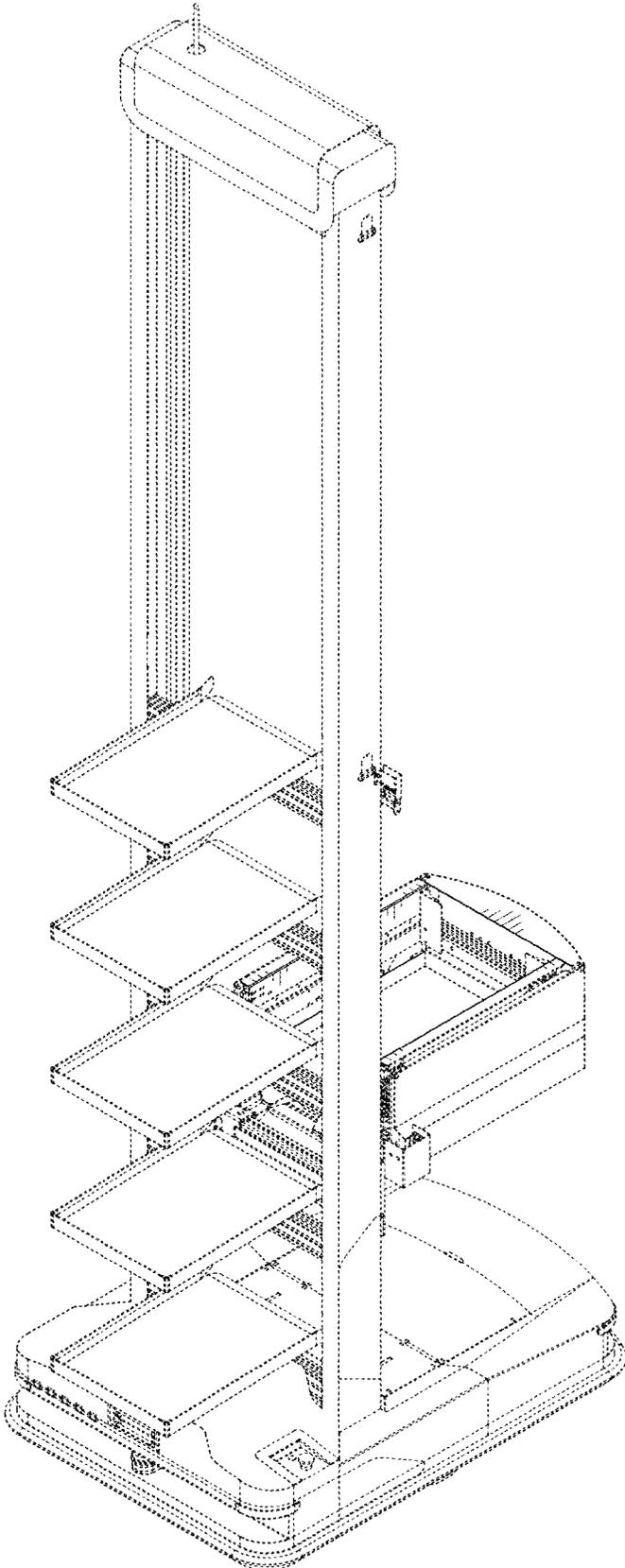


FIG. 1

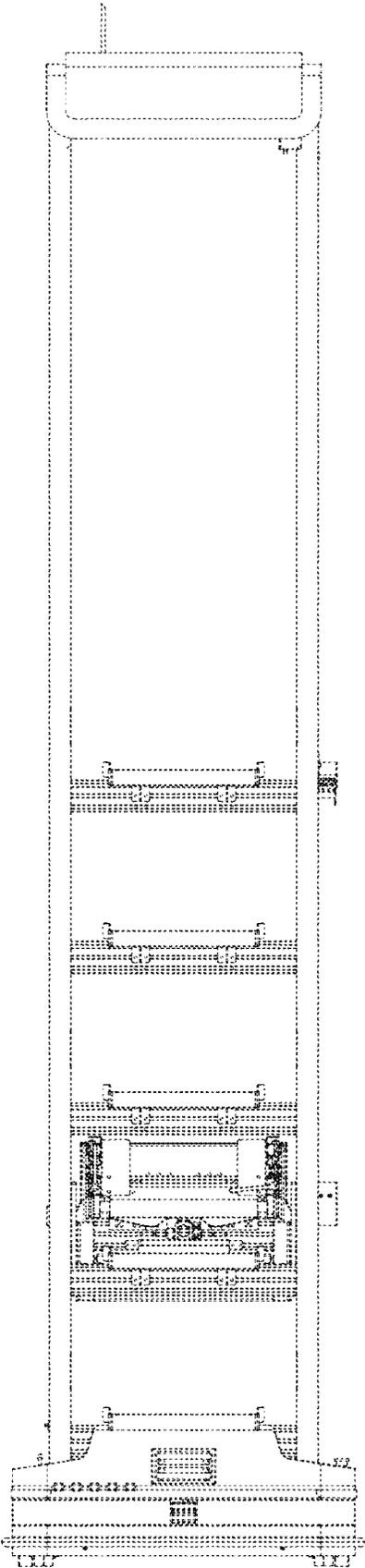


FIG. 3

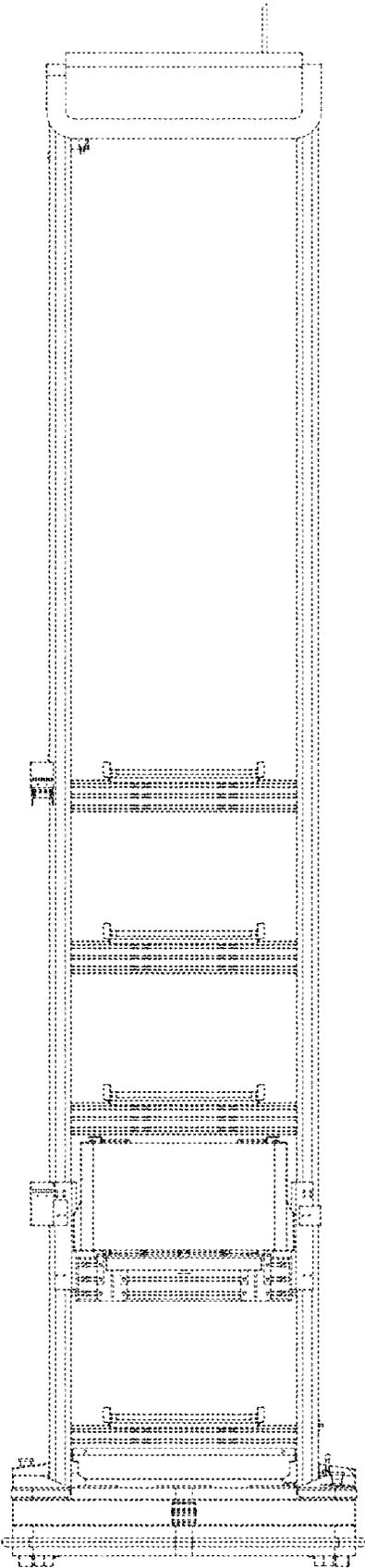


FIG. 4

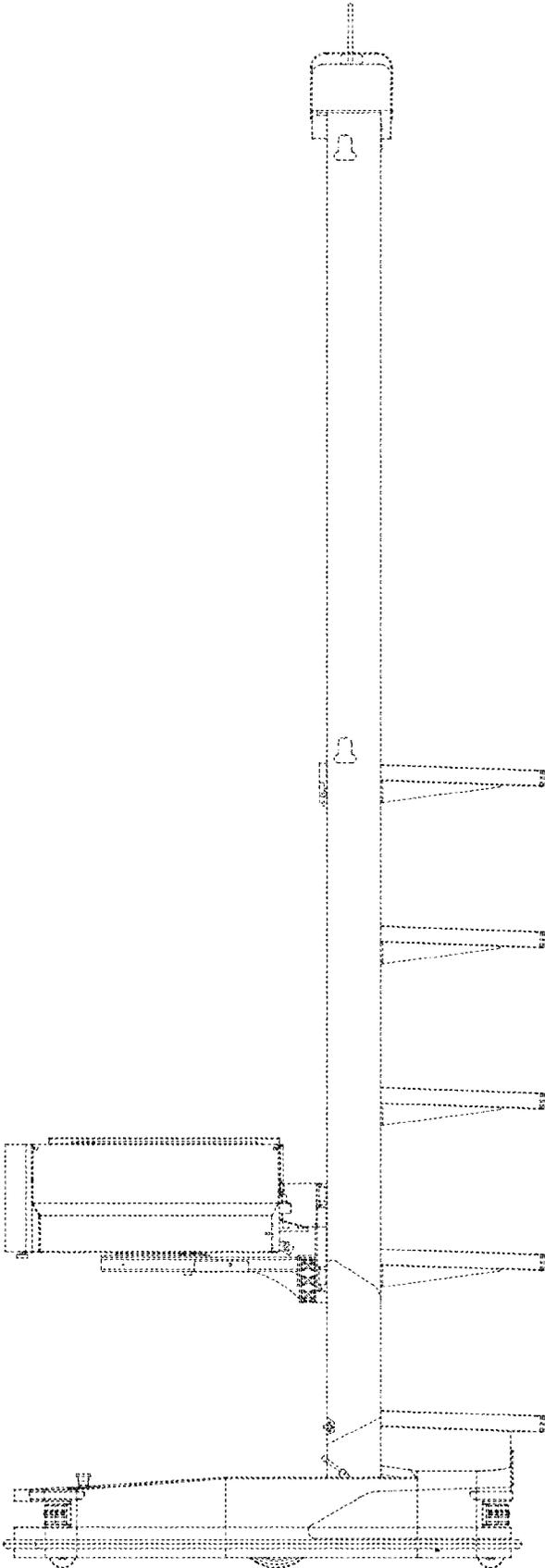


FIG. 5

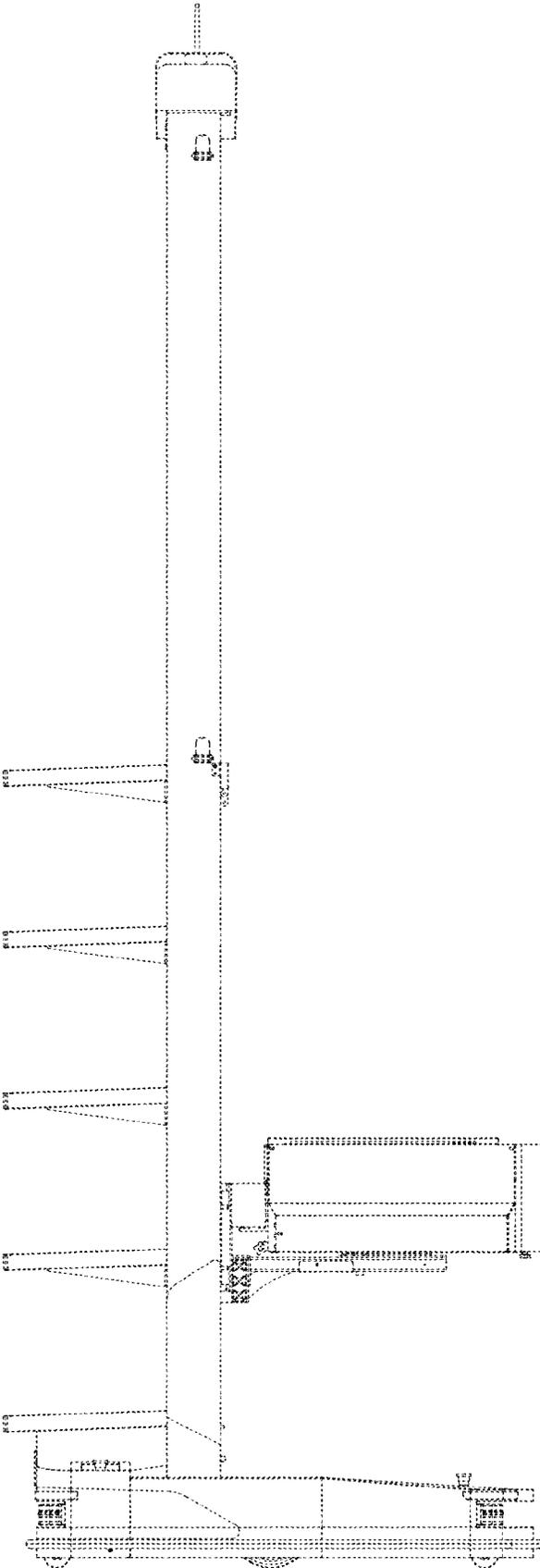


FIG. 6

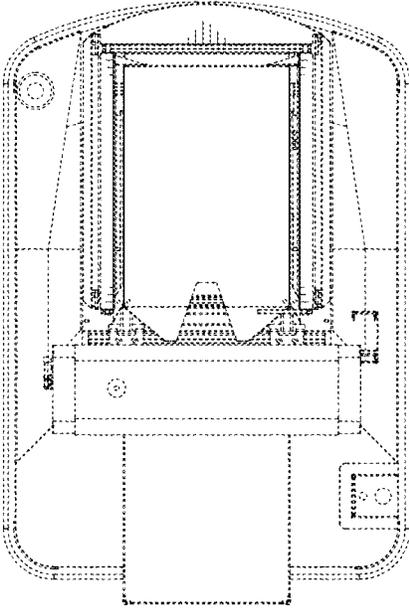


FIG. 7