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(12) **United States Design Patent** (10) **Patent No.:** **US D971,535 S**
Wu et al. (45) **Date of Patent:** **** Nov. 29, 2022**

(54) **CLEANING ROBOT**
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D942,099 S * 1/2022 Yu D32/21
D946,840 S * 3/2022 Lv D32/21
D961,869 S * 8/2022 Jang D32/31
2020/0298415 A1 * 9/2020 Sun A47L 9/16
2021/0321848 A1 * 10/2021 Chae B25J 9/1666

FOREIGN PATENT DOCUMENTS

GB 9008268064-0001 * 11/2020

OTHER PUBLICATIONS

Amazon.com—HOBOT-298 Window Cleaning Automatic Robot
<https://www.amazon.com/HOBOT-298-Cleaning-Automatic-Ultrasonic-Smartphone/dp/B07LF4HZ6C> (Year: 2018).*
Roboticsand automation.com Hobot Technology new window-cleaning robot <https://roboticsandautomationnews.com/2021/09/02/hobot-technology-unveils-new-window-cleaning-robot/46109/> (Year: 2021).*

(Continued)

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(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a front perspective view of a cleaning 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 view thereof;
FIG. 6 is a right side view thereof;
FIG. 7 is a top plan view thereof; and,
FIG. 8 is a bottom plan view thereof.

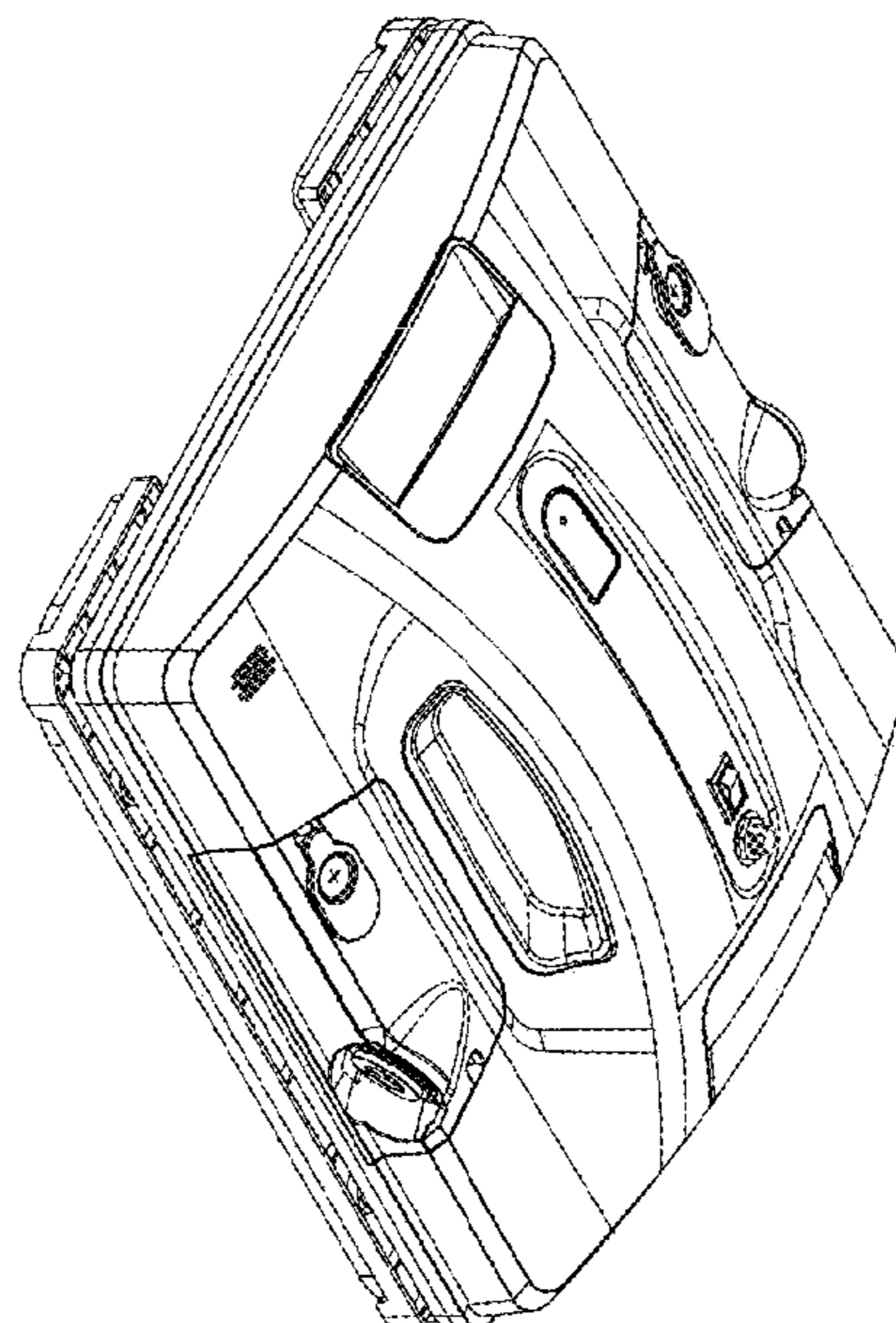
1 Claim, 8 Drawing Sheets

(**) Term: **15 Years**
(21) Appl. No.: **29/757,698**
(22) Filed: **Nov. 9, 2020**
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(51) **LOC (13) Cl.** **15-05**
(52) **U.S. Cl.**
USPC **D32/21**
(58) **Field of Classification Search**
USPC D8/70; D15/199; D16/230; D32/1, 21,
D32/31
CPC A47L 9/009; A47L 2201/00; A47L 13/10;
A47L 13/00; A47L 11/32; A47L 11/24;
A47L 11/00; A47L 11/02
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D720,510 S * 12/2014 Shin D32/21
D822,923 S * 7/2018 Casini D32/21
10,743,730 B2 * 8/2020 Chao A47L 1/02
D917,590 S * 4/2021 Li D15/199
D935,119 S * 11/2021 Wu D32/21
D936,314 S * 11/2021 Lim D32/21
D936,922 S * 11/2021 Lim D32/21
D938,115 S * 12/2021 Jang D32/21



(56)

References Cited

OTHER PUBLICATIONS

Amazon.com—HOBOT-2S Window Cleaning Automatic Smart Robot https://www.amazon.com/HOBOT-2S-Cleaning-Automatic-Ultrasonic-Smartphone/dp/B097CM7P9L/ref=asc_df_B097CM7P9L/ (Year: 2021).*
EU Design application No. 005618063-0001, filed on Aug. 23, 2018 (10 pages).

* cited by examiner

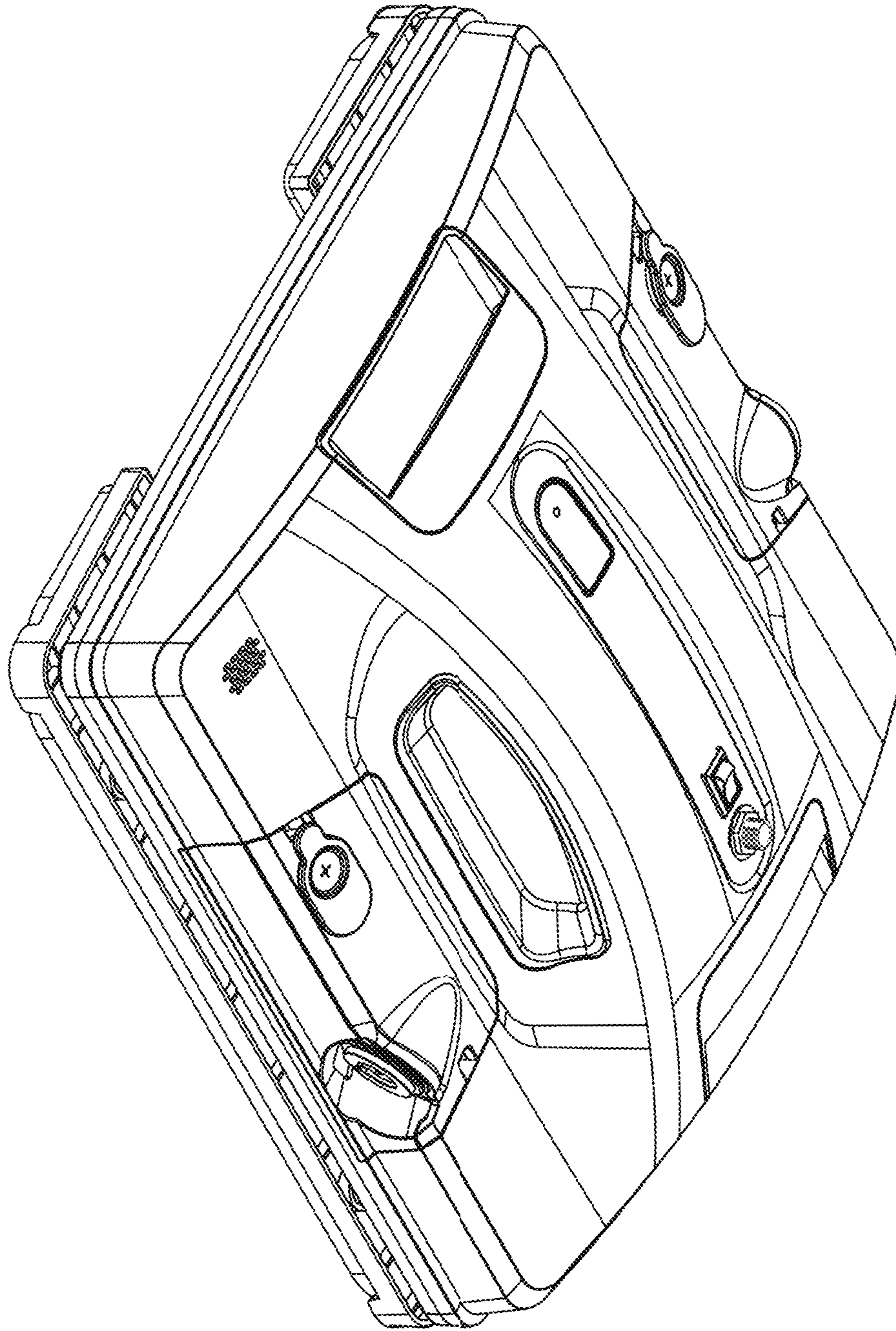


Fig. 1

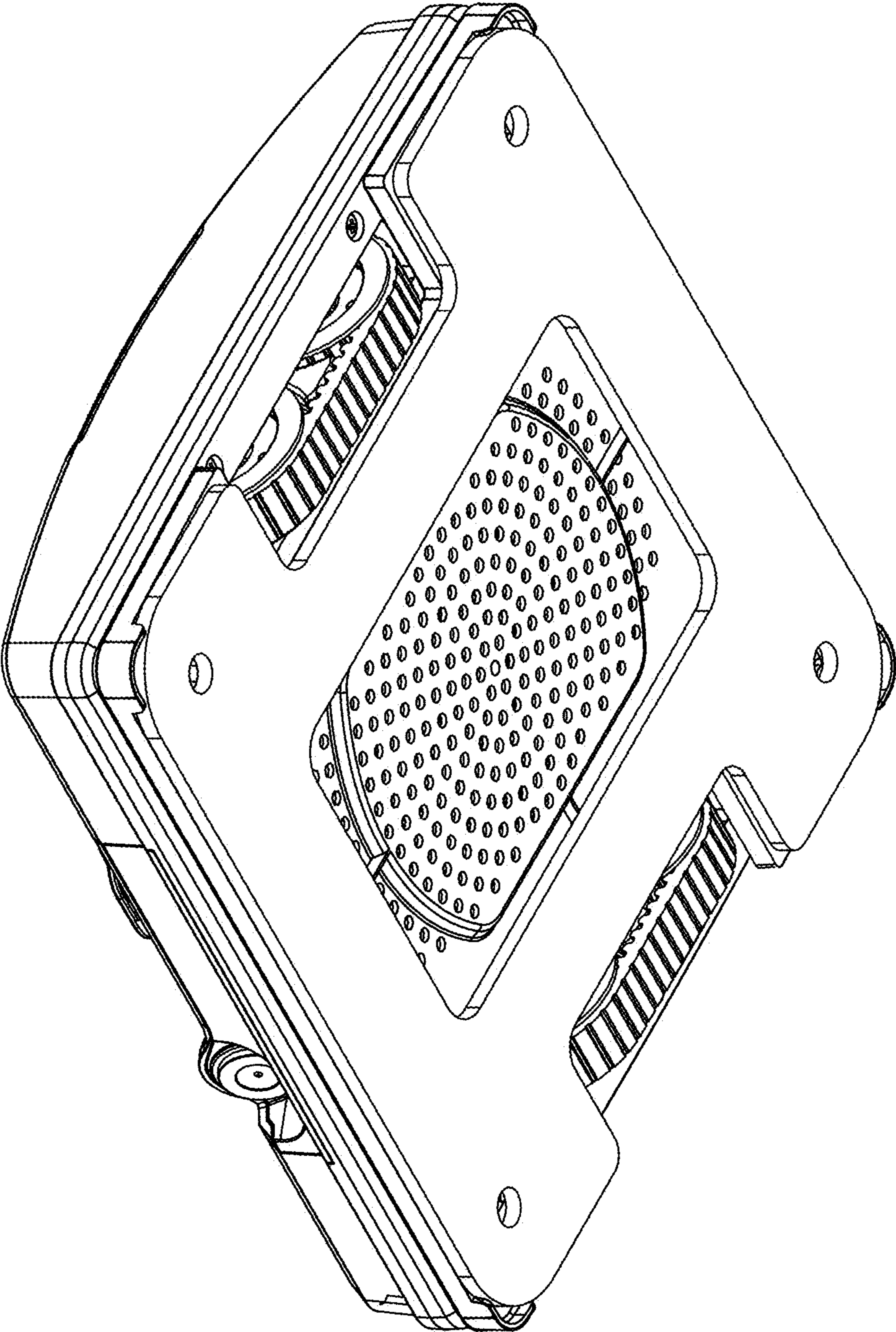


Fig. 2

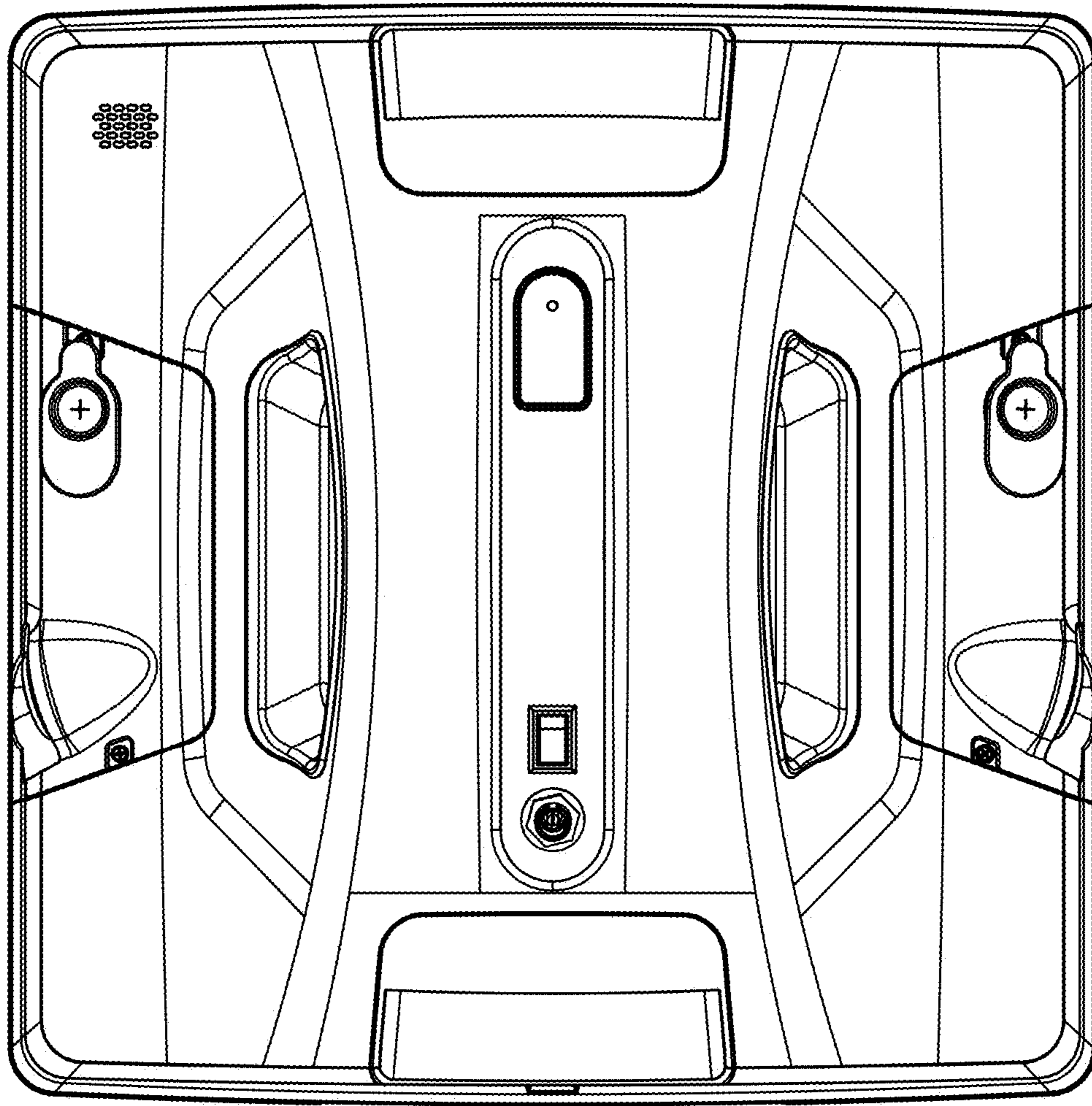


Fig. 3

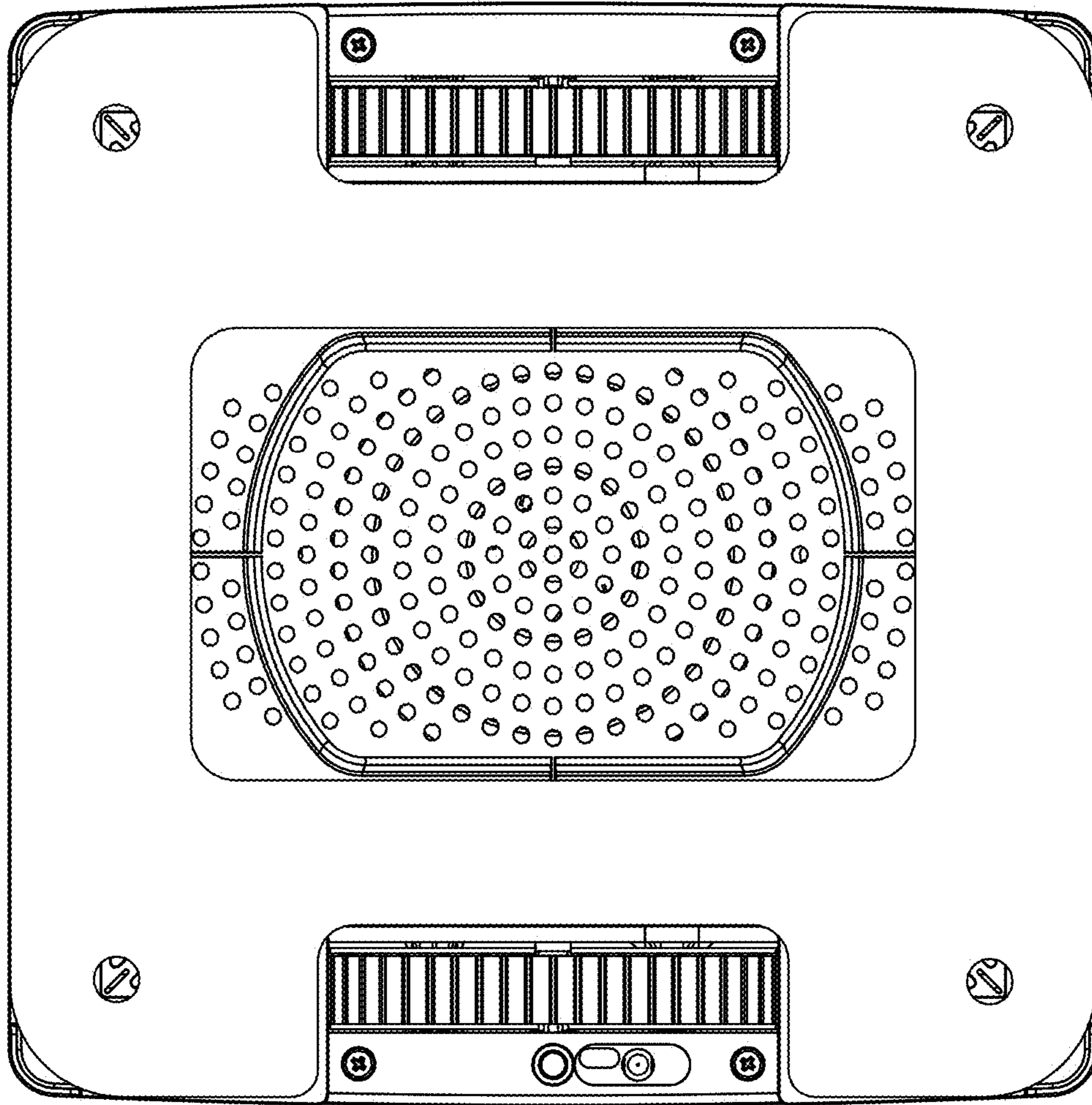


Fig. 4

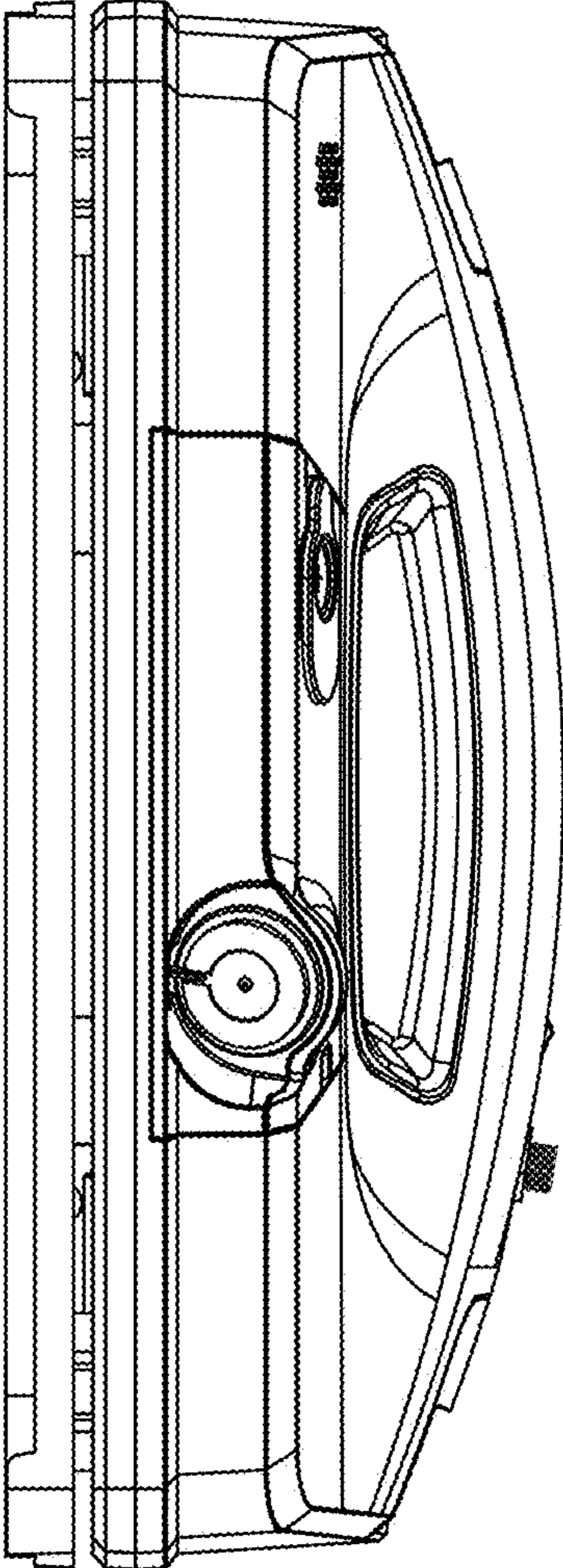


Fig. 5

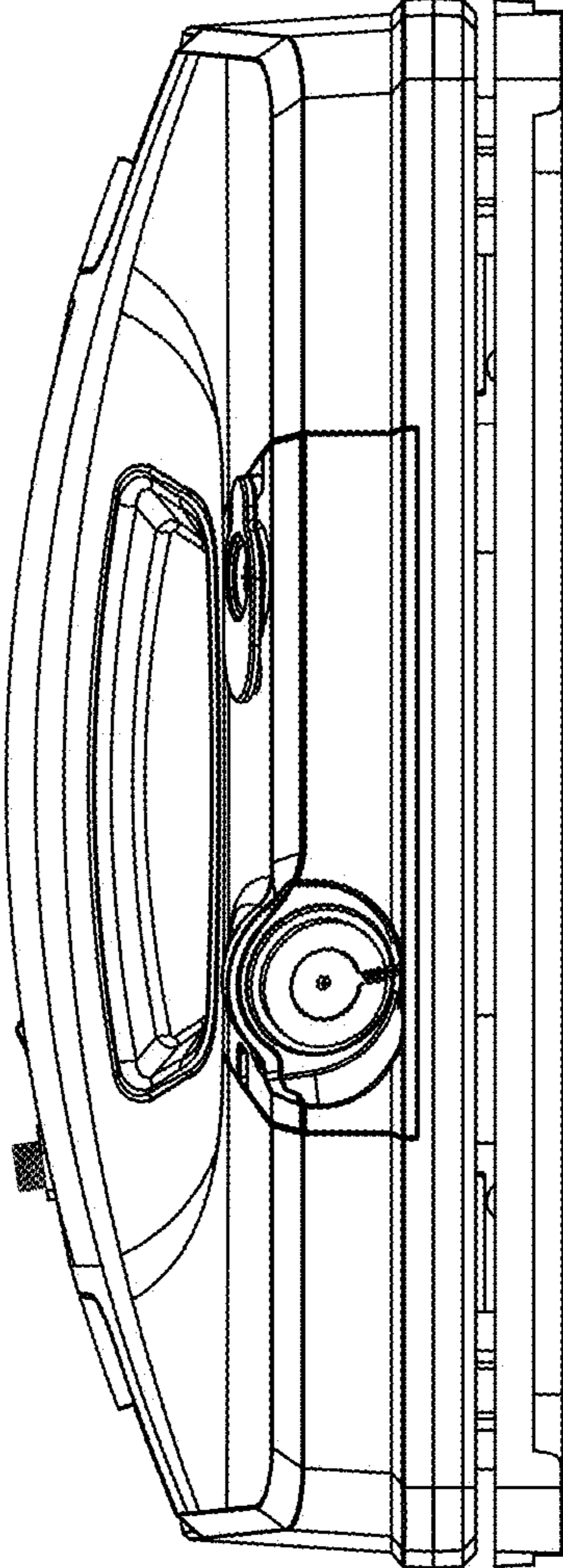


Fig. 6

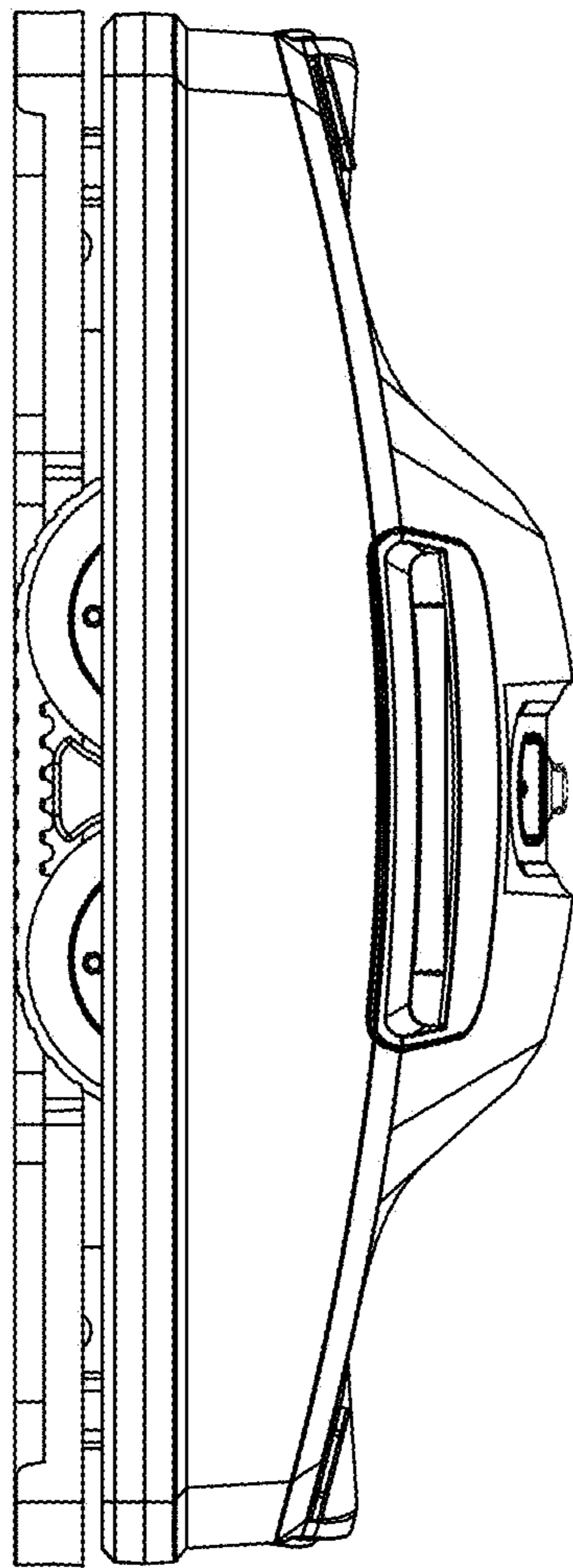


Fig. 7

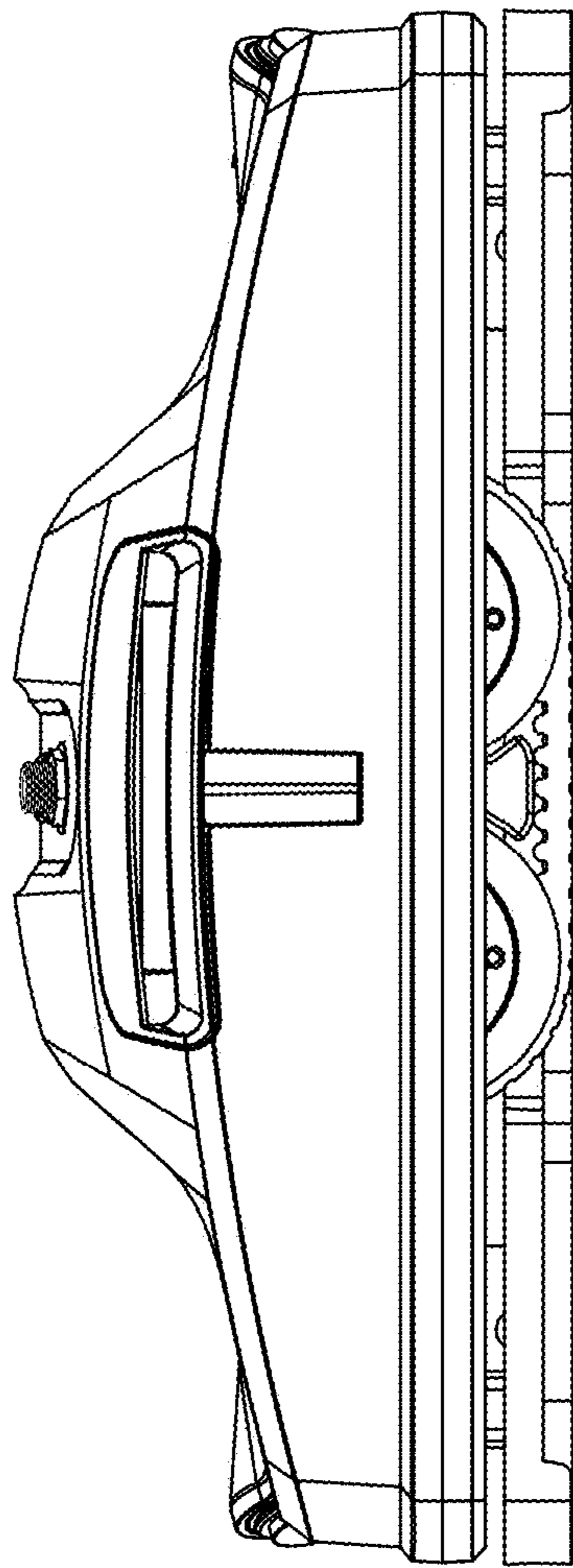


Fig. 8