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(12) **United States Design Patent**
Gou

(10) **Patent No.:** **US D920,404 S**

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(54) **CONTROLLING APPARATUS FOR
DESOLDERING AND SOLDERING TOOL**

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

(21) Appl. No.: **29/704,730**

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(51) **LOC (13) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/144**

(58) **Field of Classification Search**
USPC D8/29, 29.1, 30, 107; D14/162, 167,
D14/197, 198, 217, 257, 258; D15/144,
D15/144.1, 144.2
CPC B23K 3/00; B23K 3/027; B23K 3/033;
B23K 3/08
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D428,427 S * 7/2000 Neef D15/144.2
D527,402 S * 8/2006 Loch D15/144.2
D623,206 S * 9/2010 Mittmann D15/144
D656,525 S * 3/2012 Mochizuki D15/144.2
D678,373 S * 3/2013 Kita D15/144.2

D703,715 S * 4/2014 Kita D15/144
D762,254 S * 7/2016 Kita D15/144.2
D829,790 S * 10/2018 Gou D15/144
D831,716 S * 10/2018 Gou D15/144
D831,717 S * 10/2018 Gou D15/144
D844,561 S * 4/2019 Gou D13/110
D862,545 S * 10/2019 Lin D15/144
D879,849 S * 3/2020 Kita D15/144.2
D888,789 S * 6/2020 Gou D15/144.2

* cited by examiner

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(57) **CLAIM**

The ornamental design for a controlling apparatus for desoldering and soldering tool, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the controlling apparatus;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.

The broken lines show portions of a controlling apparatus for desoldering and soldering tool which form no part of the claimed design.

1 Claim, 7 Drawing Sheets

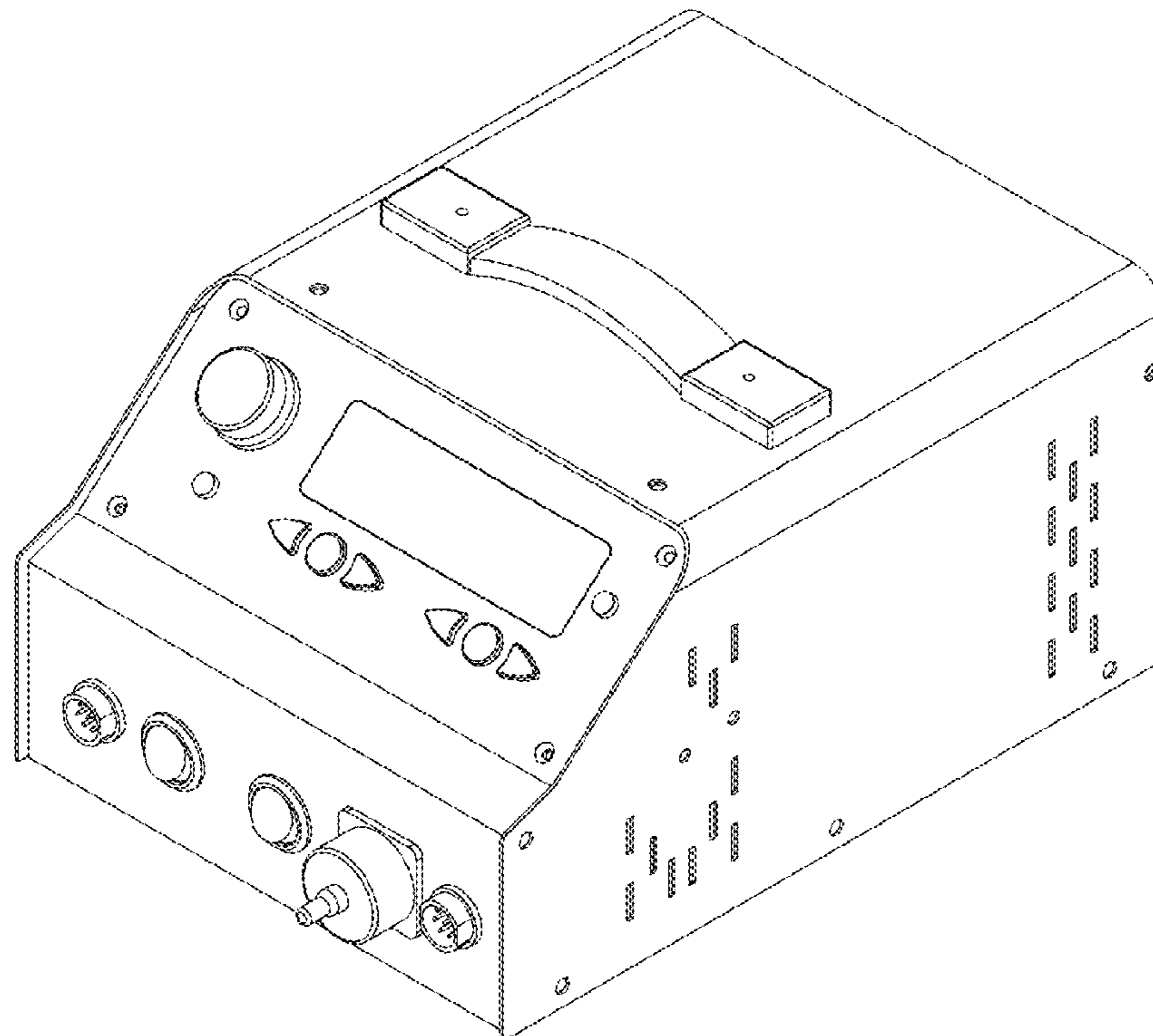


FIG. 1

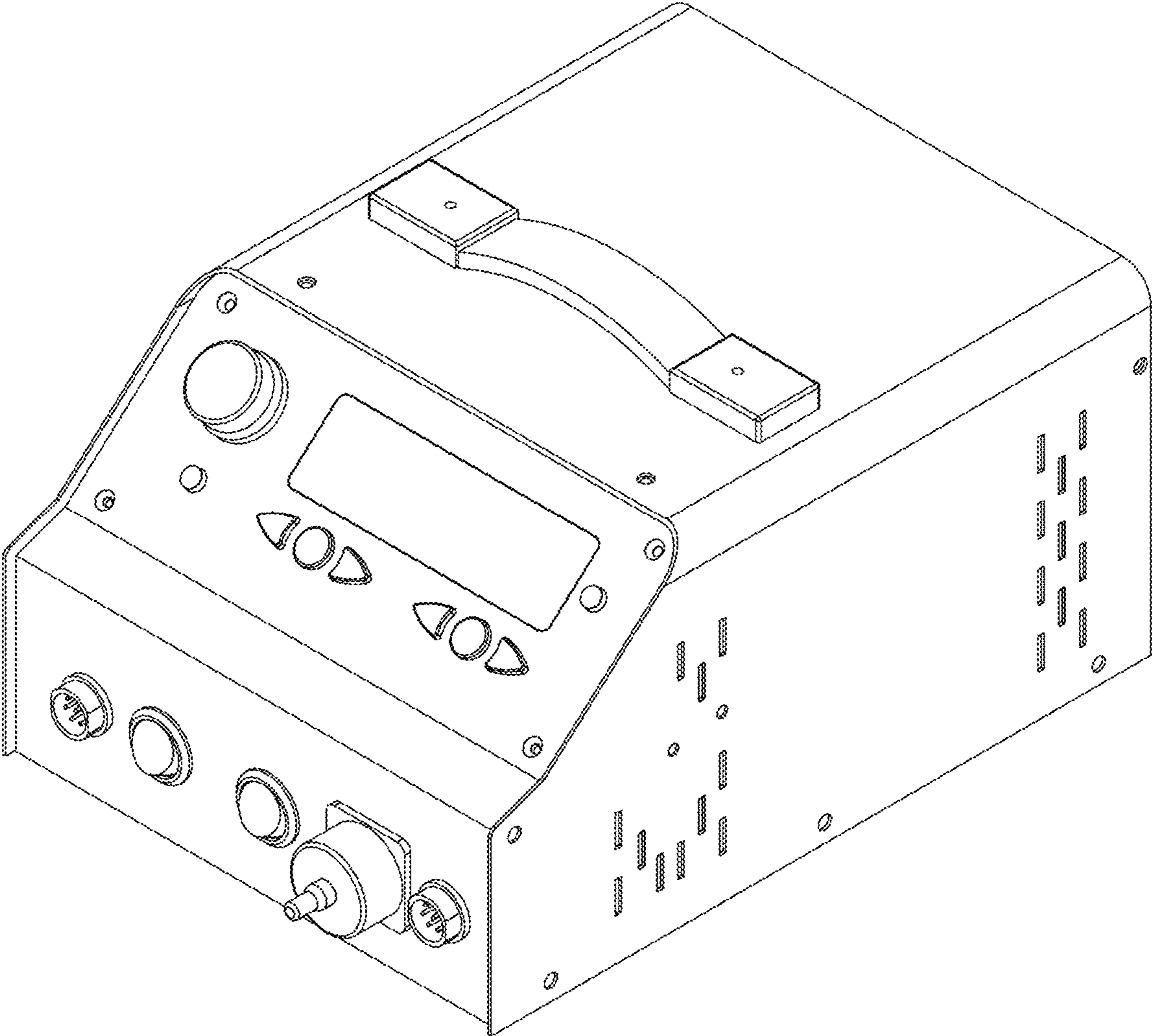


FIG. 2

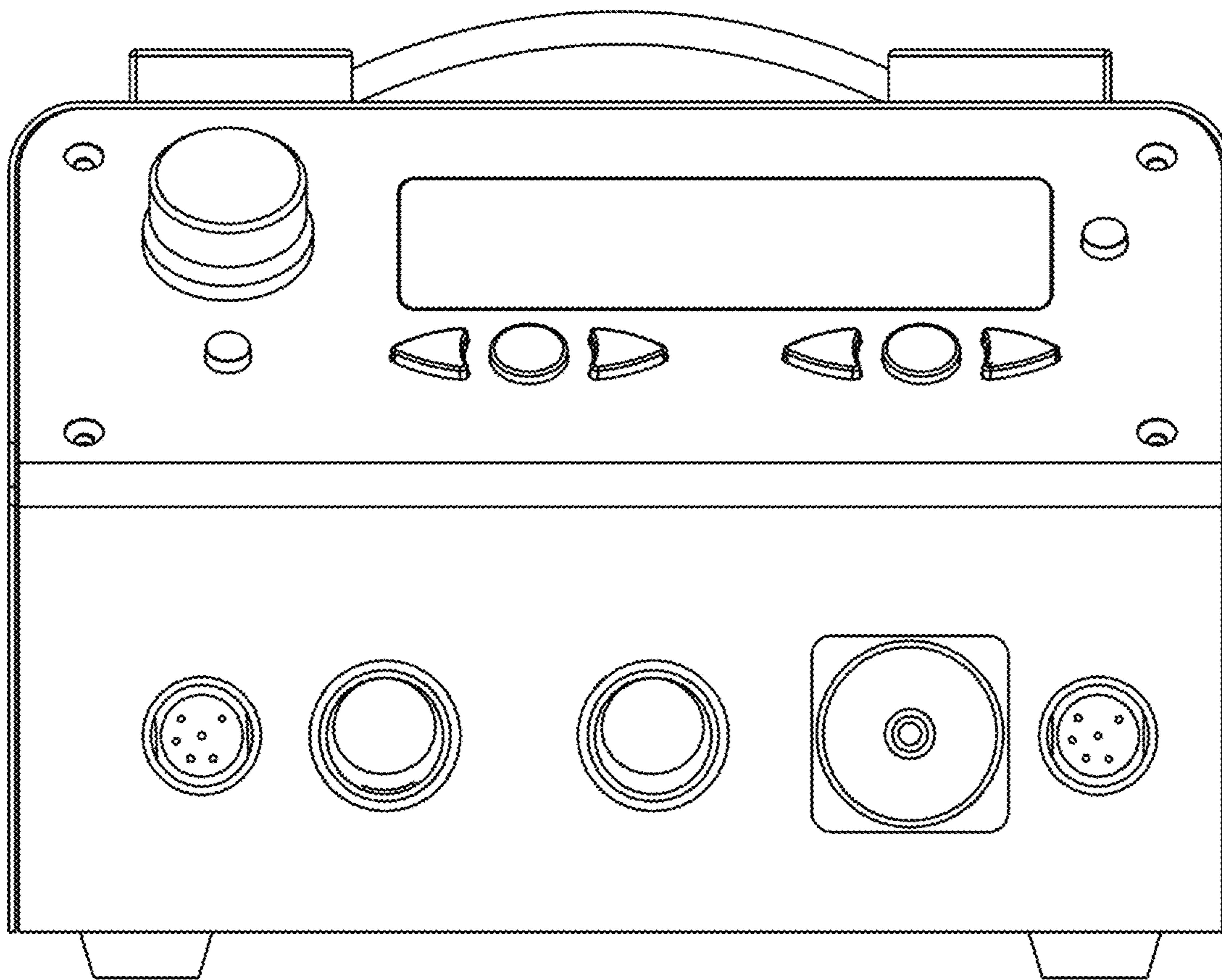


FIG. 3

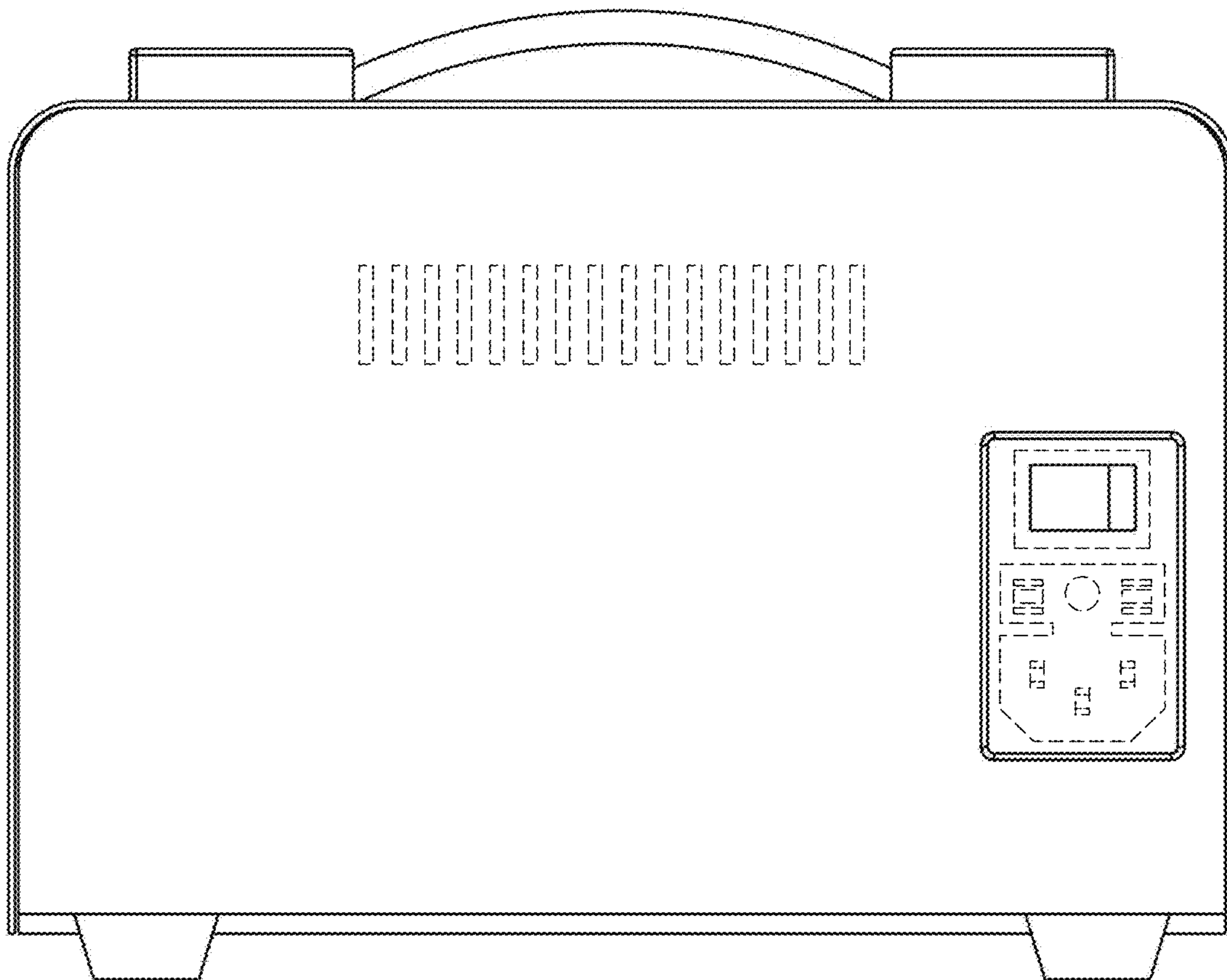


FIG. 4

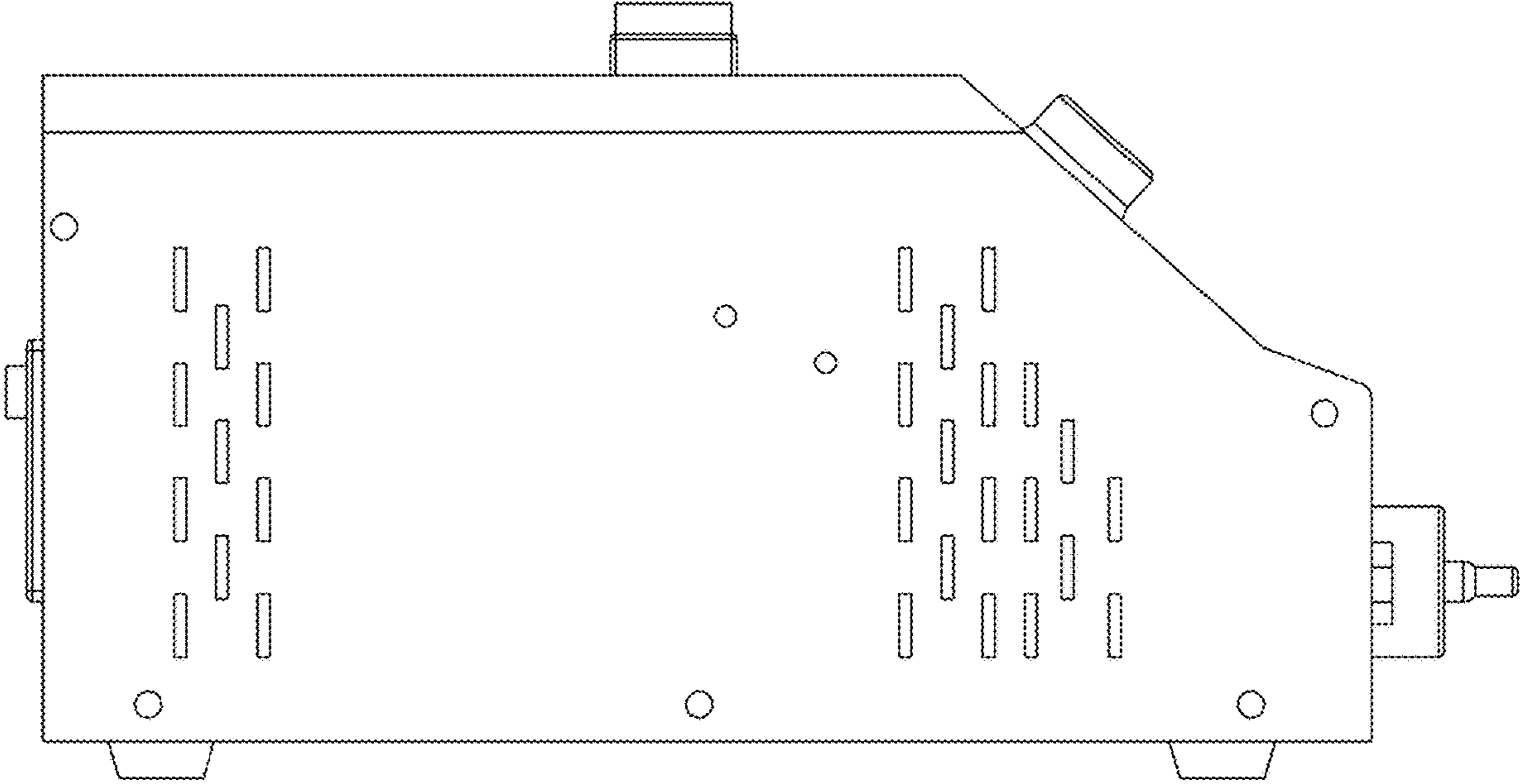


FIG. 5

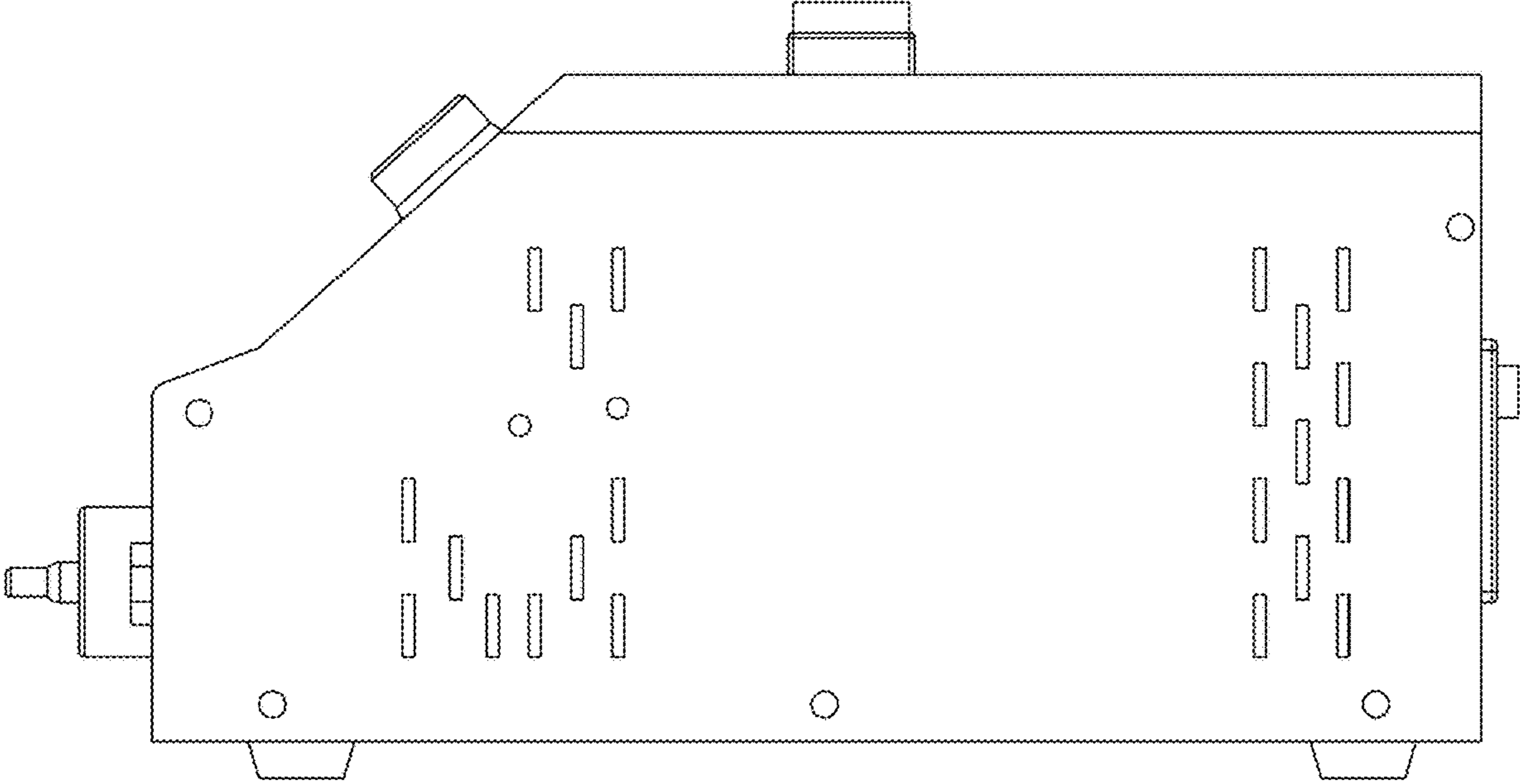


FIG. 6

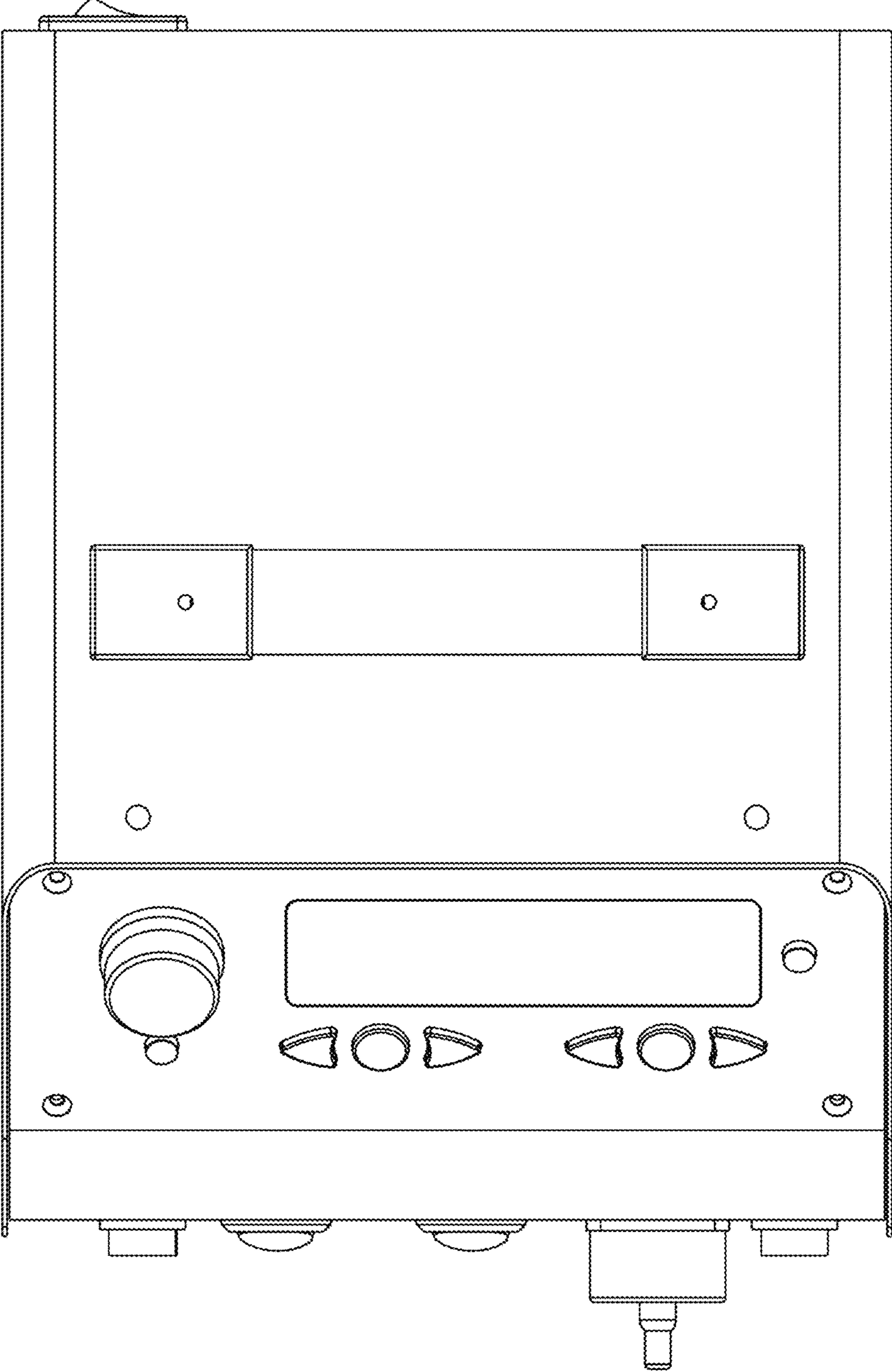


FIG. 7

