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

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(54) **PORTABLE ELECTRO-MECHANICAL
CRYOSURGICAL DEVICE**

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

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(51) **LOC (12) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/170**

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D24/110, 110.1-110.6
CPC F16M 11/105; F16M 11/10; F16M 11/048;
F16M 11/12; F16M 13/022; A61B
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(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,415,797 A * 11/1983 Choustoulakis A01M 1/2038
222/644
D288,597 S * 3/1987 Young Se D23/356
(Continued)

FOREIGN PATENT DOCUMENTS

CA 2580471 A1 * 3/2006 A61B 18/0218
CN 304082830 * 3/2017
(Continued)

OTHER PUBLICATIONS

Alibaba. Link: https://www.alibaba.com/product-detail/Cryosurgery-fat-freeze-machine-for-sale_60800739655.html?spm=a2700.7724857.normalList.132.7de3215e6qR6Qc. Visited Mar. 14, 2019. Cryosurgery Fat Freeze Machine. (Year: 2019).*
(Continued)

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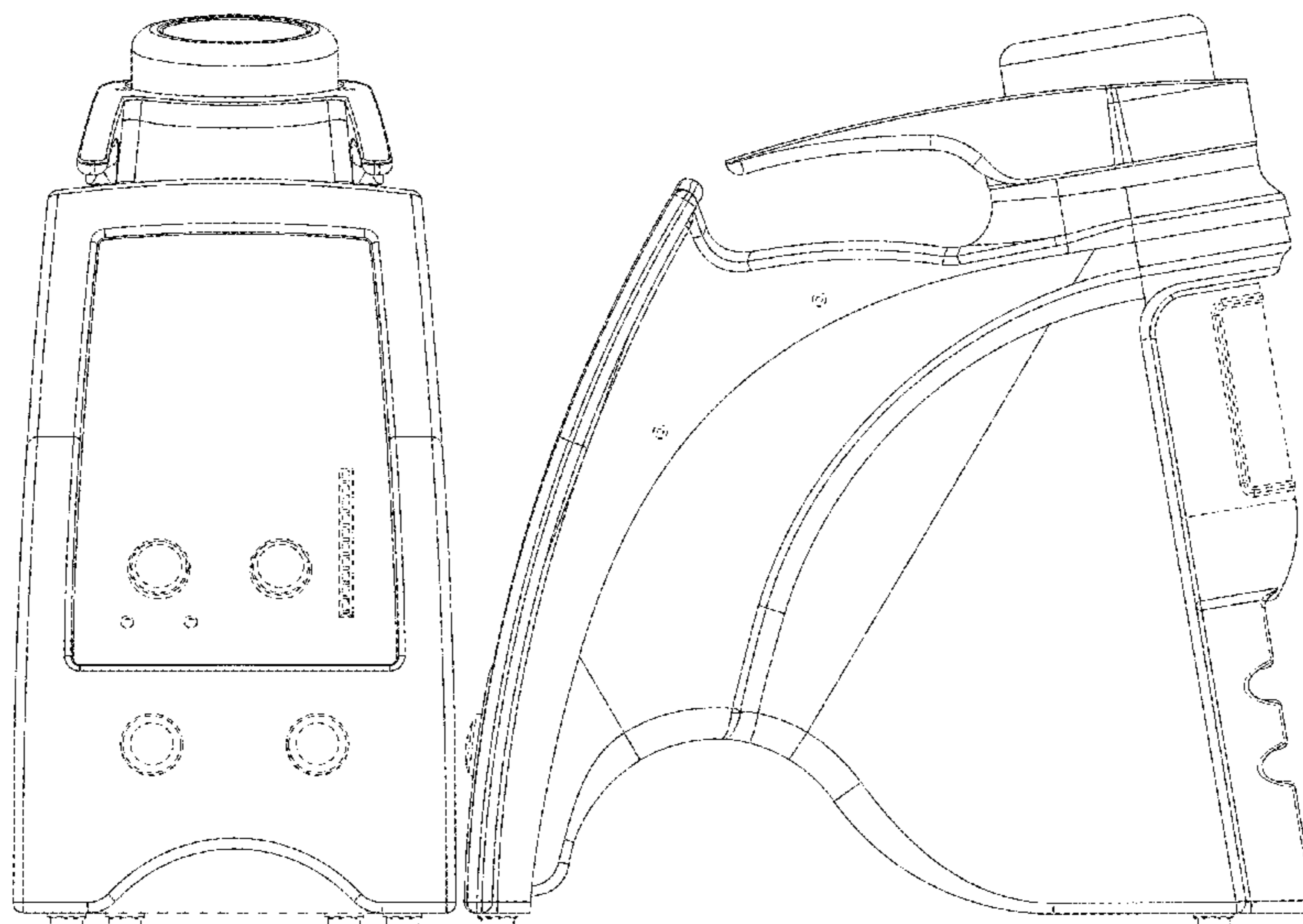
(57) **CLAIM**

The ornamental design for a portable electro-mechanical cryosurgical device, as shown and described.

DESCRIPTION

FIG. 1 is a front view of the portable electro-mechanical cryosurgical device in accordance with our new design. FIG. 2 is a right front perspective view of the portable electro-mechanical cryosurgical device of FIG. 1. FIG. 3 is a right side view of the portable electro-mechanical cryosurgical device of FIG. 1. FIG. 4 is a top view of the portable electro-mechanical cryosurgical device of FIG. 1. FIG. 5 is a bottom view of the portable electro-mechanical cryosurgical device of FIG. 1; and, FIG. 6 is a rear view of the portable electro-mechanical cryosurgical device of FIG. 1. The broken lines immediately adjacent the shaded areas represent the bounds of the claimed design; the irregular broken lines in FIG. 3 are intended to indicate surface contour; the broken lines form no part of the claimed design. The wire frame lines shown throughout the views are intended to indicate surface contour.

1 Claim, 6 Drawing Sheets



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(58) **Field of Classification Search**

CPC A61B 2018/1853; A61B 18/02; Y10S
128/27; Y10T 137/9029

See application file for complete search history.

D749,220 S * 2/2016 Taylor D24/164
D821,584 S * 6/2018 DePiano D24/170
2012/0167888 A1* 7/2012 Taylor A61M 16/10
128/205.12

(56)

References Cited

U.S. PATENT DOCUMENTS

D437,056 S * 1/2001 Remes D24/164
D438,295 S * 2/2001 Krauss D23/356
D500,847 S * 1/2005 Manke D23/356
D528,212 S * 9/2006 Conway D24/164
D666,299 S * 8/2012 Bergman D24/164
8,468,839 B2* 6/2013 Whitcher A61M 16/14
62/48.1
D712,352 S * 9/2014 George D13/112
D712,543 S * 9/2014 Maier D24/186
D712,544 S * 9/2014 Maier D24/186
D737,981 S * 9/2015 Biggs D24/170

FOREIGN PATENT DOCUMENTS

EM 004015485-0006 * 6/2017
JP D1427428 * 11/2011
JP D1450554 * 9/2012
WO WO-2019099878 A1 * 5/2019 A61B 18/02

OTHER PUBLICATIONS

Global Medical Solutions. Link: https://www.global-medical-solutions.com/Stryker-Gaymar-TP700-TPump-Professional-Core-Warming-and-Cooling-System_p_3981.html. Visited May 7, 2020. Stryker Gaymar TP700 TPump Professional Core Warming and Cooling System. (Year: 2020).*

* cited by examiner

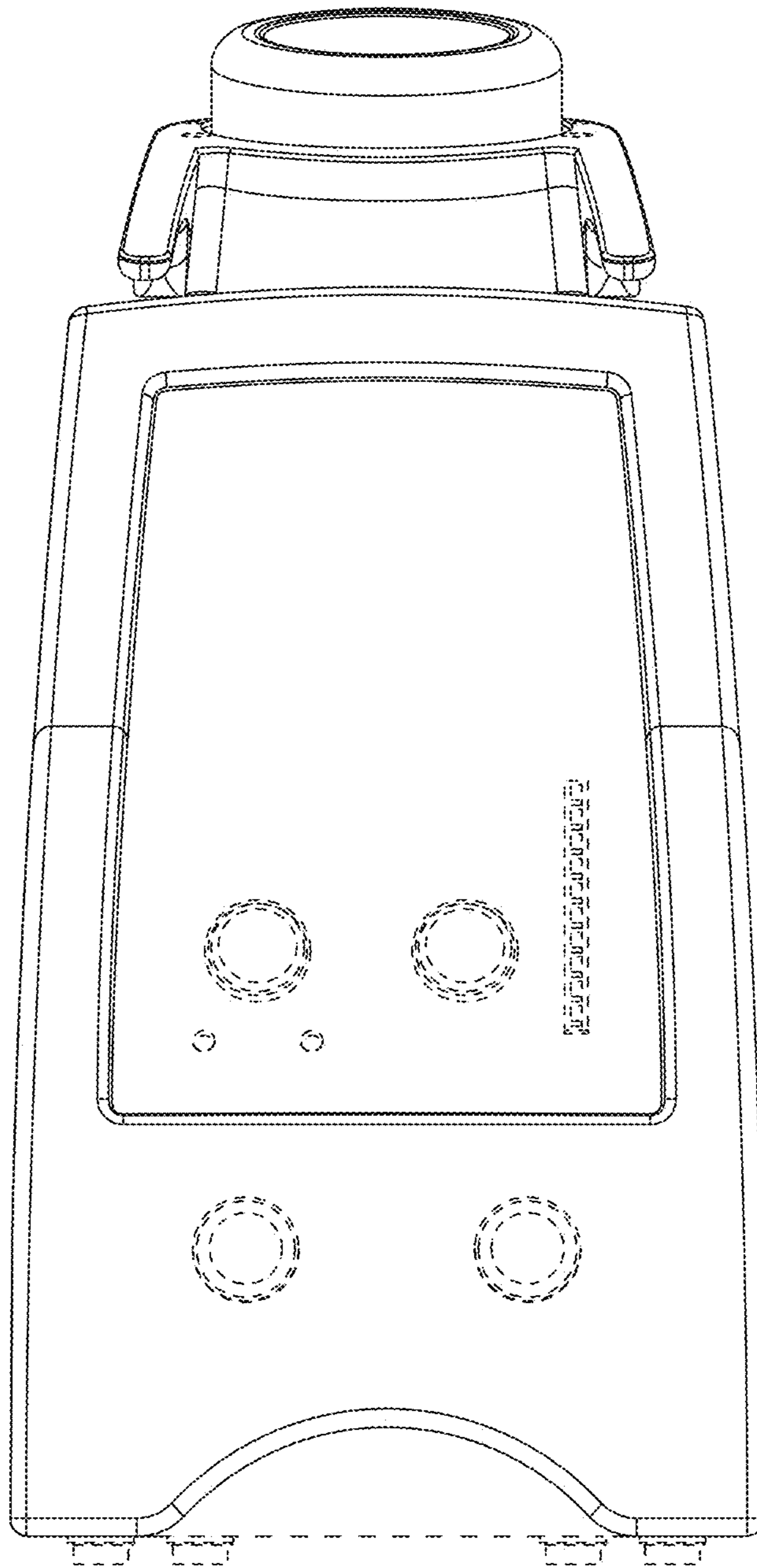


FIG. 1

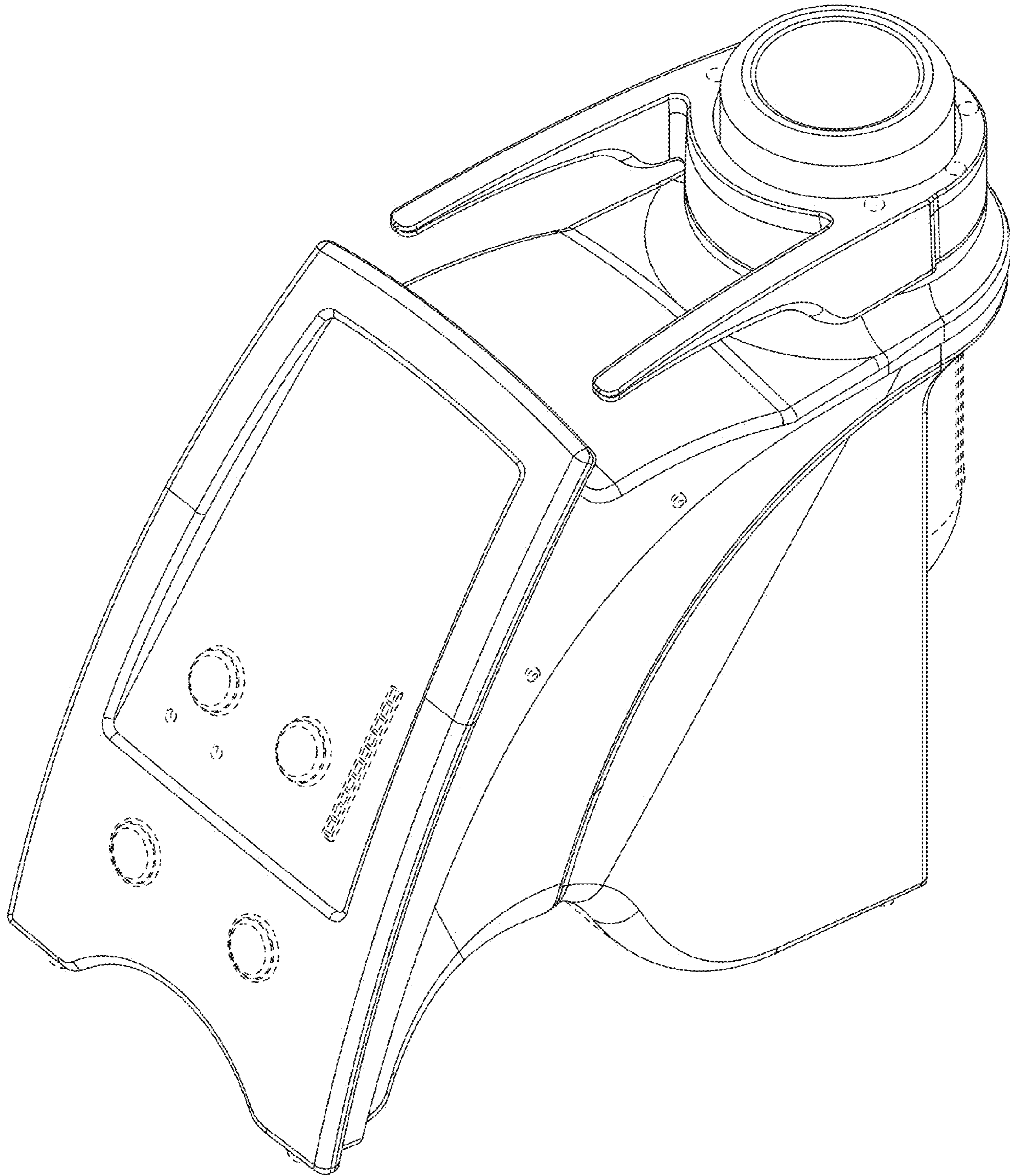


FIG. 2

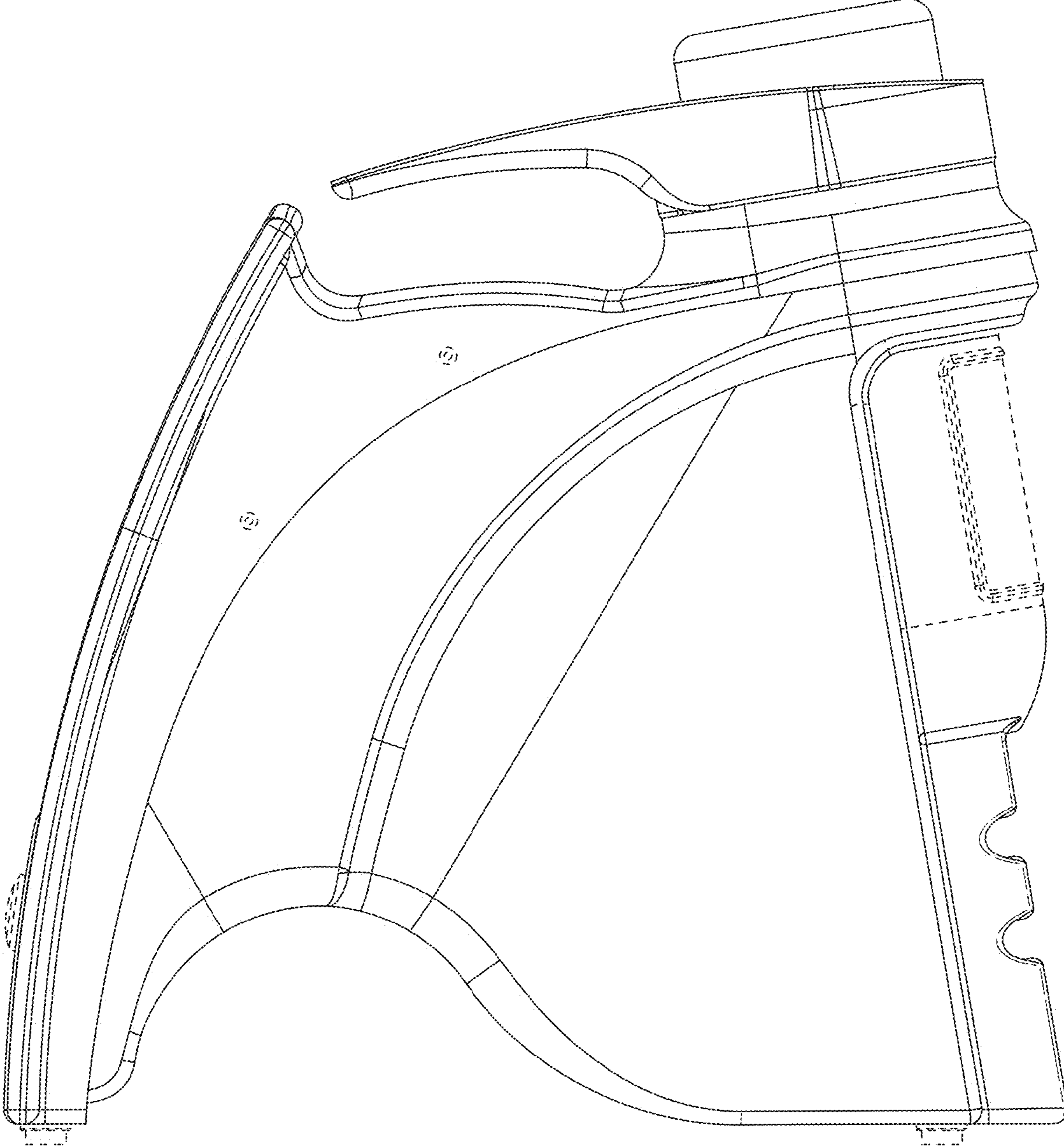


FIG. 3

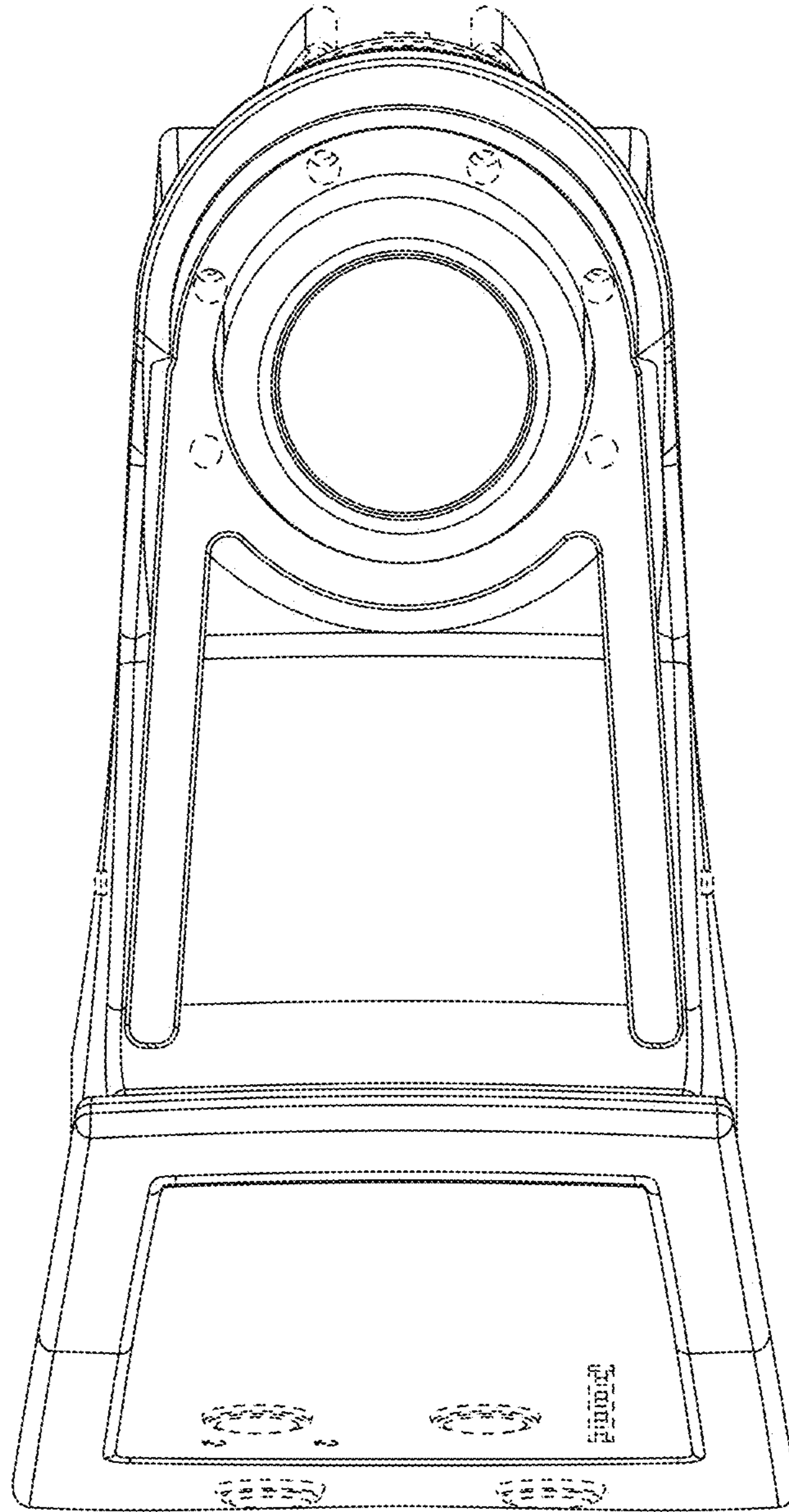


FIG. 4

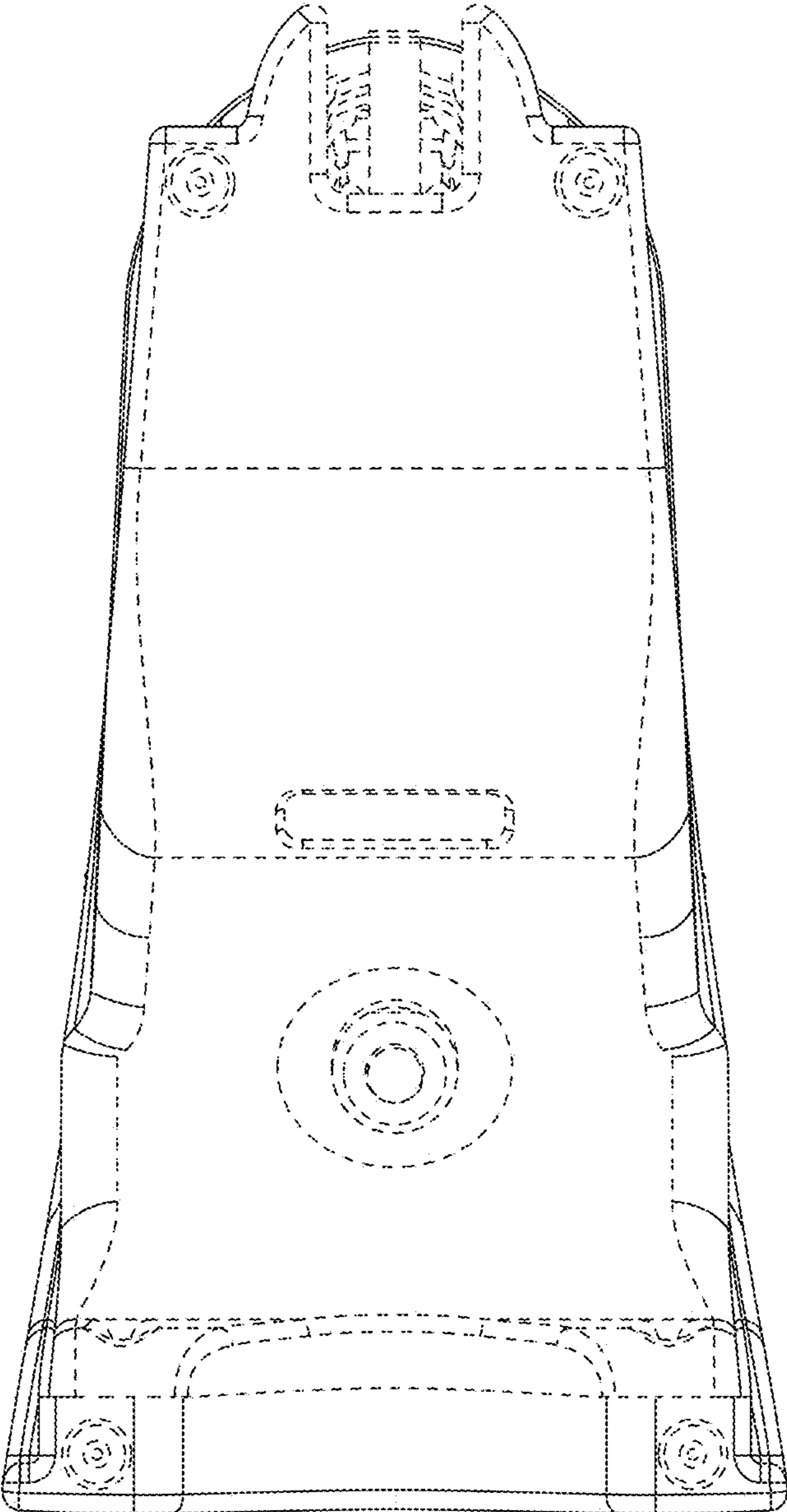


FIG. 5

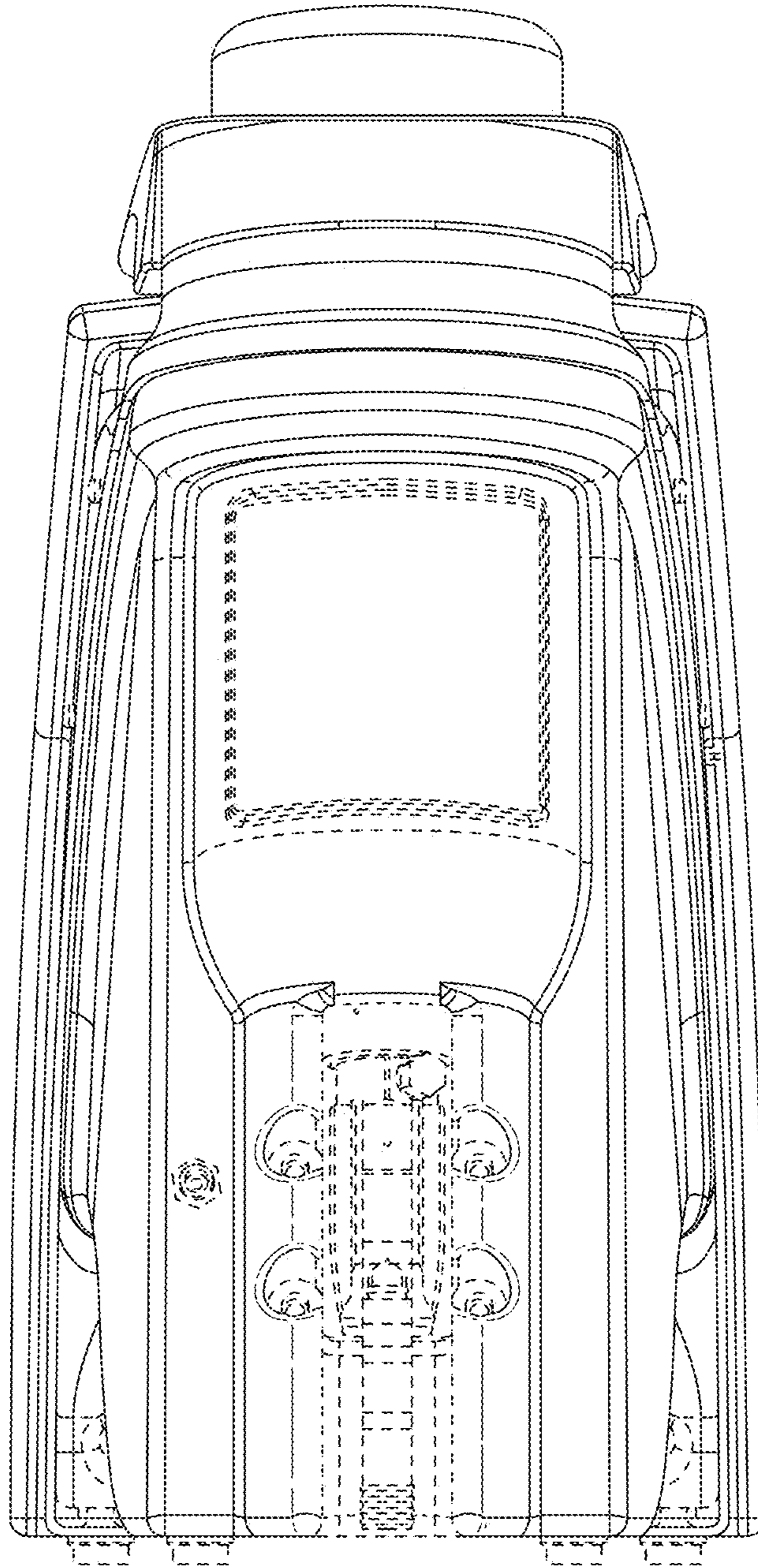


FIG. 6