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

(10) **Patent No.:** **US D781,509 S**

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(54) **DIGITAL ULTRASONIC CLEANER (CD-4862)**

(71) Applicant: **Shenzhen Codyson Electrical Co., Ltd.**, Shenzhen, Guangdong Province (CN)

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

(**) Term: **14 Years**

(21) Appl. No.: **29/467,289**

(22) Filed: **Sep. 18, 2013**

(51) **LOC (10) Cl.** **15-05**

(52) **U.S. Cl.**
USPC **D32/1**

(58) **Field of Classification Search**
USPC D32/1, 25, 15-16; 134/6, 47, 52-54, 134/56 R, 57 R, 103.1, 103.2, 109, 115 R,
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,027,688 A * 4/1962 Zabransky 451/65
3,937,236 A * 2/1976 Runnells B08B 3/12
134/182

(Continued)

FOREIGN PATENT DOCUMENTS

CN 302314003 * 2/2013
EM 002231860-0001 * 5/2013
JP D1333612 * 6/2008

OTHER PUBLICATIONS

Engineering Ultrasonic Cleaning, pub date Mar. 15, 2011, [online], [Dec. 3, 2014 3:14:35 PM], <<http://engg-learning.blogspot.com/2011/03/ultrasonic-cleaning.html>>.*

Sink Parts Washer, Wayback date Oct. 10, 2010, [online], [Dec. 3, 2014 2:13:37 PM], <<http://web.archive.org/web/20101010084426/http://s-kstore.com/index.php/sink-parts-washer-aqueous-model-90.html>>.*

(Continued)

Primary Examiner — John Windmuller

Assistant Examiner — John R Yeh

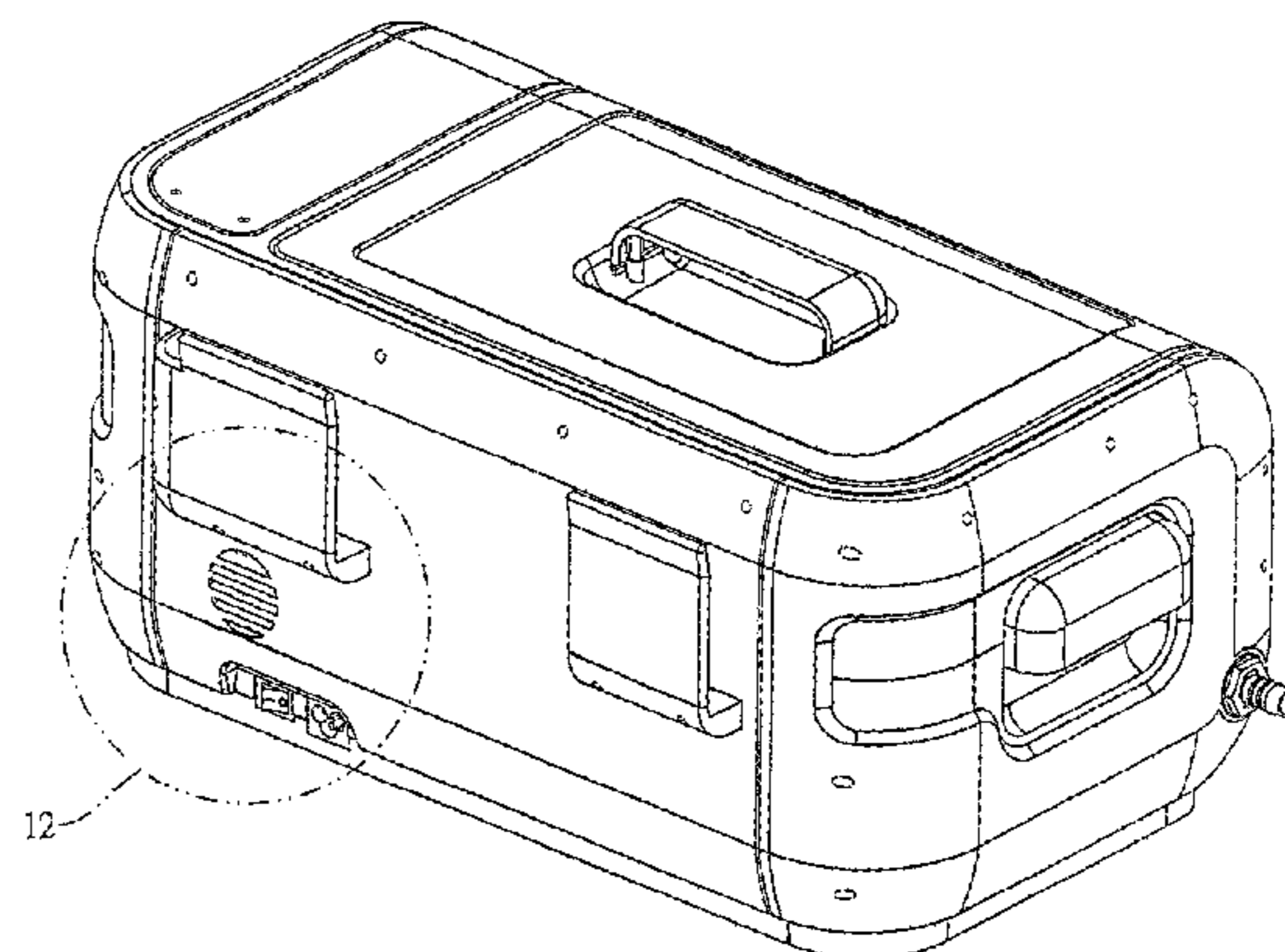
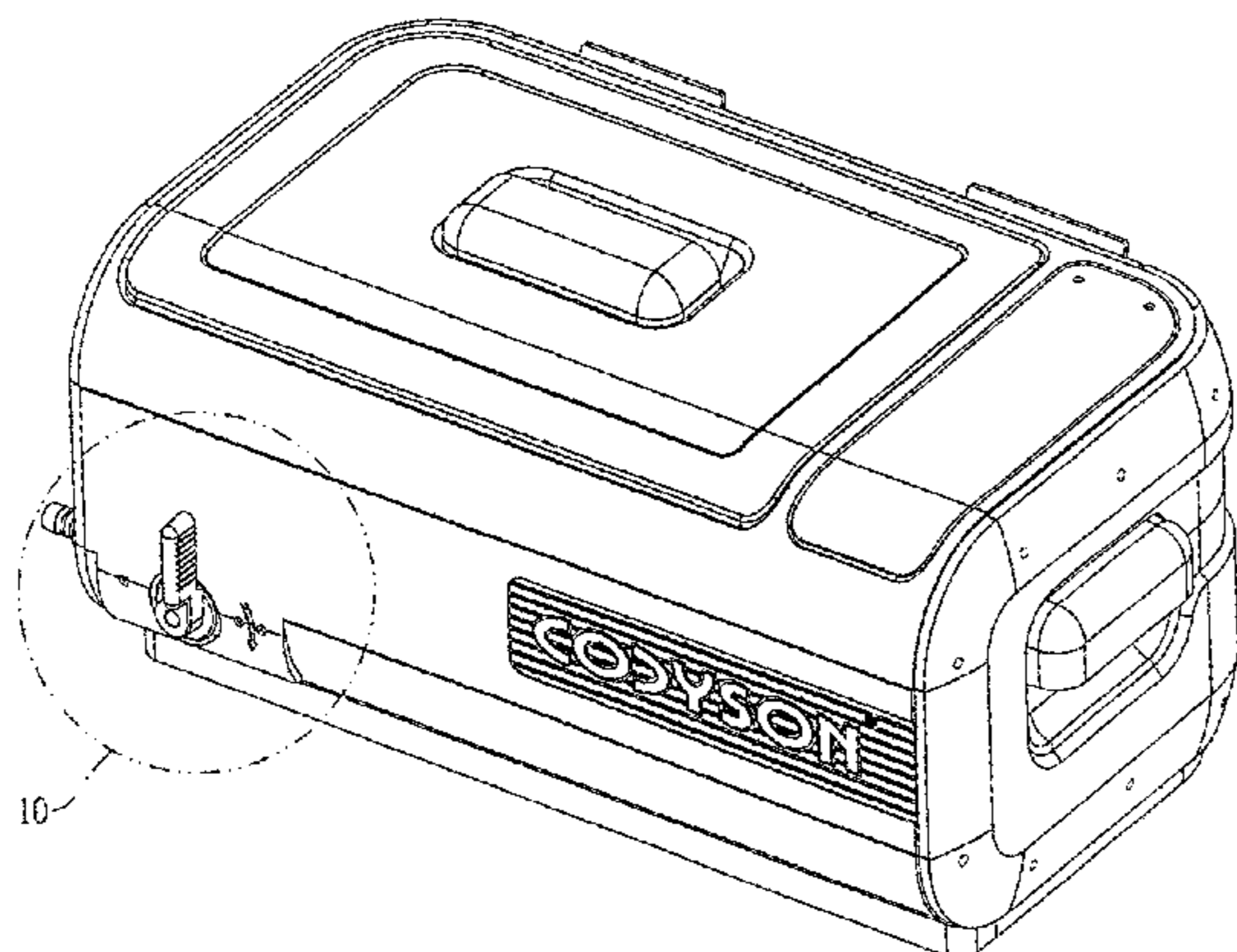
(57) **CLAIM**

The ornamental design for a digital ultrasonic cleaner (CD-4862), as shown and described.

DESCRIPTION

FIG. 1 is top plan view of the digital ultrasonic cleaner showing my new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a blown up view of a part of FIG. 3 thereof;
FIG. 5 is a bottom plan view thereof;
FIG. 6 is a blown up view of a part of FIG. 5 thereof;
FIG. 7 is a left side elevational view thereof;
FIG. 8 is a right side elevational view thereof;
FIG. 9 is a perspective view projecting toward the front thereof;
FIG. 10 is a blown up view of a part of FIG. 9 thereof;
FIG. 11 is another perspective view projecting toward the rear thereof;
FIG. 12 is a blown up view of a part of FIG. 11 thereof;
FIG. 13 is the other perspective view projecting toward the rear thereof;
FIG. 14 is a blown up view of a part of FIG. 13 thereof; and,
FIG. 15 is a blown up view of a part of FIG. 13 thereof.
The broken lines in the figures represent portions of the device that form no part of the claimed design.
The dot-dash lines represent boundaries of portions of the design that are magnified for better interpretation of the design and form no part of the claimed design.

1 Claim, 15 Drawing Sheets



(58) **Field of Classification Search**

USPC 134/117, 129, 198, 200; 15/1.51, 24,
 15/104.061; 451/64-66, 74, 92, 165;
 D7/605, 619.1; D3/218, 272, 273, 276,
 D3/294, 321, 279-81, 905;
 D24/185-187, 217; D13/169, 131, 162,
 D13/174, 176
 CPC B08B 3/00; B08B 3/12; B65D 25/00
 See application file for complete search history.

D593,262 S * 5/2009 Gong D32/1
 D633,663 S * 3/2011 Choi et al. D32/1
 D658,595 S * 5/2012 Harada et al. D13/169
 D694,522 S * 12/2013 Horovitz D3/281
 D748,872 S * 2/2016 Yao D32/1
 D763,521 S * 8/2016 Yao D32/1
 2009/0308416 A1* 12/2009 Utz B08B 3/12
 134/115 R
 2011/0023279 A1* 2/2011 Porter et al. 29/402.03
 2015/0203269 A1* 7/2015 Semer A45C 5/005
 206/1.5
 2016/0324994 A1* 11/2016 Bellosi A61L 2/04

(56) **References Cited**

U.S. PATENT DOCUMENTS

D269,810 S * 7/1983 Mace et al. D24/186
 D297,763 S * 9/1988 Daynes D24/186
 D307,653 S * 5/1990 Weirsmann D32/1
 D307,654 S * 5/1990 Weirsmann et al. D32/1
 4,995,409 A * 2/1991 Watts 134/58 R
 5,002,546 A * 3/1991 Romano 606/80
 D351,318 S * 10/1994 Wedi D7/605
 5,373,708 A * 12/1994 Dumoulin, Jr. 62/457.7
 D354,292 S * 1/1995 Monti D15/80
 D381,870 S * 8/1997 Wedi D7/605
 5,749,485 A * 5/1998 Chiu B65D 7/06
 206/586
 D400,053 S * 10/1998 Coffee et al. D7/605
 D406,416 S * 3/1999 Chan D32/1
 D453,624 S * 2/2002 Itzkovitch D3/276
 D467,468 S * 12/2002 Krieger et al. D7/605
 6,609,258 B1 * 8/2003 Clements 4/655
 D533,940 S * 12/2006 Hayamizu D24/138
 D536,491 S * 2/2007 Schumaier D32/1

OTHER PUBLICATIONS

Soniclean ultrasonic cleaner, wayback date Jan. 10, 2010, [online],
 [Dec. 3, 2014 2:40:51 PM], <<http://web.archive.org/web/20100110011934/http://www.ausoptic.com/catalog/partdetail.aspx?PartNo=296000>>.*
 Ultrasonic cleaner, wayback date Jan. 30, 2011, [online], [Dec. 3,
 2014 3:23:07 PM], <<http://web.archive.org/web/20110130233007/http://ultrasoniccleanerjewelry.com/>>.*
 Craftsmen portable chest tool box, review date Dec. 3, 2008,
 [online], [Dec. 4, 2014 8:34:50 PM], <<http://www.sears.com/craftsman-3-drawer-plastic-metal-portable-chest-red-black/p-00965628000P?prdNo=5&blockNo=5&blockType=G5>>.*
 Amazon.com: Angel POS 6 Liter 1.58 Gallon 300W Ultrasonic
 Cleaner, review date Nov. 15, 2015, site visited Nov. 17, 2016,
https://www.amazon.com/...OSUltrasonicCommercialIndustrial/dp/B000EHHQM0/ref=sr_1_195?ie=UTF8&qid=1479433727&sr=8-195&keywords=ultrasonic+cleaner#customerReviews.*

* cited by examiner

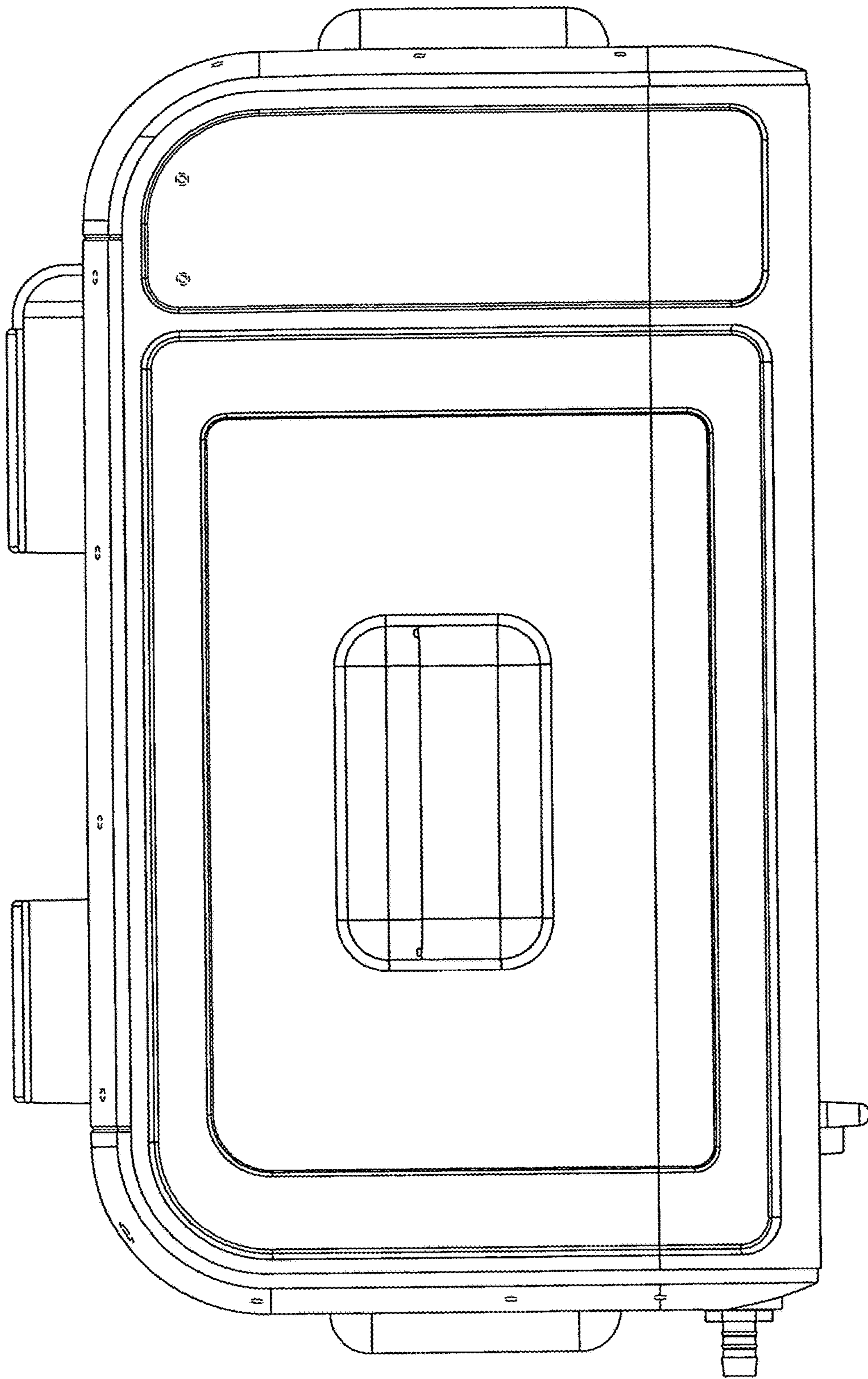


FIG.1

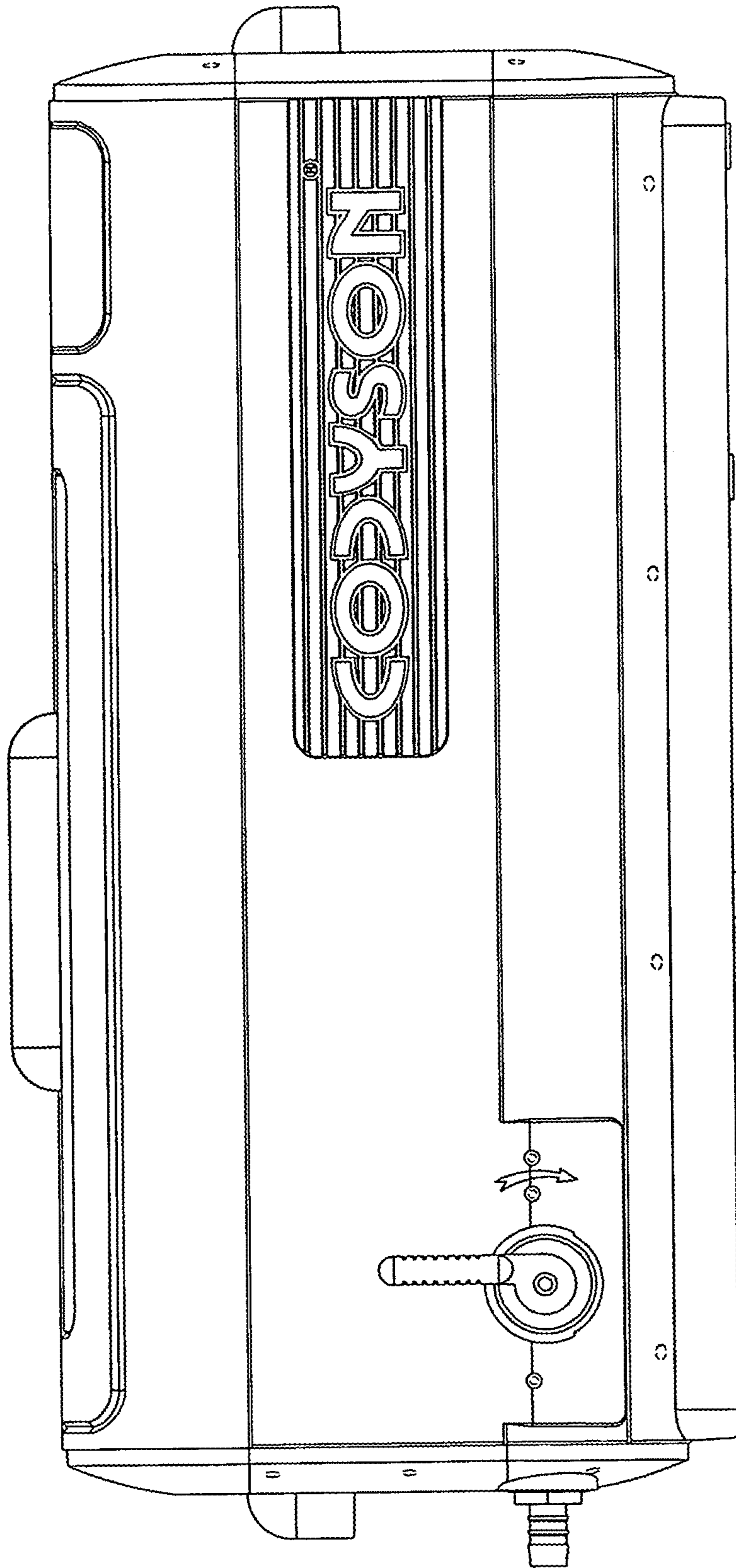


FIG.2

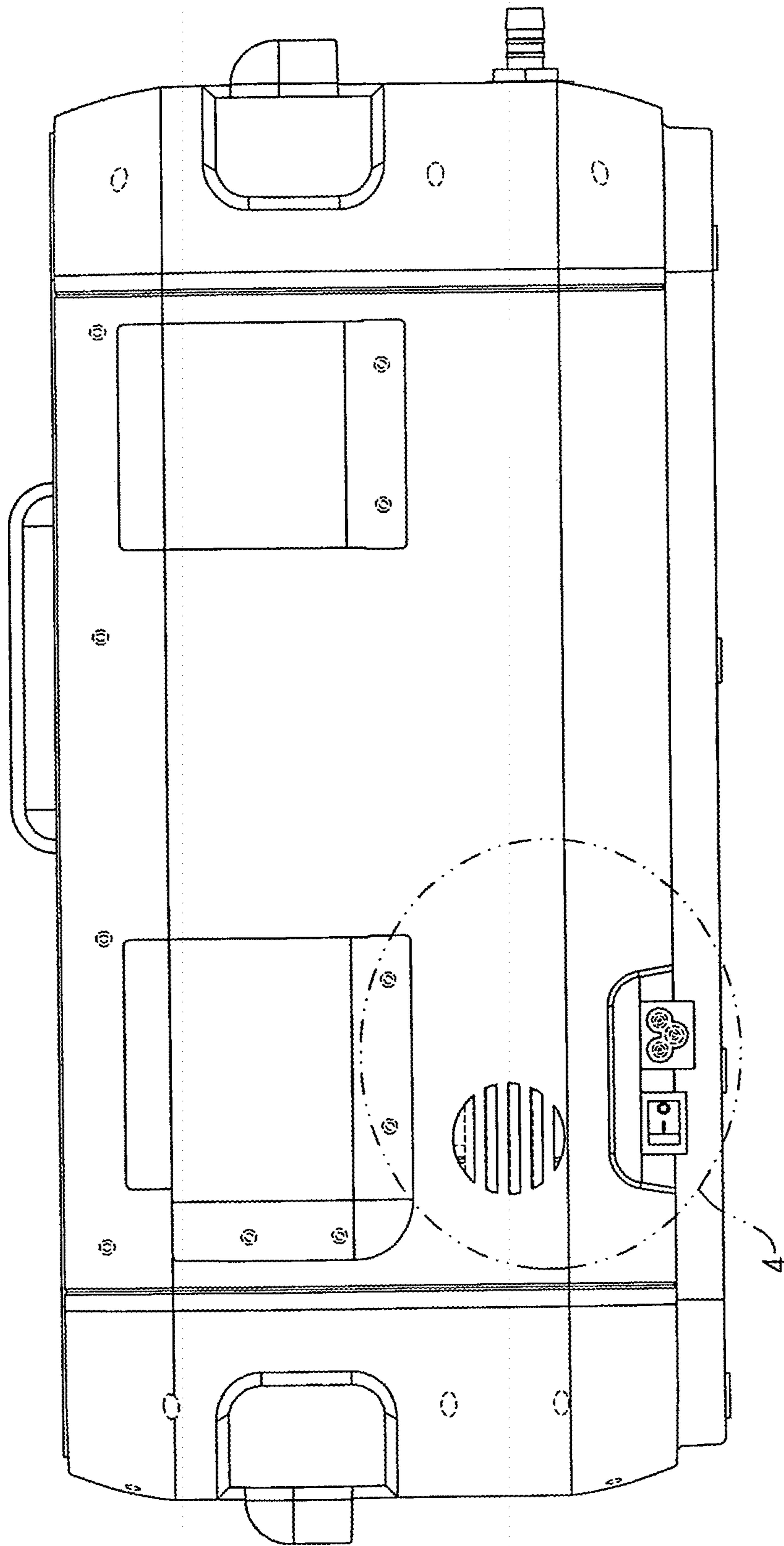


FIG.3

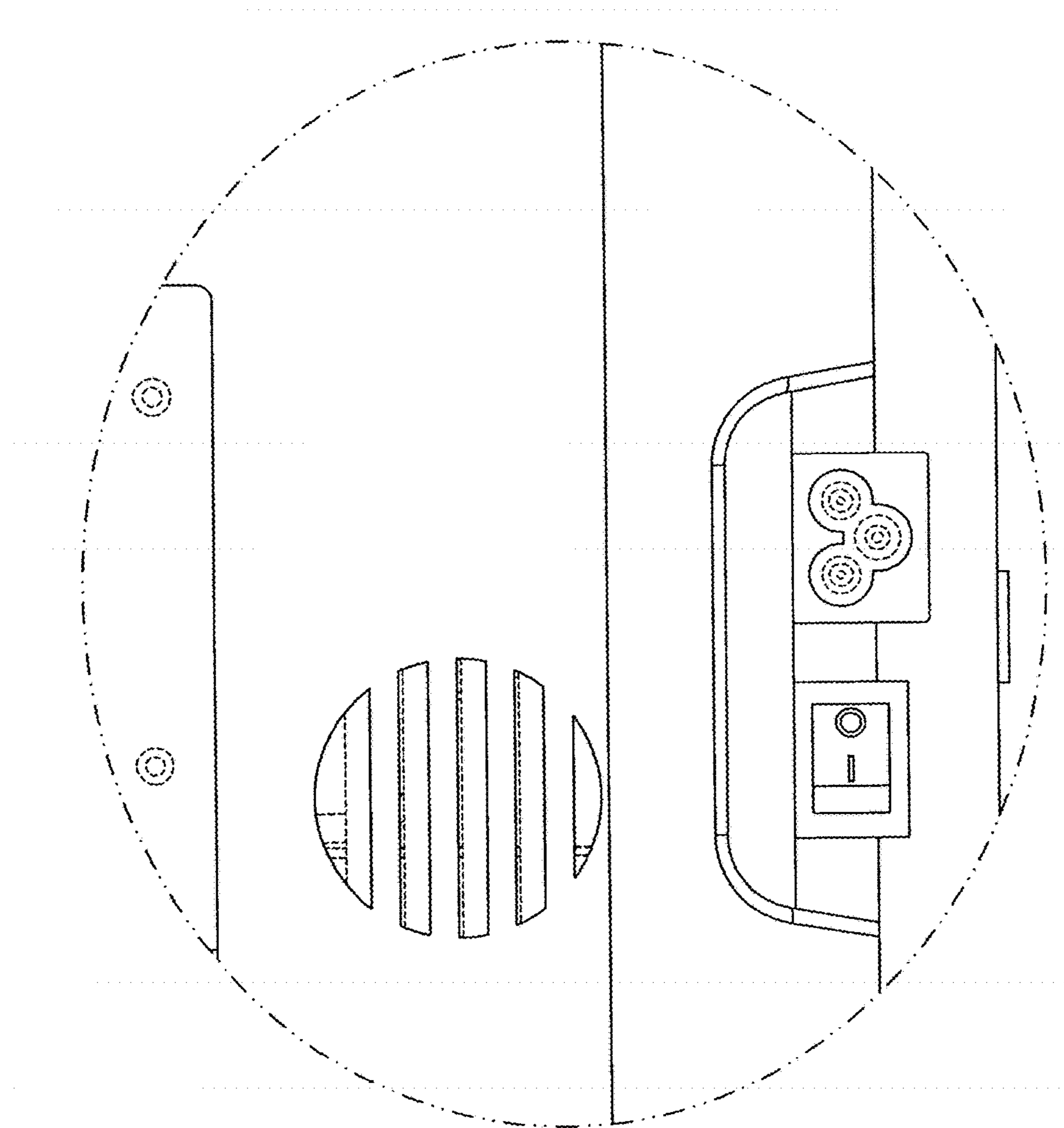


FIG. 4

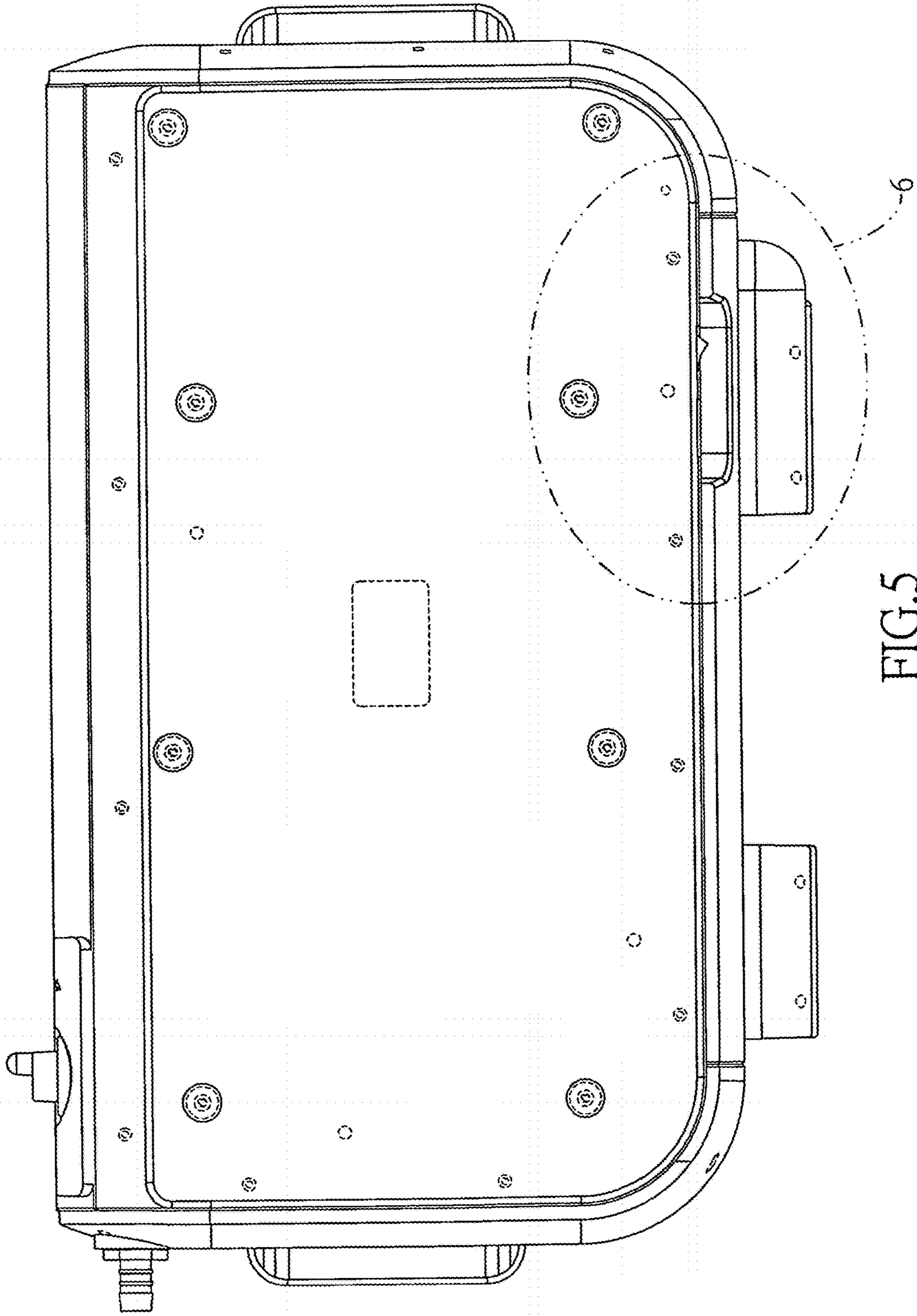


FIG. 5

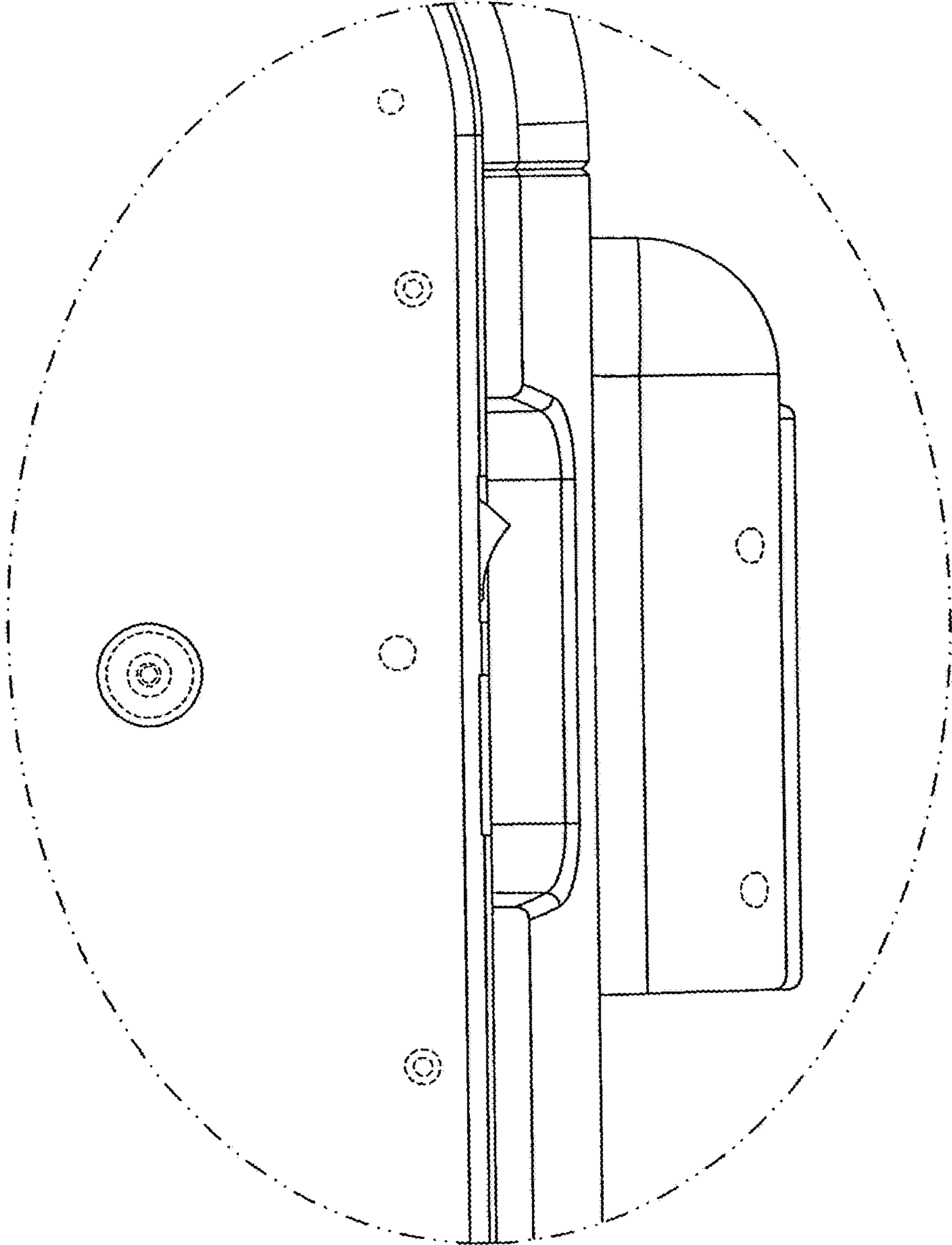


FIG.6

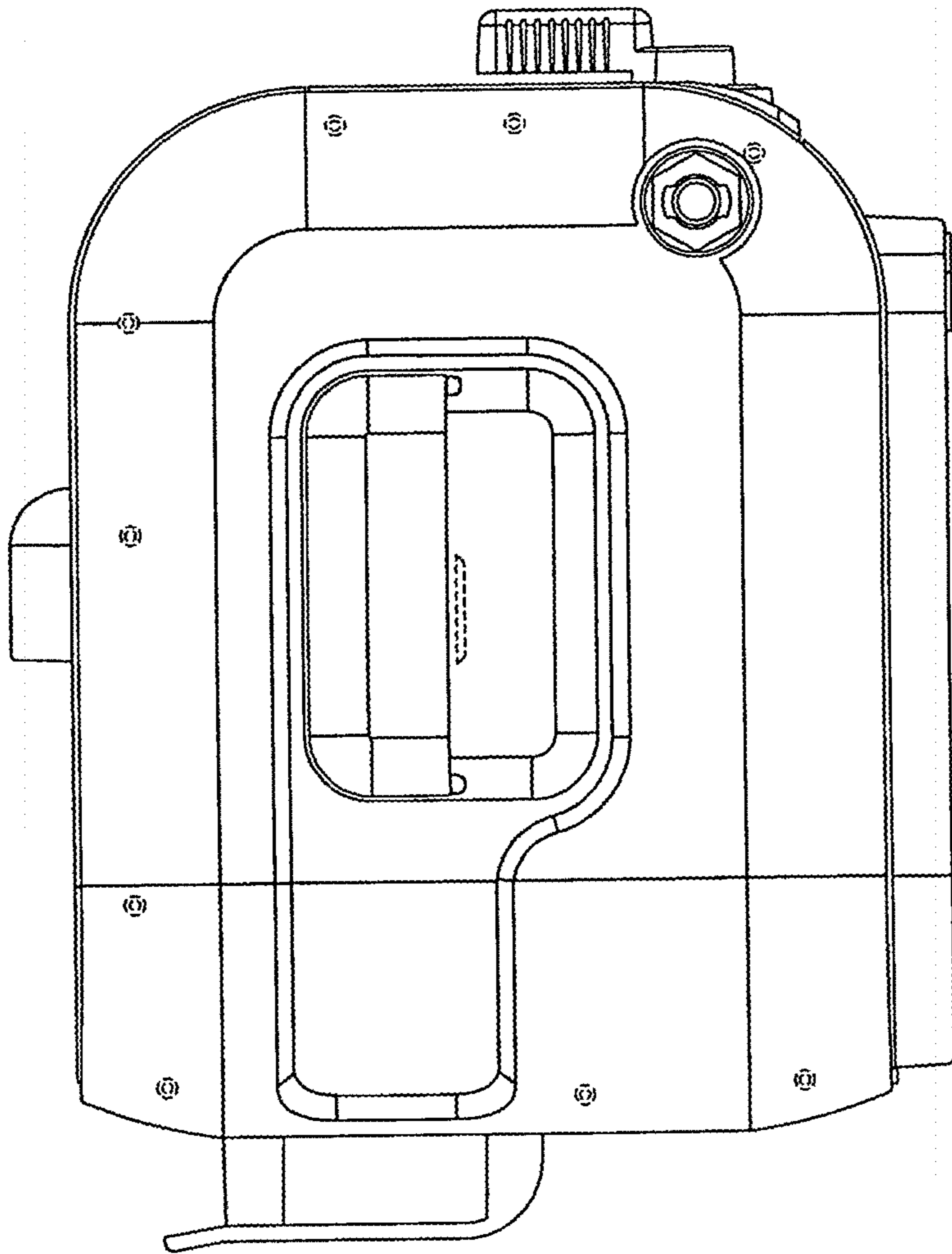


FIG. 7

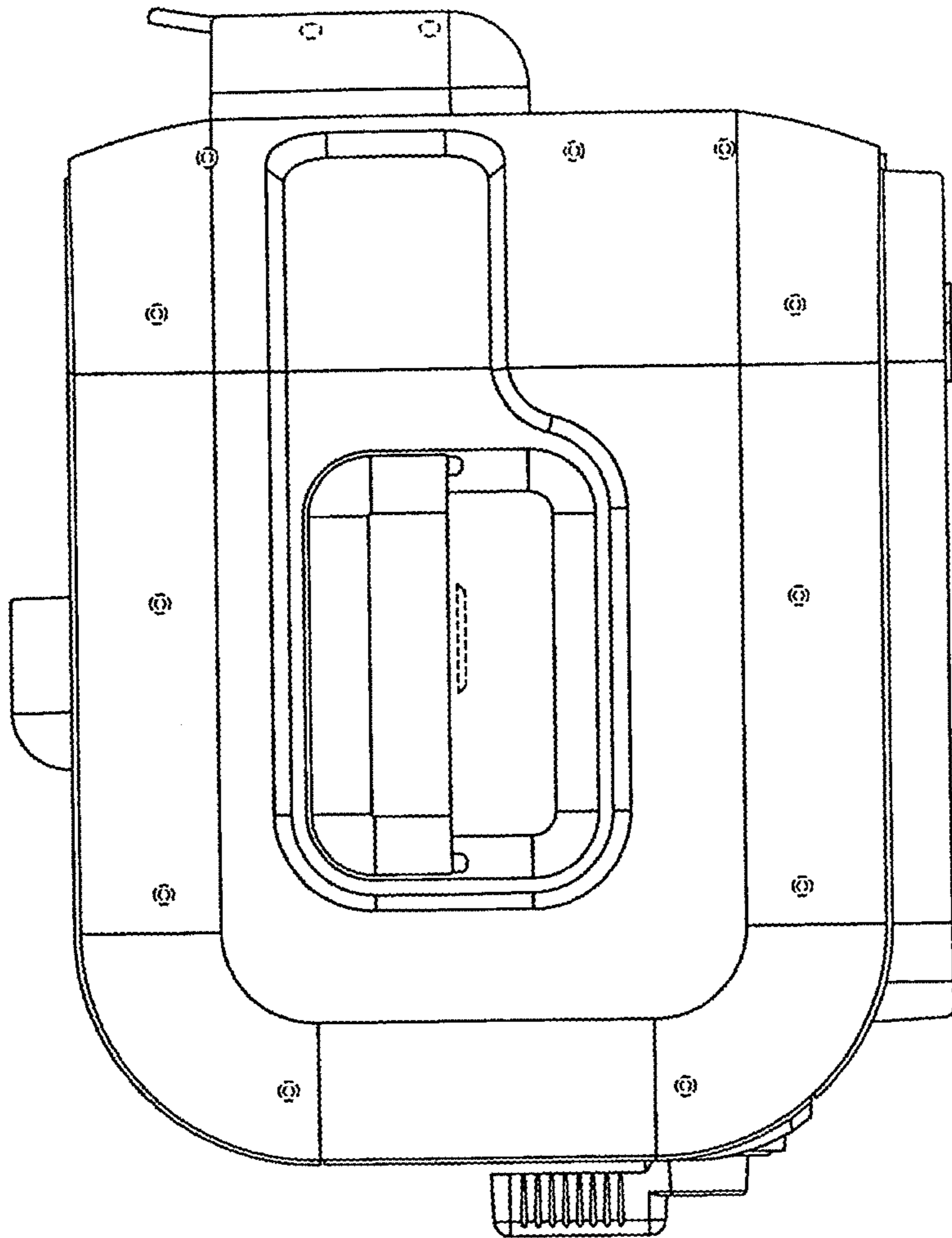


FIG.8

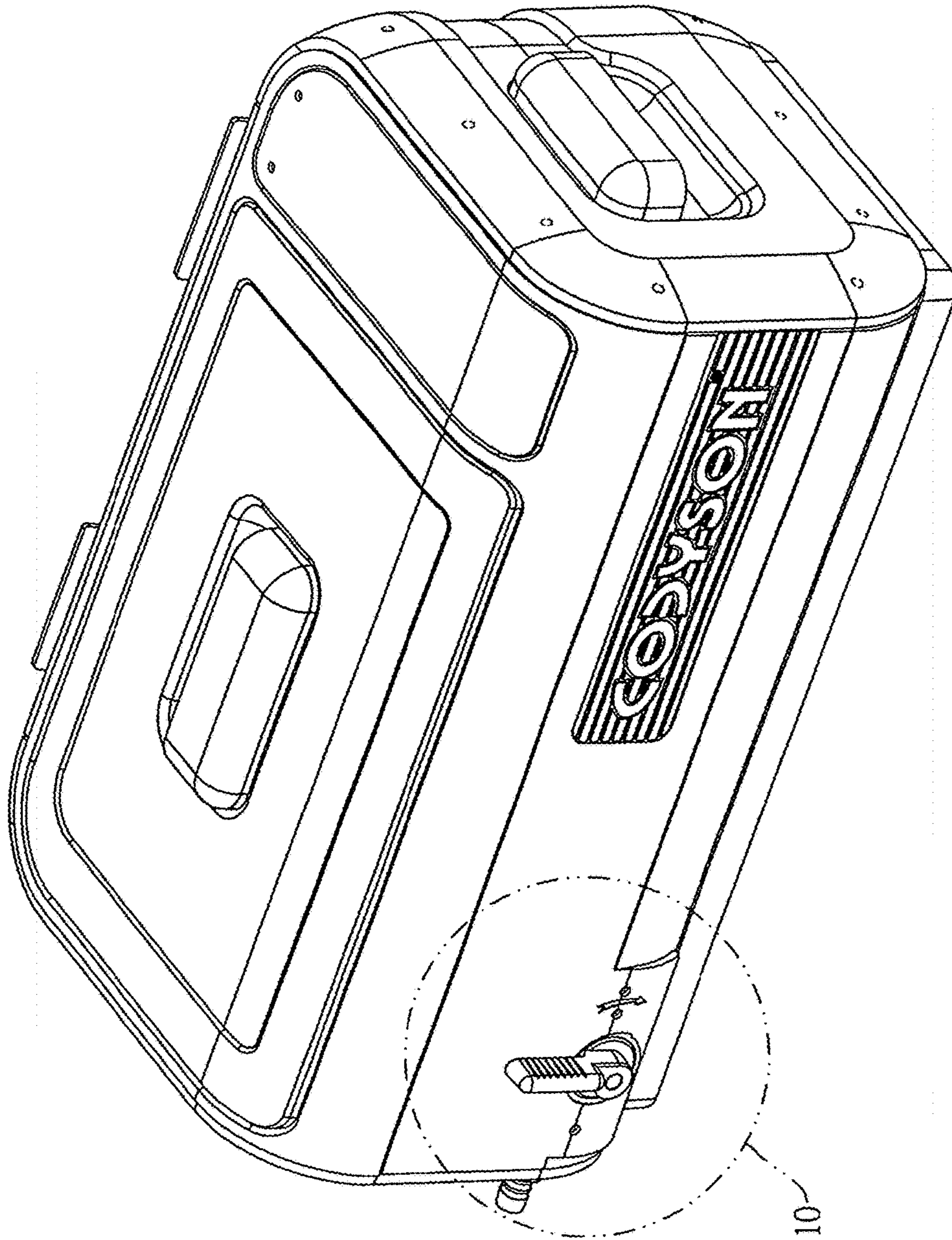


FIG.9

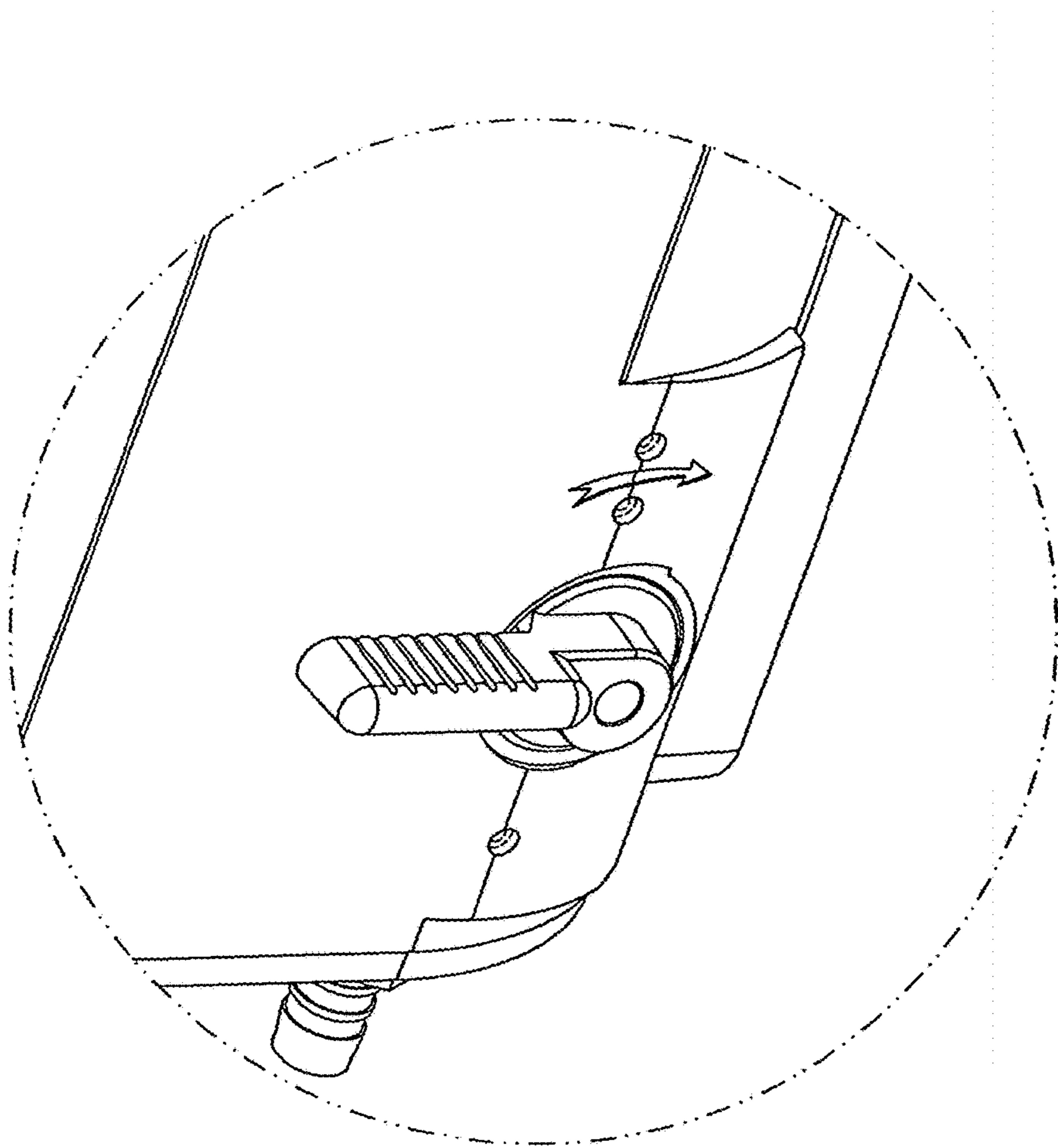


FIG.10

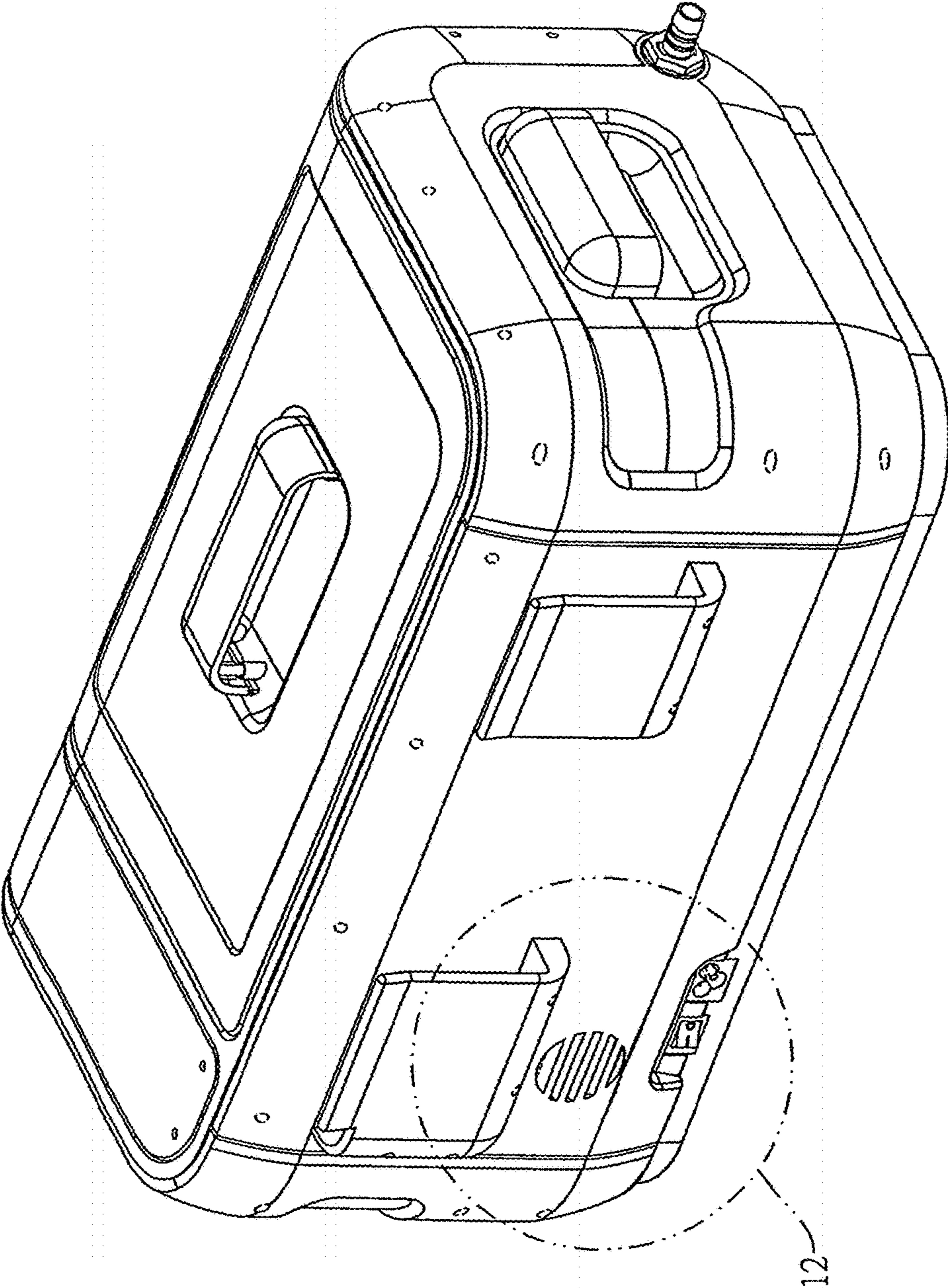


FIG.11

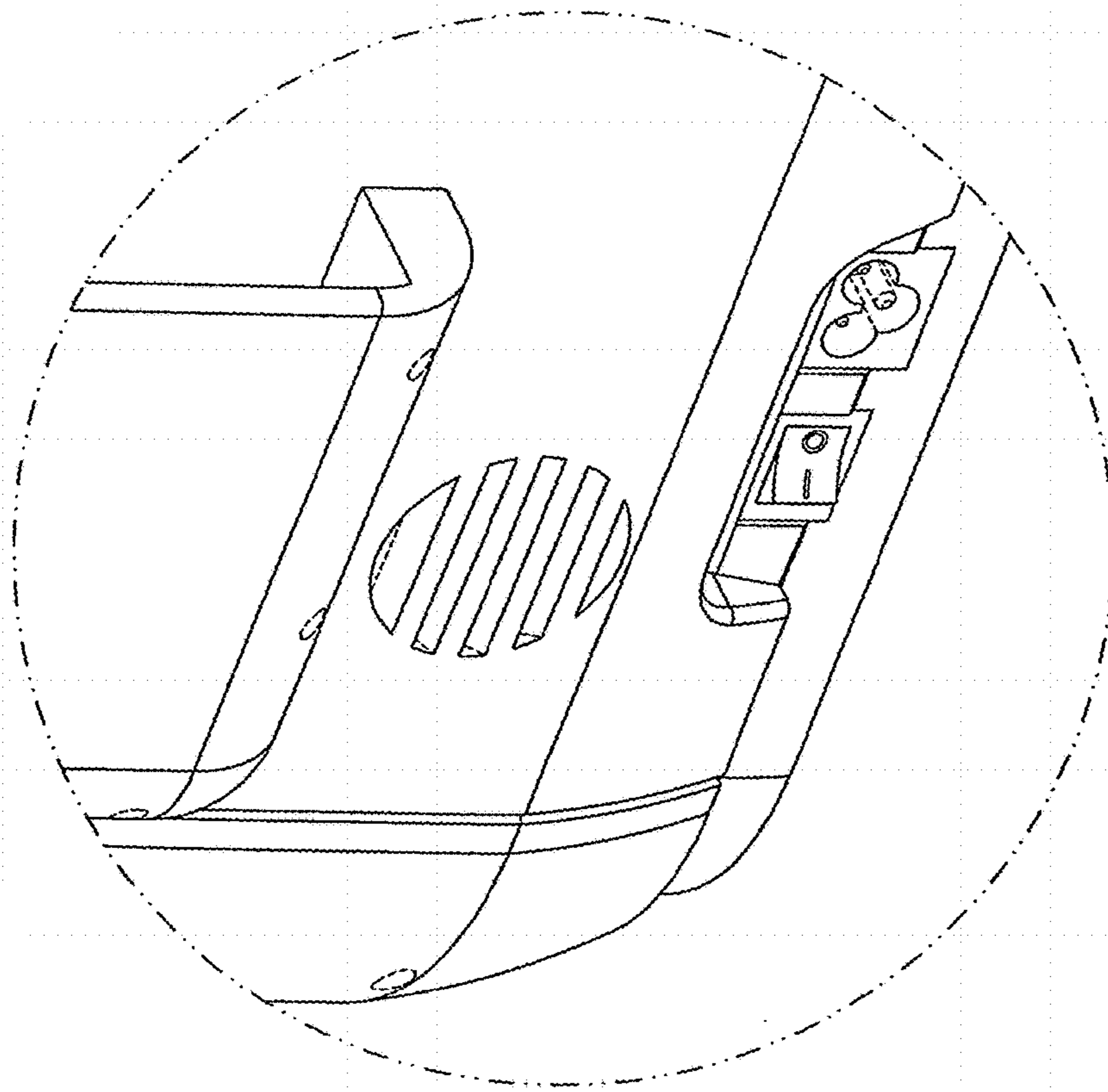


FIG. 12

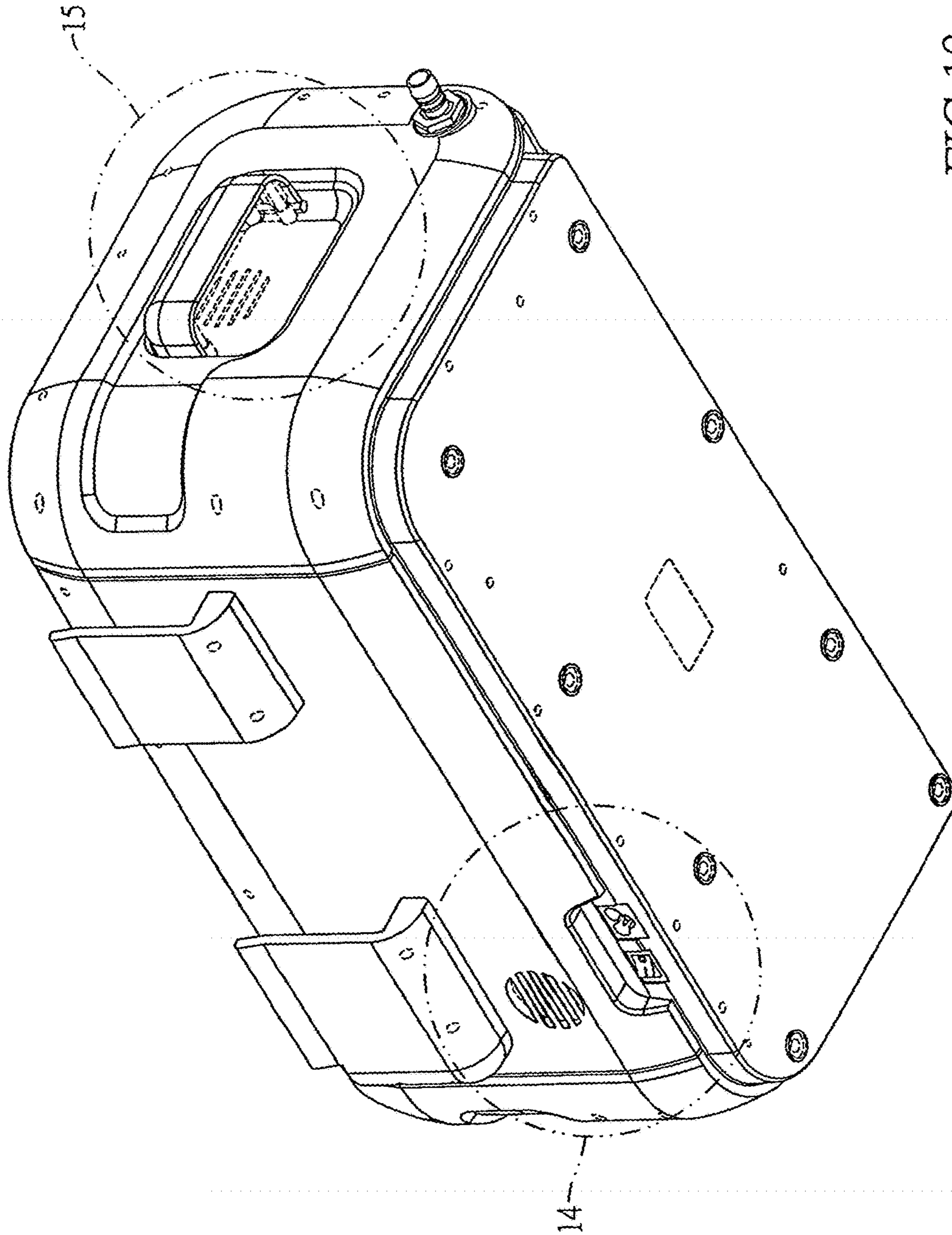


FIG.13

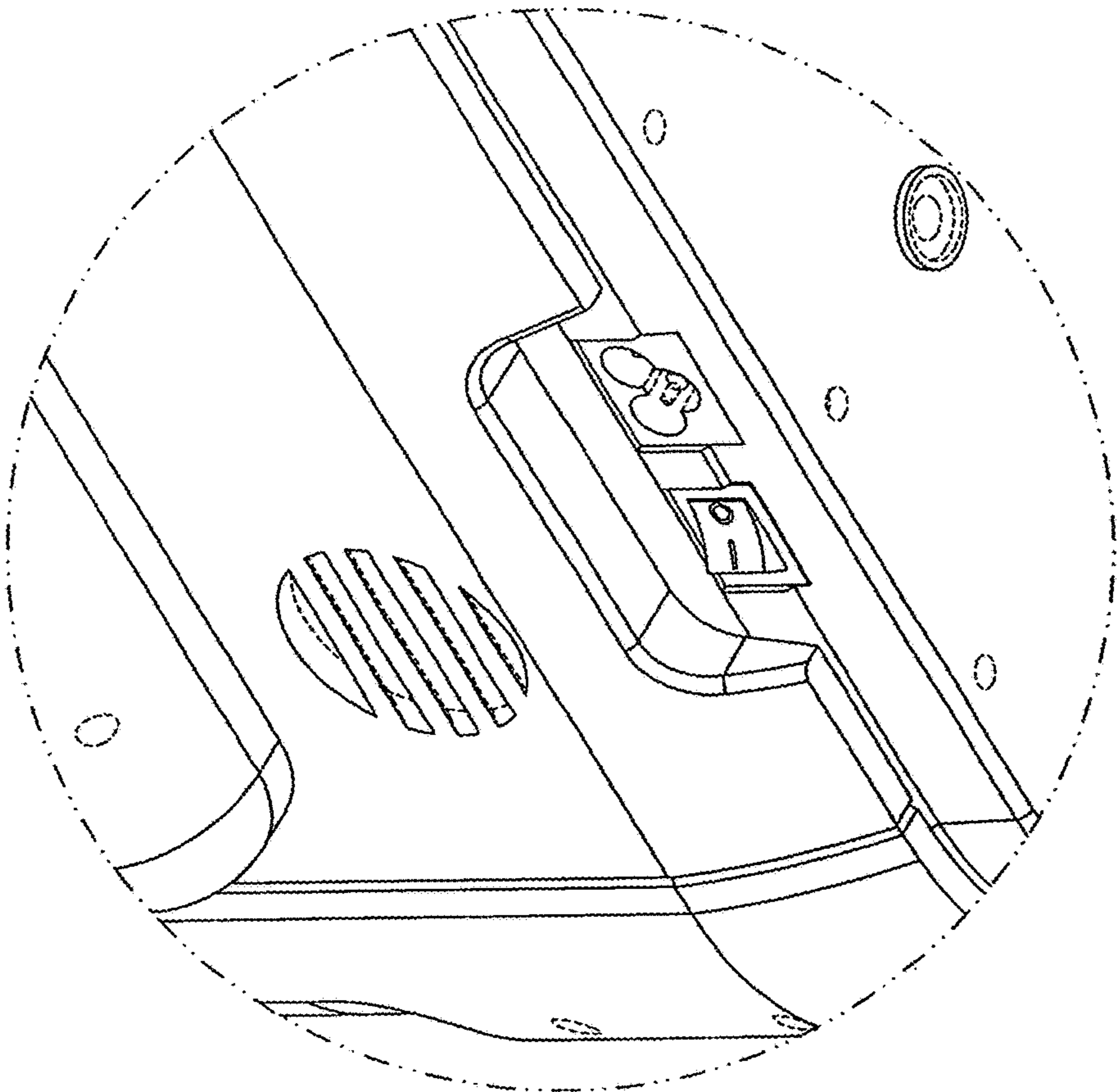


FIG.14

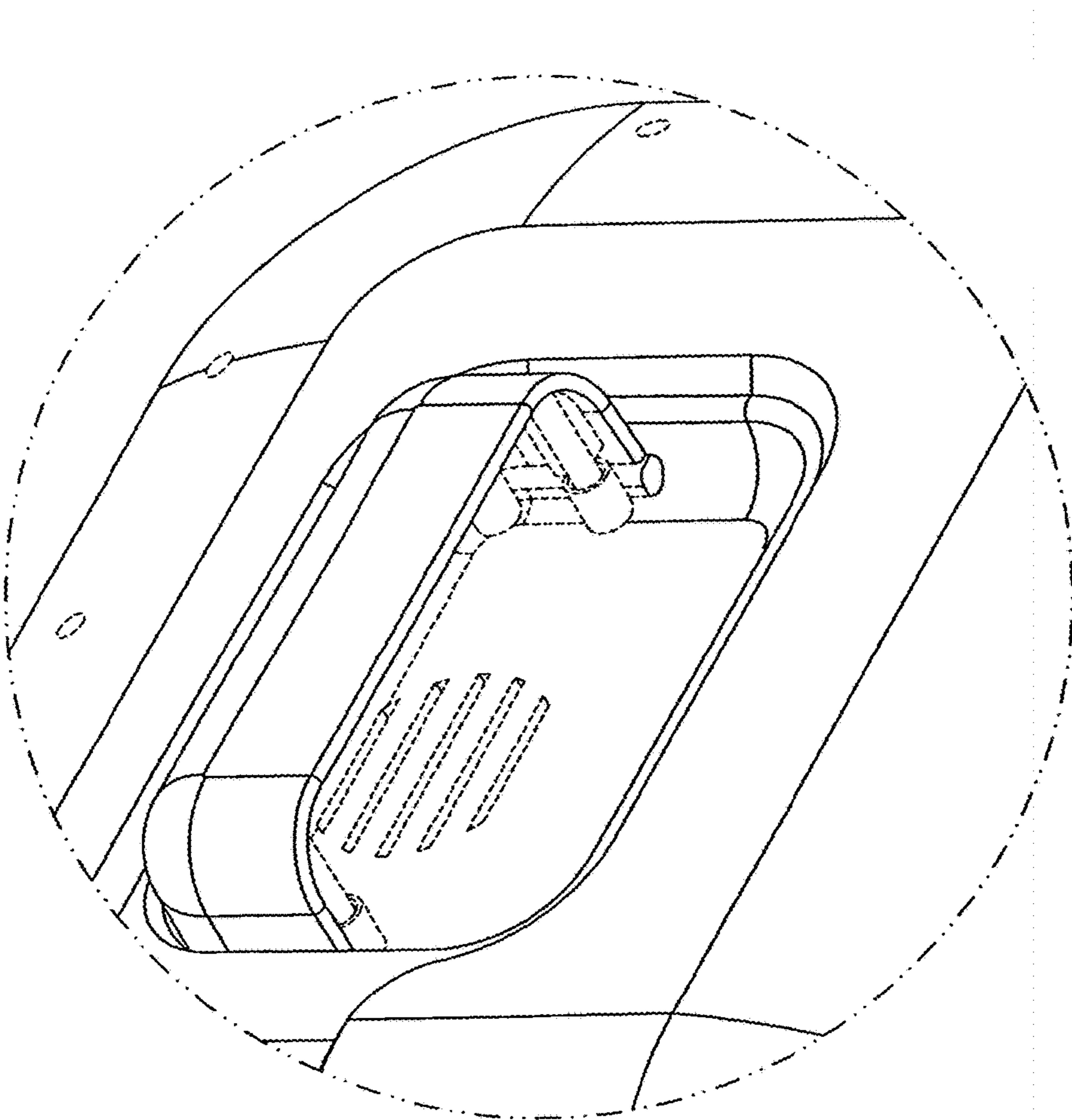


FIG.15