



US00D748872S

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

(10) **Patent No.:** **US D748,872 S**  
(45) **Date of Patent:** **\*\* Feb. 2, 2016**

(54) **DIGITAL ULTRASONIC CLEANER**

FOREIGN PATENT DOCUMENTS

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

JP D1333612 \* 6/2008

(72) Inventor: **Xingyuan Yao**, Shenzhen (CN)

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>>.\*

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

(Continued)

(21) Appl. No.: **29/467,288**

*Primary Examiner* — John Windmuller

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

*Assistant Examiner* — John R Yeh

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

(57) **CLAIM**

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

The ornamental design for a digital ultrasonic cleaner, as shown and described.

(58) **Field of Classification Search**

**DESCRIPTION**

USPC ..... D32/1, 15, 16, 25; 134/6, 47, 52-54, 134/56 R, 57 R, 103.1, 103.2, 109, 115 R, 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, D24/217; D13/169, 131, 162, 174, 176  
See application file for complete search history.

FIG. 1 is top plan view of the digital ultrasonic cleaner showing my new design;  
FIG. 2 is a bottom plan view thereof;  
FIG. 3 is a blown up view of a part of FIG. 2 thereof;  
FIG. 4 is a left side elevational view thereof;  
FIG. 5 is a right side elevational view thereof;  
FIG. 6 is a rear elevational view thereof;  
FIG. 7 is a blown up view of a part of FIG. 6 thereof;  
FIG. 8 is a front 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; and,  
FIG. 12 is a blown up view of a part of FIG. 11 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.

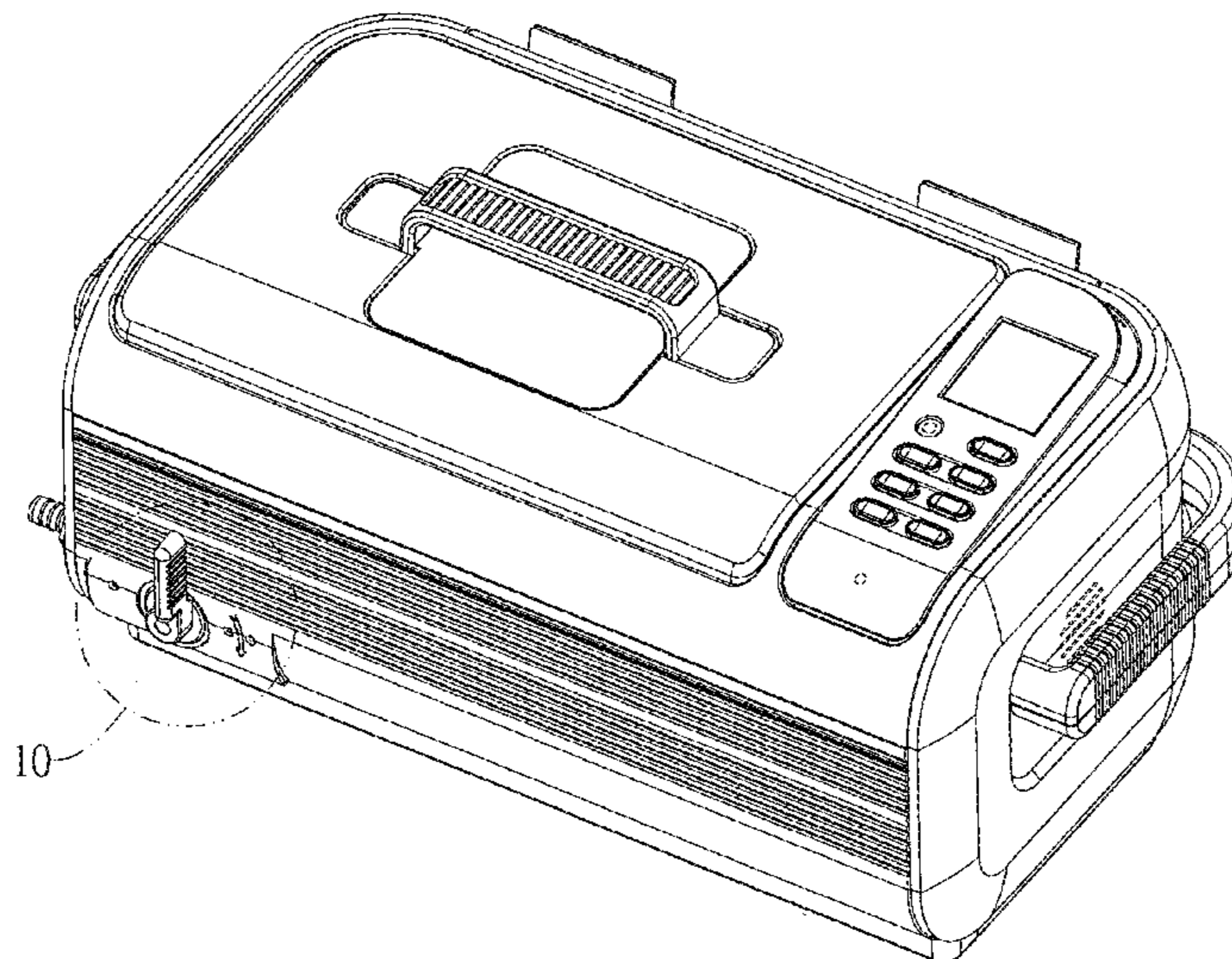
(56) **References Cited**

U.S. PATENT DOCUMENTS

3,027,688	A *	4/1962	Zabransky	.....	451/65
D269,810	S *	7/1983	Mace et al.	.....	D24/186
D297,763	S *	9/1988	Daynes	.....	D24/186
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

(Continued)

**1 Claim, 12 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

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
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
2011/0023279	A1 *	2/2011	Porter et al.	.....	29/402.03

OTHER PUBLICATIONS

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>>.\*

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/>>.\*

\* cited by examiner

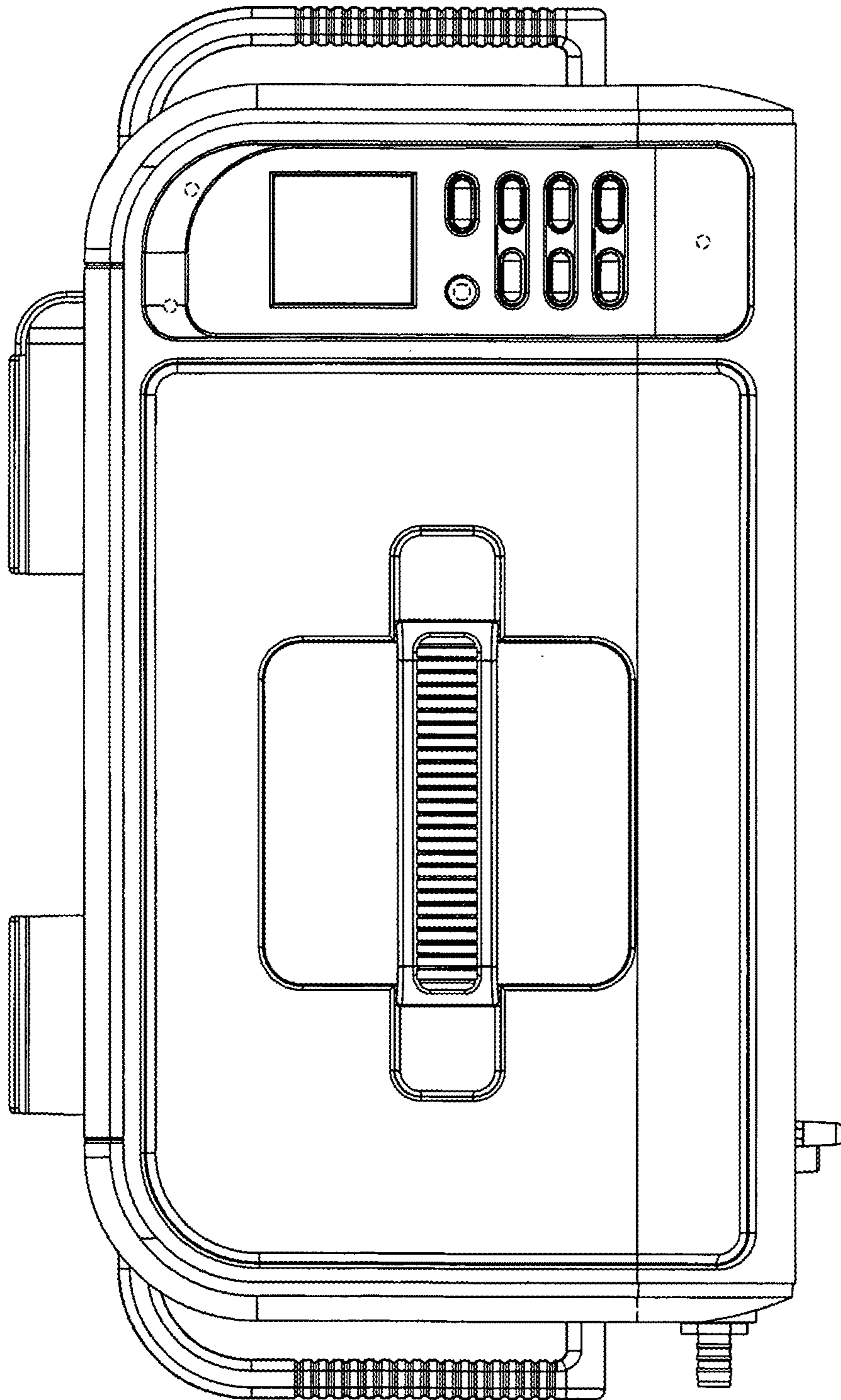


FIG.1



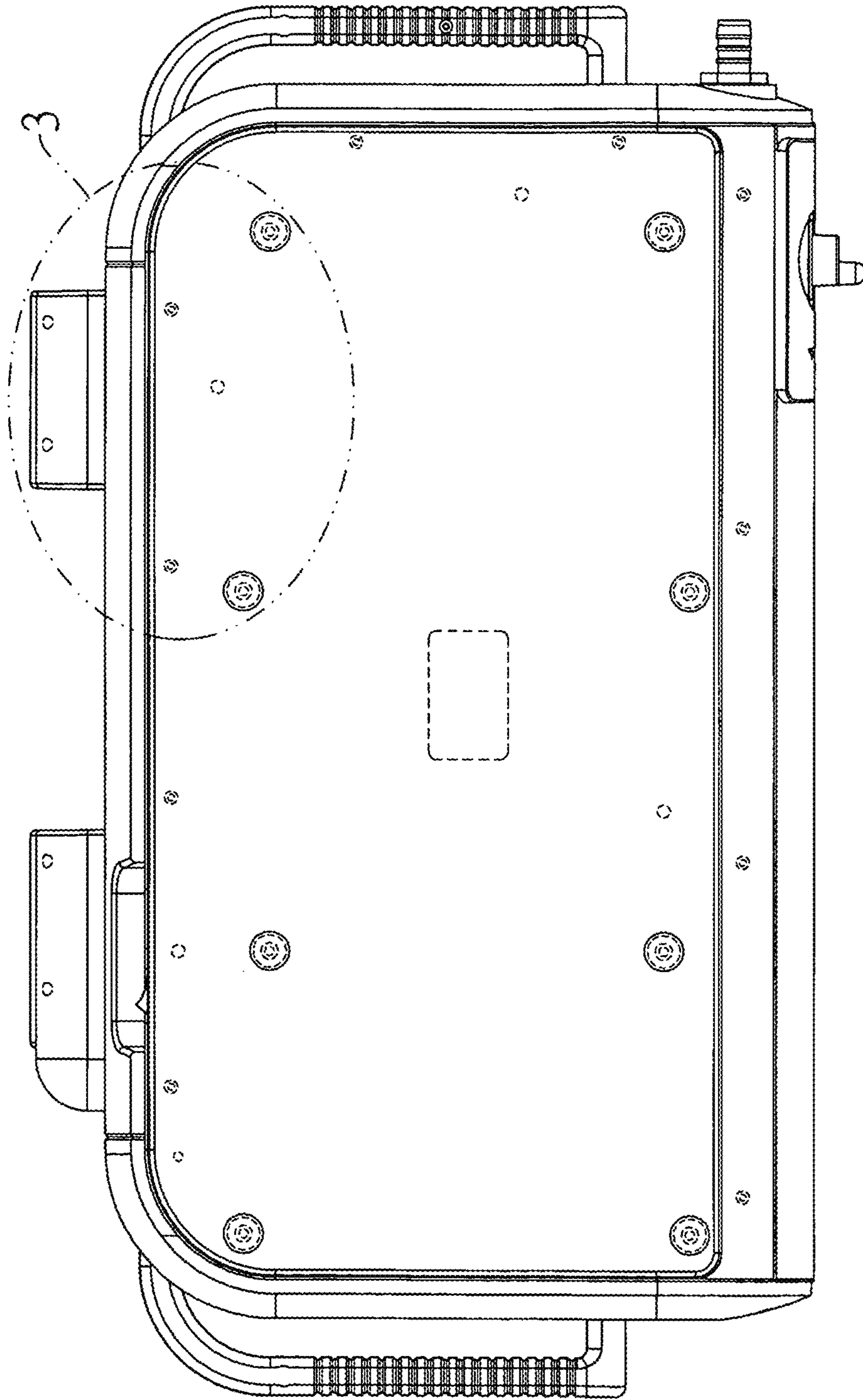


FIG.2

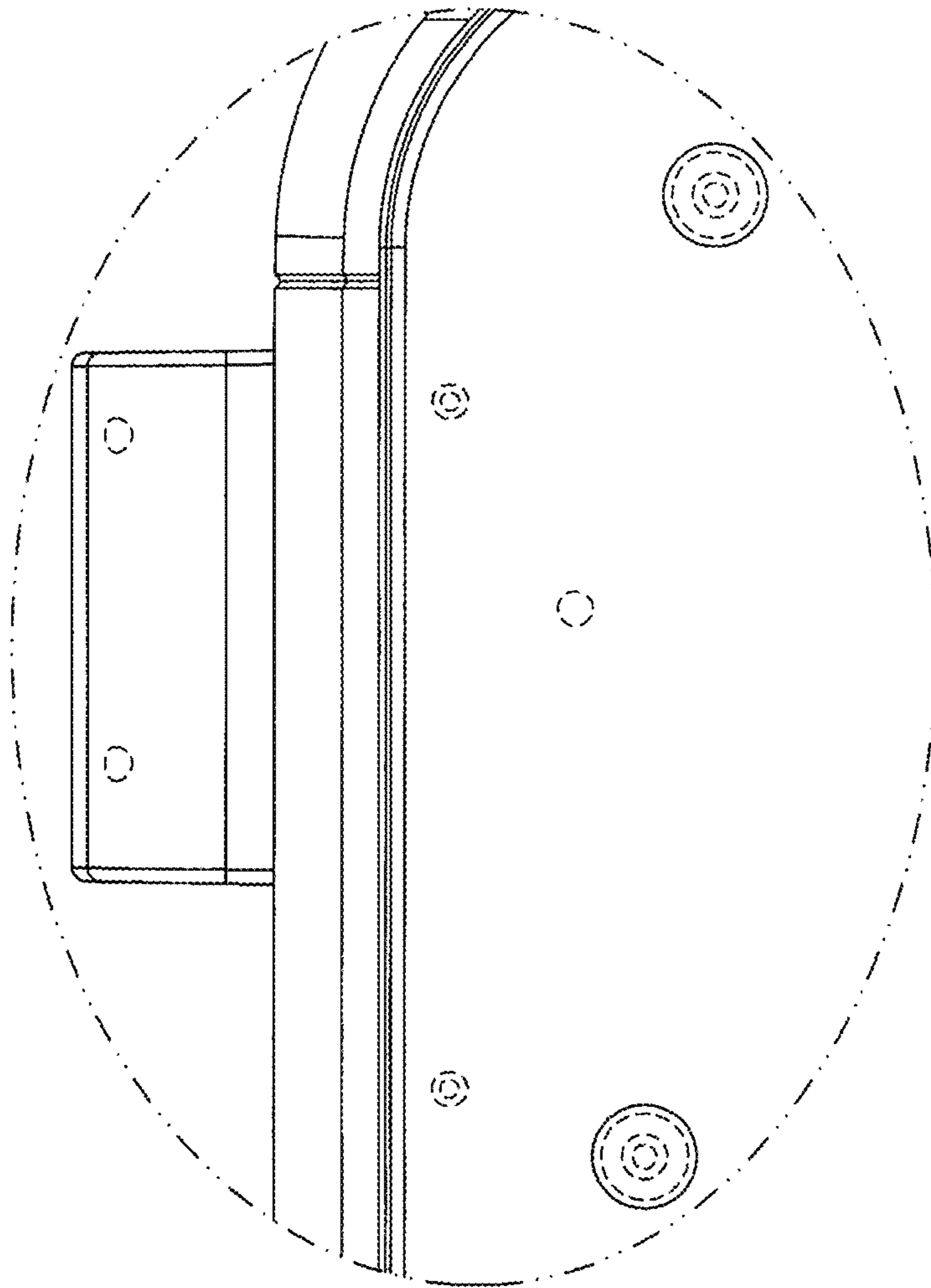


FIG.3

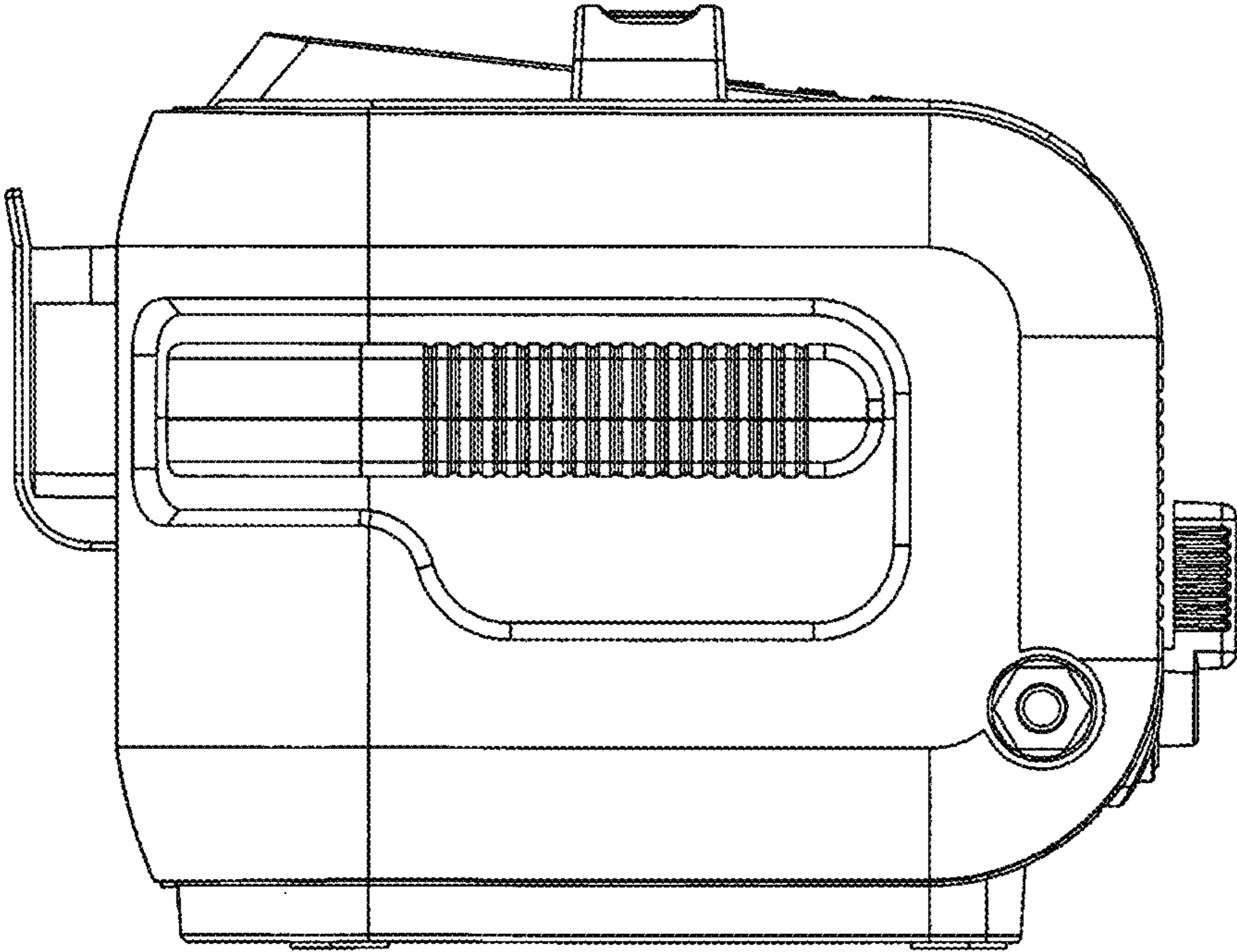


FIG.4

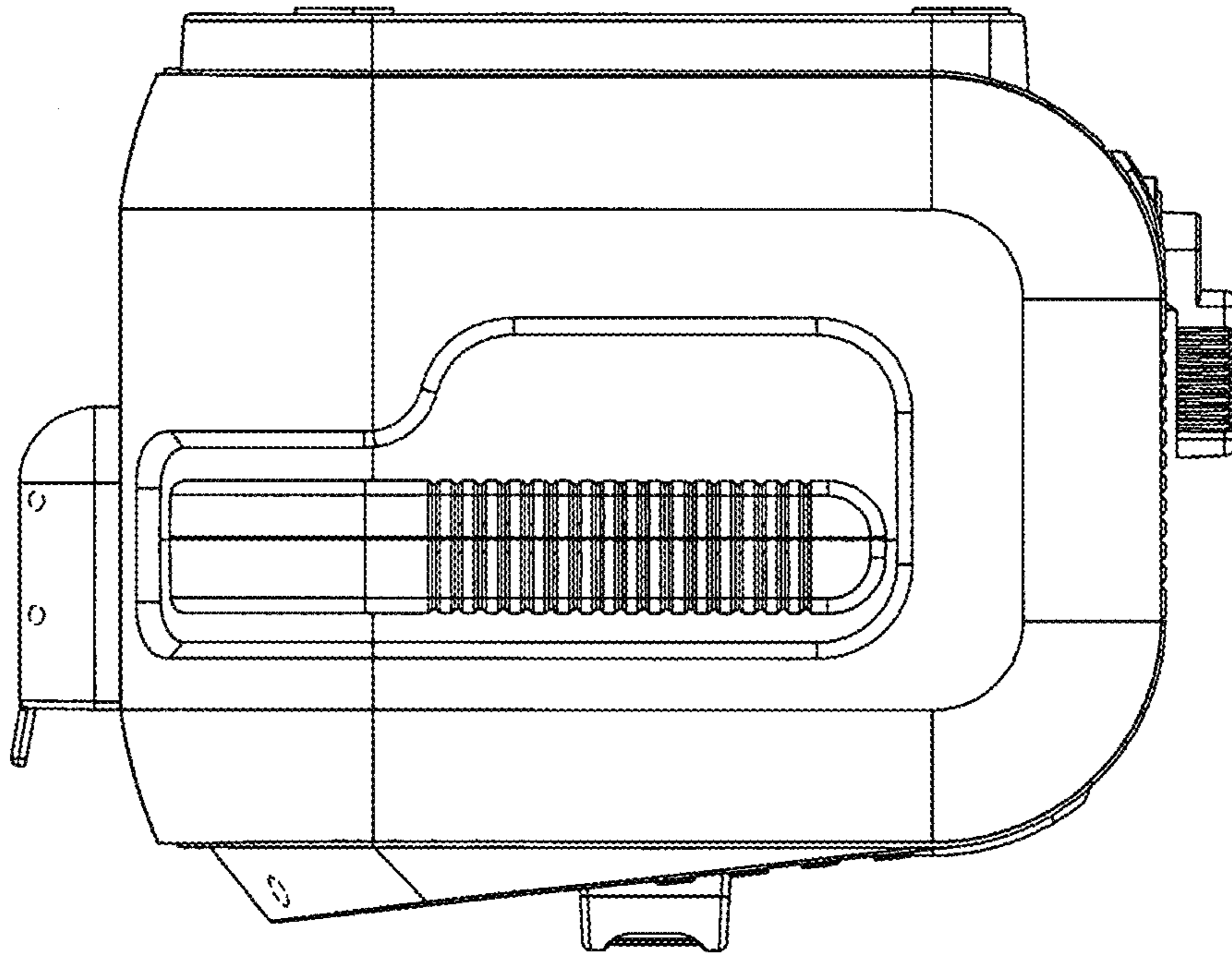


FIG.5

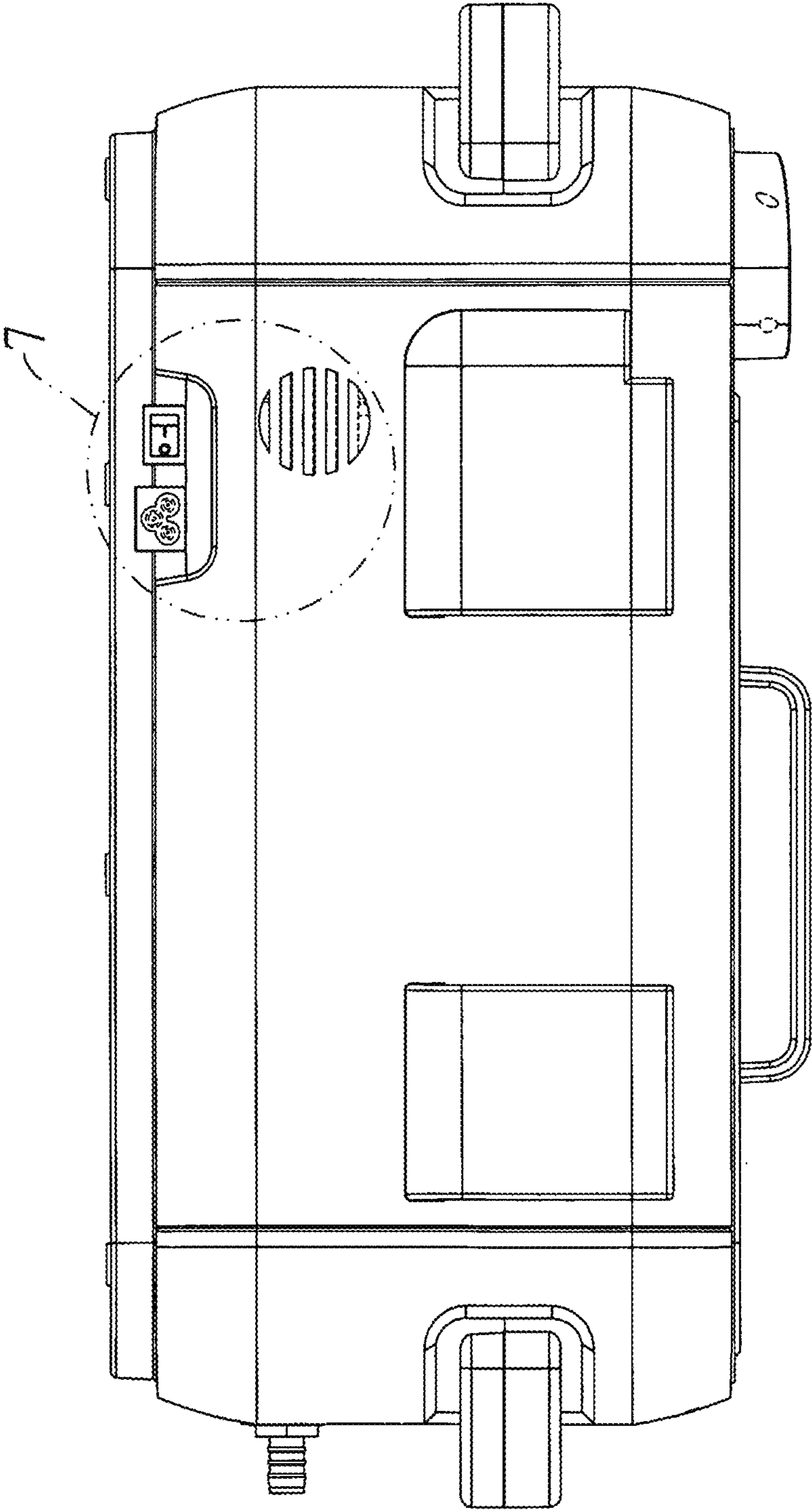


FIG.6



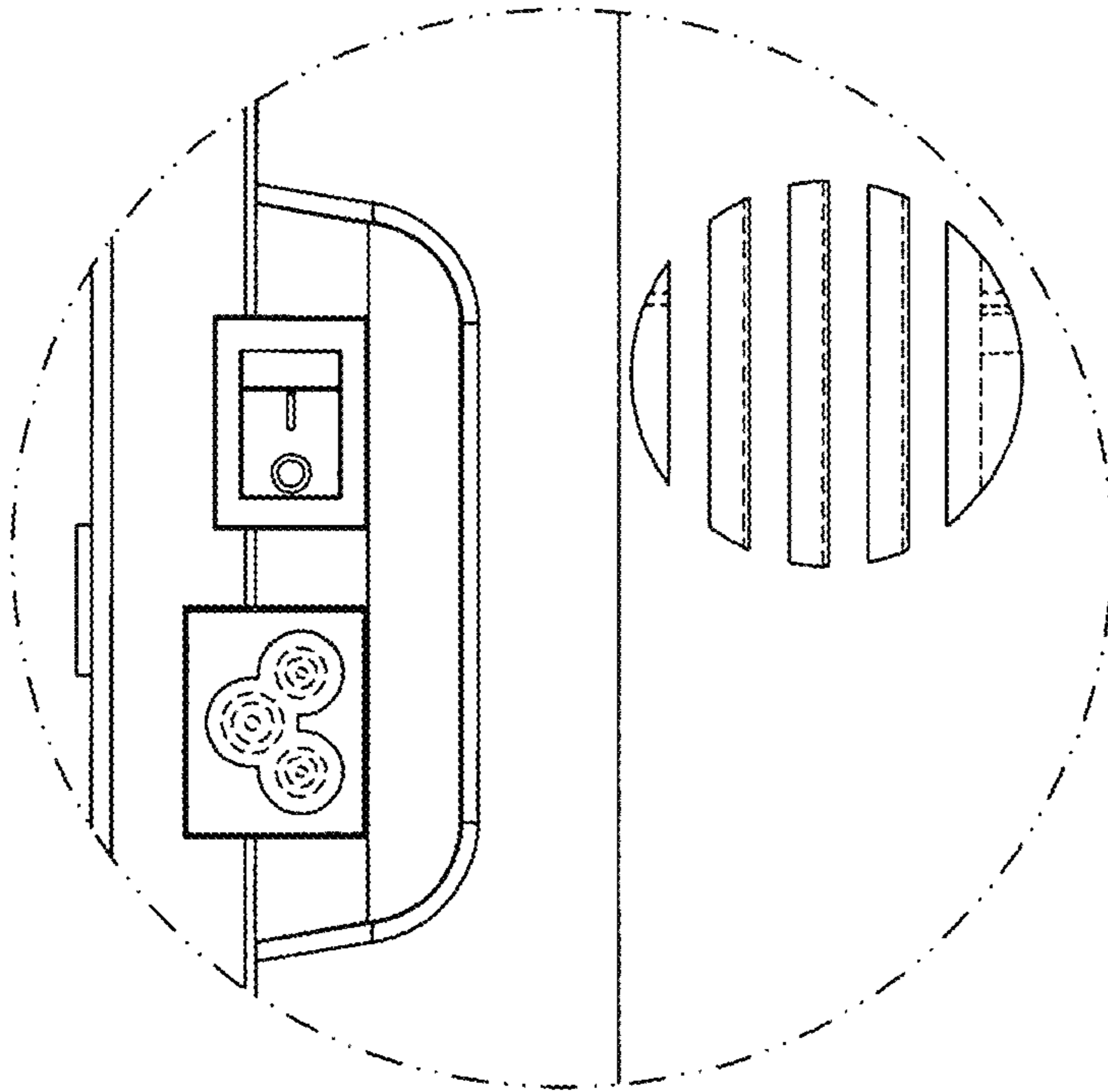


FIG. 7

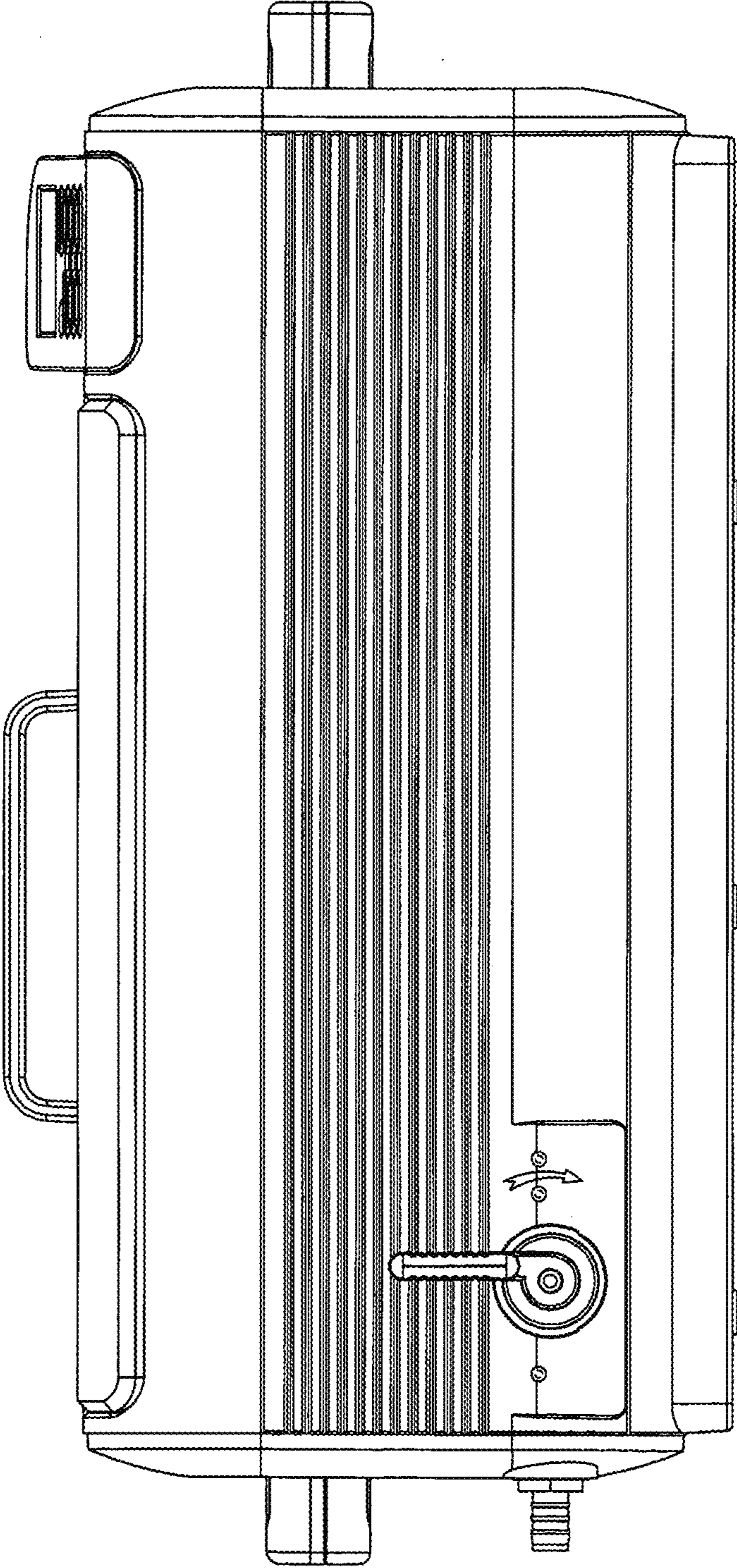


FIG.8

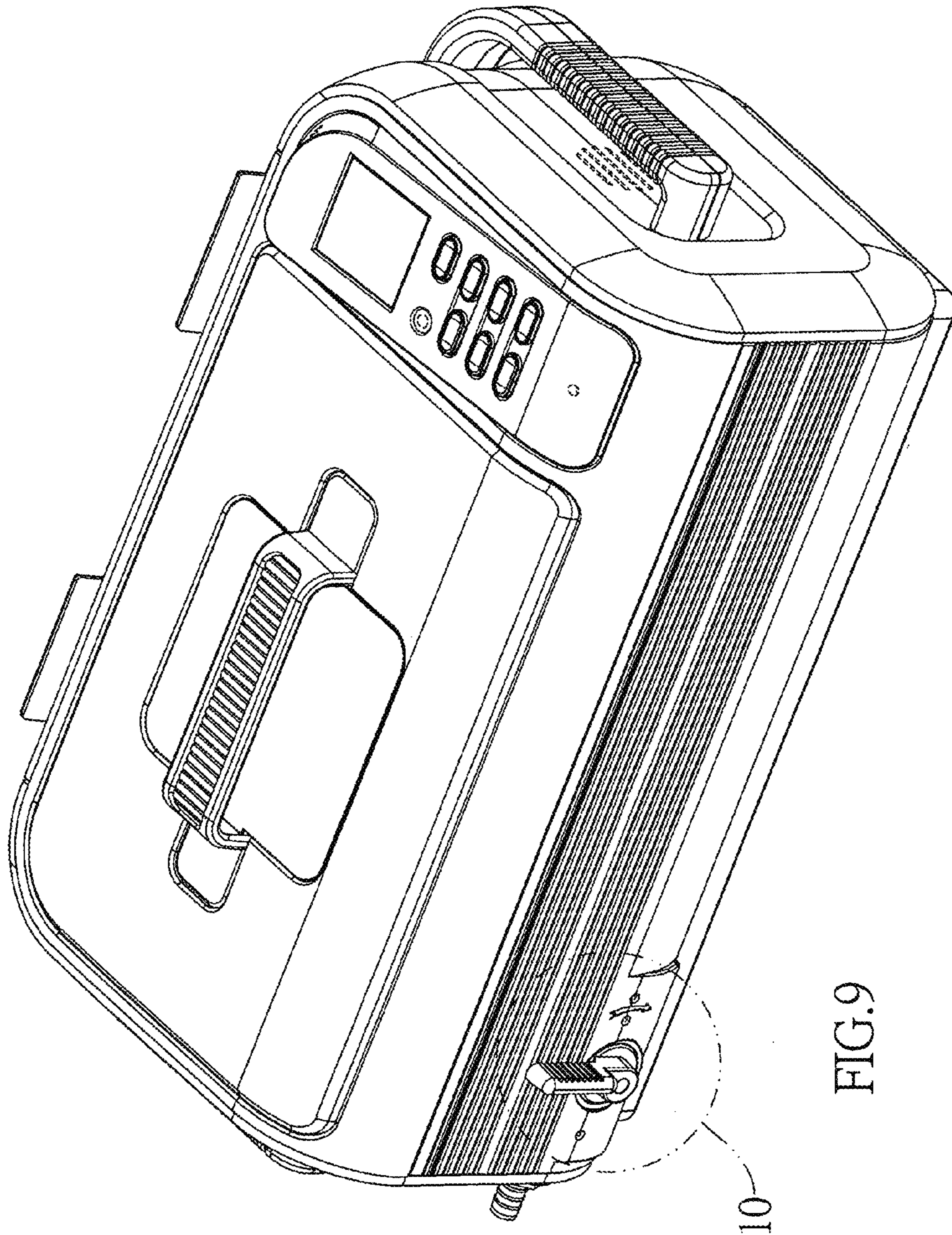


FIG. 9



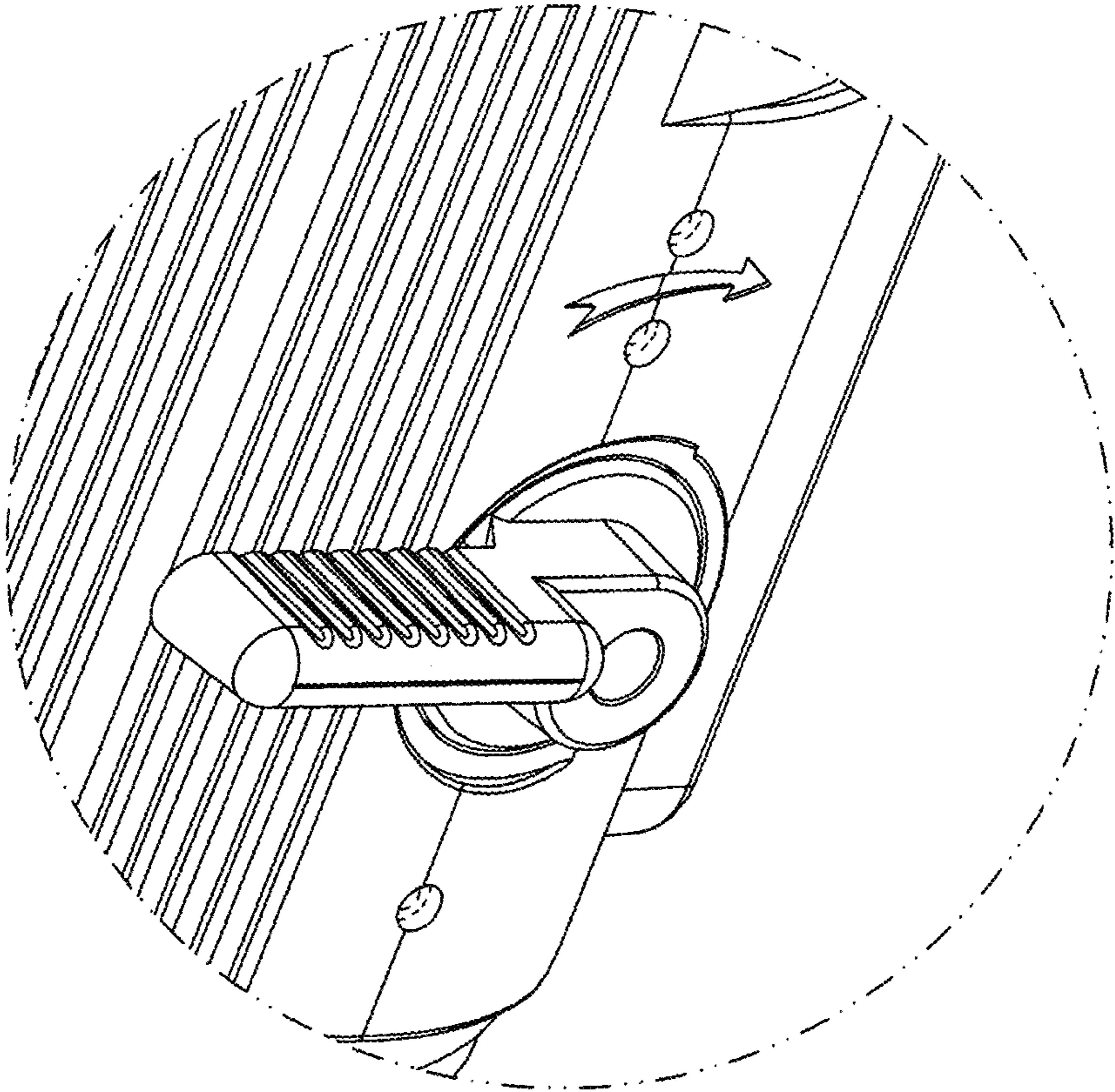


FIG.10



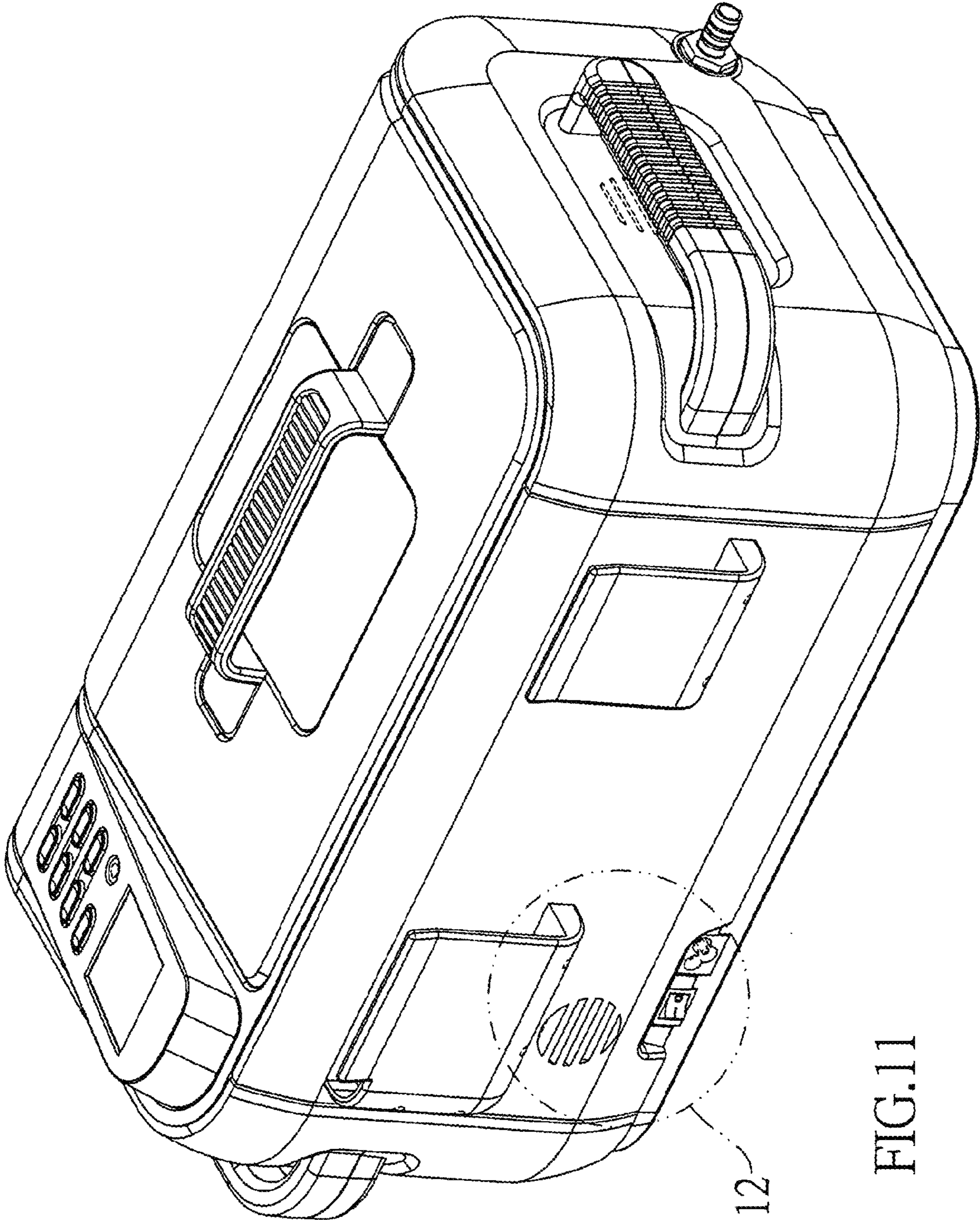


FIG.11

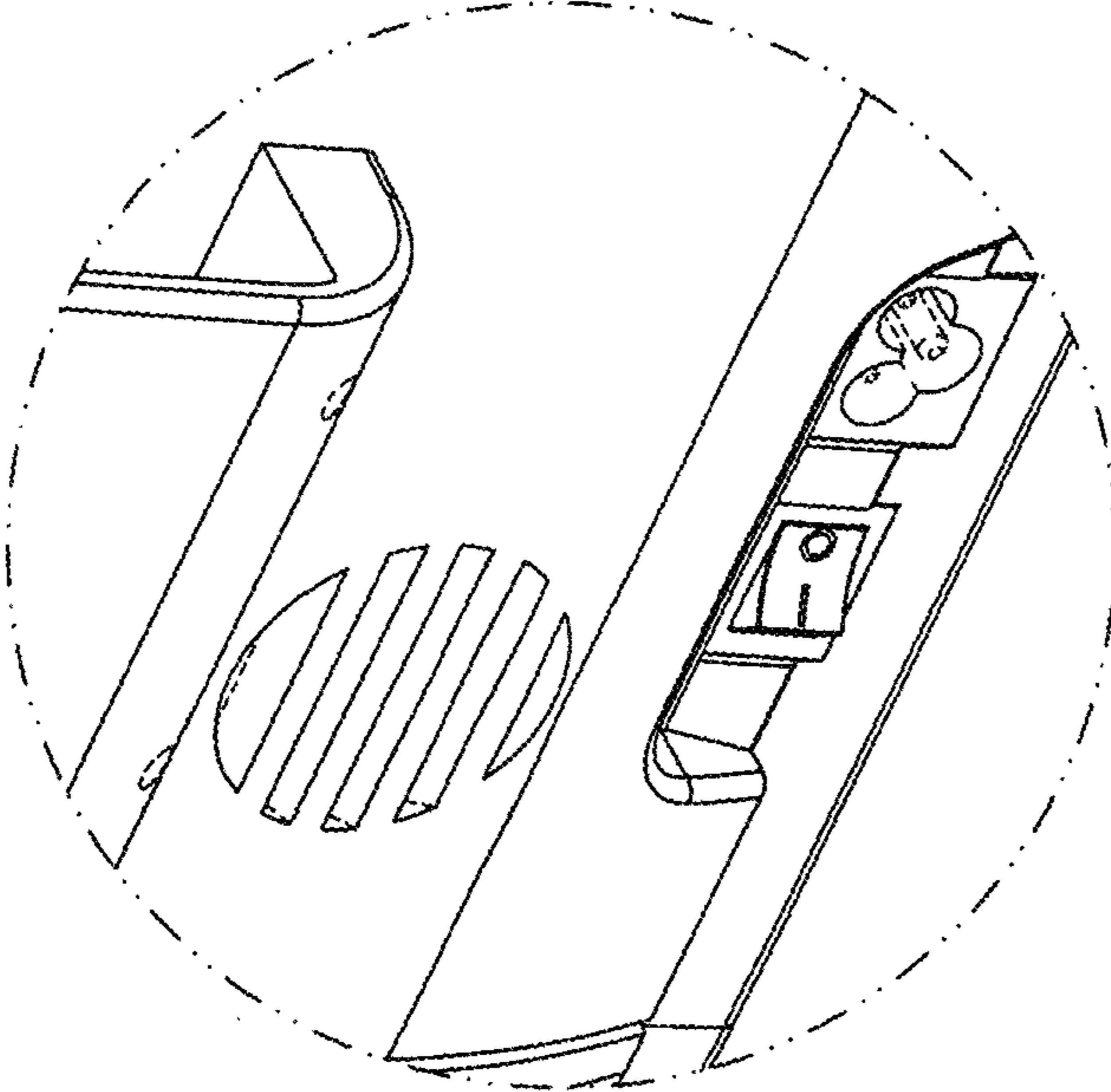


FIG.12