



US00D932119S

(12) **United States Design Patent** (10) **Patent No.:** **US D932,119 S**  
**Chang** (45) **Date of Patent:** **\*\* Sep. 28, 2021**

(54) **CLEANER**  
(71) Applicants: **Excelsior Medical Co., Ltd.**, New Taipei (TW); **Hung Hsing Electric Co., Ltd.**, Tainan (TW)

D414,304 S \* 9/1999 Schumaier ..... D32/1  
D467,394 S \* 12/2002 Schumaier ..... D32/1  
D516,258 S \* 2/2006 Matsusaki ..... D32/1  
D519,688 S \* 4/2006 Garske ..... D32/1  
D593,262 S \* 5/2009 Gong ..... D24/217  
D631,620 S \* 1/2011 Choi ..... D32/1  
D633,260 S \* 2/2011 Choi ..... D32/1

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(Continued)

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

**OTHER PUBLICATIONS**

Ultrasonic Cleaner <https://www.walmart.com/ip/ANGGREK-Ultrasonic-Cleaner-10L-Digital-Cleaning-Machine-Ultrasonic-Cleaner-Bath-Tank-Timer-Heated-Machine/402392842> (Year: 2021).\*

(21) Appl. No.: **29/727,357**

(Continued)

(22) Filed: **Mar. 10, 2020**

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*Assistant Examiner* — Richard E Yenchesky

(30) **Foreign Application Priority Data**

(74) *Attorney, Agent, or Firm* — Wang Law Firm, Inc.

Sep. 10, 2019 (TW) ..... 108305491

(57) **CLAIM**

(51) **LOC (13) Cl.** ..... **15-05**

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

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

**DESCRIPTION**

(58) **Field of Classification Search**  
USPC ..... D15/122; D23/207; D24/217; D32/1  
CPC ..... A47L 11/284; B08B 3/02  
See application file for complete search history.

FIG. 1 is a 1<sup>st</sup> perspective view of cleaner, showing my new design;  
FIG. 2 is a 2<sup>nd</sup> 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 elevational view thereof;  
FIG. 6 is a right elevational view thereof;  
FIG. 7 is a top elevational view thereof;  
FIG. 8 is a bottom elevational view thereof;  
FIG. 9 is a reference view during usage;  
FIG. 10 is a reference view during usage; and,  
FIG. 11 is a sectional view of FIG. 5.

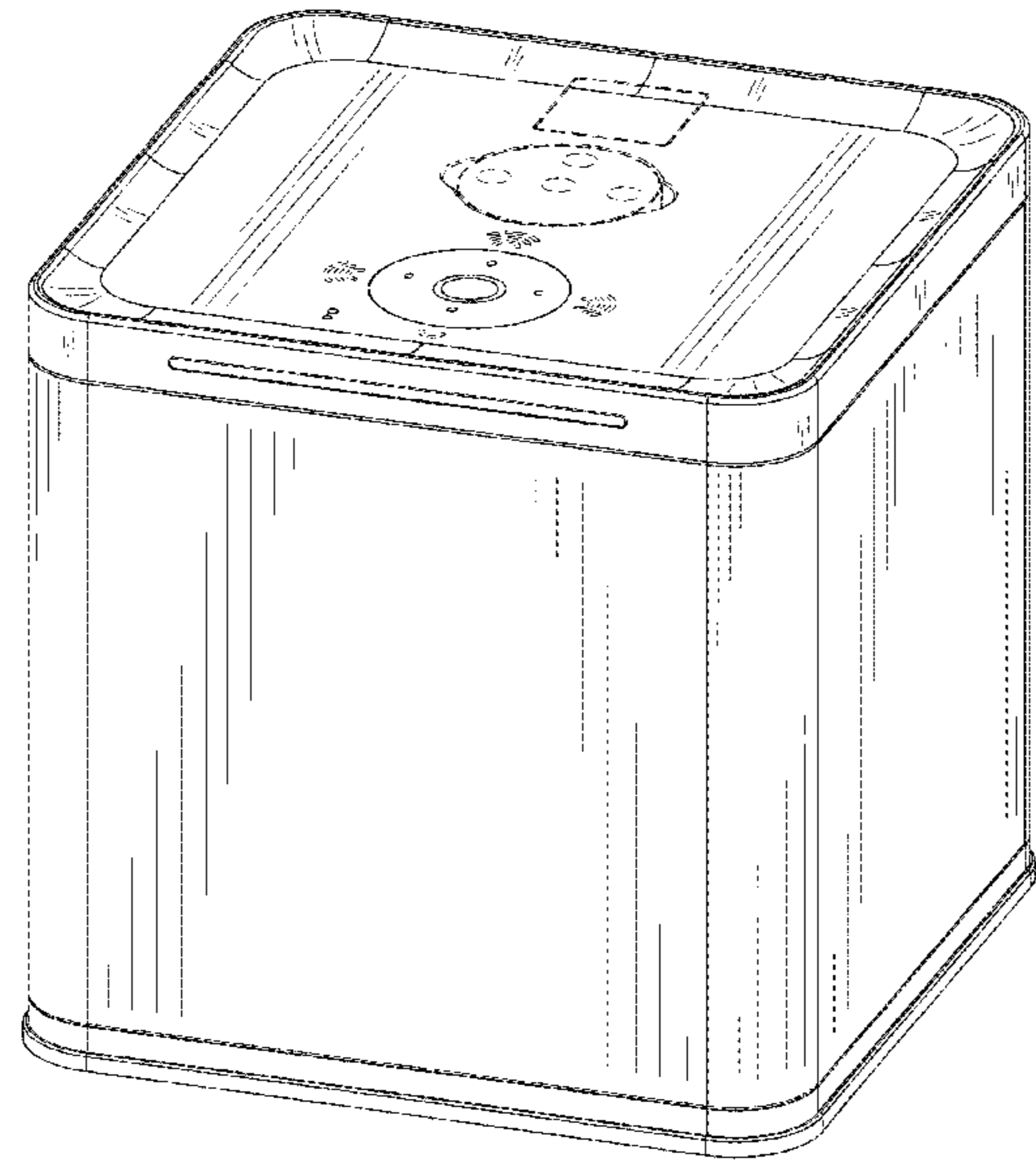
(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D204,306 S \* 4/1966 Hamm ..... D32/1  
D229,220 S \* 11/1973 Pulos ..... D24/217  
D261,423 S \* 10/1981 Geissler ..... D24/217  
D269,370 S \* 6/1983 Groff ..... D23/207  
D303,854 S \* 10/1989 Linton ..... D32/1  
D307,653 S \* 5/1990 Weirsmann ..... D32/1  
D307,654 S \* 5/1990 Weirsmann ..... D32/1  
4,995,409 A \* 2/1991 Watts ..... B08B 3/02  
134/111  
D406,416 S \* 3/1999 Chan ..... D32/1

The broken line showing of a display screen forms no part of the claimed design.

**1 Claim, 11 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

D633,663	S	*	3/2011	Choi	.....	D32/1
D682,490	S	*	5/2013	Goetzke	.....	D32/1
D685,540	S	*	7/2013	Yao	.....	D32/1
D704,350	S	*	5/2014	Lau	.....	D24/217
D747,567	S	*	1/2016	Marks	.....	D32/1
D748,872	S	*	2/2016	Yao	.....	D32/1
D763,521	S	*	8/2016	Yao	.....	D32/1
D778,004	S	*	1/2017	Yao	.....	D32/1
D778,005	S	*	1/2017	Yao	.....	D32/1
D781,003	S	*	3/2017	Yao	.....	D32/1
D781,509	S	*	3/2017	Yao	.....	D32/1
D796,749	S	*	9/2017	Kessler	.....	D32/1
D808,091	S	*	1/2018	Pan	.....	D32/1
D828,654	S	*	9/2018	Yao	.....	D32/1
D832,533	S	*	10/2018	Yao	.....	D32/1
D873,434	S	*	1/2020	Xie	.....	D24/217
D881,407	S	*	4/2020	Li	.....	D24/217
D898,218	S	*	10/2020	Hickey	.....	D24/217
D900,172	S	*	10/2020	Wu	.....	D15/122
D900,416	S	*	10/2020	Yao	.....	D32/1
D907,233	S	*	1/2021	Wu	.....	D24/217
2015/0128996	A1	*	5/2015	Dooley	.....	A47L 11/284 134/6

OTHER PUBLICATIONS

Medesy <https://www.medesy.it/en/product/ultrasonic-cleaner-12-litre/> (Year: 2021).\*

\* cited by examiner

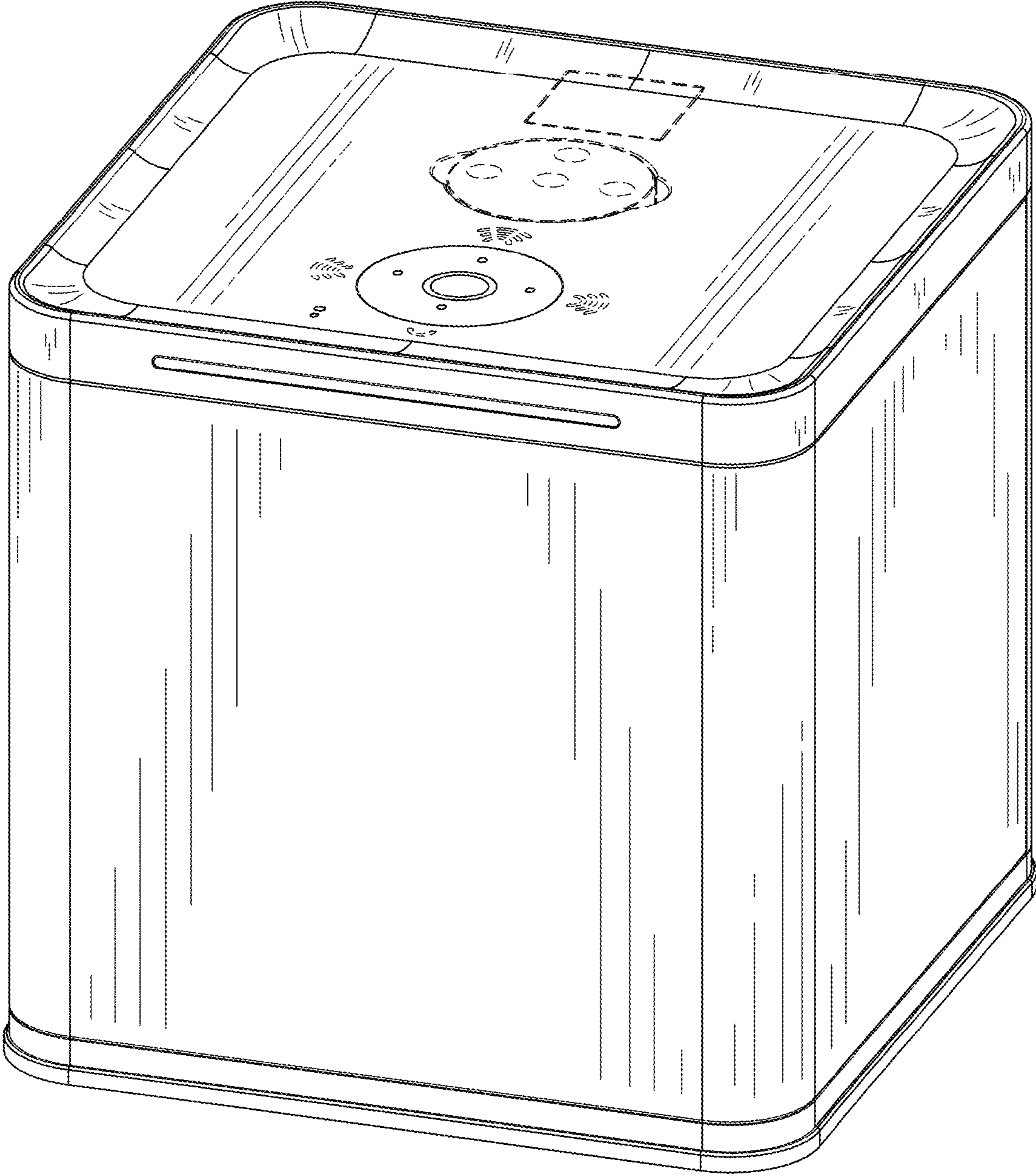


FIG. 1



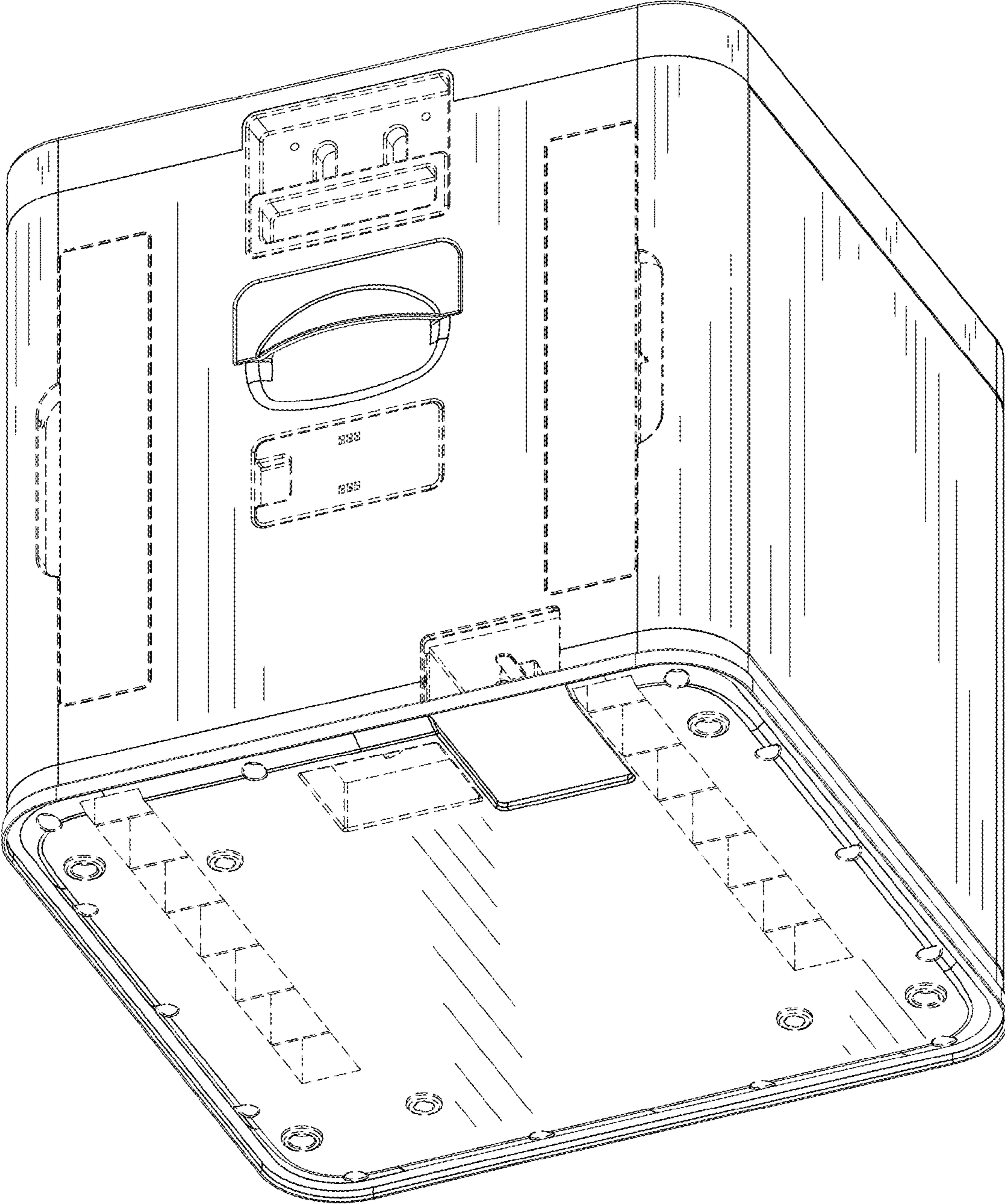


FIG. 2

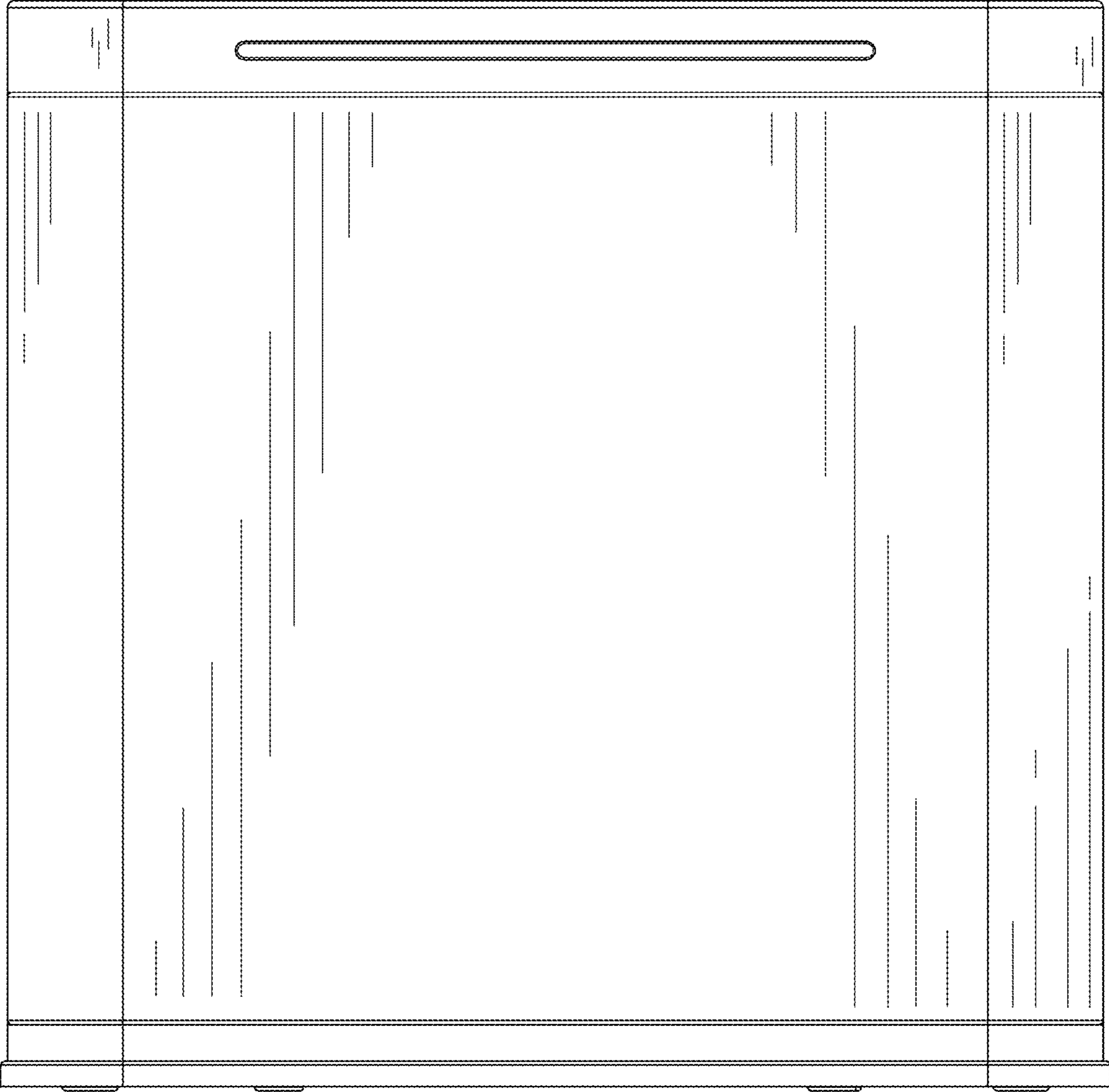


FIG. 3

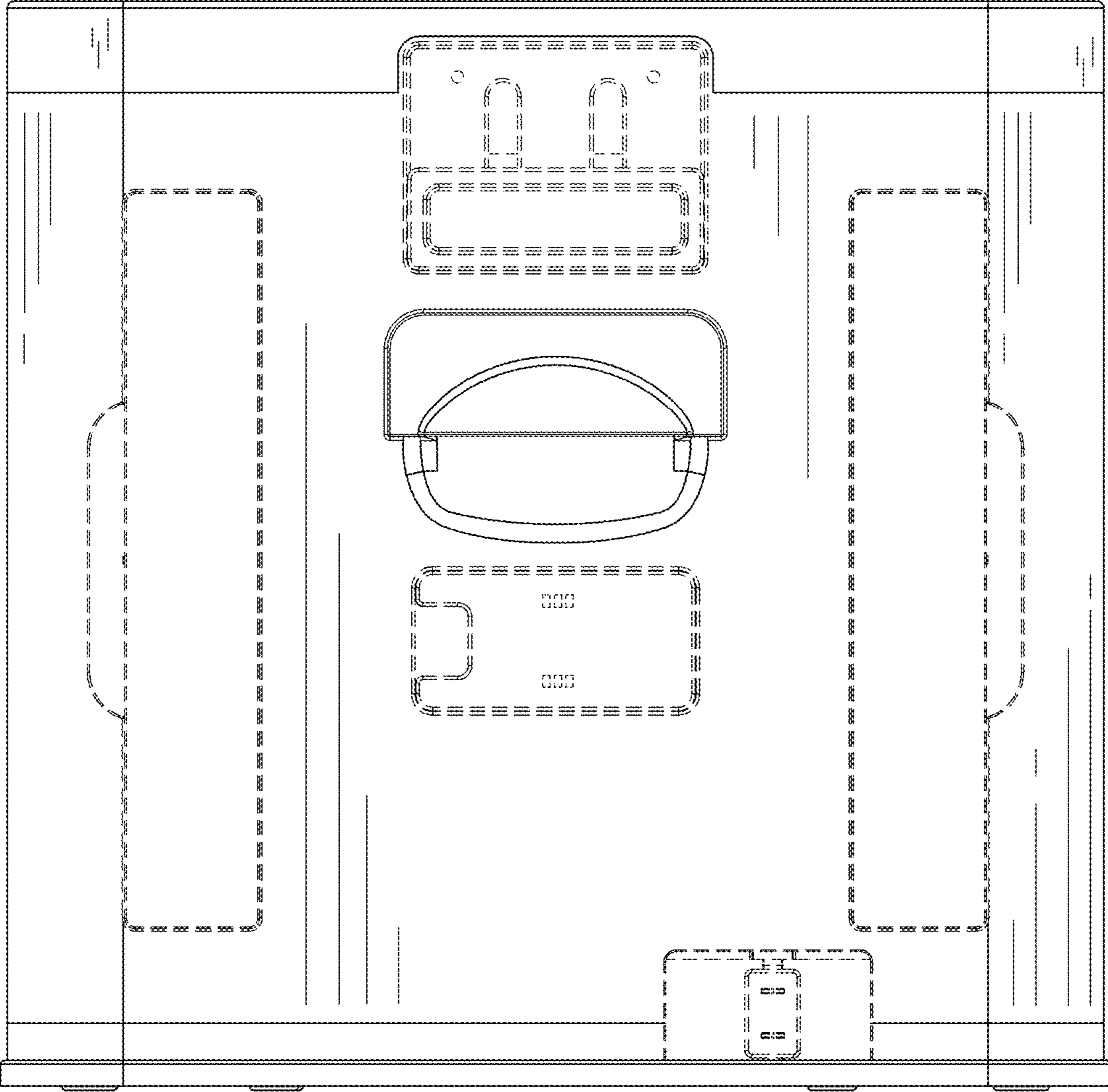


FIG. 4

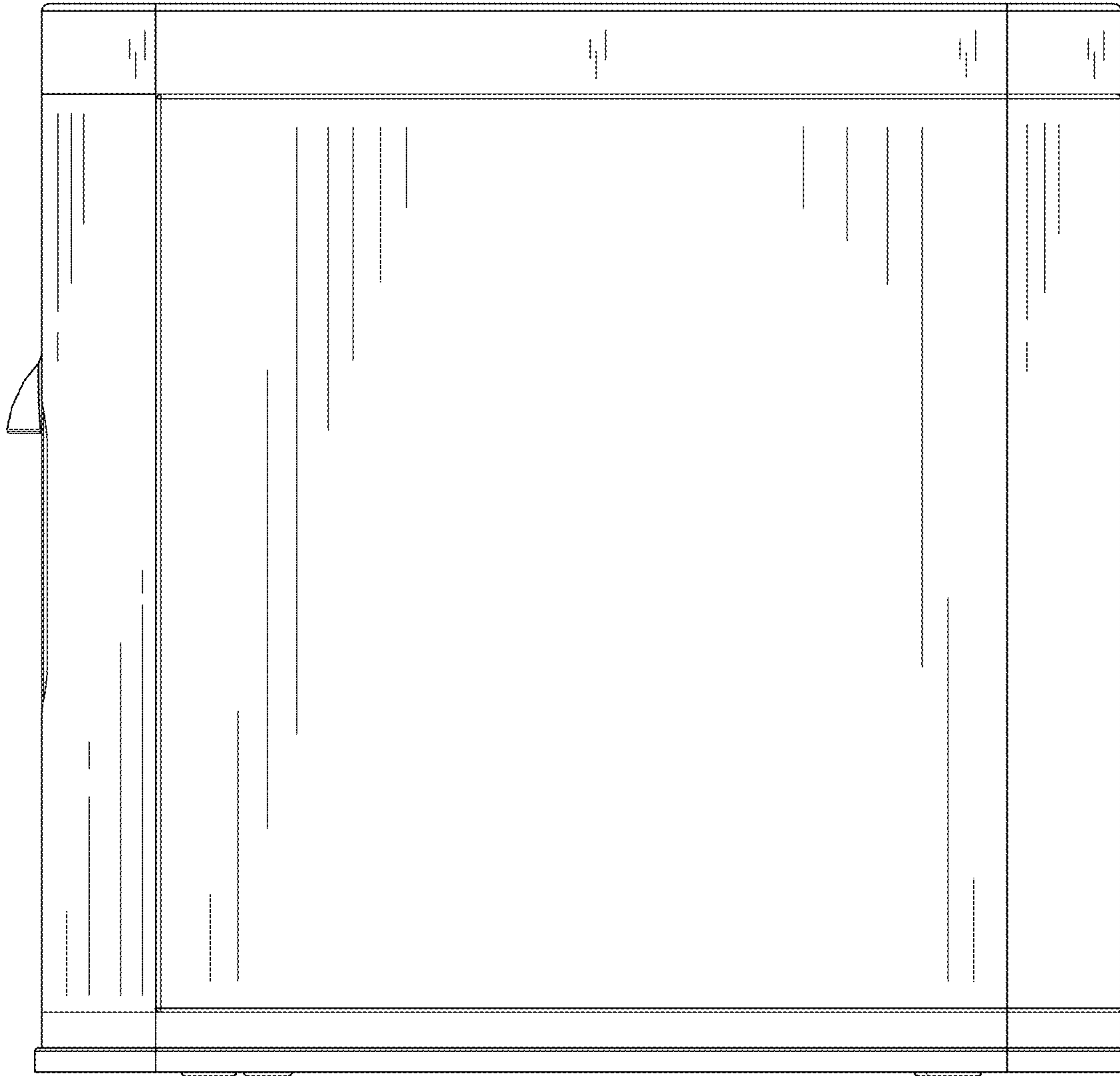


FIG. 5

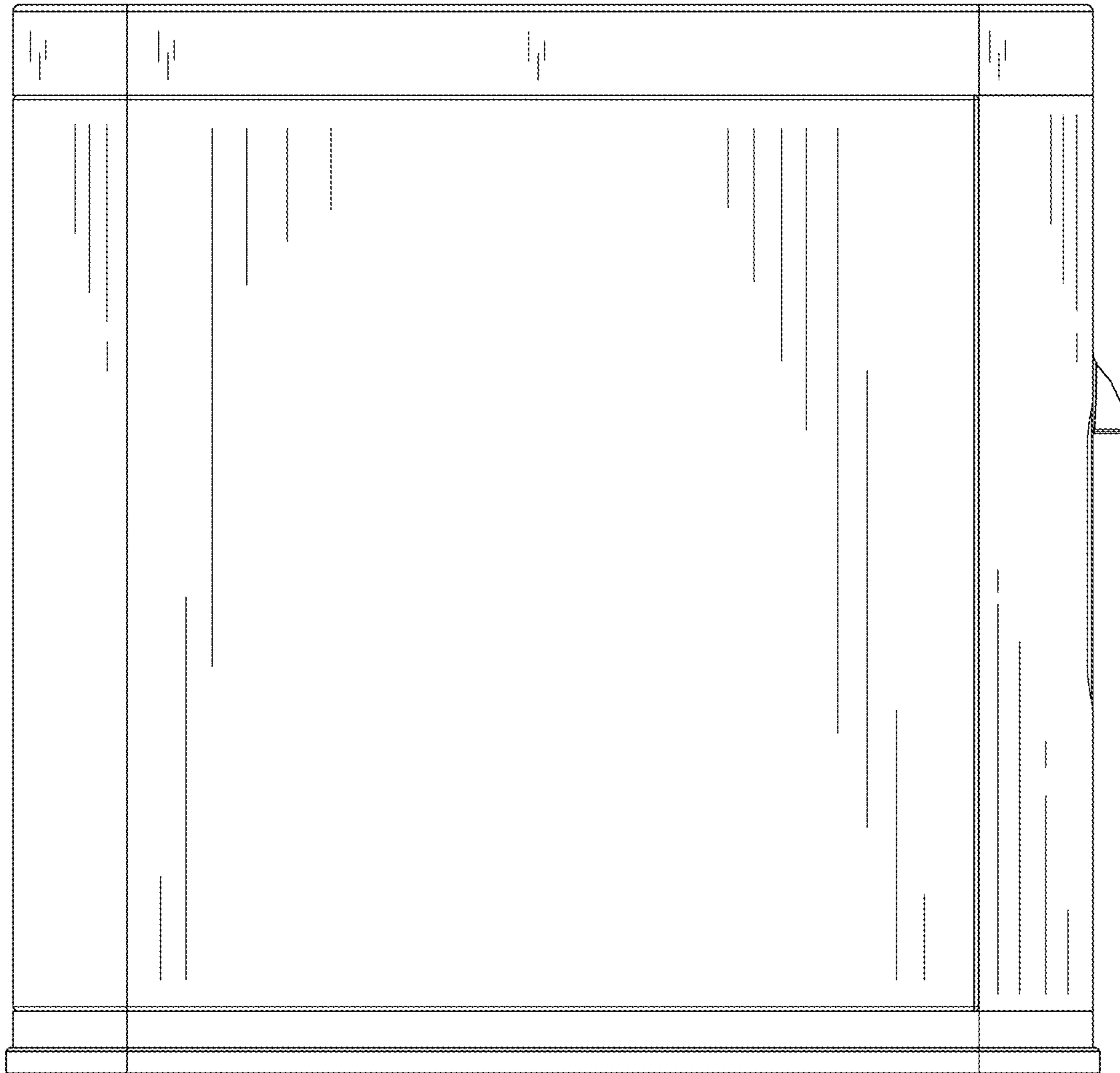


FIG. 6



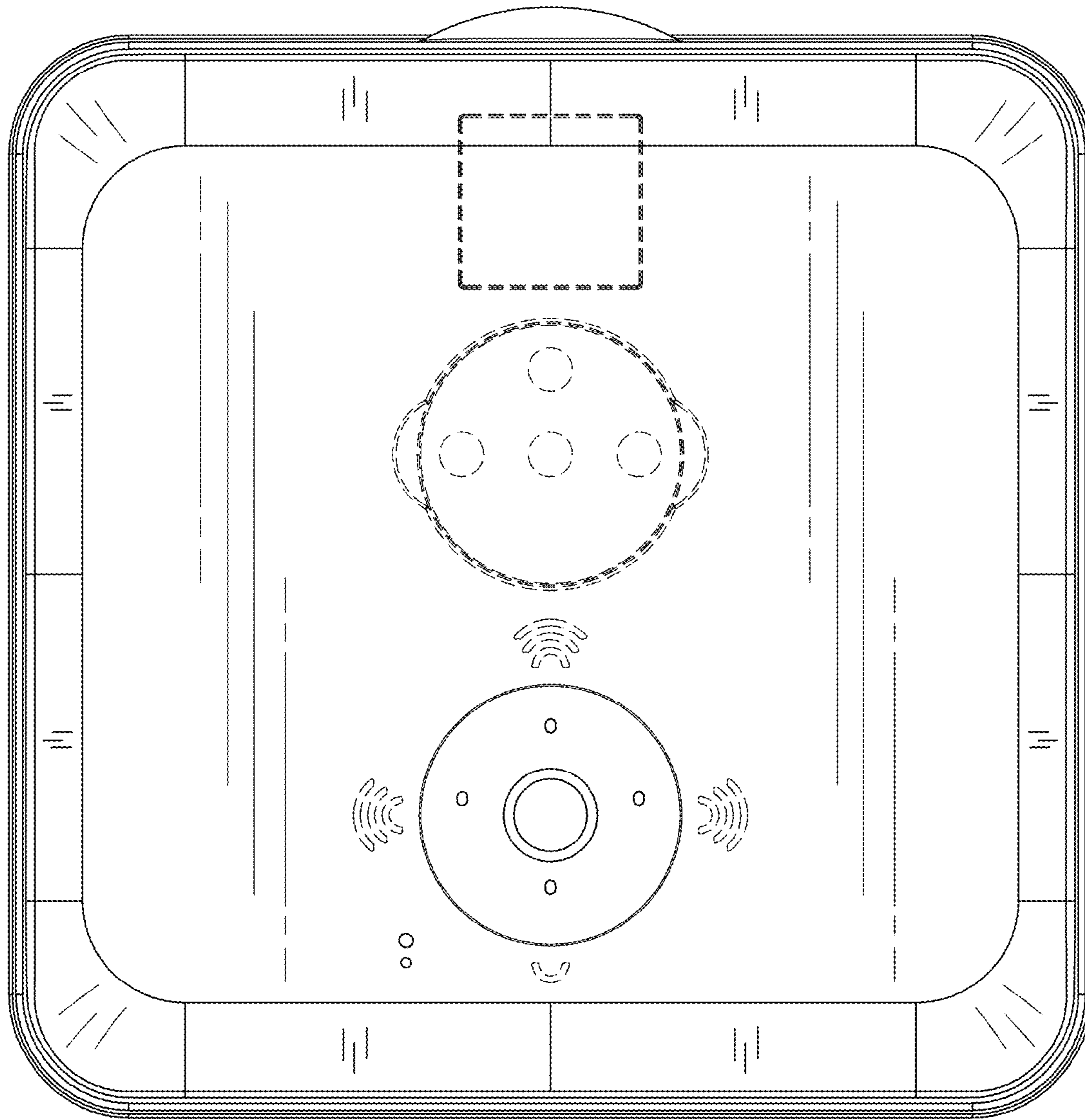


FIG. 7

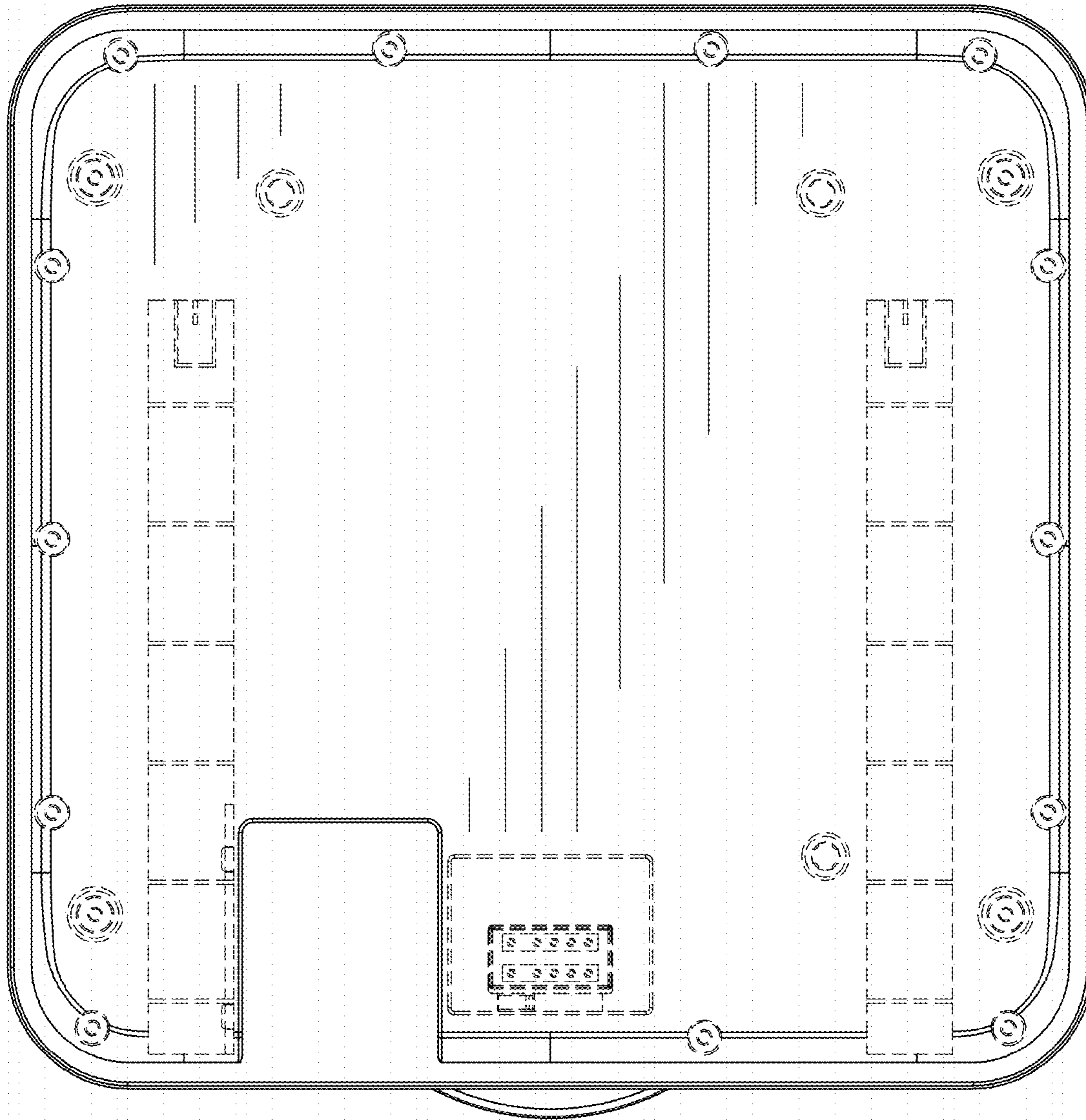


FIG. 8

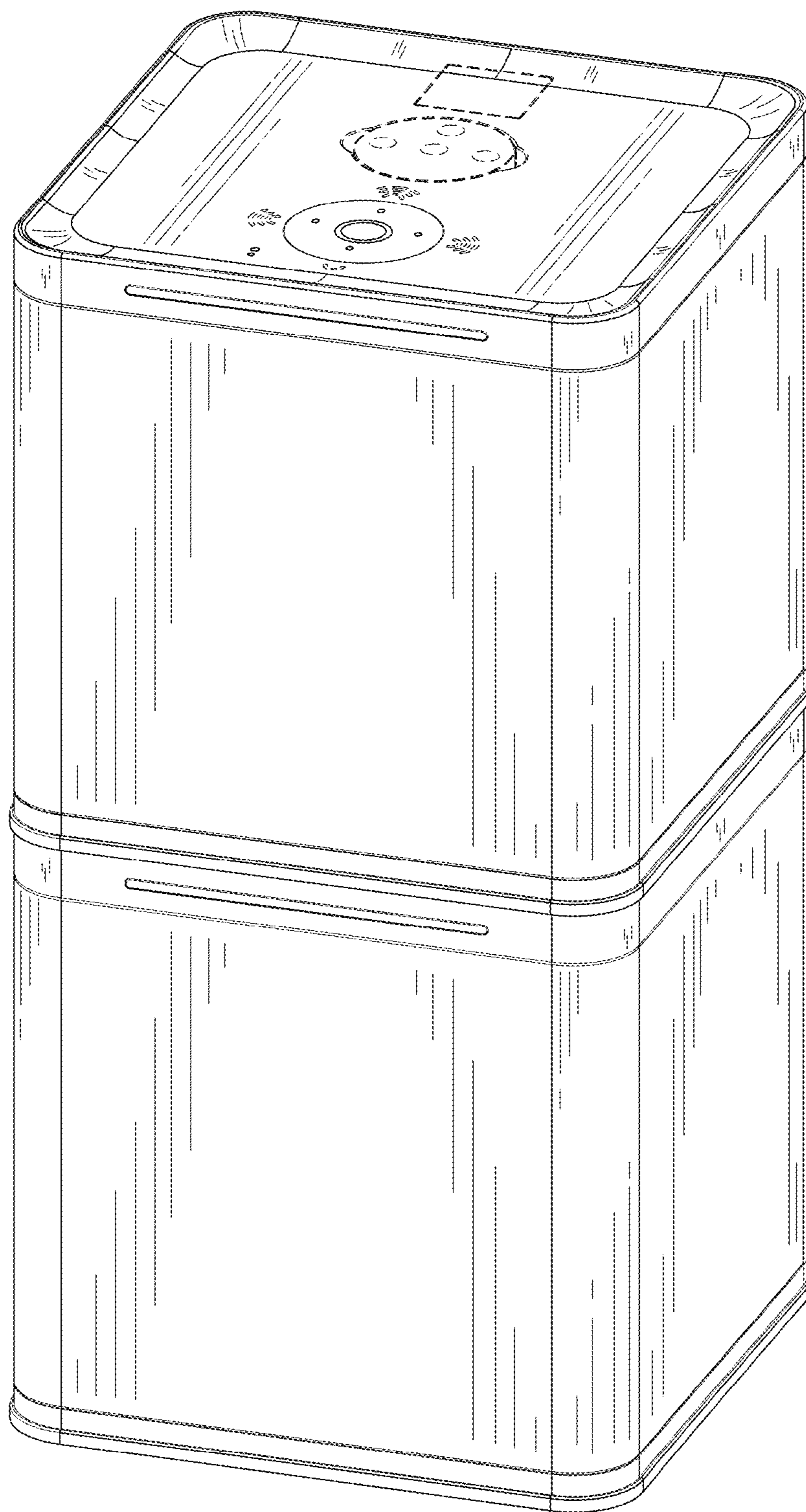


FIG. 9



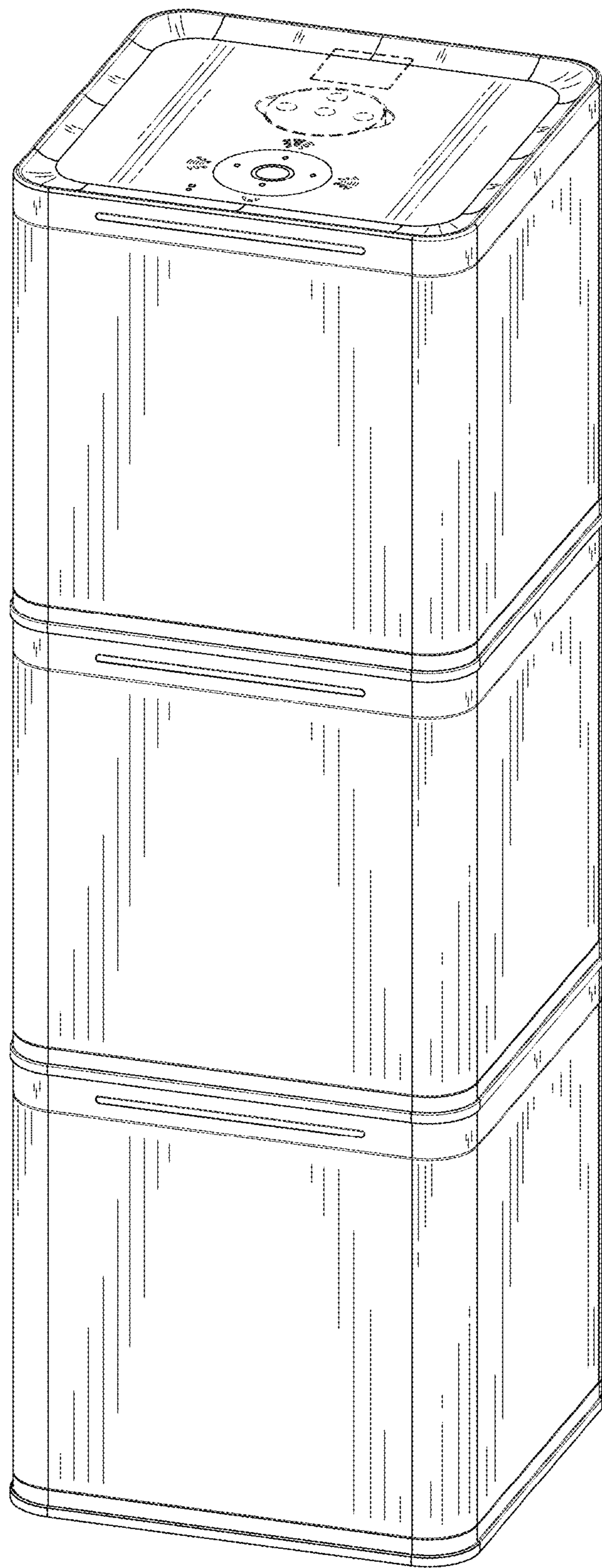


FIG. 10



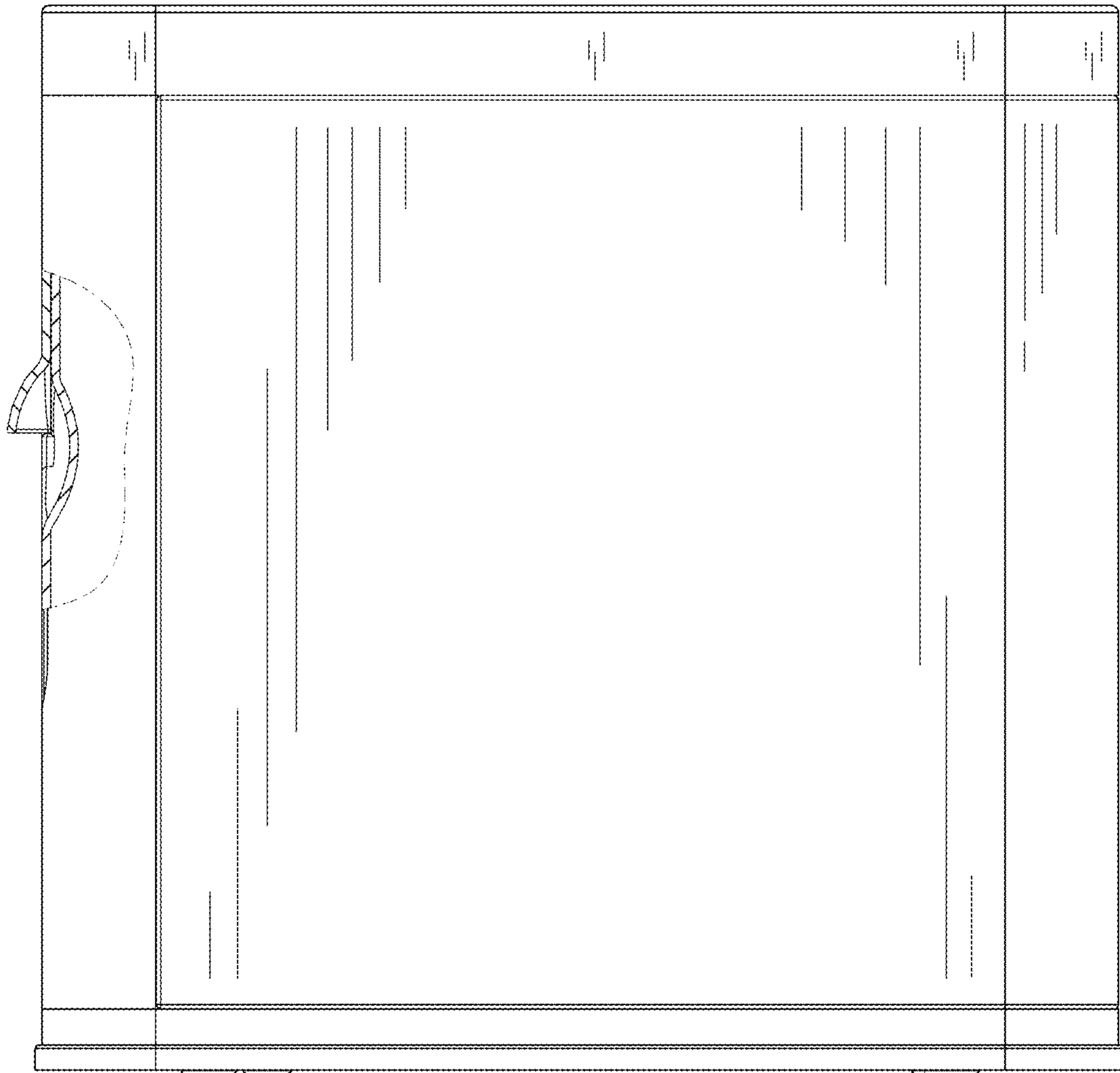


FIG. 11