



US00D879051S

(12) **United States Design Patent** (10) **Patent No.:** **US D879,051 S**
Colbaugh et al. (45) **Date of Patent:** **** Mar. 24, 2020**

(54) **THREE PHASE BUS MOUNTED SURGE PROTECTION DEVICE**

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

(21) Appl. No.: **29/710,108**

(22) Filed: **Oct. 21, 2019**

Related U.S. Application Data

(63) Continuation of application No. 29/676,802, filed on
Jan. 15, 2019, now Pat. No. Des. 864,126, which is a
(Continued)

(51) **LOC (12) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/160; D13/158**

(58) **Field of Classification Search**
USPC D13/110, 112, 122, 123, 156, 158-162.1,
D13/173, 177, 178, 184, 199
CPC H01H 9/00; H01H 71/00; H01H 71/02;
H01H 71/12; H01H 1/06; H01H 1/20;
H01H 3/32; H01H 9/02; H01H 9/28;
H01H 21/04; H01H 21/22; H01H 33/02;
H01H 33/08; H01H 33/10; H01H 33/18;
H01H 36/00; H01H 47/00; H01H 50/14;
H01H 50/16; H01H 1/64; H01H 3/26;
H01H 33/53; H01H 71/04; H01H 71/08;
H01H 71/10; H01H 71/24; H05K 7/00;
H05K

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,862,125 A 8/1989 Maier
5,483,213 A 1/1996 Mueller

(Continued)

OTHER PUBLICATIONS

Eaton Surge Protection (SPD) and Power Conditioning Products,
dated Sep. 2016, [online], [site visited May 22, 2018]. Available
from Internet, <URL:http://www.eaton.com/ecm/groups/public/
@pub/@electrical/documents/content/tb048000003e.pdf>(Year 2016).

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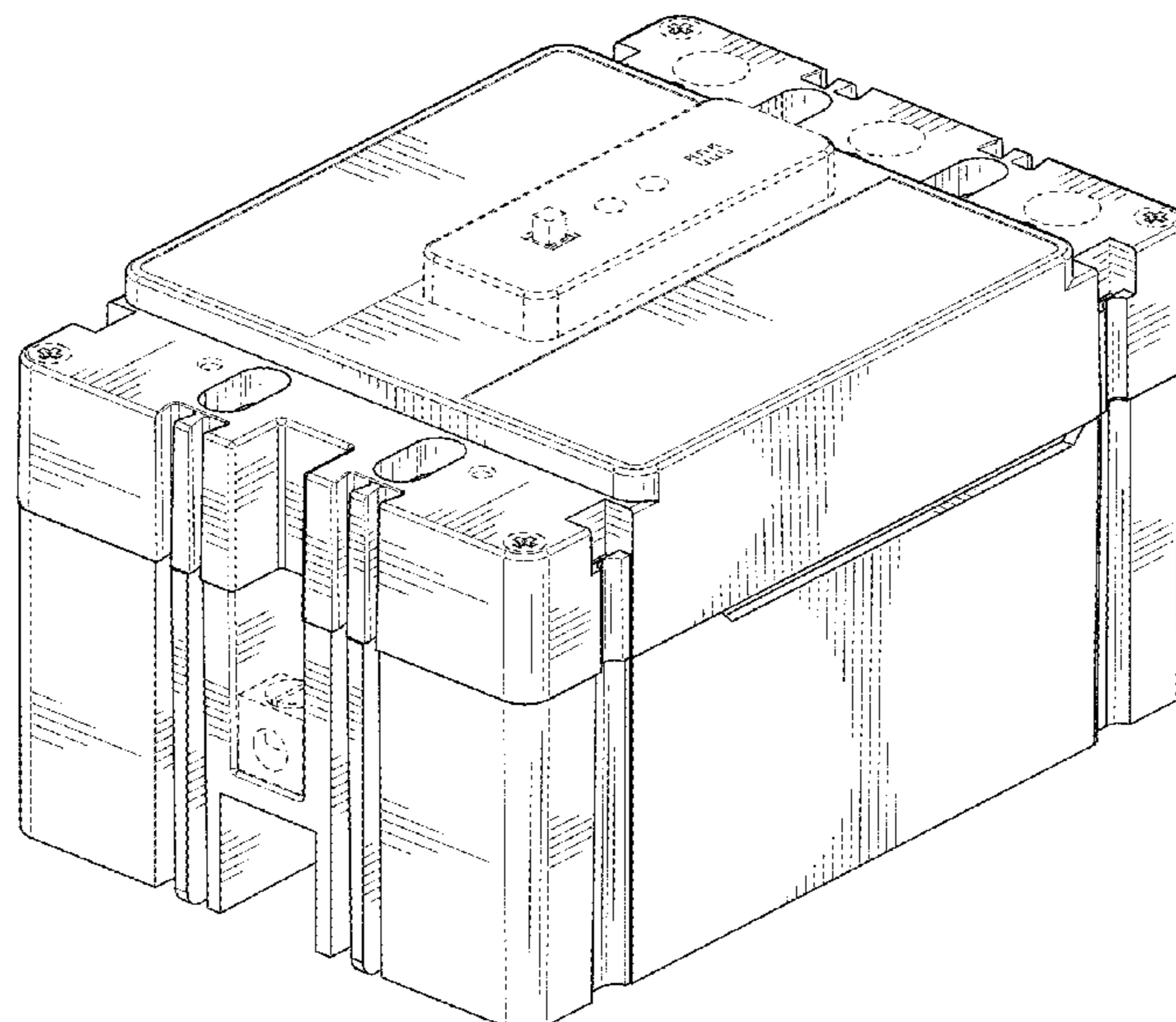
(57) **CLAIM**

The ornamental design for a three phase bus mounted surge
protection device, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of the three phase bus
mounted surge protection device showing our design;
FIG. 2 is an exploded view thereof;
FIG. 3 is first side view of the surge protection device;
FIG. 4 is an opposing side view of FIG. 3;
FIG. 5 is a second side view thereof;
FIG. 6 is an opposing side view of FIG. 5;
FIG. 7 is a top view of the surge protection device;
FIG. 8 is a bottom view of the surge protection device; and,
FIG. 9 is an environmental view of the three phase bus
mounted surge protection device positioned in a circuit
breaker panel with similarly sized circuit breaker modules.
The broken lines in the drawings illustrate portions of the
article that form no part of the claimed design.

1 Claim, 9 Drawing Sheets



Related U.S. Application Data

continuation of application No. 29/617,453, filed on Sep. 14, 2017, now Pat. No. Des. 842,257.

(58) **Field of Classification Search**

CPC 7/14; H05K 7/18; H05K 7/20; H01R 4/26;
 H01R 4/48; H01R 25/00; H01R 9/24
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

8,587,240	B2	11/2013	Wolfe	
D798,244	S	9/2017	Lecoanet	
10,141,128	B1	11/2018	Zhou	
D842,257	S	3/2019	Colbaugh	
D864,126	S *	10/2019	Colbaugh D13/160
2006/0071750	A1	4/2006	Marks	
2012/0182664	A1	7/2012	Wan	
2013/0203302	A1	8/2013	Grunwald	
2013/0306454	A1	11/2013	Nickerson	
2015/0340513	A1	12/2015	Kim	
2015/0371790	A1	12/2015	Sippel	
2016/0260560	A1	9/2016	Mishra	
2018/0062285	A1	3/2018	Eberts	
2018/0082799	A1	3/2018	Zhang	
2018/0145486	A1 *	5/2018	Kroushl H02B 1/26
2018/0166241	A1	6/2018	Gottschalk	
2019/0081474	A1	3/2019	Colbaugh	
2019/0140429	A1 *	5/2019	Mascarenhas H02B 1/052
2019/0164711	A1	5/2019	Caffro	
2019/0164713	A1 *	5/2019	Devine H01H 71/123
2019/0198276	A1 *	6/2019	Abdala H01H 71/56

* cited by examiner

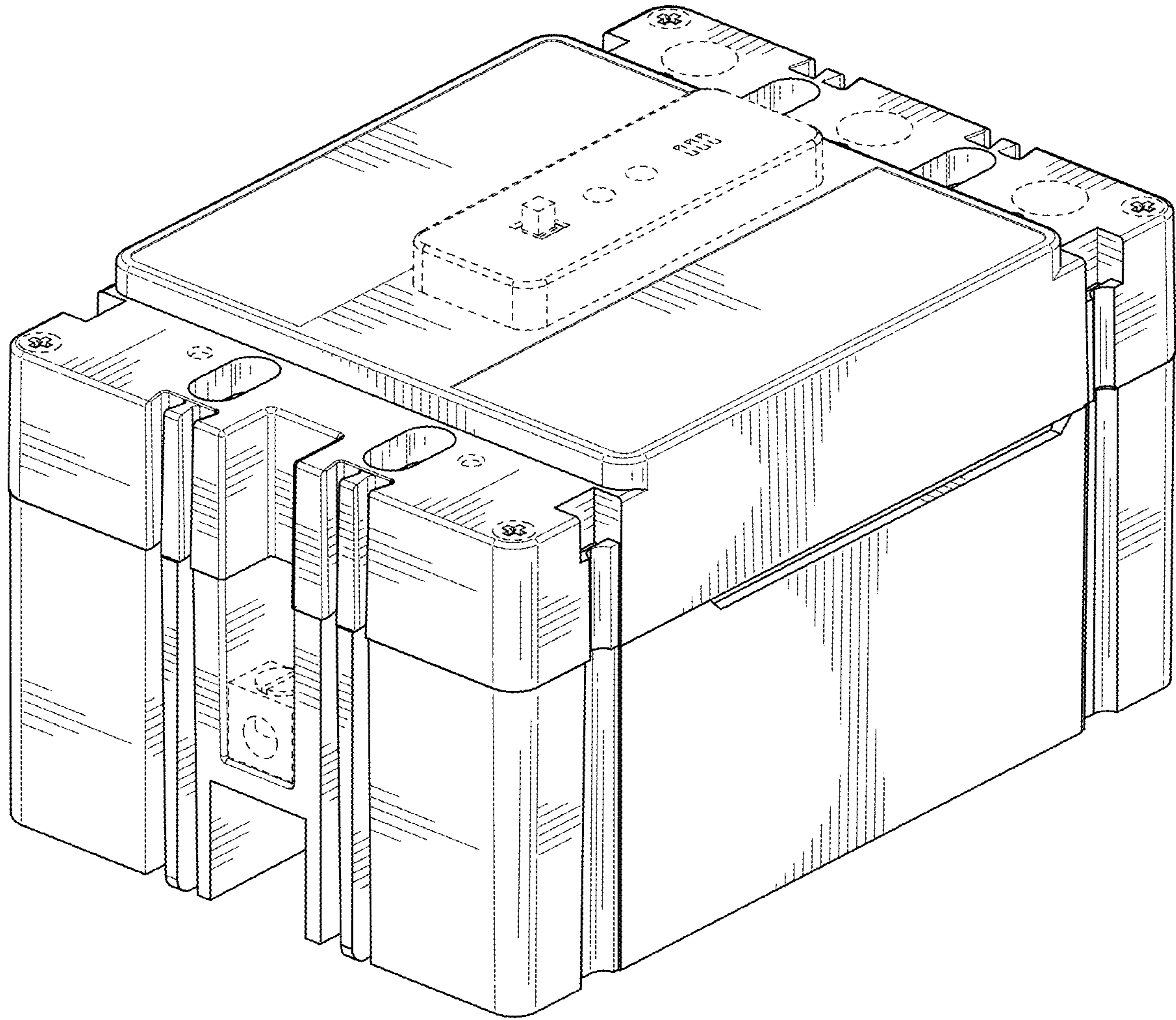


FIG. 1

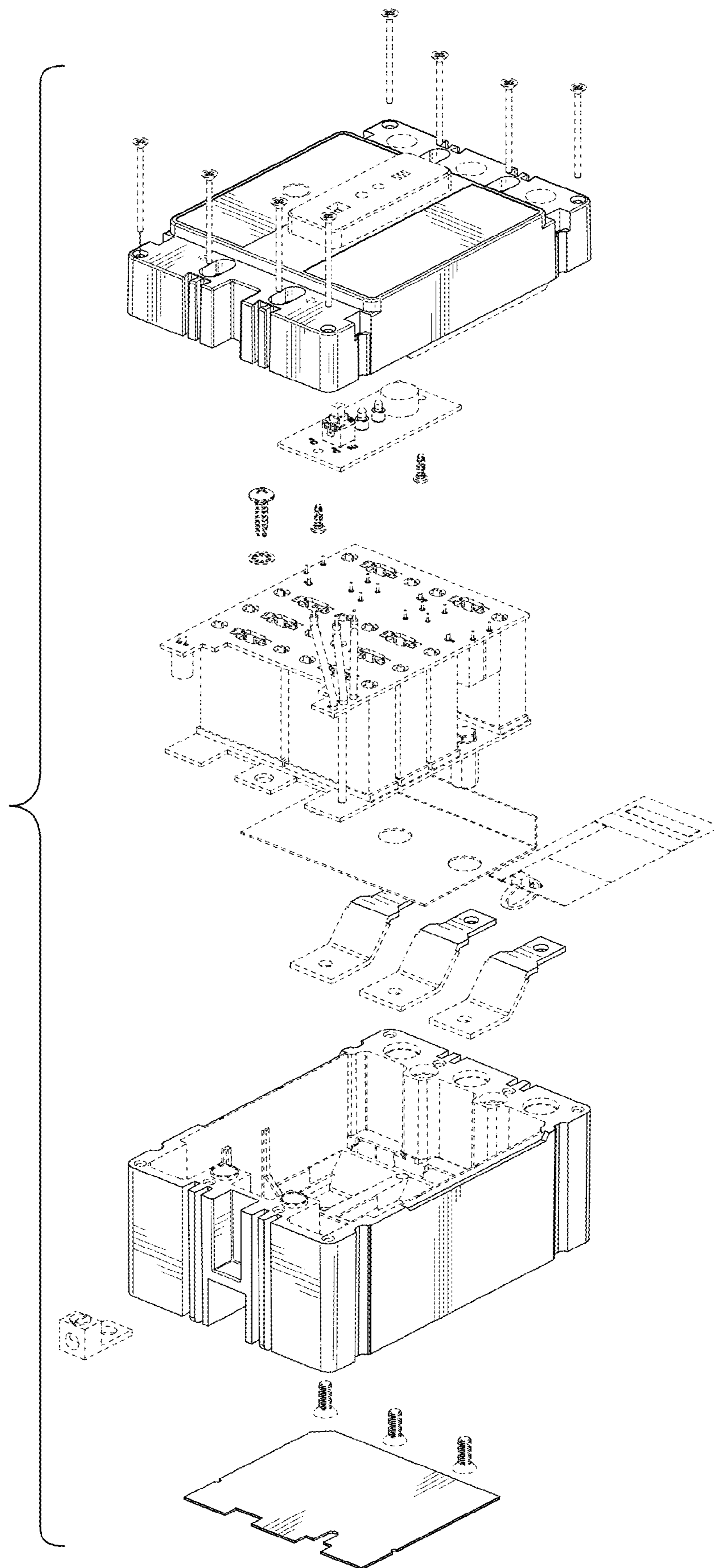


FIG. 2

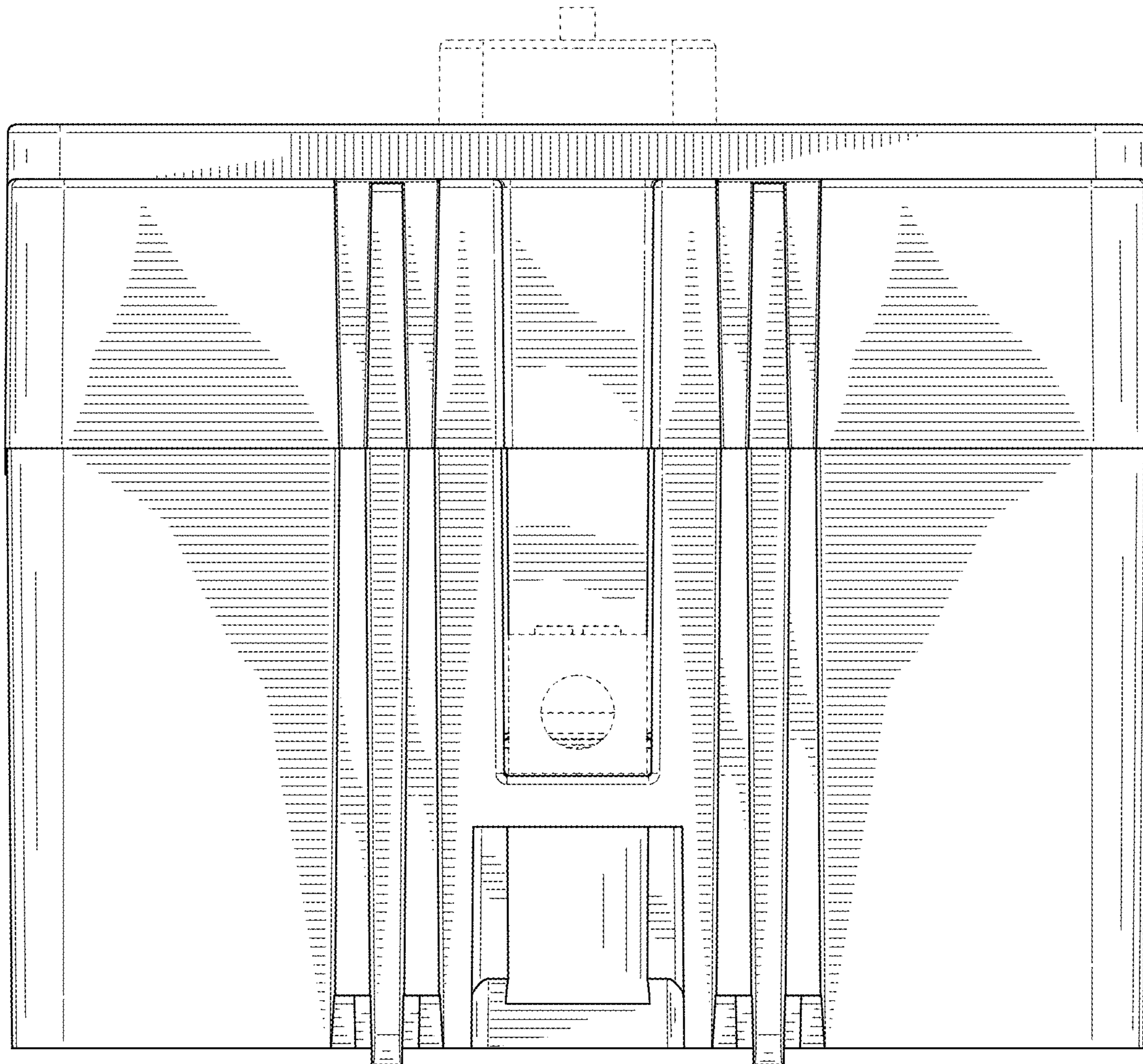


FIG. 3

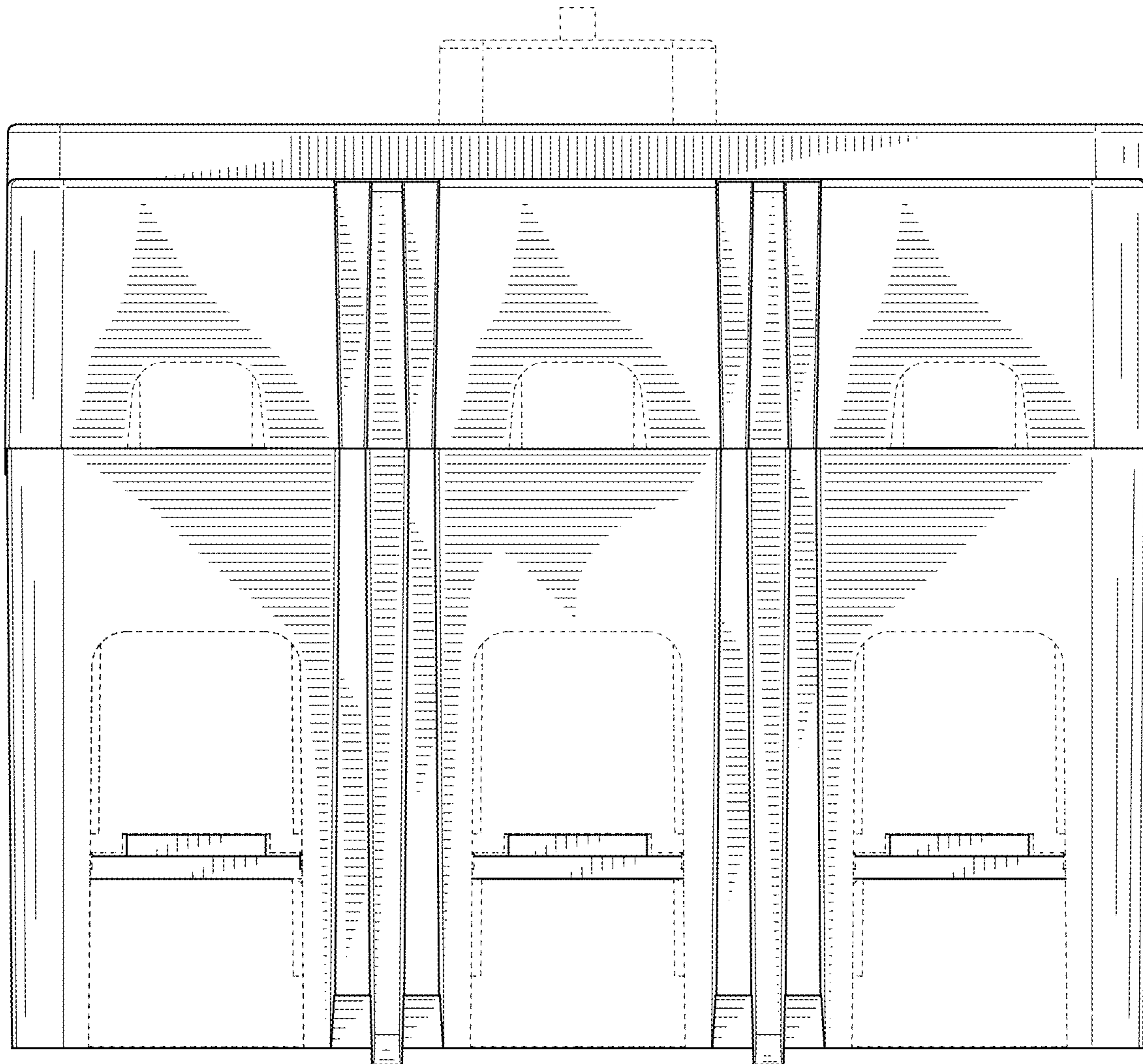


FIG. 4

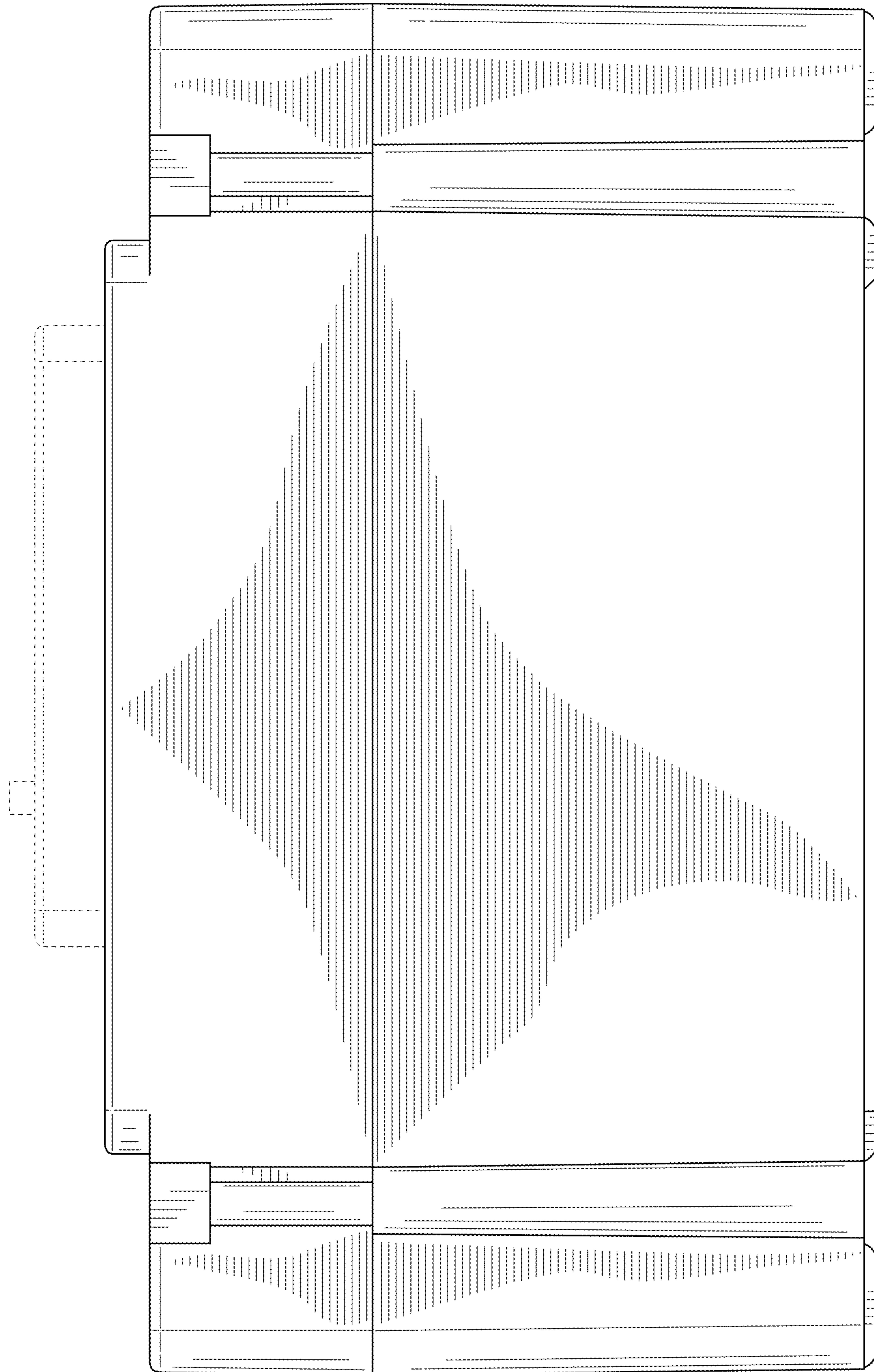


FIG. 5

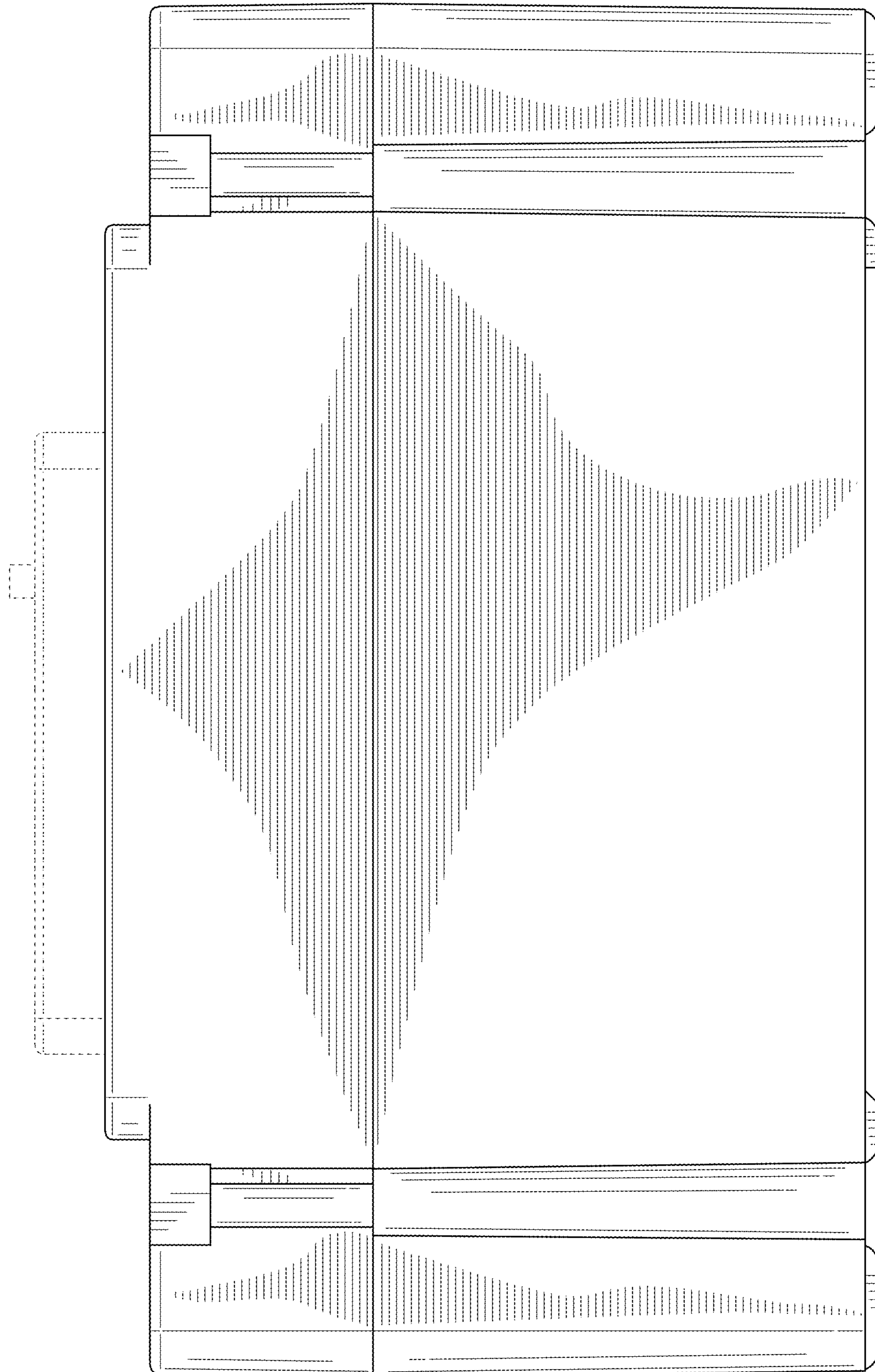


FIG. 6

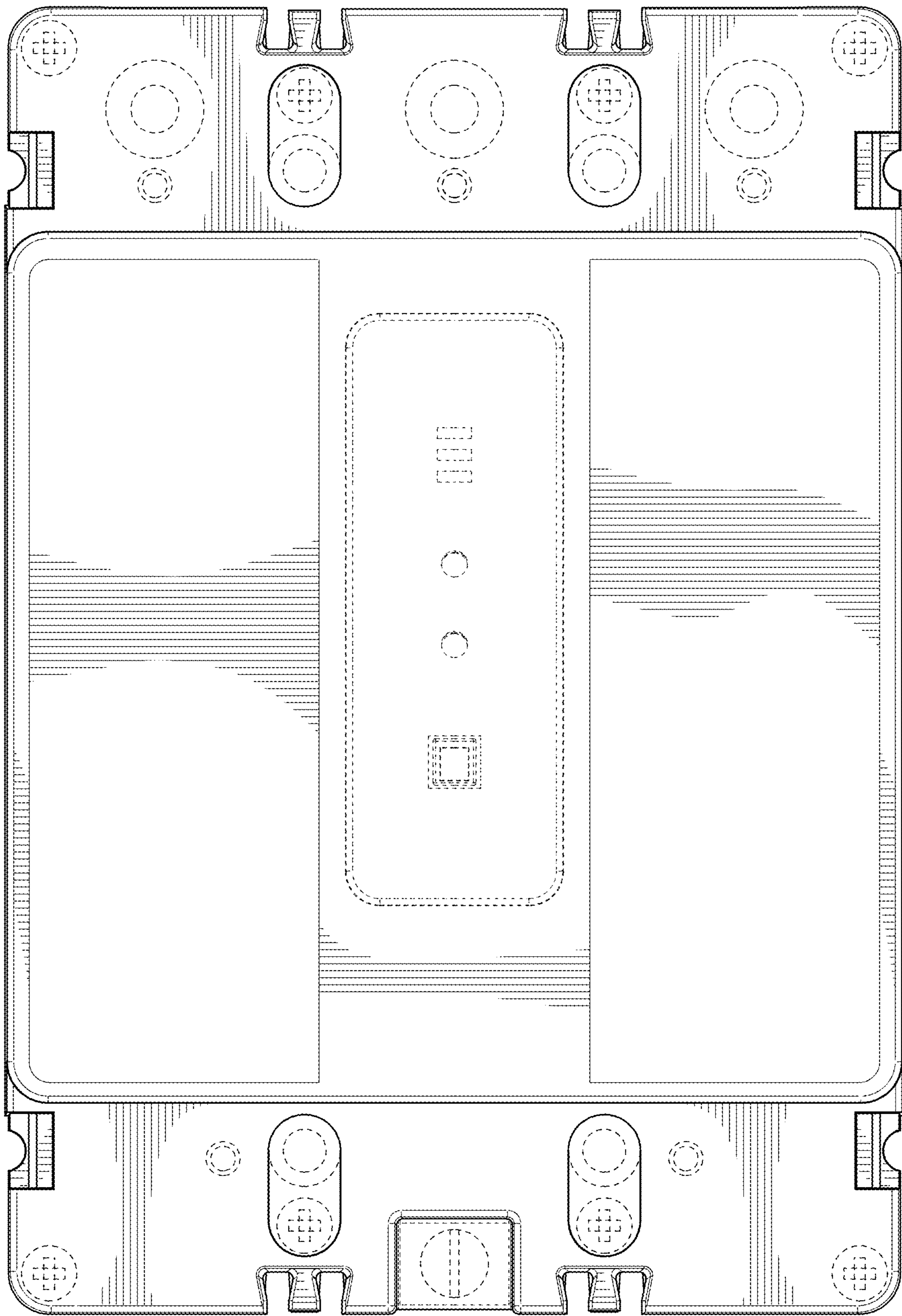


FIG. 7

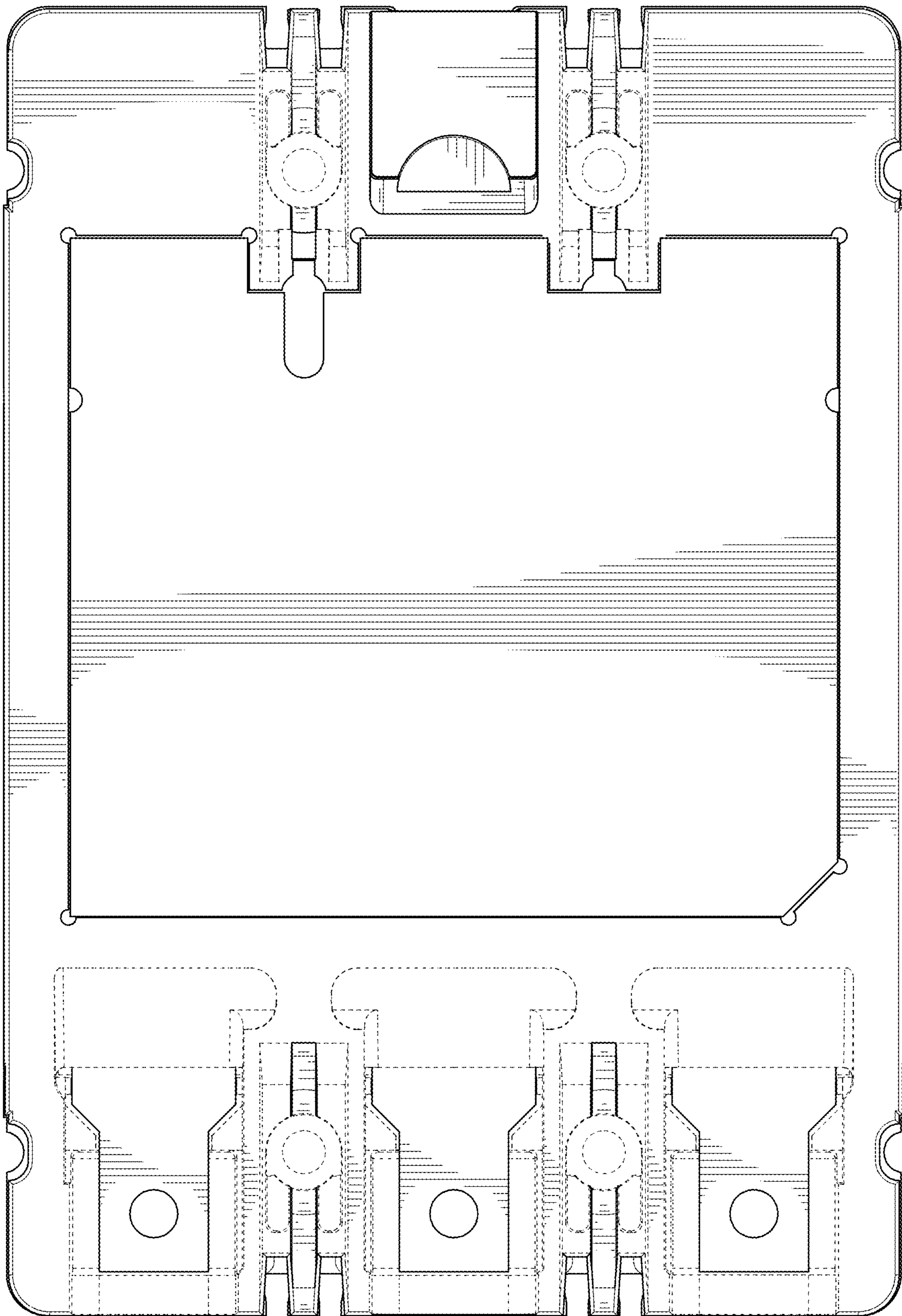


FIG. 8

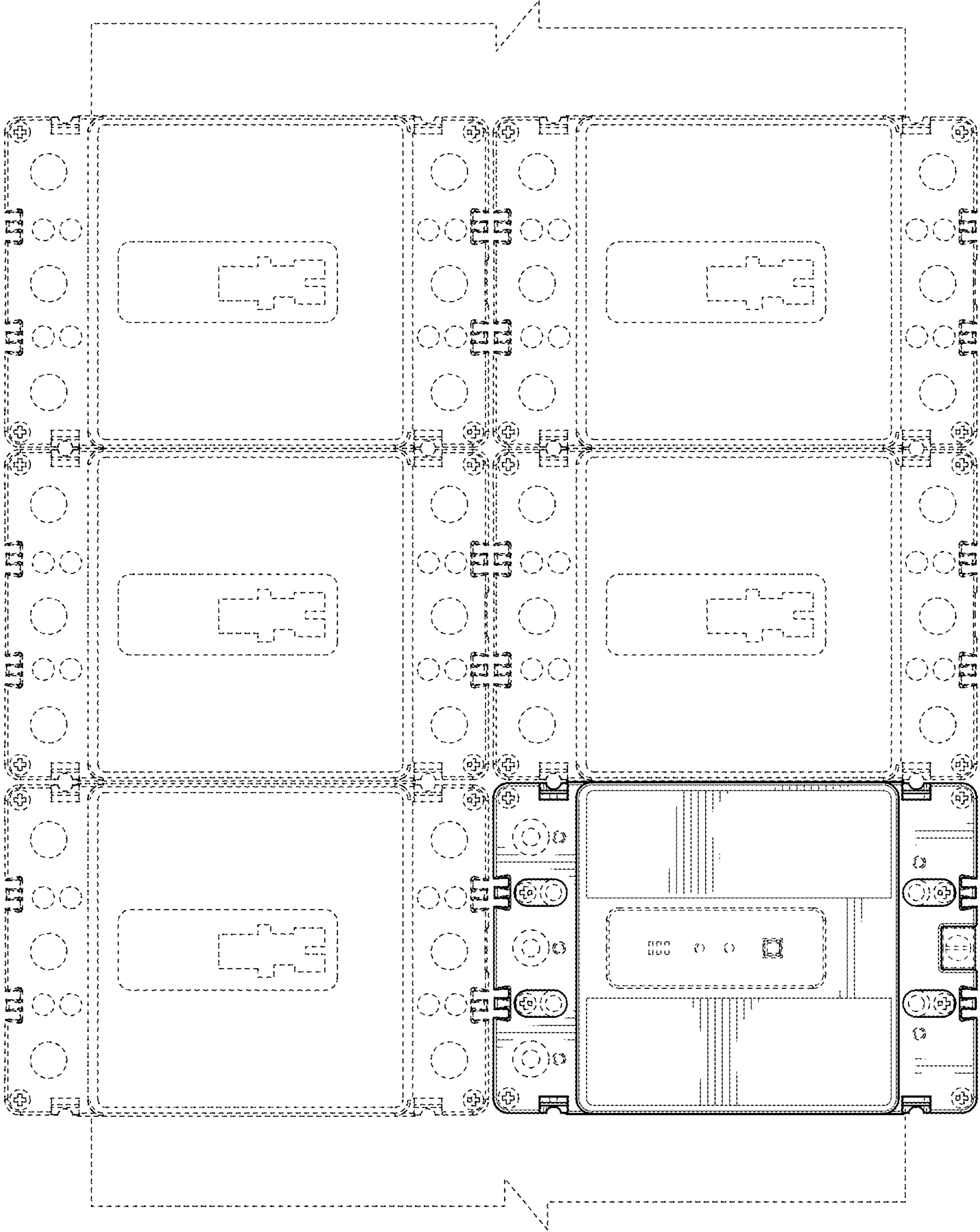


FIG. 9