



US00D755131S

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

(10) **Patent No.:** **US D755,131 S**
(45) **Date of Patent:** **** May 3, 2016**

(54) **CIRCUIT BREAKER**

(71) Applicant: **ABB S.p.A.**, Milan (IT)

(72) Inventors: **Lucio Azzola**, Bergamo (IT); **Giovanni Frassinetti**, Bergamo (IT)

(73) Assignee: **ABB S.p.A.**, Milan (IT)

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

(21) Appl. No.: **29/484,272**

(22) Filed: **Mar. 7, 2014**

Related U.S. Application Data

(62) Division of application No. 29/416,701, filed on Mar. 26, 2012, now Pat. No. Des. 703,621, which is a division of application No. 29/356,421, filed on Feb. 25, 2010, now Pat. No. Des. 660,805, which is a division of application No. 29/331,873, filed on Feb. 3, 2009, now Pat. No. Des. 611,002, which is a division of application No. 29/241,662, filed on Oct. 31, 2005, now Pat. No. Des. 587,658.

Foreign Application Priority Data

(30) May 10, 2005 (EM) 000341169
(51) **LOC (10) Cl.** **13-03**
(52) **U.S. Cl.**
USPC **D13/160**
(58) **Field of Classification Search**
USPC D13/160, 162, 177
CPC H01H 3/227; H01H 71/04; H01H 71/70;
H01H 2071/006; H02B 11/12; H02B 11/127;
H02B 11/133

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,728,757 A 3/1988 Buxton et al.
5,362,933 A 11/1994 Kutsche et al.
D378,914 S 4/1997 Smith et al.

(Continued)

FOREIGN PATENT DOCUMENTS

WO WO-DM/055273 4/2001

OTHER PUBLICATIONS

ABB SACE L.V., SACE Emax. A system that's open to any solution, 604060/011 en, Jul. 1999.

(Continued)

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Novak Druce Connolly Bove + Quigg LLP

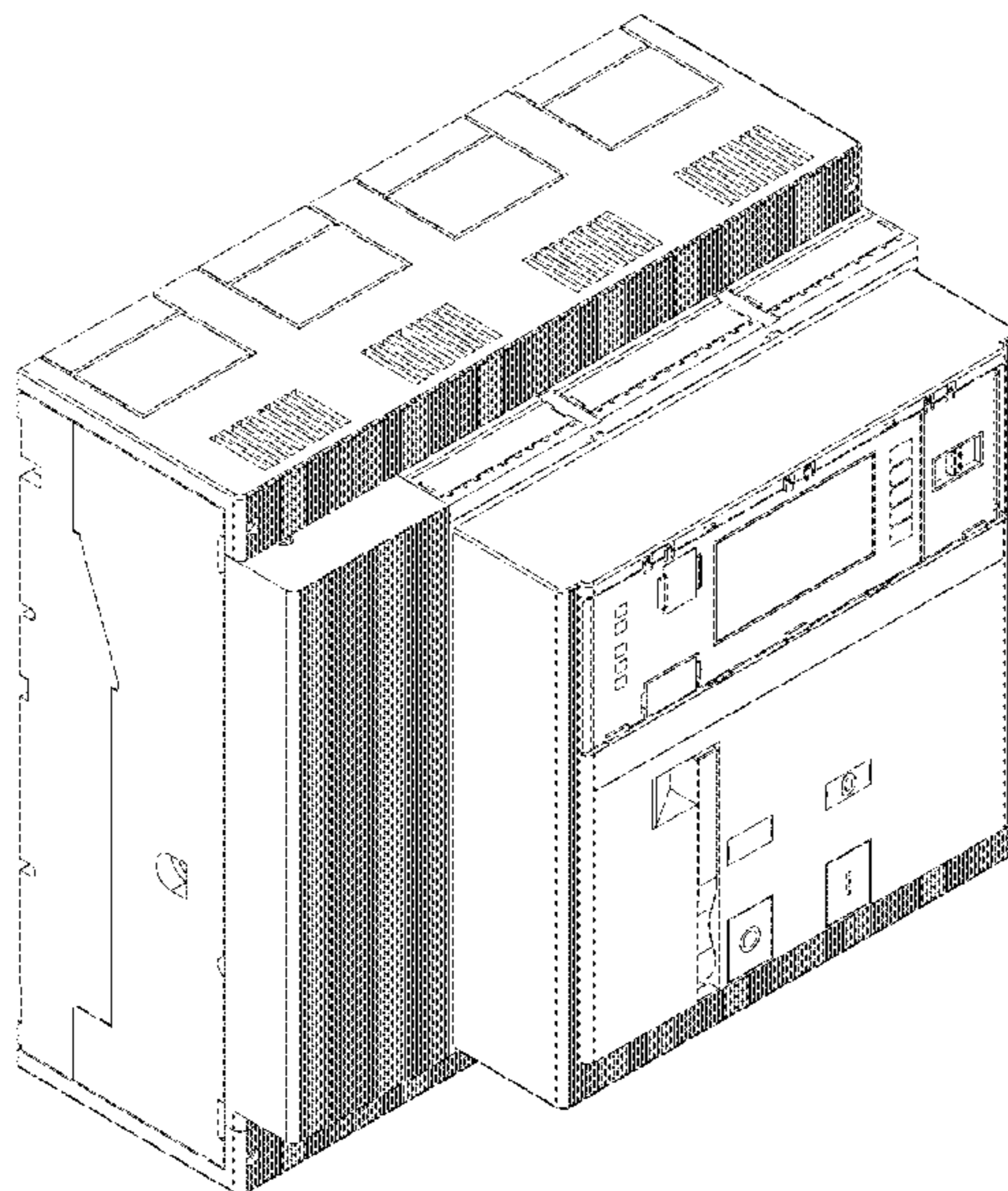
(57) **CLAIM**

The ornamental design for a “circuit breaker,” as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an embodiment of a circuit breaker;
FIG. 2 is a front view of an embodiment of a circuit breaker;
FIG. 3 is a right view of an embodiment of a circuit breaker;
FIG. 4 is a left view of an embodiment of a circuit breaker;
FIG. 5 is a bottom view of an embodiment of a circuit breaker;
FIG. 6 is a top view of an embodiment of a circuit breaker;
and,
FIG. 7 is a rear view of an embodiment of a circuit breaker.
The broken line portion of the figure drawings is included to show unclaimed subject matter only and forms no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,717,178 A 2/1998 Turner et al.
 D402,267 S 12/1998 M'Sadoques
 5,902,973 A 5/1999 Ramey et al.
 6,177,641 B1 1/2001 Morel et al.
 6,388,867 B1 5/2002 Rakus et al.
 6,445,559 B1 9/2002 Phillips et al.
 6,489,577 B2 12/2002 Kurata
 7,064,283 B2 6/2006 Deylitz et al.
 D535,626 S 1/2007 Azzola et al.
 D547,729 S 7/2007 Azzola et al.
 D547,730 S 7/2007 Azzola et al.
 D551,629 S 9/2007 Azzola et al.
 D562,777 S 2/2008 Azzola et al.
 D576,111 S 9/2008 Azzola et al.
 D585,839 S 2/2009 Azzola et al.
 D587,658 S 3/2009 Azzola et al.
 D589,002 S * 3/2009 Magoni D13/177
 D593,506 S 6/2009 Azzola et al.
 D599,301 S 9/2009 Azzola et al.

D606,026 S 12/2009 Azzola et al.
 D610,552 S 2/2010 Azzola et al.
 D611,002 S 3/2010 Azzola et al.
 D633,446 S 3/2011 Besana et al.
 7,952,042 B2 * 5/2011 Coomer et al. 200/302.1
 D639,252 S 6/2011 Azzola et al.
 D641,711 S 7/2011 Azzola et al.
 D659,105 S 5/2012 Azzola et al.
 D660,805 S 5/2012 Azzola et al.
 D704,149 S * 5/2014 Azzola et al. D13/160
 2001/0025773 A1 10/2001 Rane et al.
 2004/0045796 A1 3/2004 Azzola et al.
 2006/0118397 A1 6/2006 Dahl et al.
 2010/0163377 A1 * 7/2010 Frassinetti et al. 200/308
 2010/0296621 A1 * 11/2010 Broli et al. 376/411
 2014/0374223 A1 * 12/2014 Wan 200/43.01

OTHER PUBLICATIONS

Terasaki Electric , Revolution in circuit breaker technology, 35 pp
 (date unknown).

* cited by examiner

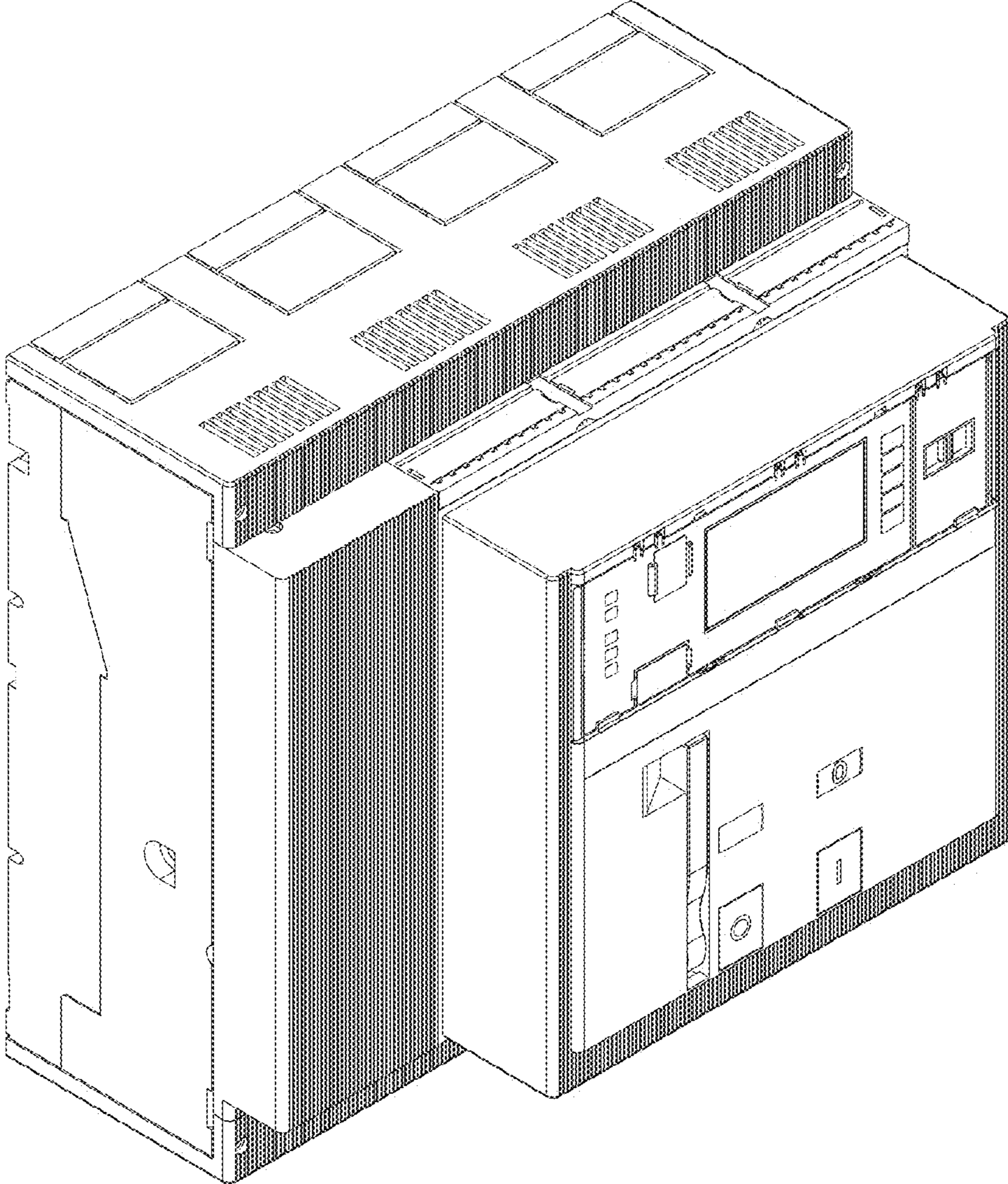


FIG. 1

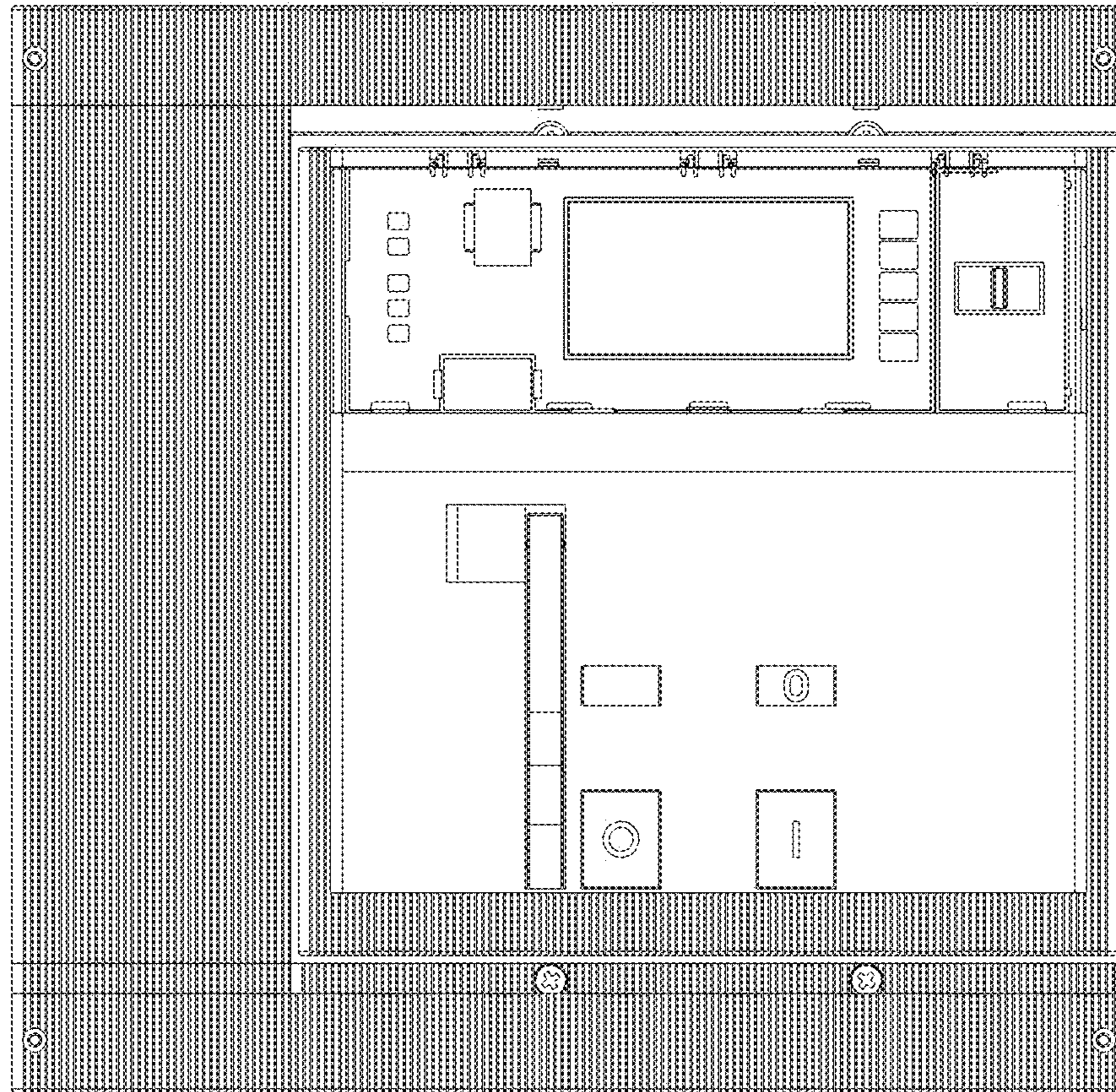


FIG. 2

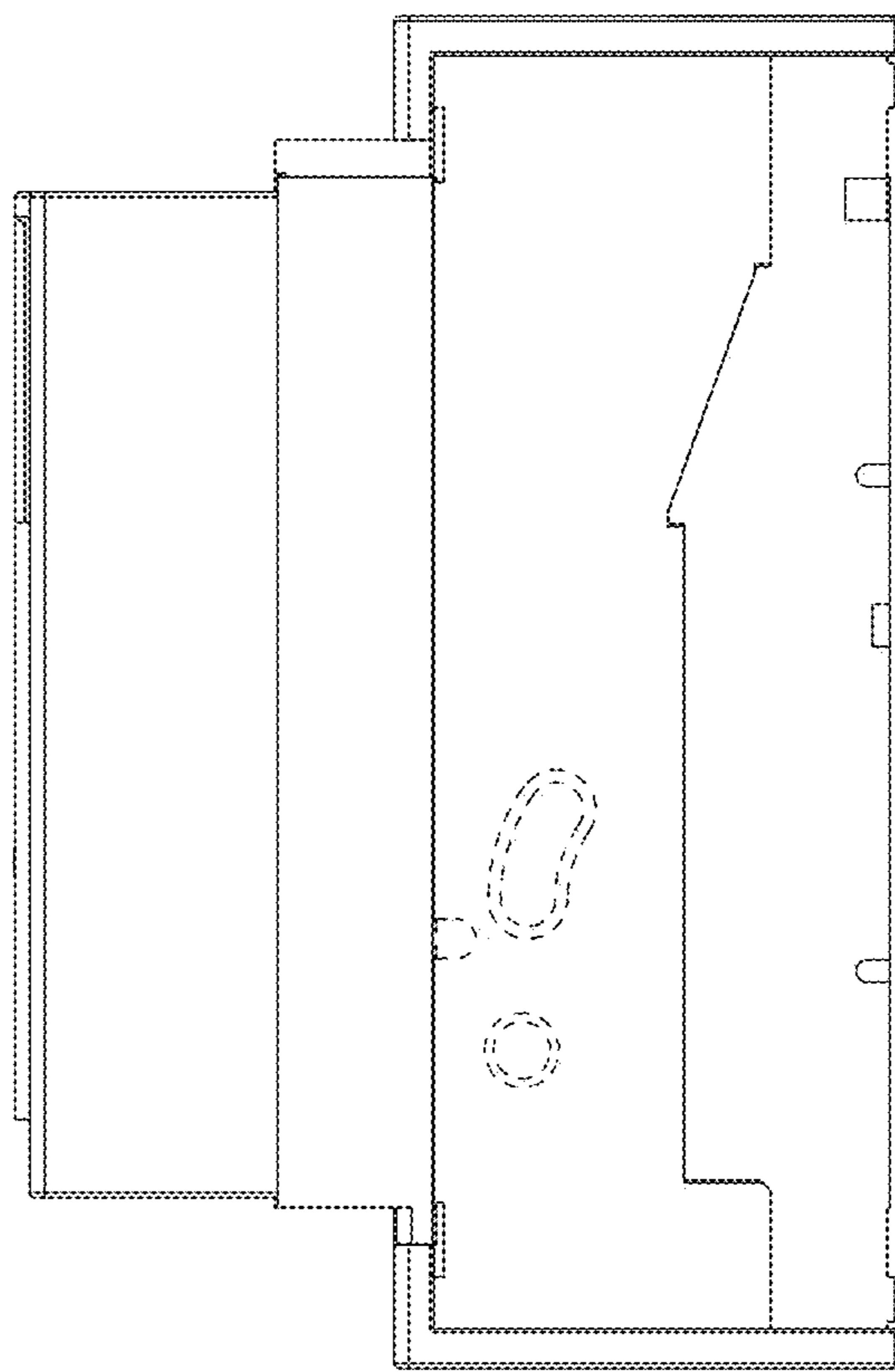


FIG. 3

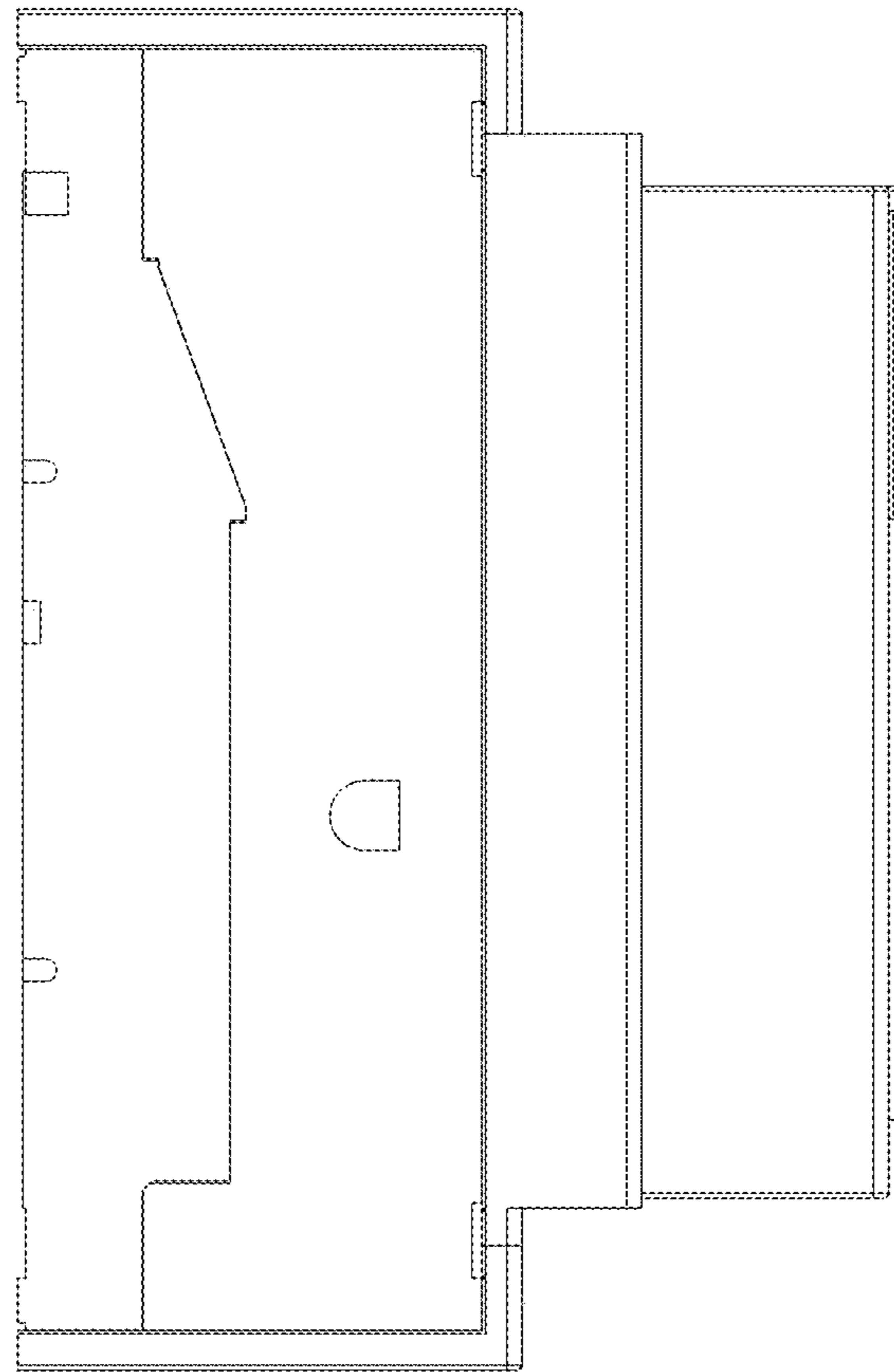


FIG. 4

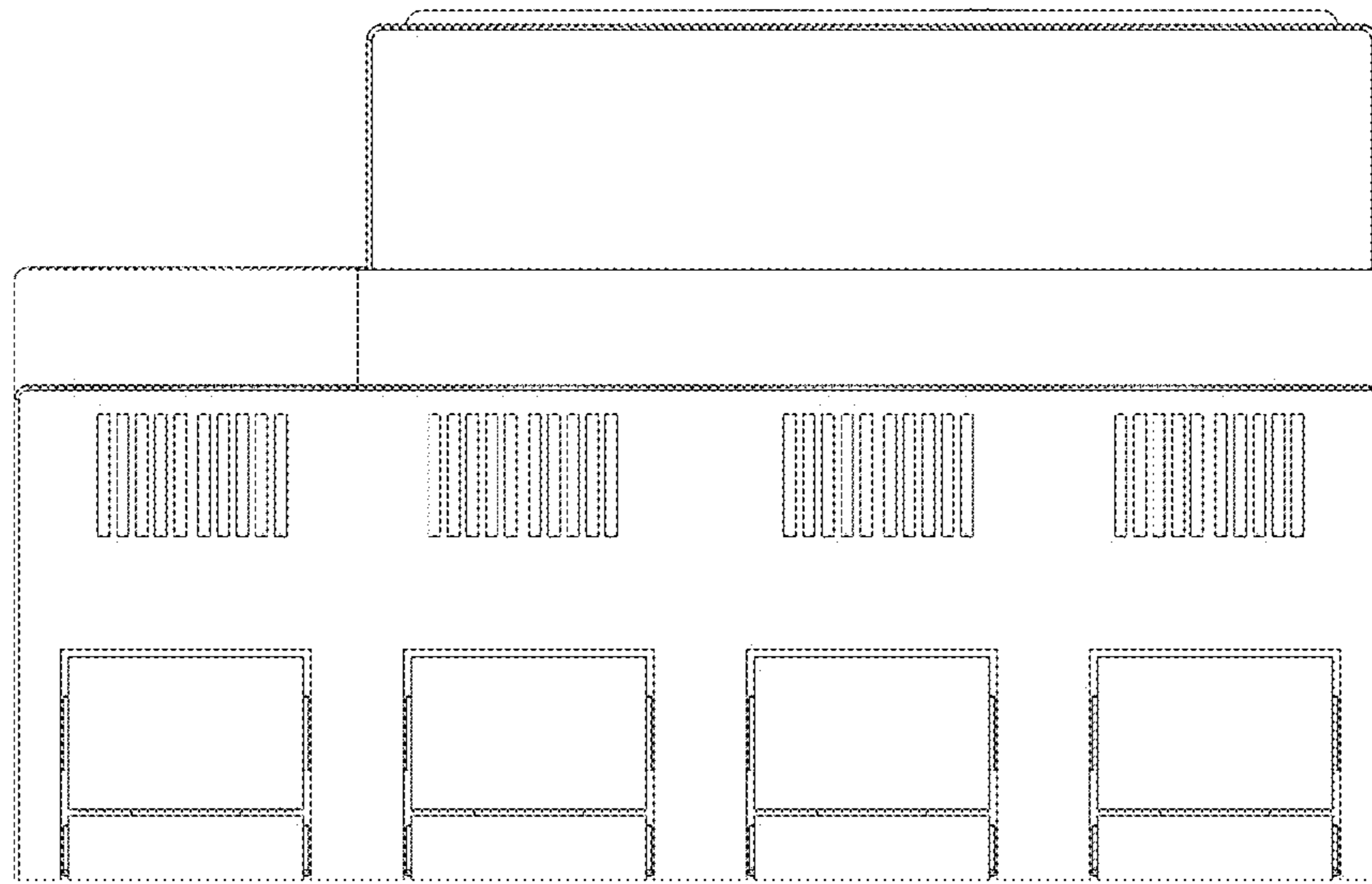


FIG. 5

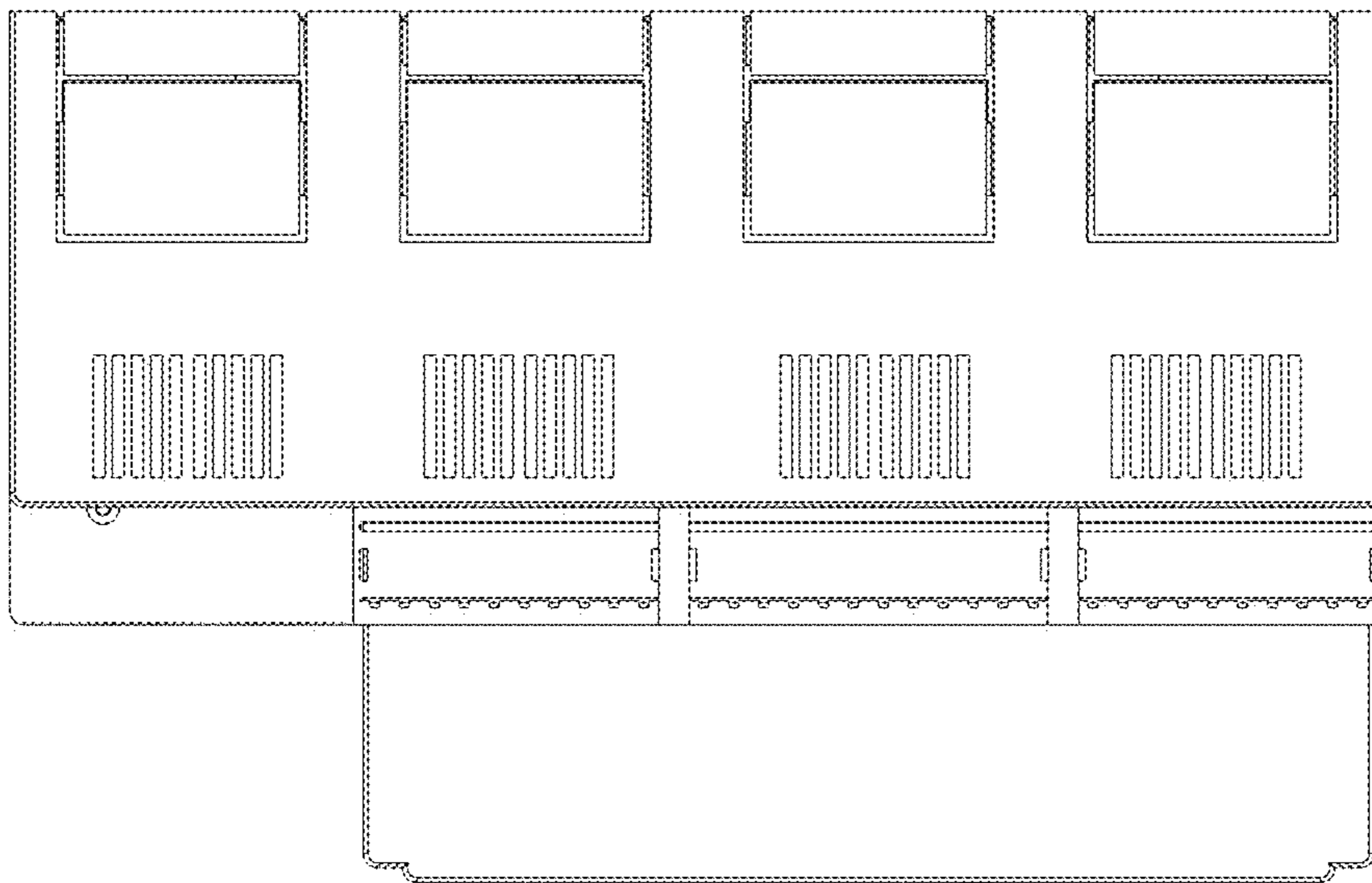


FIG. 6

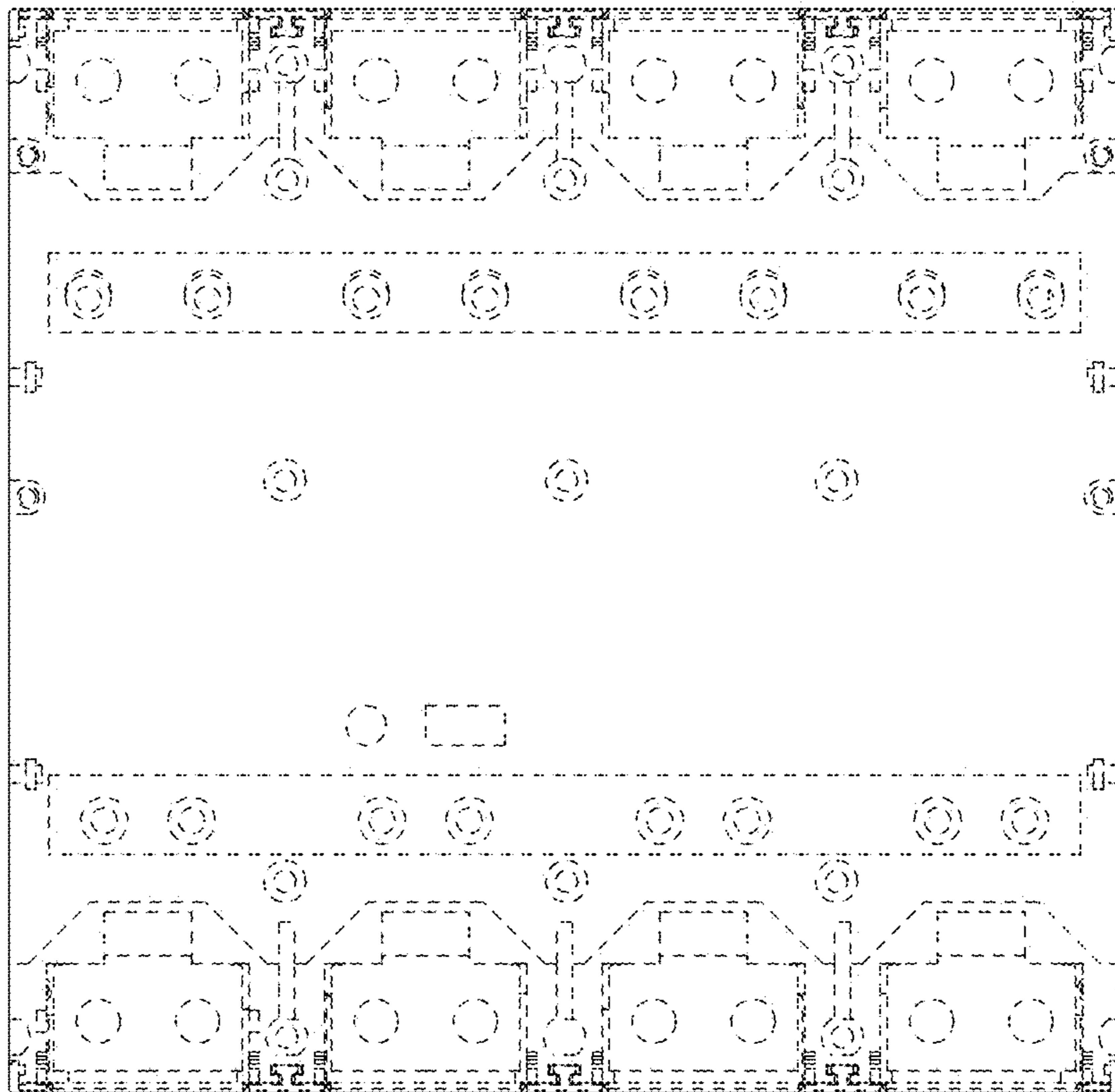


FIG. 7