



US00D761746S

(12) **United States Design Patent**
Toyoshima(10) **Patent No.:** US D761,746 S
(45) **Date of Patent:** ** Jul. 19, 2016(54) **SEMICONDUCTOR MODULE FOR POWER CONVERSION**(71) Applicant: **Sumitomo Electric Industries, Ltd.**,
Osaka-shi (JP)(72) Inventor: **Shigenori Toyoshima**, Osaka (JP)(73) Assignee: **Sumitomo Electric Industries, Ltd.**,
Osaka-shi (JP)(**) Term: **14 Years**(21) Appl. No.: **29/525,721**(22) Filed: **May 1, 2015**(30) **Foreign Application Priority Data**

Nov. 4, 2014 (JP) 2014-024556

(51) **LOC (10) Cl.** **13-03**(52) **U.S. Cl.**USPC **D13/182**(58) **Field of Classification Search**USPC D13/110, 182; 257/678, 684, 690, 691;
361/679.01, 713, 728, 736, 760, 761,
361/772, 775, 783, 820; 174/250, 253;
438/15, 25, 26, 51, 55, 63, 64, 106
CPC . H01L 21/00; H01L 2224/42; H01L 2224/43;
H01L 2021/00; H01L 2021/02; H01L
2021/04; H01L 21/4814; H01L 21/4846;
H01L 21/4871; H01L 21/67144; H01L 23/12;
H01L 23/13; H01L 23/14; H01L 23/147;
H01L 2924/171; H01L 2924/1711; H01L
2924/1715; H01L 2924/17151; H01L
2924/181; H01L 2924/1811; H01L 2924/1815;
H01L 2924/19042; H01L 2924/1905; H01L
2224/08054; H01L 23/58; H05B 41/14;
H02B 6/4201; G02B 6/4256; G02B 6/4257;
G02B 6/4261; G02B 6/4262; G02B 6/428;
G02B 6/4281; H05K 1/14; H05K 1/141;
H05K 1/142; H05K 1/144; H05K 1/18;
H05K 1/181; H05K 1/182; H05K 1/026

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

D357,672 S * 4/1995 Terasawa D13/182
5,408,128 A * 4/1995 Furnival H01L 23/49811
257/690
5,410,450 A * 4/1995 Iida H01L 23/49575
174/533
D364,383 S * 11/1995 Yamada D13/146
D364,384 S * 11/1995 Shimizu D13/146
D364,385 S * 11/1995 Shimizu D13/146
5,512,782 A * 4/1996 Kobayashi H02M 7/003
257/691
D441,726 S * 5/2001 Sofue D13/182

(Continued)

Primary Examiner — Elizabeth J Oswecki(74) *Attorney, Agent, or Firm* — Venable LLP; Michael A. Sartori; Tamatane J. Aga(57) **CLAIM**

The ornamental design for a semiconductor module for power conversion, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a semiconductor module for power conversion showing my new design.

FIG. 2 is a rear view of the semiconductor module for power conversion of FIG. 1.

FIG. 3 is a top plan view of the semiconductor module for power conversion of FIG. 1.

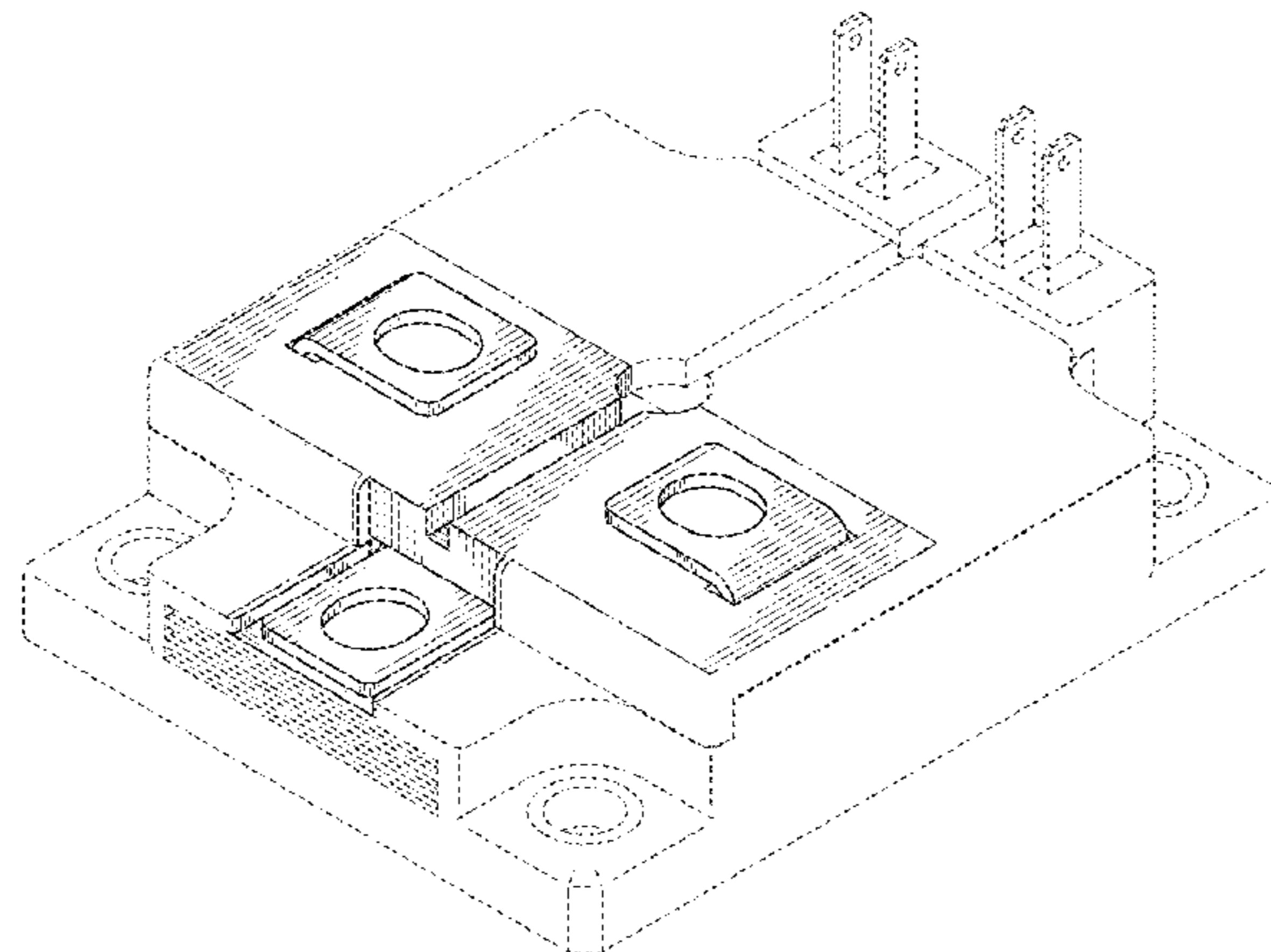
FIG. 4 is a bottom plan view of the semiconductor module for power conversion of FIG. 1.

FIG. 5 is a right side view of the semiconductor module for power conversion of FIG. 1.

FIG. 6 is a left side view of the semiconductor module for power conversion of FIG. 1; and,

FIG. 7 is a perspective view of the semiconductor module for power conversion of FIG. 1.

The dashed-dot-dashed lines represent the boundary lines of the claimed design. The even dashed lines represent unclaimed environment that form no part of the claimed design.

1 Claim, 7 Drawing Sheets

US D761,746 S

Page 2

References Cited									
U.S. PATENT DOCUMENTS									
D464,618	S *	10/2002	Ando	D13/110	D686,174	S *	7/2013	Soyano	D13/182
6,521,983	B1 *	2/2003	Yoshimatsu	H01L 25/072 257/678	D689,446	S *	9/2013	Soyano	D13/180
D587,662	S *	3/2009	Soutome	D13/182	D703,625	S *	4/2014	Lim	D13/182
D589,012	S *	3/2009	Soyano	D13/182	D704,670	S *	5/2014	Chen	D13/182
D606,951	S *	12/2009	Soyano	D13/182	D704,671	S *	5/2014	Chen	D13/182
8,093,692	B2 *	1/2012	Obara	H01L 23/49861 257/668	D705,184	S *	5/2014	Takahashi	D13/182
D653,633	S *	2/2012	Soyano	D13/182	D706,232	S *	6/2014	Nakamura	D13/182
D653,634	S *	2/2012	Soyano	D13/182	D710,317	S *	8/2014	Chen	D13/182
D674,760	S *	1/2013	Mochizuki	D13/182	D710,318	S *	8/2014	Chen	D13/182
					D710,319	S *	8/2014	Chen	D13/182
					8,941,228	B2 *	1/2015	Kodaira	H01L 23/142 257/584
					D742,338	S *	11/2015	Akana	D13/182
					D748,595	S *	2/2016	Bertalan	D13/182

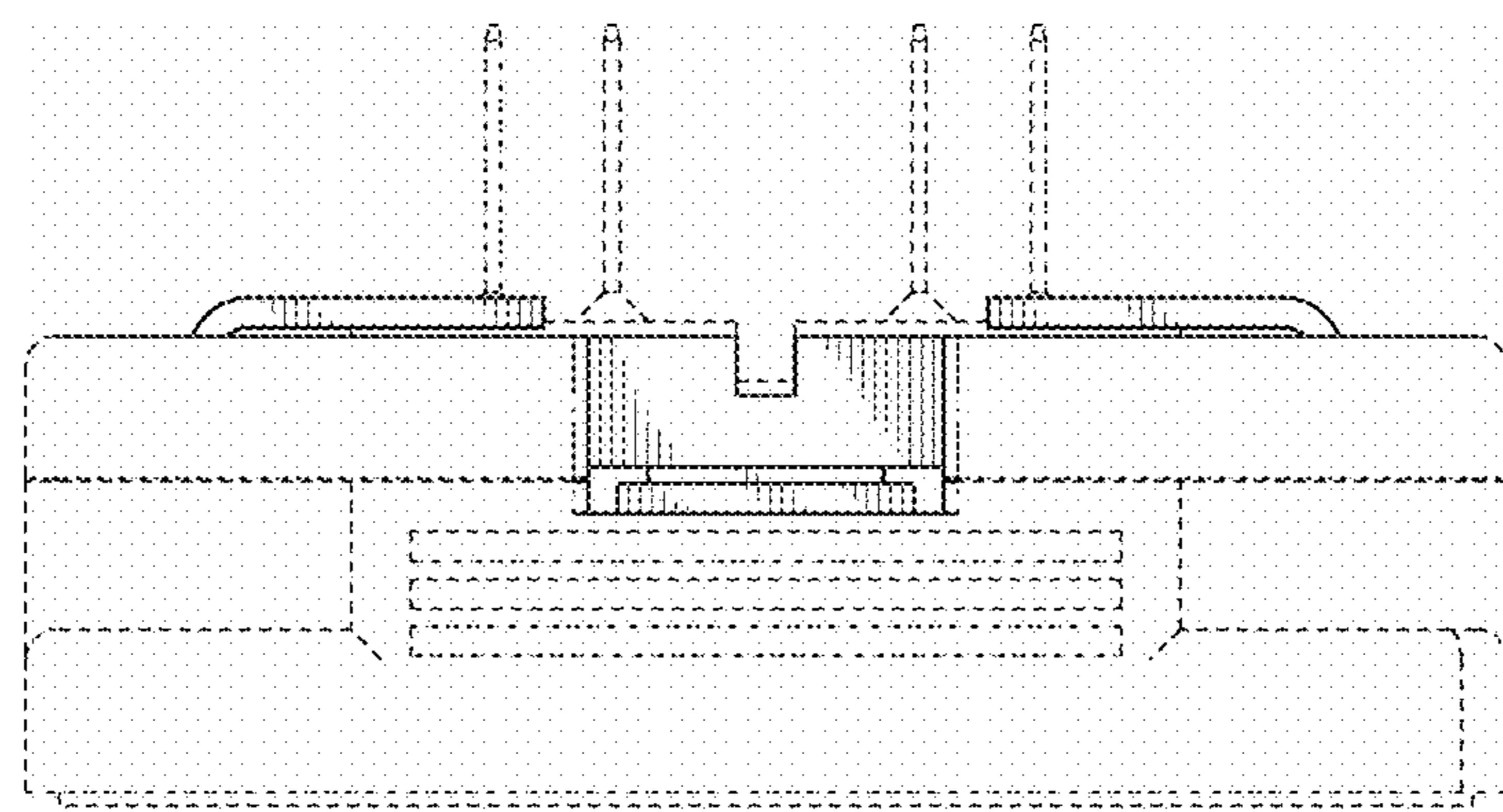


Fig. 1

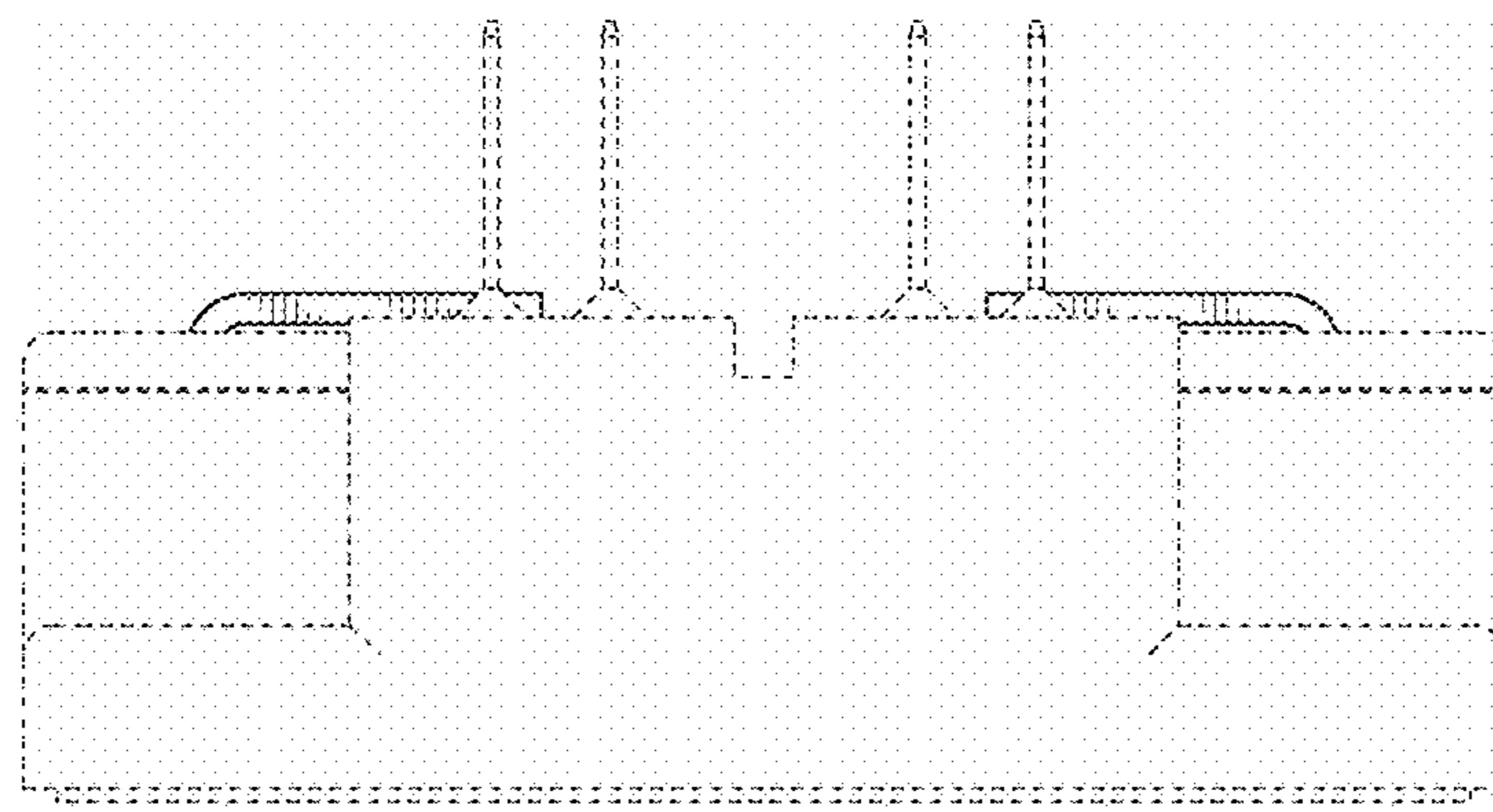


Fig.2

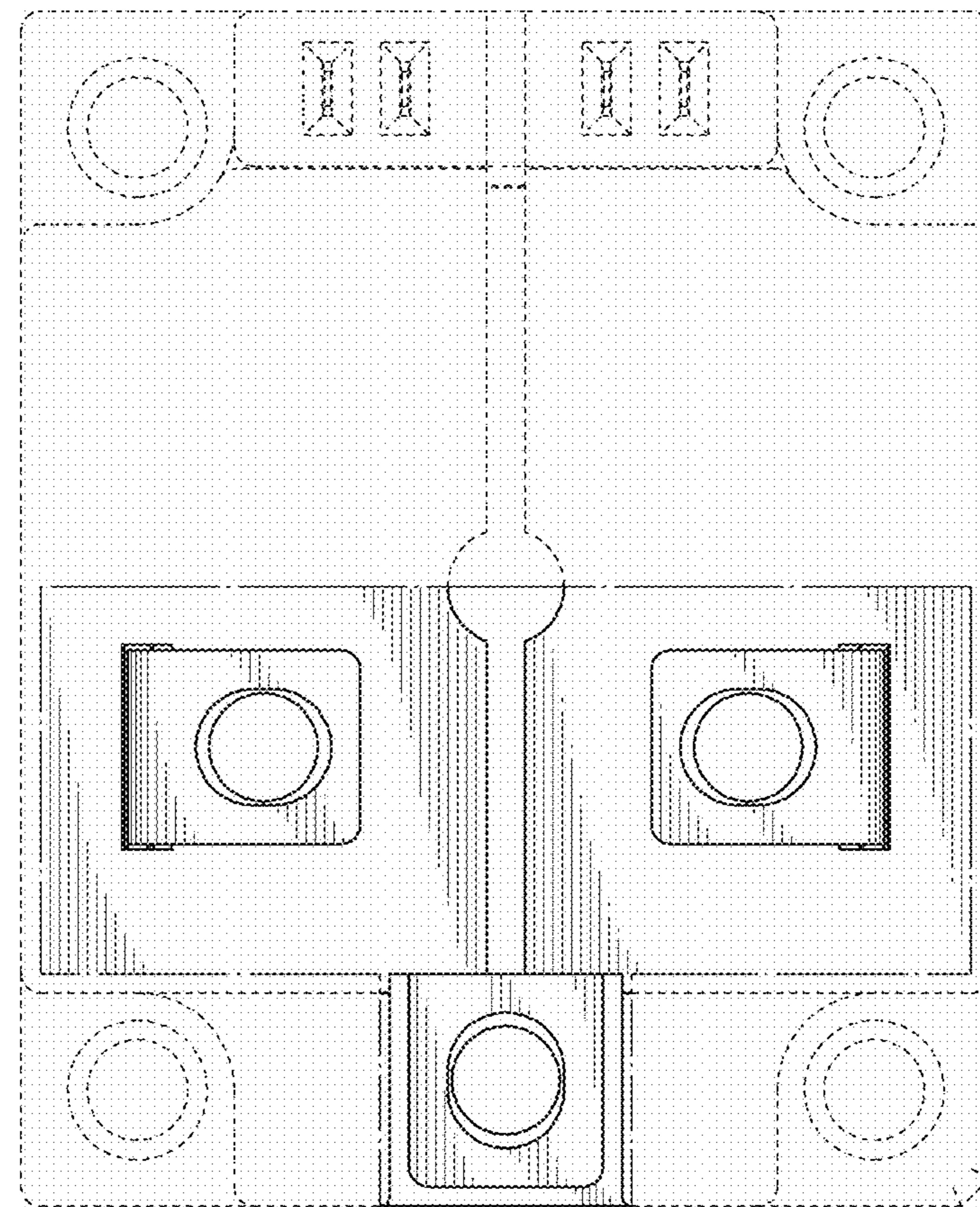


Fig.3

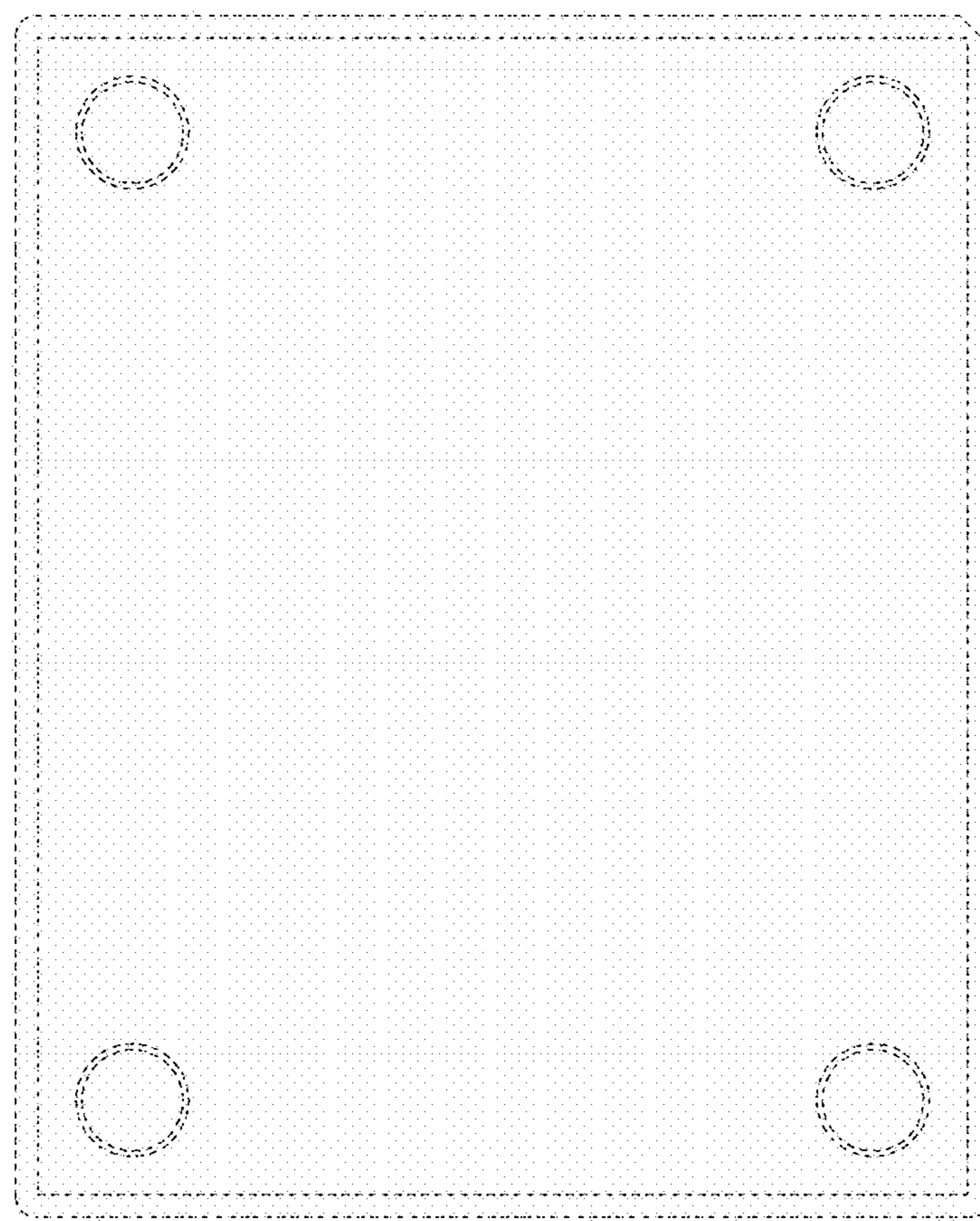


Fig.4

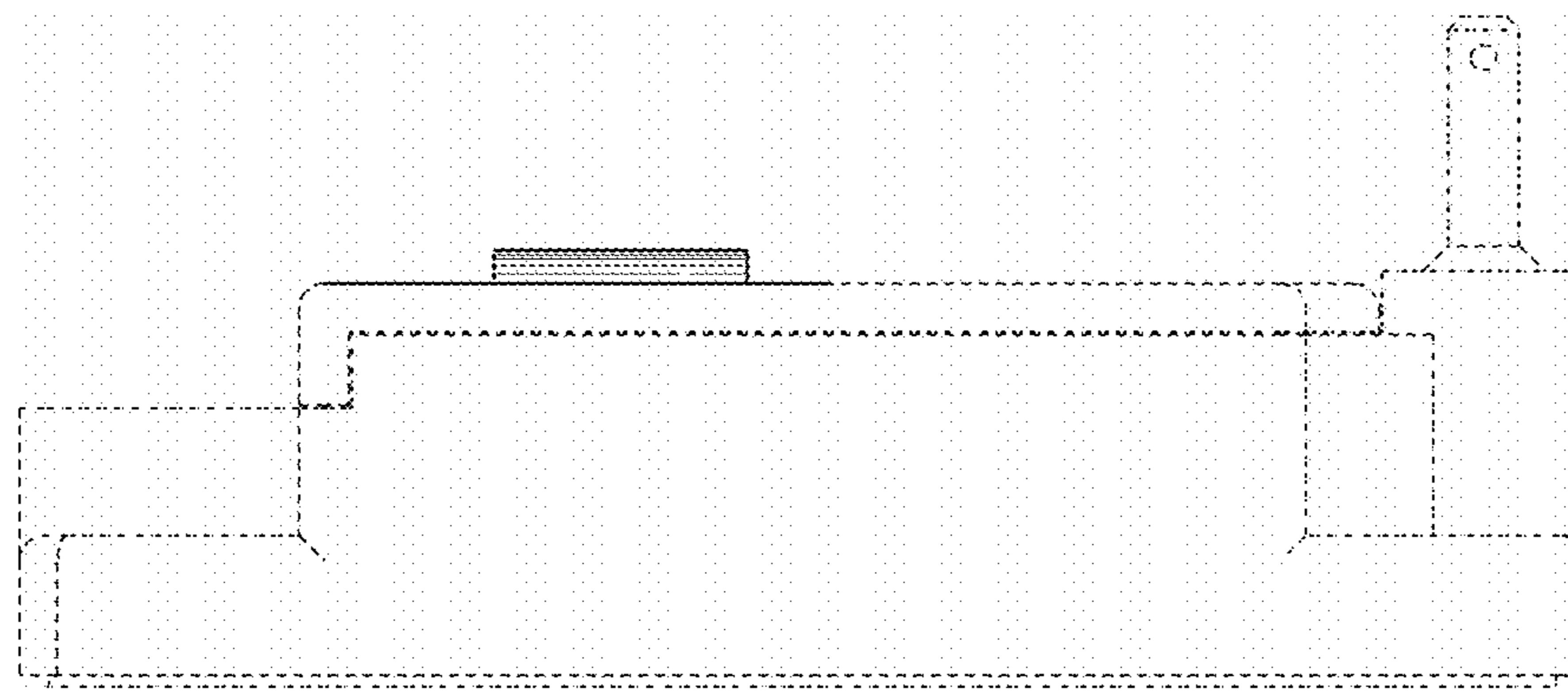


Fig.5

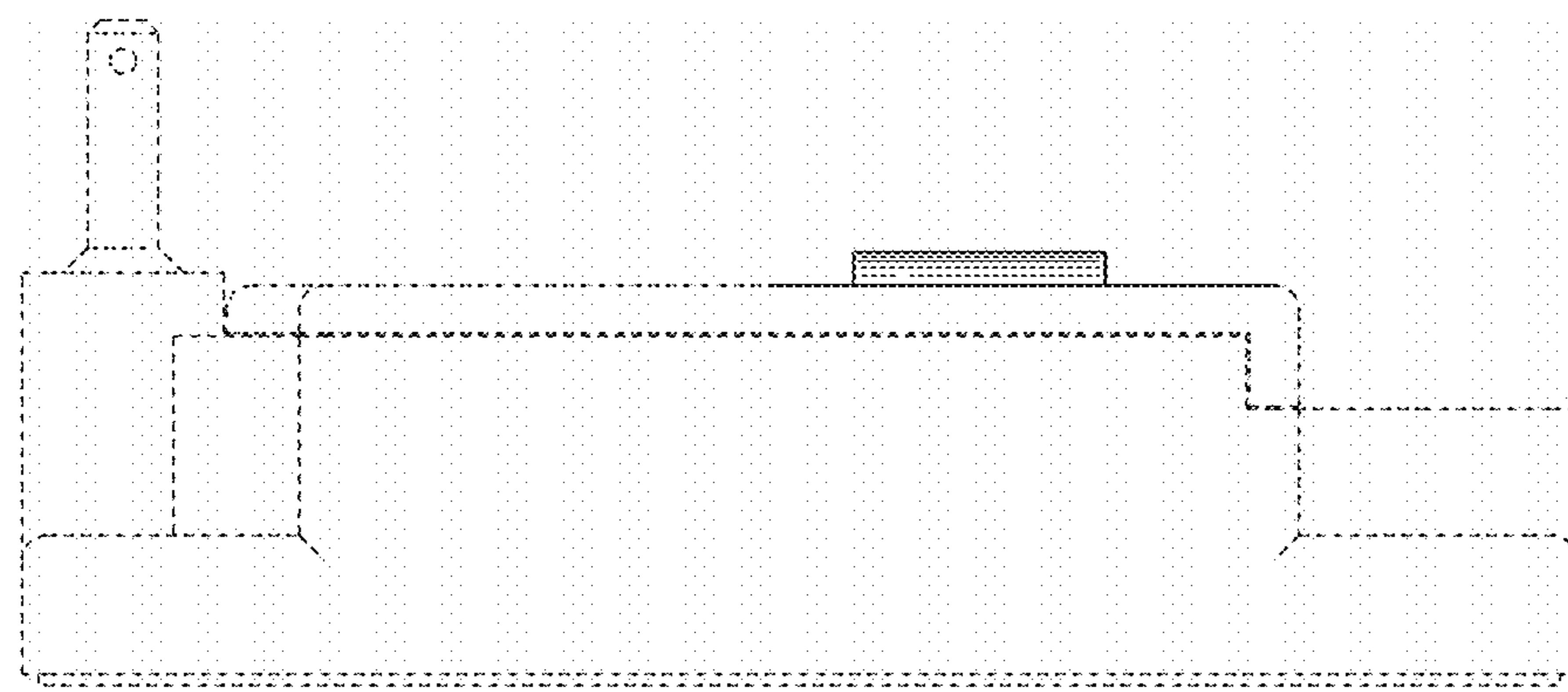


Fig.6

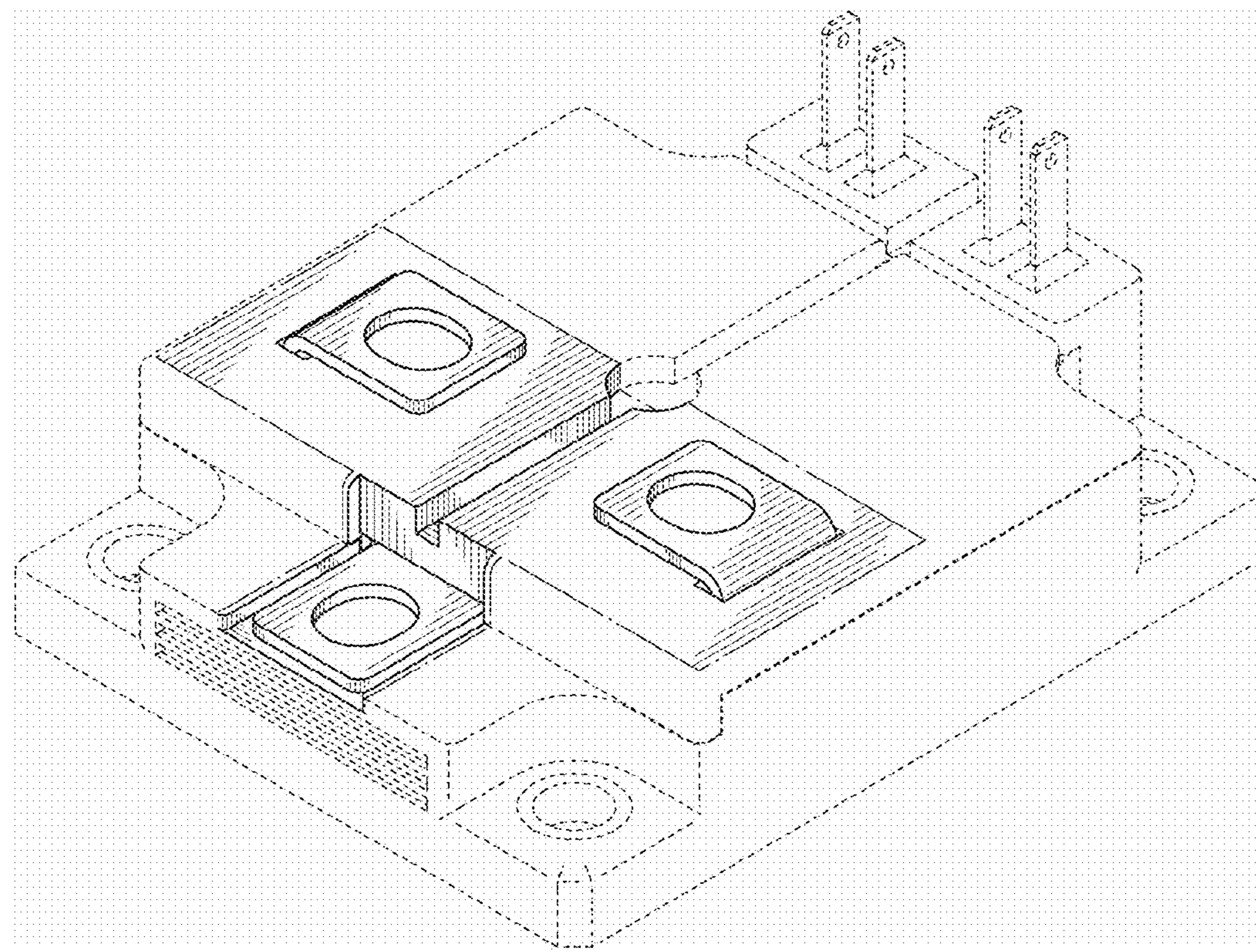


Fig. 7