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(12) **United States Design Patent** (10) **Patent No.:** **US D916,039 S**
Yamanaka et al. (45) **Date of Patent:** **** Apr. 13, 2021**

(54) **SEMICONDUCTOR DEVICE**
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(52) **U.S. Cl.**
USPC **D13/182**
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CPC H01L 21/00; H01L 21/02; H01L 21/4814; H01L 21/4846; H01L 21/4871; H01L 21/67144; H01L 2224/42; H01L 2224/43; H01L 2224/01; H01L 2224/08055; H01L 2224/08054; H01L 23/12; H01L 23/13; H01L 23/14; H01L 23/147; H01L 23/00; H01L 23/48; H01L 23/4926; H01L 23/495; H01L 23/49517; H01L 23/498; H01L 23/49805; H01L 23/49811; H01L 23/49861; H01L 23/49866; H01L 23/49872; H01L 23/49575; H01L 23/49579; H01L 2924/171; H01L 2924/1711; H01L 2924/1715; H01L 2924/181; H01L 2924/1811; H01L 2924/1815; H01L 2924/19042; H01L 2924/1905

See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
5,408,128 A * 4/1995 Furnival H01L 23/49811 257/690
D364,383 S * 11/1995 Yamada D13/146
D364,384 S * 11/1995 Shimizu D13/146
D364,385 S * 11/1995 Shimizu D13/146
D441,726 S * 5/2001 Sofue D13/182
D464,618 S * 10/2002 Ando D13/110
7,425,757 B2 * 9/2008 Takubo H01L 25/072 257/678
8,526,199 B2 * 9/2013 Matsumoto H01L 23/3735 361/820
D703,625 S * 4/2014 Lim D13/182
D704,670 S * 5/2014 Chen D13/182
D704,671 S * 5/2014 Chen D13/182
D710,317 S * 8/2014 Chen D13/182
D710,318 S * 8/2014 Chen D13/182
D710,319 S * 8/2014 Chen D13/182
D748,595 S * 2/2016 Bertalan D13/182
D761,746 S * 7/2016 Toyoshima D13/182
(Continued)

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(57) **CLAIM**
The ornamental design for a semiconductor device, as shown and described.

DESCRIPTION
FIG. 1 is a front view of a semiconductor device, showing our new design;
FIG. 2 is a rear view thereof;
FIG. 3 is a top view thereof;
FIG. 4 is a bottom view thereof;
FIG. 5 is a left-side view thereof;
FIG. 6 is a right-side view thereof;
(Continued)

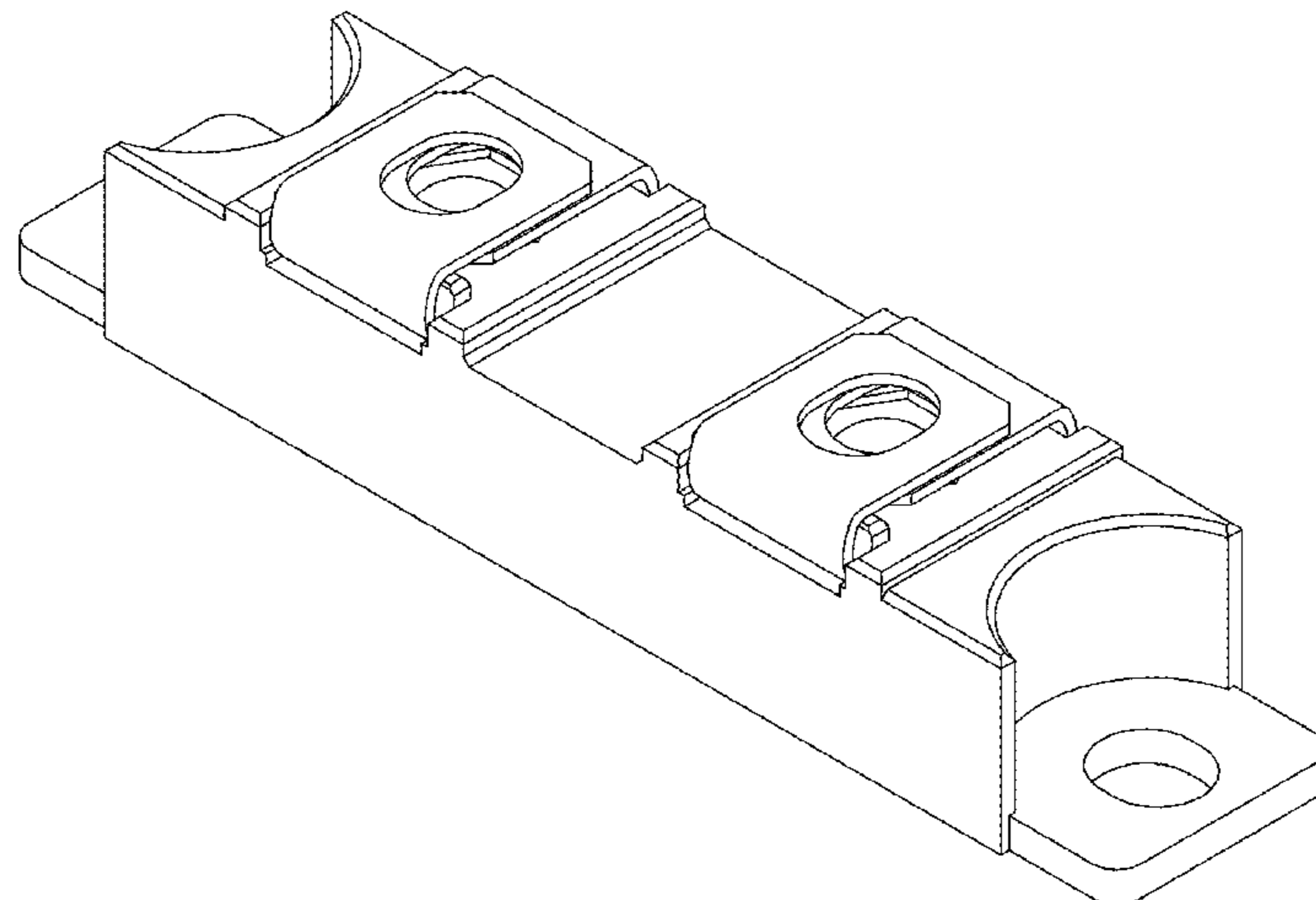


FIG. 7 is a front top perspective view thereof;
FIG. 8 is a rear top perspective view thereof; and,
FIG. 9 is a rear side perspective view thereof.

1 Claim, 9 Drawing Sheets

(56)

References Cited

U.S. PATENT DOCUMENTS

D762,185	S *	7/2016	Muehlensiep	D13/182
D762,597	S *	8/2016	Bertalan	D13/182
9,418,975	B1 *	8/2016	Yoneyama	H01L 23/5386
D766,851	S *	9/2016	Yoneyama	D13/182
D773,412	S *	12/2016	Yoneyama	D13/182
9,660,356	B1 *	5/2017	Nakamura	H05K 7/1432
D790,491	S *	6/2017	Hayashida	D13/182
D798,832	S *	10/2017	Hayashida	D13/182
D827,591	S *	9/2018	Ikeda	D13/182
D884,662	S *	5/2020	Itoh	D13/182
2001/0038143	A1 *	11/2001	Sonobe	H01L 24/49 257/690
2004/0227231	A1 *	11/2004	Maly	H01L 25/072 257/724
2008/0142948	A1 *	6/2008	Matsumoto	H01R 12/52 257/690
2016/0190915	A1 *	6/2016	Horiuchi	H01L 25/072 363/132
2016/0284618	A1 *	9/2016	Tsukamoto	H01L 23/645

* cited by examiner

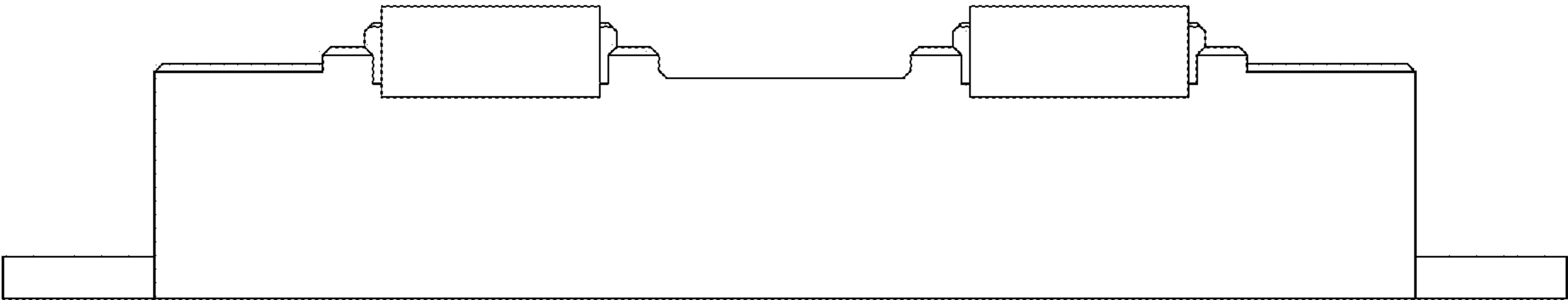


FIG. 1

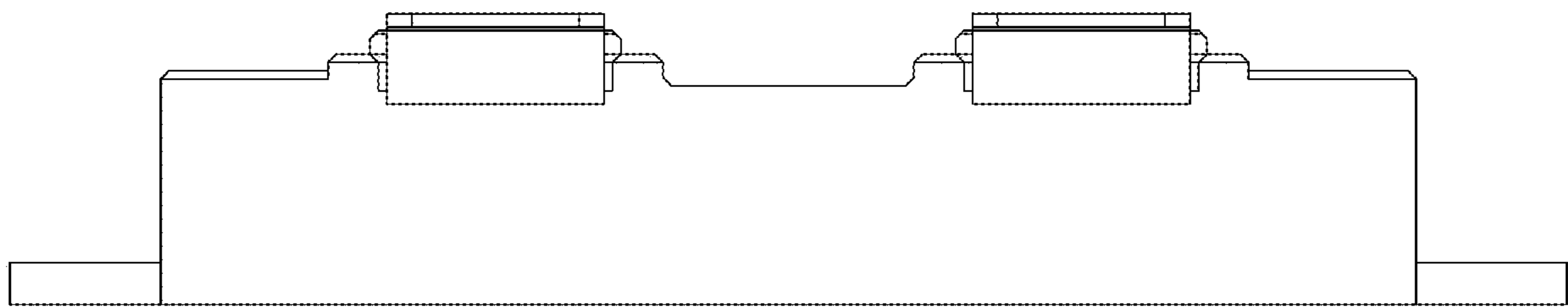


FIG. 2

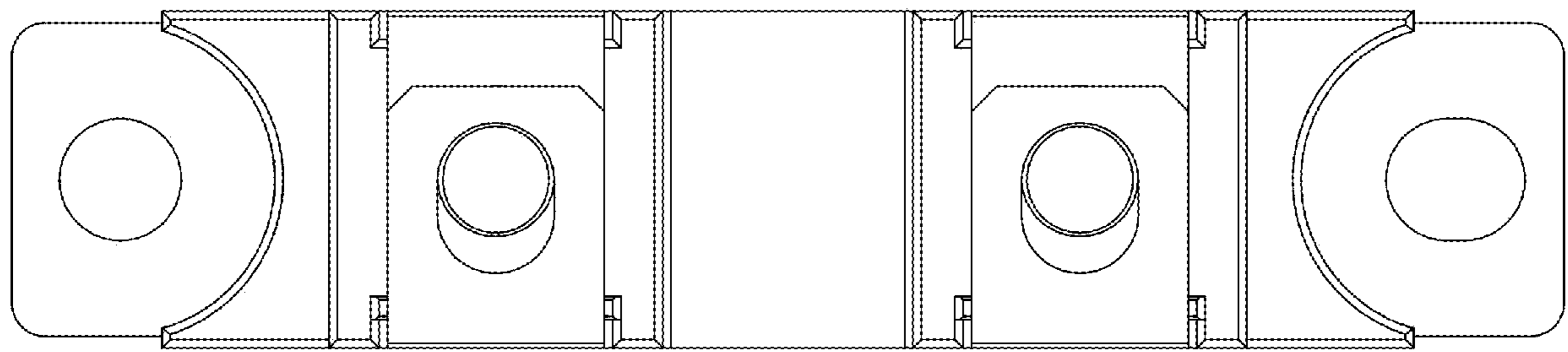


FIG. 3

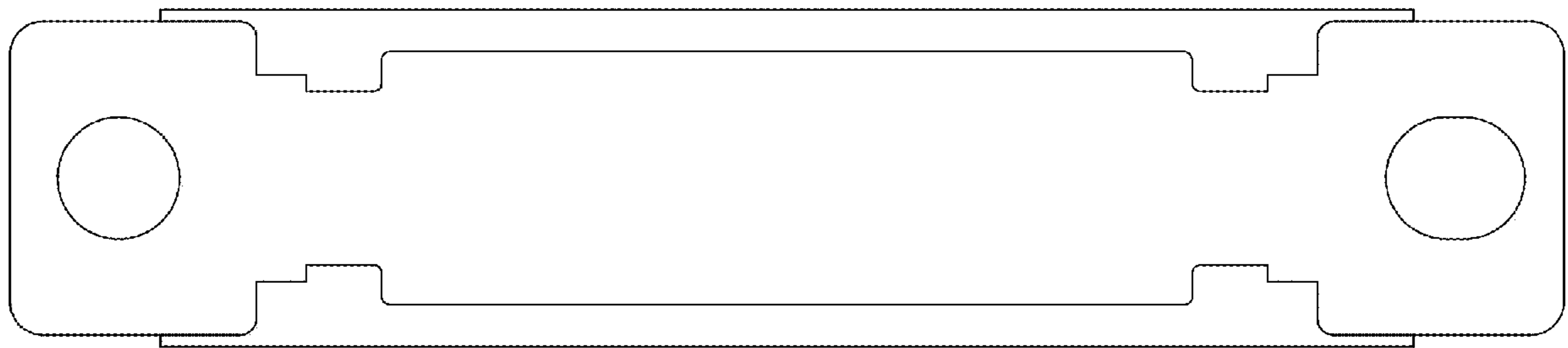


FIG. 4

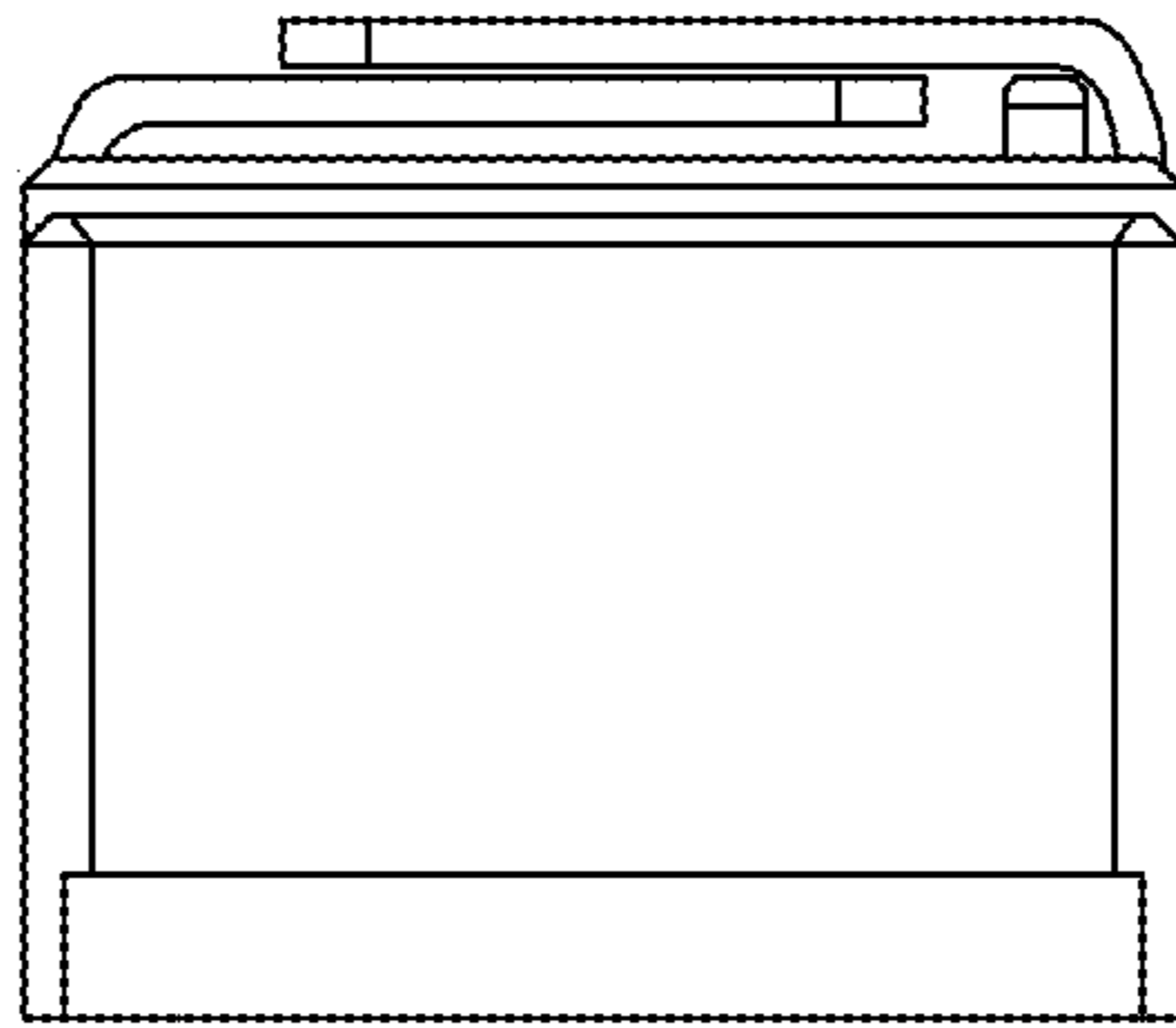


FIG. 5

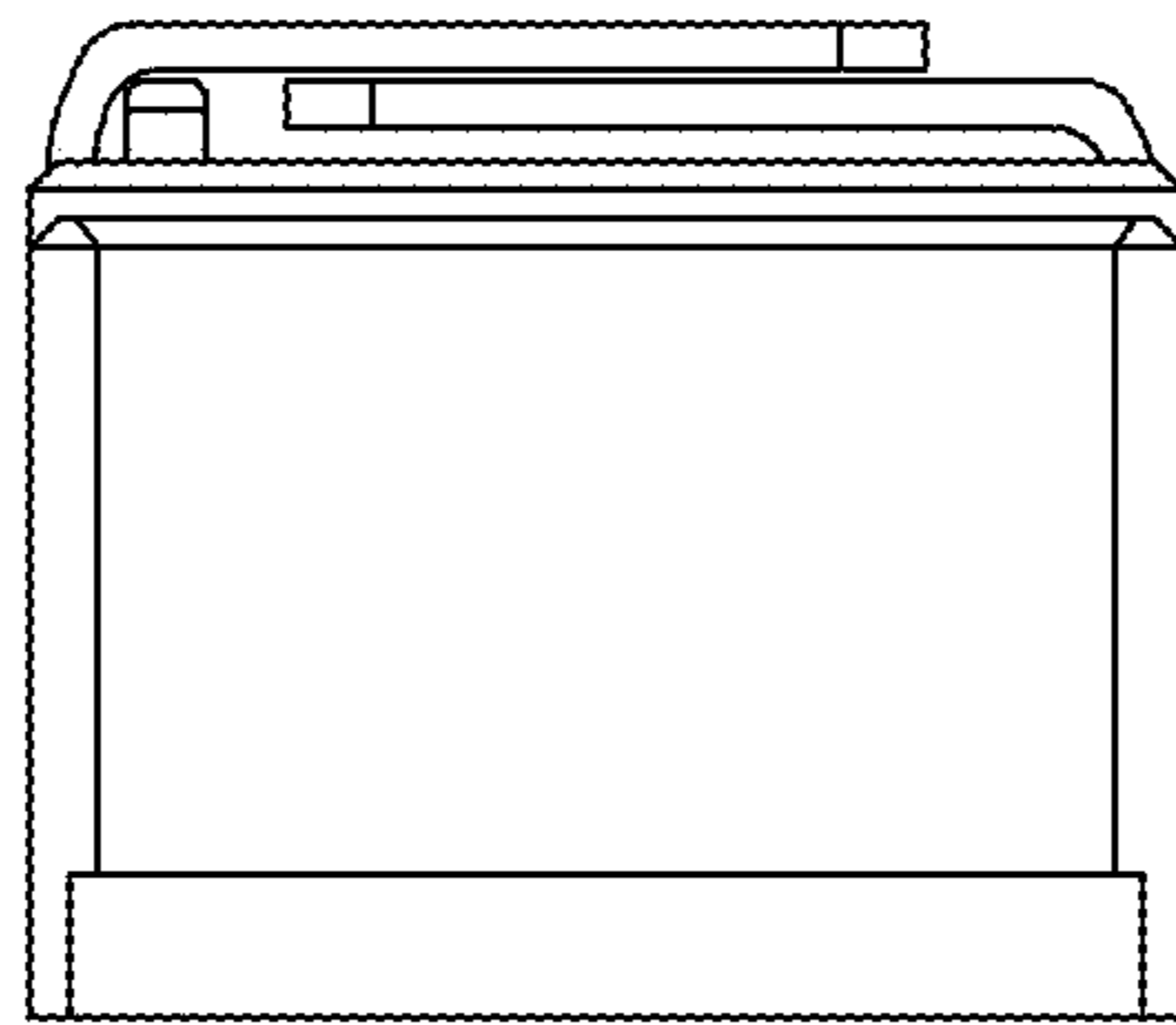


FIG. 6

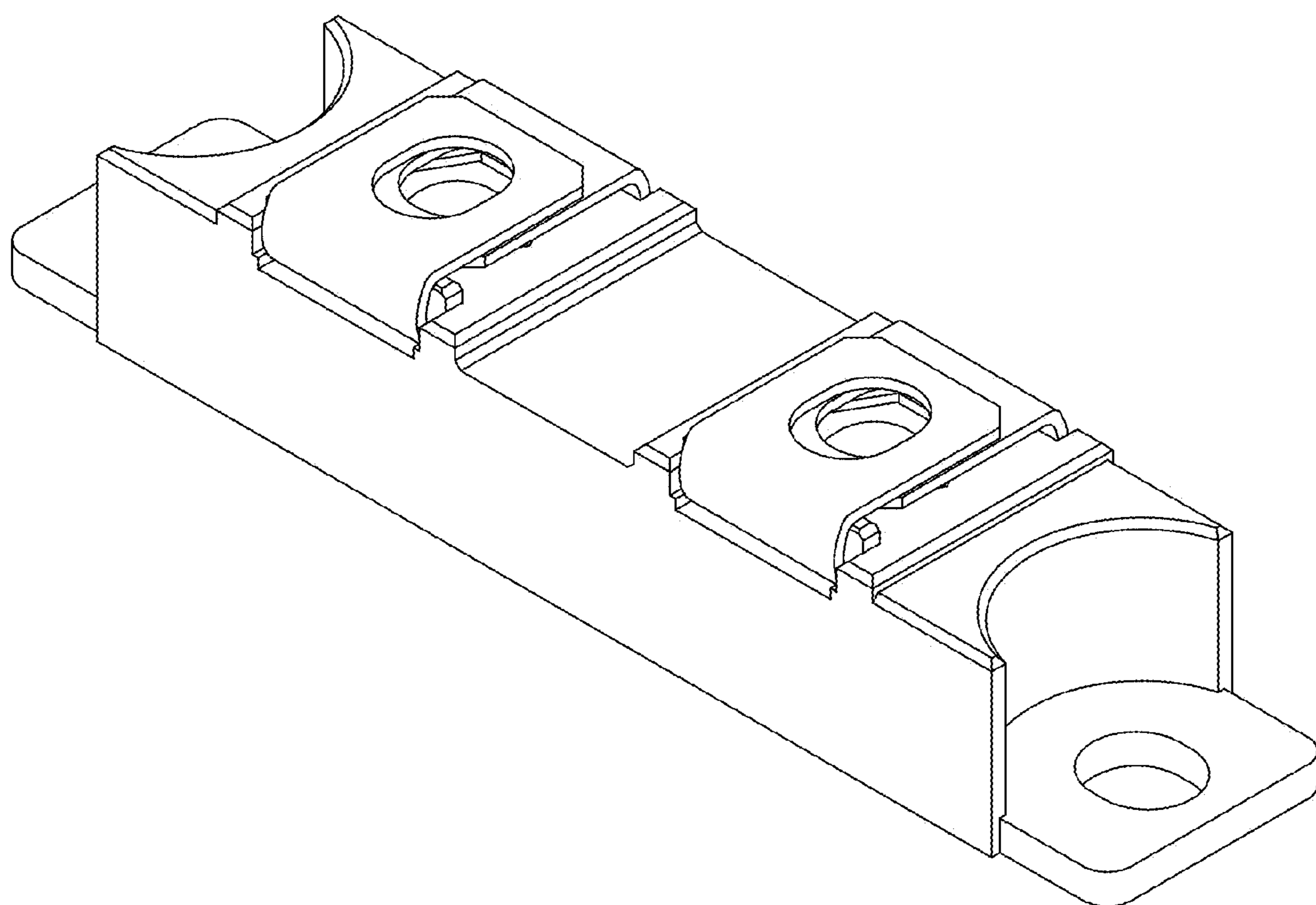


FIG. 7

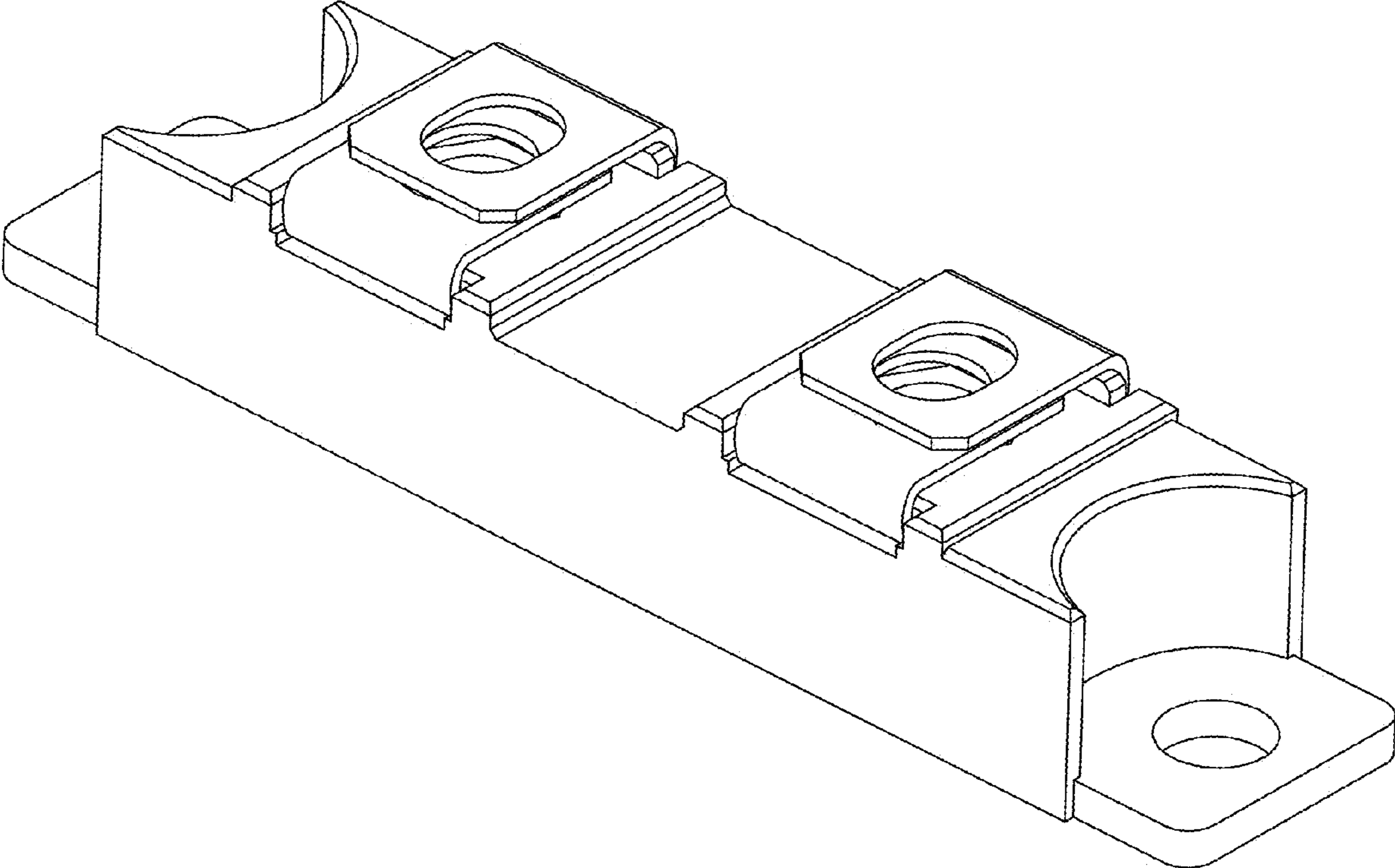


FIG. 8

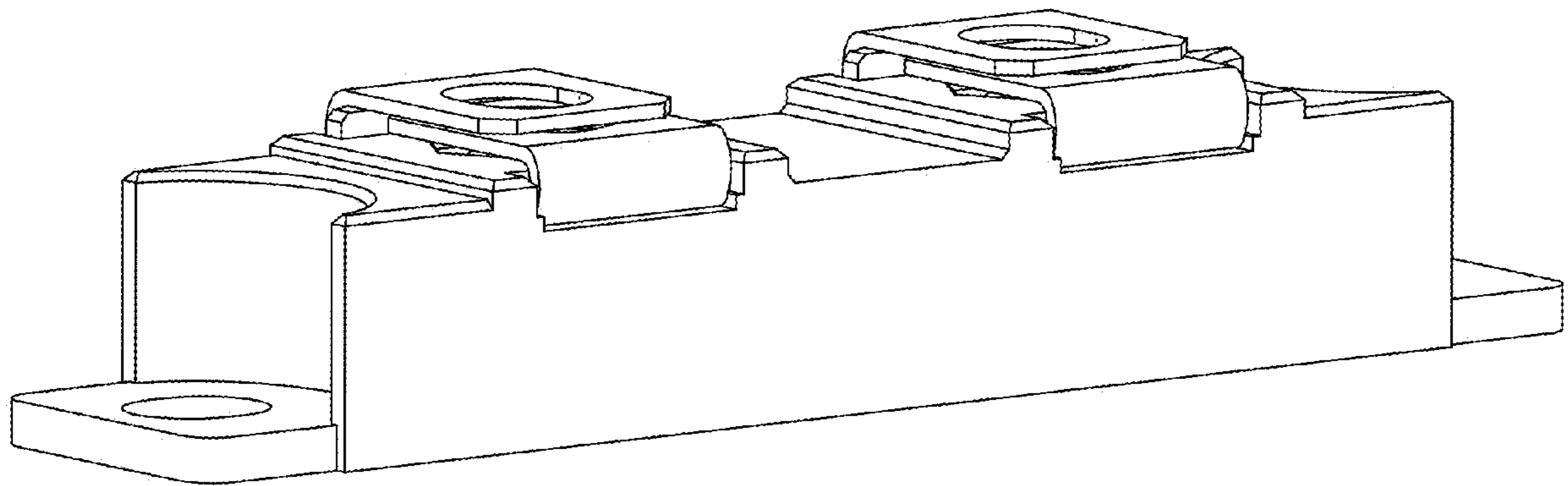


FIG. 9