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

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(54) **POWER SEMICONDUCTOR DEVICE**

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (10) Cl.** **13-03**
(52) **U.S. Cl.**
USPC **D13/182**
(58) **Field of Classification Search**
USPC D13/182; 257/678, 684, 690, 691; 361/679.01, 713, 728, 736, 760, 761, 772, 361/775, 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 23/02; 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;
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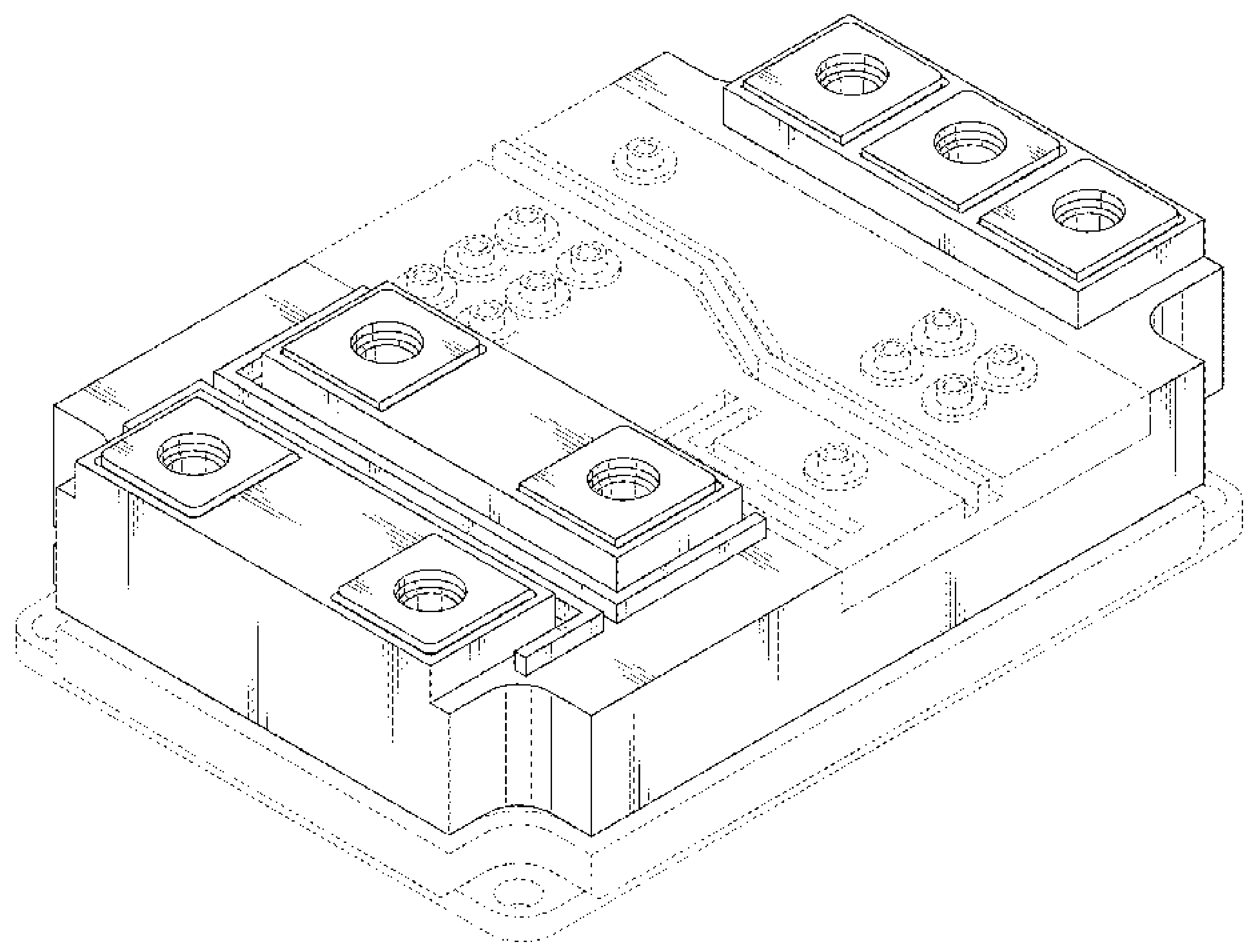
(57) **CLAIM**

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

DESCRIPTION

FIG. **1** is a front, left side, bottom perspective view of a power semiconductor device, showing our new design;
FIG. **2** is a front, right side, top perspective view thereof;
FIG. **3** is a front view thereof;
FIG. **4** is a rear view thereof;
FIG. **5** is a left side view thereof;
FIG. **6** is a right side view thereof;
FIG. **7** is a top view thereof;
FIG. **8** is a bottom view thereof;
FIG. **9** is a cross sectional view taken along line **9-9** in FIG. **3**; and,
FIG. **10** is another cross sectional view taken along line **10-10** in FIG. **3**.
The broken line showing of the power semiconductor device is included for the purpose of illustrating portions of the power semiconductor device and forms no part of the claimed design. The dot and dashed lines mean a boundary between the claimed portion and the non-claimed portion.

1 Claim, 9 Drawing Sheets



(58) **Field of Classification Search**

CPC 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.

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Fig. 1

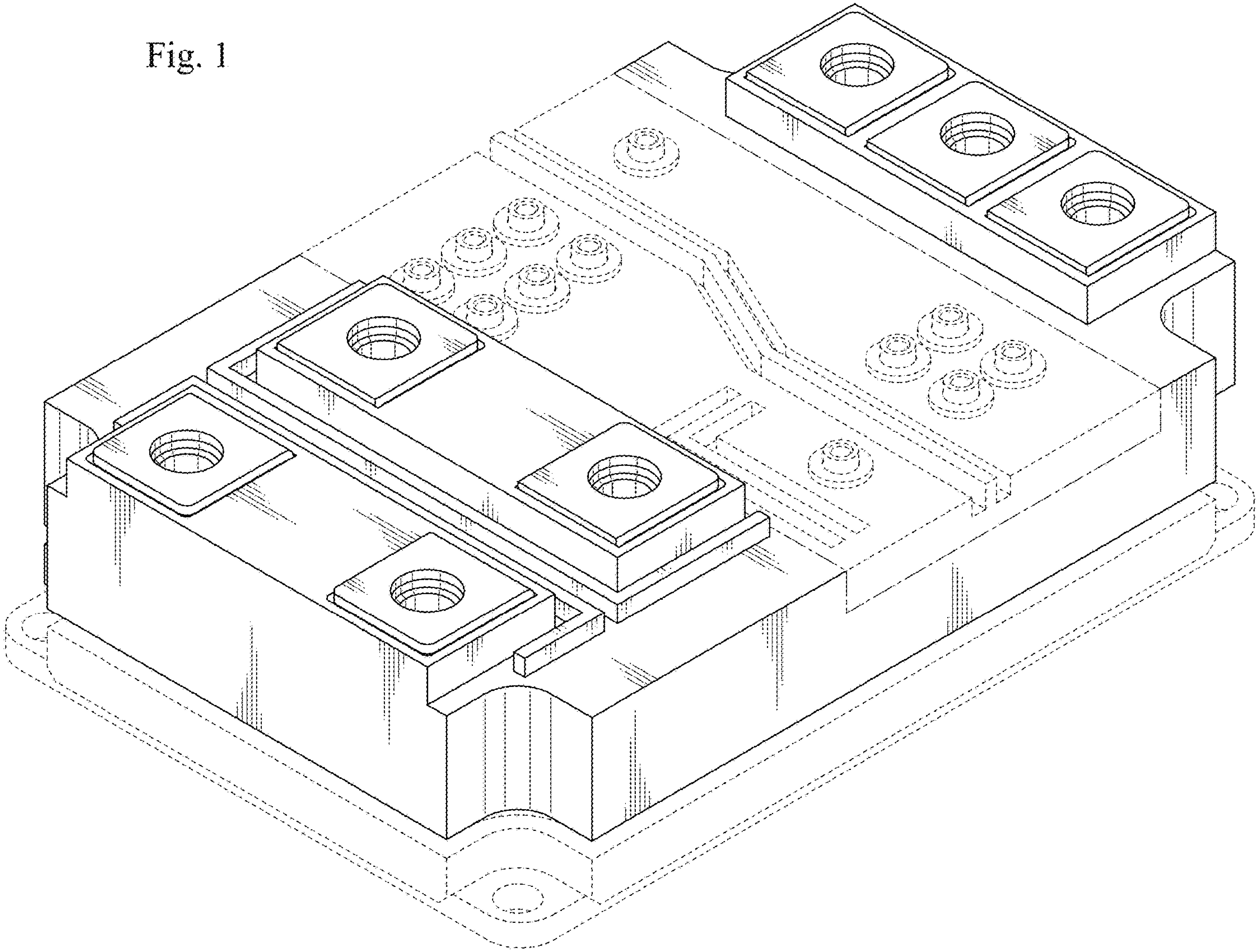
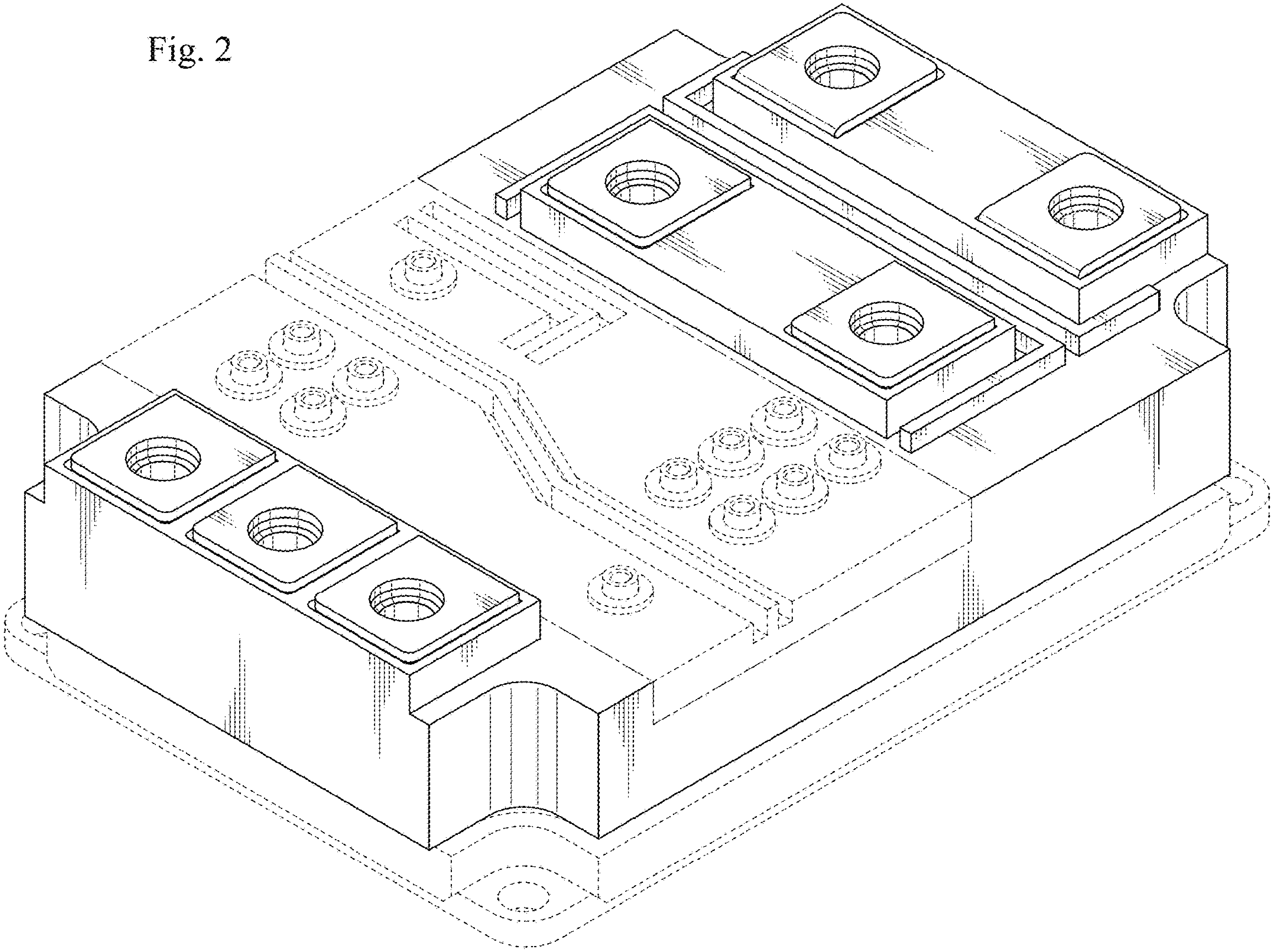


Fig. 2



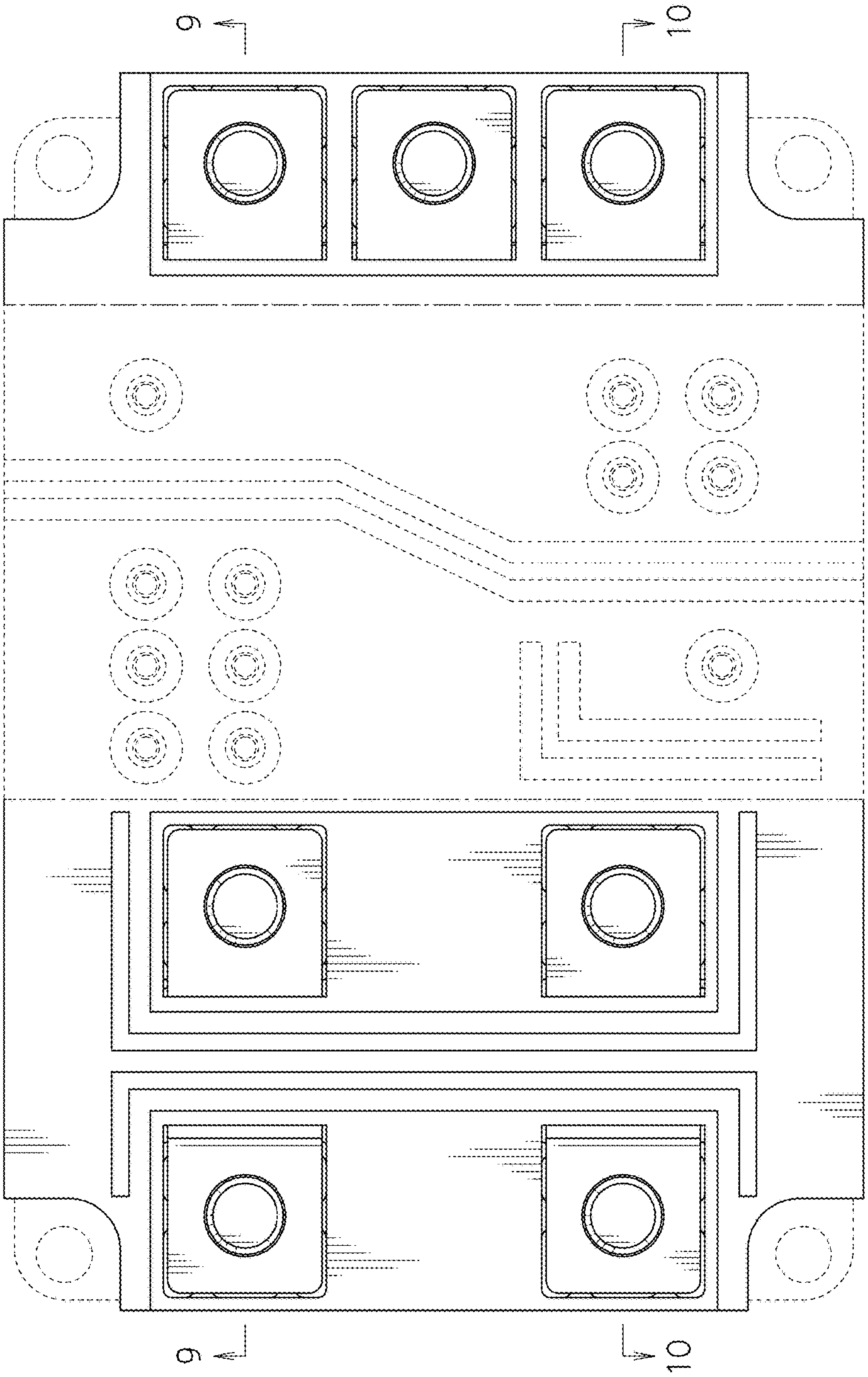
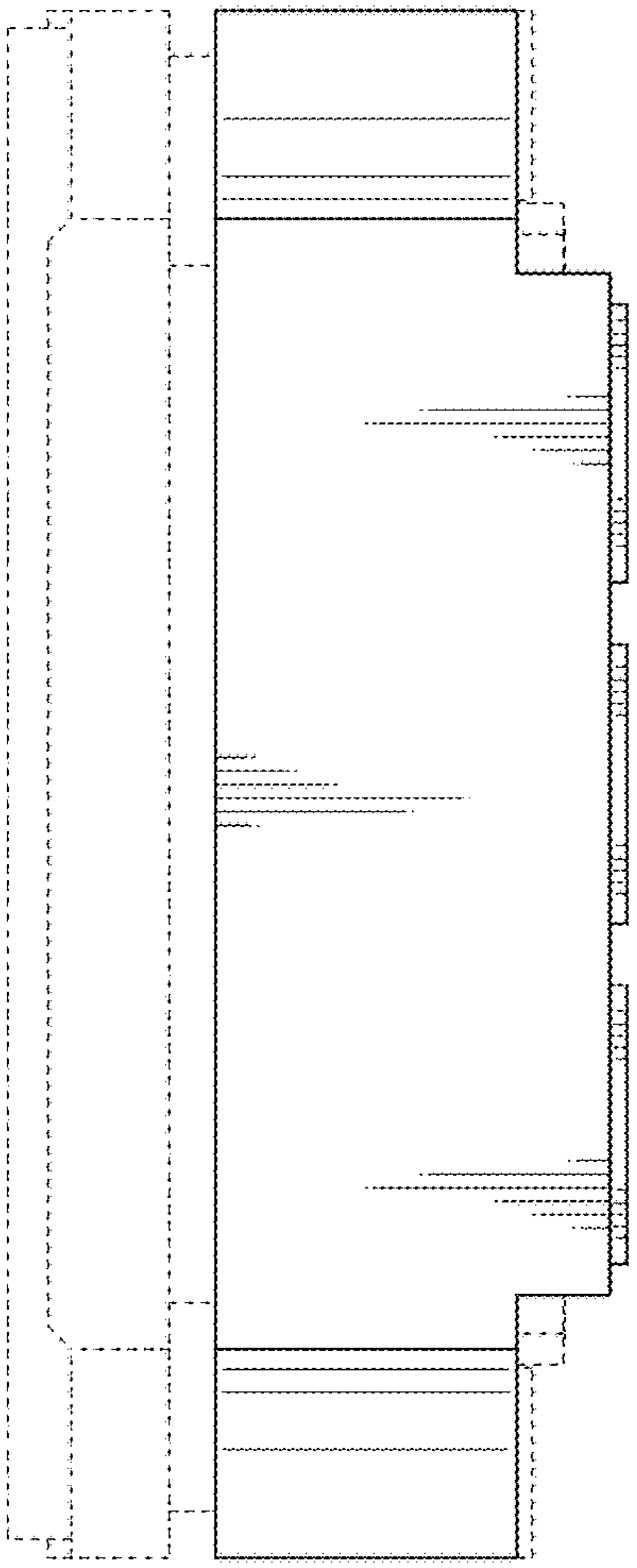


Fig. 3

Fig. 4

Fig. 5



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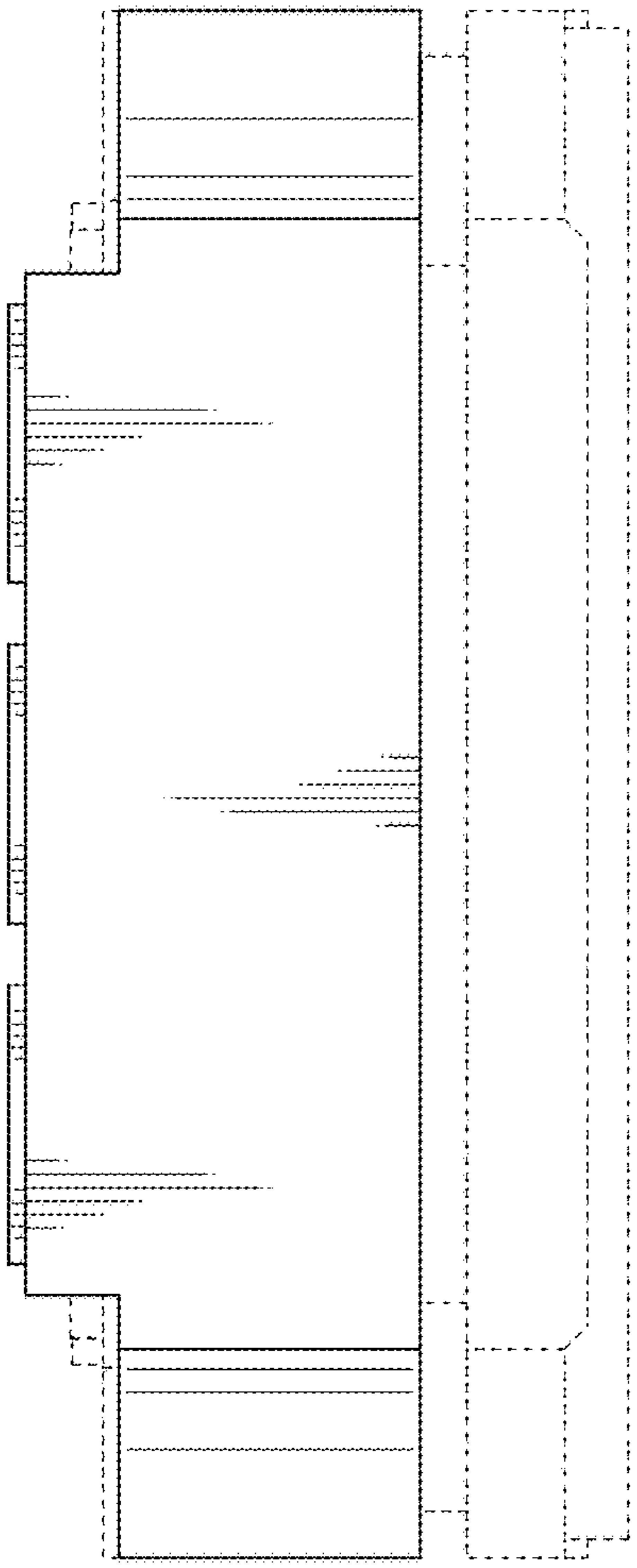

Fig. 7

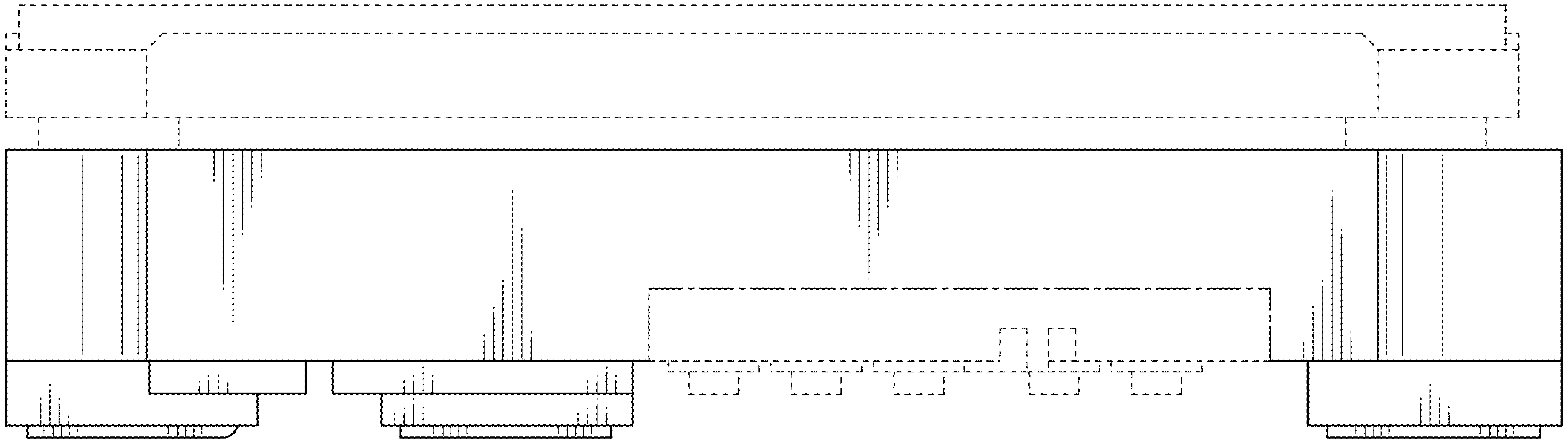

Fig. 8

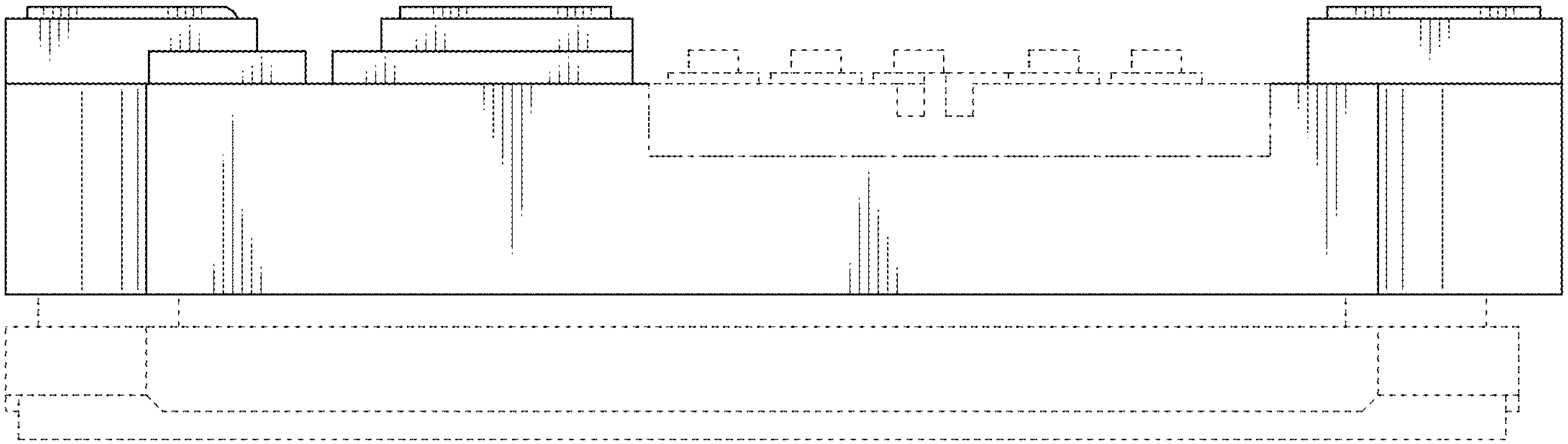

Fig. 9

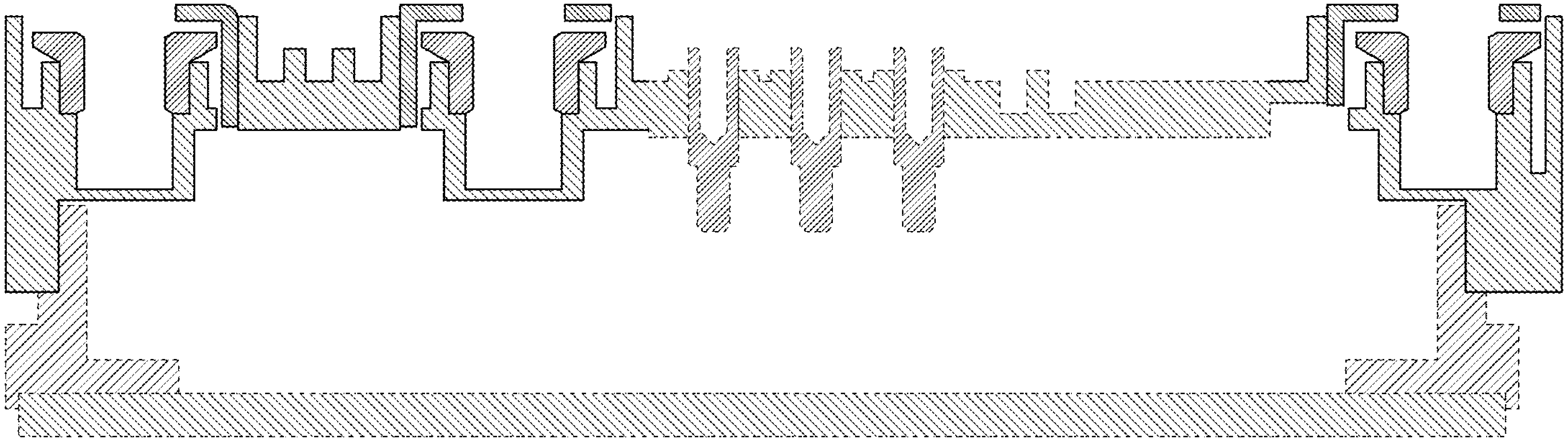

Fig. 10