



US00D845921S

(12) **United States Design Patent** (10) **Patent No.:** **US D845,921 S**
Saito (45) **Date of Patent:** **** Apr. 16, 2019**

(54) **SEMICONDUCTOR DEVICE**

(71) Applicant: **ROHM CO., LTD.**, Kyoto-shi, Kyoto (JP)

(72) Inventor: **Koshun Saito**, Kyoto (JP)

(73) Assignee: **ROHM CO., LTD.**, Kyoto (JP)

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

(21) Appl. No.: **29/623,907**

(22) Filed: **Oct. 27, 2017**

(30) **Foreign Application Priority Data**

May 2, 2017 (JP) 2017-009670

(51) **LOC (11) Cl.** **13-03**

(52) **U.S. Cl.**

USPC **D13/182**

(58) **Field of Classification Search**

USPC D13/182; D8/349, 354, 381, 364, 315;
D25/126, 136; 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
23/12; 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

D396,847 S * 8/1998 Nakayama D13/182
5,949,294 A * 9/1999 Kondo H01L 23/58
310/340

(Continued)

FOREIGN PATENT DOCUMENTS

JP 925569 S 6/1995
JP 1078478-001 8/2000

OTHER PUBLICATIONS

Office Action issued for counterpart Japanese Design Application No. 2017-009670, dated Aug. 25, 2017, 6 pages including English translation.

Primary Examiner — Elizabeth J Oswecki
(74) *Attorney, Agent, or Firm* — Hamre, Schumann,
Mueller & Larson, P.C.

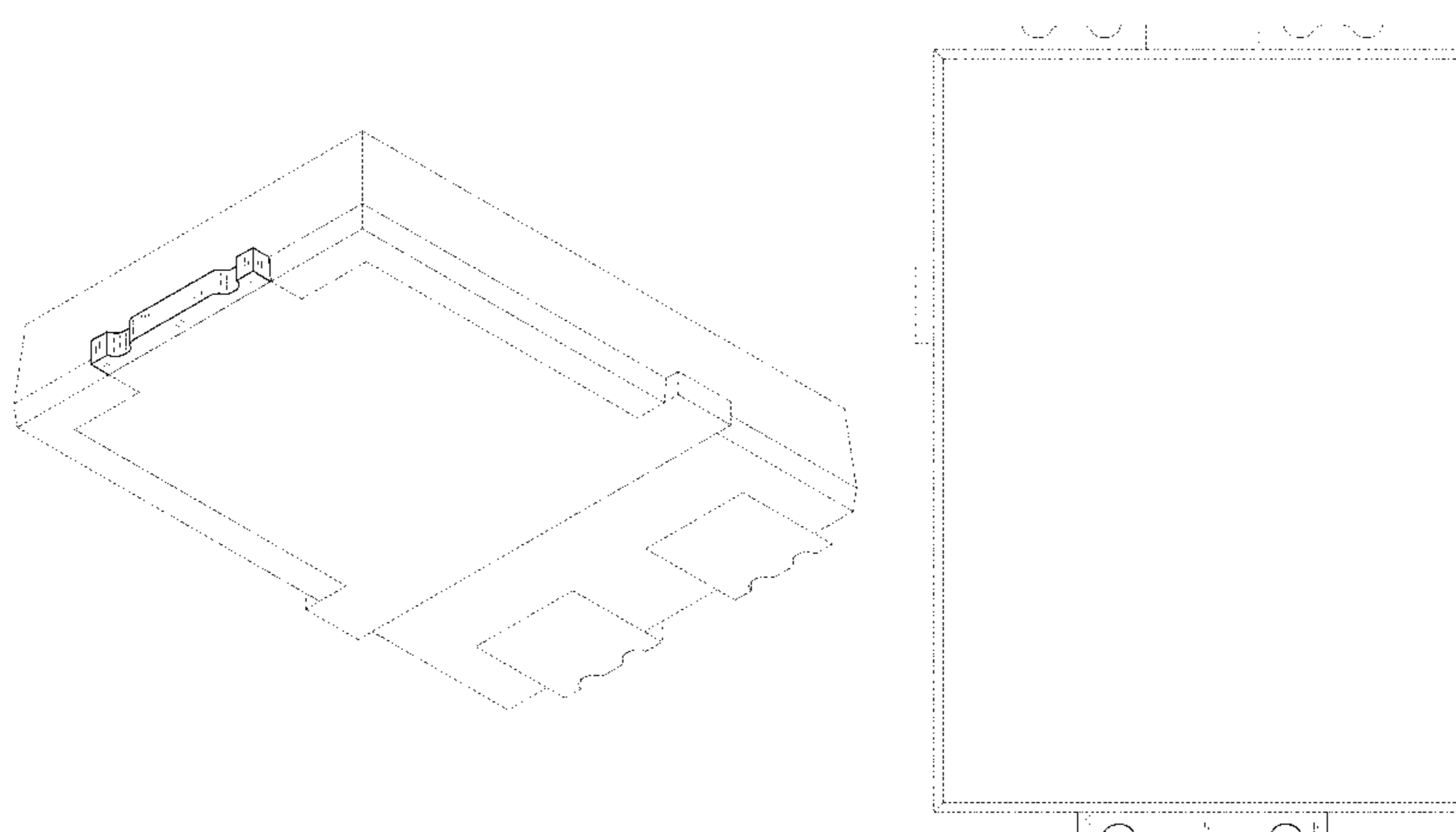
(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a perspective view of a semiconductor device showing my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a top plan view thereof;
FIG. 5 is a bottom plan view thereof; and,
FIG. 6 is a right-side view thereof, the left-side view being a mirror image of FIG. 6.
The broken lines illustrate portions of the semiconductor device and form no part of the claimed design. The dash-dotted lines denote the boundary of the claim and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D416,236 S * 11/1999 Kobayashi D13/182
5,991,162 A * 11/1999 Saso H05K 1/0207
257/700
D444,132 S * 6/2001 Iwanishi D13/182
6,330,165 B1 * 12/2001 Kohjiro H01L 23/04
174/250
6,355,877 B1 * 3/2002 Watanabe H05K 9/006
174/351
D466,873 S * 12/2002 Kasem D13/182
D472,528 S * 4/2003 Kasem D13/182
D476,962 S * 7/2003 Yoshihira D13/182
D489,338 S * 5/2004 Seddon D13/182
D508,682 S * 8/2005 Yamada D13/182
6,992,386 B2 * 1/2006 Hata H01L 23/49562
257/735
D605,930 S * 12/2009 Piersant D8/381
D632,948 S * 2/2011 Travis D8/354
D689,053 S * 9/2013 Nilsson D14/436
D692,896 S * 11/2013 Nilsson D14/436
D796,459 S * 9/2017 Iwai D13/182
D822,629 S * 7/2018 Kimura D13/182
D832,227 S * 10/2018 Chikamatsu D13/182
D832,228 S * 10/2018 Chikamatsu D13/182
2001/0038143 A1 * 11/2001 Sonobe H01L 24/29
257/690

* cited by examiner

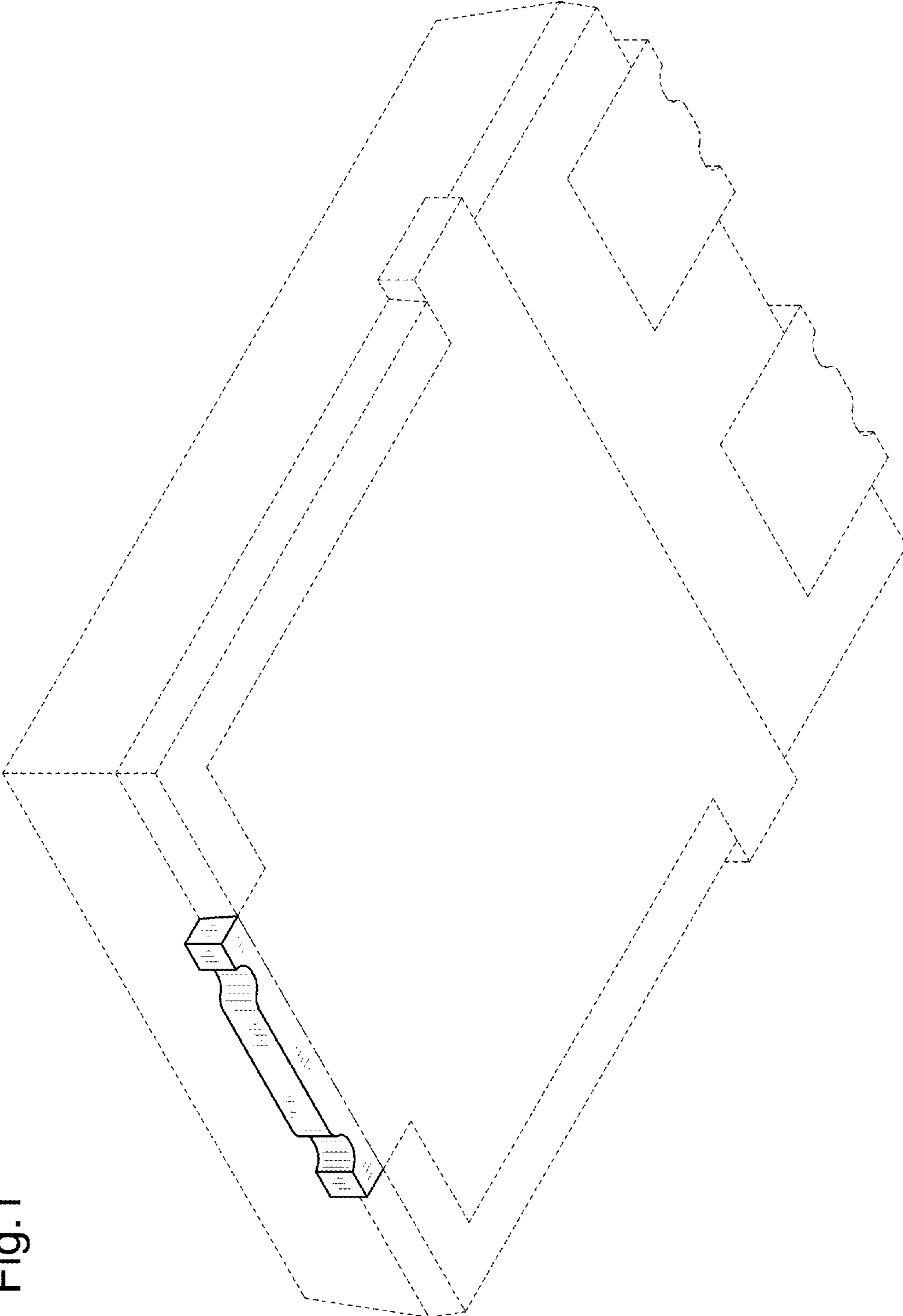


Fig.1

Fig.2

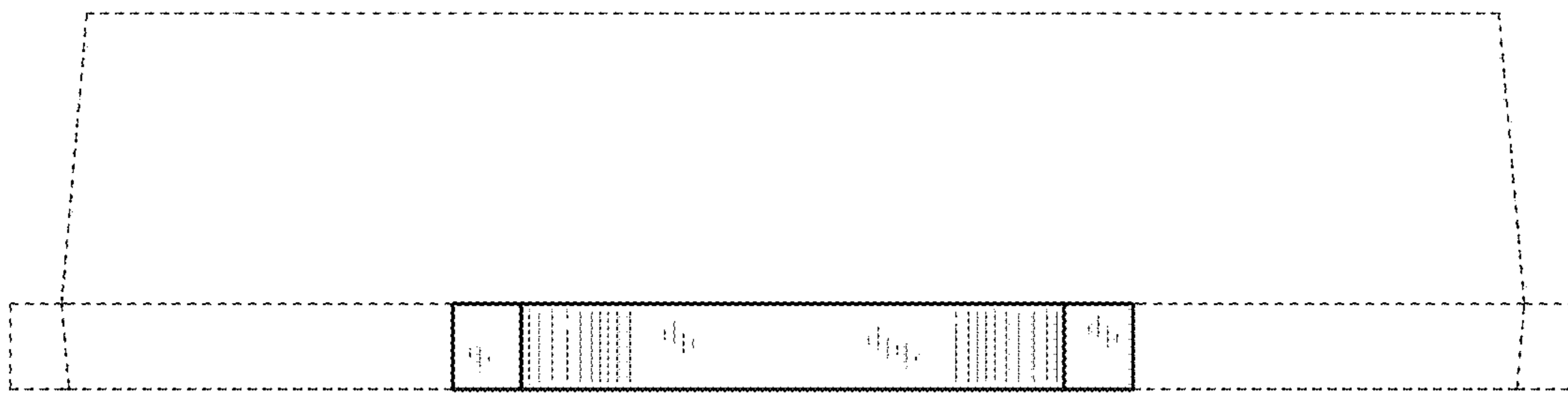


Fig.3

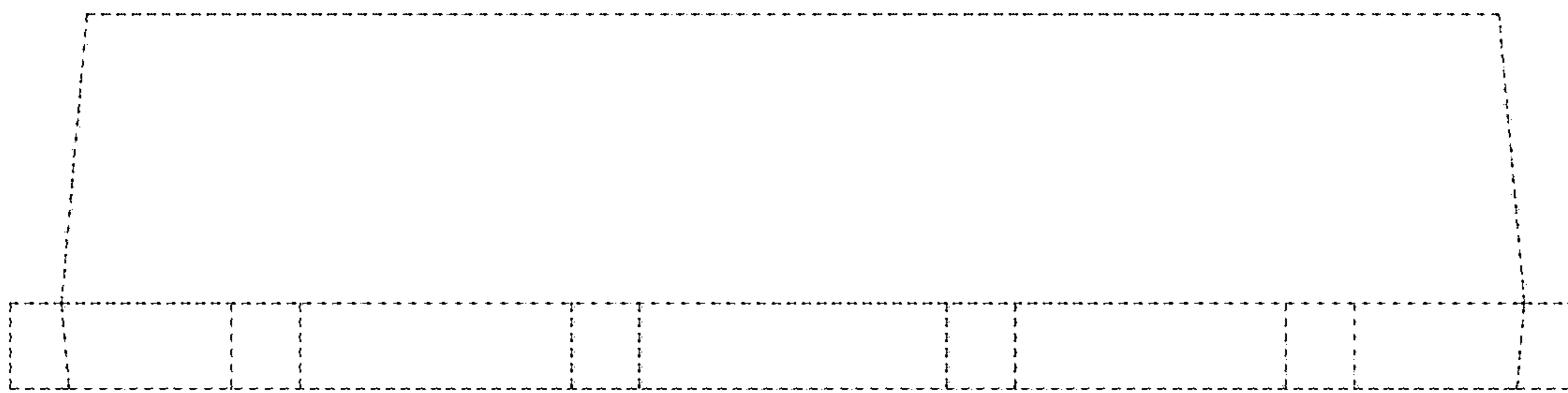


Fig.4

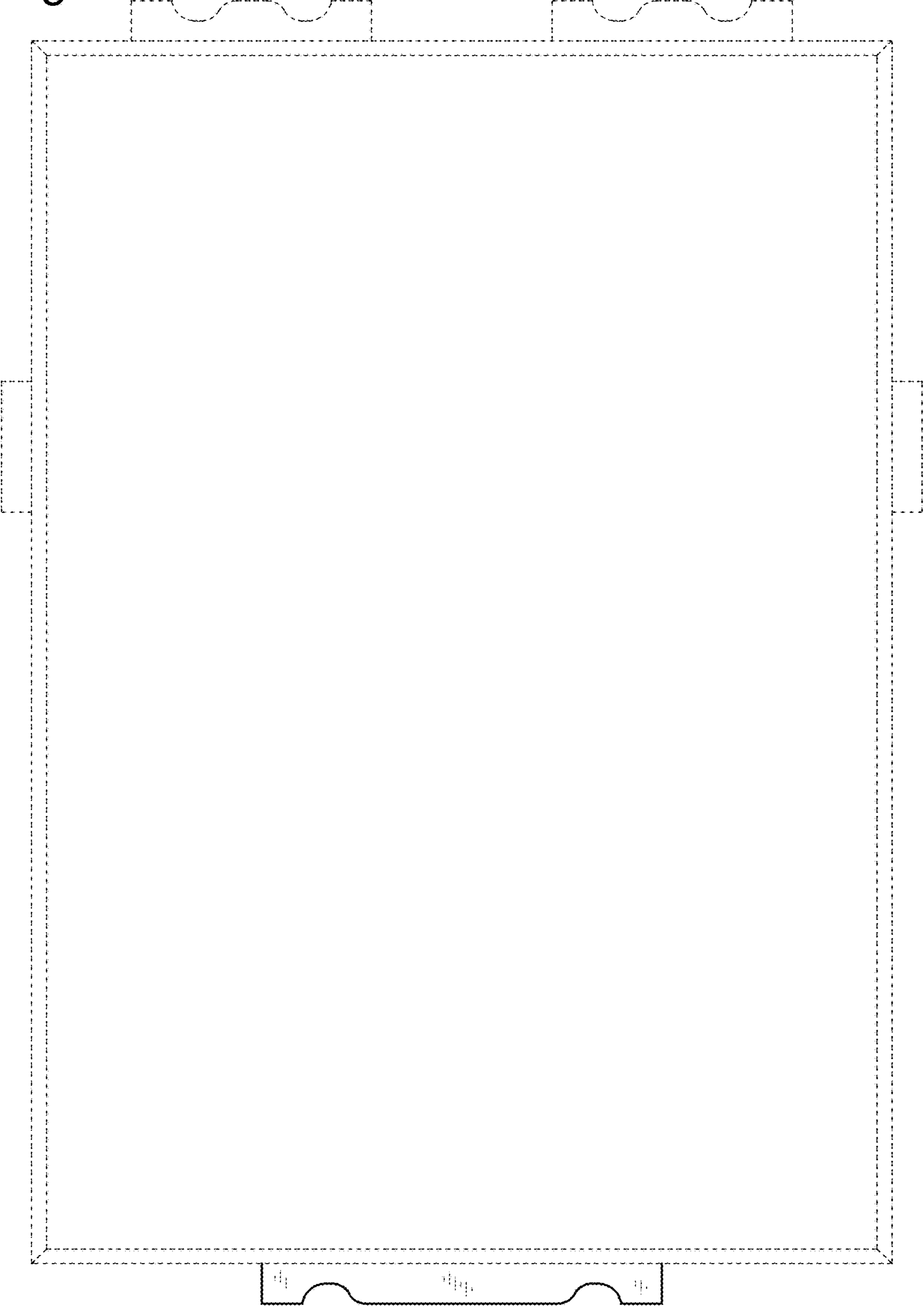


Fig.5

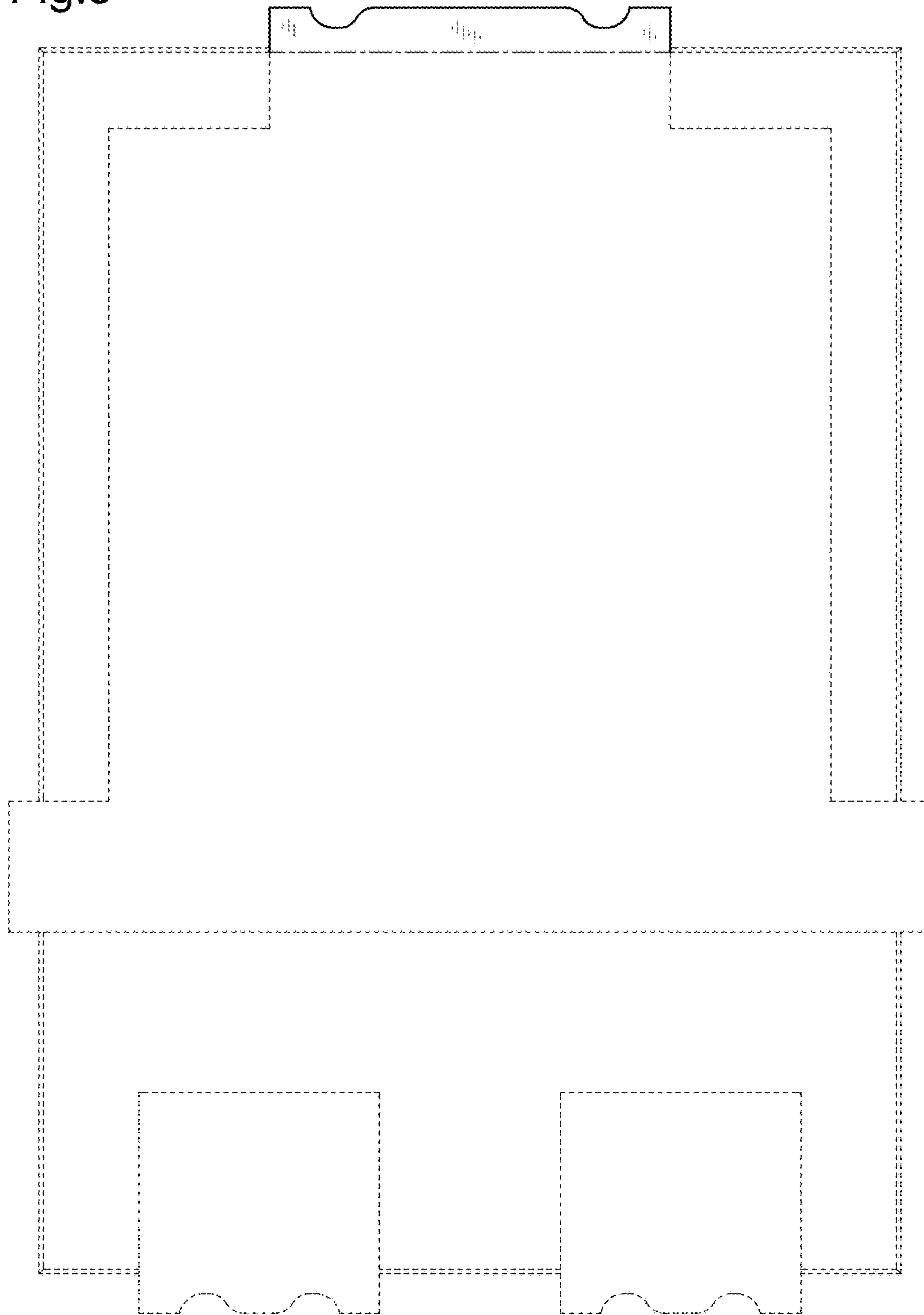


Fig.6

