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(12) **United States Design Patent**  
**Saito**

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(54) **SEMICONDUCTOR DEVICE**

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

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

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

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(58) **Field of Classification Search**

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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  
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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.

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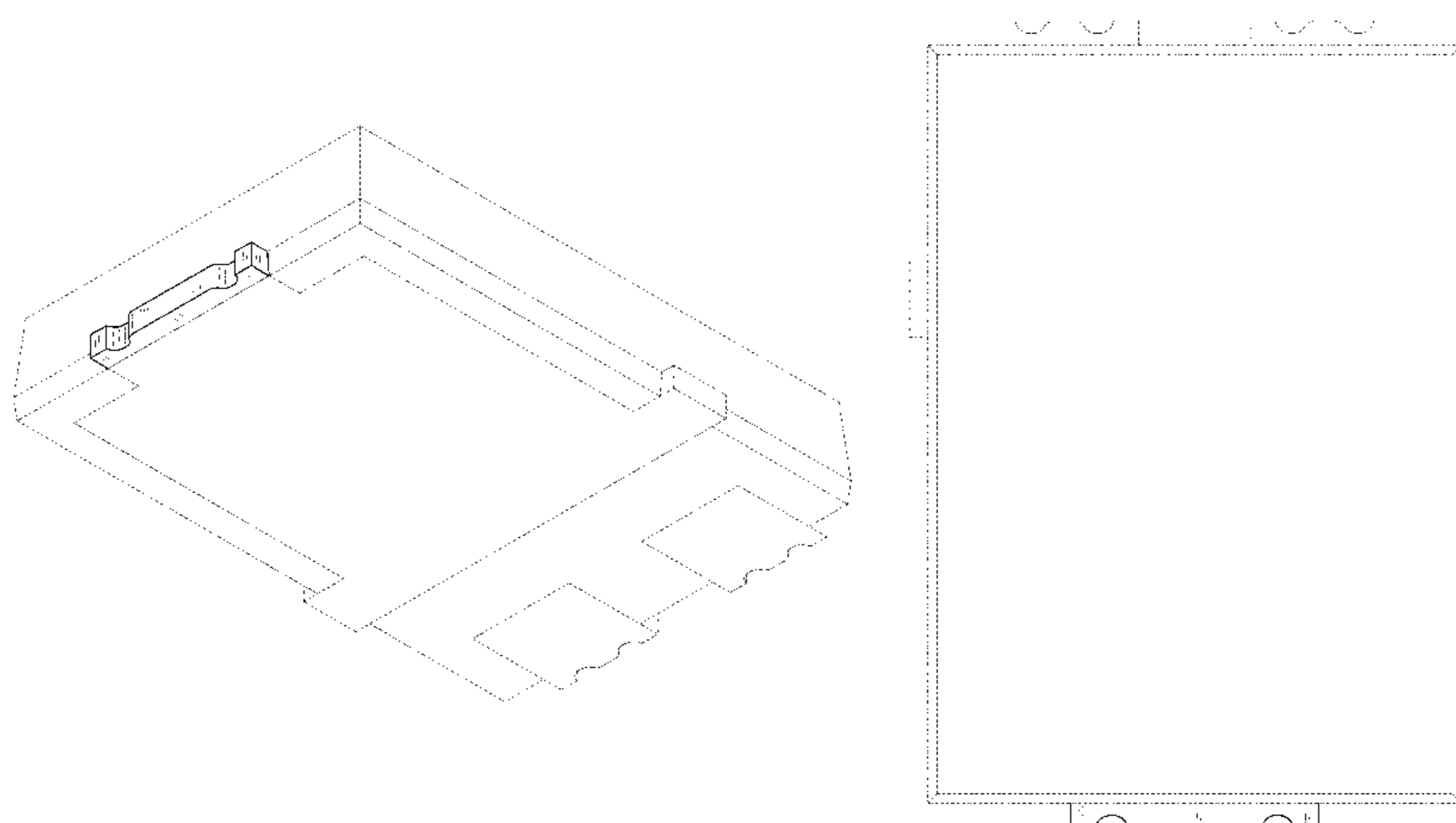
(57) **CLAIM**

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

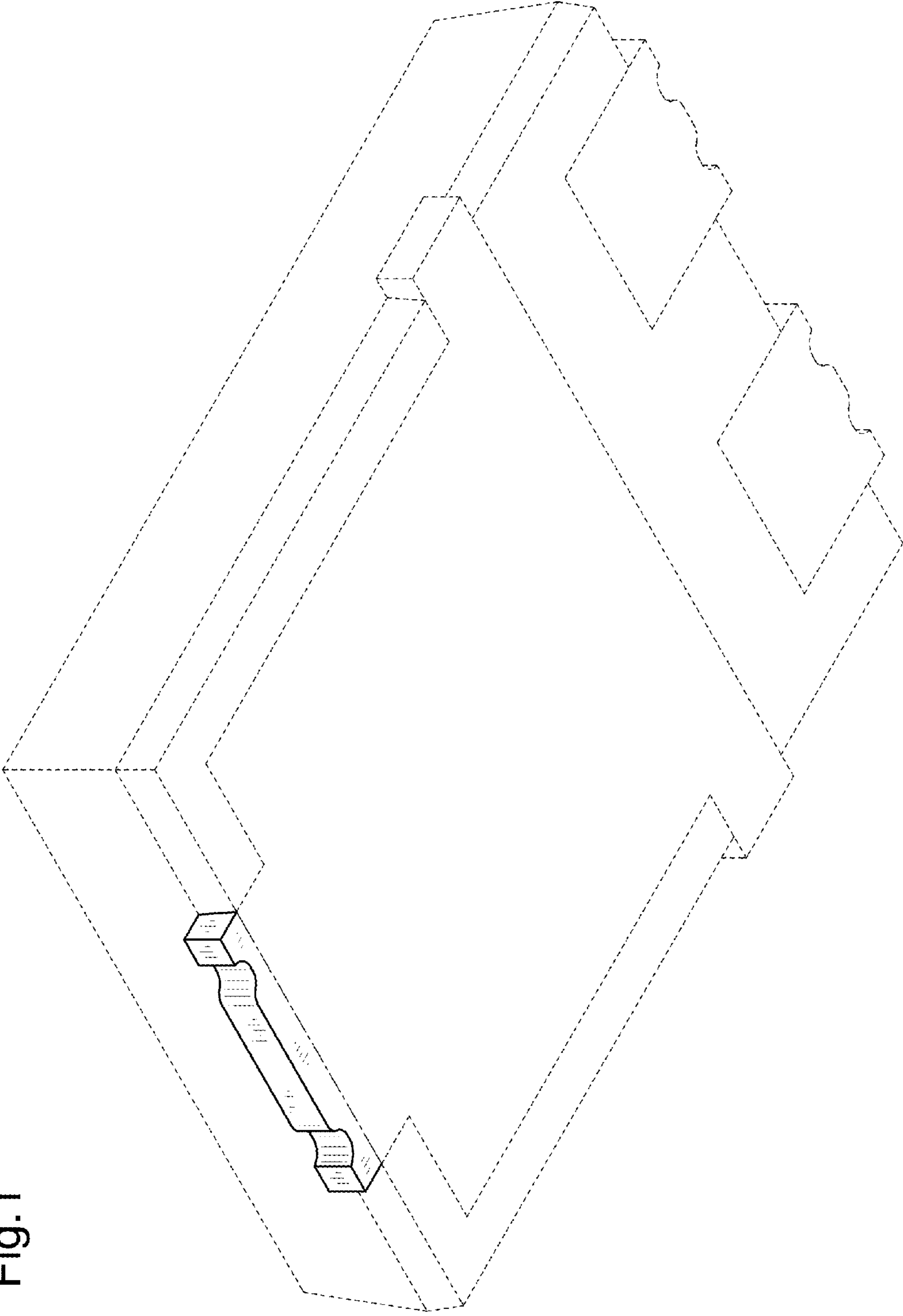


Fig.1

Fig.2

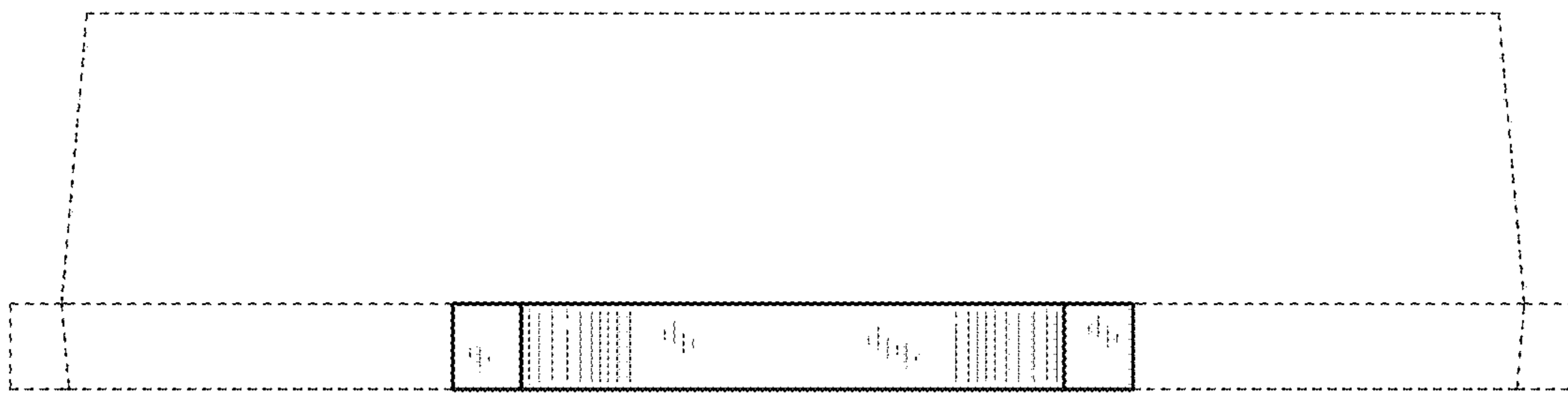


Fig.3

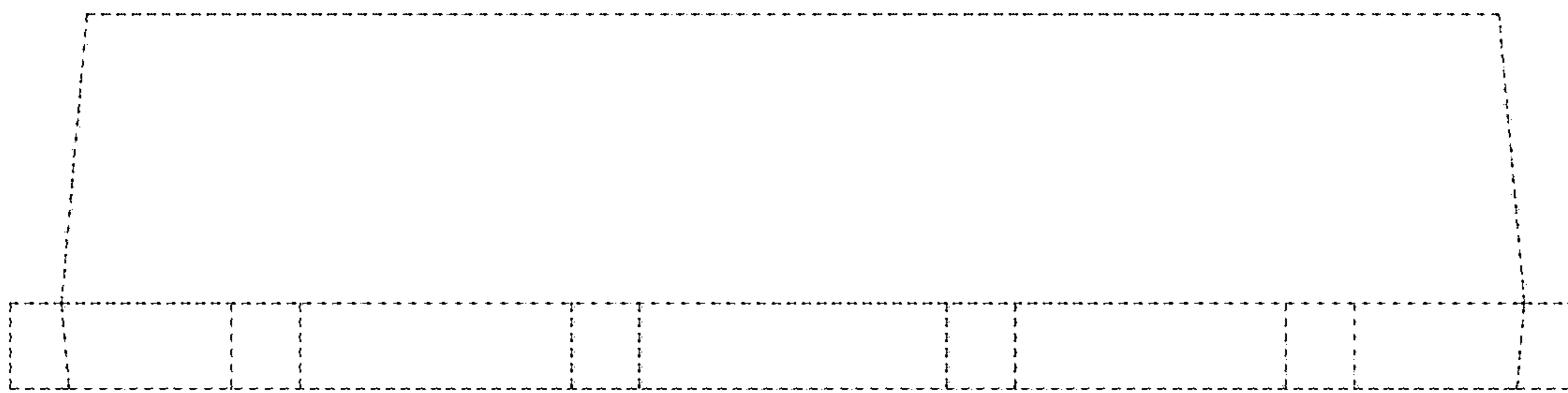


Fig.4

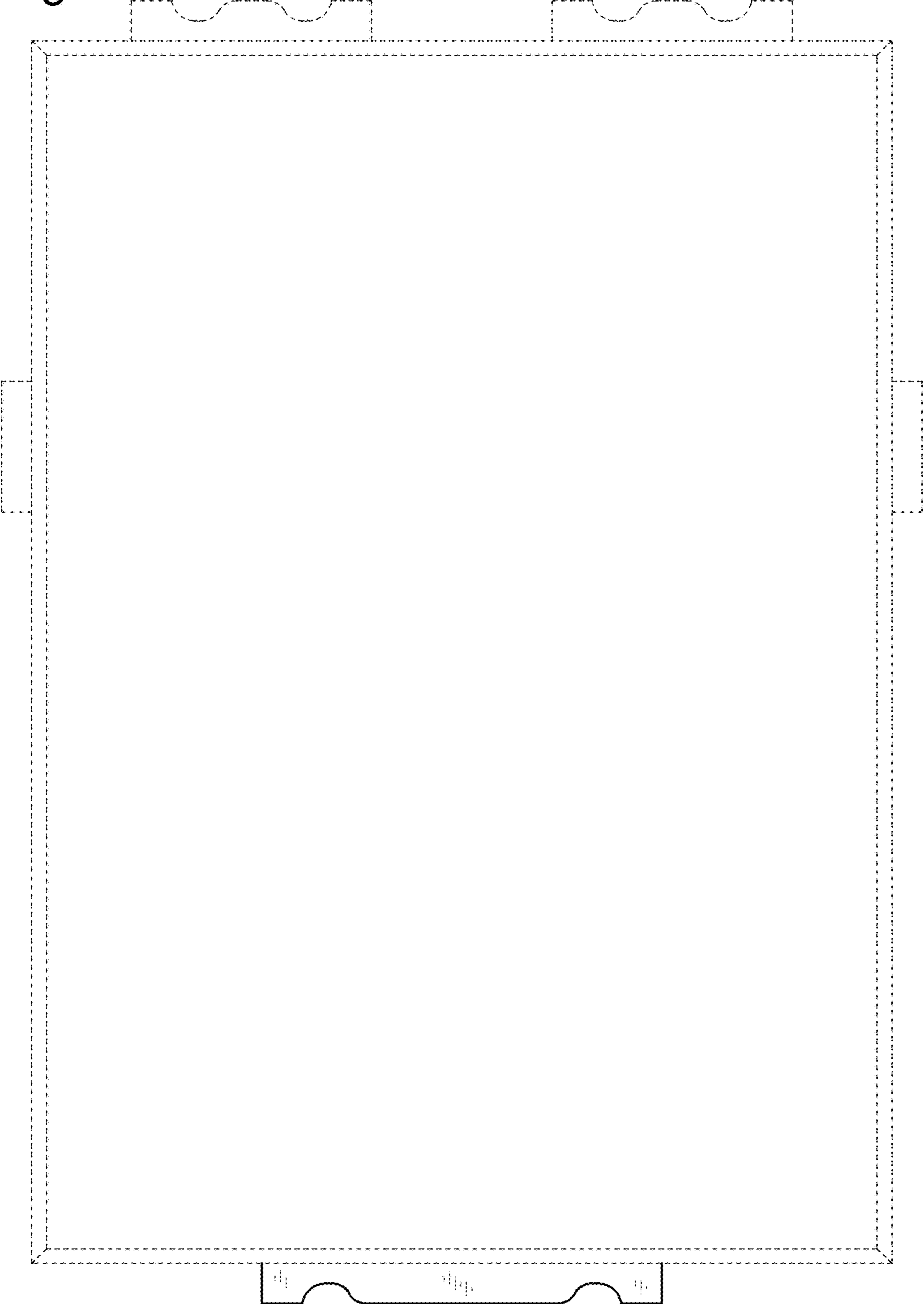


Fig.5

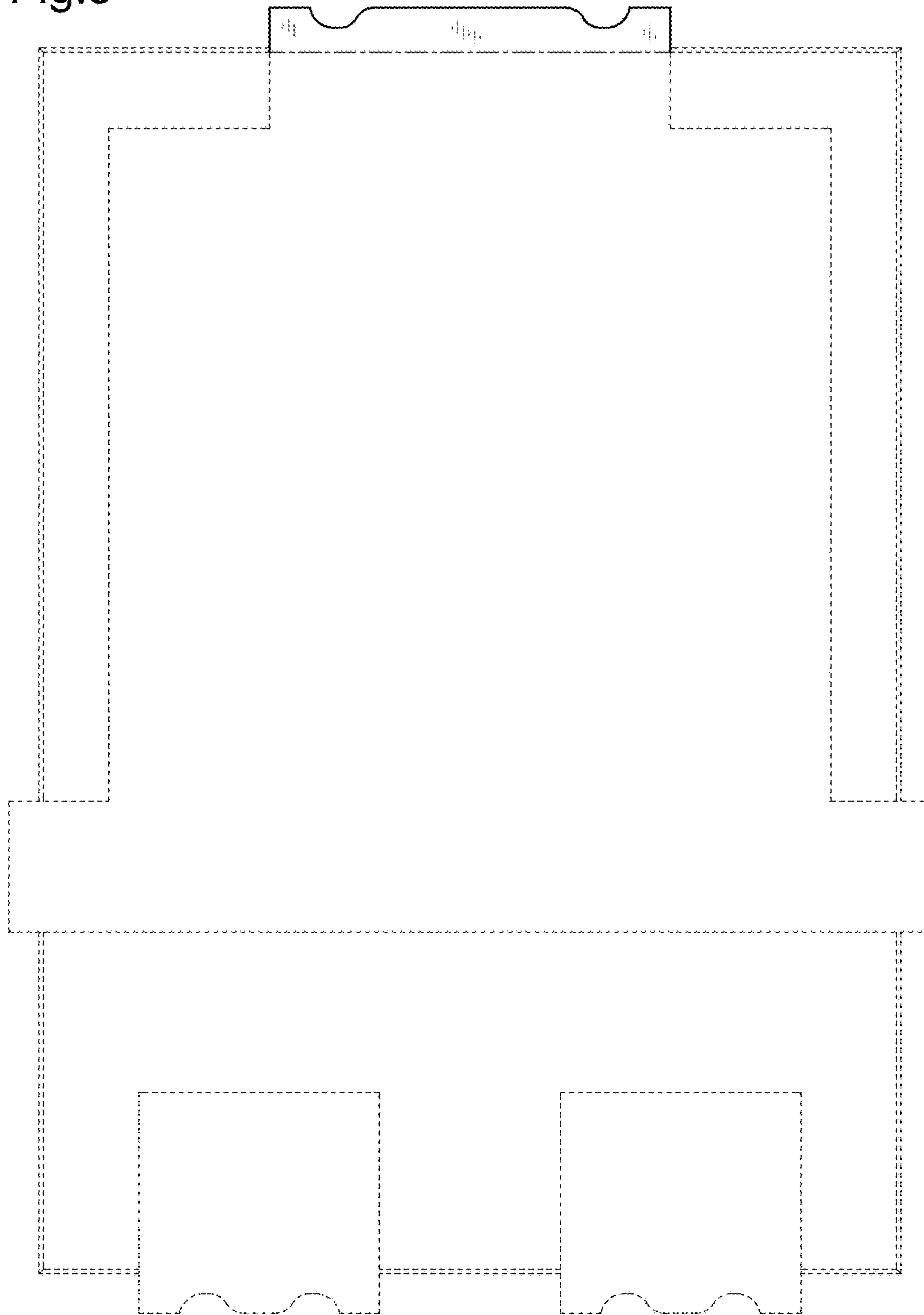


Fig.6

