



US00D754083S

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

(10) **Patent No.:** **US D754,083 S**
(45) **Date of Patent:** **** Apr. 19, 2016**

- (54) **ELECTRIC TERMINAL**
- (71) Applicant: **VLT, Inc.**, Sunnyvale, CA (US)
- (72) Inventors: **Patrizio Vinciarelli**, Boston, MA (US);
Michael B. LaFleur, East Hampstead,
NH (US)
- (73) Assignee: **VLT, Inc.**, Sunnyvale, CA (US)
- (**) Term: **14 Years**
- (21) Appl. No.: **29/470,060**
- (22) Filed: **Oct. 17, 2013**
- (51) **LOC (10) Cl.** **13-03**
- (52) **U.S. Cl.**
USPC **D13/182**
- (58) **Field of Classification Search**
USPC D13/182; 257/678, 690; 361/679.31,
361/719, 720, 752, 777, 820
CPC H01L 21/00; H01L 21/02; H01L 23/3675;
H01L 23/3677; H01L 23/48; H01L 23/481;
H01L 23/50; H01L 23/482; H01L 23/52;
H01L 23/498; H01L 23/49805; H01L
23/49811; H05K 7/1422; H05K 7/1424;
H05K 7/1427; H05K 7/1428
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
- 3,579,046 A * 5/1971 Jordan H05K 5/00
174/535
- 4,338,621 A * 7/1982 Braun H01L 23/057
174/549
- 4,698,663 A * 10/1987 Sugimoto H01L 23/055
174/16.3
- D317,300 S * 6/1991 Hasegawa D13/182
- 5,066,999 A * 11/1991 Casper H01L 27/0802
257/786
- 5,757,082 A * 5/1998 Shibata H01L 24/05
257/48
- 5,994,772 A * 11/1999 Shin H01L 23/13
257/686

- 6,078,505 A * 6/2000 Turudic H05K 3/3436
174/255
- 6,348,742 B1 * 2/2002 MacPherson H01L 22/32
257/48
- D466,093 S * 11/2002 Ebihara D13/182
- 6,476,505 B2 * 11/2002 Nakamura H01L 23/528
257/203
- 6,483,038 B2 * 11/2002 Lee G06K 19/07743
174/255
- D471,167 S * 3/2003 Ebihara D13/182
- D485,536 S * 1/2004 Dang D13/182
- D540,272 S * 4/2007 Higashibata D13/182
- D547,371 S * 7/2007 Miller D19/1
- D601,520 S * 10/2009 Yokota D13/182
- D612,347 S * 3/2010 Yokota D13/182
- D633,054 S * 2/2011 Fujihara D13/180
- D633,450 S * 3/2011 Fujihara D13/180
- D638,809 S * 5/2011 Morikawa D13/180

(Continued)

OTHER PUBLICATIONS

Mitsubishi Electric Corporation, Release No. 2647, Mitsubishi Electric Launches 1200V/50A Large-Type Dual In-Line Package Intelligent Power Module, Jan. 26, 2012, 2 pages.

(Continued)

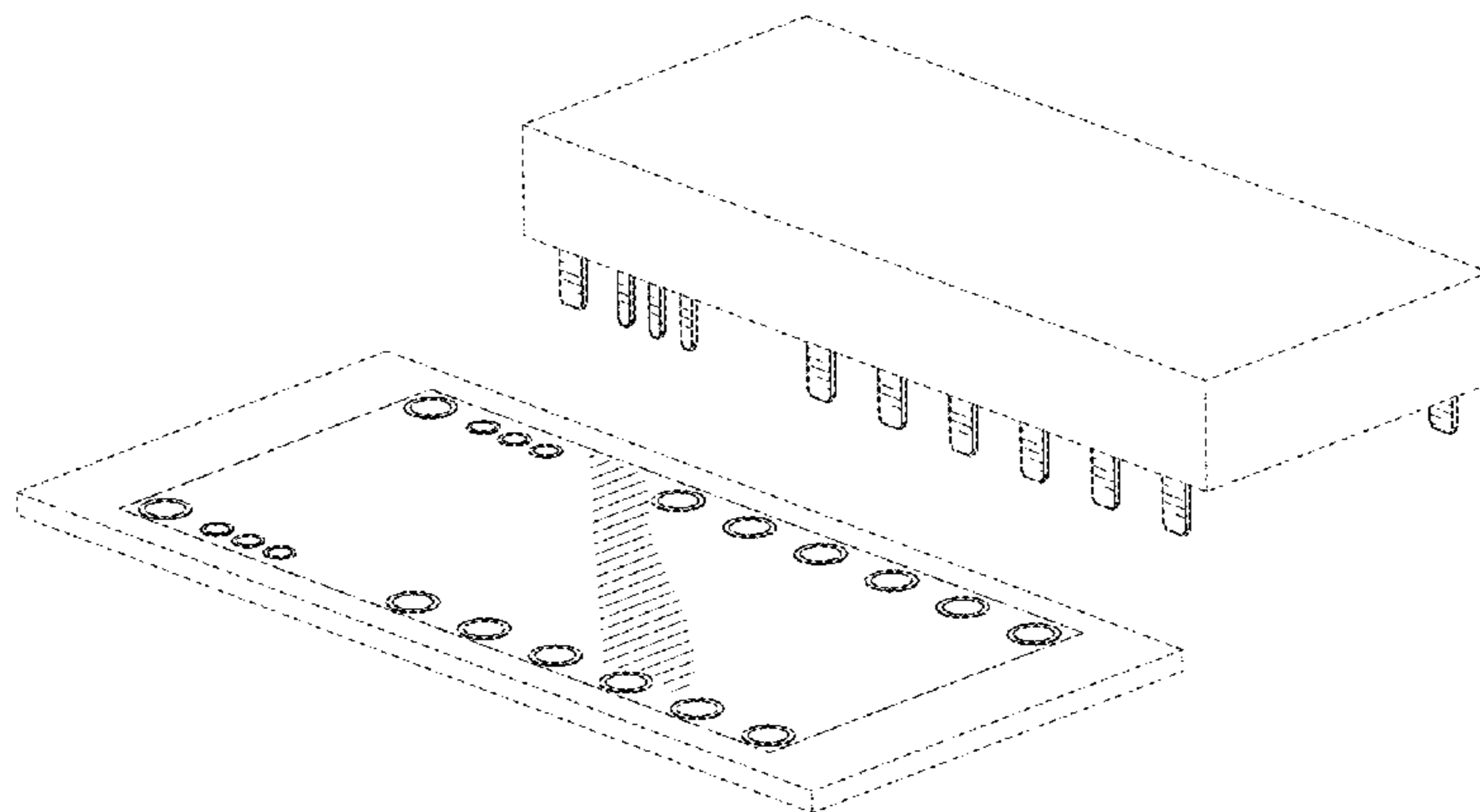
Primary Examiner — Elizabeth J Oswecki
(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP; John D. Lanza

(57) **CLAIM**
The ornamental design for an electric terminal, as shown and described.

DESCRIPTION

FIG. 1 is a top, front, right perspective view of an electric terminal showing our new design;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a right side elevation view thereof;
FIG. 5 is a left side elevation view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
The dashed-dot-dashed lines represent the boundary line of the claimed design. The even dashed broken lines shown in the drawings represent portions of the electric terminal that form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

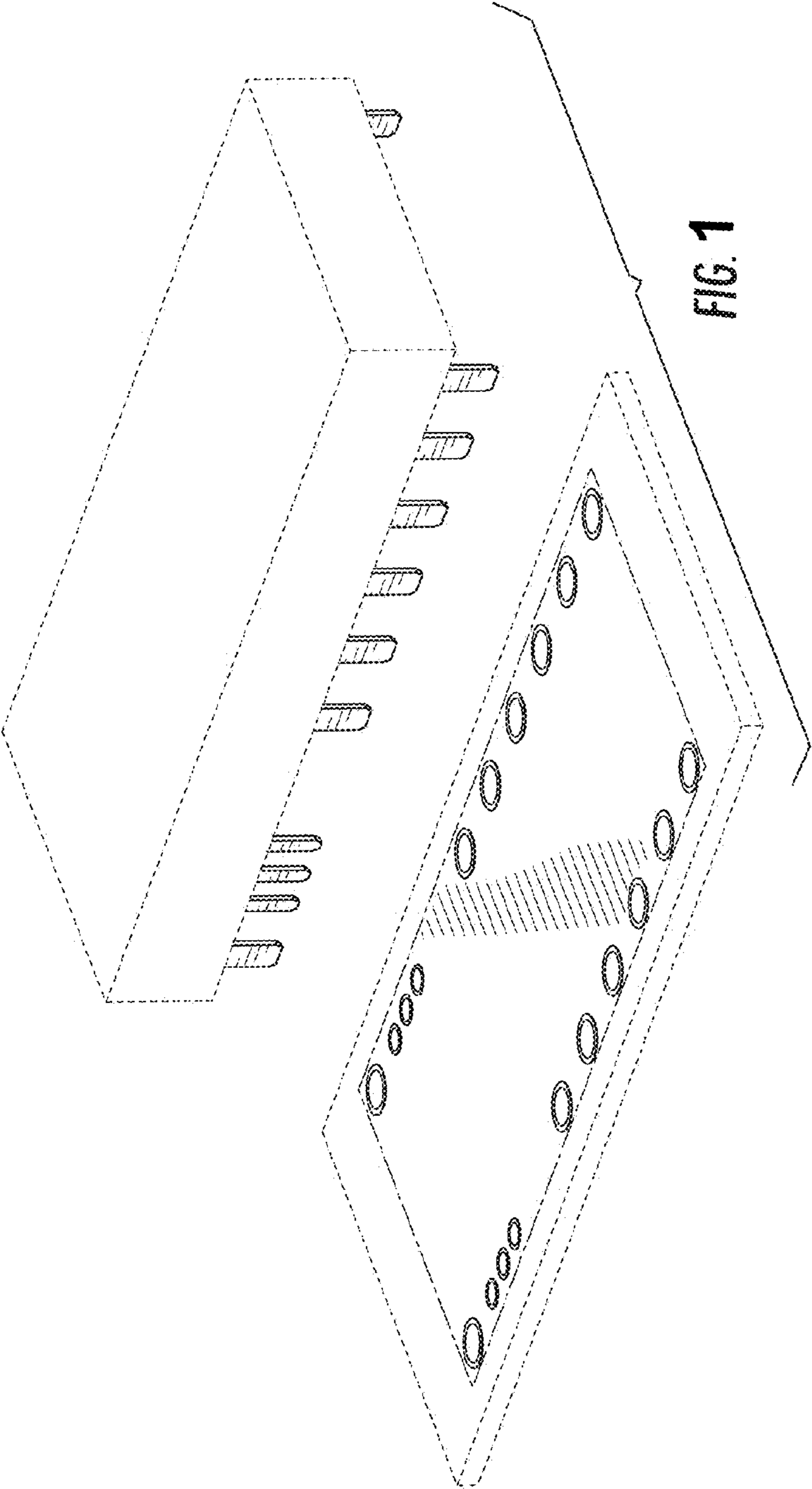
D638,810 S * 5/2011 Morikawa D13/180
D684,547 S * 6/2013 Kawachi D13/180
D690,277 S * 9/2013 Matsuhisa D13/180
D690,672 S * 10/2013 Yoshida D13/182
D694,200 S * 11/2013 Matsuhisa D13/180
D699,201 S * 2/2014 Petsch D13/182
D708,594 S * 7/2014 Kirihara D13/180
D708,595 S * 7/2014 Kirihara D13/180

D730,304 S * 5/2015 Matsumoto D13/182
D736,213 S * 8/2015 Kang D14/436
D736,216 S * 8/2015 Kang D14/436
2006/0097374 A1* 5/2006 Egawa H01L 23/3128
257/686

OTHER PUBLICATIONS

Protek Devices, Package Outline, 16 Pin Drip Package, 2000, 2 pages.

* cited by examiner



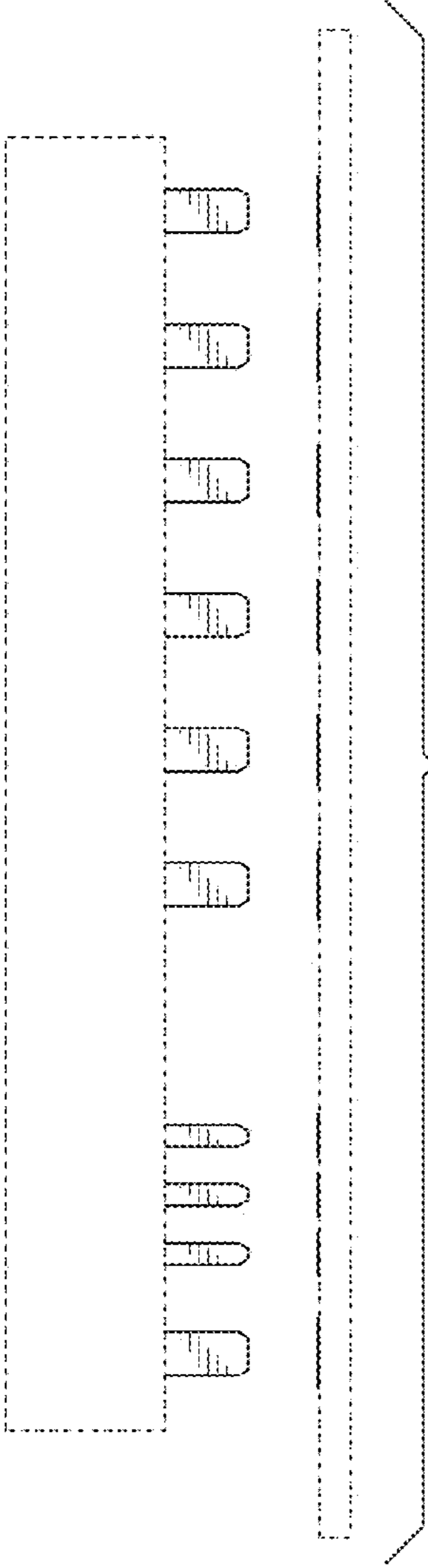


FIG. 2

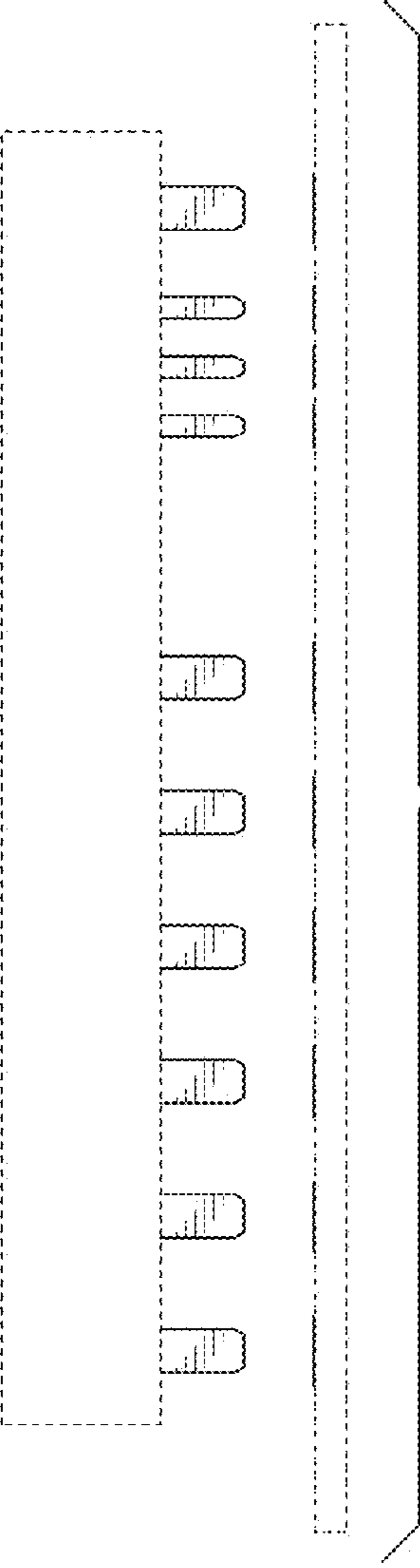


FIG. 3

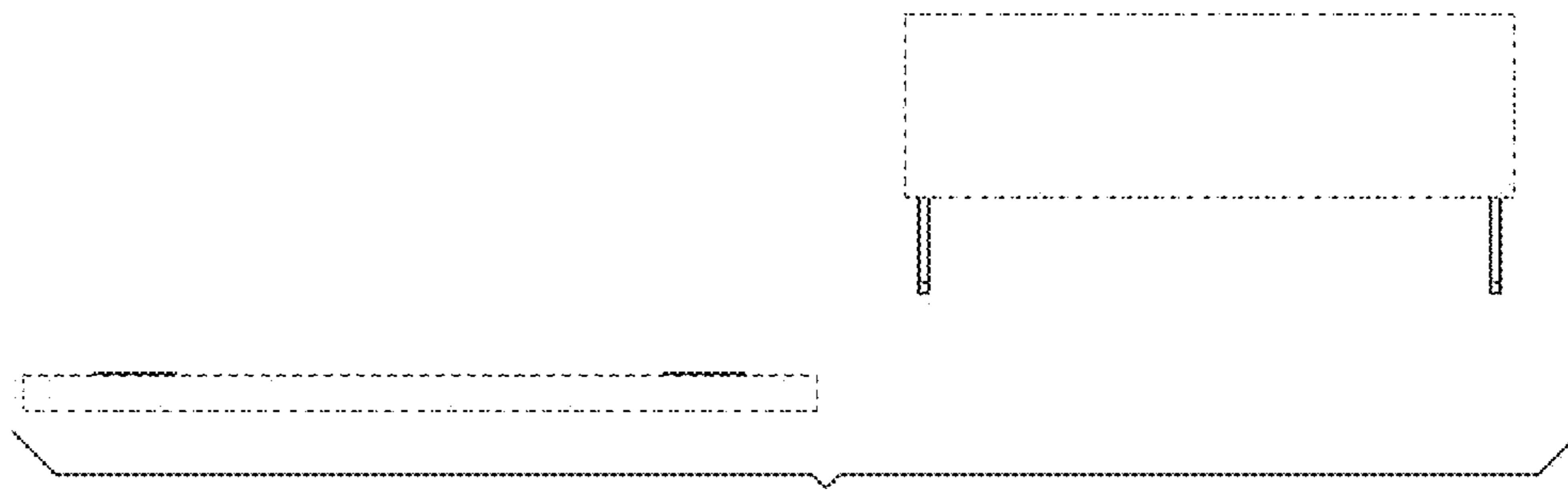


FIG. 4

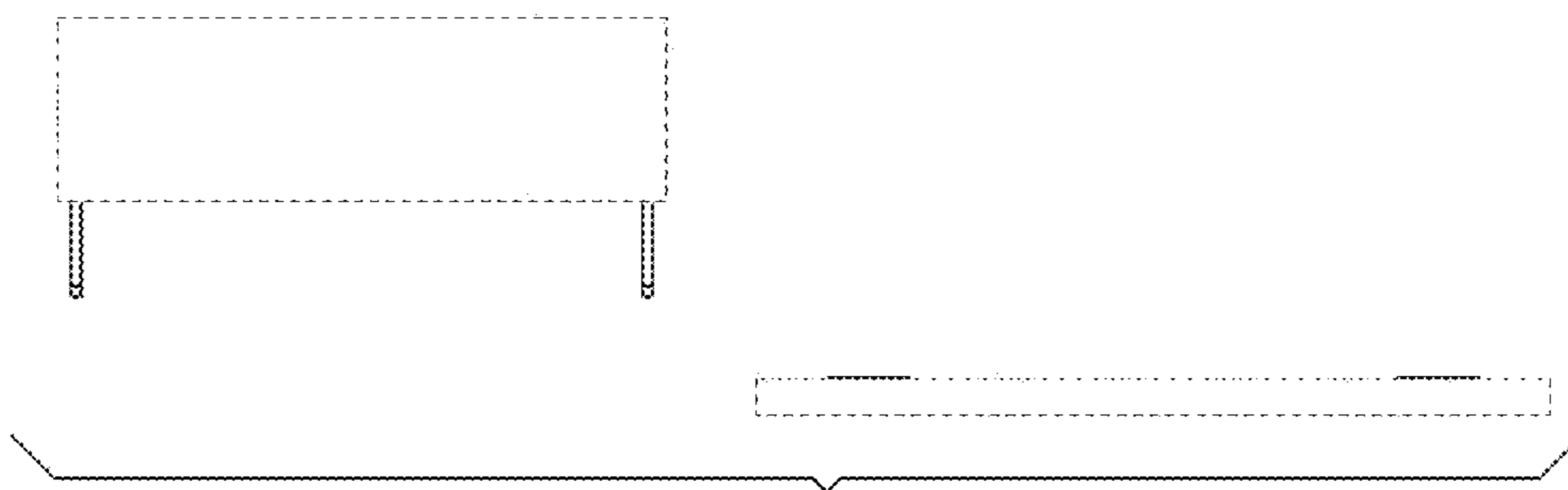


FIG. 5

FIG. 6

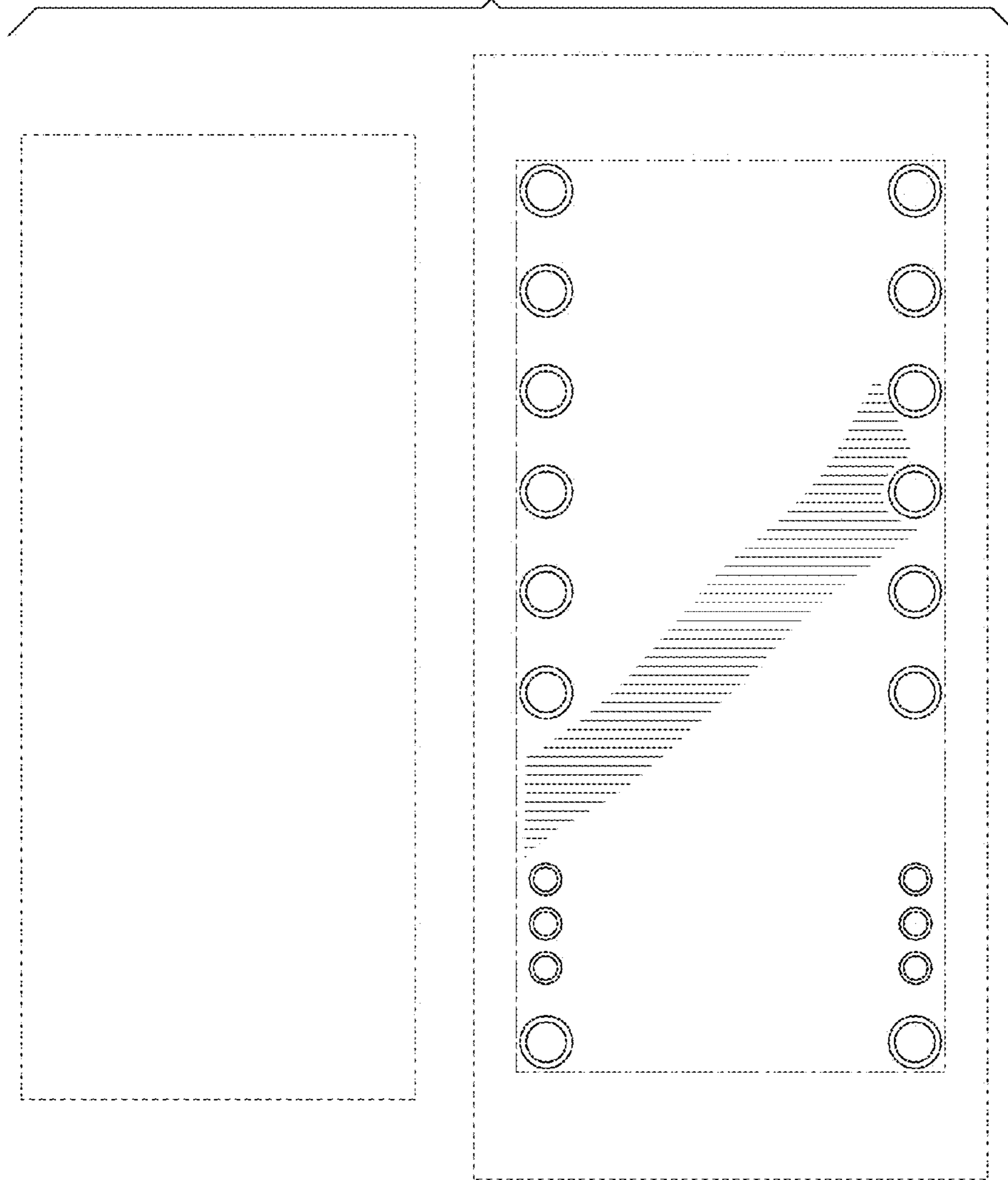


FIG. 7

