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(12) **United States Design Patent** (10) **Patent No.:** **US D798,249 S**  
**Vinciarelli et al.** (45) **Date of Patent:** **\*\* Sep. 26, 2017**

- (54) **ELECTRIC TERMINAL**
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- (\*\*) Term: **15 Years**
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**Related U.S. Application Data**

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- (51) **LOC (10) Cl.** ..... **13-03**
- (52) **U.S. Cl.**  
USPC ..... **D13/182**
- (58) **Field of Classification Search**  
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361/719, 720, 752, 777, 820  
CPC ..... H01L 21/00; H01L 21/02; H01L 23/3675;  
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See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,579,046 A	5/1971	Jordan	
4,338,621 A	7/1982	Braun	
4,698,663 A	10/1987	Sugimoto et al.	
D317,300 S	6/1991	Hasegawa et al.	
5,066,999 A	11/1991	Casper	
5,742,005 A *	4/1998	Saka	..... B60R 16/0238 174/541

5,757,082 A	5/1998	Shibata
5,994,772 A	11/1999	Shin
6,078,505 A	6/2000	Turudic
6,348,742 B1	2/2002	MacPherson
D466,093 S	11/2002	Ebihara et al.
		(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)

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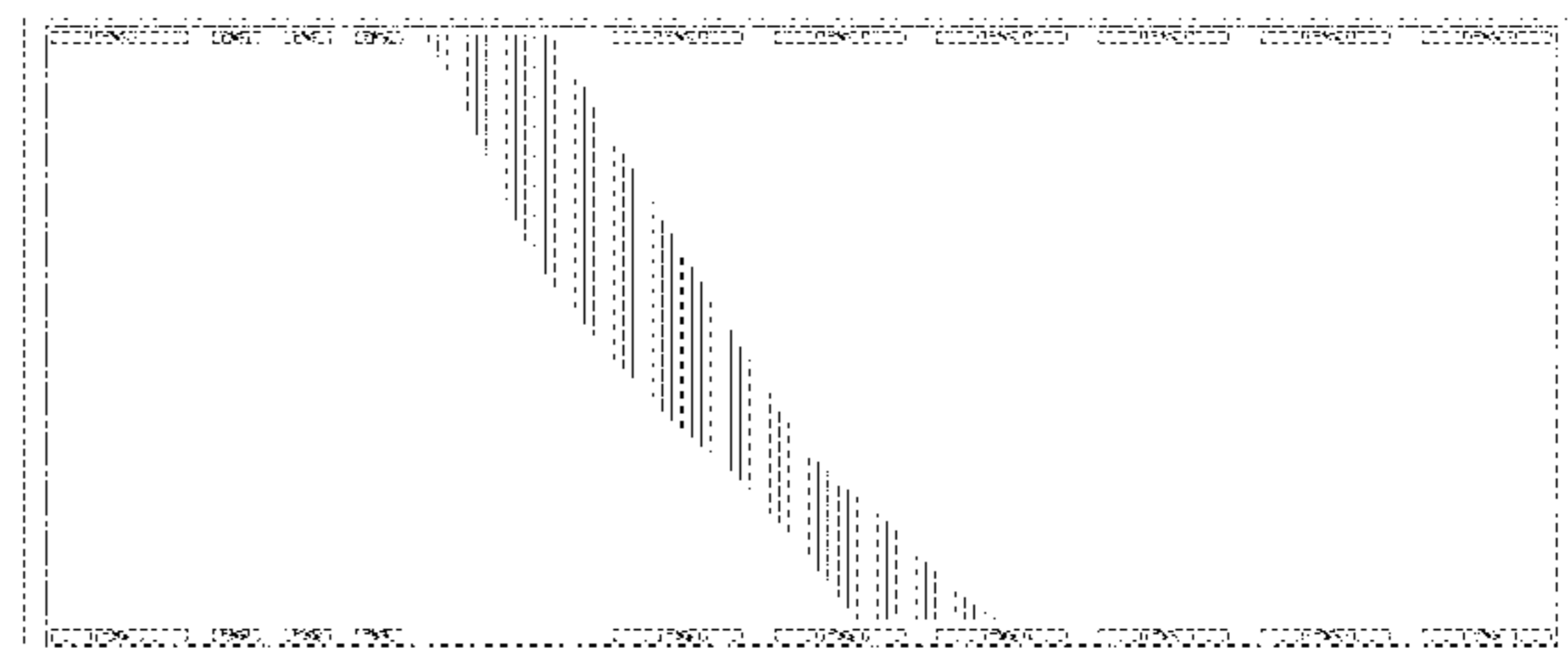
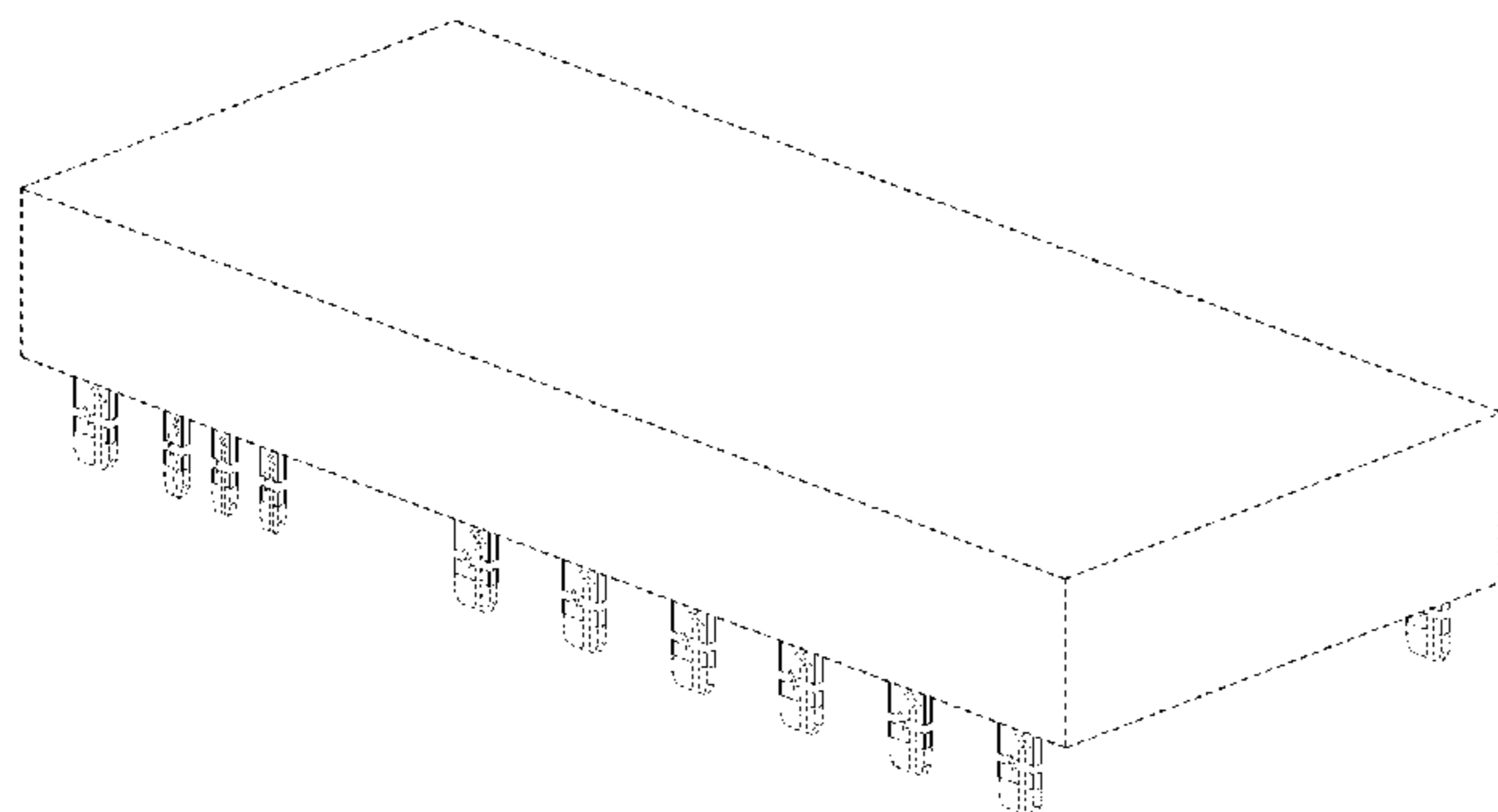
(57) **CLAIM**

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 ornamental design which is claimed is shown in the figures.  
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.  
The claimed design should be understood to include the outer solid line edges of the protruding members shown in FIGS. 1-5, as well as the bottom surface area in FIG. 7.

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

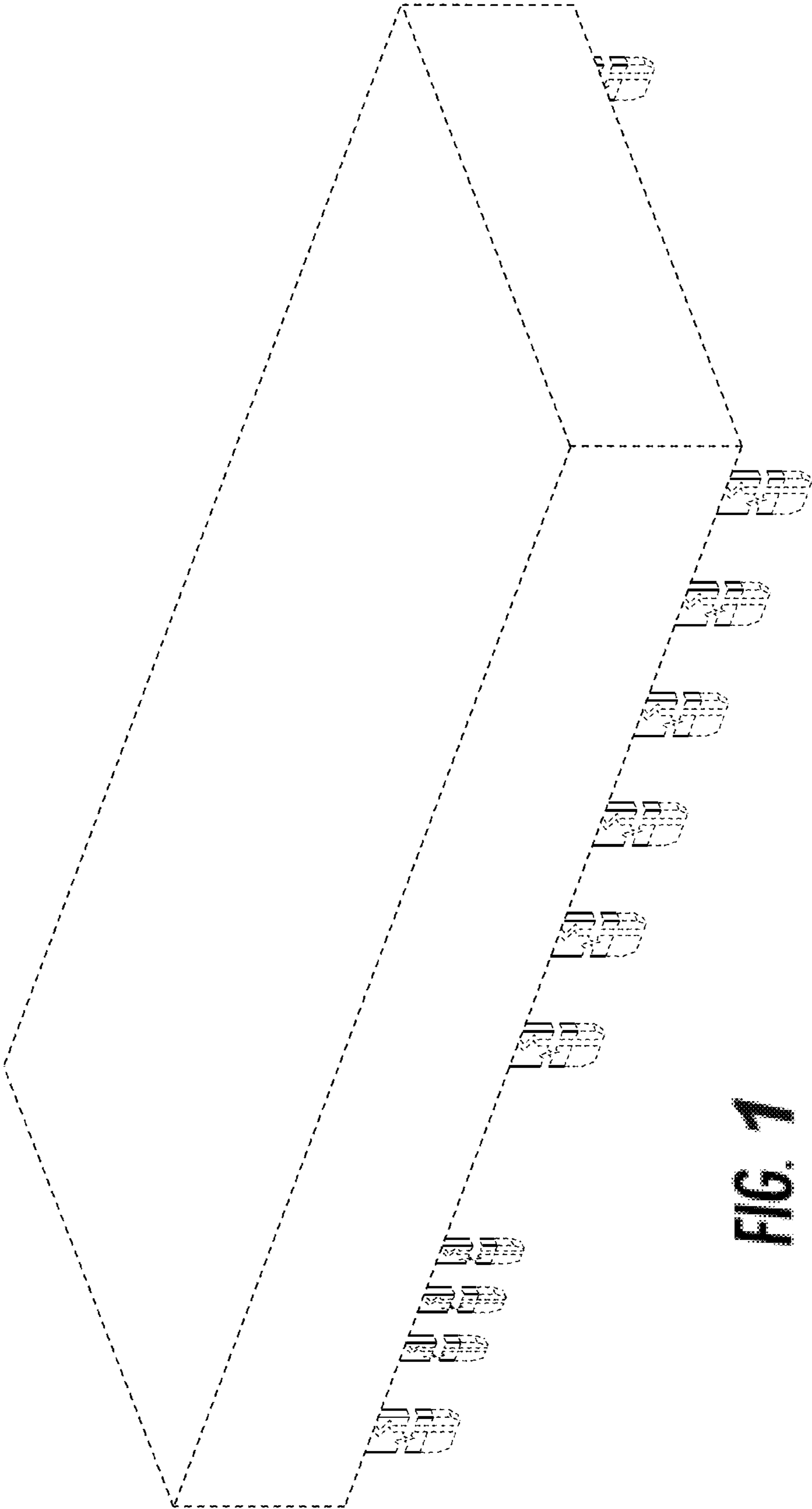
6,476,505 B2 11/2002 Nakamura  
 6,483,038 B2 11/2002 Lee et al.  
 D471,167 S 3/2003 Hitoshi et al.  
 6,537,850 B1\* 3/2003 Corisis ..... H01L 23/49838  
 257/E21.508  
 D485,536 S 1/2004 Dang et al.  
 6,753,482 B1\* 6/2004 Schoenfeld ..... H01L 23/3128  
 174/255  
 D540,272 S 4/2007 Higashibata  
 D547,371 S 7/2007 Miller  
 D601,520 S 10/2009 Yokota et al.  
 D612,347 S 3/2010 Yokota et al.  
 7,709,292 B2\* 5/2010 Sadwick ..... H01L 21/6835  
 257/723  
 D633,054 S 2/2011 Fujihara et al.  
 D633,450 S 3/2011 Fujihara et al.  
 D638,809 S 5/2011 Morikawa et al.  
 D638,810 S 5/2011 Morikawa et al.  
 D684,547 S 6/2013 Kawachi et al.  
 D690,277 S 9/2013 Matsuhisa et al.  
 D690,672 S 10/2013 Yoshida et al.  
 D694,200 S 11/2013 Matsuhisa et al.  
 D699,201 S 2/2014 Petsch

D708,594 S 7/2014 Kirihara et al.  
 D708,595 S 7/2014 Kirihara et al.  
 D730,304 S 5/2015 Matsumoto et al.  
 D736,213 S 8/2015 Kang et al.  
 D736,216 S 8/2015 Kang et al.  
 D754,083 S\* 4/2016 Vinciarelli ..... D13/182  
 2006/0097374 A1 5/2006 Egawa  
 2009/0004776 A1\* 1/2009 Ye ..... B82Y 10/00  
 438/108  
 2014/0070381 A1\* 3/2014 Doi ..... H01L 23/3107  
 257/666  
 2014/0099805 A1\* 4/2014 Kutchery ..... H04B 1/3816  
 439/76.1  
 2014/0106621 A1\* 4/2014 Wu ..... G06K 19/07739  
 439/630

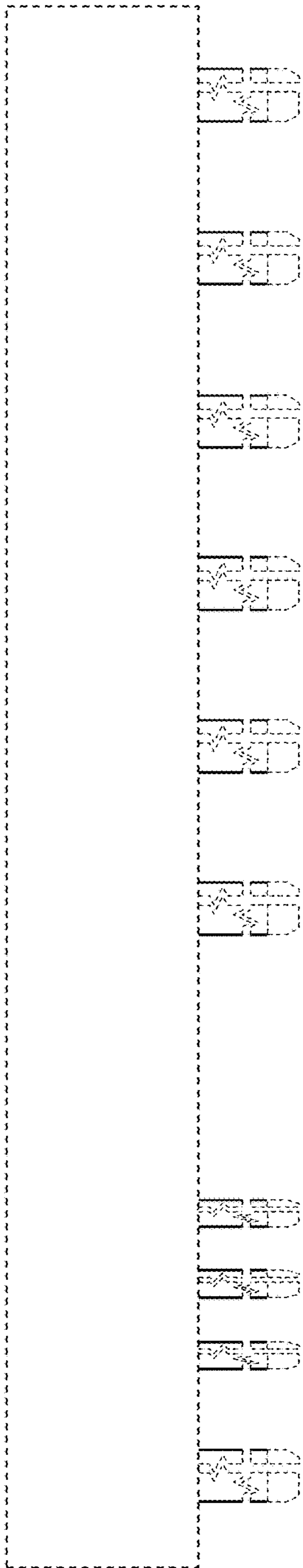
OTHER PUBLICATIONS

Protek Devices, Package Outline, 16 Pin Drip Package, 2000, 2 pages.  
 US Notice of Allowance for U.S. Appl. No. 29/470,060, mailed Dec. 4, 2015, 13 pages.  
 US Office Action for U.S. Appl. No. 29/470,060, mailed Sep. 17, 2015, 10 pages.

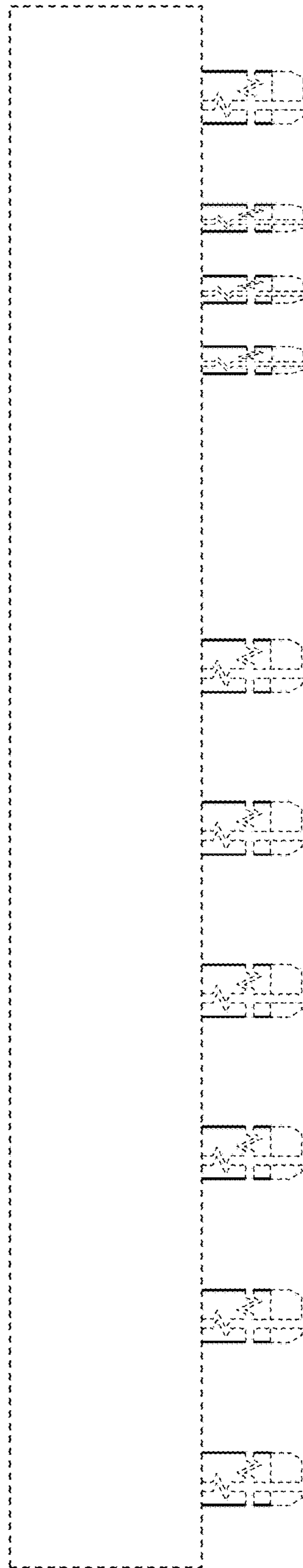
\* cited by examiner



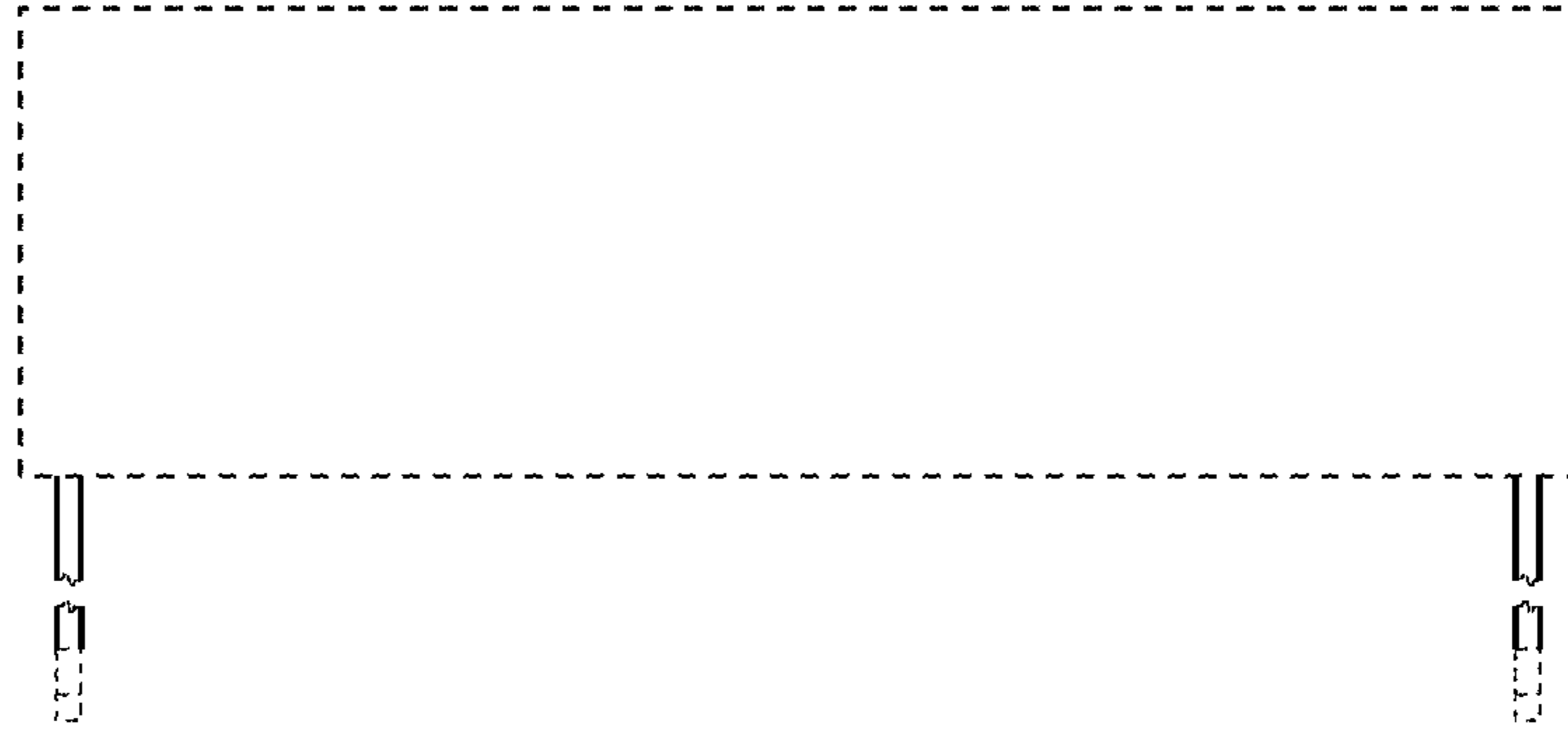
**FIG. 1**



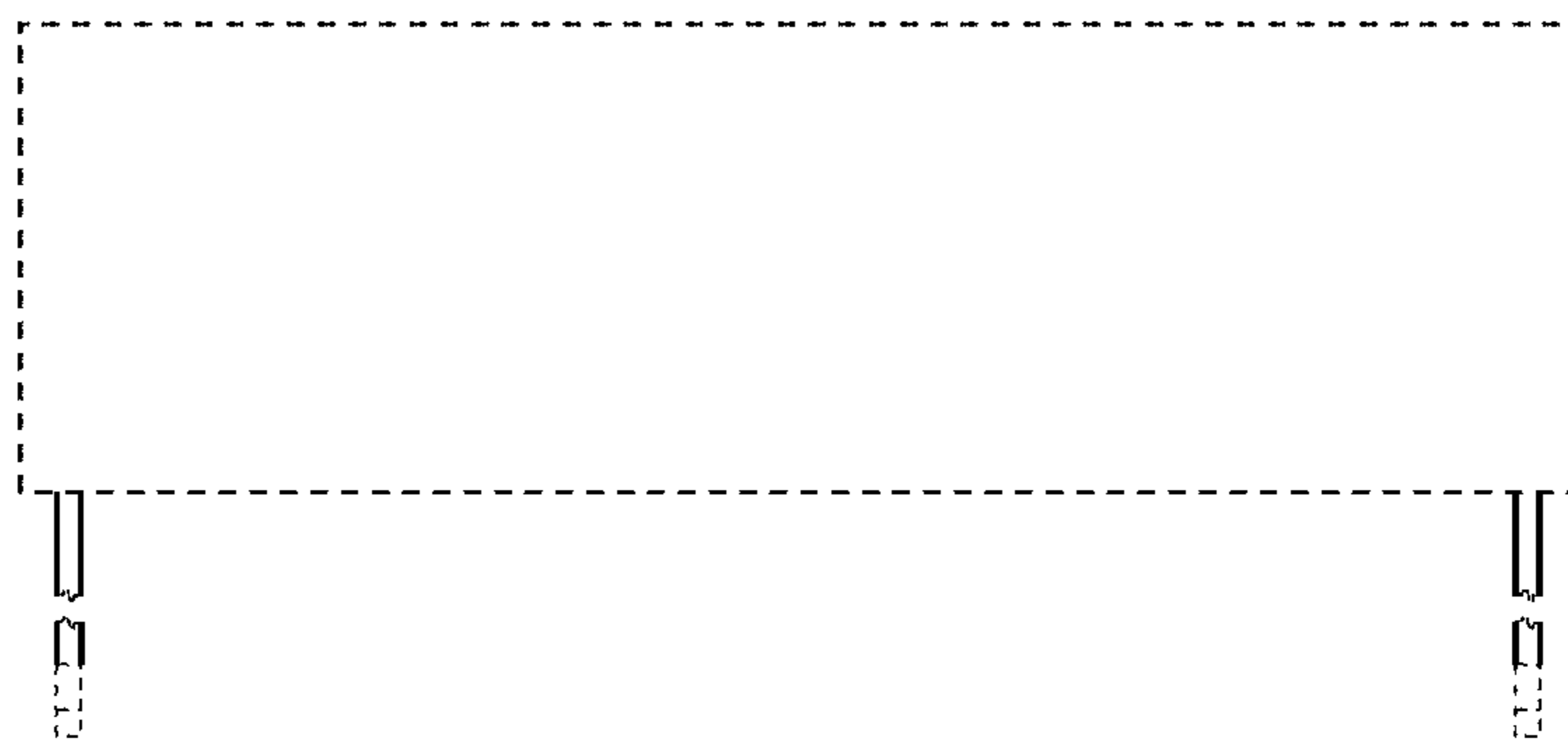
**FIG. 2**



**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**

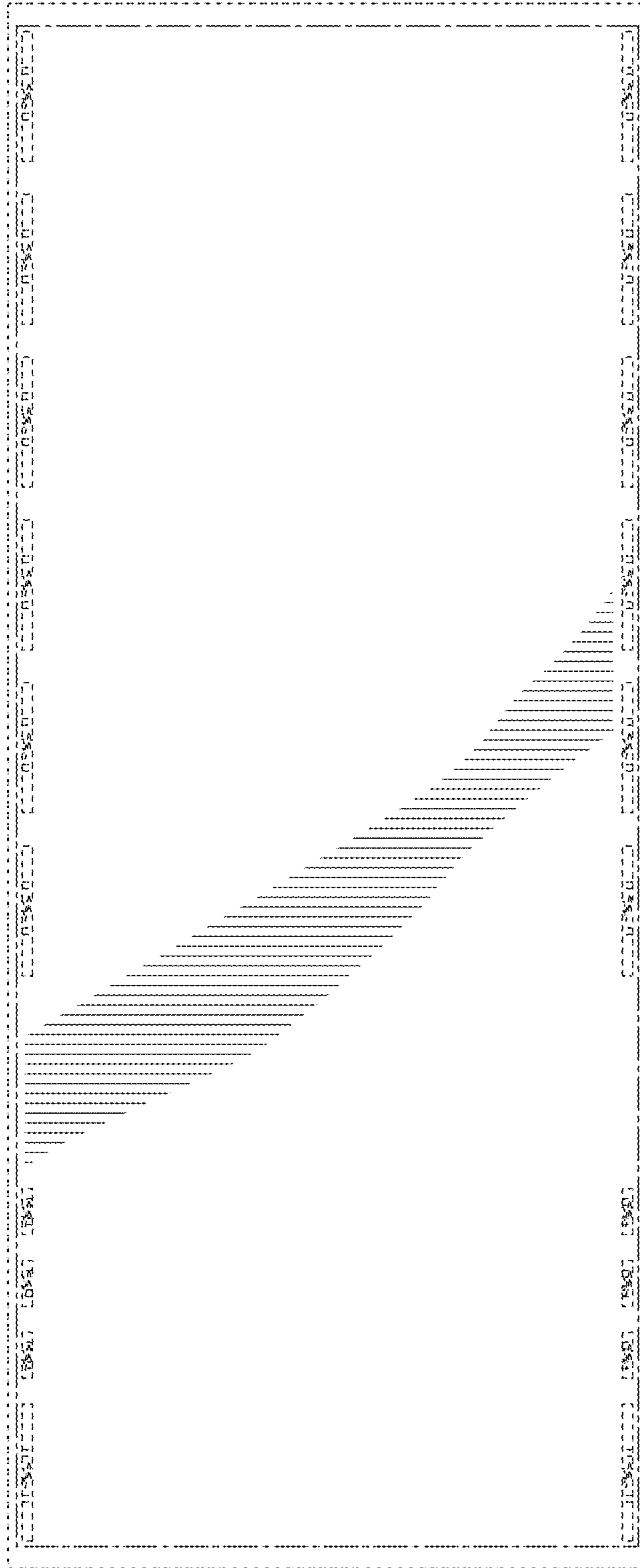


FIG. 7