



(12) **United States Design Patent**  
**Cartier, Jr. et al.**

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(45) **Date of Patent:** **\*\* Jan. 26, 2021**

(54) **ELECTRICAL CONNECTOR**

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(73) Assignee: **Amphenol Corporation**, Wallingford, CT (US)

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

(21) Appl. No.: **29/666,526**

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

(52) **U.S. Cl.**  
USPC ..... **D13/147**

(58) **Field of Classification Search**  
USPC ..... D13/103, 107, 108, 110, 112, 118, 120, D13/123, 133, 137.1, 145-147, 149-156,  
(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D350,329 S \* 9/1994 Lindeman ..... D13/107  
D397,084 S \* 8/1998 Siddoway ..... D13/107  
(Continued)

**FOREIGN PATENT DOCUMENTS**

WO WO 2013/075693 A1 5/2013

**OTHER PUBLICATIONS**

Amphenol. Spring Loaded Connectors. No date specified. <https://www.amphenol.com/node/3996> (Year: 0).\*  
(Continued)

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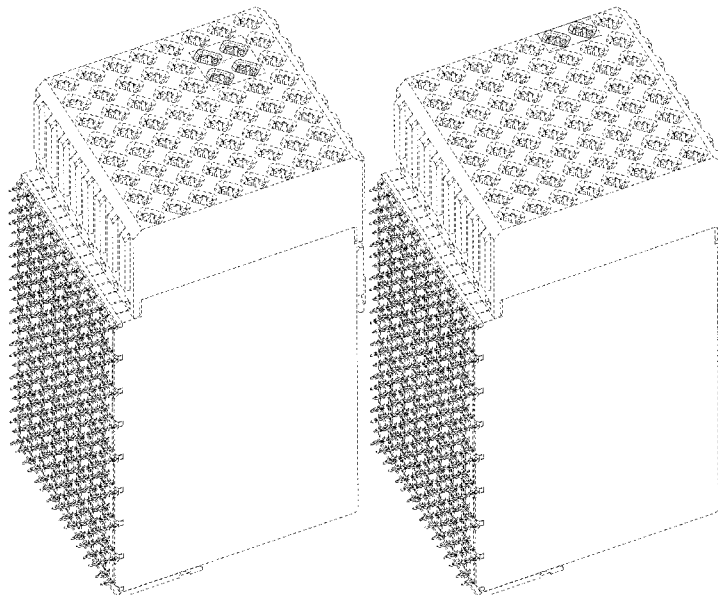
(57) **CLAIM**

The ornamental design for an electrical connector, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front, right side perspective view of an electrical connector showing a first embodiment of our new design;  
FIG. 2 is a top, rear, left side perspective view thereof;  
FIG. 3 is a front elevation view thereof;  
FIG. 4 is a rear elevation view thereof;  
FIG. 5 is a left side elevation view thereof;  
FIG. 6 is a right side elevation view thereof;  
FIG. 7 is a top plan view thereof;  
FIG. 8 is a bottom plan view thereof;  
FIG. 9 is a top, front, right side perspective view of a second embodiment thereof;  
FIG. 10 is a top, rear, left side perspective view of FIG. 9;  
FIG. 11 is a front elevation view of FIG. 9;  
FIG. 12 is a rear elevation view of FIG. 9;  
FIG. 13 is a left side elevation view of FIG. 9;  
FIG. 14 is a right side elevation view of FIG. 9;  
FIG. 15 is a top plan view of FIG. 9; and,  
FIG. 16 is a bottom plan view of FIG. 9.  
The dash-dot-dash broken lines represent boundaries of the electrical connector and form no part of the claimed design. All other broken lines represent portions of the electrical connector that form no part of the claimed design.

**1 Claim, 16 Drawing Sheets**



(58) **Field of Classification Search**

USPC ..... D13/158, 173, 177, 184, 199, 242;  
 D14/240, 242, 432-438, 435.1, 436-438  
 CPC .... H01R 12/716; H01R 12/57; H01R 12/585;  
 H01R 13/52; H01R 13/506; H01R  
 13/6585; H01R 13/648; H01R 13/212;  
 H01R 13/2464; H01R 13/2492; H01R  
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 H01R 13/5804; H01R 13/5816; H01R  
 13/6271; H01R 13/635; H01R 13/6599;  
 H01R 13/6598; H01R 13/6594; H01R  
 12/7076; H01R 12/737; H01R 13/04;  
 H01R 13/6586; H01R 13/6461; H01R  
 13/6473; H01R 13/6474; H01R 13/6587

See application file for complete search history.

(56)

**References Cited**

U.S. PATENT DOCUMENTS

5,895,278 A 4/1999 Humphrey  
 6,471,548 B2 10/2002 Bertocini et al.  
 6,692,272 B2 2/2004 Lemke et al.  
 6,976,886 B2 12/2005 Wirings  
 7,094,102 B2 8/2006 Cohen et al.  
 7,108,556 B2 9/2006 Cohen et al.  
 7,182,643 B2 2/2007 Wirings et al.  
 7,467,955 B2 12/2008 Raistrick et al.  
 7,651,373 B2 1/2010 Knaub et al.  
 7,674,133 B2 3/2010 Fogg et al.  
 7,837,505 B2 11/2010 Minich et al.

D629,355 S \* 12/2010 Bodley ..... D13/108  
 7,914,305 B2 3/2011 Amleshi et al.  
 8,215,968 B2 7/2012 Cartier et al.  
 8,251,745 B2 8/2012 Johnescu et al.  
 8,444,436 B1 5/2013 Cohen et al.  
 8,475,183 B2 7/2013 Chien et al.  
 8,535,065 B2 9/2013 Costello et al.  
 8,556,657 B1 10/2013 Nichols  
 D710,797 S \* 8/2014 Awizsus ..... D13/107  
 8,905,785 B2 12/2014 Johnescu et al.  
 D749,042 S \* 2/2016 Gecawicz ..... D13/107  
 D755,122 S \* 5/2016 Gecawicz ..... D13/107  
 D850,380 S \* 6/2019 Tabata ..... D13/133  
 D863,227 S \* 10/2019 Abdalla ..... D13/154  
 D864,858 S \* 10/2019 Clark ..... D13/108  
 2006/0024983 A1 2/2006 Cohen et al.  
 2008/0045079 A1 2/2008 Minich et al.  
 2009/0311908 A1 12/2009 Fogg et al.  
 2011/0275249 A1 11/2011 Cartier et al.  
 2012/0156929 A1 \* 6/2012 Manter ..... H01R 13/514  
 439/607.02  
 2012/0202380 A1 8/2012 Lappoehn  
 2013/0130554 A1 5/2013 Girard et al.  
 2013/0309910 A1 \* 11/2013 Gulla ..... H01R 12/91  
 439/626  
 2017/0358883 A1 \* 12/2017 Chen ..... H01R 13/112  
 2019/0181579 A1 \* 6/2019 Ju ..... H01R 12/57

OTHER PUBLICATIONS

Amphenol. A Series Family. 2019. <https://www.amphenol-sine.com/a-series-connectors> (Year: 2019).\*

\* cited by examiner

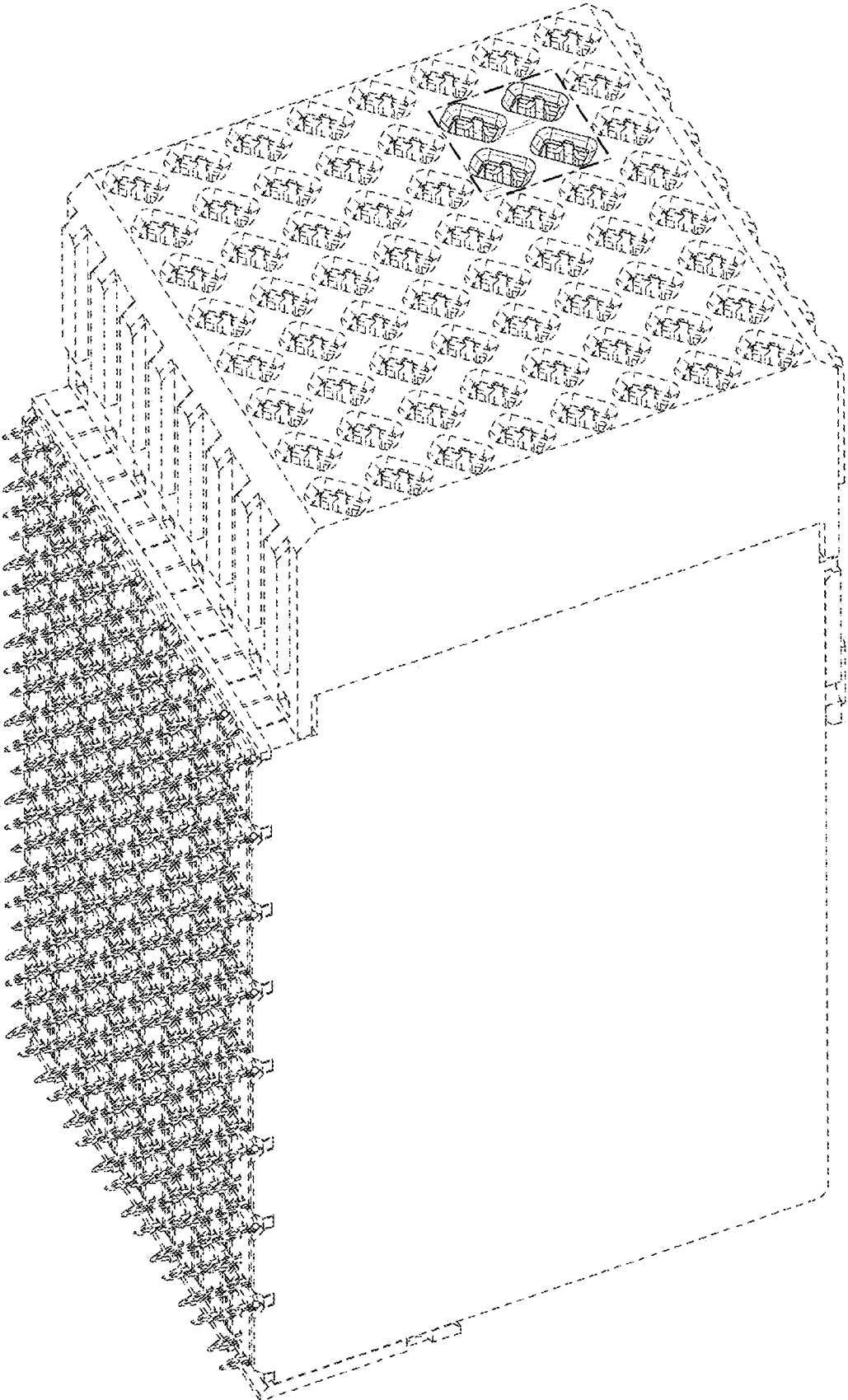


FIG. 1

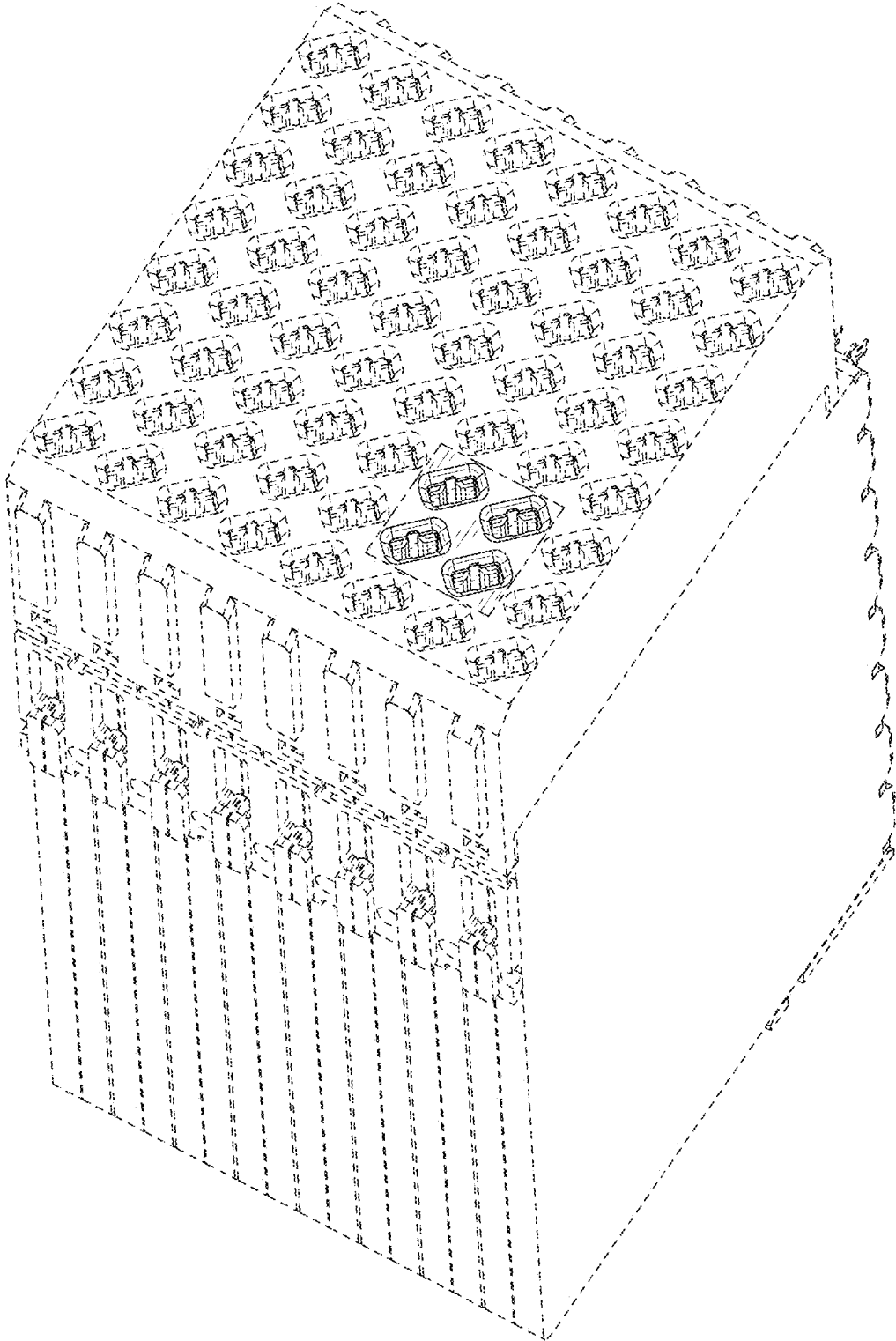


FIG. 2

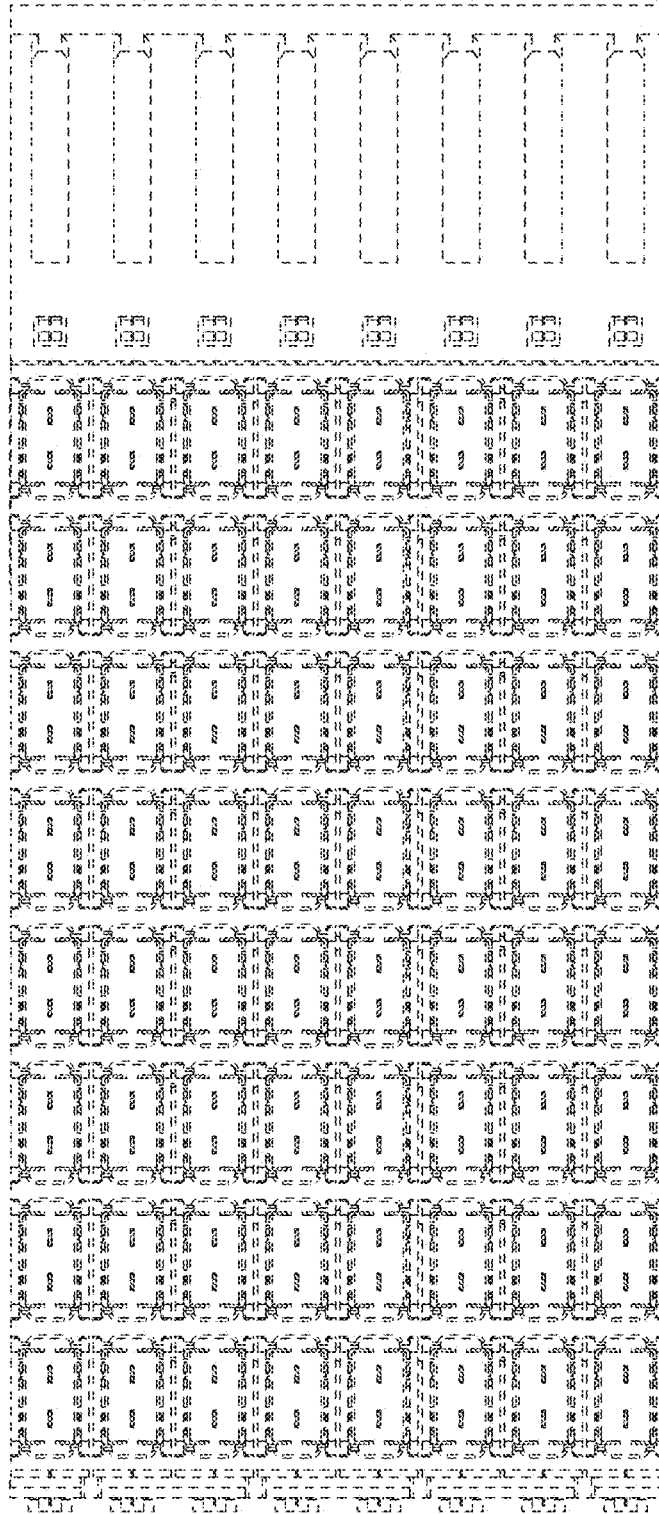


FIG. 3

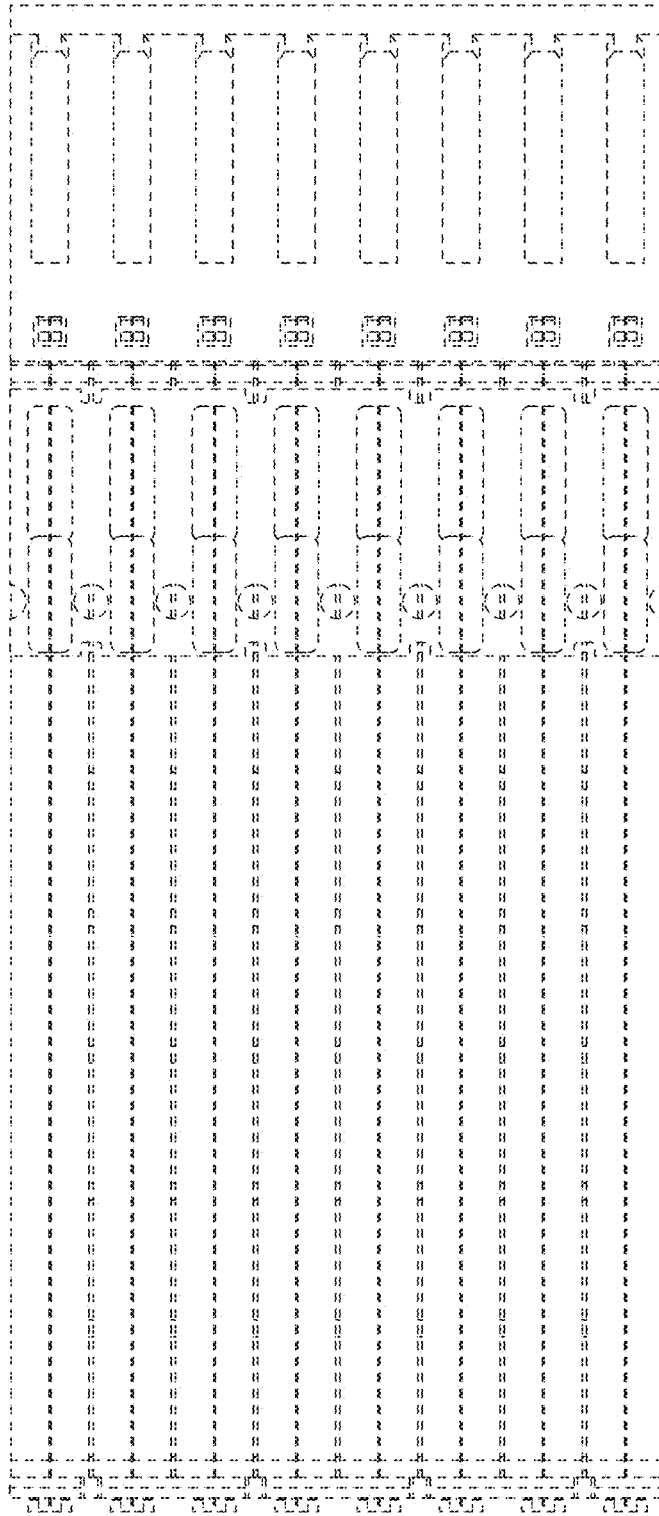


FIG. 4

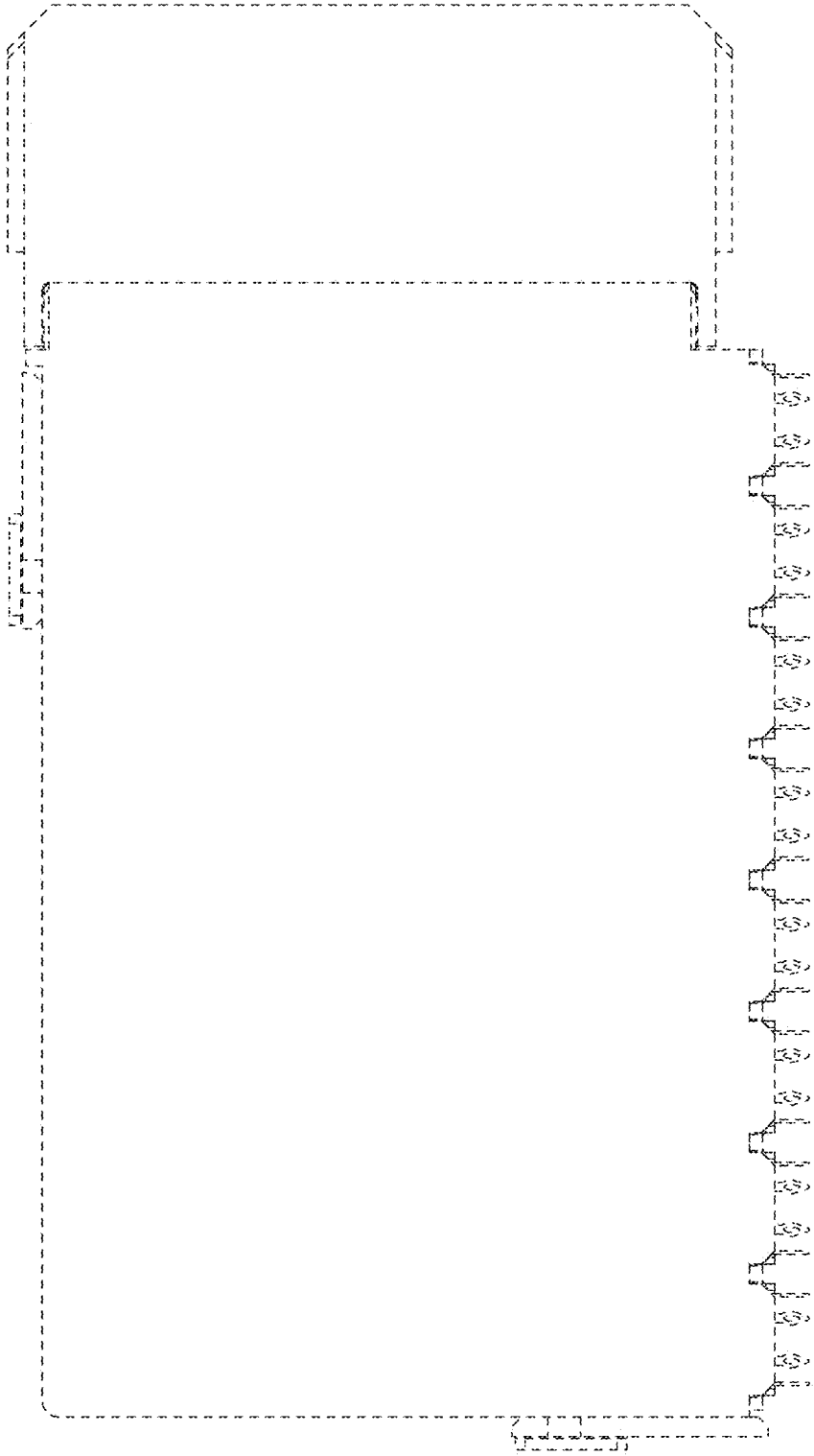


FIG. 5

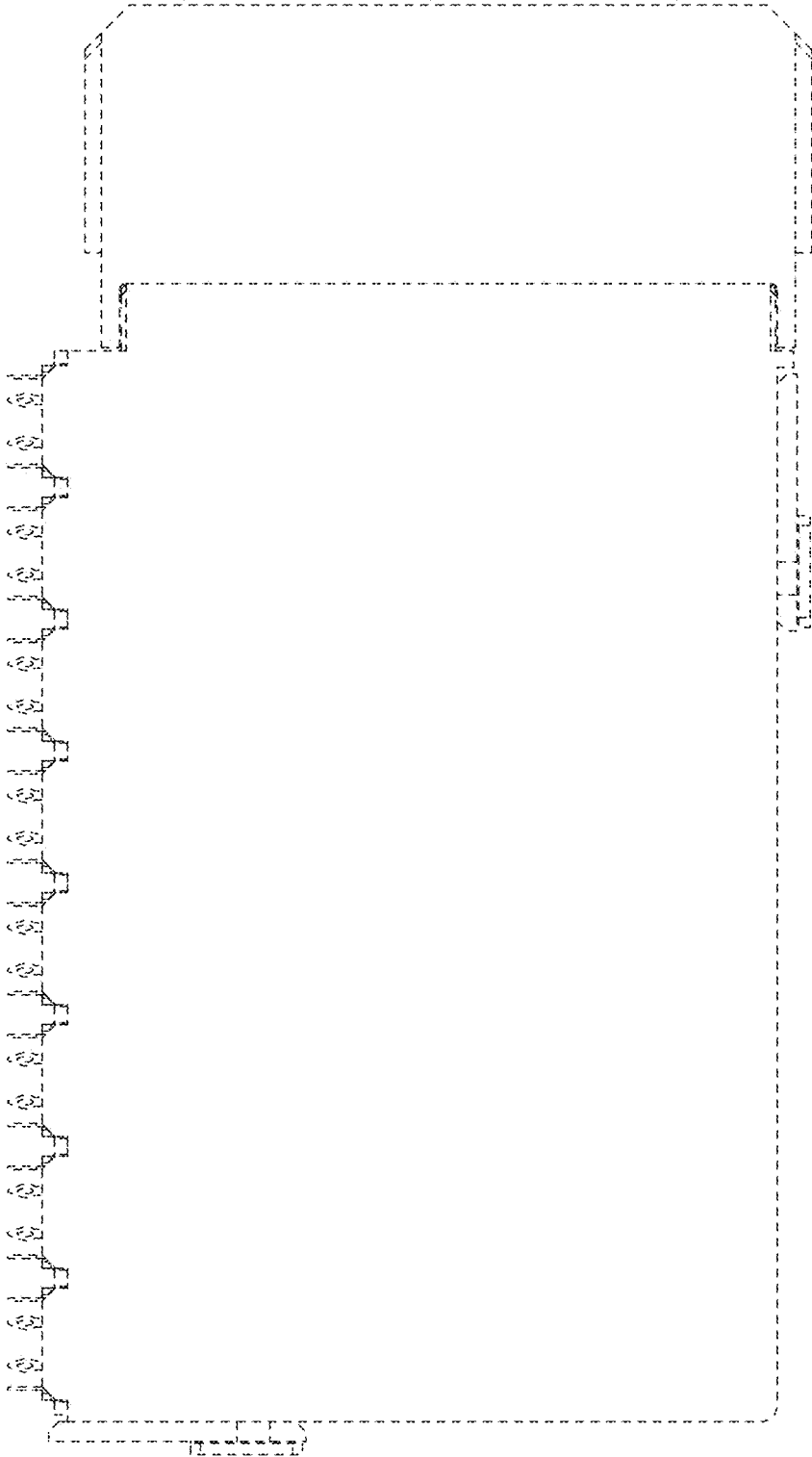


FIG. 6



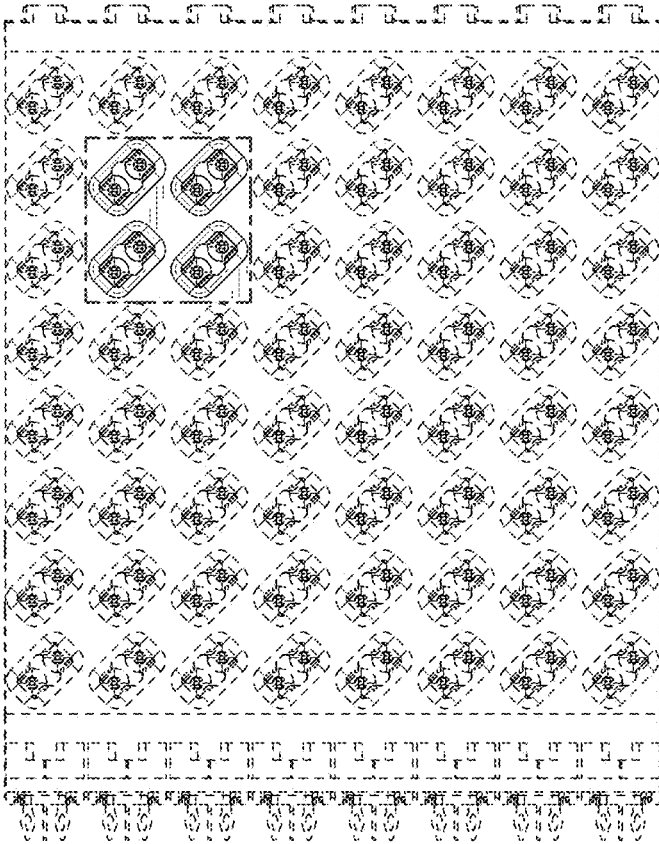


FIG. 7

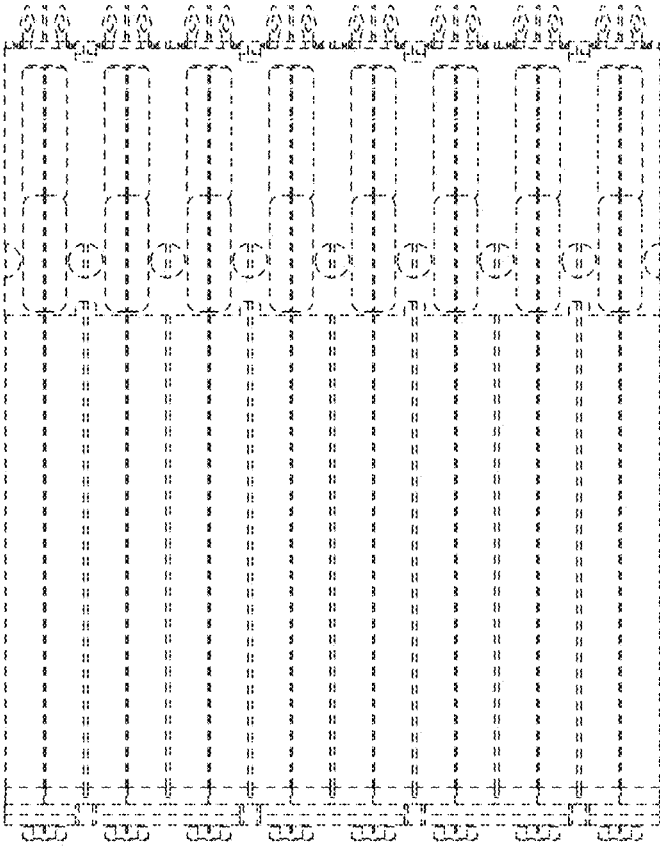


FIG. 8

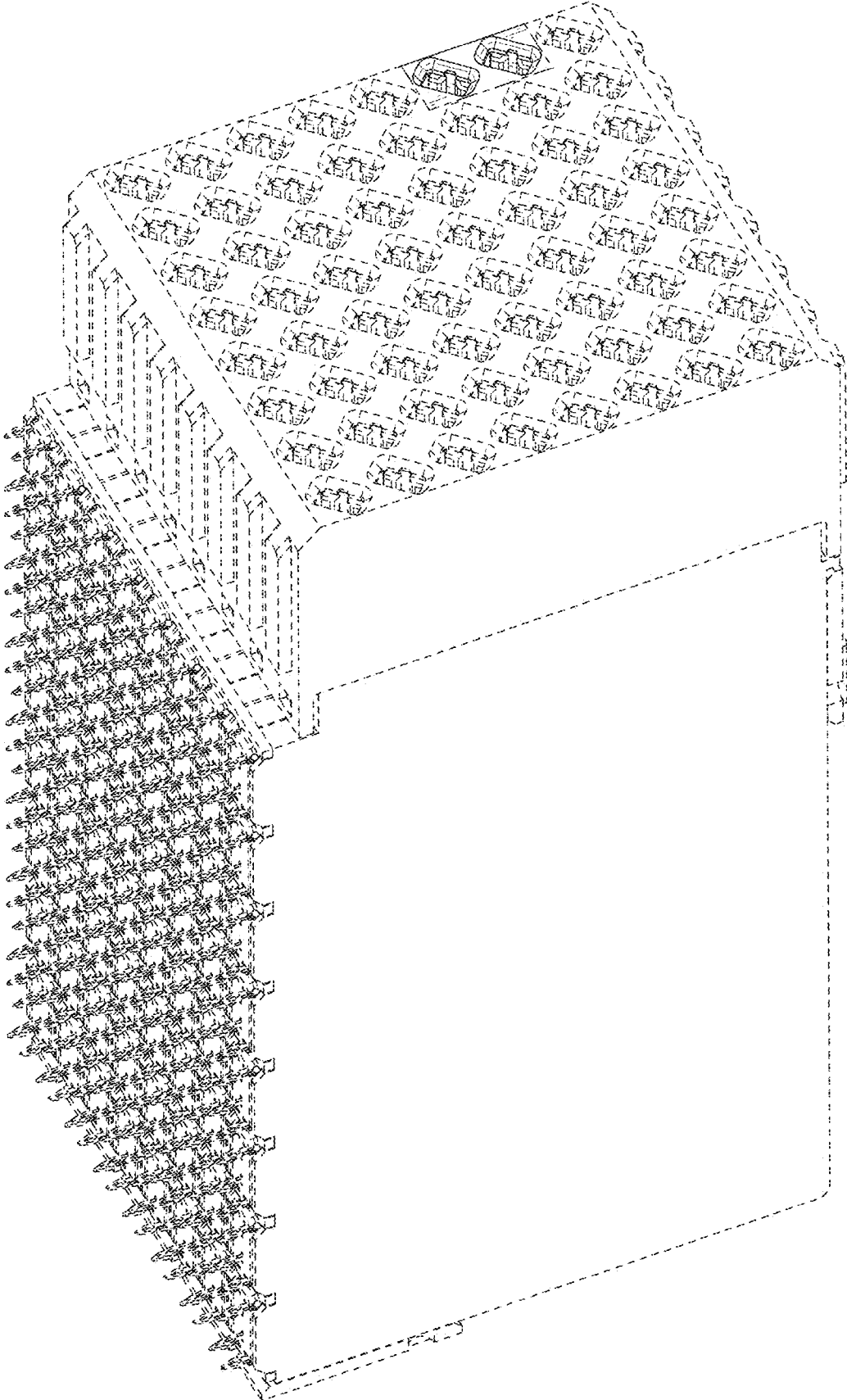


FIG. 9

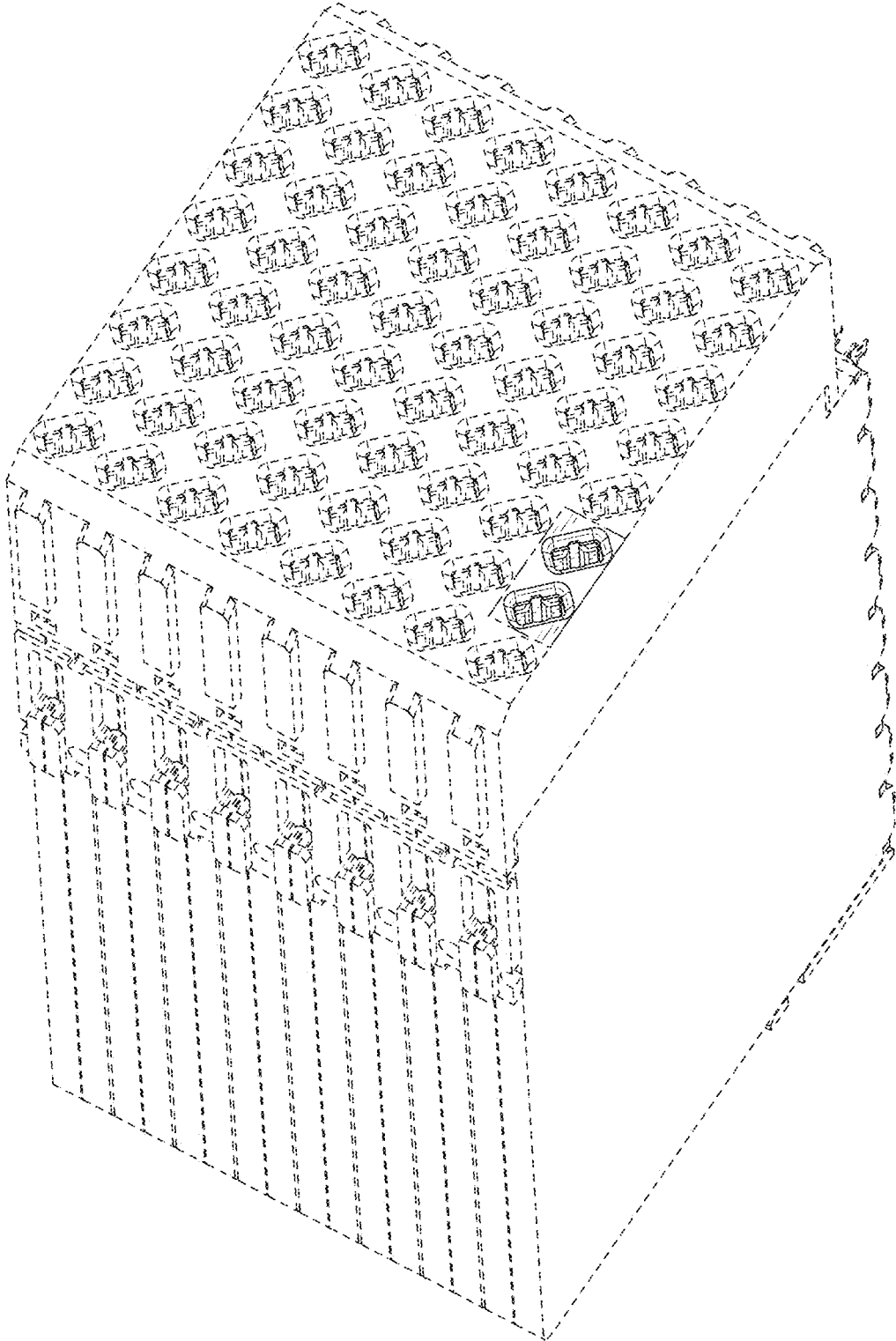


FIG. 10

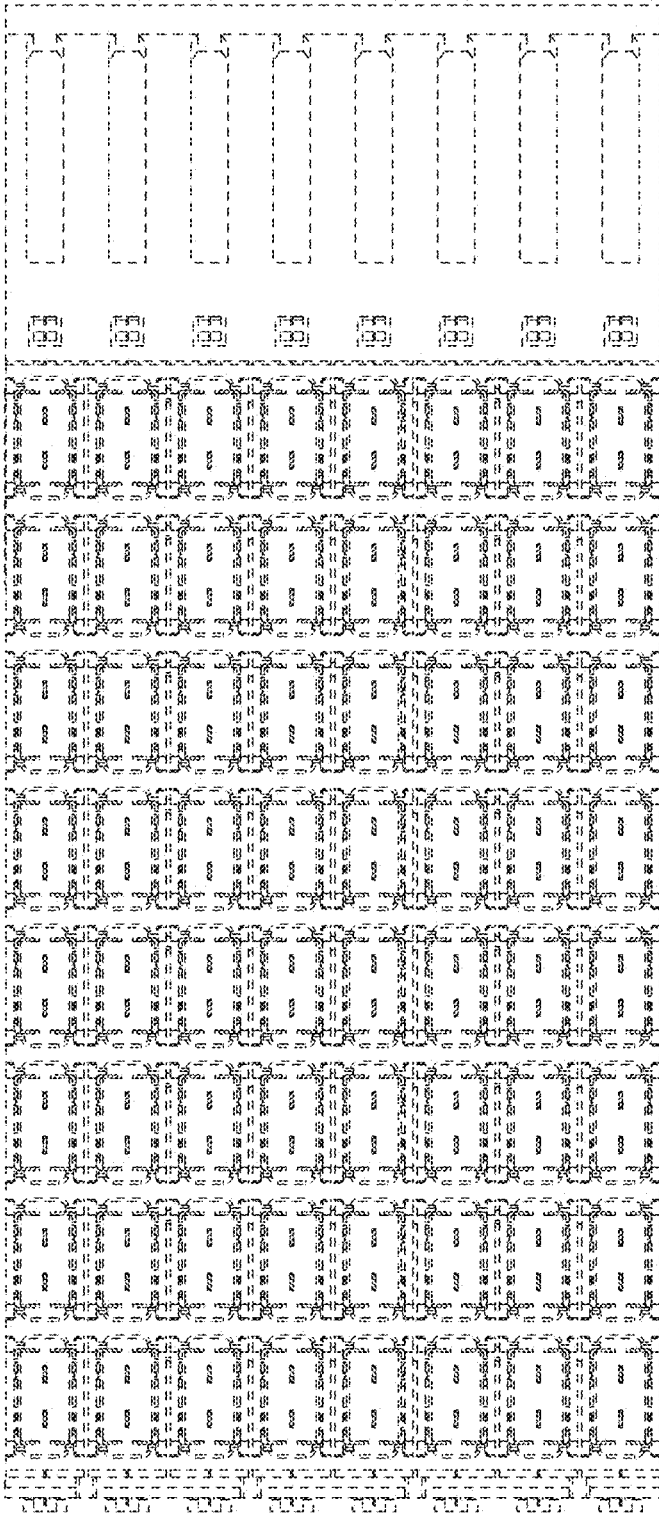


FIG. 11

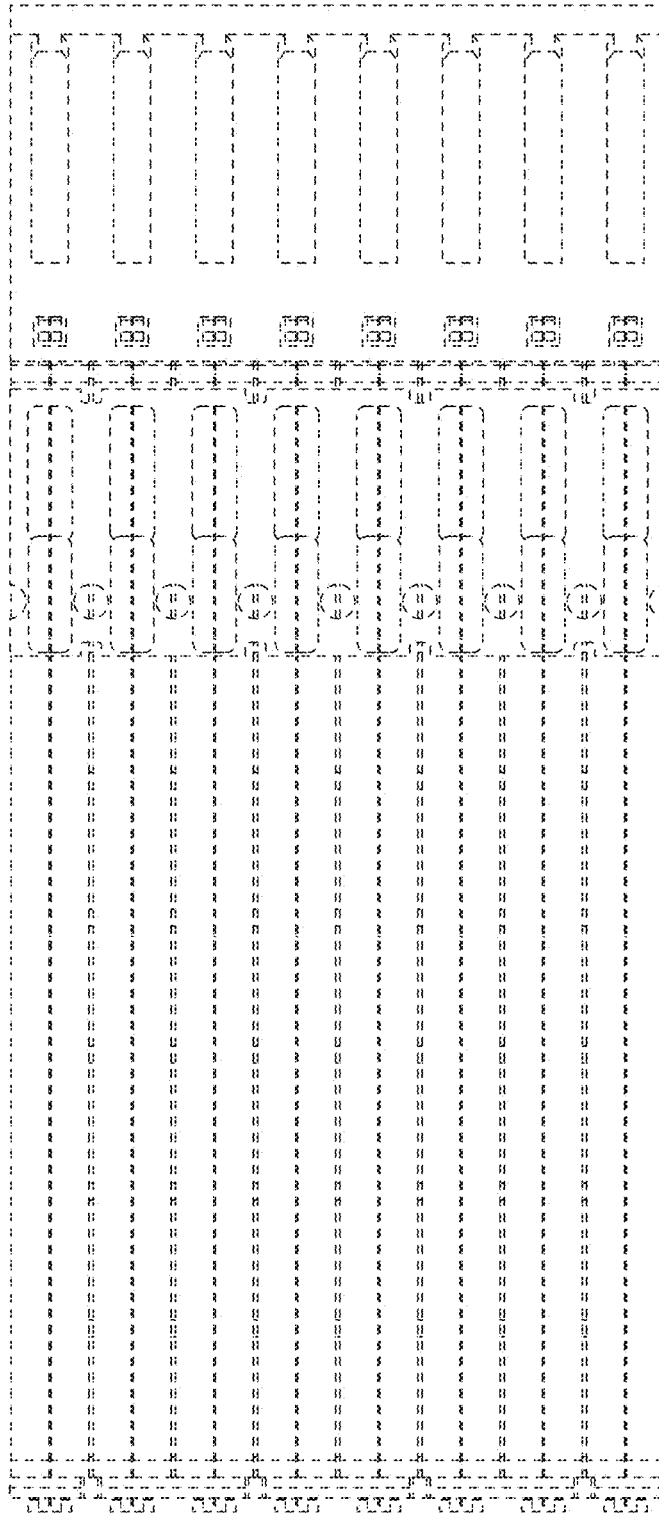


FIG. 12

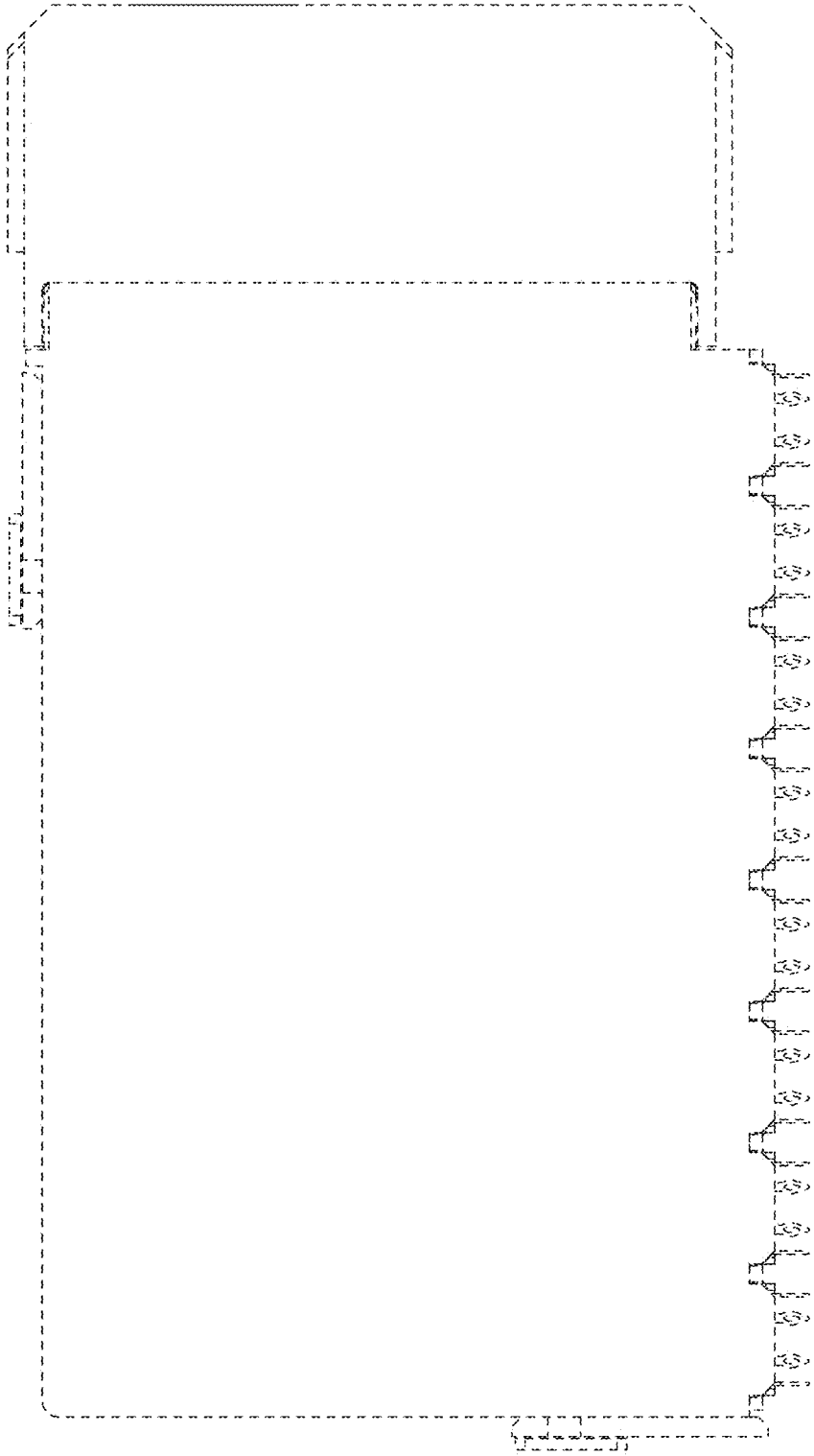


FIG. 13

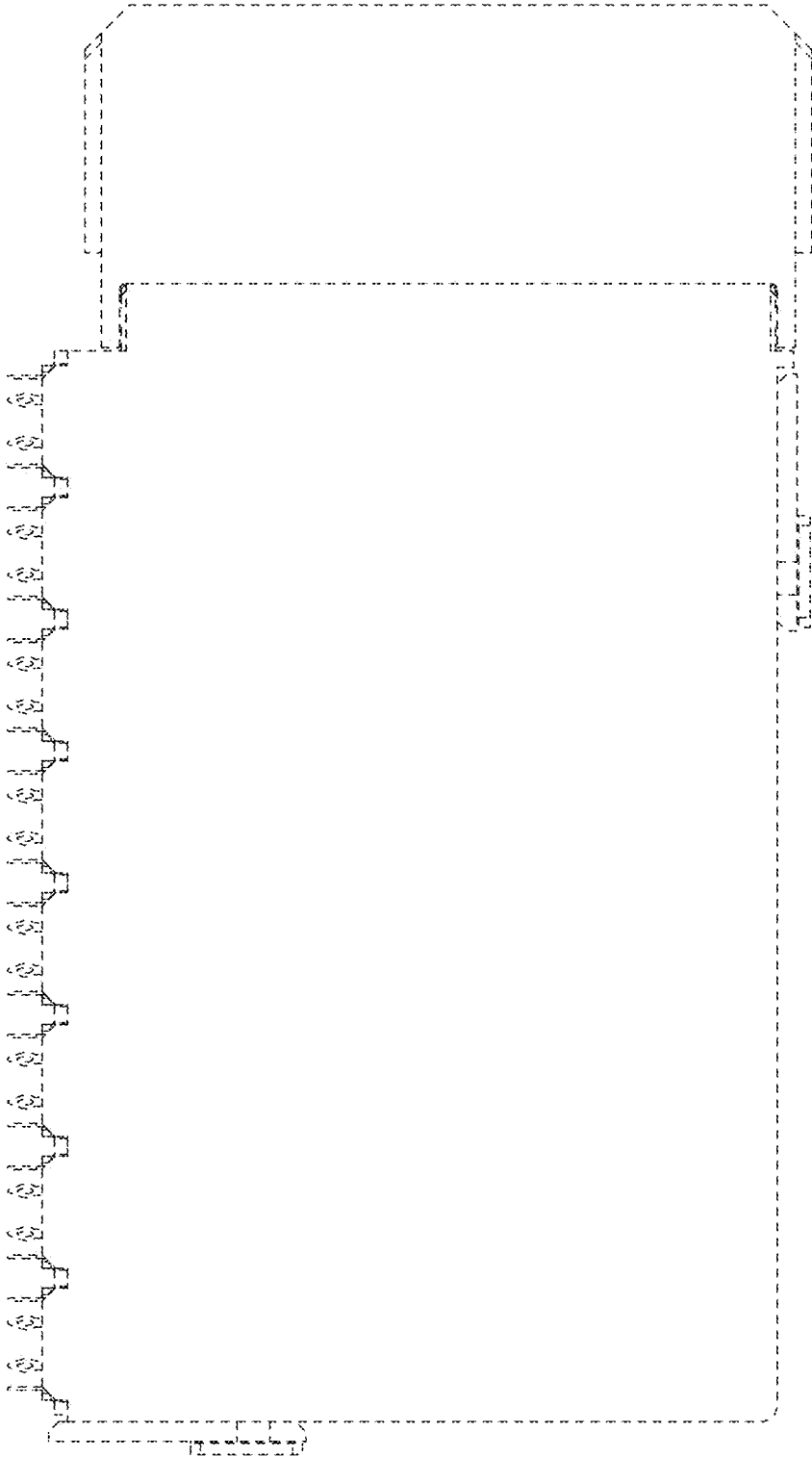


FIG. 14



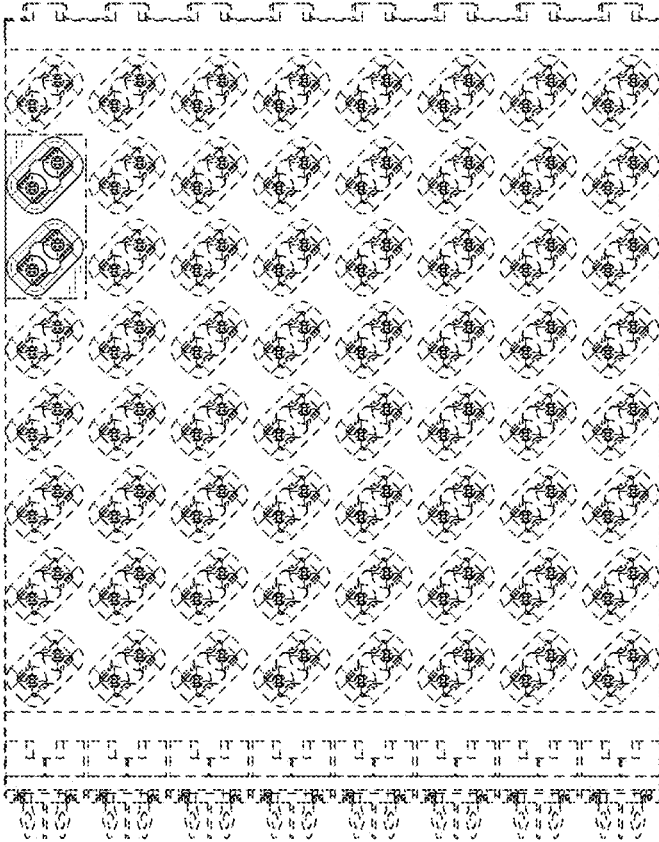


FIG. 15

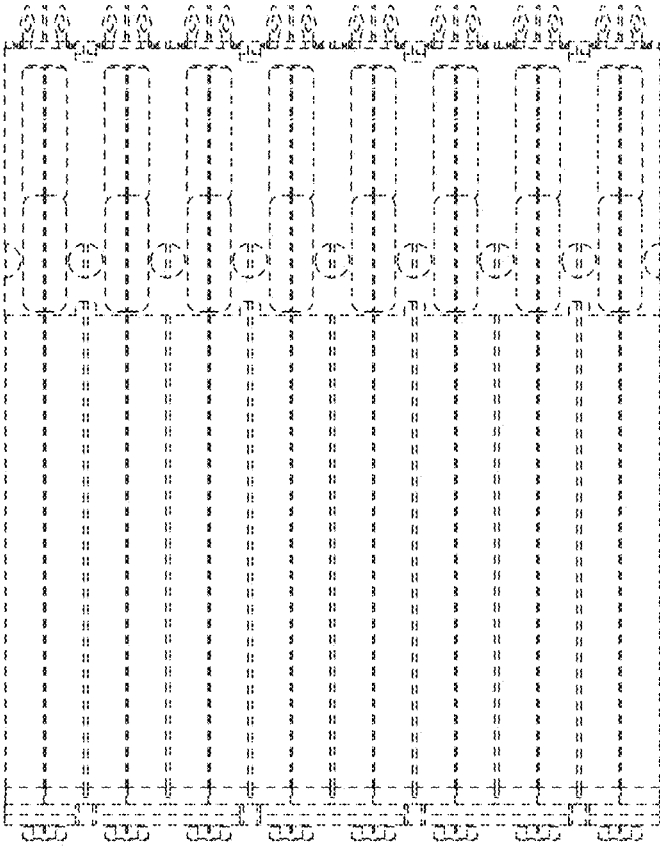


FIG. 16