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(12) United States Design Patent

Ngo et al.

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(54) **ELECTRICAL CONNECTOR**

(75) Inventors: **Hung Viet Ngo**, Harrisburg, PA (US); **John David Dodds**, Harrisburg, PA (US)

(73) Assignee: **FCI Americas Technology, Inc.**, Carson City, NV (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/356,214**

(22) Filed: **Feb. 22, 2010**

Related U.S. Application Data

(63) Continuation of application No. 29/331,731, filed on Jan. 30, 2009, now Pat. No. Des. 616,827.

(51) **LOC (9) Cl.** **13-03**
(52) **U.S. Cl.** **D13/154**
(58) **Field of Classification Search** D13/133, D13/146–147, 154, 184; 439/108, 540.1, 439/541.5, 607.01, 607.04, 607.05, 607.17, 439/607.25, 607.34, 607.41, 607.53
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,059,142	A	10/1991	Ohta et al.
D418,817	S	1/2000	Wu
6,126,475	A	10/2000	Matsuura et al.
6,431,886	B1	8/2002	Ramey et al.
D465,204	S	11/2002	Shi et al.
D465,765	S	11/2002	Zhang et al.
D465,769	S	11/2002	Zhang et al.
D466,084	S	11/2002	Zhang et al.
6,716,045	B2	4/2004	Meredith
D499,381	S	12/2004	Hu et al.
6,848,953	B2	2/2005	Schell et al.
D517,487	S	3/2006	Riku
D517,992	S	3/2006	Riku
7,258,562	B2	8/2007	Daily et al.

OTHER PUBLICATIONS

Author Unknown, "AMP-HDI Hybrid Connectors, Product Line Information for AMP-HDI Hybrid Connectors and Contacts," Tyco Electronics, copyright 2006, date accessed Feb. 17, 2009, 3 pages.

Author Unknown, "Guidance Hardware and Applications, Product Line Information for Accessories (AMP-HDI and TBC)," Tyco Electronics, copyright 2006, date accessed Feb. 17, 2009, 2 pages.

Author Unknown, "Keying Hardware and Applications, Product Line Information for Accessories (AMP-HDI- and TBC)," Tyco Electronics, copyright 2006, date accessed Feb. 17, 2009, 1 page.

(Continued)

Primary Examiner—Daniel D Bui
(74) *Attorney, Agent, or Firm*—Woodcock Washburn LLP

(57) **CLAIM**

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

DESCRIPTION

FIG. **1** is a top, right, front perspective view of an electrical connector according to our design;

FIG. **2** is a right side elevation view thereof;

FIG. **3** is a left side elevation view thereof;

FIG. **4** is a top plan view thereof;

FIG. **5** is a bottom plan view thereof;

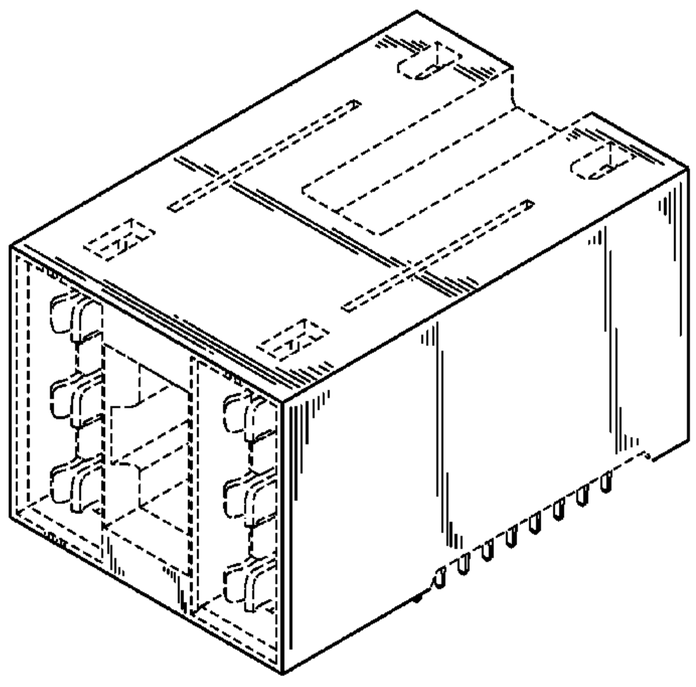
FIG. **6** is a front elevation view thereof; and,

FIG. **7** is a rear elevation view thereof.

The broken line portion of the figure drawings is included to show unclaimed subject matter only and forms no part of the claimed design.

In a preferred embodiment, the nature of this product is an electrical connector in the form of an electrical connector housing configured for retaining a plurality of electrical contacts.

1 Claim, 5 Drawing Sheets



OTHER PUBLICATIONS

Author Unknown, "Power Connectors & Interconnection Systems: Introduction to High Current Card Edge Connectors," Tyco Electronics, Catalog 1773096, Revised Jul. 2007, pp. 137-155.
Author Unknown, "Power Hardware and Applications (for Three and For-Row Connectors Only), Product Line Information for Accessories (AMP-HDI and TBC)," Tyco Electronics, copyright 2006, date accessed Feb. 17, 2009, 2 pages.
Author Unknown, "Tyco Electronics Releases New Card Edge Power Connector," http://news.thomasnet.com/companystory/824480, Tyco Electronics Corp., date accessed Jan. 19, 2010, 4 pages.
Author Unknown, "Universal Power Module, Product Line Information for Universal Power Module (for use with Z-Pack 2mm HM, Z-Pack HS3, Z-Pack HM Zd and Multi GIG RT2J)," copyright 2006, date accessed Feb. 17, 2009, 2 pages.
FCI, Engineer Drawings, "7.2mm Guide Module, Right Angle," Drawing No. 10037909, Aug. 3, 2004, 2 pages.
FCI, Engineer Drawings, "7.2mm Guide Pin," Drawing No. 10037908, Aug. 3, 2004, 2 pages.
http://www.molex.com/molex/products/family?channel=products&chanName=family&pageTitle=Introduction&key=extreme_poweredge, EXTreme PowerEdge ™: EXTreme PowerEdge ™ connectors with signal contacts for combined high-power and signal card edge or busy bar tab applications, printed Feb. 25, 2010, 1 page.
http://www.molex.com/molex/products/famly?channel=products&chanName=family&pageTitle=Introduction&key=extreme_Iphpower, EXTreme LPHPower ™ Low-Profile Hybrid Power Connector: High-current, low-profile EXTreme LPHPPower ™ connector extends mounting flexibility to backplane or midplane mating applications, printed Feb. 25, 2010, 1 page.
REDACTED Inspection Prints SK10045368, Low Profile Guide Pin, 2004, 2 pages.
REDACTED Inspection Prints SK10045588, Right Angle Guide Pin, 2004, 4 pages.

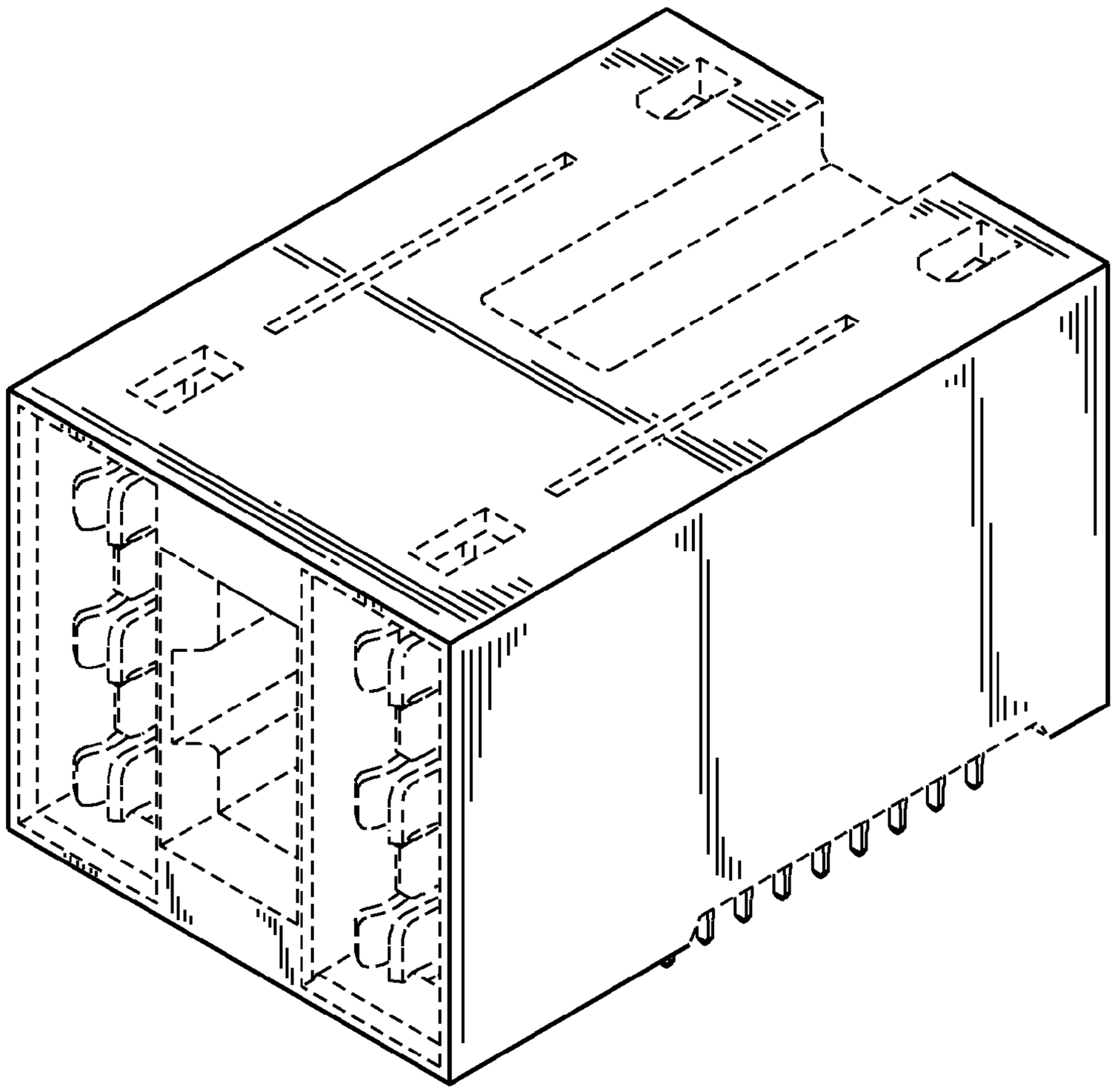


FIG. 1

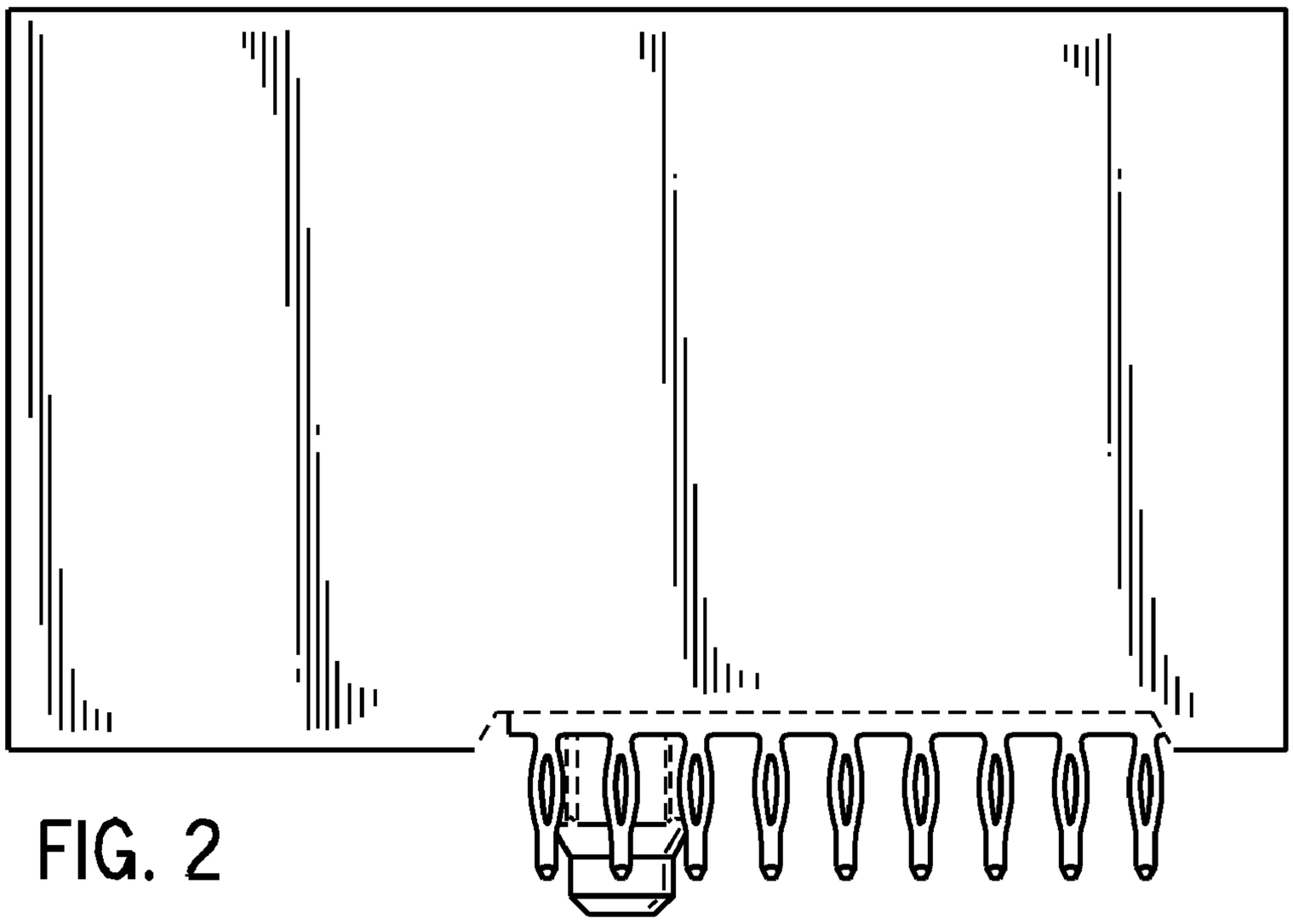


FIG. 2

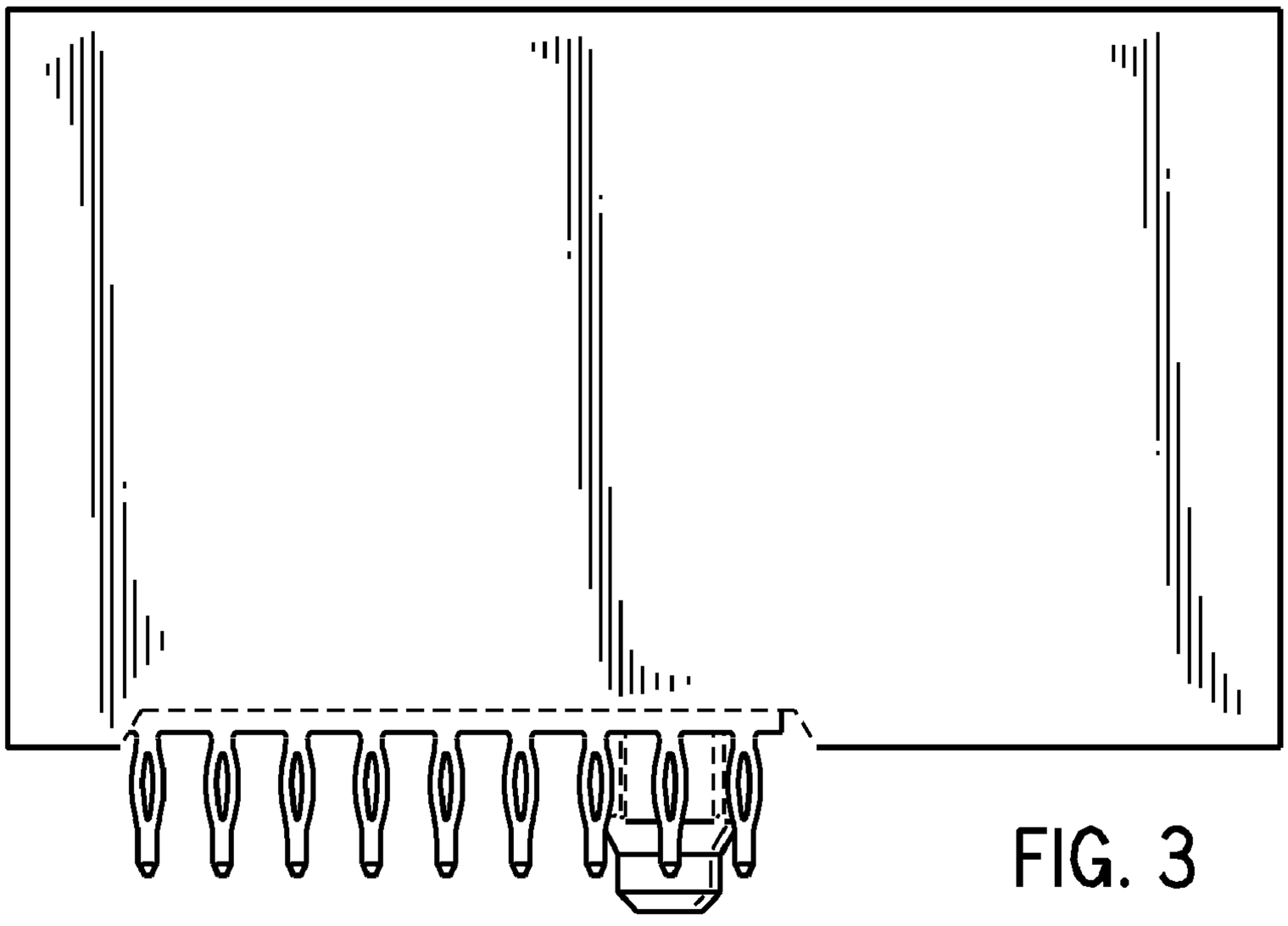


FIG. 3

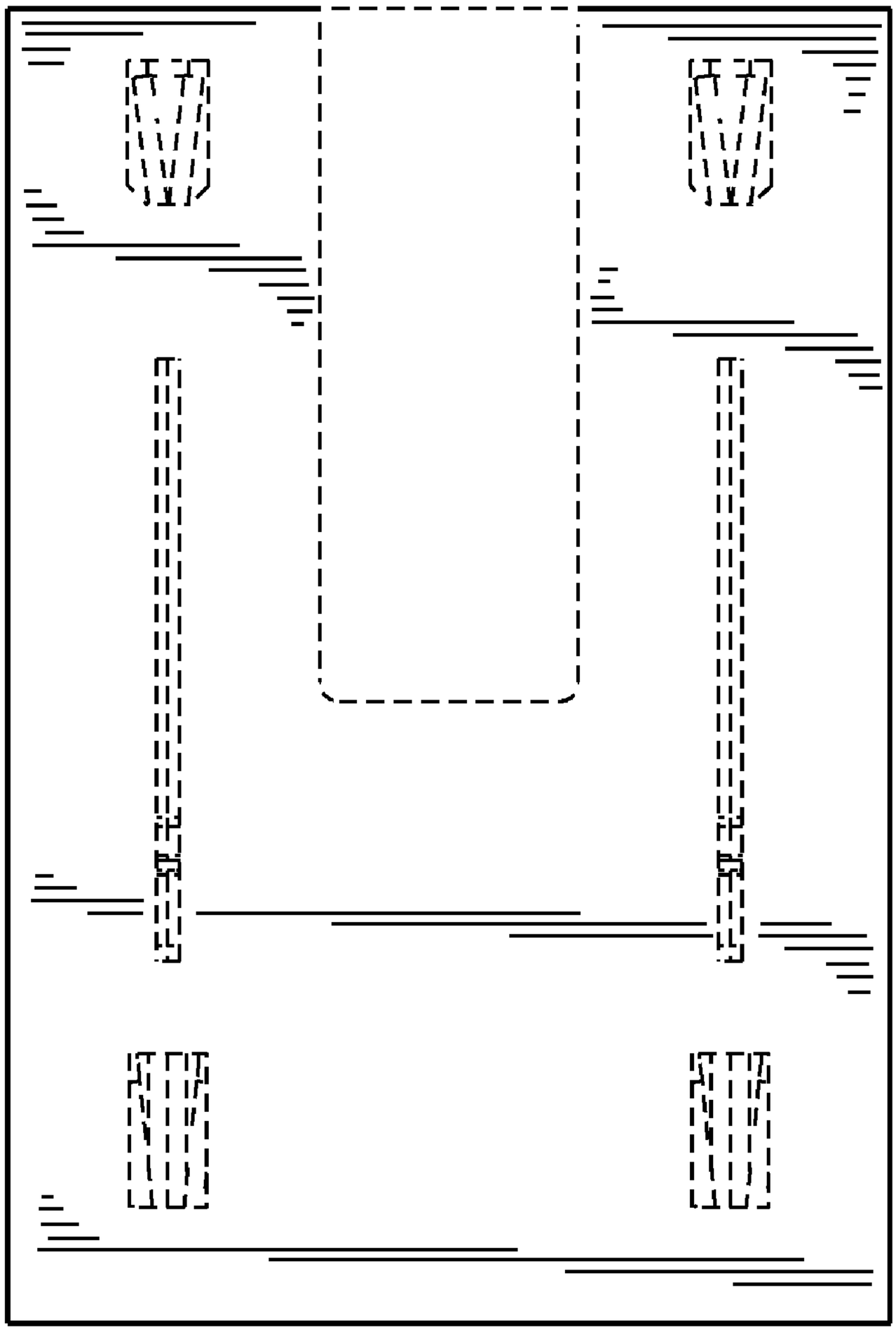


FIG. 4

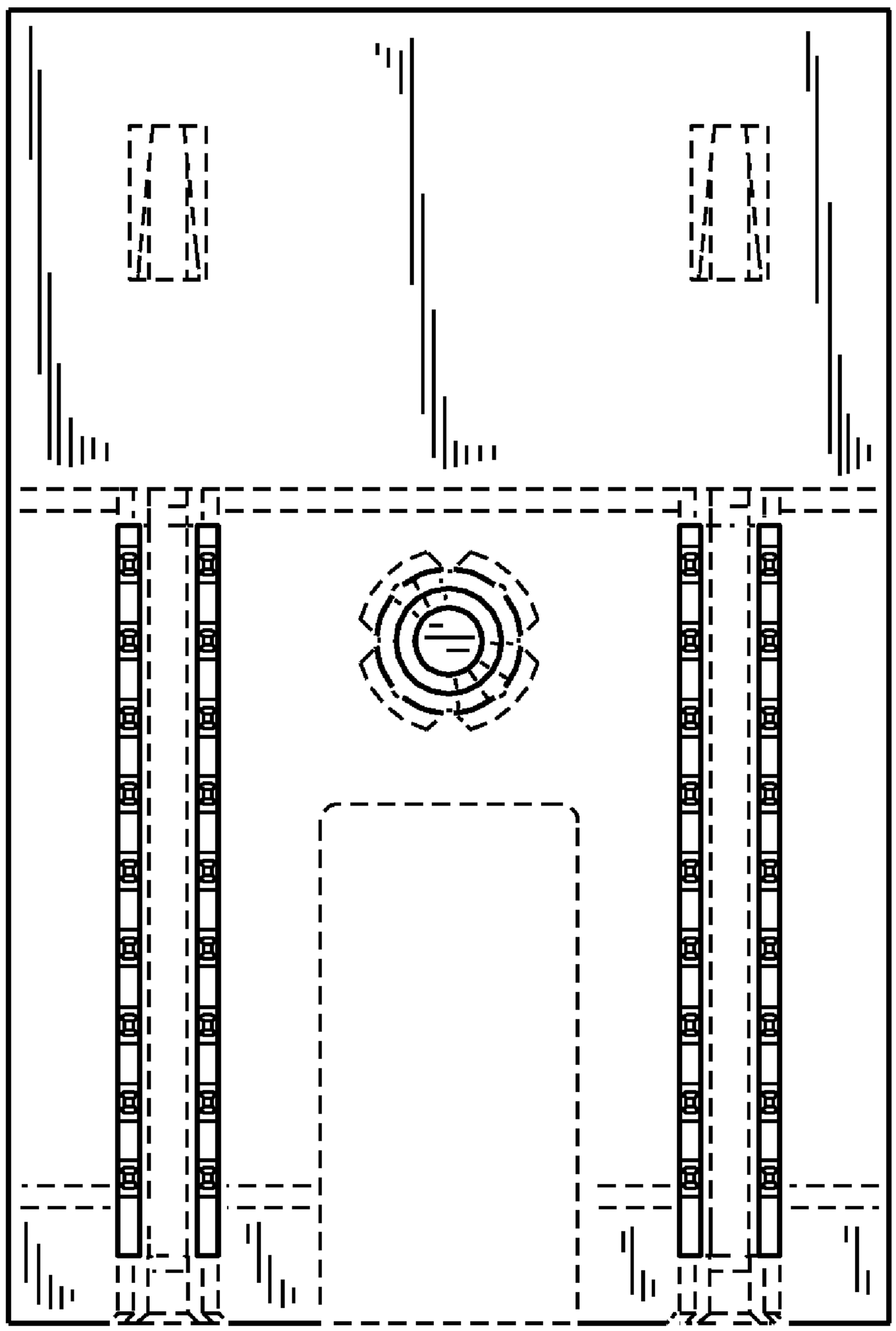


FIG. 5

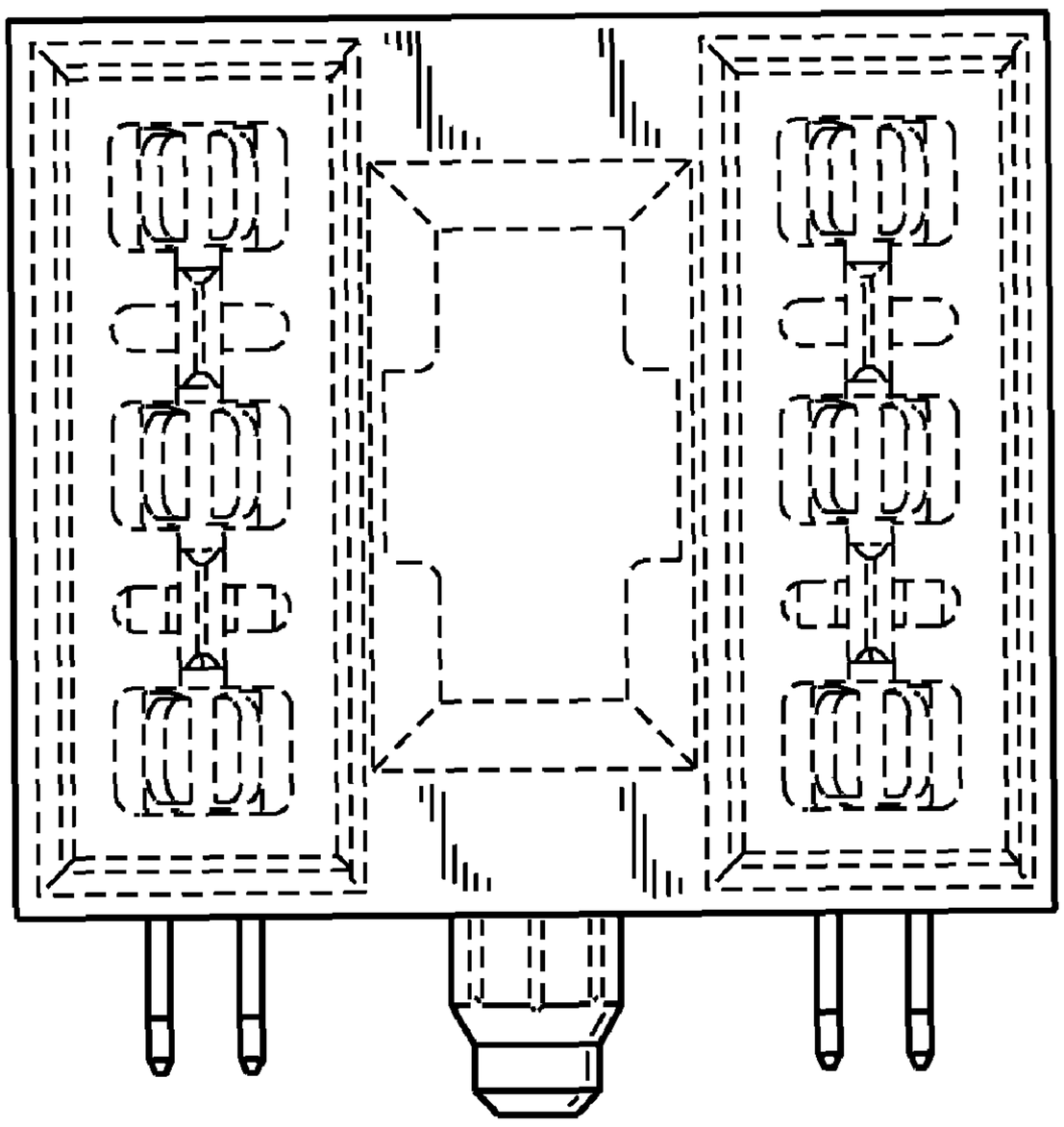


FIG. 6

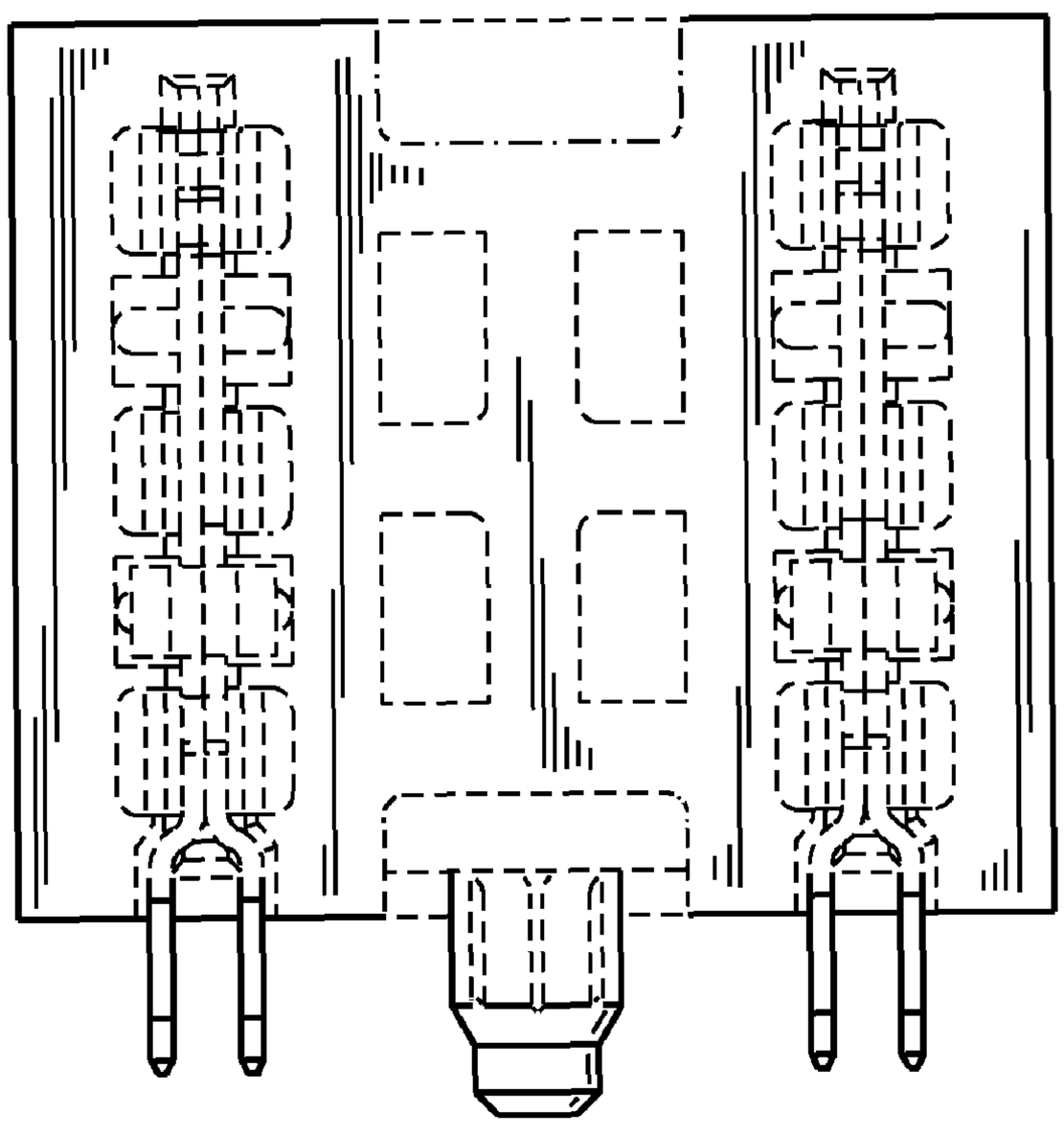


FIG. 7