US0D1094296S

(12) United States Design Patent

Pressel et al.

(10) Patent No.: US D1,094,296 S
(45) Date of Patent: ** Sep. 23, 2025

(54) **HIGH VOLTAGE ELECTRICAL CONNECTOR**

(71) Applicant: **Amphenol Corporation**, Wallingford, CT (US)

(72) Inventors: **Steven E. Pressel**, Harrisburg, PA (US); **Yilin Liu**, Dongguan (CN); **Yulin Rao**, Dongguan (CN)

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

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

(21) Appl. No.: **29/923,325**

(22) Filed: **Dec. 28, 2023**

(51) **LOC (15) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/133**; D13/147

(58) **Field of Classification Search**
USPC D13/120, 133, 146, 147, 153, 154, 156, D13/199; D14/256, 432, 433; 439/94, 439/366, 205, 607.24
CPC H01R 13/02; H01R 13/11; H01R 13/40; H01R 13/64; H01R 13/74; H01R 13/6272; H01R 13/6275
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D425,485	S *	5/2000	Nishio	D13/147
D479,199	S *	9/2003	Jones	D13/147
D605,133	S *	12/2009	Tanaka	D13/147
D737,218	S *	8/2015	Yoshida	D13/154
D748,588	S *	2/2016	Endo	D13/147
D791,707	S *	7/2017	Li	D13/147
D792,853	S *	7/2017	Li	D13/147
D826,863	S *	8/2018	Schafmeister	D13/147

(Continued)

FOREIGN PATENT DOCUMENTS

TW	D204458 S	5/2020
TW	D219847 S	7/2022

(Continued)

OTHER PUBLICATIONS

EV Connector, posted date unavailable, retrieved May 7, 2025 (online), https://evtronix.ca/collections/ev-connectors/products/hvsl800062a1s1 (Year: 2025).*

(Continued)

Primary Examiner — Justin M Jonaitis
Assistant Examiner — Bria' L Simmons-Holloway
(74) *Attorney, Agent, or Firm* — Wolf, Greenfield & Sacks, P.C.

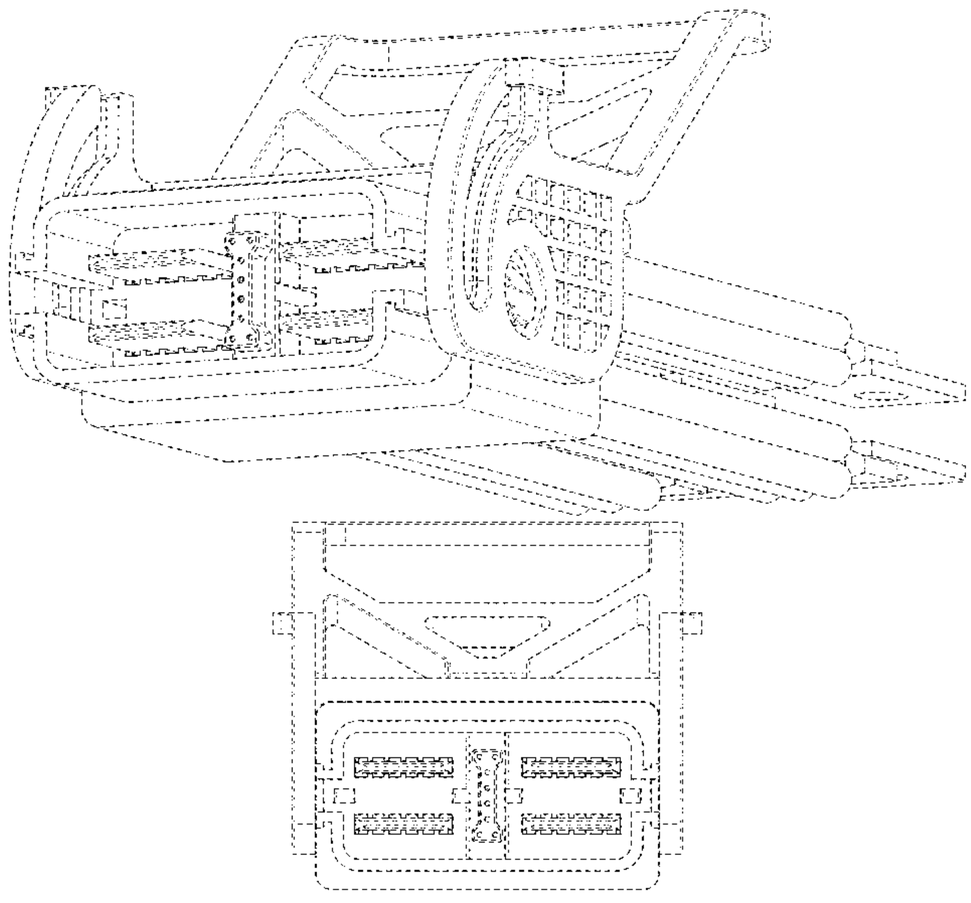
(57) **CLAIM**

The ornamental design for a high voltage electrical connector, as shown and described.

DESCRIPTION

FIG. **1** is a front, bottom, left side perspective view of a high voltage electrical connector with environmental structure shown;
FIG. **2** is a front, bottom, right side perspective view thereof;
FIG. **3** is a front, top, left side perspective view thereof;
FIG. **4** is a front, top, right side perspective view thereof;
FIG. **5** is a front view thereof;
FIG. **6** is a rear view thereof;
FIG. **7** is a right side view thereof;
FIG. **8** is a left side view thereof;
FIG. **9** is a top view thereof; and,
FIG. **10** is a bottom view thereof.
The broken lines in the figures show portions of the high voltage electrical connector and environmental structure that form no part of the claimed design.

1 Claim, 10 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

D841,587	S	*	2/2019	Terajima	D13/133
D906,978	S	*	1/2021	Ganamukhi	D13/133
D1,032,529	S	*	6/2024	Pan	D13/133

FOREIGN PATENT DOCUMENTS

TW	D220693 S		8/2022
TW	D222539 S		12/2022
TW	D227154 S		8/2023
TW	236781-0001	*	3/2025

OTHER PUBLICATIONS

High Voltage Connector, posted date unavailable, retrieved May 7, 2025 (online), https://www.alibaba.com/product-detail/HVIL-2Pin-125A-High-Voltage-Connector_1600638747678.html (Year: 2025).*
Taiwanese Office Action dated Nov. 1, 2024 in connection with Taiwanese Application No. 113303245.
Taiwanese Office Action dated Nov. 1, 2024 in connection with Taiwanese Application No. 113303245D01.
Taiwanese Office Action dated Nov. 1, 2024 in connection with Taiwanese Application No. 113304097.
Taiwanese Office Action dated Nov. 1, 2024 in connection with Taiwanese Application No. 113304133.
[No Author Listed], Busbar Connectors. Amphenol Communications Solutions. 2025. 4 pages. URL:https://www.amphenol-cs.com/busbar-connectors [retrieved on Jan. 3, 2025].
Pressel et al., High Voltage Electrical Connector, Design U.S. Appl. No. 29/923,355, filed Dec. 28, 2023.
Liu et al., High Voltage Electrical Connector, Design U.S. Appl. No. 29/923,334, filed Dec. 28, 2023.
Liu et al., High Voltage Electrical Connector, Design U.S. Appl. No. 29/923,337, filed Dec. 28, 2023.
Xavier, High Voltage Electrical Connector, Design U.S. Appl. No. 29/923,345, filed Dec. 28, 2023.
Xavier, High Voltage Electrical Connector, Design U.S. Appl. No. 29/923,369, filed Dec. 28, 2023.
Liu et al., Latching Mechanism For An Electrical Connector, Design U.S. Appl. No. 29/923,332, filed Dec. 28, 2023.
Xavier, Latching Mechanism For An Electrical Connector, Design U.S. Appl. No. 29/923,346, filed Dec. 28, 2023.
Liu et al., Latching Mechanism For An Electrical Connector, Design U.S. Appl. No. 29/923,328, filed Dec. 28, 2023.
Xavier, Latching Mechanism For An Electrical Connector, Design U.S. Appl. No. 29/923,361, filed Dec. 28, 2023.
Japanese Notice of Allowance dated Jun. 11, 2025 in connection with Japanese Application No. 2025-005303.
Taiwanese Office Action dated May 8, 2025 in connection with Taiwanese Application No. 113304098.
Taiwanese Office Action dated May 8, 2025 in connection with Taiwanese Application No. 113304099.
Taiwanese Notice of Allowance dated Apr. 28, 2025 in connection with Taiwanese Application No. 113304100.
[No. Author Listed], HD 2000497500. Ubersicht Steckverbinder 1. Schaltbau GmbH. Published on Feb. 18, 2009. 4 pages.
[No. Author Listed], HD 2000498400. Ubersicht Steckverbinder 1. Schaltbau GmbH. Published on Feb. 18, 2009. 4 pages.

* cited by examiner

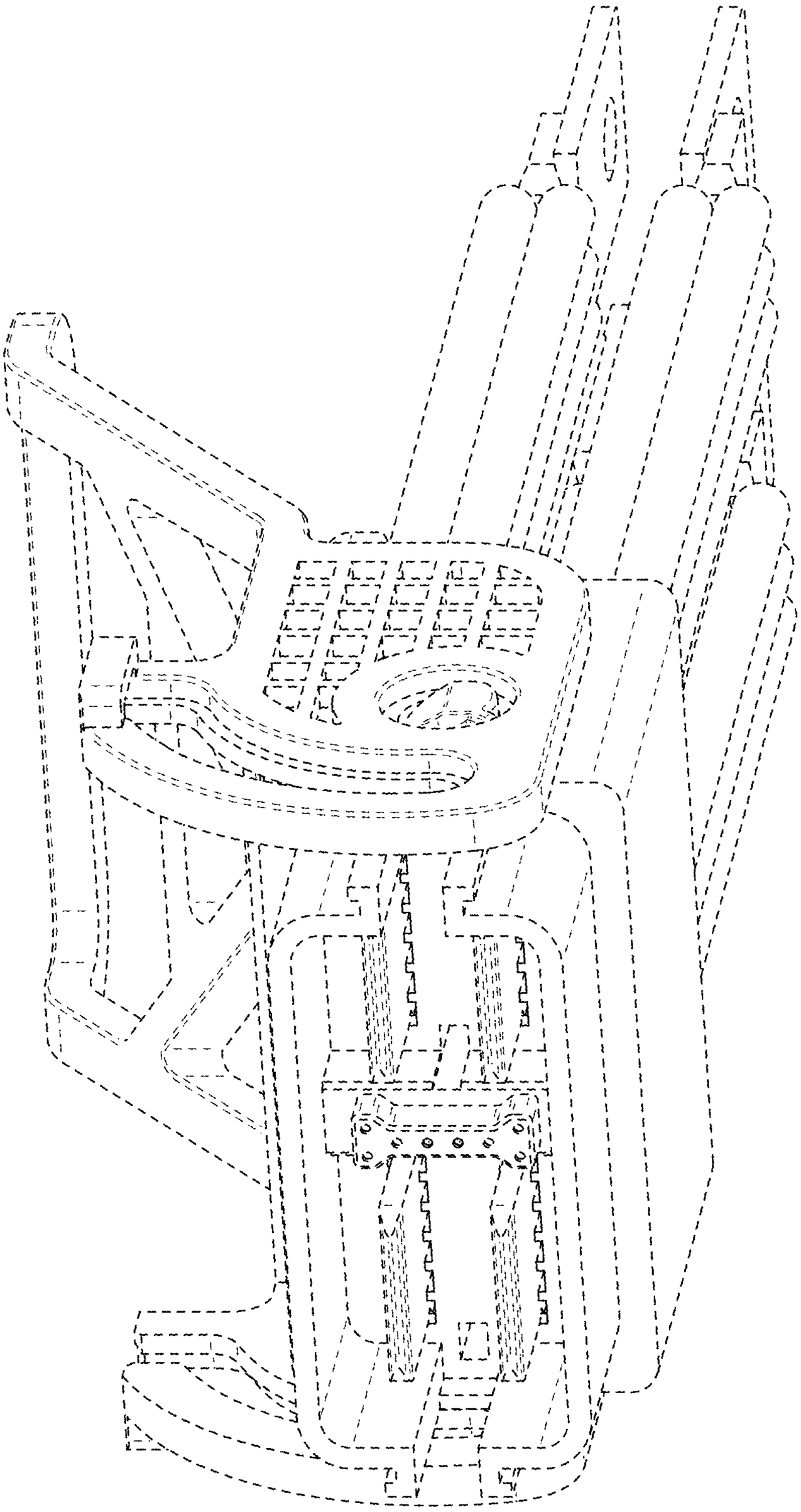


FIG. 1

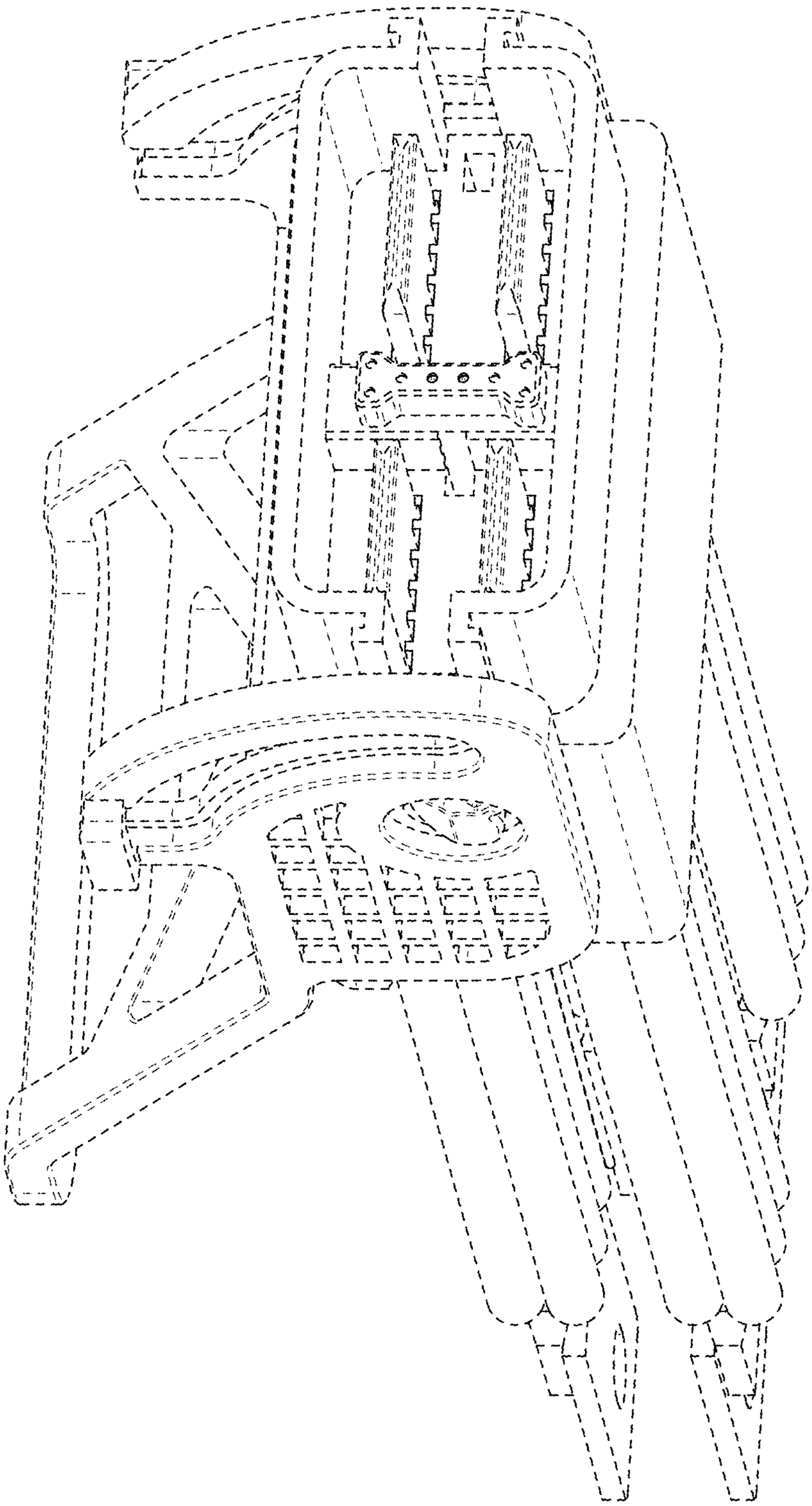


FIG. 2

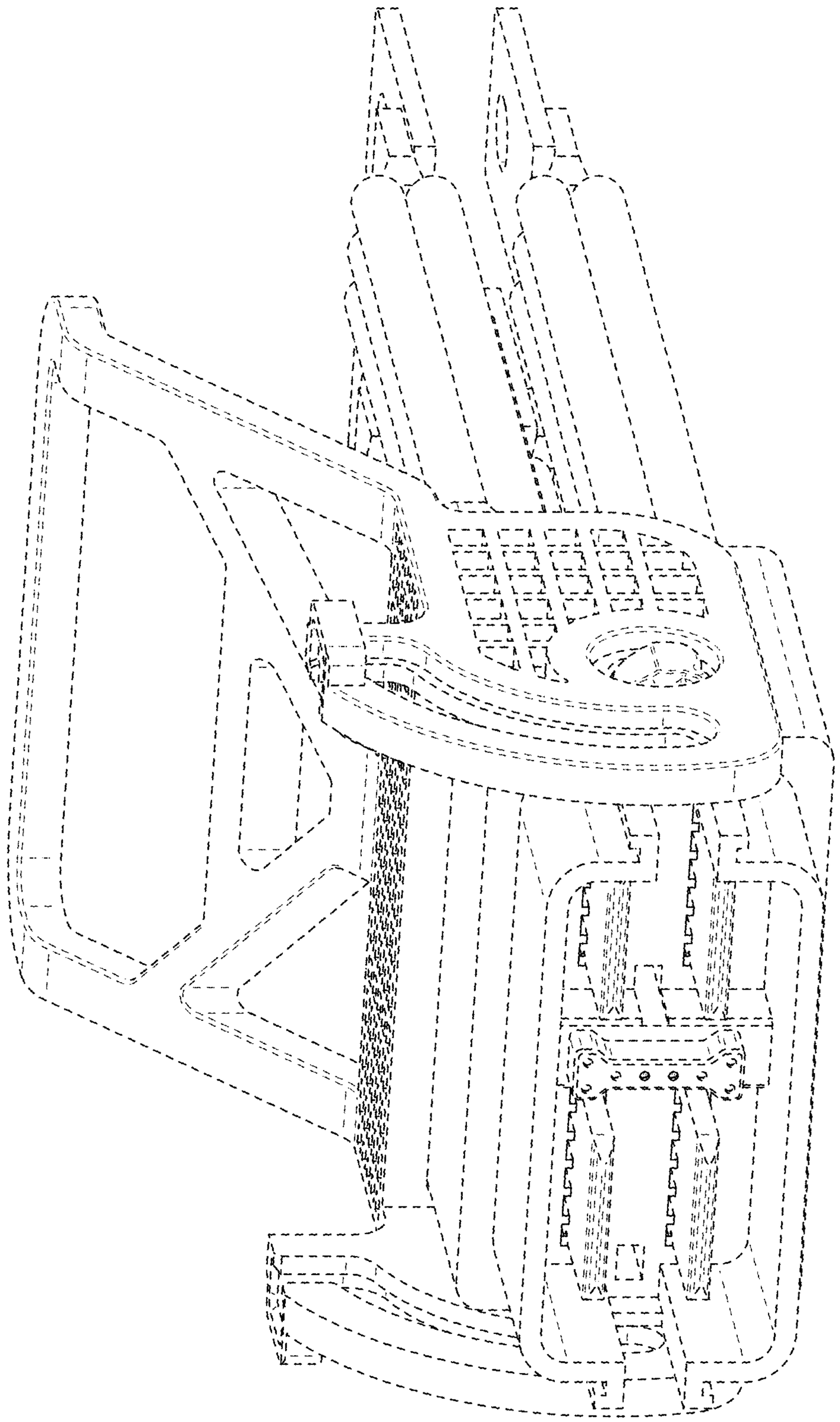


FIG. 3

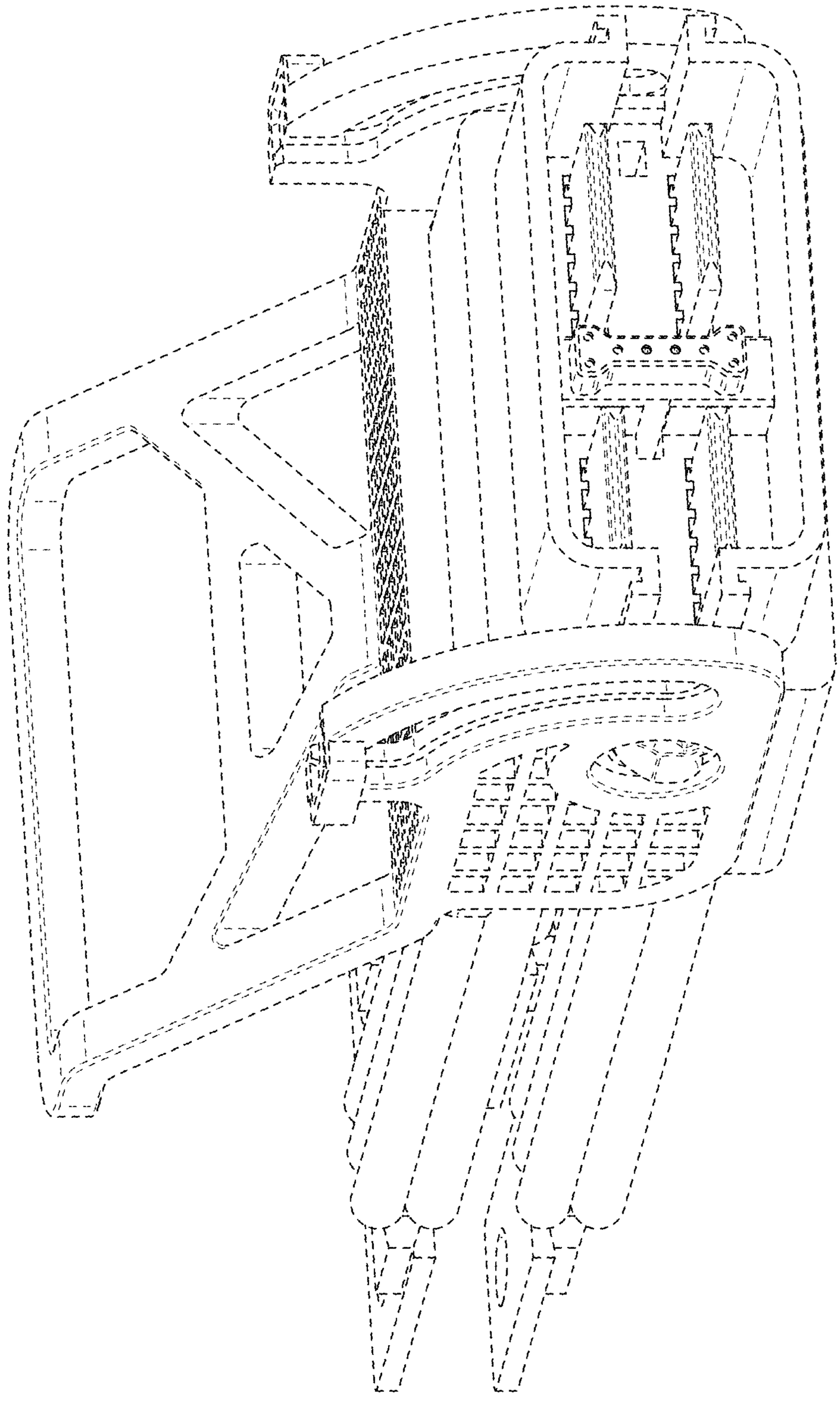


FIG. 4

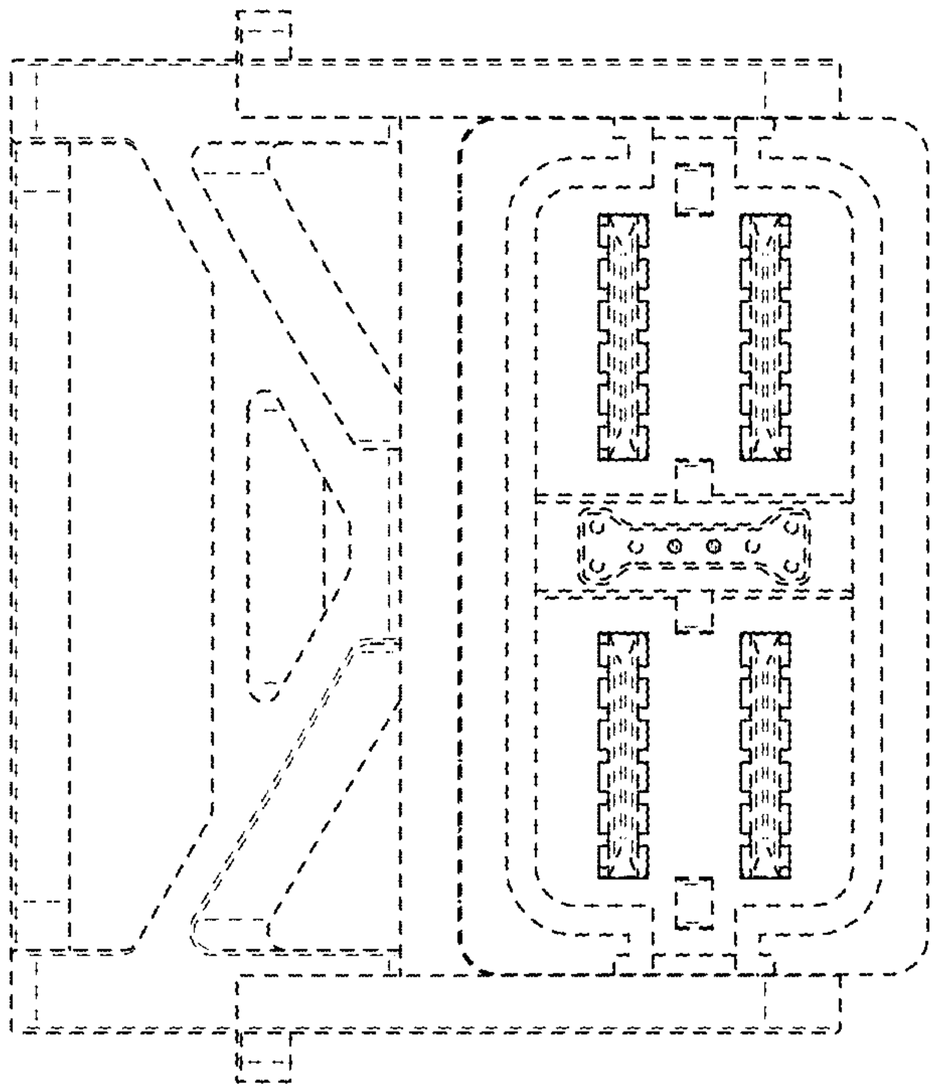


FIG. 5

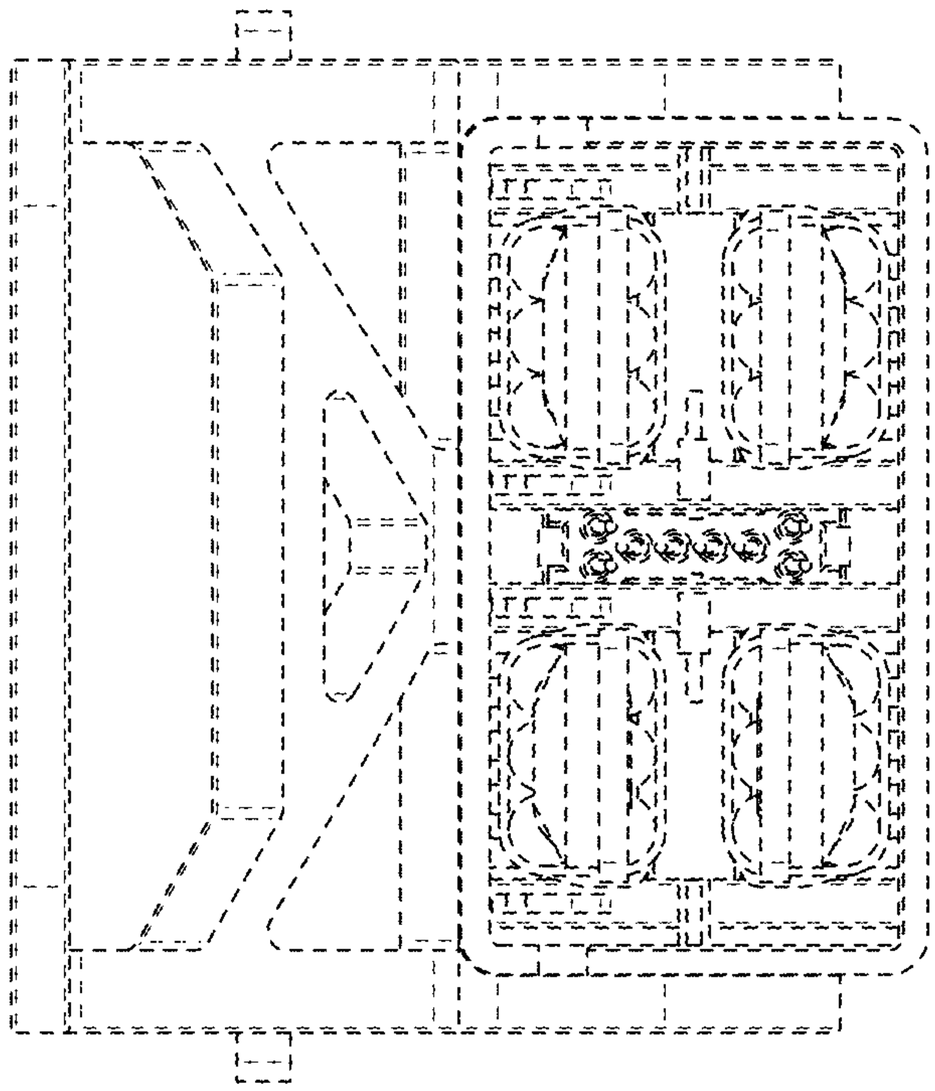


FIG. 6

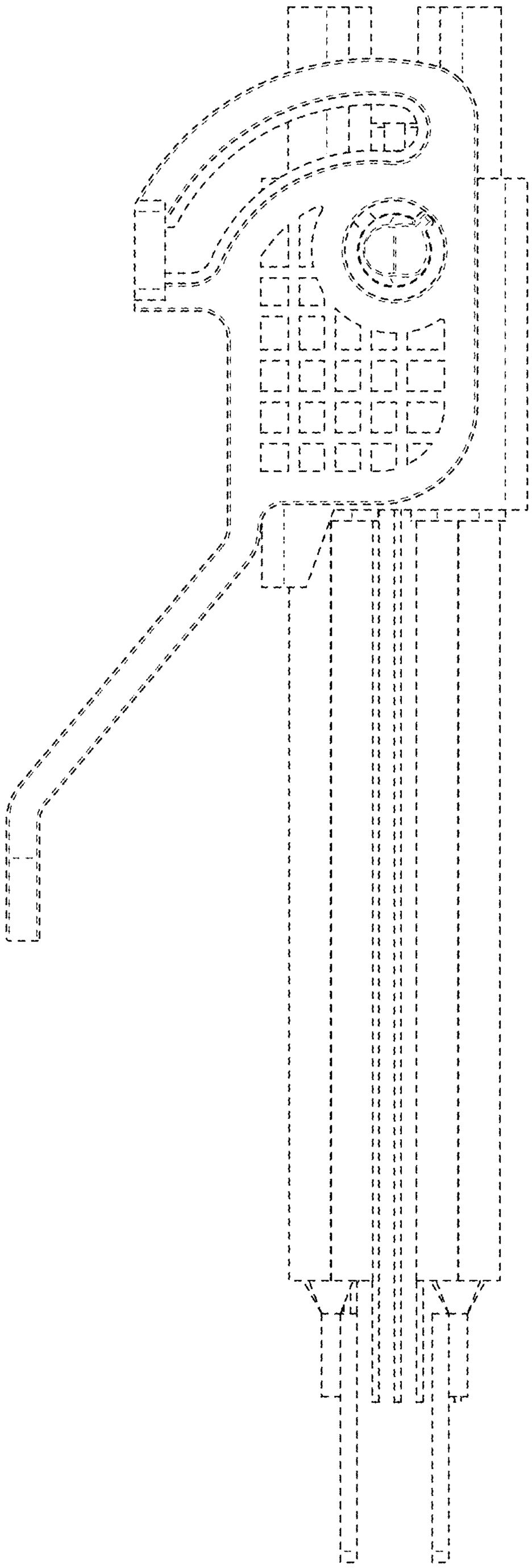


FIG. 7

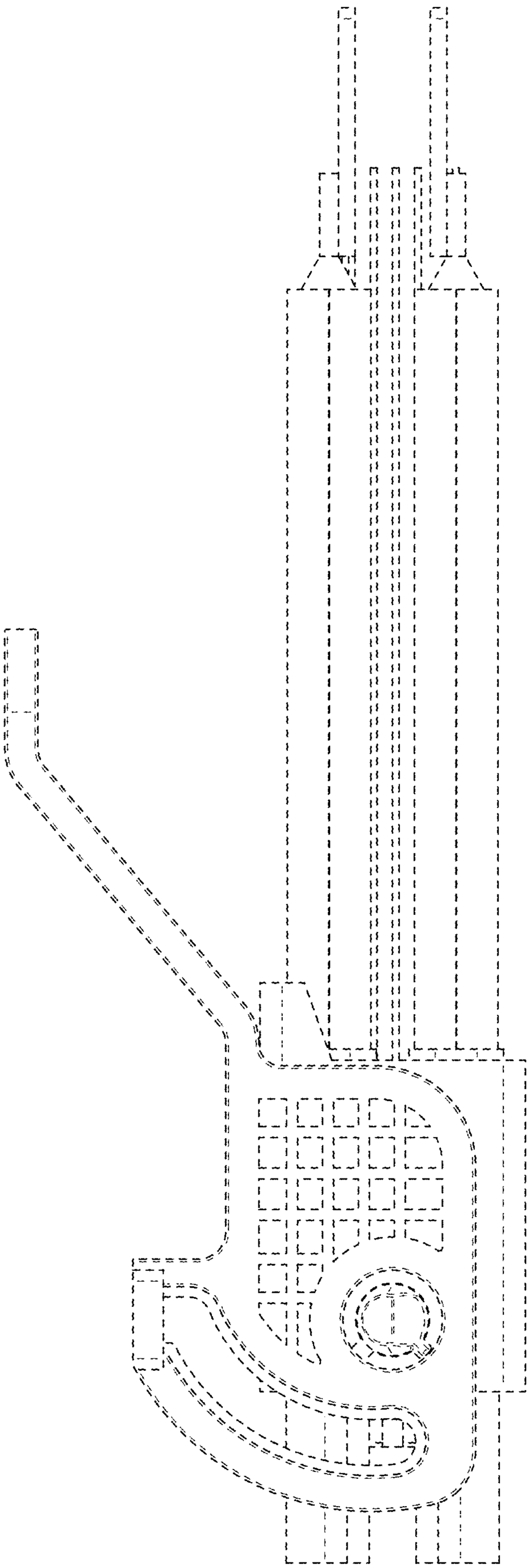


FIG. 8

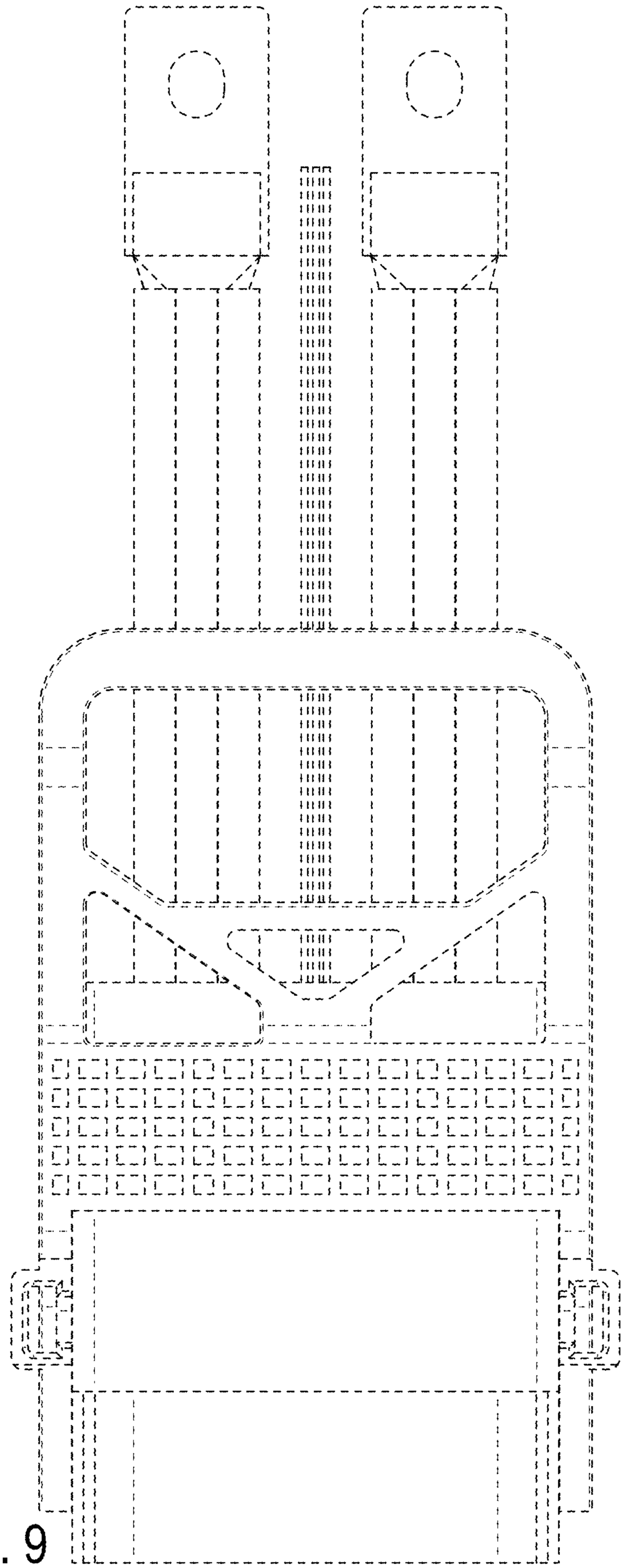


FIG. 9

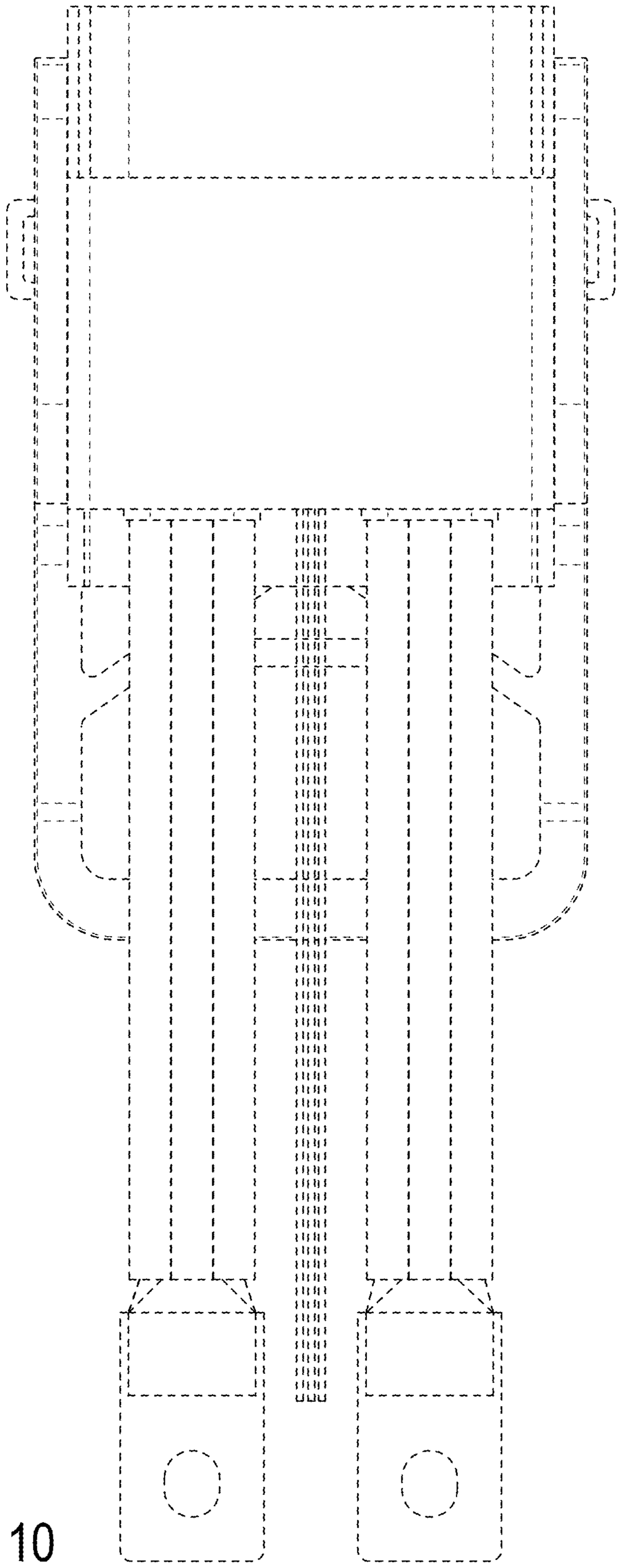


FIG. 10