



US0D1072766S

(12)

United States Design Patent

Lee et al.

(10)

Patent No.:

US D1,072,766 S

(45)

Date of Patent:

** Apr. 29, 2025

(54) CONNECTOR

(71) Applicant: LS Mtron Ltd., Anyang-si (KR)
(72) Inventors: Su Chan Lee, Anyang-si (KR); In Duk Song, Anyang-si (KR); Kyung Hae Choi, Anyang-si (KR)

(73) Assignee: LS MTRON LTD., Anyang-si (KR)

(**) Term: 15 Years

(21) Appl. No.: 29/898,272

(22) Filed: Jul. 25, 2023

(30) Foreign Application Priority Data
Jan. 31, 2023 (KR) 30-2023-0003474
(51) LOC (15) Cl. 13-03
(52) U.S. Cl.
USPC D13/147
(58) Field of Classification Search
USPC D13/133, 146, 147, 149, 182, 184, 199,
D13/101, 107, 116, 118, 120, 121, 123,
D13/137.1, 137.2, 137.4, 153, 154;
D14/435.1, 433
CPC H01R 24/00; H01R 24/46; H01R 12/00;
H01R 12/70; H01R 12/52; H01R 12/707;
H01R 12/716; H01R 13/40; H01R 13/58;
H01R 13/627; H01R 13/62; H01R 13/66;
H01R 13/6335; H01R 13/6272; H01R
13/6397; H01R 13/639; H01R 13/6275;
H01R 31/06; H01R 43/26; H01R
13/6588; H01R 13/6594; H01R 13/6585;
H01R 13/6471; H01R 13/6597; H01R
13/6582; H01R 13/6598; H01R 13/405;
H01R 13/6587; H01R 24/50; H01R
12/73; H01R 13/00; H01R 13/02; H01R
13/10; H01R 13/2407; H01R 13/2492;
H01R 4/363; H01R 2201/00; H01R 3/08;
G02B 6/38; G02B 6/38875; G02B 6/4284

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

D604,250 S * 11/2009 Obikane D13/147
D606,943 S * 12/2009 Ohshima D13/147
D760,659 S * 7/2016 Takemoto D13/147
(Continued)

FOREIGN PATENT DOCUMENTS

CN 302924376 * 8/2014
CN 308637361 * 5/2024
(Continued)

OTHER PUBLICATIONS

240130 Full shielded B2B connector, posted Jan. 30, 2024 [online],
[retrieved Sep. 18, 2024]. Retrieved from internet, https://www.youtube.com/watch?v=OJ8R-F2p_pU (Year: 2024).*

(Continued)

Primary Examiner — George D. Kirschbaum
Assistant Examiner — Denis Houyoux
(74) Attorney, Agent, or Firm — K&L Gates LLP

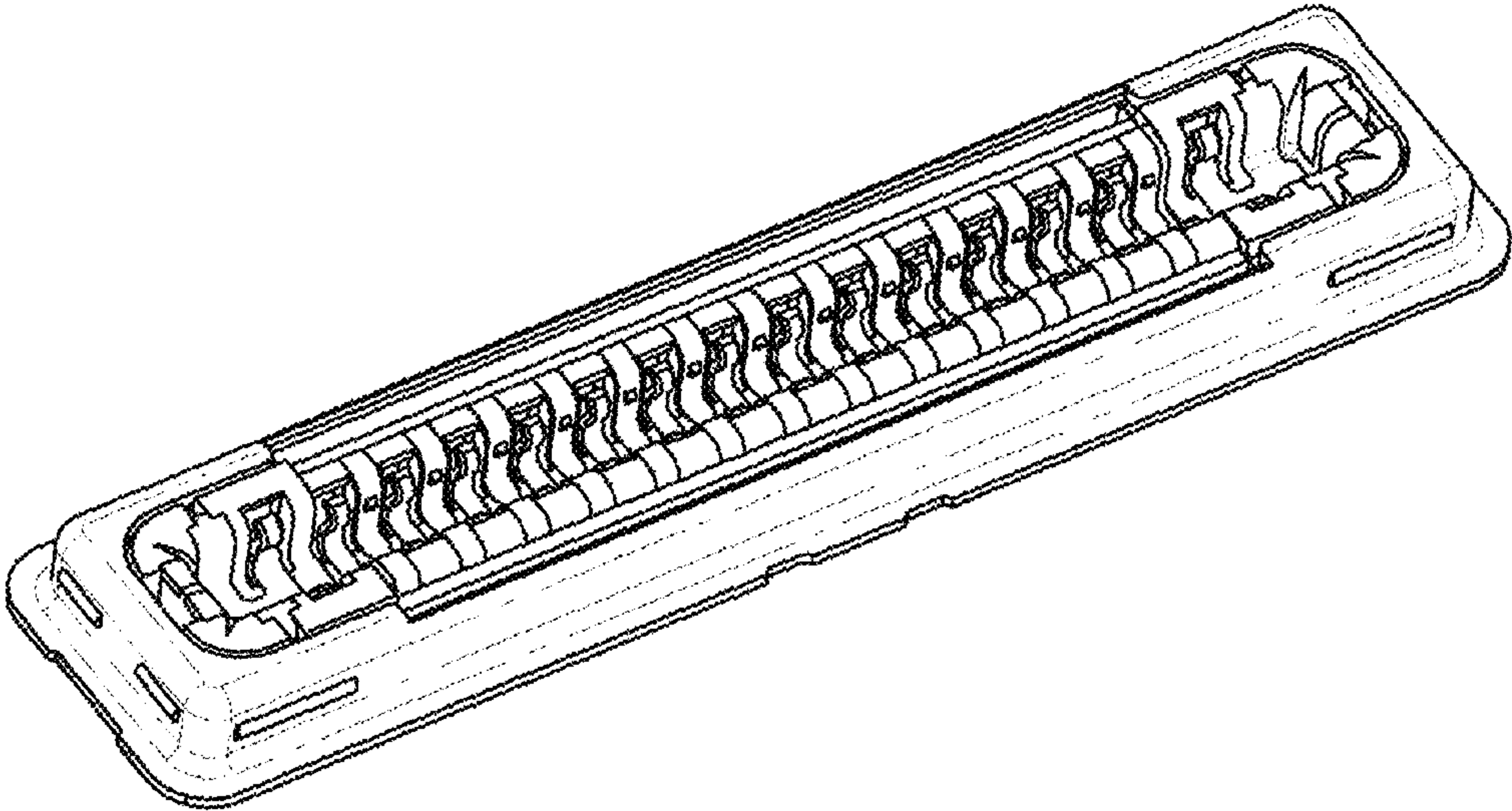
(57) CLAIM

The ornamental design for a connector as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a connector showing the new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left-side view thereof;
FIG. 5 is a right-side view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom view thereof; and,
FIG. 8 is a bottom perspective view thereof.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D834,524	S	*	11/2018	Yayoshi		D13/147
D907,581	S	*	1/2021	Ishida		D13/147
D1,007,437	S	*	12/2023	Gondo		D13/147
D1,033,366	S	*	7/2024	Tanaka		D13/147
D1,034,472	S	*	7/2024	Kan		D13/133
2013/0137307	A1	*	5/2013	Huang		H01R 24/60 439/660
2019/0131731	A1	*	5/2019	Lee		H01R 12/716

FOREIGN PATENT DOCUMENTS

CN	308816895	*	9/2024
KR	301273650.0000	*	8/2024
KR	301273651.0000	*	8/2024
TW	176643-0001	*	6/2016

OTHER PUBLICATIONS

240130 LS Mtron B2B connector, posted Jan. 30, 2024 [online], [retrieved Sep. 18, 2024]. Retrieved from internet, <https://www.youtube.com/watch?v=WXsVqA6AAUc> (Year: 2024).*

NexPCB connectors article, posted Jul. 8, 2021 [online], [retrieved Sep. 18, 2024]. Retrieved from internet, <https://www.nexpcb.com/blog/pcb-connectors-crash-course-almost-all-the-connectors-you-need-to-know> (Year: 2021).*

Panasonic high current connectors, posted Aug. 5, 2020 [online], [retrieved Sep. 18, 2024]. Retrieved from internet, <https://na.industrial.panasonic.com/products/connectors/board-board-connectors/lineup/high-current-connectors> (Year: 2020).*

Panasonic Narrow Fine Pitch Connectors, posted Aug. 5, 2020 [online], [retrieved Sep. 18, 2024]. Retrieved from internet, <https://na.industrial.panasonic.com/products/connectors/board-board-connectors/lineup/narrow-fine-pitch-connectors> (Year: 2020).*

SSB RP Series Datasheet, posted Aug. 2018 [online], [retrieved Sep. 18, 2024]. Retrieved from internet, <https://www.tti.com/content/dam/ttiinc/manufacturers/molex/Products/PDF/SSB%20RP%20Series%20Datasheet.PDF> (Year: 2018).*

SSB6 Standard Series Datasheet, posted Aug. 2018 [online], [retrieved Sep. 18, 2024]. Retrieved from internet, <https://www.tti.com/content/dam/ttiinc/manufacturers/molex/Products/PDF/SSB6%20Standard%20Series%20Datasheet.PDF> (Year: 2018).*

* cited by examiner

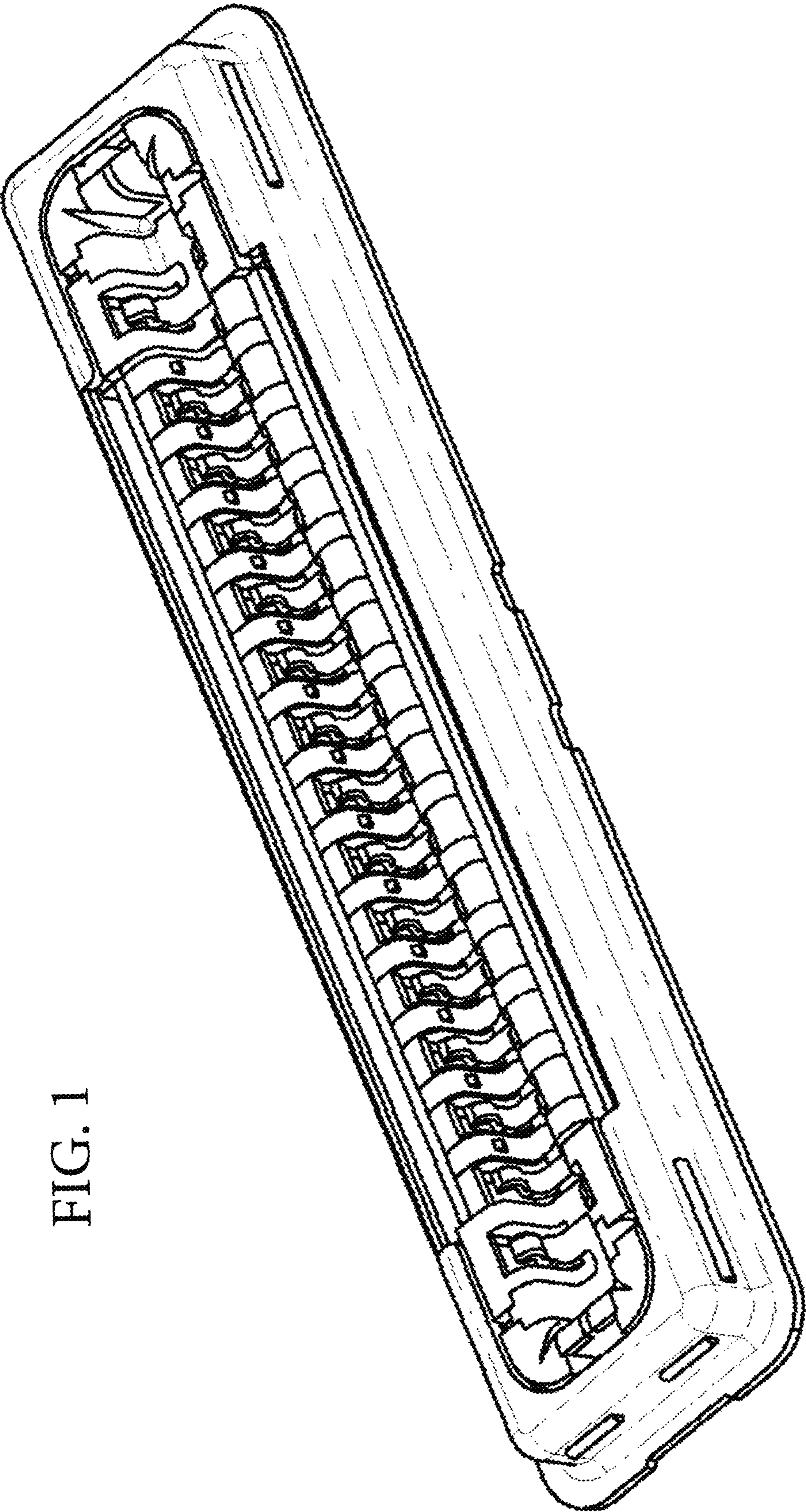


FIG. 1

FIG. 2

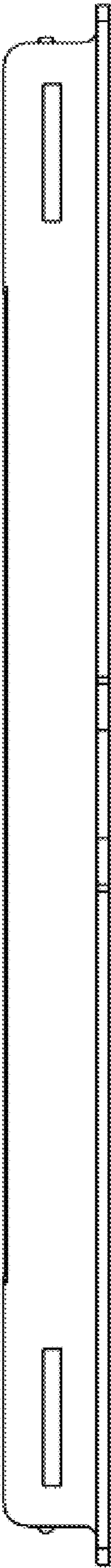


FIG. 3

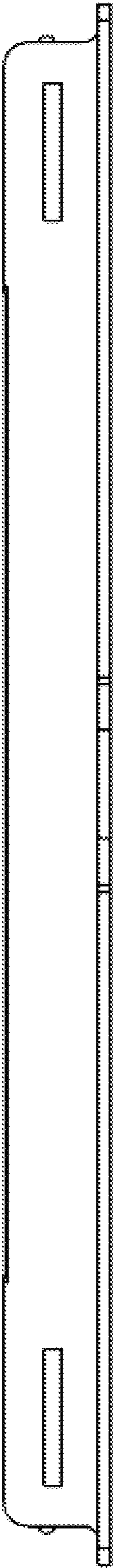


FIG. 4

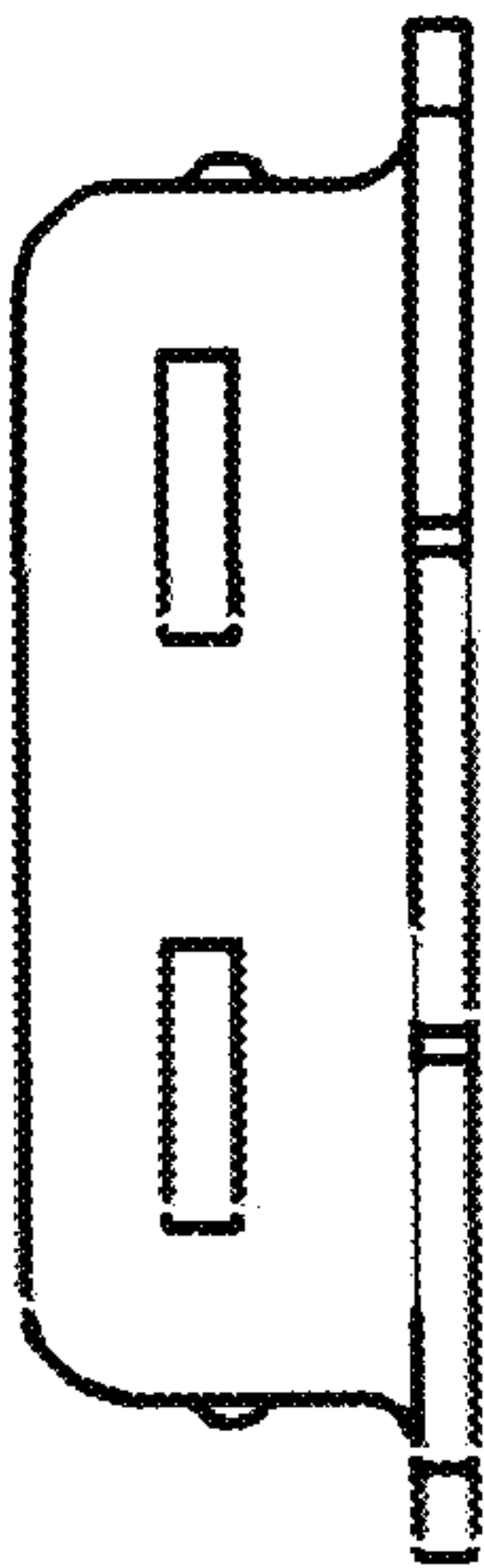


FIG. 5

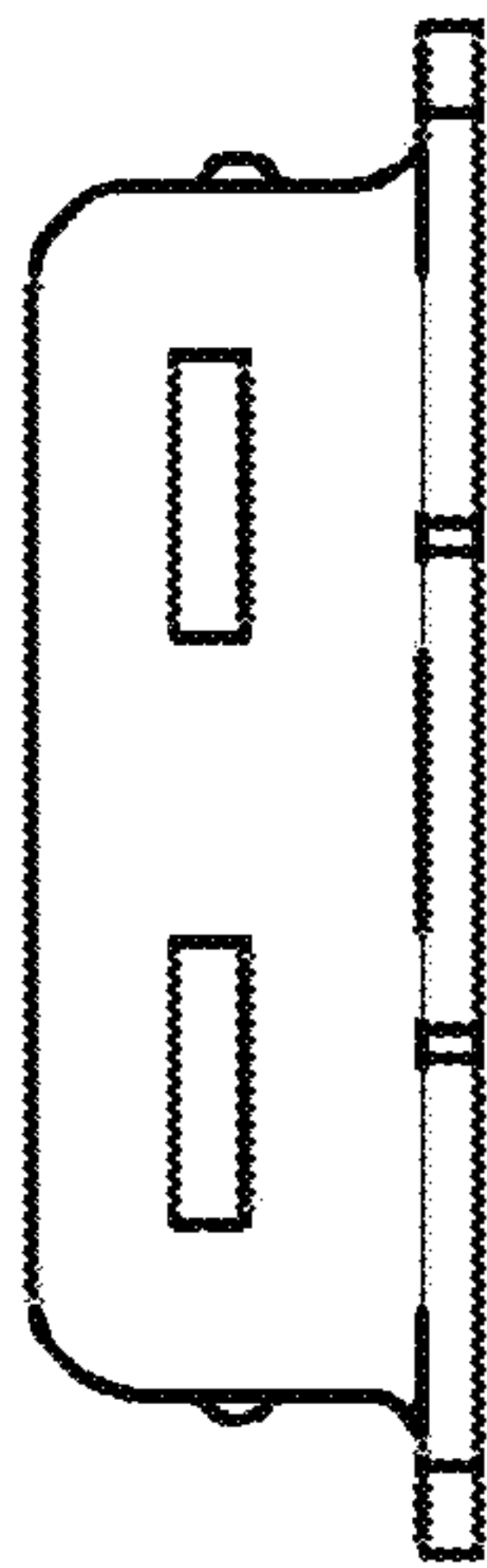


FIG. 6

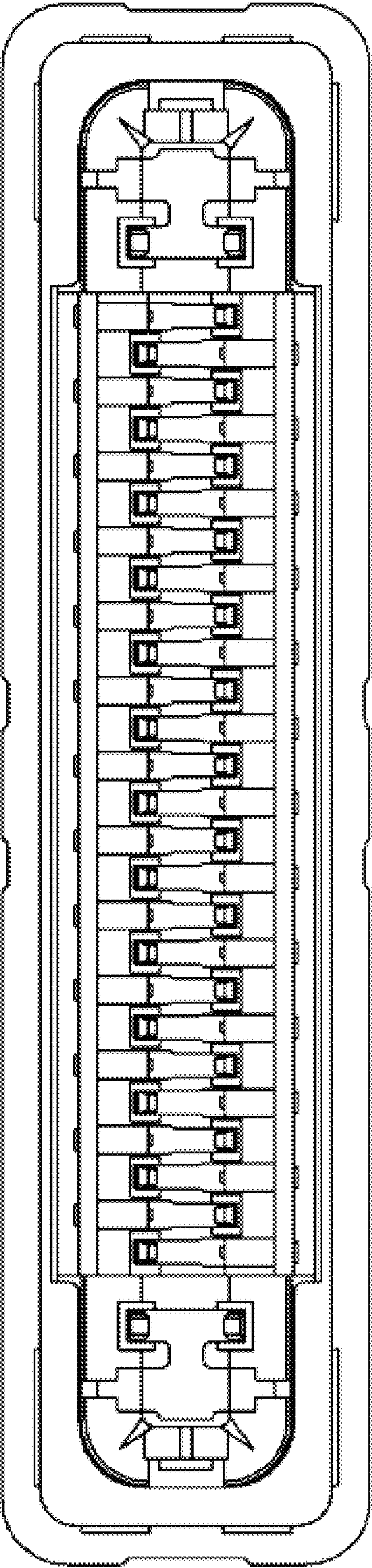


FIG. 7

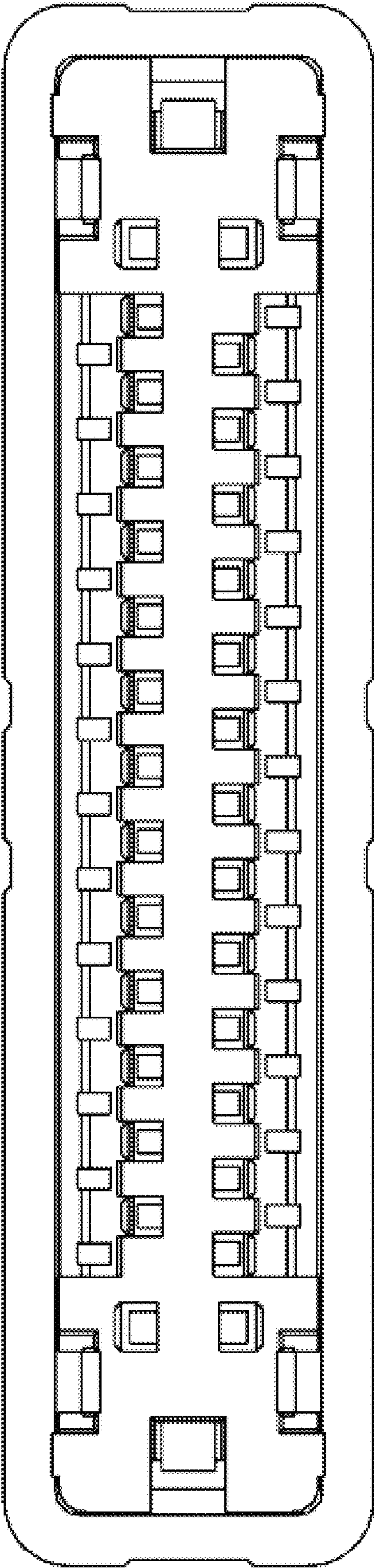


FIG. 8

