US00D844568S

(12) United States Design Patent

Naito et al.

(10) Patent No.: US D844,568 S
(45) Date of Patent: ** Apr. 2, 2019

(54) **ELECTRICAL CONNECTOR**

(71) Applicant: **Japan Aviation Electronics Industry, Limited**, Tokyo (JP)

(72) Inventors: **Takeharu Naito**, Tokyo (JP); **Yukiko Sato**, Tokyo (JP); **Kimiaki Saitou**, Tokyo (JP)

(73) Assignee: **JAPAN AVIATION ELECTRONICS INDUSTRY, LIMITED**, Tokyo (JP)

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

(21) Appl. No.: **29/642,361**

(22) Filed: **Mar. 29, 2018**

(30) **Foreign Application Priority Data**

Oct. 5, 2017 (JP) 2017-022151

(51) **LOC (11) Cl.** **13-03**

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

(58) **Field of Classification Search**
USPC D13/110, 118, 123, 133, 146, 147, 154, D13/156, 173, 177, 184, 199
CPC . H01R 9/00; H01R 9/03; H01R 12/00; H01R 12/58; H01R 12/585; H01R 12/72; H01R 13/00; H01R 13/05; H01R 13/436; H01R 13/516; H01R 13/60; H01R 13/62; H01R 13/6471; H01R 13/648; H01R 13/658; H01R 13/6597
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D478,050 S * 8/2003 Nishio D13/147
D480,685 S * 10/2003 Hagiwara D13/147
D566,655 S * 4/2008 Chen D13/147
D585,829 S * 2/2009 Ko D13/147
D591,242 S * 4/2009 Zhang D13/147
D593,036 S * 5/2009 Asano D13/147
D618,625 S * 6/2010 Nagata D13/147
D624,022 S * 9/2010 Liu D13/147
D628,538 S * 12/2010 Wang D13/147
D633,047 S * 2/2011 Nagata D13/147
D636,733 S * 4/2011 Wang D13/147
D637,958 S * 5/2011 Asano D13/147
(Continued)

Primary Examiner — Angela J Lee
Assistant Examiner — Shawn T Gingrich
(74) *Attorney, Agent, or Firm* — Manabu Kanesaka

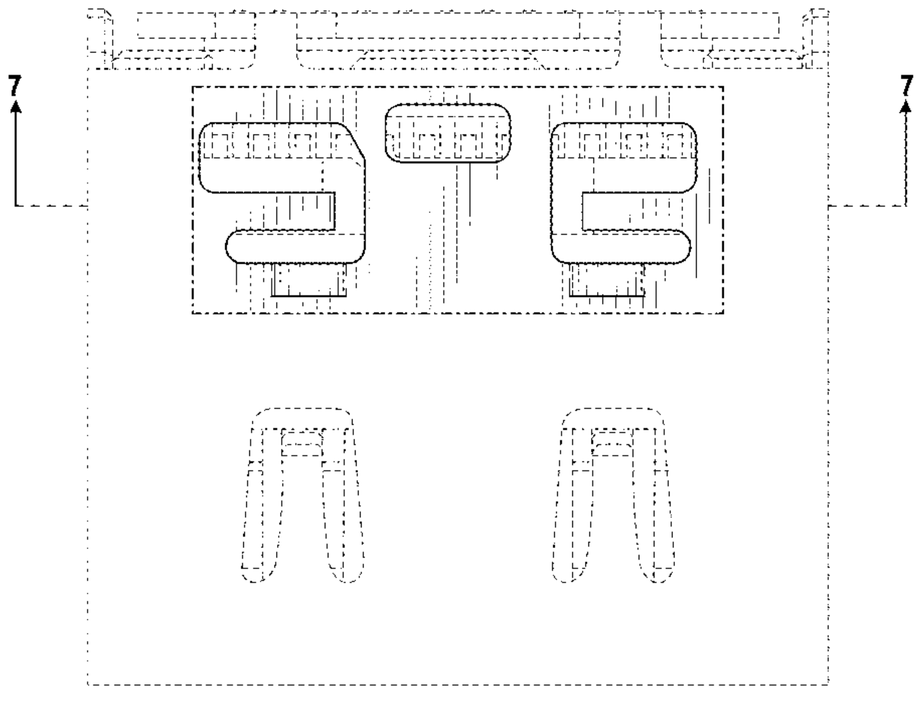
(57) **CLAIM**

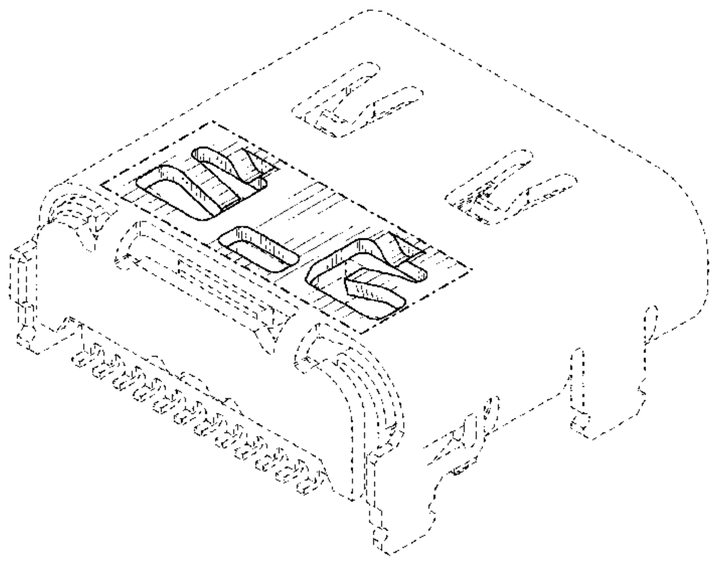
The ornamental design for an electrical connector, as shown and described.

DESCRIPTION

FIG. **1** is a front elevational view of an electrical connector showing our new design;
FIG. **2** is a rear elevational view thereof;
FIG. **3** is a right side elevational view thereof;
FIG. **4** is a left side elevational view thereof;
FIG. **5** is a top plan view thereof;
FIG. **6** is a bottom plan view thereof;
FIG. **7** is a cross-sectional view thereof taken along a line **7-7** in FIG. **5**;
FIG. **8** is a perspective view showing a front, top and right side thereof;
FIG. **9** is a perspective view showing a rear, bottom and left side thereof;
FIG. **10** is a perspective view showing a front, right and bottom side thereof; and,
FIG. **11** is a perspective view showing a rear, left and top side thereof.
The dashed broken line showing of the electrical connector is for the purpose of illustrating portions of the article, and the dot-dash broken line defines the bounds of the claimed design. The dashed broken line and the dot-dash broken line form no part of the claimed design.

1 Claim, 6 Drawing Sheets





(56) **References Cited**

U.S. PATENT DOCUMENTS

D639,245	S *	6/2011	Wada	D13/147
D708,581	S *	7/2014	Asano	D13/147
D709,035	S *	7/2014	Yokoyama	D13/147
D733,661	S *	7/2015	Tada	D13/147
2012/0171906	A1 *	7/2012	Chiang	H01R 13/05 439/676
2016/0240977	A1 *	8/2016	Yu	H01R 13/6471
2016/0254619	A1 *	9/2016	Toda	H01R 12/585 439/607.01
2018/0138621	A1 *	5/2018	Zhao	H01R 13/6585

* cited by examiner

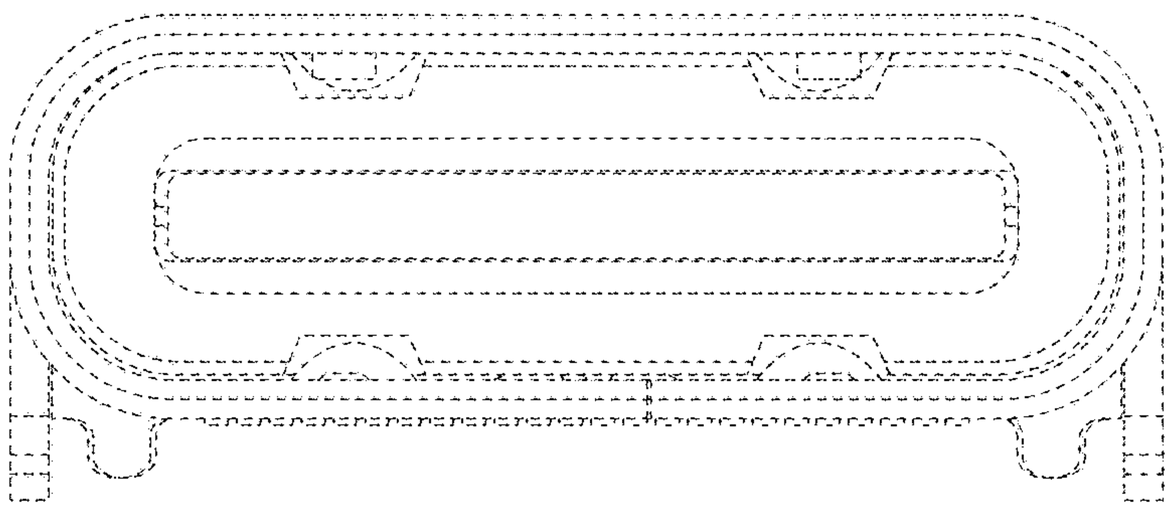


FIG. 1

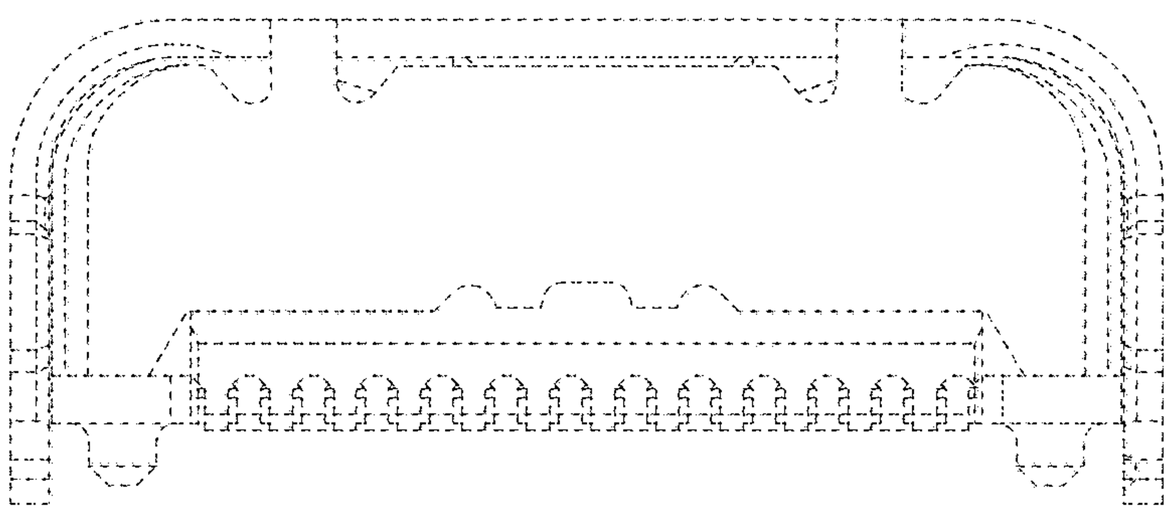


FIG. 2

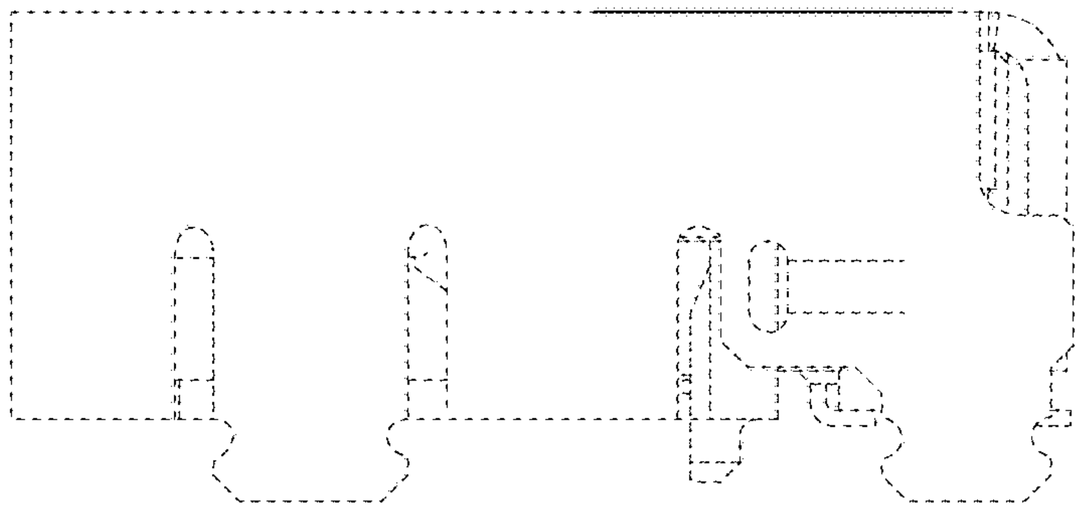


FIG. 3

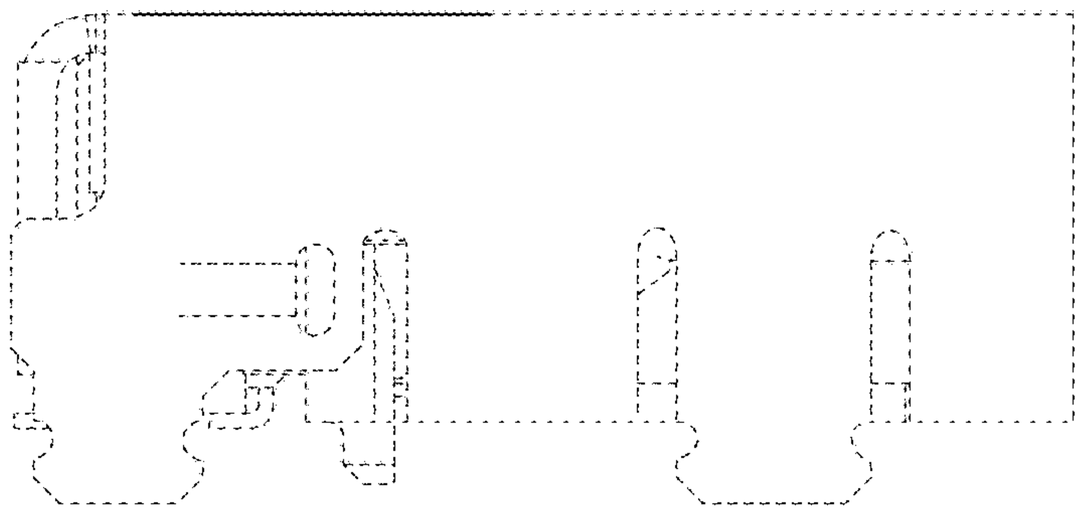


FIG. 4

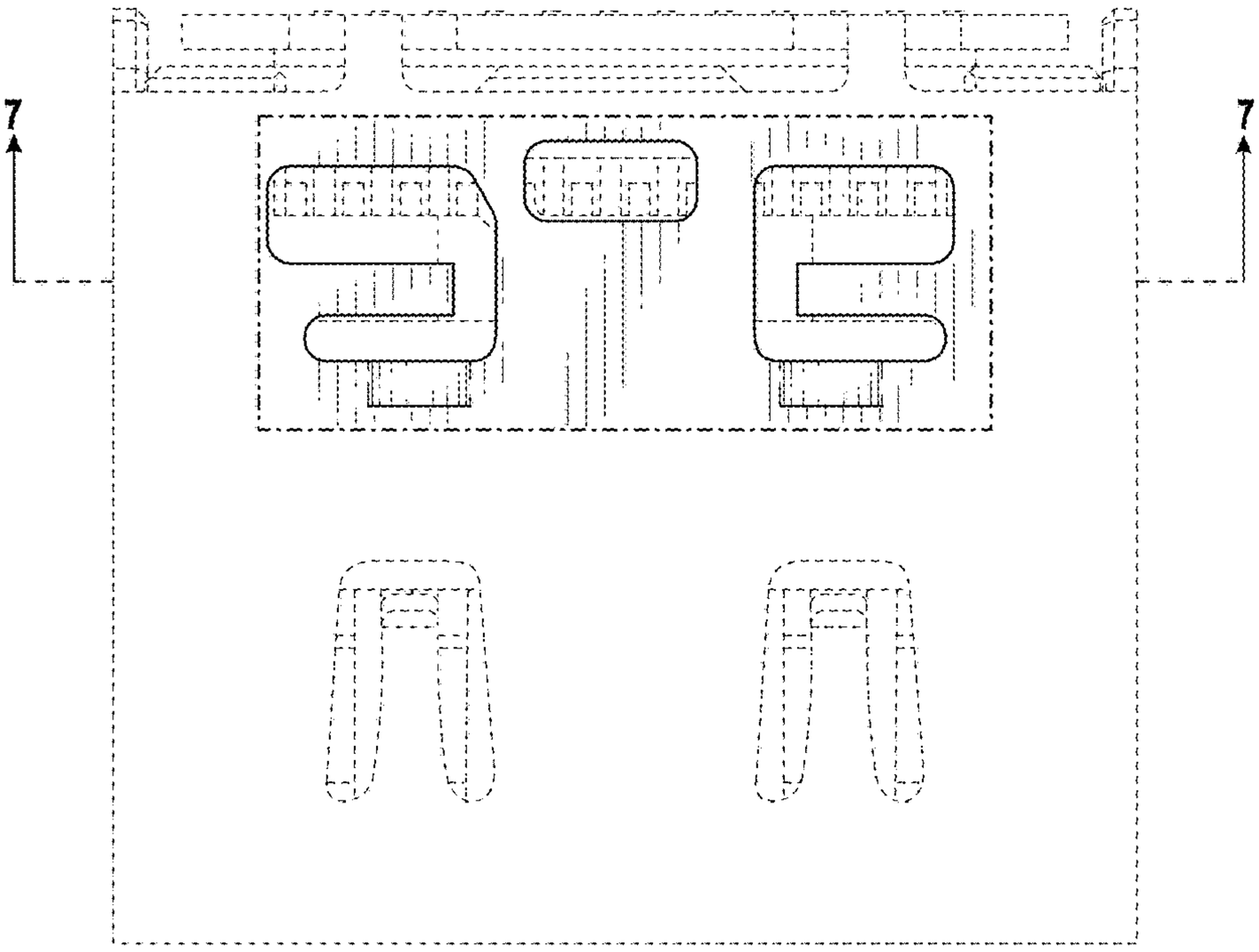


FIG. 5

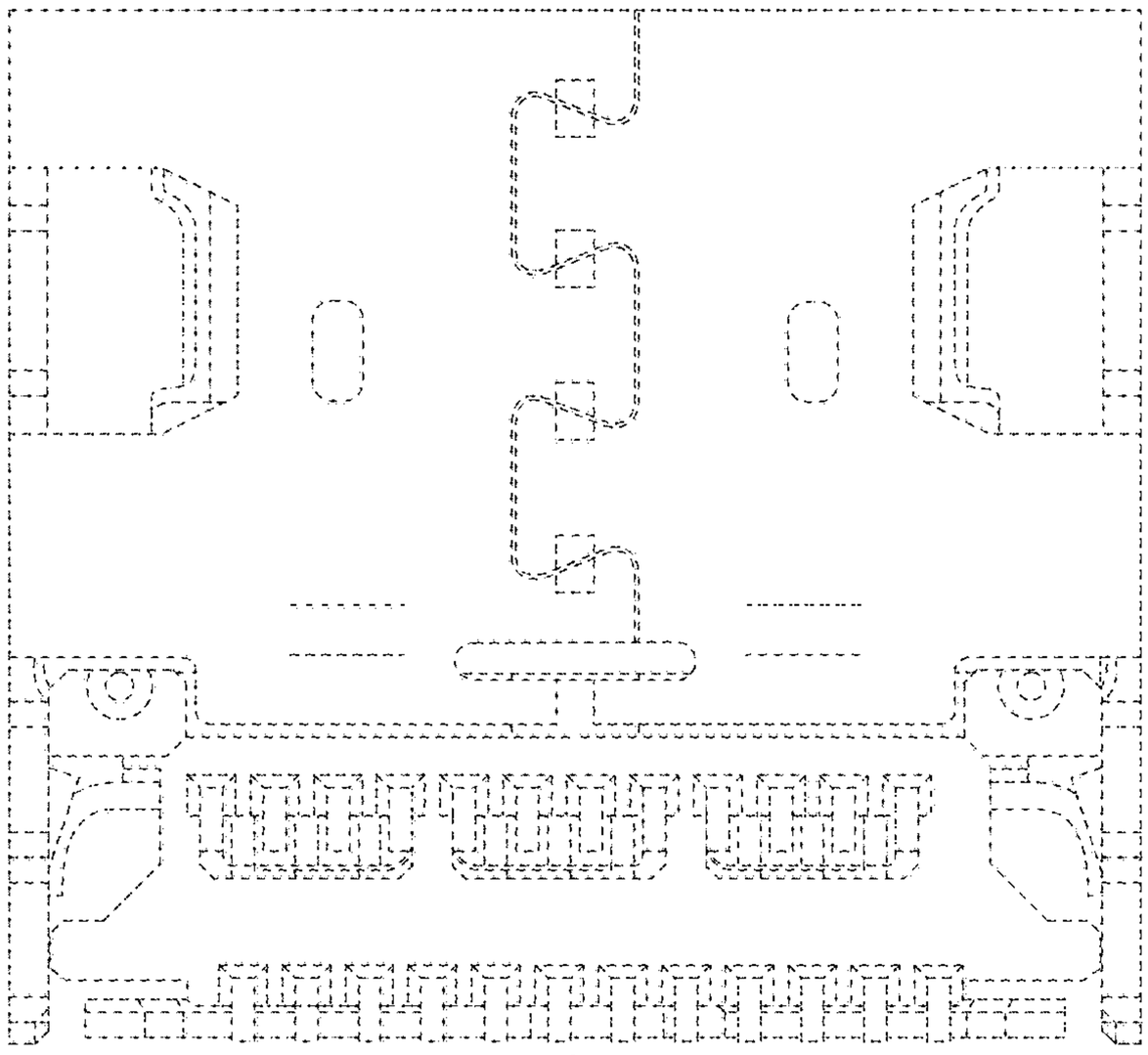


FIG. 6

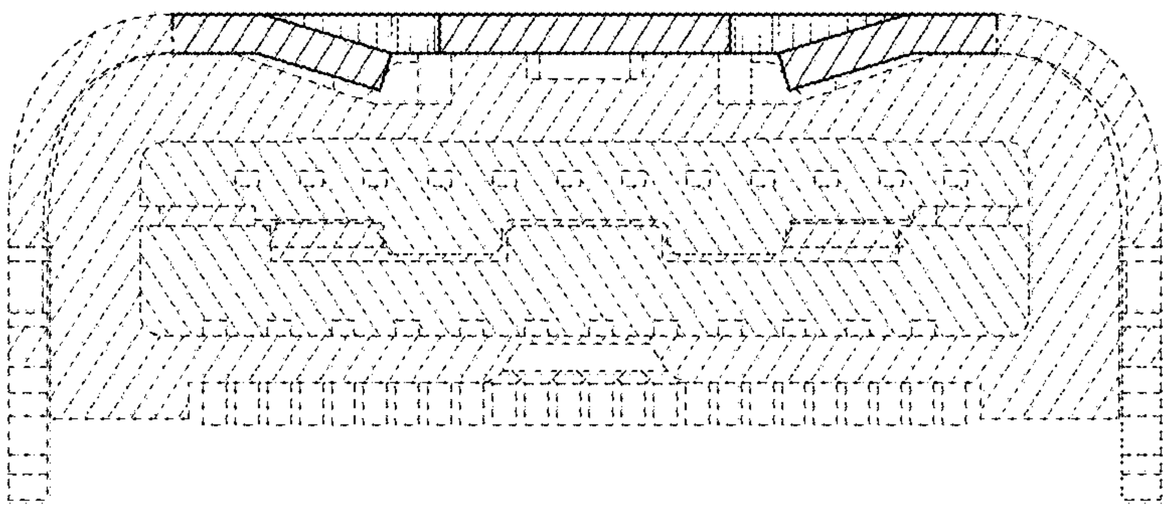


FIG. 7

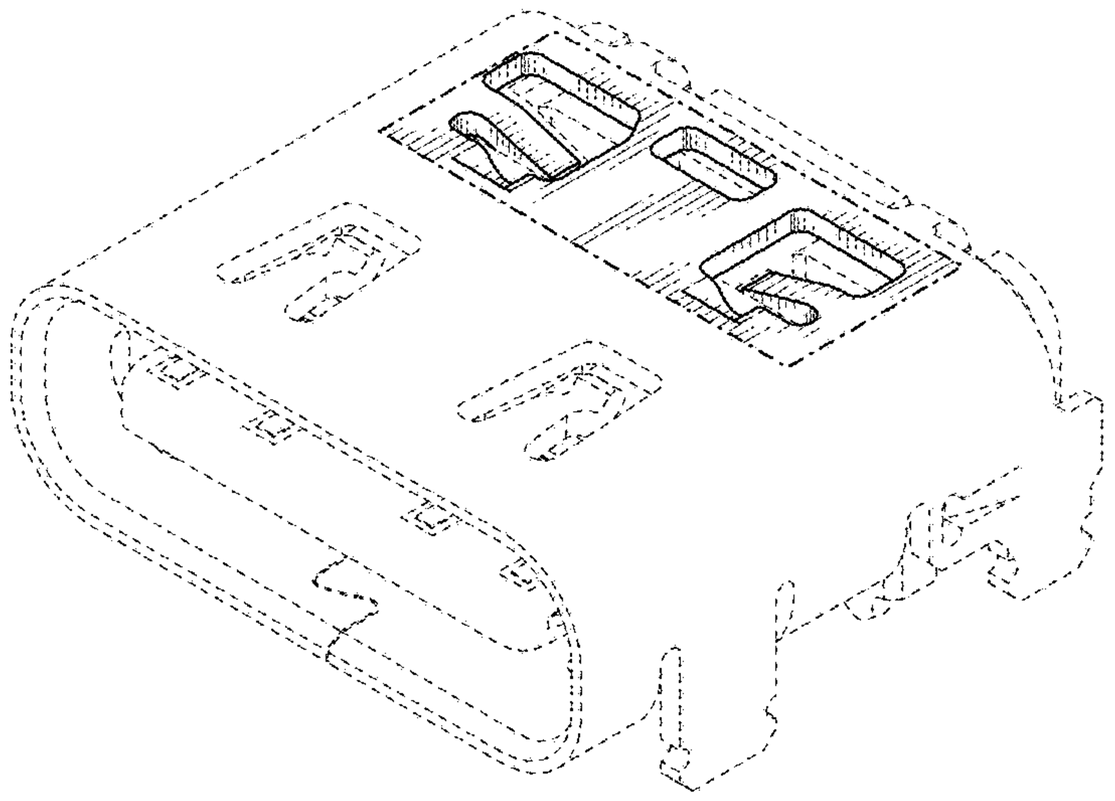


FIG. 8

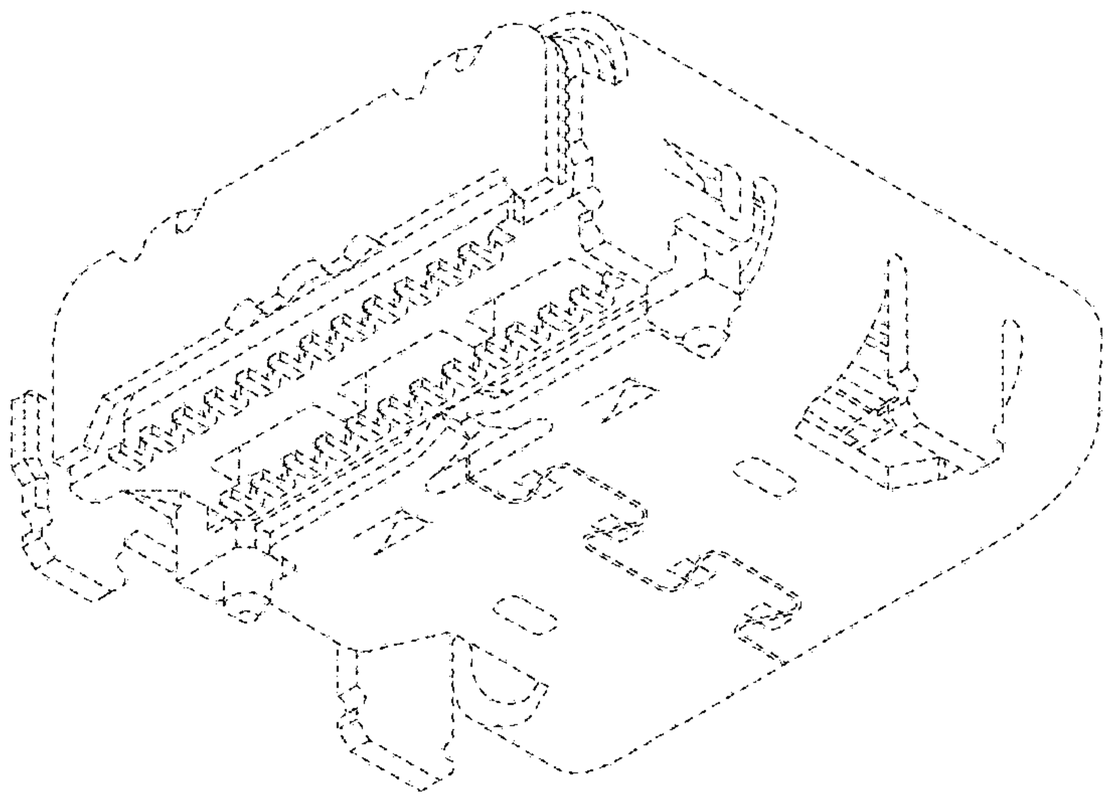


FIG. 9

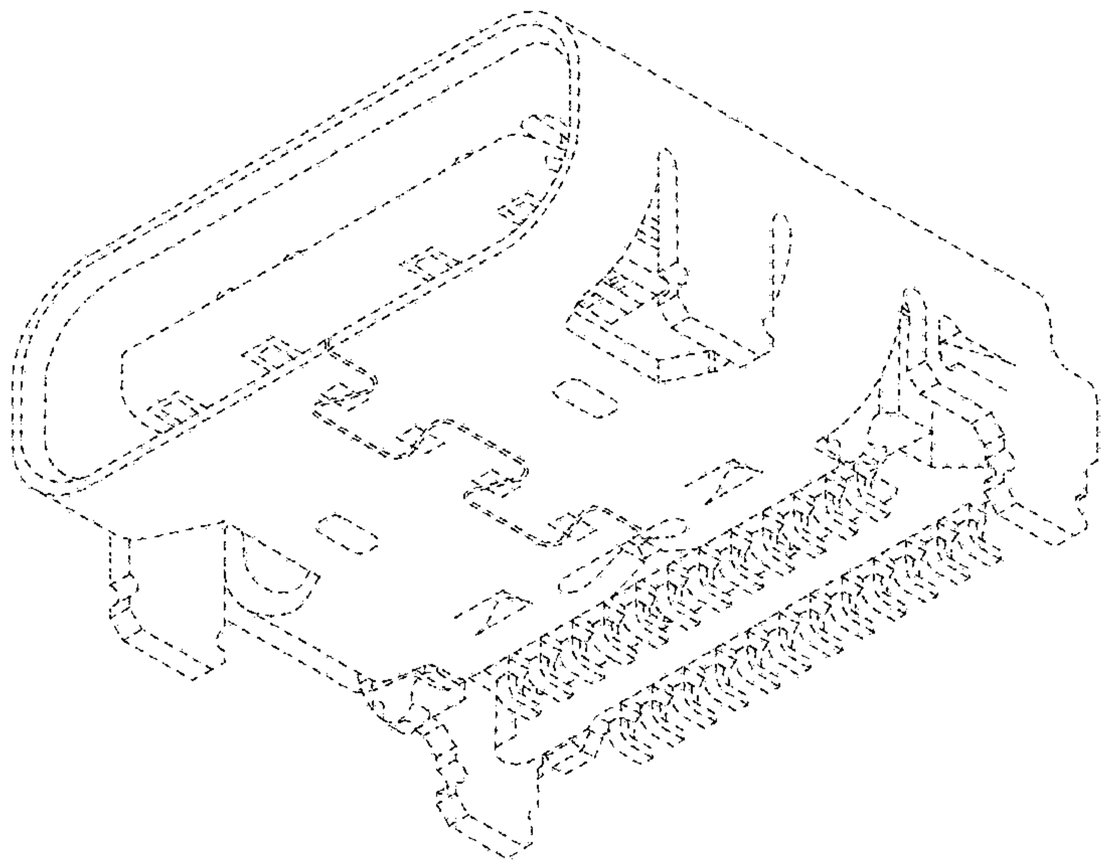


FIG. 10

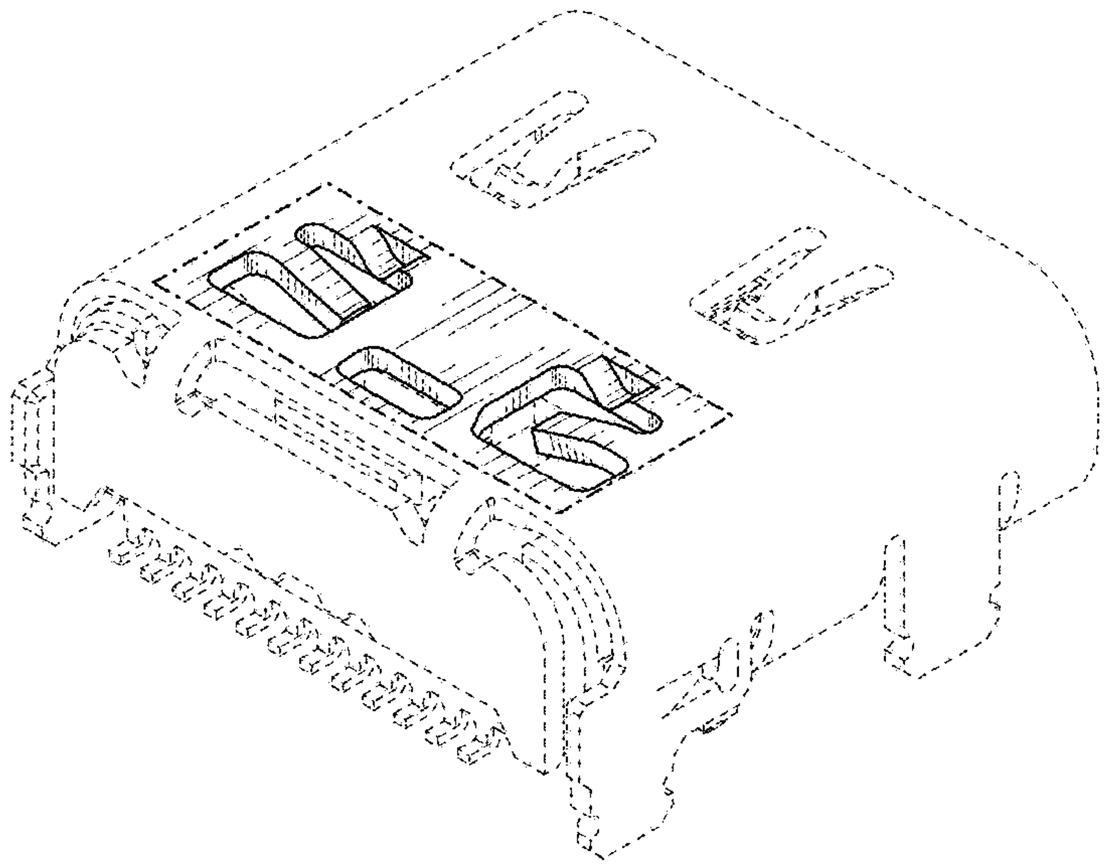


FIG. 11