



US00D877704S

(12) **United States Design Patent**
Takenaga

(10) **Patent No.:** **US D877,704 S**
(45) **Date of Patent:** **** Mar. 10, 2020**

(54) **ELECTRICAL CONNECTOR**

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

(72) Inventor: **Yuichi Takenaga**, Tokyo (JP)

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

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

(21) Appl. No.: **29/659,184**

(22) Filed: **Aug. 7, 2018**

(30) **Foreign Application Priority Data**

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Feb. 20, 2018 (JP) 2018-003447

(51) **LOC (12) Cl.** **13-03**

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

(58) **Field of Classification Search**
USPC D13/154, 155, 133, 153, 147
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D331,224 S * 11/1992 Robertson D13/147

D413,577 S * 9/1999 Ono D13/147

(Continued)

FOREIGN PATENT DOCUMENTS

JP D1609716 * 7/2018

JP D1609836 * 7/2018

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Primary Examiner — Bridget L Eland

(74) *Attorney, Agent, or Firm* — Manabu Kanesaka

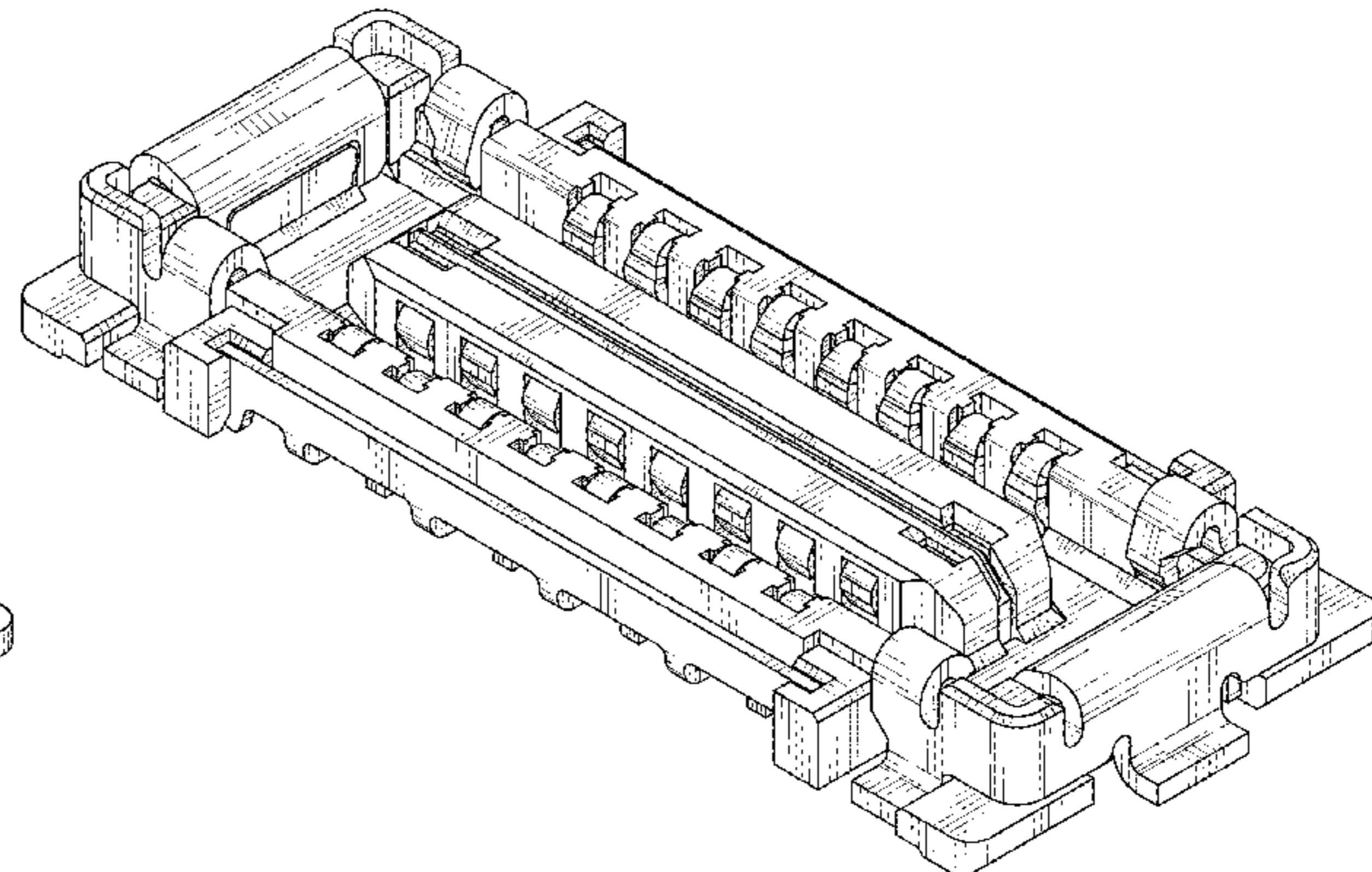
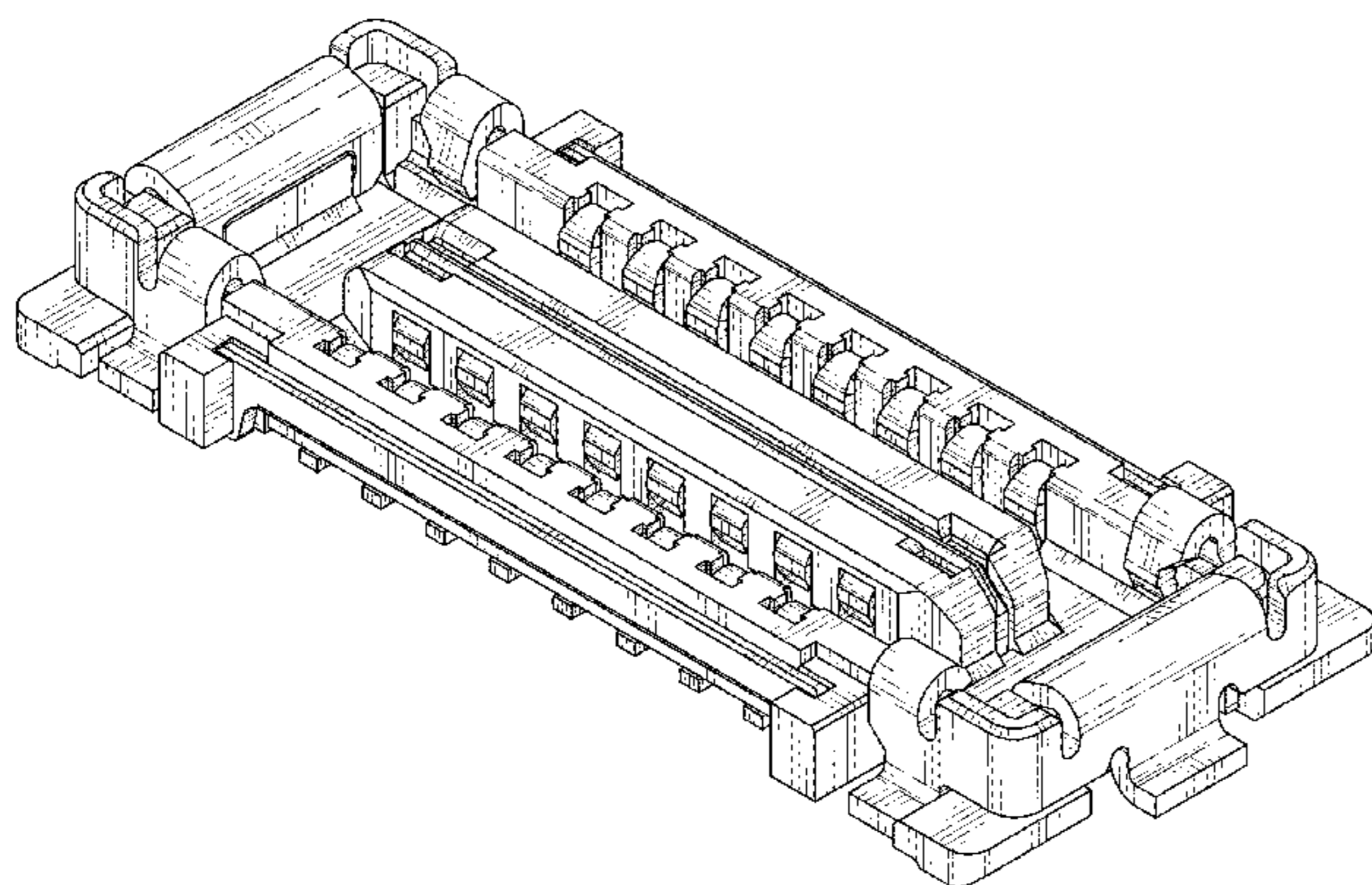
(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a front elevational view of a first embodiment of an electrical connector showing my 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 perspective view showing a front, top and right side thereof; FIG. 8 is a perspective view showing a rear, bottom and left side thereof; FIG. 9 is a perspective view showing a front, right and bottom side thereof; FIG. 10 is a perspective view showing a rear, left and top side thereof; FIG. 11 is a front elevational view of a second embodiment of an electrical connector showing my new design; FIG. 12 is a rear elevational view thereof; FIG. 13 is a right side elevational view thereof; FIG. 14 is a left side elevational view thereof; FIG. 15 is a top plan view thereof; FIG. 16 is a bottom plan view thereof; FIG. 17 is a perspective view showing a front, top and right side thereof; FIG. 18 is a perspective view showing a rear, bottom and left side thereof; FIG. 19 is a perspective view showing a front, right and bottom side thereof; and, FIG. 20 is a perspective view showing a rear, left and top side thereof.
The broken line showing of the electrical connector is for the purpose of illustrating portions of the article and forms no part of the claimed design.

1 Claim, 16 Drawing Sheets



(58) **Field of Classification Search**

CPC .. H01R 12/78; H01R 12/7005; H01R 12/725;
H01R 13/635; H01R 13/639; H01R
13/6581

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D562,247 S * 2/2008 Matsuzaki D13/147
D603,801 S * 11/2009 Obikane D13/147
D721,040 S * 1/2015 Watanabe D13/147
D722,974 S * 2/2015 Ueda D13/147
D793,342 S * 8/2017 Ashibu D13/147
9,985,371 B1 * 5/2018 Ashibu H01R 12/78
D824,339 S * 7/2018 Yamaguchi D13/147
D826,166 S * 8/2018 Yayoshi D13/147
D828,307 S * 9/2018 Ashibu D13/147
2010/0267287 A1 * 10/2010 Ishikawa H01R 13/20
439/700
2011/0263140 A1 * 10/2011 Sato H01R 12/7052
439/74

FOREIGN PATENT DOCUMENTS

KR 3009964290003 * 3/2019
KR 3009964290001 * 6/2019
KR 3009964290002 * 6/2019

* cited by examiner

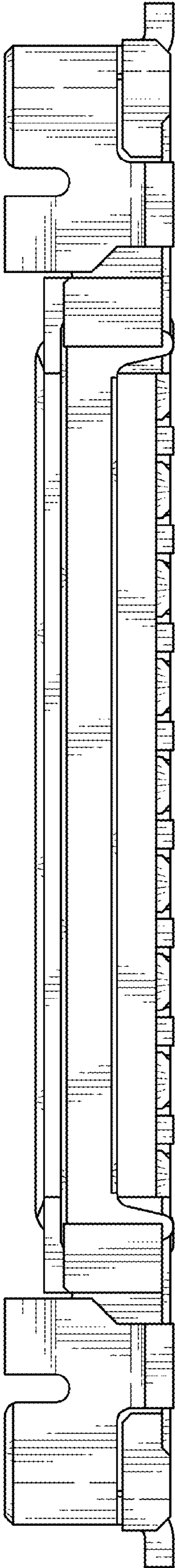


FIG. 1

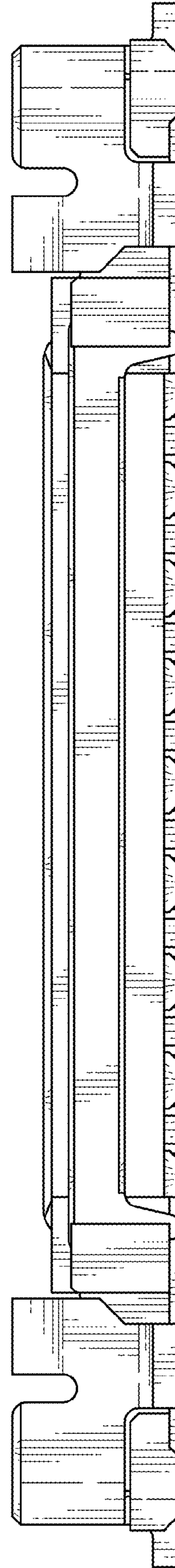


FIG. 2

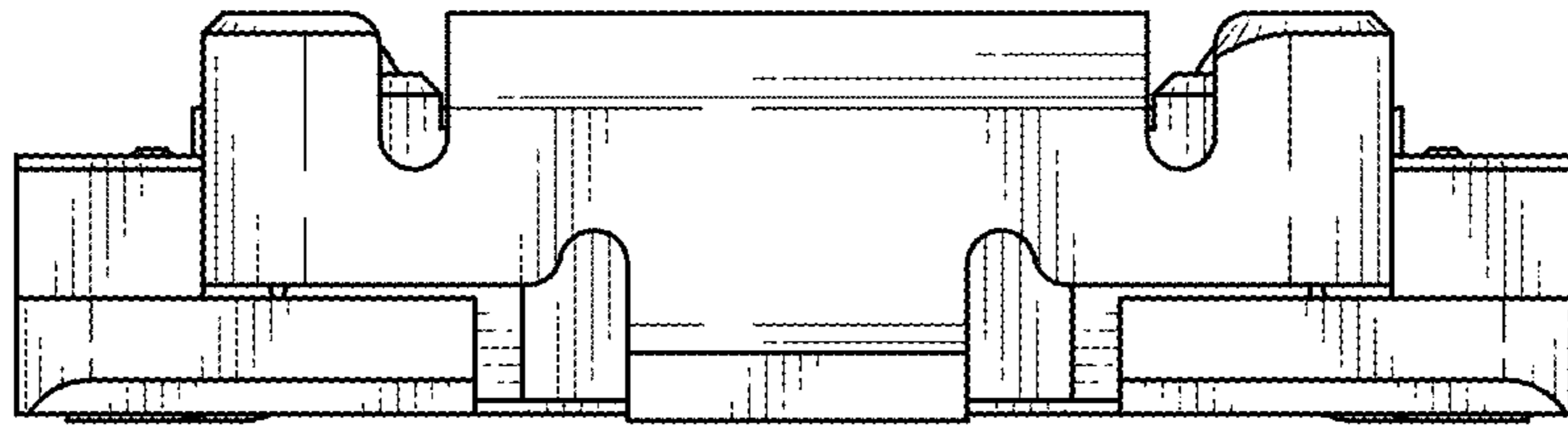


FIG. 3

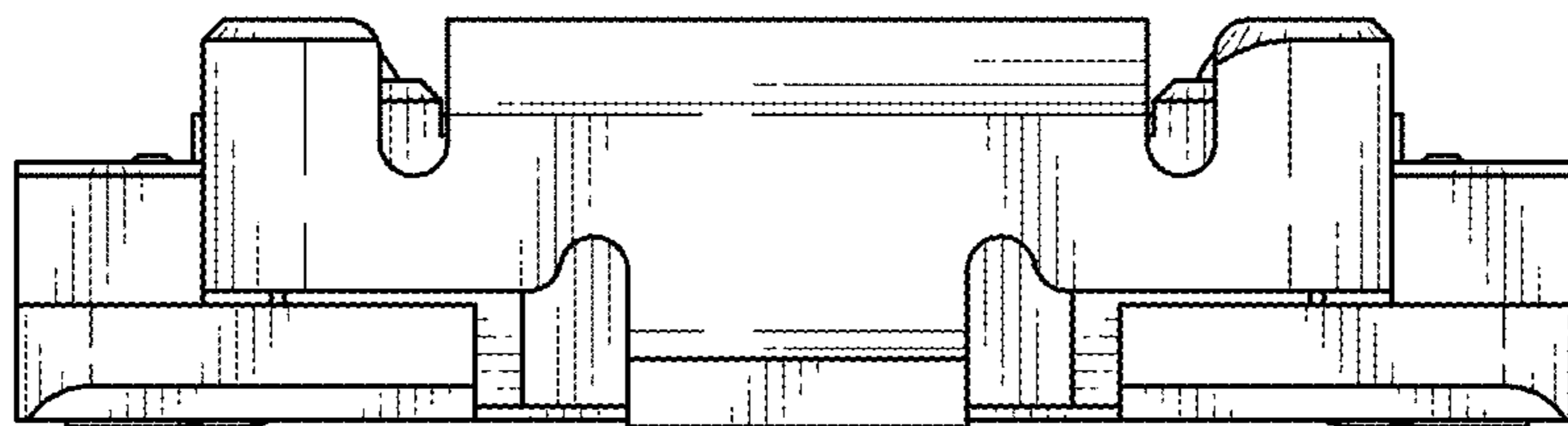


FIG. 4

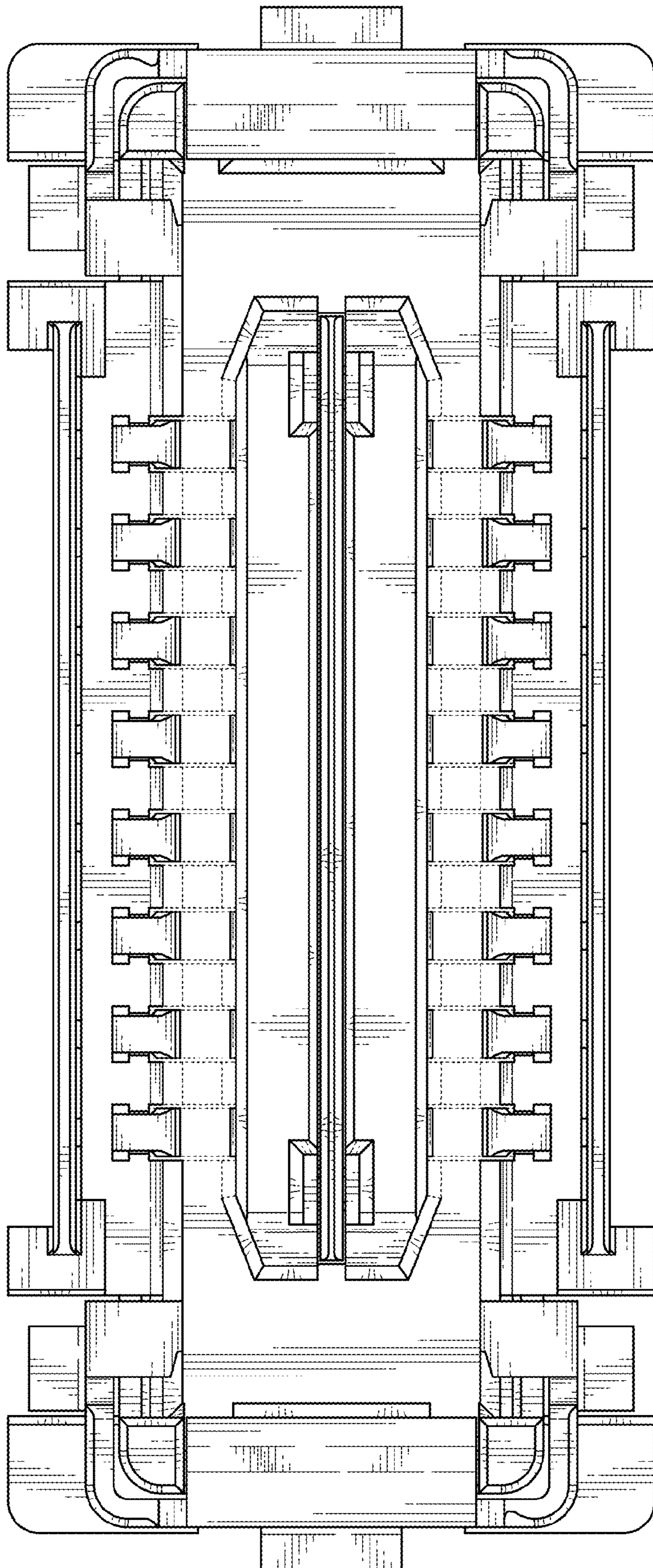


FIG. 5

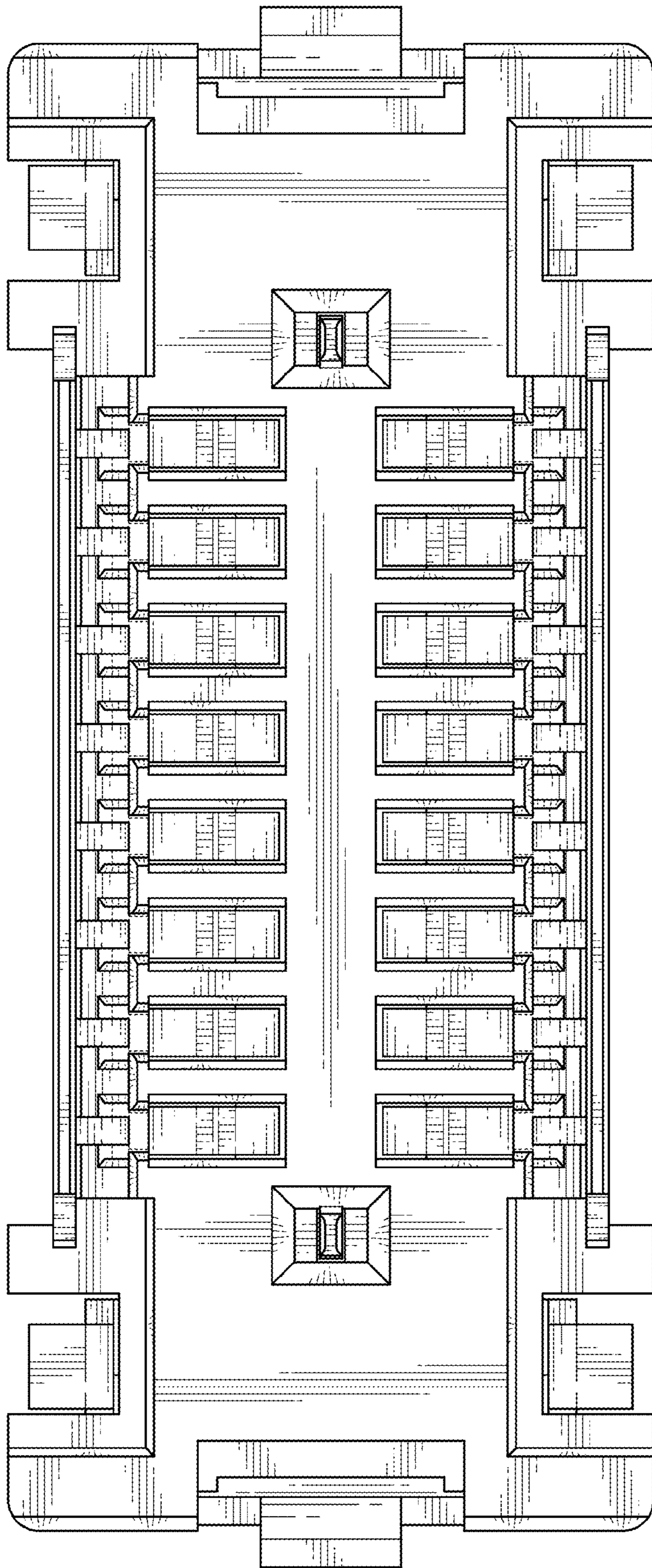


FIG. 6

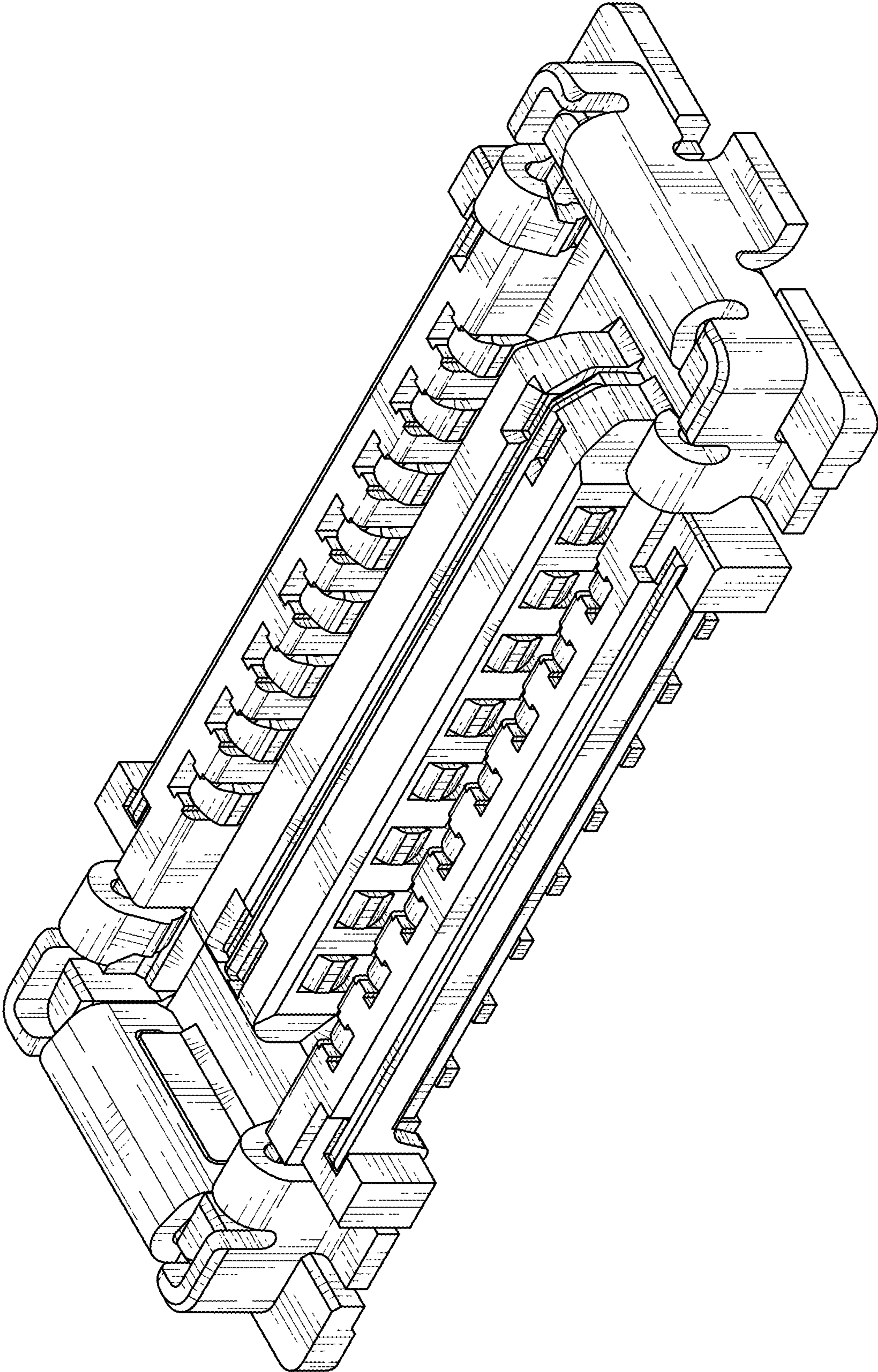


FIG. 7

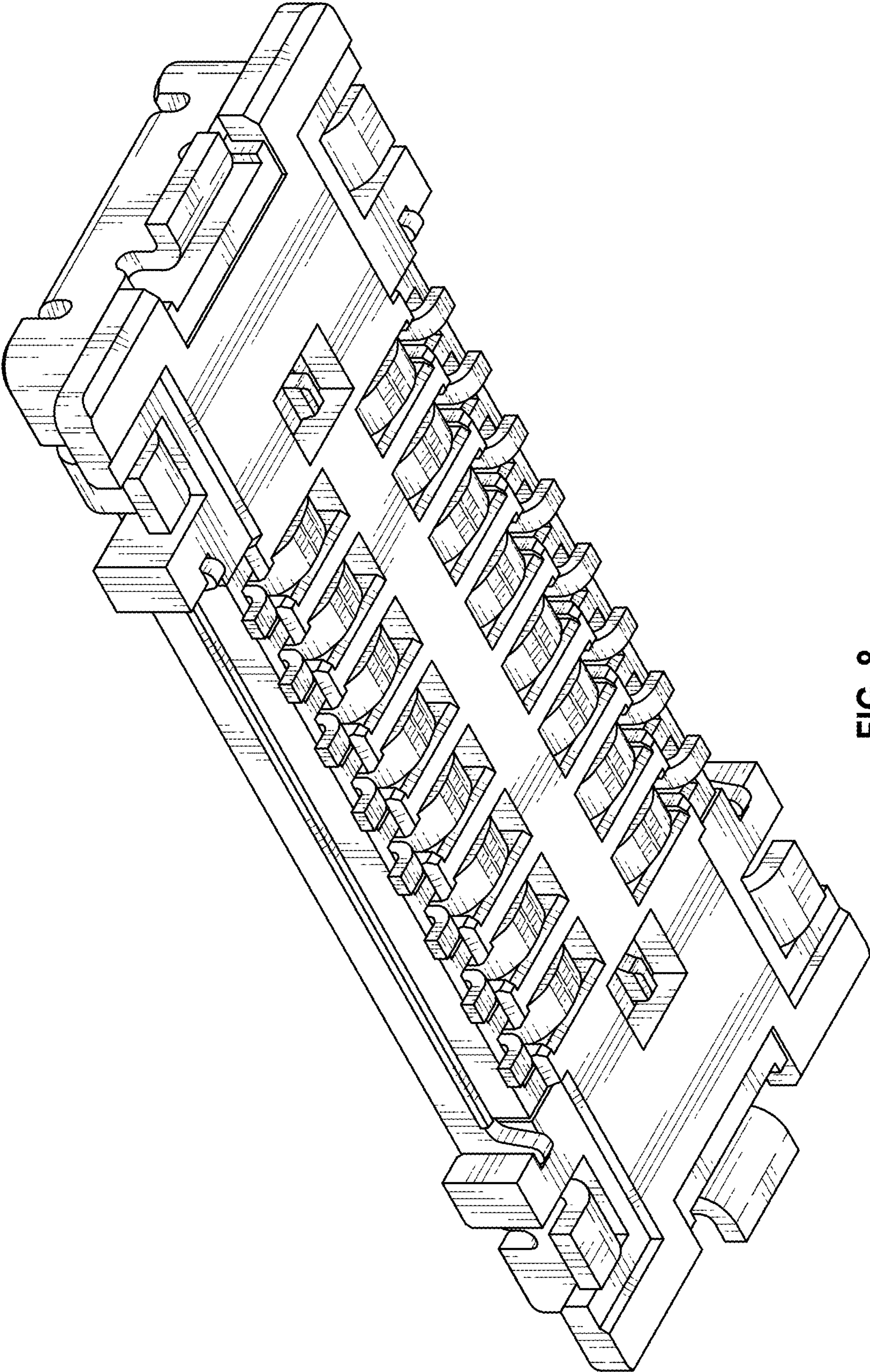


FIG. 8

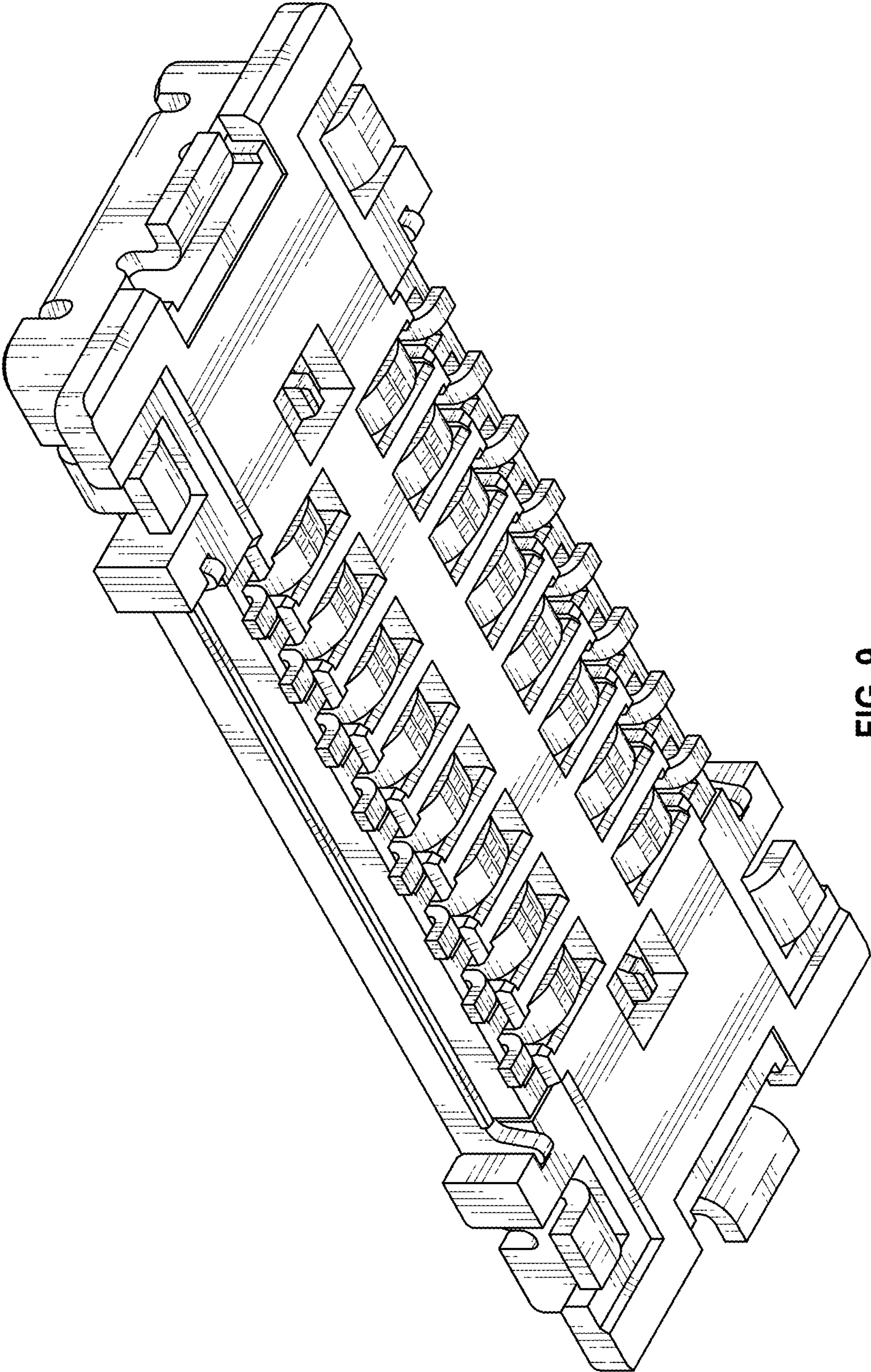


FIG. 9

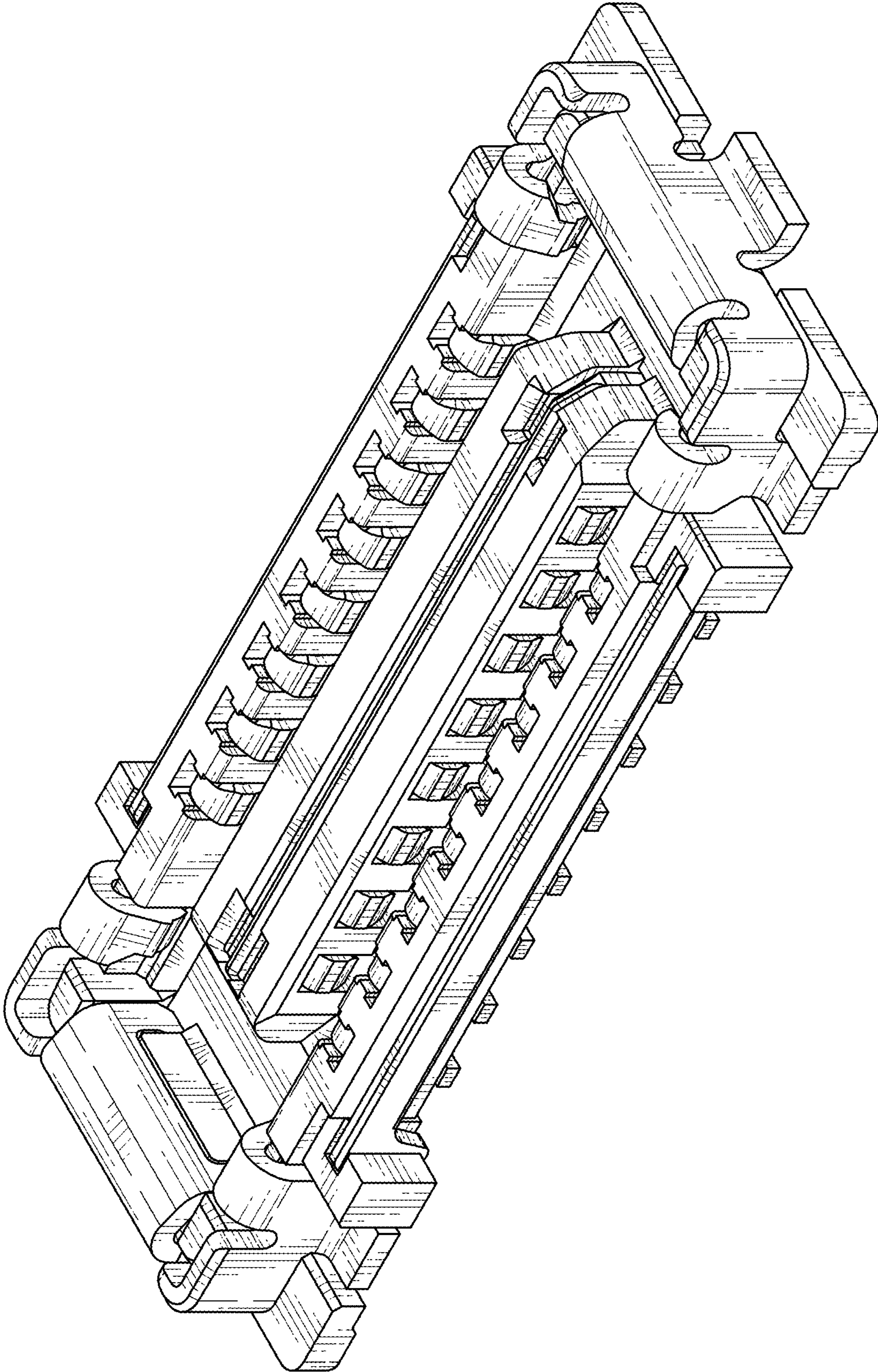


FIG. 10

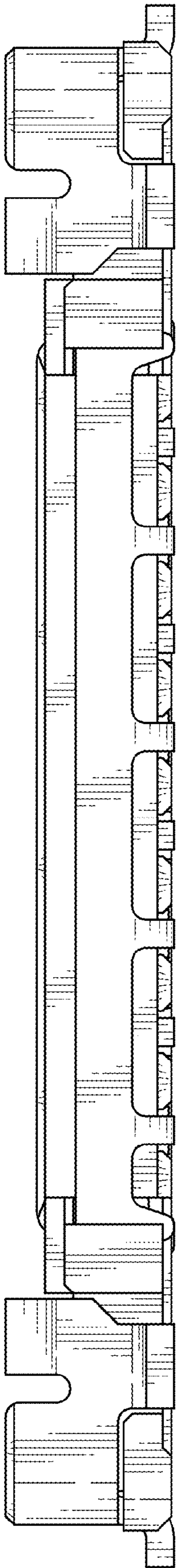


FIG. 11

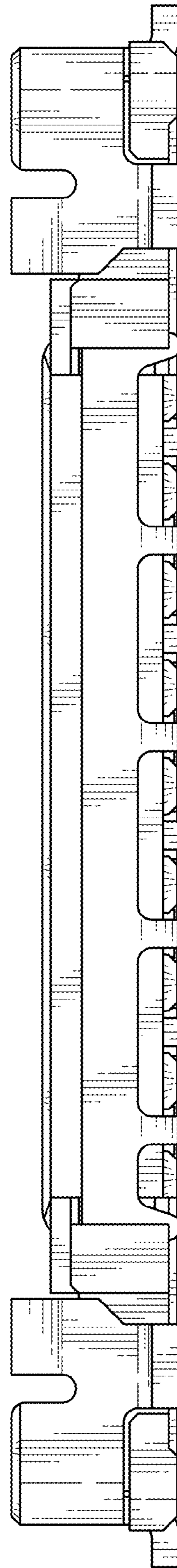


FIG. 12

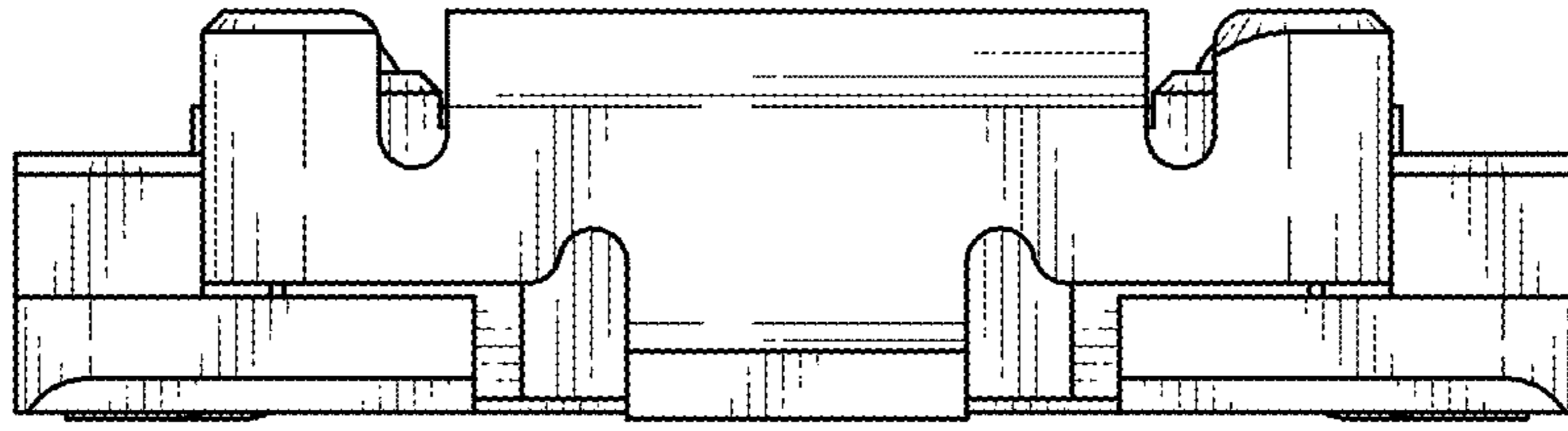


FIG. 13

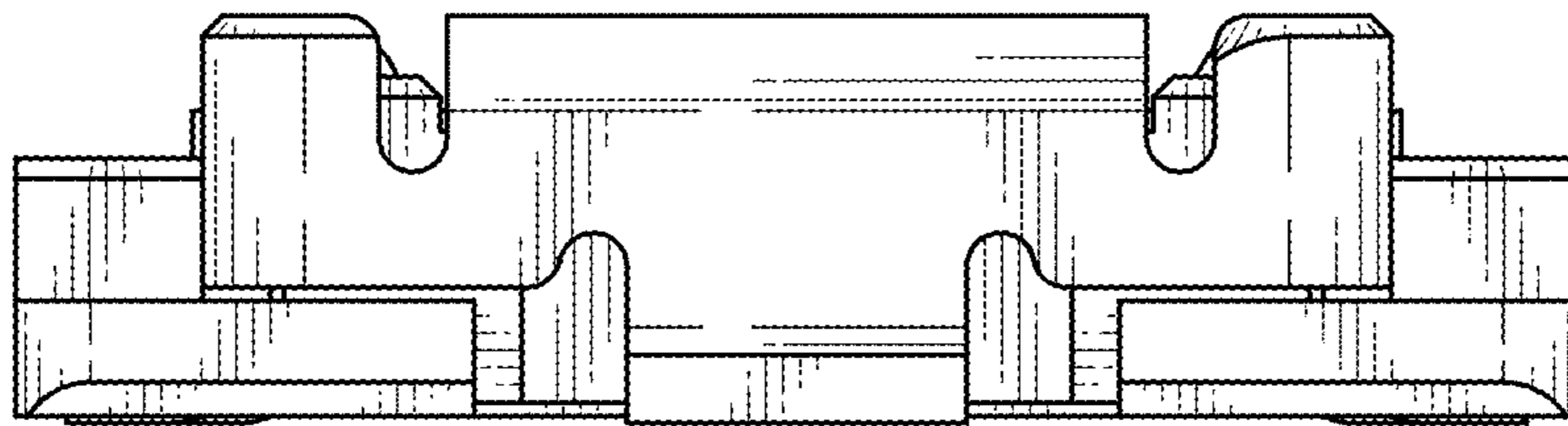


FIG. 14

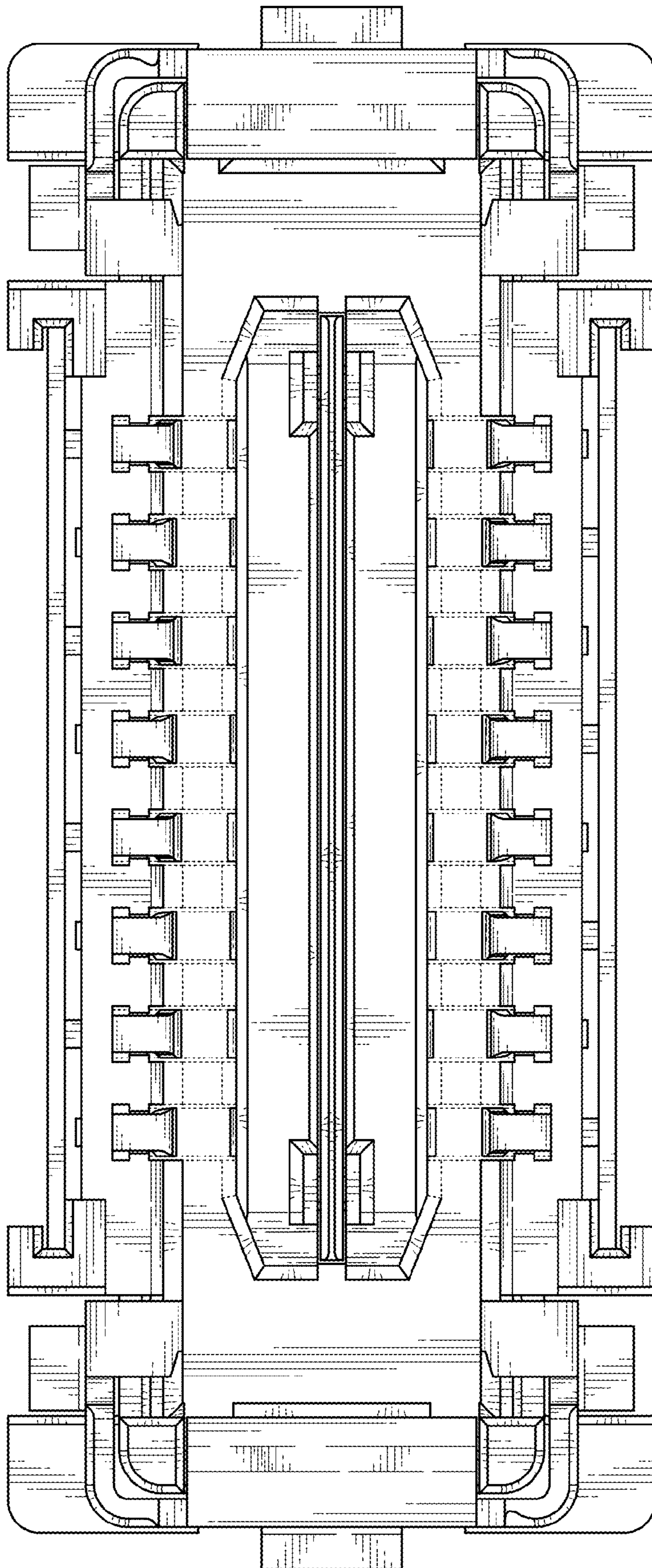


FIG. 15

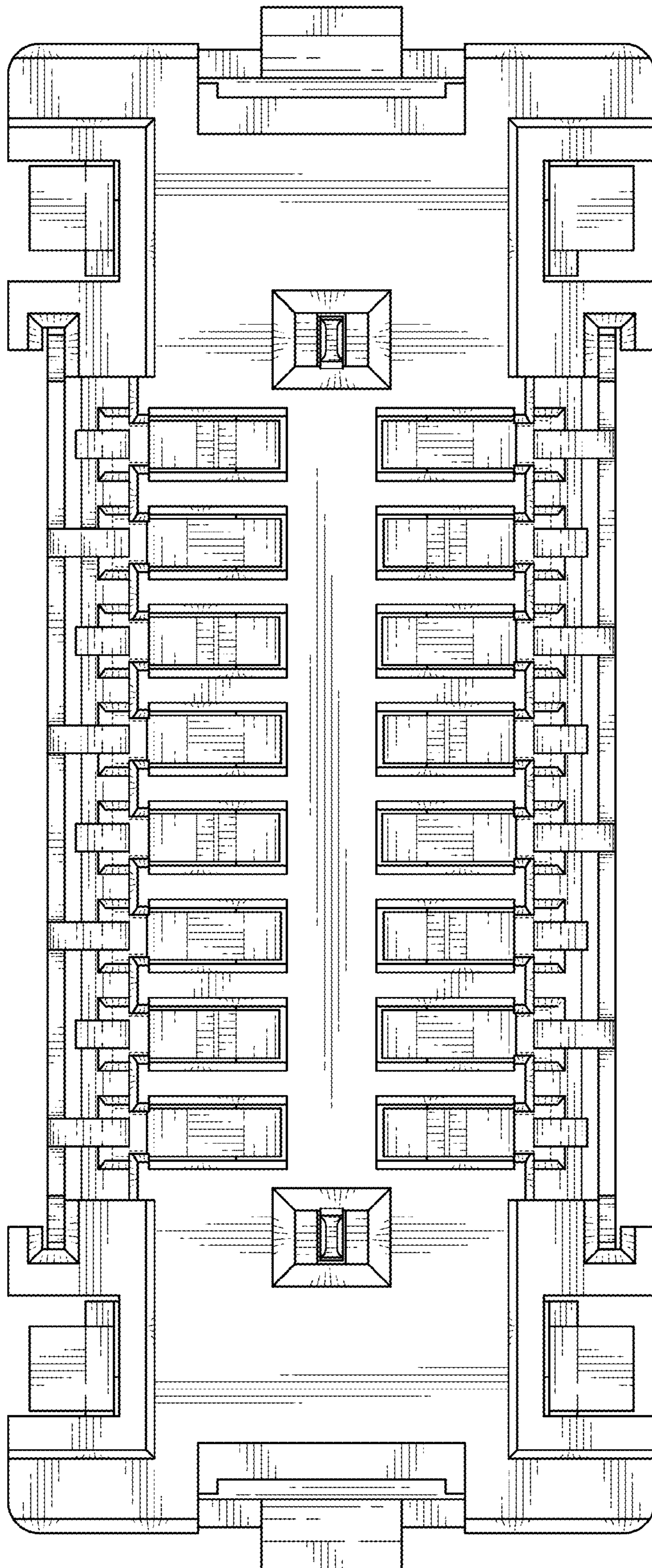


FIG. 16

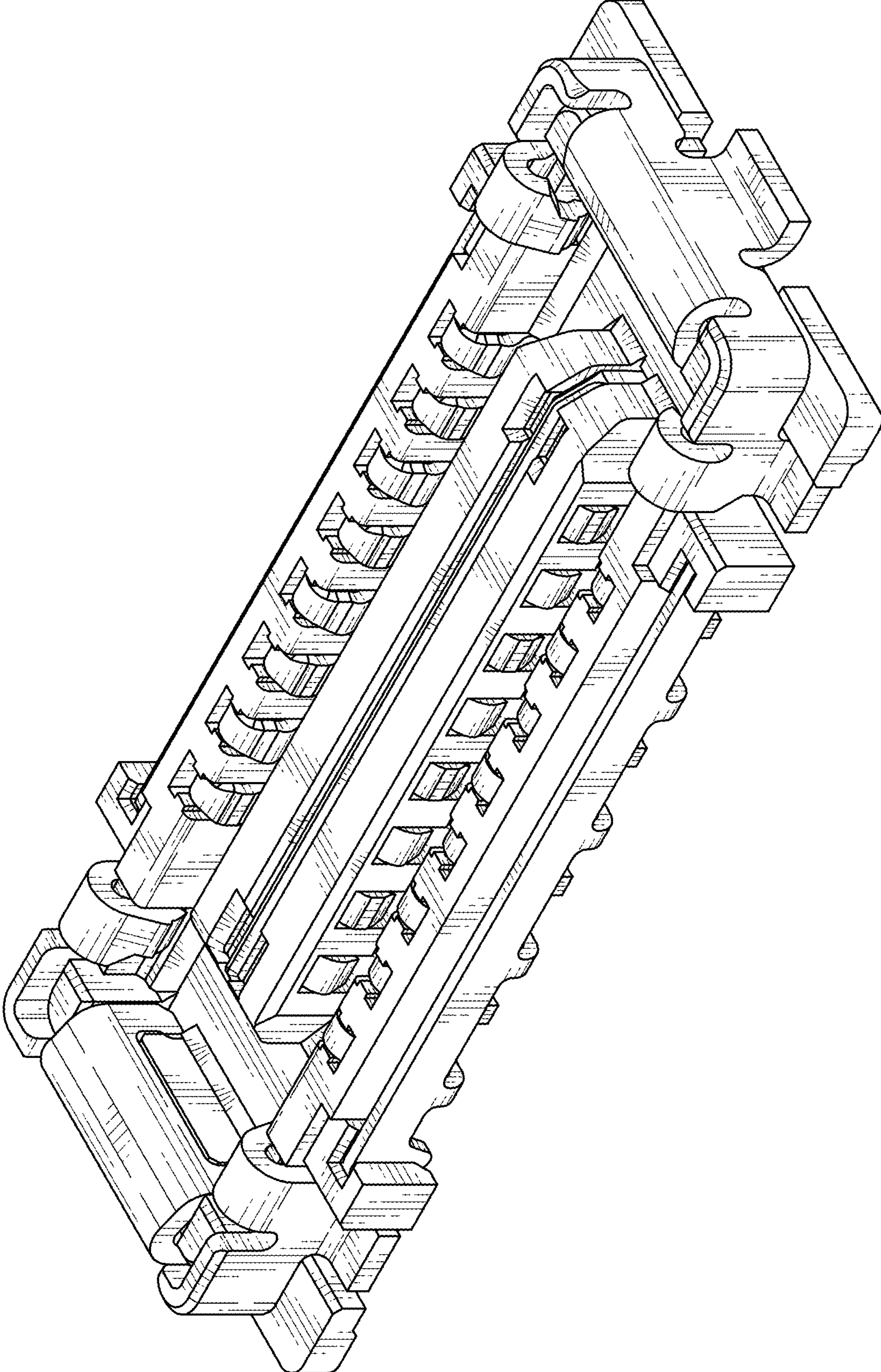


FIG. 17

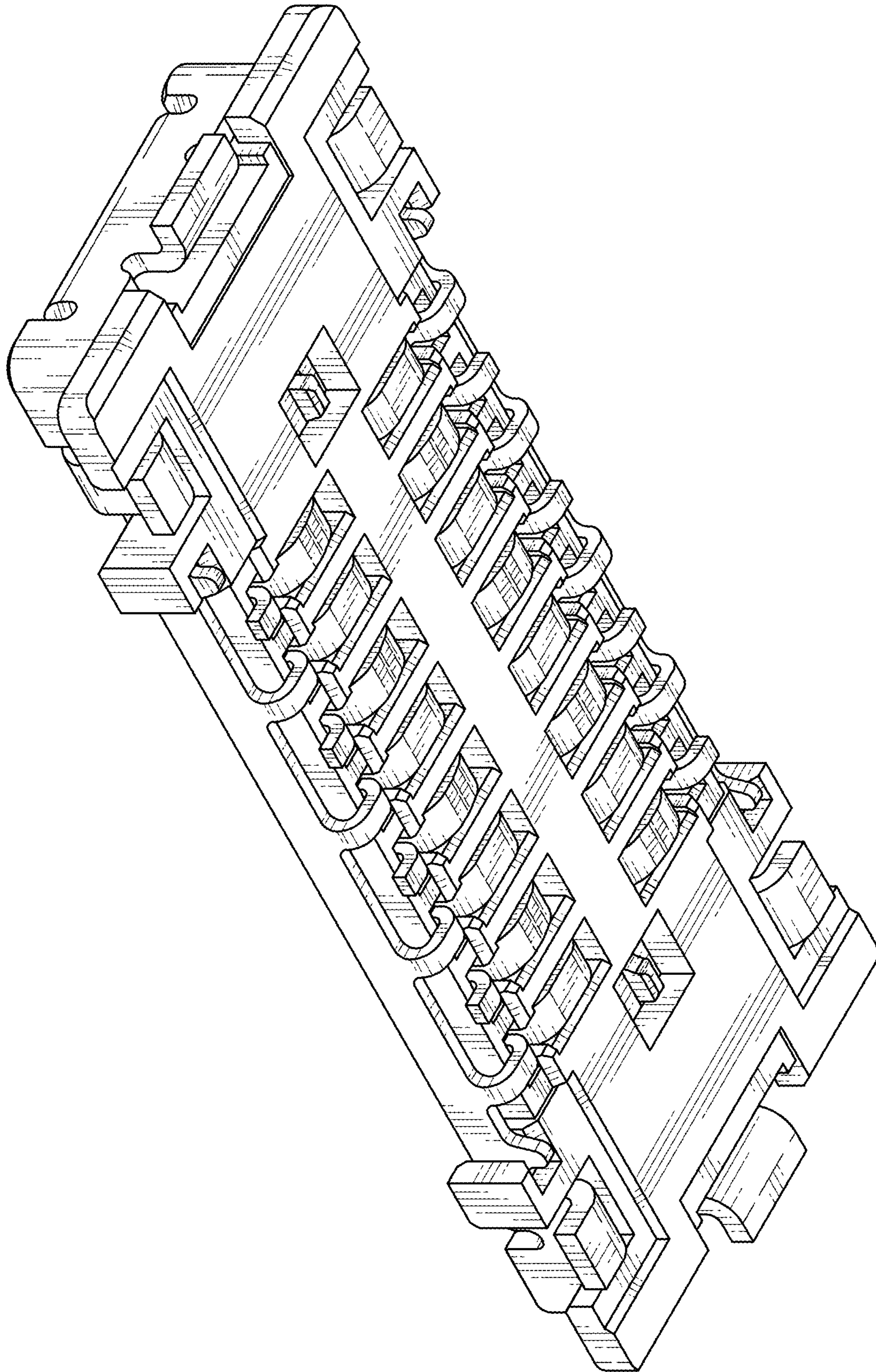


FIG. 18

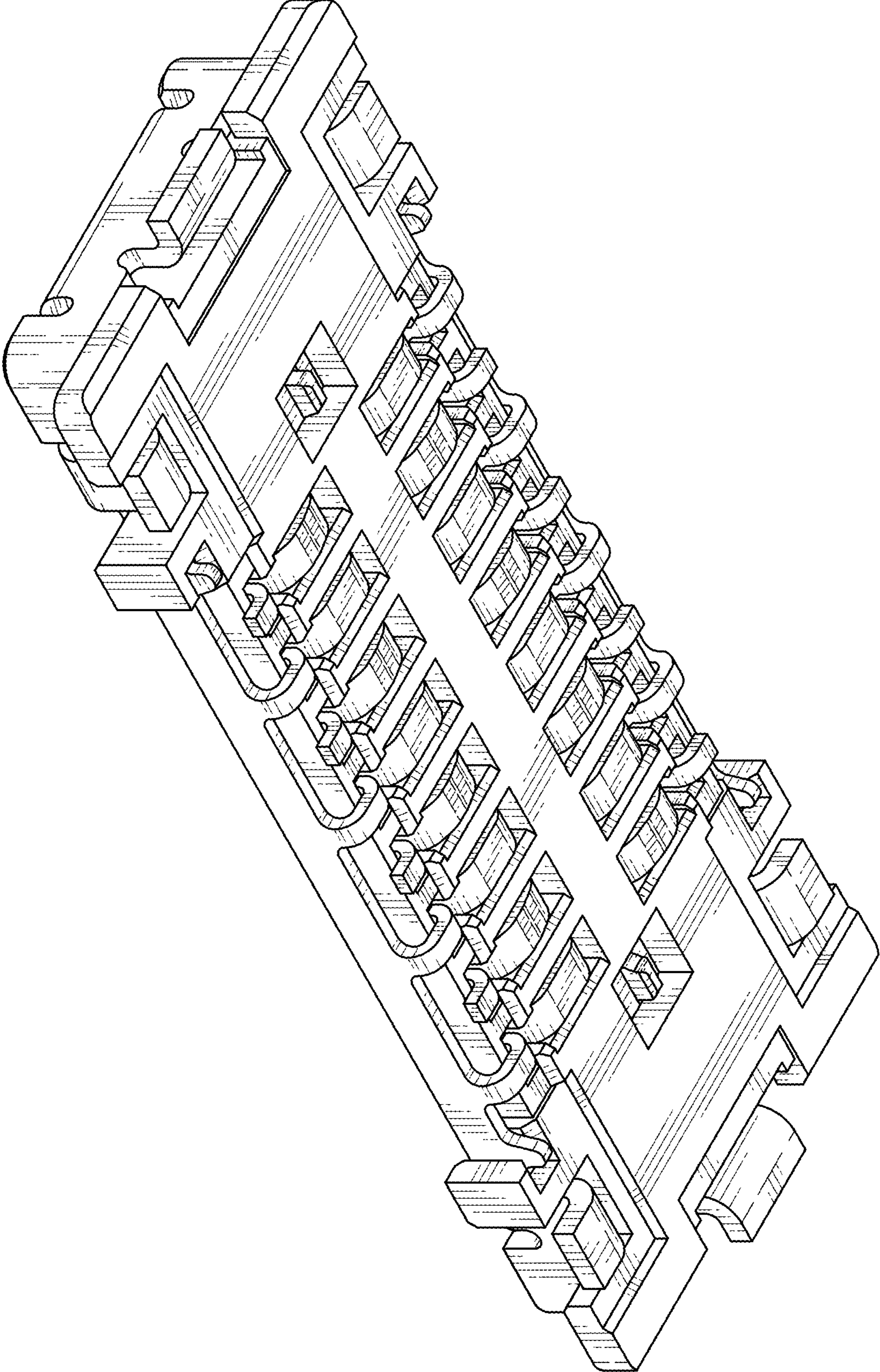


FIG. 19

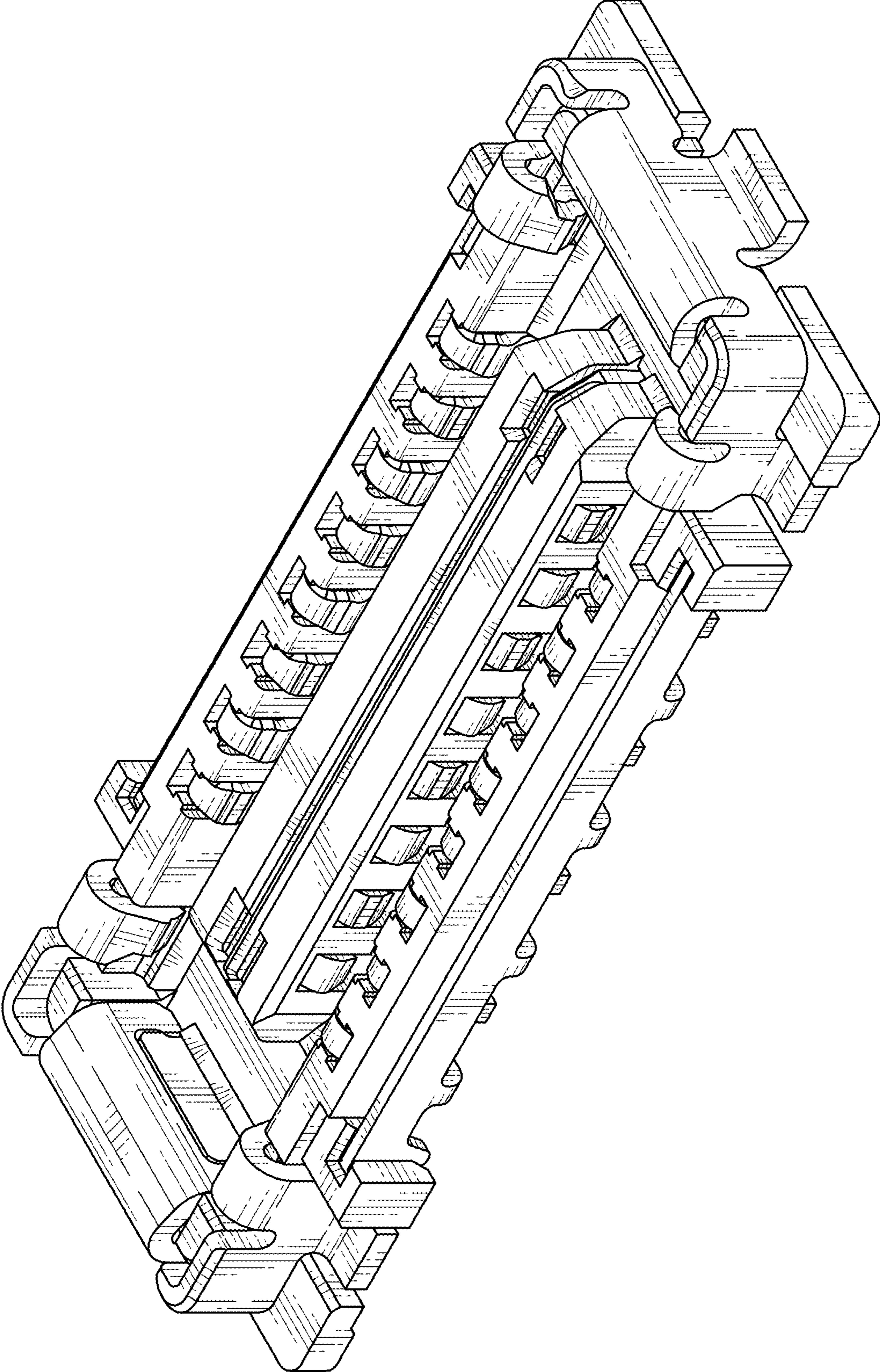


FIG. 20