



US00D802534S

(12) **United States Design Patent** (10) **Patent No.:** **US D802,534 S**
Endo et al. (45) **Date of Patent:** **** Nov. 14, 2017**

(54) **ELECTRICAL CONNECTOR**

(56) **References Cited**

(71) Applicants: **DAI-ICHI SEIKO CO., LTD.**, Kyoto (JP); **KOITO MANUFACTURING CO., LTD.**, Tokyo (JP)

U.S. PATENT DOCUMENTS

D461,776 S * 8/2002 Chen D13/147
D682,210 S * 5/2013 Yang D13/133
D737,214 S * 8/2015 Endo D13/147

(72) Inventors: **Takayoshi Endo**, Shizuoka (JP);
Takehiko Osuga, Shizuoka (JP);
Masaya Muta, Shizuoka (JP);
Shigehiko Kazaoka, Shizuoka (JP);
Kohei Yamaguchi, Shizuoka (JP)

(Continued)

(73) Assignees: **DAI-ICHI SEIKO CO., LTD.**, Kyoto (JP); **KOITO MANUFACTURING CO., LTD.**, Tokyo (JP)

OTHER PUBLICATIONS

File:Type B Plug Coloured.svg, posted at Commons.Wikimedia.org, posted on Feb. 7, 2007, [online], [site visited Apr. 6, 2017]. Available from Internet, <https://commons.wikimedia.org/wiki/File:Type_B_Plug_Coloured.svg>.*

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

Primary Examiner — Mary Ann Calabrese

Assistant Examiner — Catherine Ho

(21) Appl. No.: **29/561,536**

(74) *Attorney, Agent, or Firm* — Nakanishi IP Associates, LLC

(22) Filed: **Apr. 18, 2016**

(57) **CLAIM**

(30) **Foreign Application Priority Data**

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

Oct. 20, 2015 (JP) 2015-023240

(51) **LOC (10) Cl.** **13-03**

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

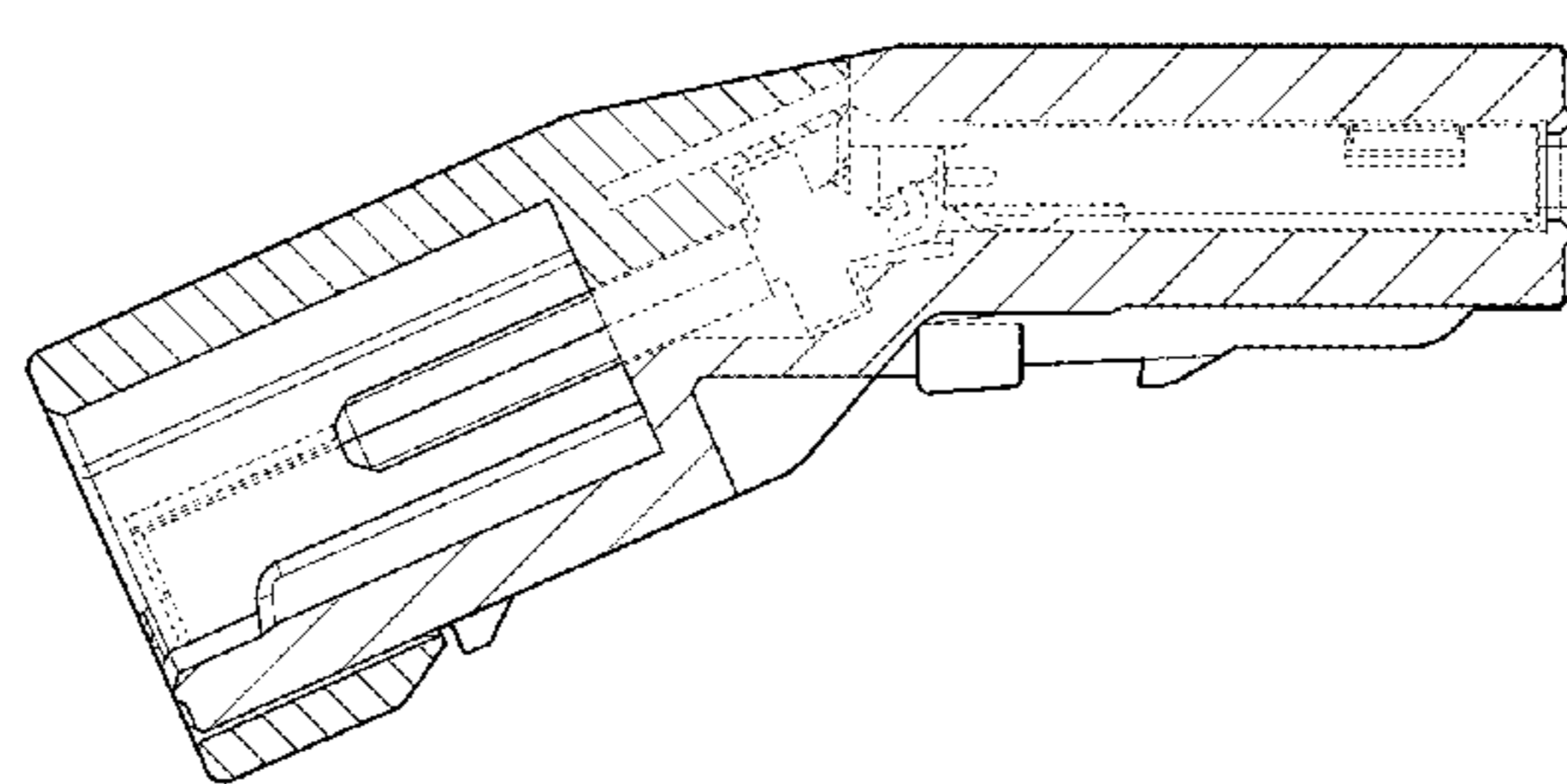
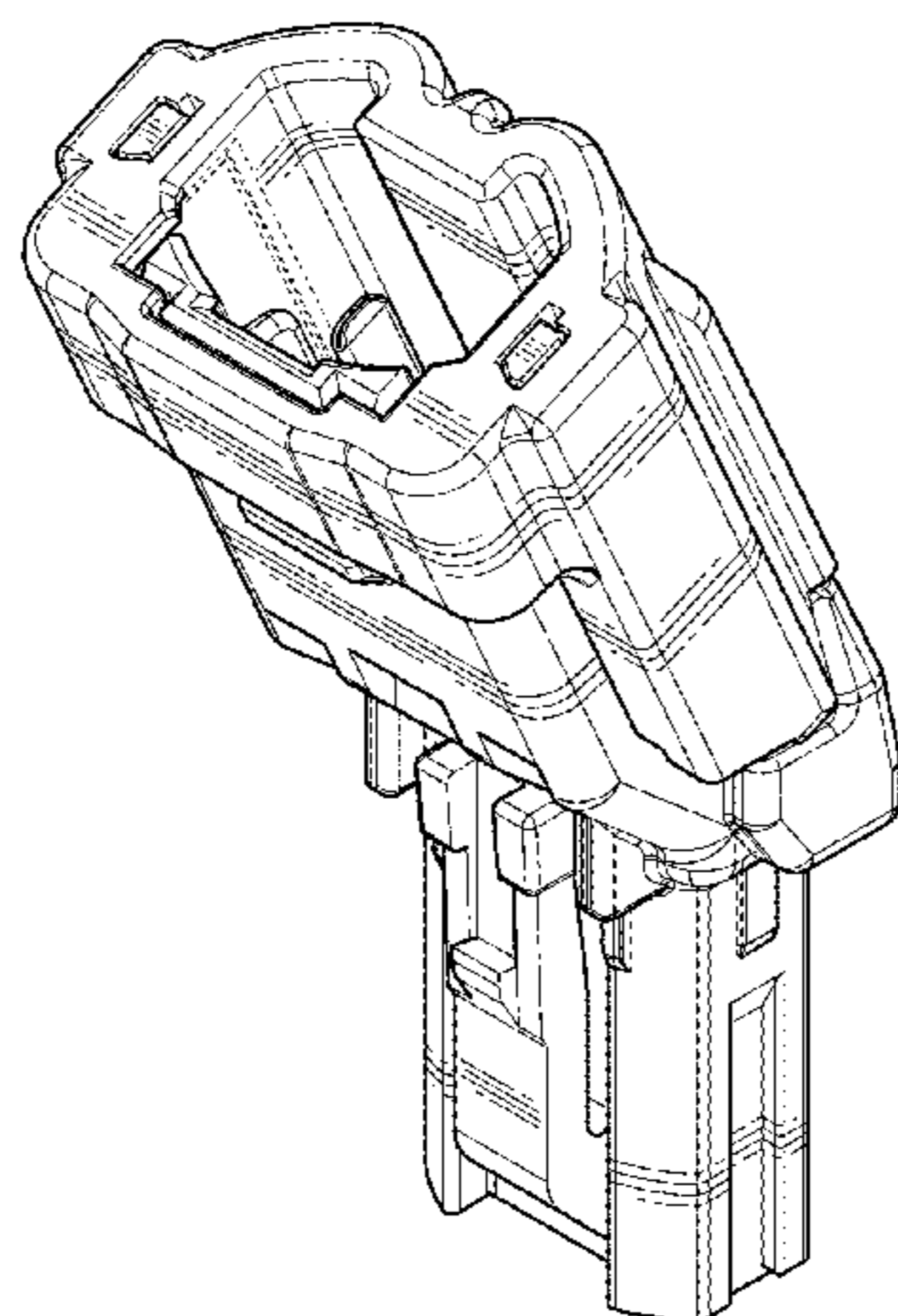
DESCRIPTION

(58) **Field of Classification Search**
USPC D13/107, 108, 110, 118, 123, 133, 134, D13/137.2, 137.3, 139.1, 139.2, 147, 148, D13/149, 150, 151, 152, 154, 156, 158, D13/159, 162, 173, 179, 184, 199
CPC H01R 4/56; H01R 9/0757; H01R 9/16; H01R 9/22; H01R 9/223; H01R 11/03; H01R 13/11; H01R 13/187; H01R 13/422; H01R 13/501; H01R 13/5025; H01R 13/504; H01R 13/506; H01R 13/514; H01R 13/62; H01R 13/625; H01R 13/6272; H01R 13/635; H01R 13/64; H01R 13/642; H01R

FIG. 1 is a front, bottom, and right side perspective view of an electrical connector showing our new design;
FIG. 2 is a rear, bottom, and right side perspectives view thereof;
FIG. 3 is a front elevation view thereof;
FIG. 4 is a rear elevation view thereof;
FIG. 5 is a top plan view thereof;
FIG. 6 is a bottom plan view thereof;
FIG. 7 is a left side elevation view thereof;
FIG. 8 is a right side elevation view thereof;
FIG. 9 is a cross-sectional view thereof, taken along line 9-9 of FIG. 3; and,
FIG. 10 is a view thereof, taken from the direction of arrow 10 of FIG. 8.

(Continued)

(Continued)



The broken lines shown in the drawings are included for the purpose of illustrating unclaimed environment only, and form no part of the claimed design.

1 Claim, 7 Drawing Sheets

(58) **Field of Classification Search**

CPC .. 13/659; H01R 13/743; H01R 13/741; H01R 13/74; H01R 13/4362; H01R 13/436

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

D756,931 S * 5/2016 Asano D13/147

2003/0199192 A1* 10/2003 Caveney H01R 13/514
439/418
2006/0134992 A1* 6/2006 Green H01R 13/6466
439/676
2009/0081907 A1* 3/2009 Shen H01R 24/64
439/676
2014/0011388 A1* 1/2014 Muro H01R 13/627
439/352
2014/0169871 A1* 6/2014 Nishiyama H01R 13/4362
403/374.1
2014/0199892 A1* 7/2014 Lan H01R 13/514
439/660
2014/0242823 A1* 8/2014 Littek H01R 13/422
439/162
2014/0242832 A1* 8/2014 Sakakura H01R 13/5227
439/374
2016/0259135 A1* 9/2016 Gniadek G02B 6/3885

* cited by examiner

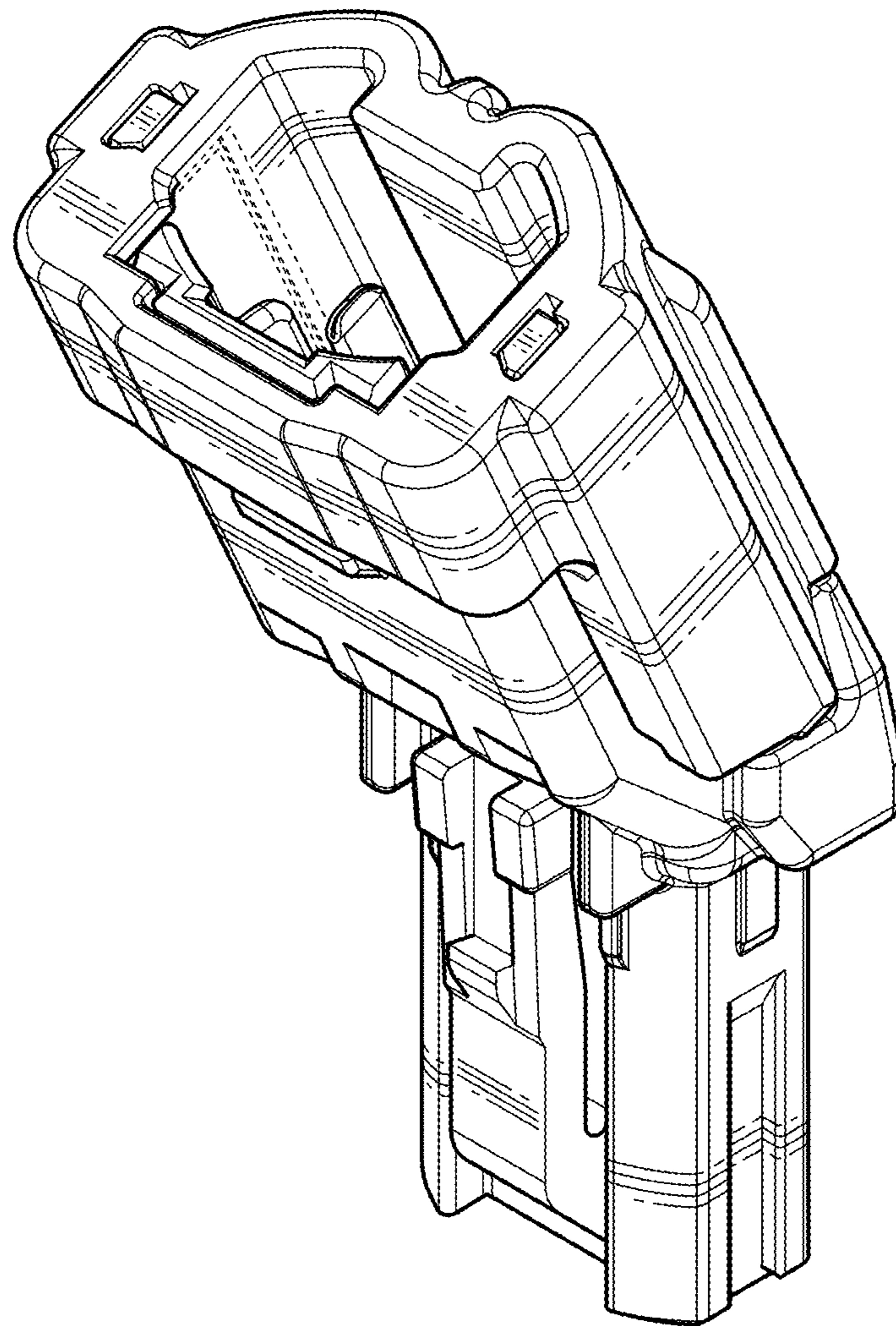


FIG. 1

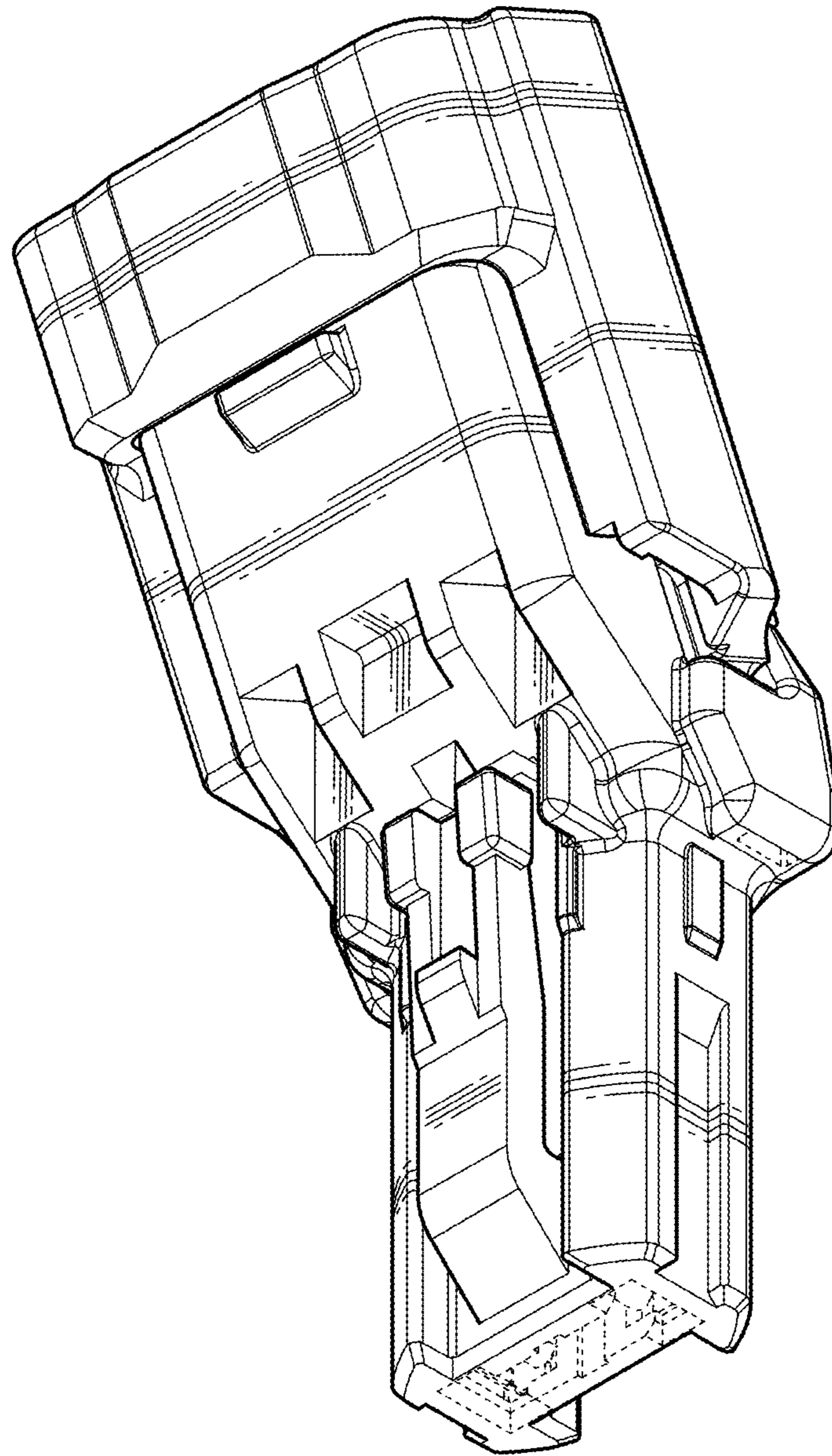


FIG. 2

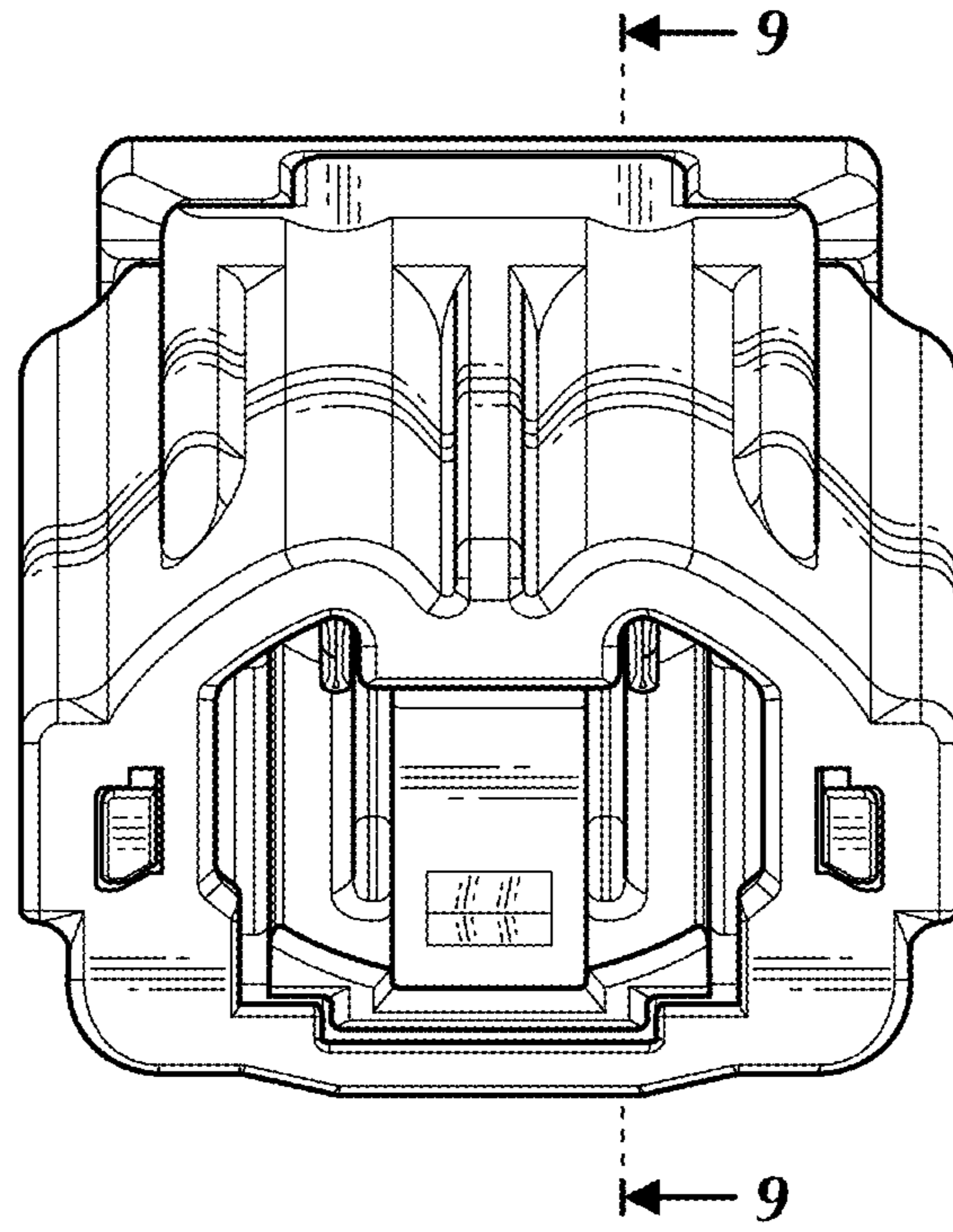


FIG. 3

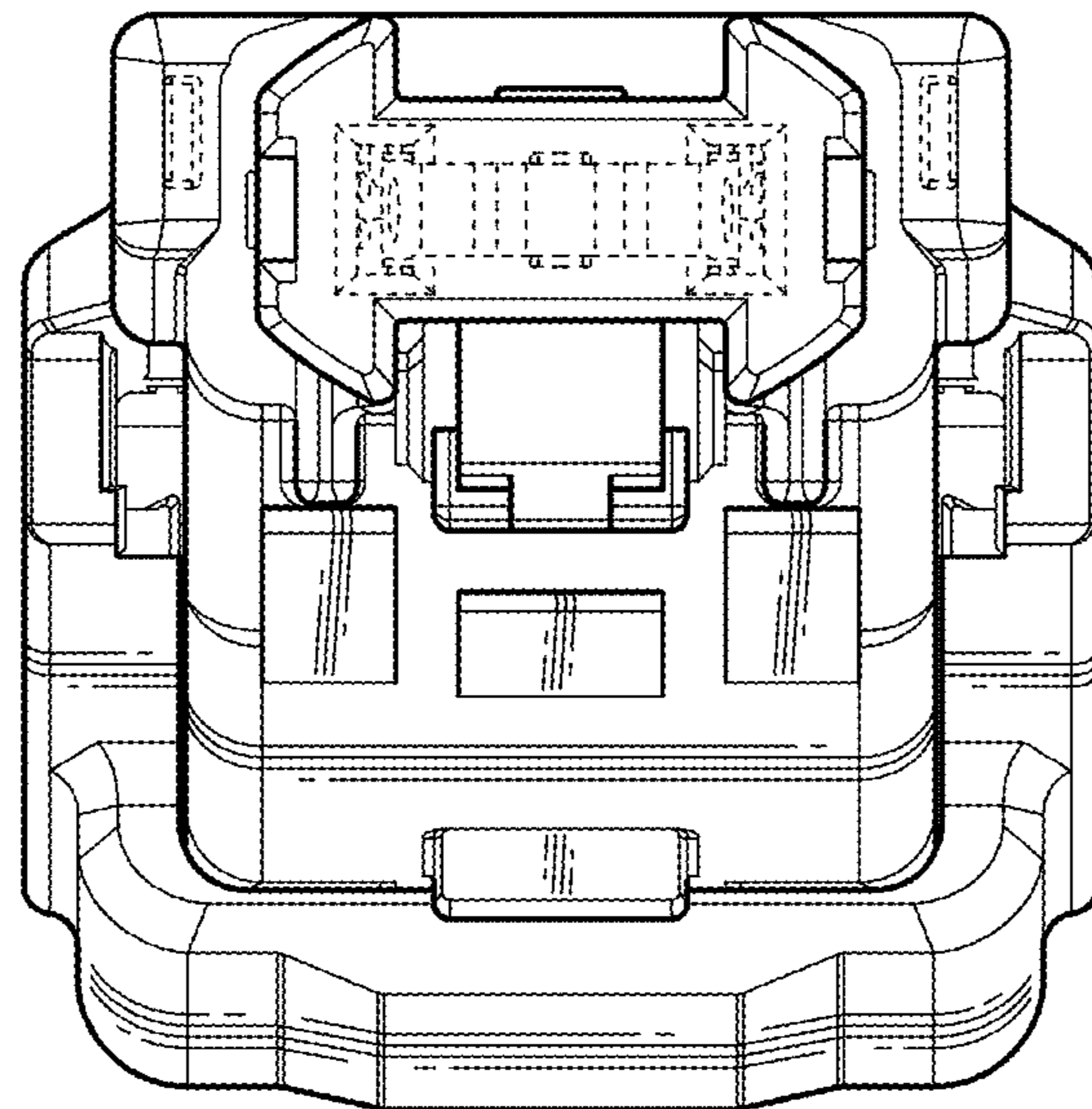


FIG. 4

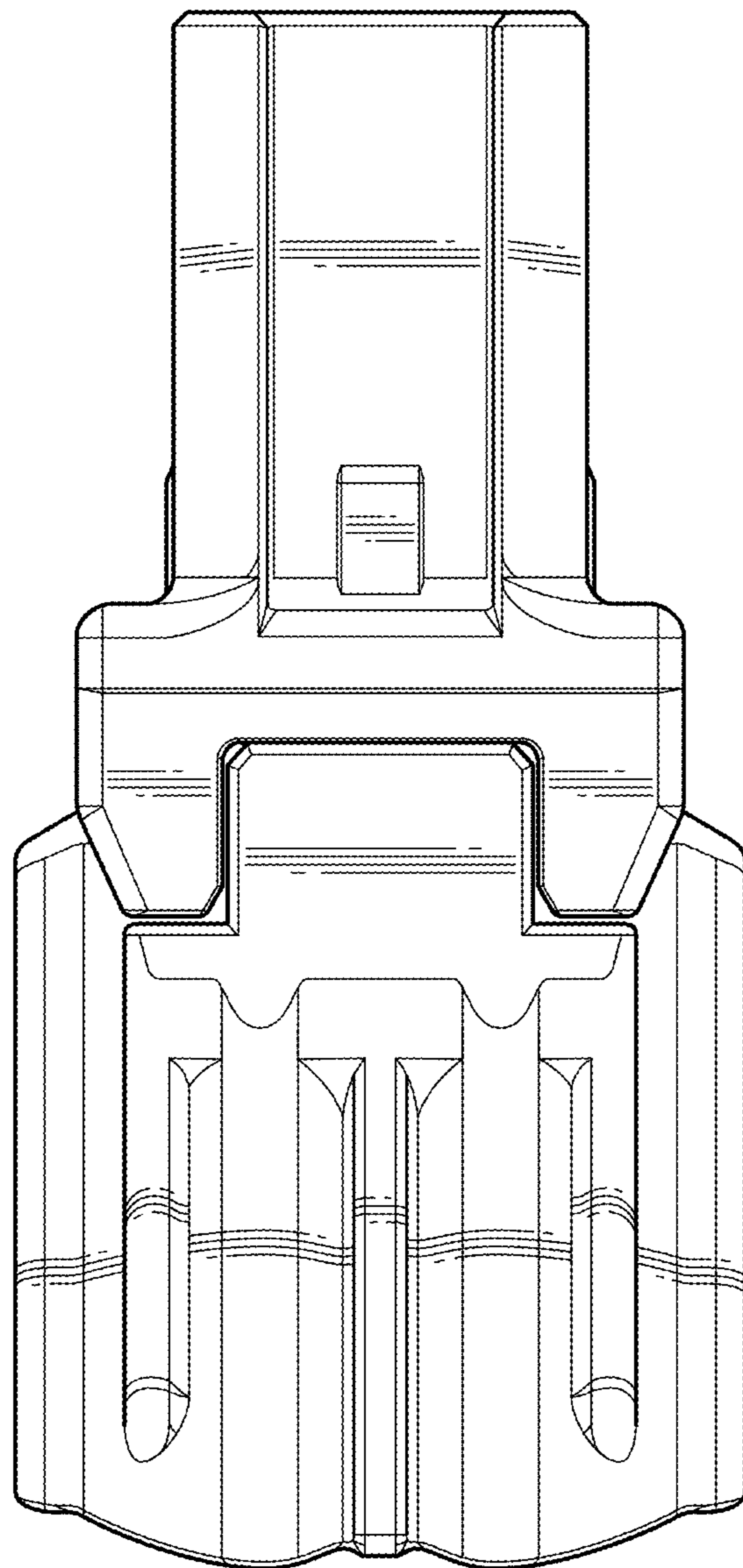


FIG. 5

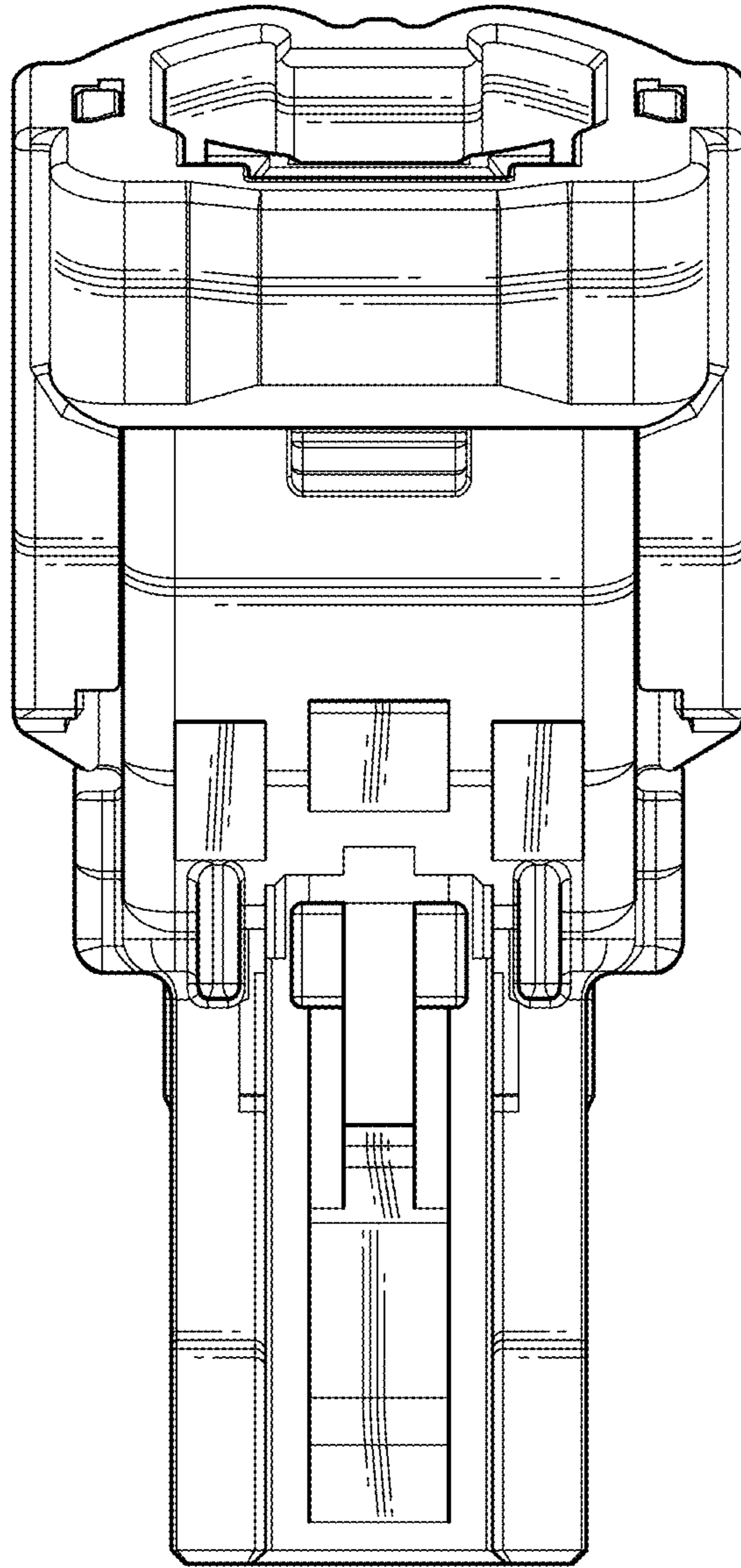


FIG. 6

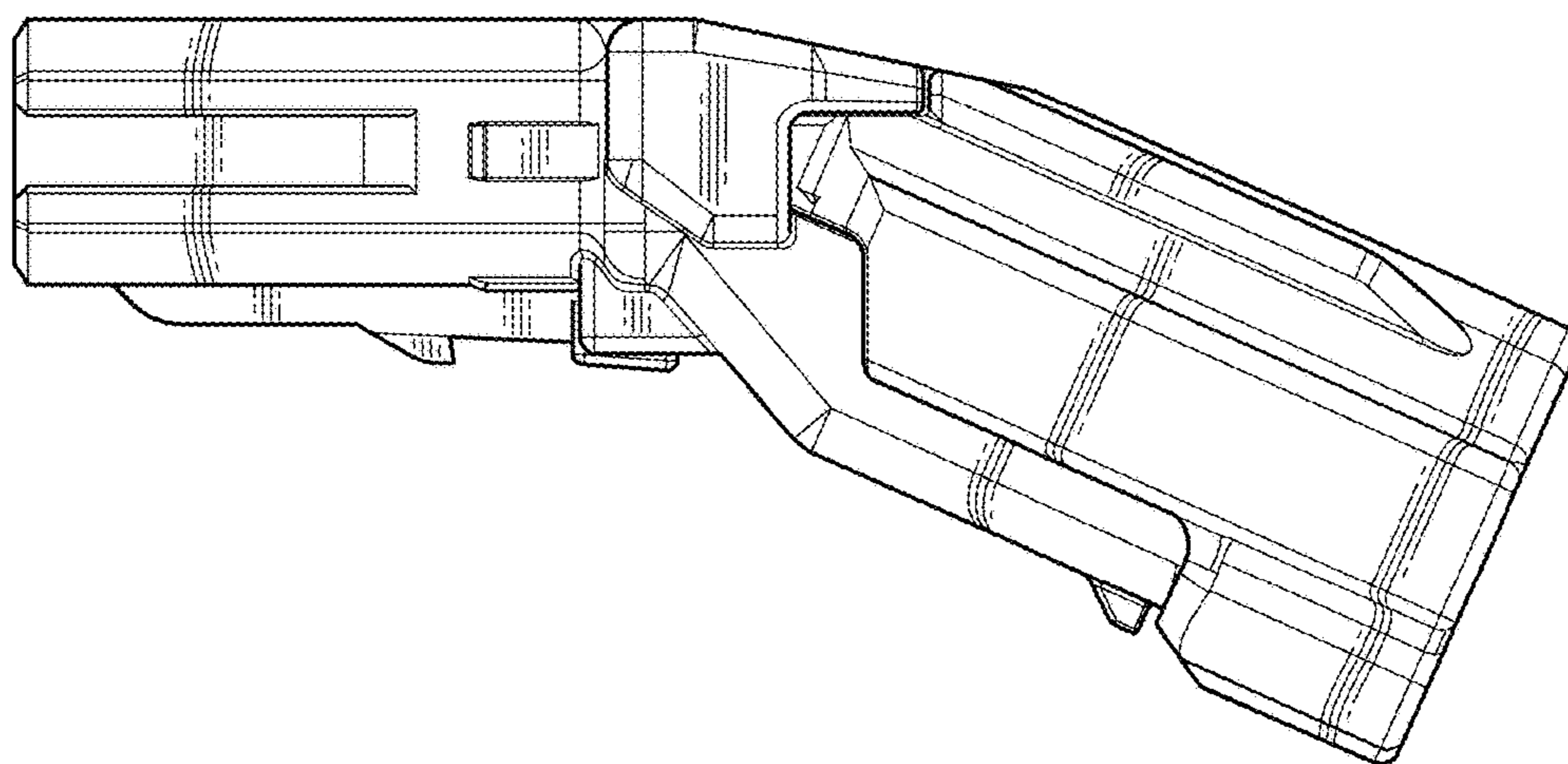


FIG. 7

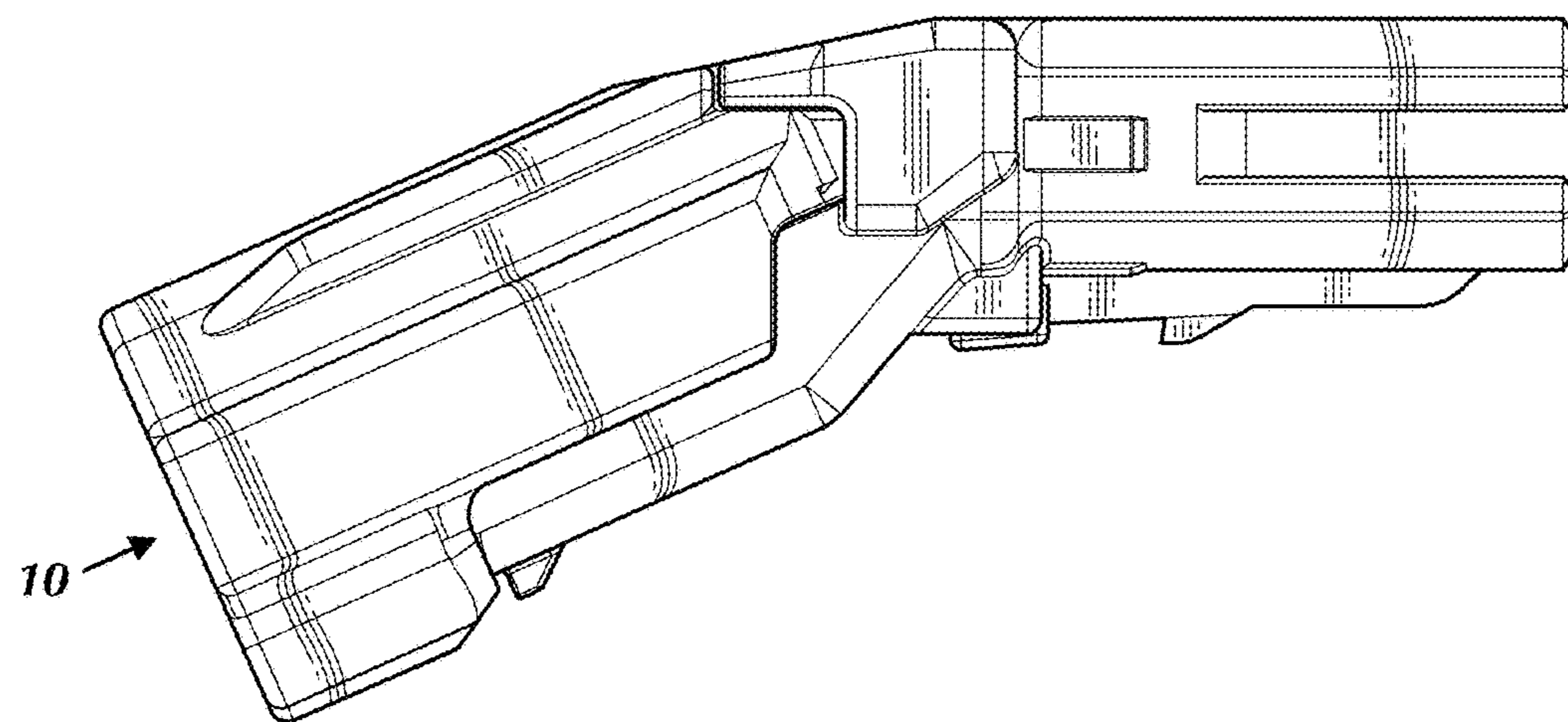


FIG. 8

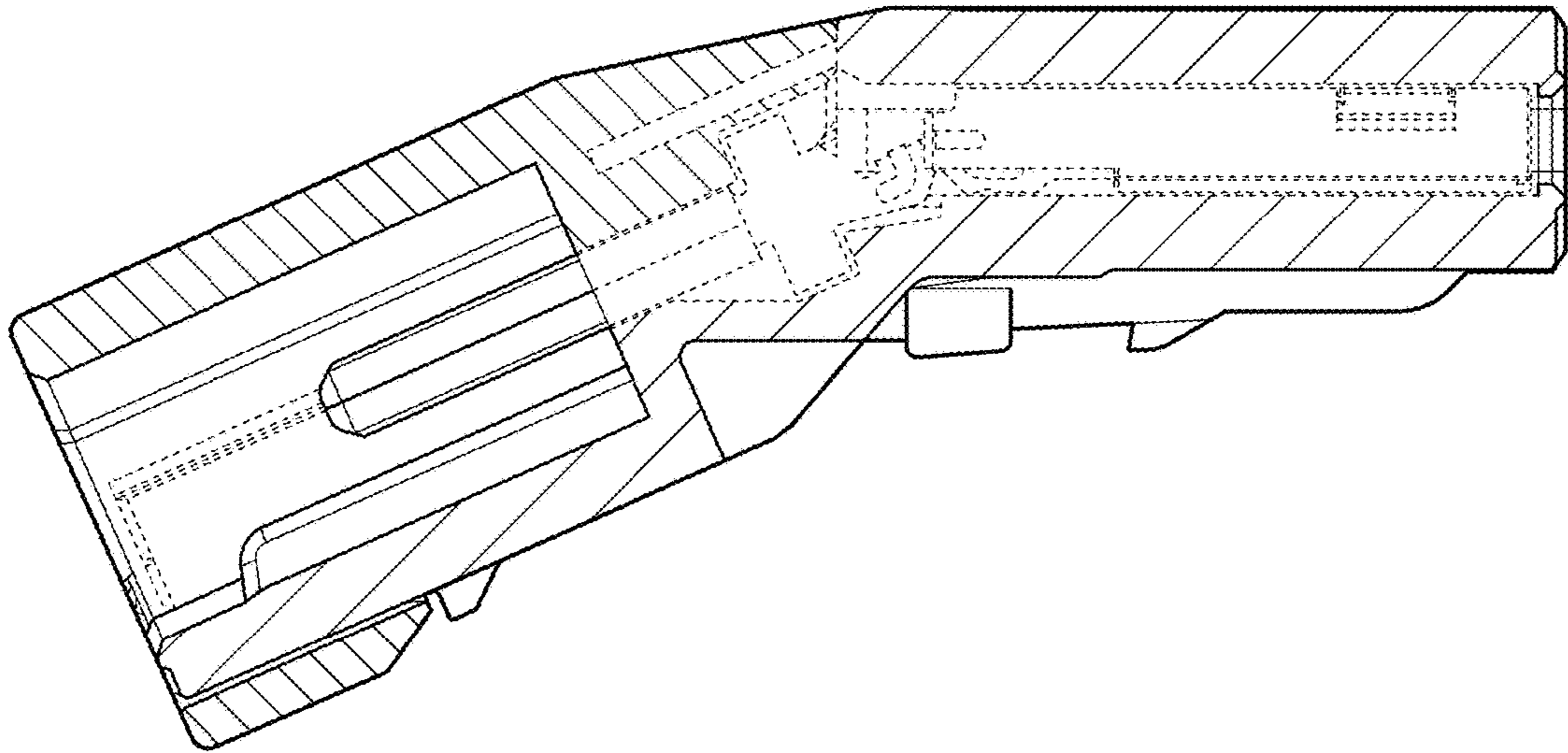


FIG. 9

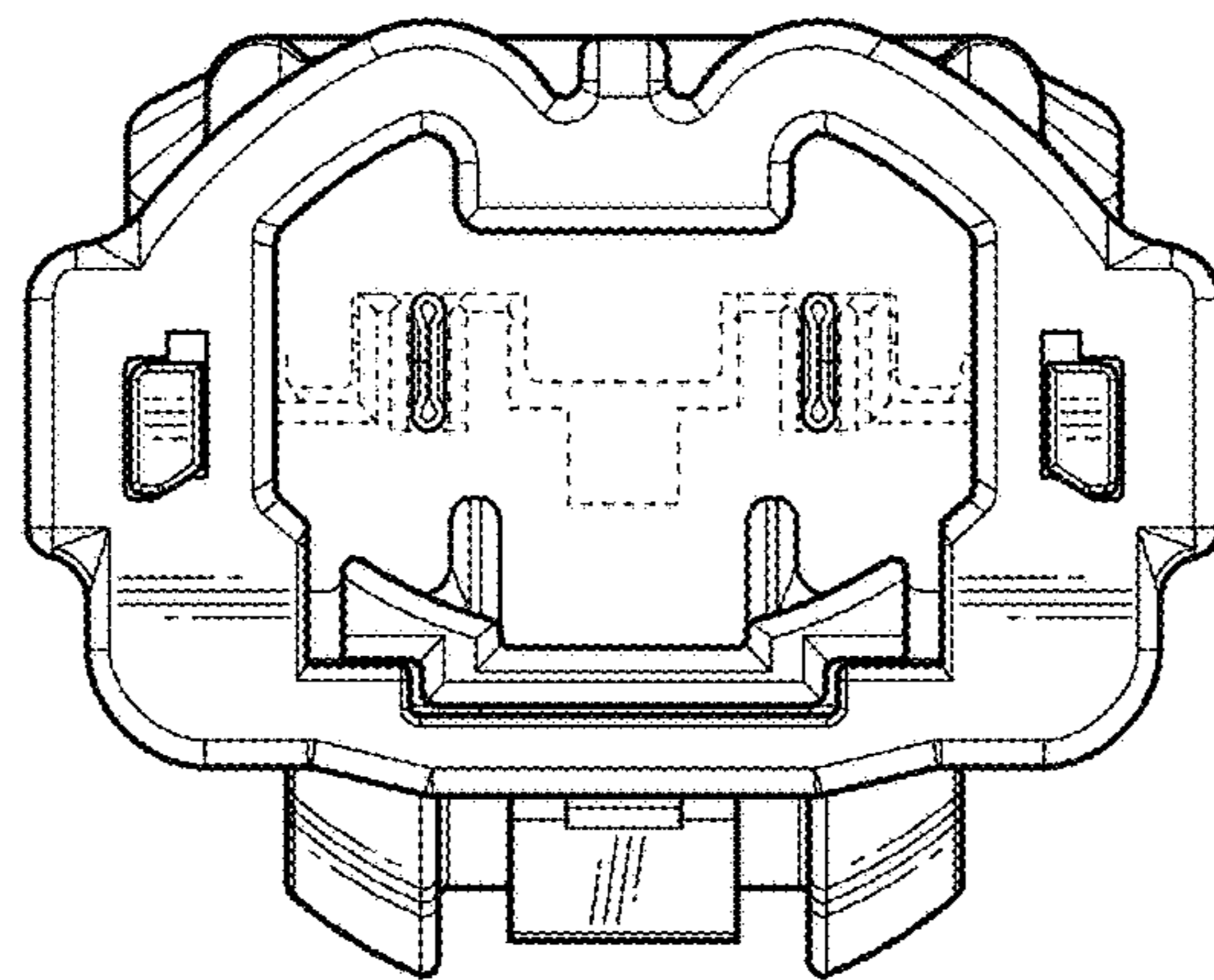


FIG. 10