



US00D972514S

(12) **United States Design Patent** (10) **Patent No.:** **US D972,514 S**  
**Horino et al.** (45) **Date of Patent:** **\*\* Dec. 13, 2022**

(54) **ELECTRICAL CONNECTOR**  
 (71) Applicant: **KYOCERA Corporation**, Kyoto (JP)  
 (72) Inventors: **Shintaro Horino**, Yokohama (JP);  
**Masayoshi Kakino**, Yokohama (JP)  
 (73) Assignee: **Kyocera Corporation**, Kyoto (JP)  
 (\*\*) Term: **15 Years**

(21) Appl. No.: **29/768,452**  
 (22) Filed: **Jan. 29, 2021**

(30) **Foreign Application Priority Data**  
 Oct. 6, 2020 (JP) ..... 2020-021421 D  
 (51) **LOC (13) Cl.** ..... **13-03**  
 (52) **U.S. Cl.**  
 USPC ..... **D13/147; D13/133**  
 (58) **Field of Classification Search**  
 USPC ..... D13/133, 146-147, 149, 154, 184, 199  
 CPC ..... H01R 12/52; H01R 12/707; H01R 12/716  
 See application file for complete search history.

(56) **References Cited**  
 U.S. PATENT DOCUMENTS  
 D642,986 S \* 8/2011 Nishimura ..... D13/147  
 D703,146 S \* 4/2014 Takenaga ..... D13/147  
 D745,463 S \* 12/2015 Kobuchi ..... D13/147  
 D756,933 S \* 5/2016 Kobuchi ..... D13/147  
 D767,499 S \* 9/2016 Goto ..... D13/147  
 D885,347 S \* 5/2020 Ishida ..... D13/147  
 D908,636 S \* 1/2021 Takenaga ..... D13/147  
 D922,959 S \* 6/2021 Oosaka ..... D13/147  
 D923,581 S \* 6/2021 Oosaka ..... D13/147  
 D952,565 S \* 5/2022 Oosaka ..... D13/133

2006/0040557 A1 2/2006 Yamaguchi  
 2006/0178022 A1\* 8/2006 Liu ..... H01R 12/52  
 439/74  
 2012/0231637 A1\* 9/2012 Takeuchi ..... H01R 12/716  
 439/65  
 2016/0315430 A1\* 10/2016 Takeuchi ..... H01R 12/707  
 2020/0220287 A1 7/2020 Hirakawa

**FOREIGN PATENT DOCUMENTS**

JP 2006-059589 A 3/2006  
 JP 2019-087382 A 6/2019

\* cited by examiner

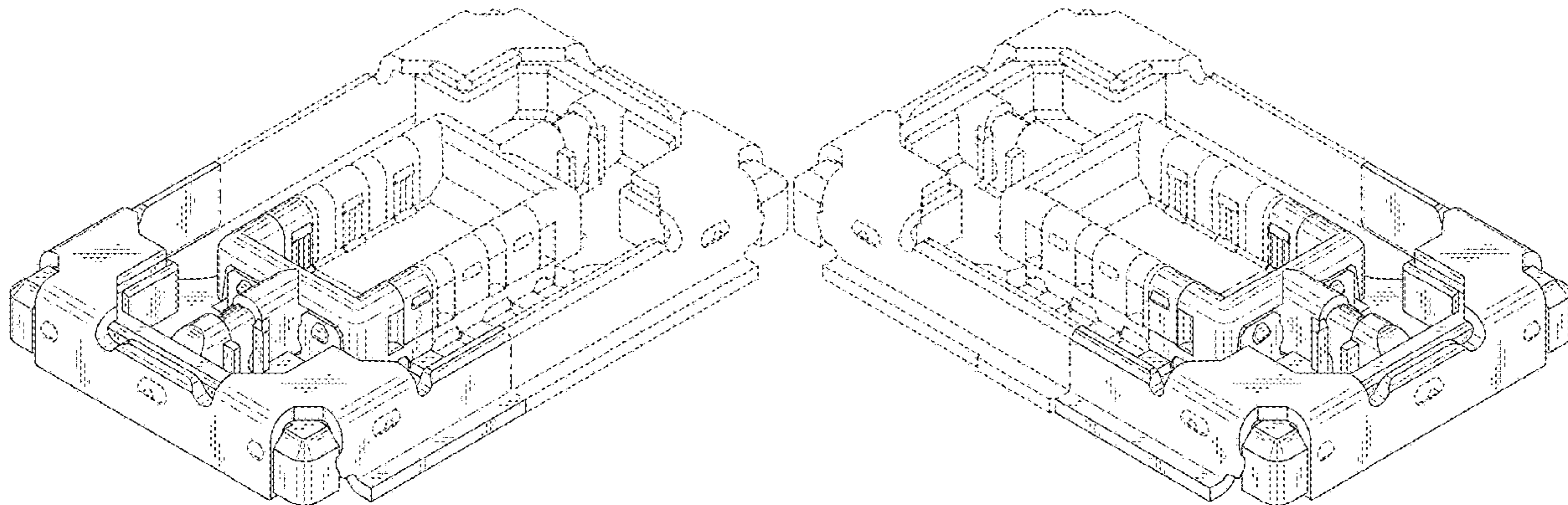
*Primary Examiner* — Shawn T Gingrich  
*Assistant Examiner* — Bryan N. Melvin  
 (74) *Attorney, Agent, or Firm* — Sughrue Mion, PLLC

(57) **CLAIM**  
 The ornamental design for an electrical connector, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, bottom and left-side perspective view of an electrical connector showing our new design;  
 FIG. 2 is a front, top and left-side perspective view thereof;  
 FIG. 3 is a front, top and right-side perspective view thereof;  
 FIG. 4 is a front elevational view thereof;  
 FIG. 5 is rear elevational view thereof;  
 FIG. 6 is a left-side elevational view thereof;  
 FIG. 7 is a right-side elevational view thereof;  
 FIG. 8 is a top plan view thereof; and,  
 FIG. 9 is a bottom plan view thereof.  
 The broken lines depict portions of the electrical connector that form no part of the claimed design. The dot-dash boundary lines define the boundary of the claimed design and form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**



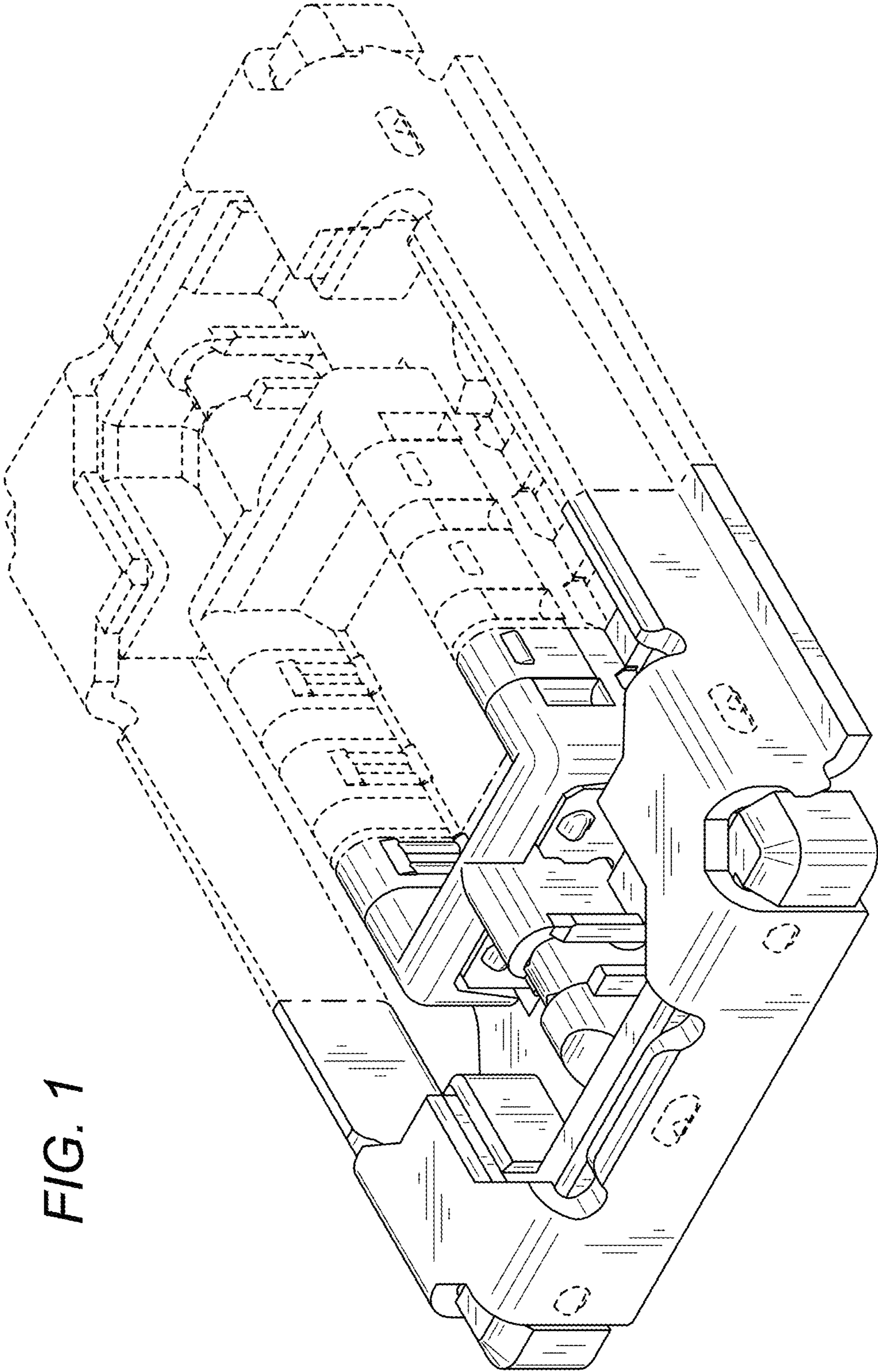
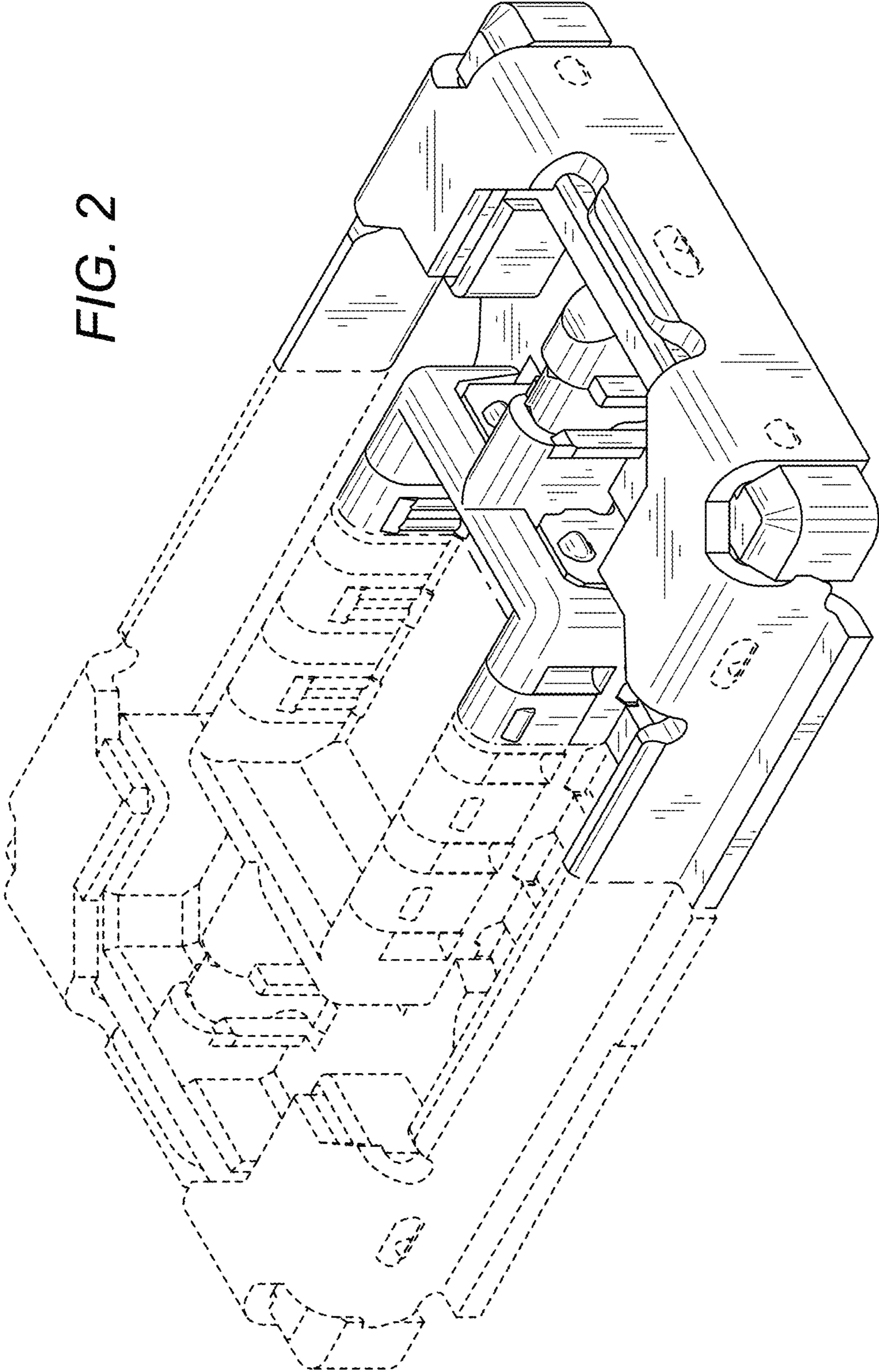


FIG. 1

FIG. 2



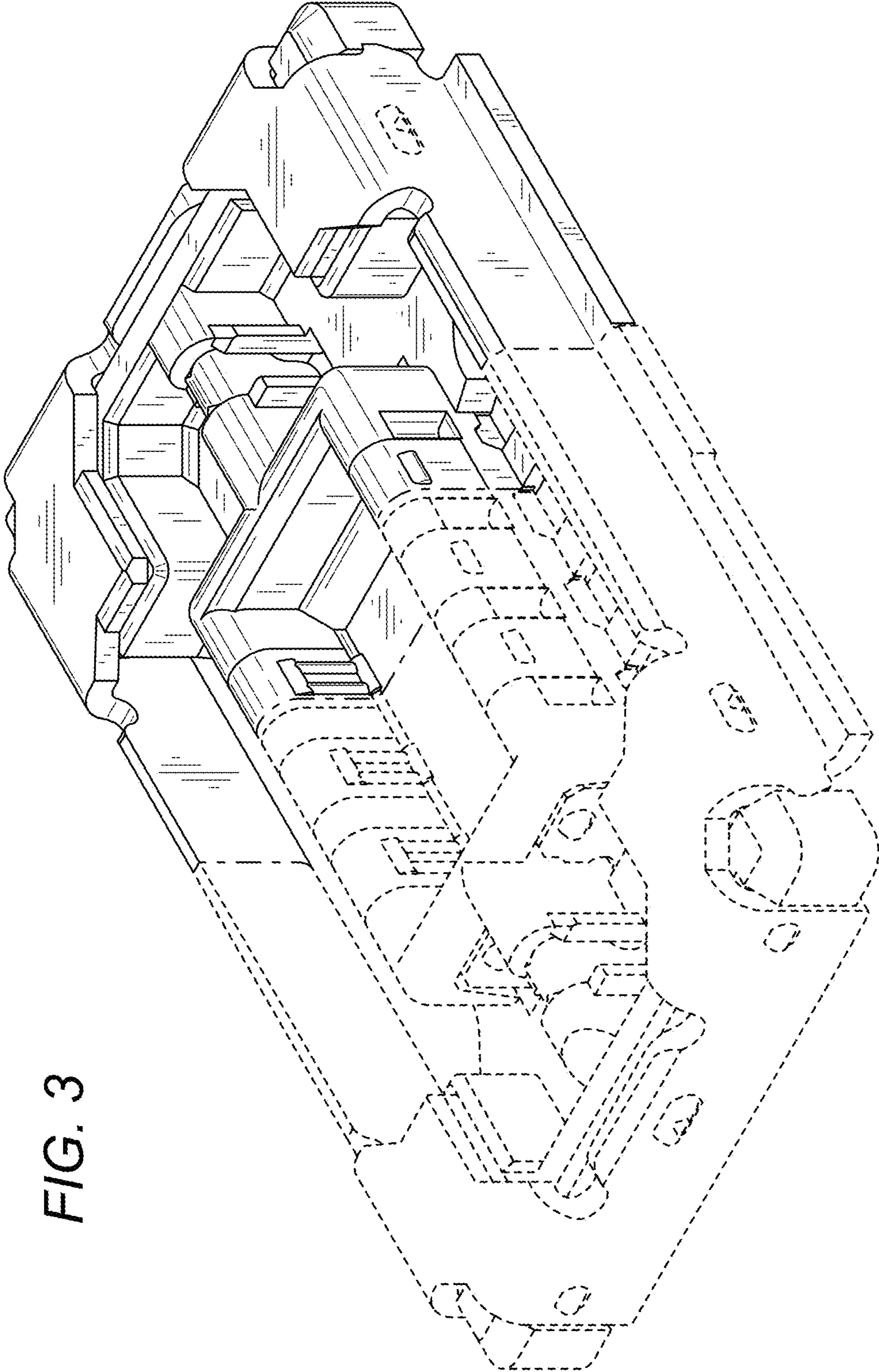


FIG. 3

FIG. 4

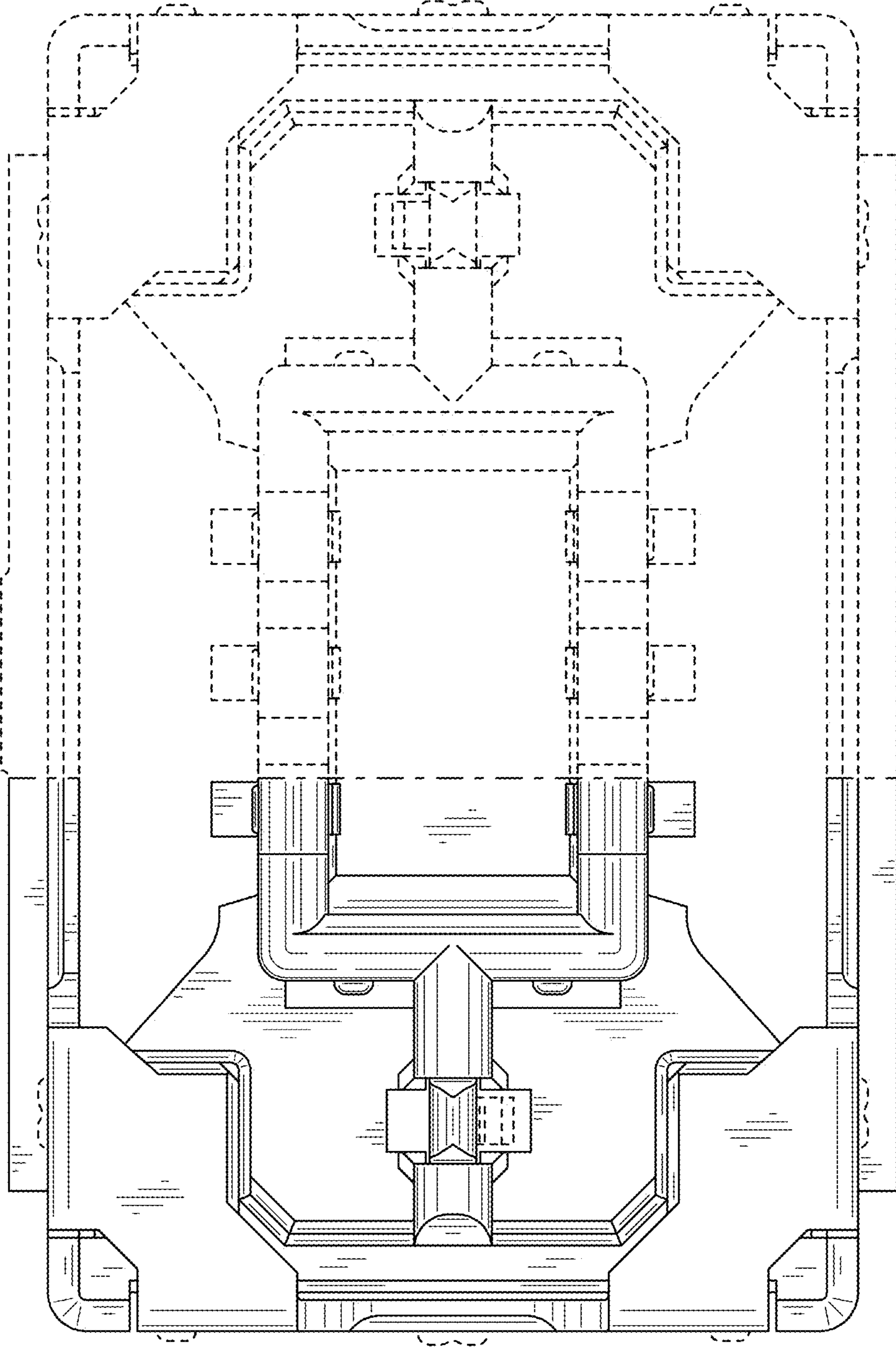


FIG. 5

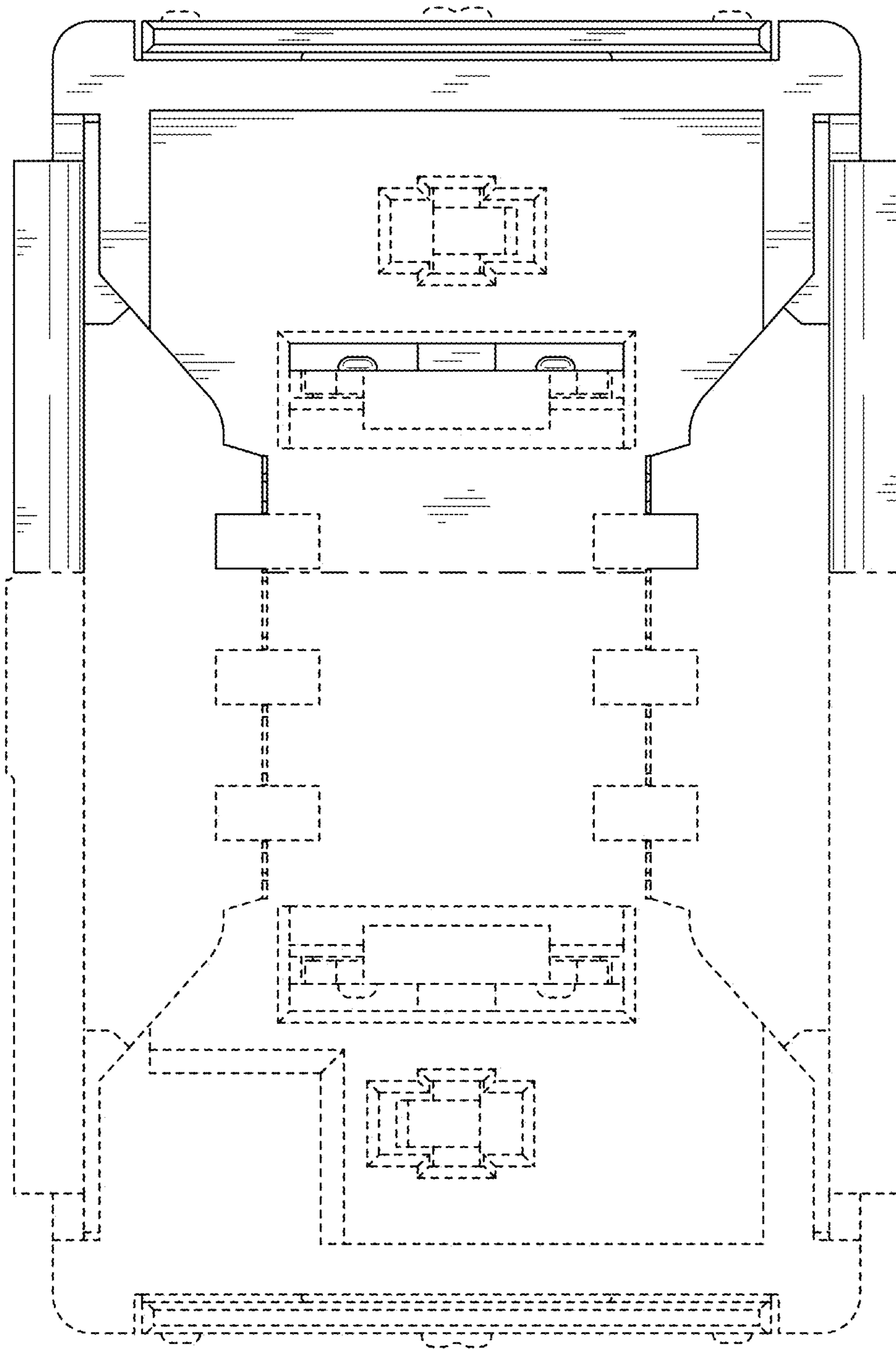


FIG. 6

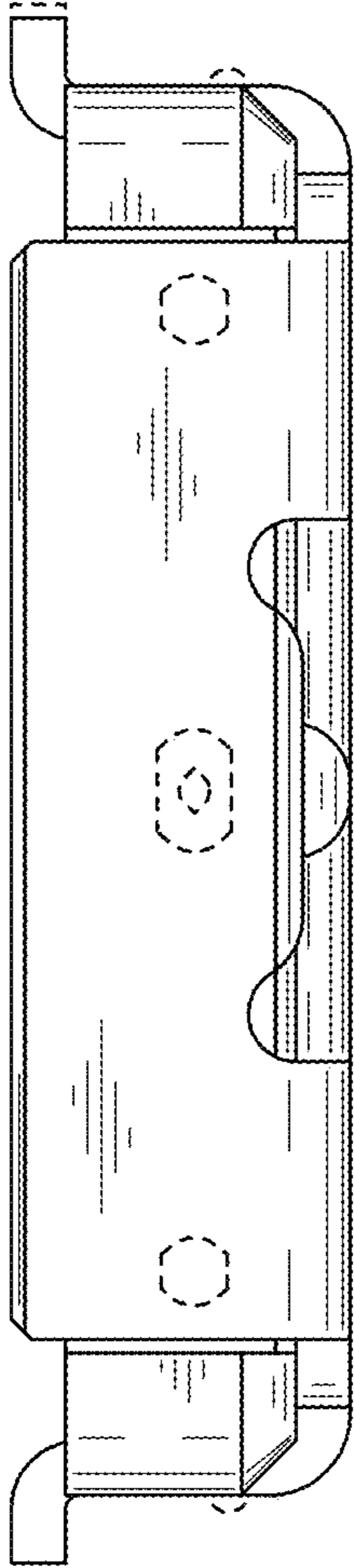


FIG. 7

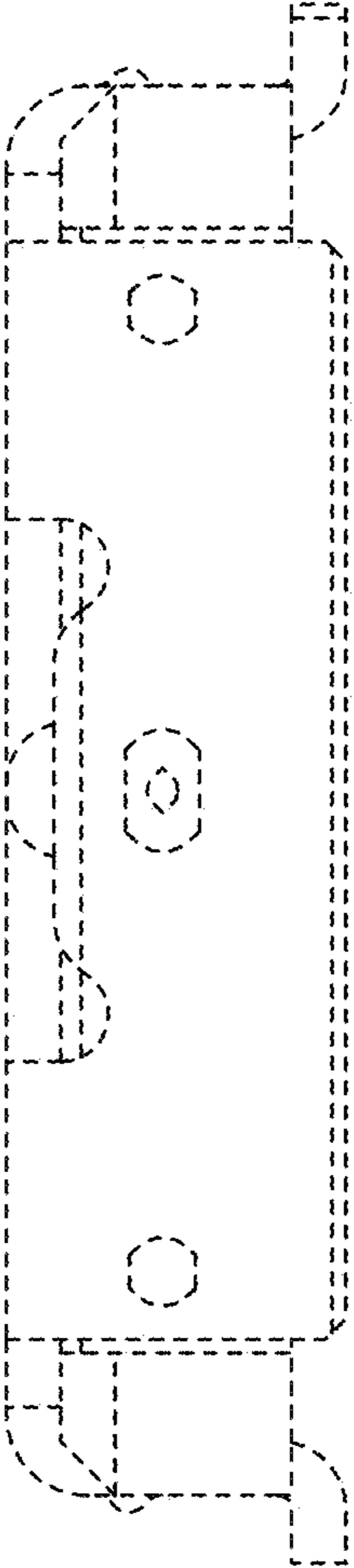


FIG. 8

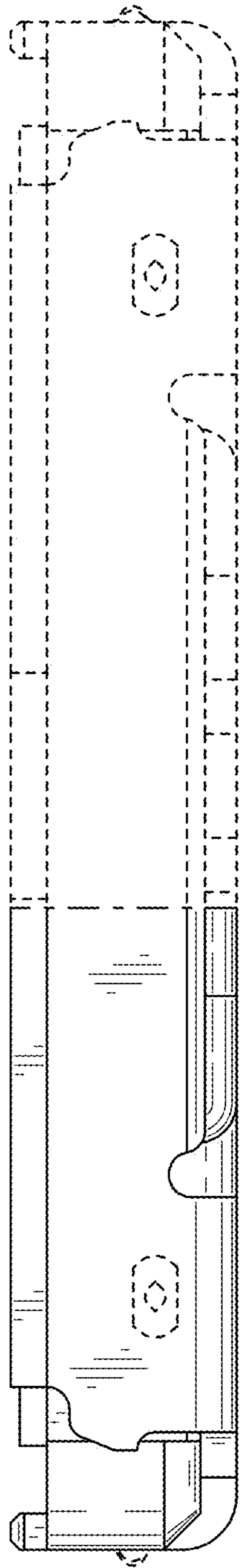


FIG. 9

