



US00D532373S

(12) **United States Design Patent**  
**Nishida et al.**

(10) **Patent No.:** **US D532,373 S**

(45) **Date of Patent:** **\*\* Nov. 21, 2006**

(54) **ELECTRICAL CONNECTOR**

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(\*\*) Term: **14 Years**

(21) Appl. No.: **29/197,375**

(22) Filed: **Jan. 14, 2004**

(30) **Foreign Application Priority Data**

Jul. 14, 2003 (JP) ..... 2003-020265

(51) **LOC (8) Cl.** ..... **13-03**

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

(58) **Field of Classification Search** ..... D13/133,  
D13/146-147, 153-154, 184, 199; 439/188,  
439/331, 352, 372, 507, 509, 489, 620  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,772,470 A \* 6/1998 Togashi ..... 439/582  
6,074,217 A \* 6/2000 Maruyama et al. .... 439/63  
D447,117 S \* 8/2001 Ko ..... D13/133  
D453,736 S \* 2/2002 Shimojyo ..... D13/147  
6,419,510 B1 \* 7/2002 Shiraki et al. .... 439/188

D469,741 S \* 2/2003 Shimojo ..... D13/133  
6,743,051 B1 \* 6/2004 Hayashi ..... 439/620  
6,893,277 B1 \* 5/2005 Parrish et al. .... 439/188  
D521,933 S \* 5/2006 Wade et al. .... D13/147  
2001/0027043 A1 \* 10/2001 Shiraki et al. .... 439/188  
2003/0228782 A1 \* 12/2003 Nishida et al. .... 439/188

\* cited by examiner

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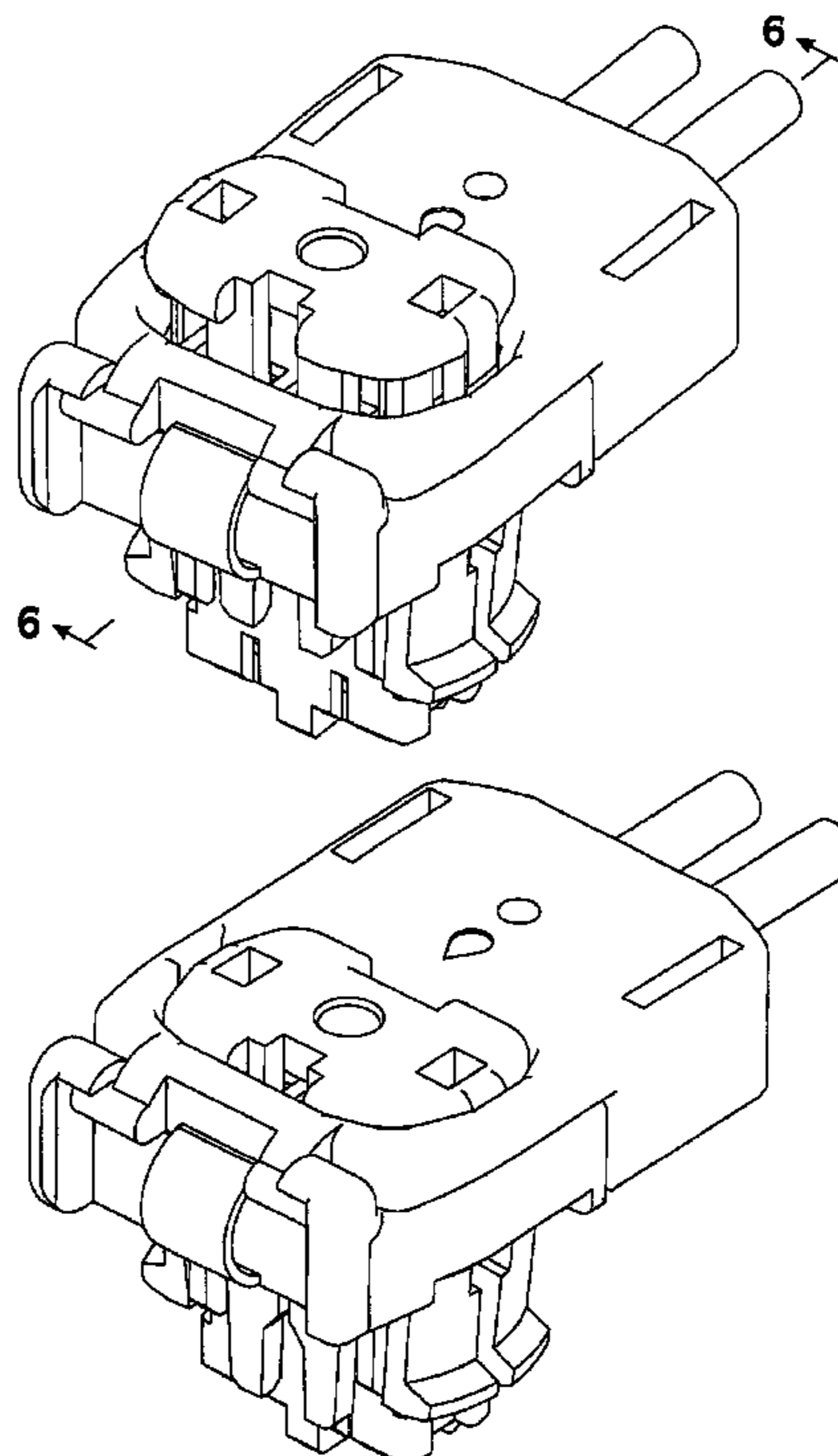
(57) **CLAIM**

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

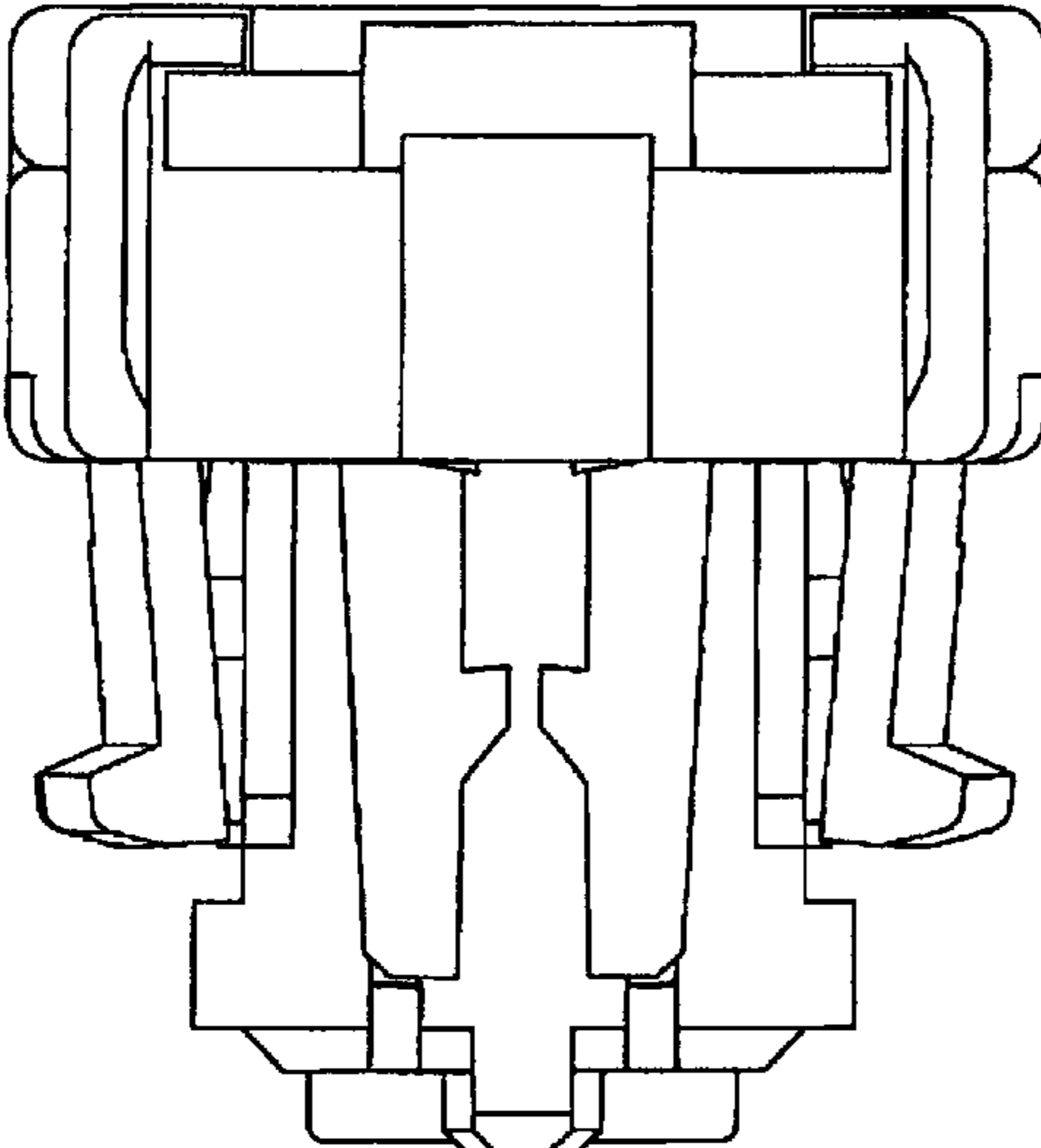
**DESCRIPTION**

FIG. 1 is a front elevation view of an electrical connector, showing our new design;  
FIG. 2 is a top plan view thereof;  
FIG. 3 is a rear elevation view thereof;  
FIG. 4 is a bottom plan view thereof;  
FIG. 5 is a right side elevation view thereof, the left side elevation view is a mirror image thereto;  
FIG. 6 is a cross-sectional view thereof, taken along line 6—6 in FIG. 7, in a larger scale;  
FIG. 7 is a top, front and right side perspective view thereof, in a preassembled position; and,  
FIG. 8 is top, front and right side perspective view thereof, in an assembled position.

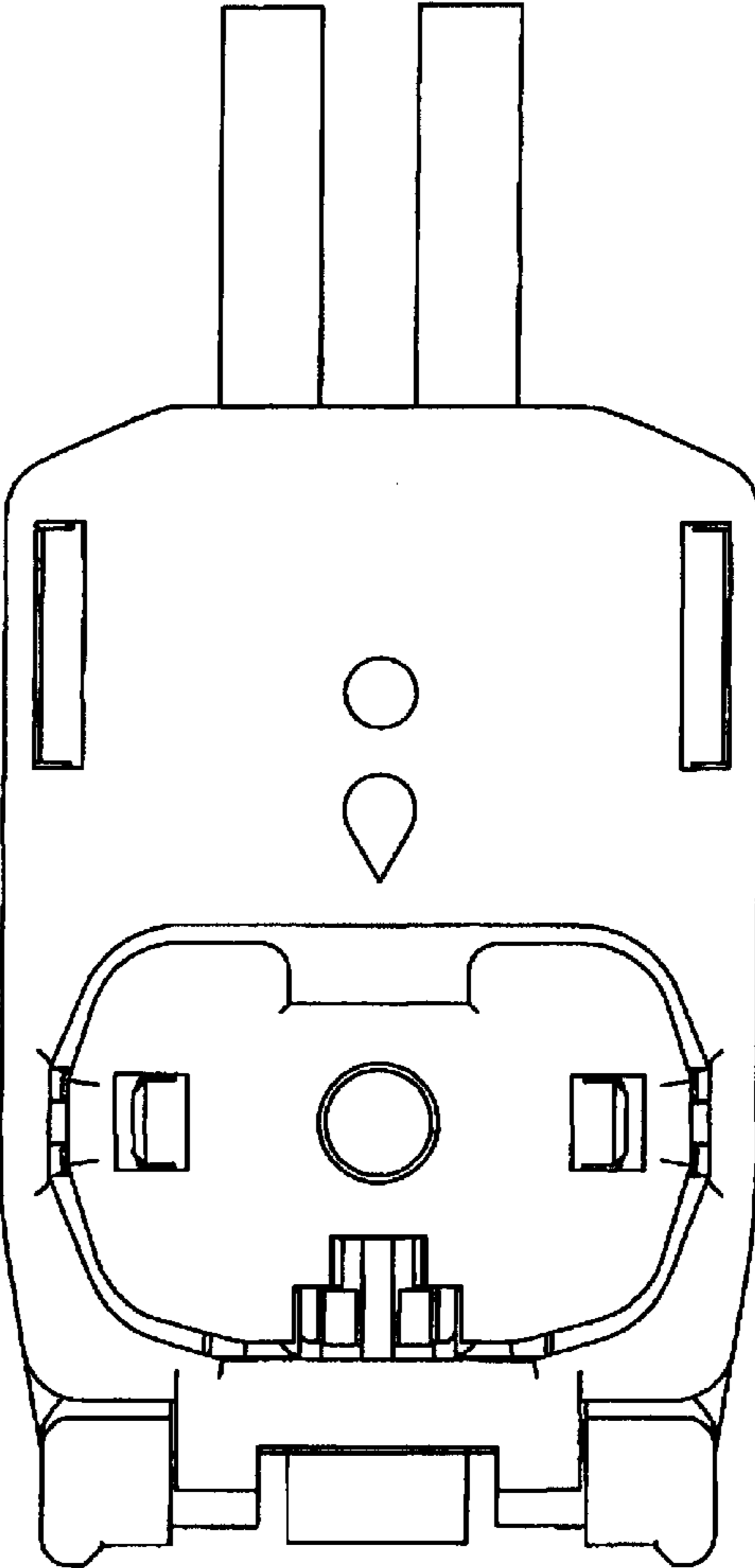
**1 Claim, 4 Drawing Sheets**



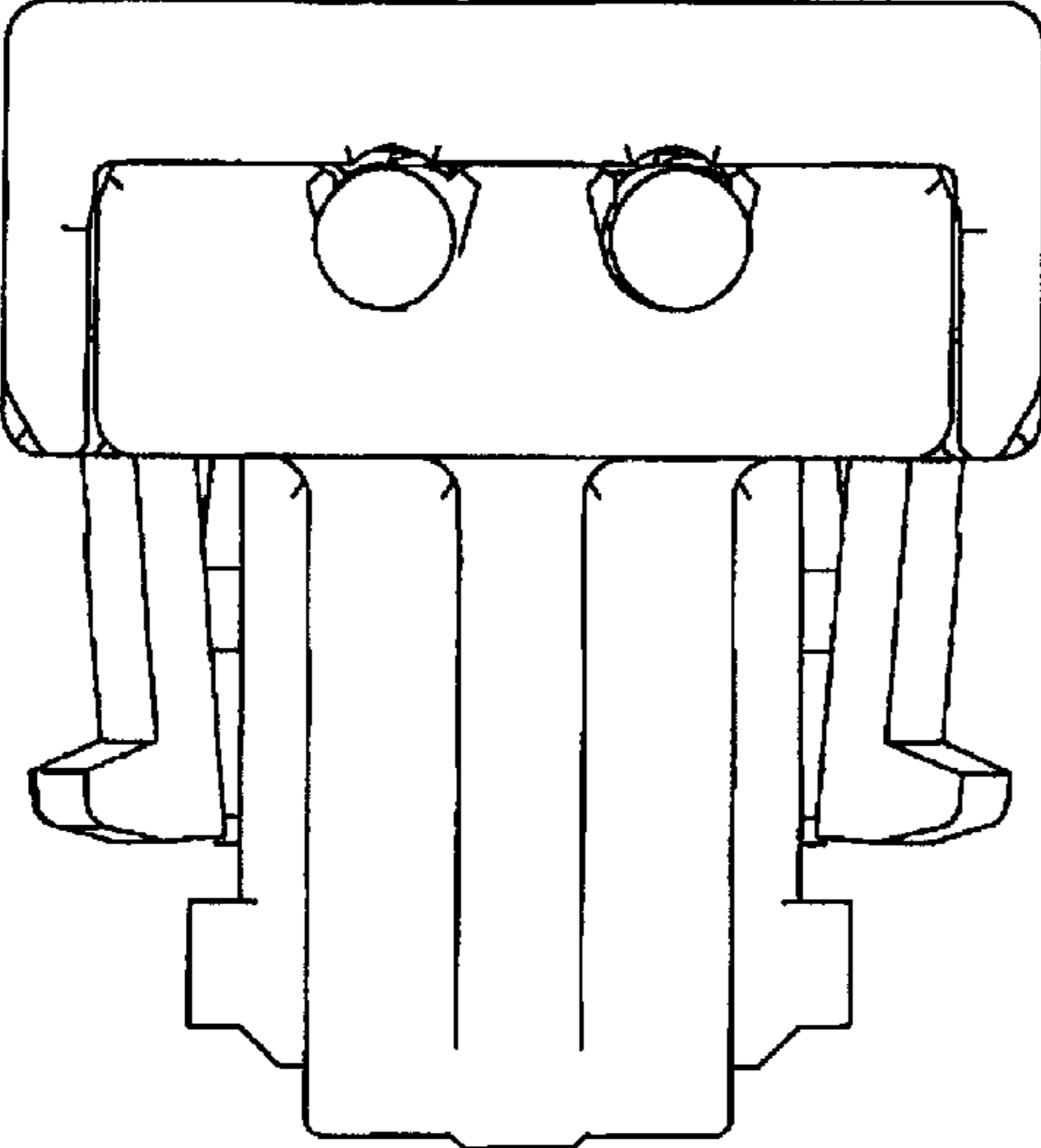
**FIG. 1**



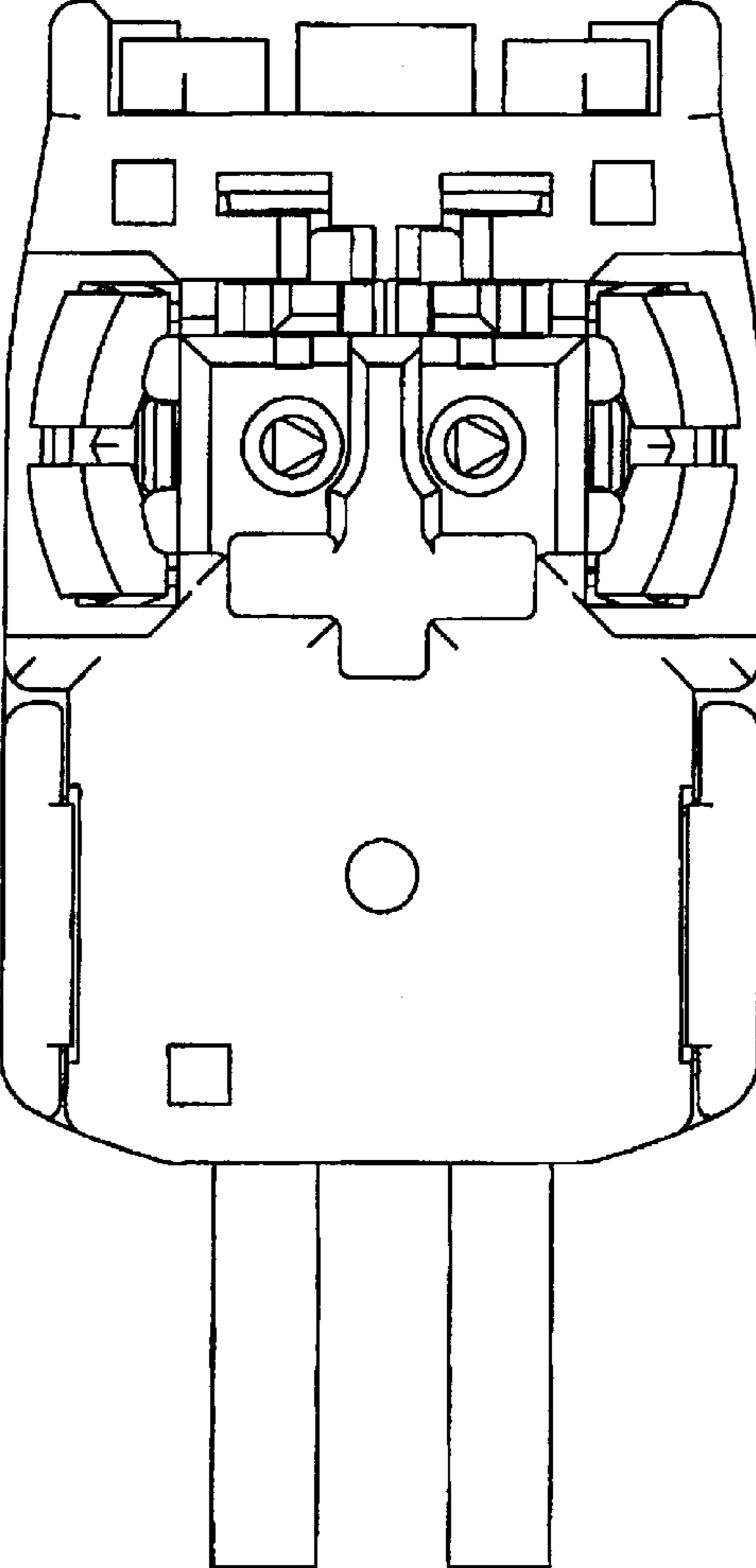
**FIG. 2**



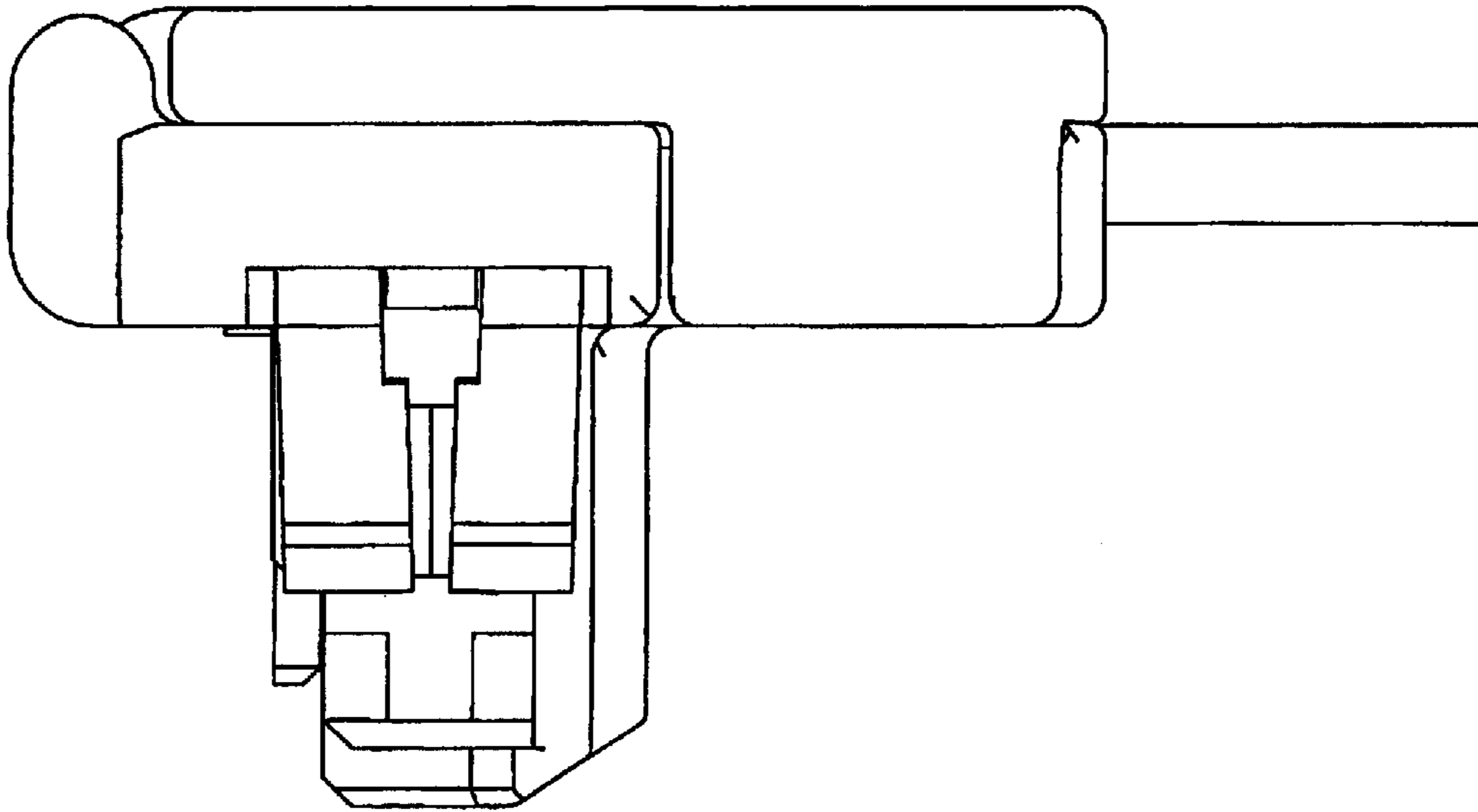
**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**

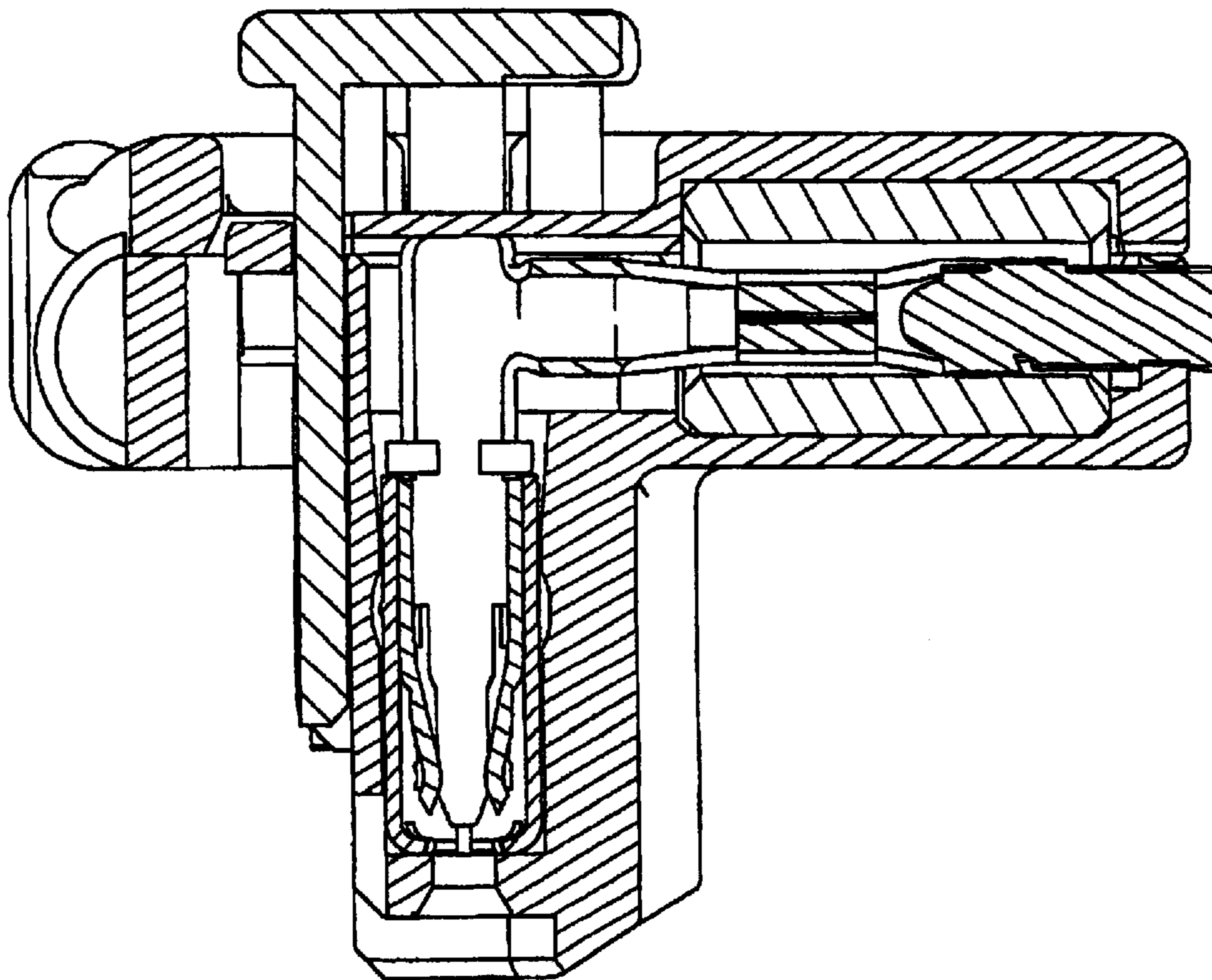


FIG. 7

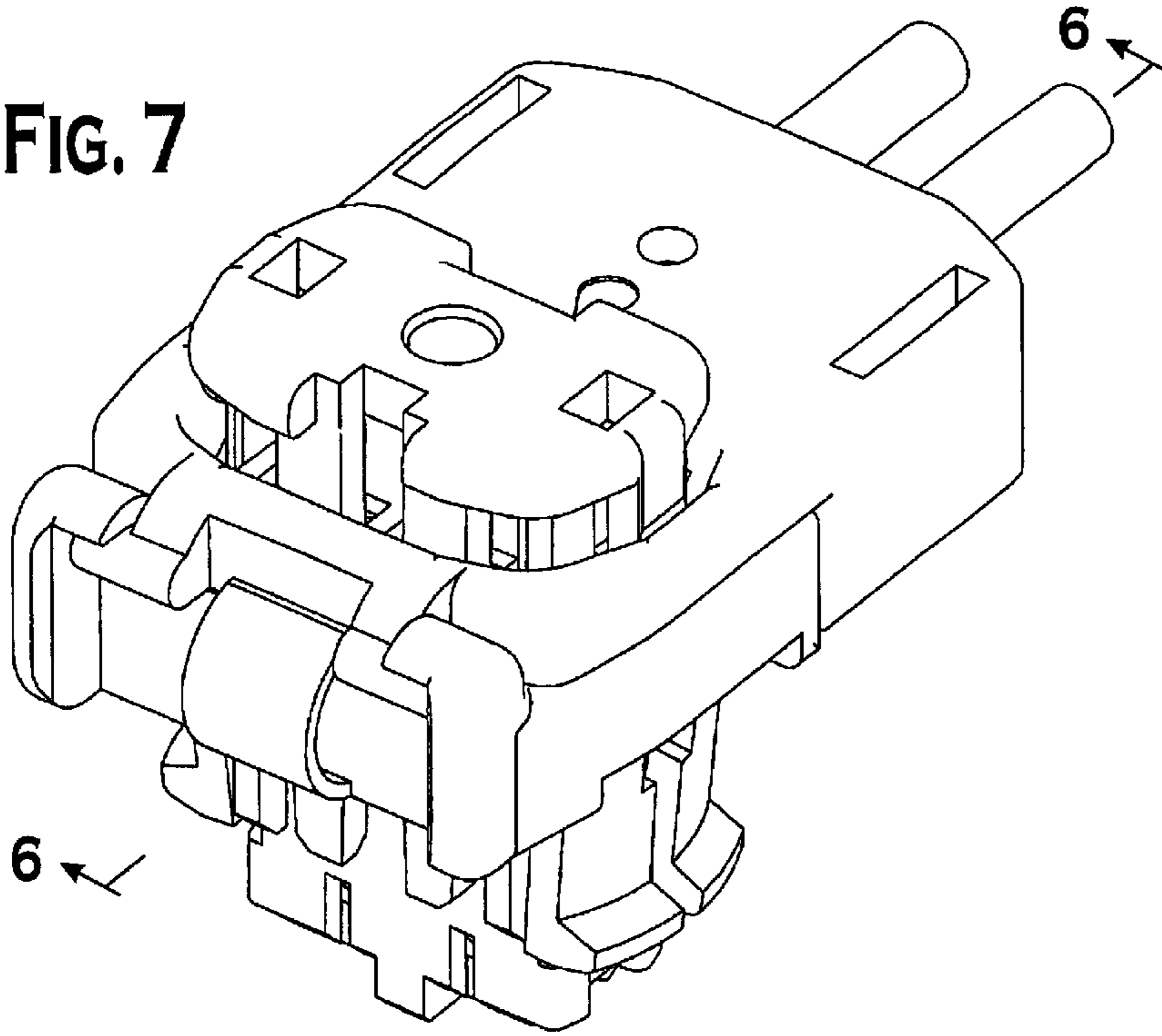


FIG. 8

