



US00D459309S

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

(10) **Patent No.:** **US D459,309 S**  
(45) **Date of Patent:** **\*\* Jun. 25, 2002**

(54) **ELECTRICAL CONNECTOR**

6,213,793 B1 \* 4/2001 Norizuki et al. .... 439/157

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\* cited by examiner

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

(57) **CLAIM**

(21) Appl. No.: **29/143,289**

I claim the ornamental design for an electrical connector, as shown and described.

(22) Filed: **Jun. 12, 2001**

(30) **Foreign Application Priority Data**

**DESCRIPTION**

Dec. 15, 2000 (JP) ..... 2000-035917

FIG. 1 is a front elevation view of an electrical connector, showing my new design;

(51) **LOC (7) Cl.** ..... **13-03**

FIG. 2 is a rear elevation view of the electrical connector design of FIG. 1;

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

FIG. 3 is a top plan view of the electrical connector design of FIG. 1;

(58) **Field of Search** ..... D13/147; 439/350,  
439/352, 353, 354, 357, 752, 358

FIG. 4 is a bottom plan view of the electrical connector design of FIG. 1;

(56) **References Cited**

FIG. 5 is a right side view of the electrical connector design of FIG. 1;

**U.S. PATENT DOCUMENTS**

4,596,436 A \* 6/1986 Kraemer et al. .... 439/752 X  
4,640,566 A \* 2/1987 Matsusaka ..... 439/350  
4,769,896 A \* 9/1988 Denlinger et al. .... 29/509  
5,145,413 A \* 9/1992 Okamoto et al. .... 439/620  
D366,454 S \* 1/1996 Eaton ..... D13/147  
D367,040 S \* 2/1996 Hamada ..... D13/147  
5,643,003 A \* 7/1997 Myer et al. .... 439/352  
5,772,452 A \* 6/1998 Aoyama ..... 439/74  
6,126,470 A \* 10/2000 Ono ..... 439/372 X  
6,183,276 B1 \* 2/2001 Tsuji et al. .... 439/157

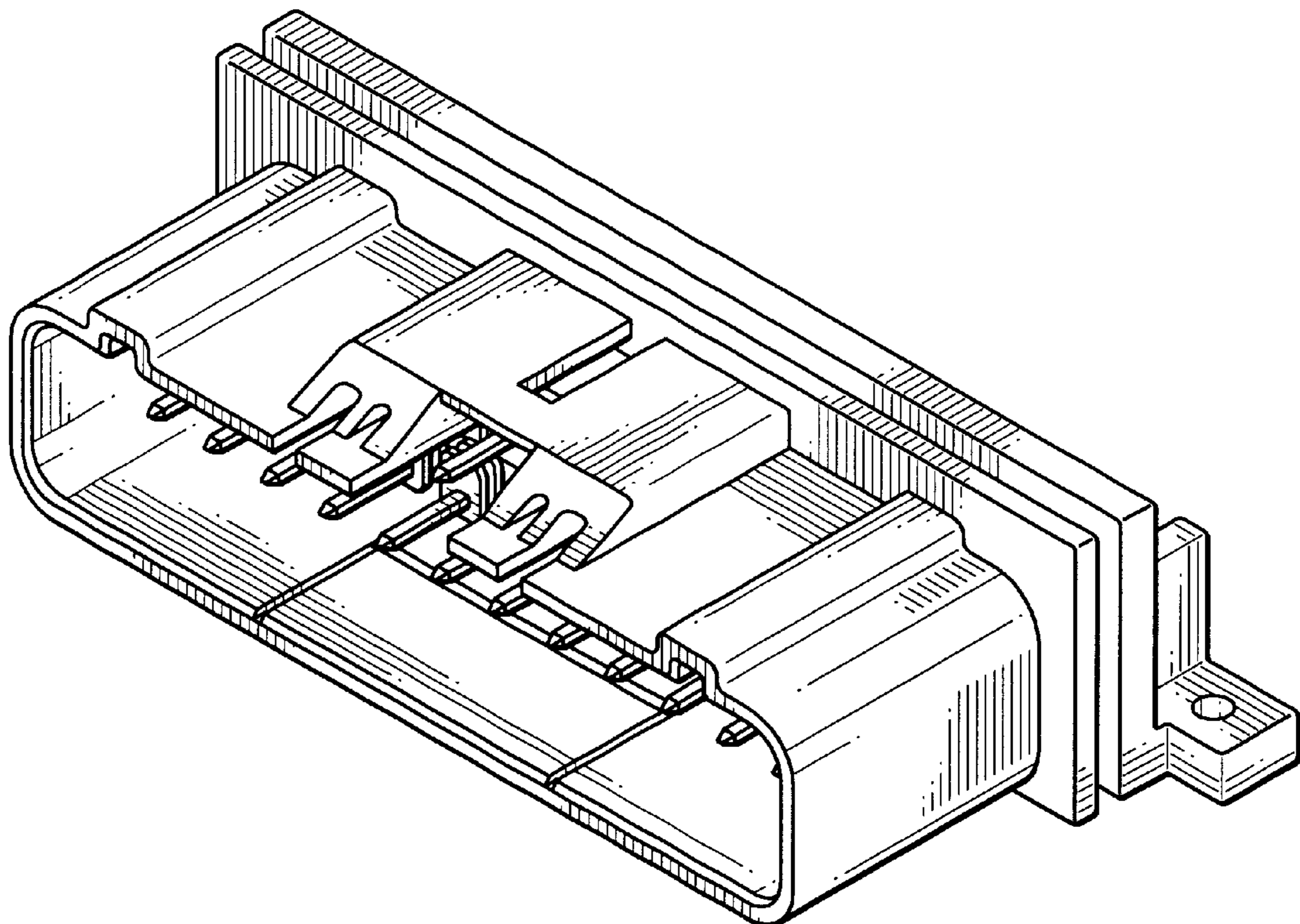
FIG. 6 is a cross-sectional view taken along the lines VI—VI of FIG. 1;

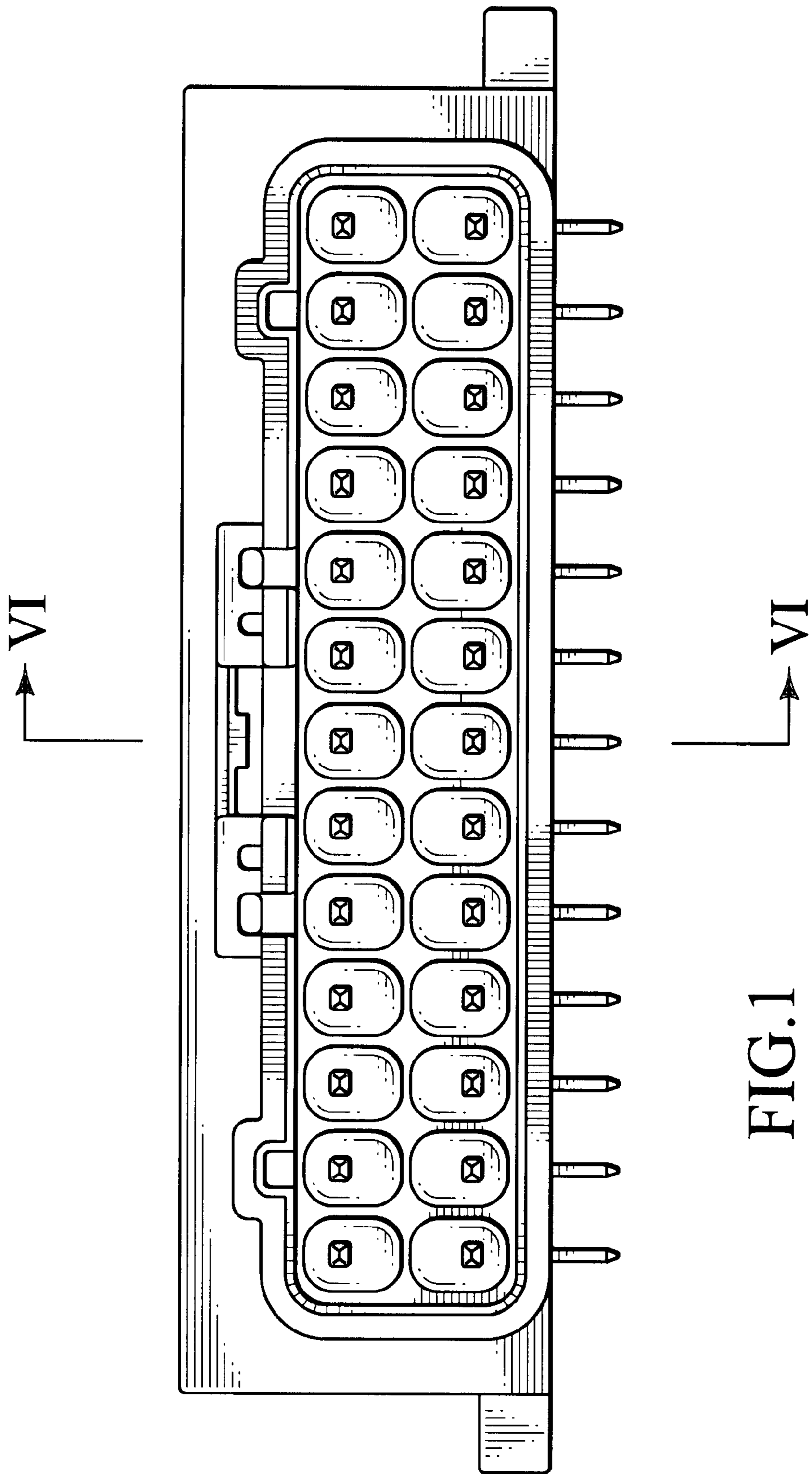
FIG. 7 is a front perspective view of the electrical connector of the present design; and,

FIG. 8 is a rear perspective view of the electrical connector of the present design.

The left side view is omitted as being a mirror image of the right side view.

**1 Claim, 7 Drawing Sheets**





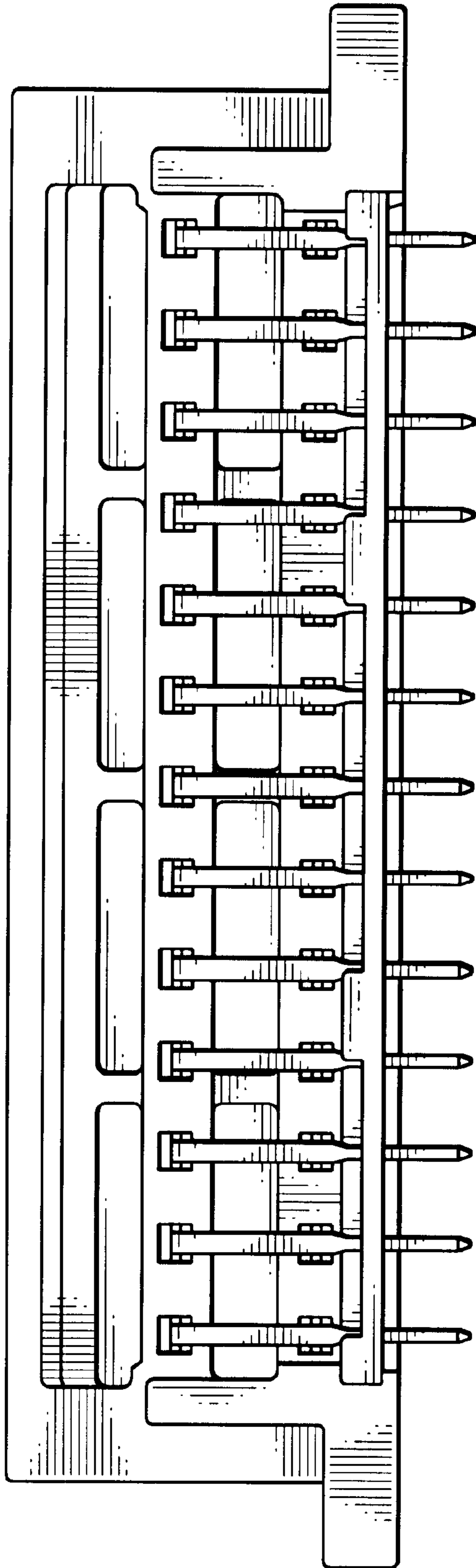


FIG.2

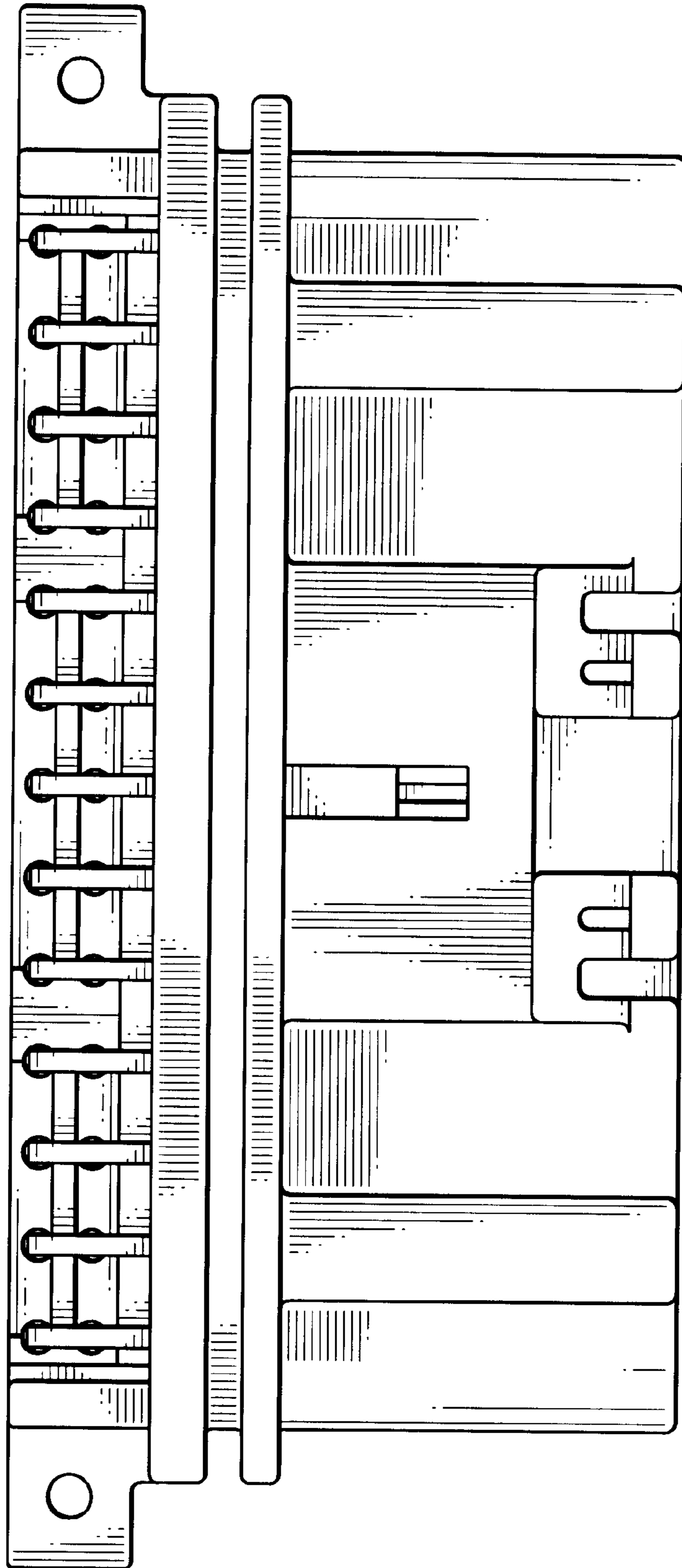


FIG.3

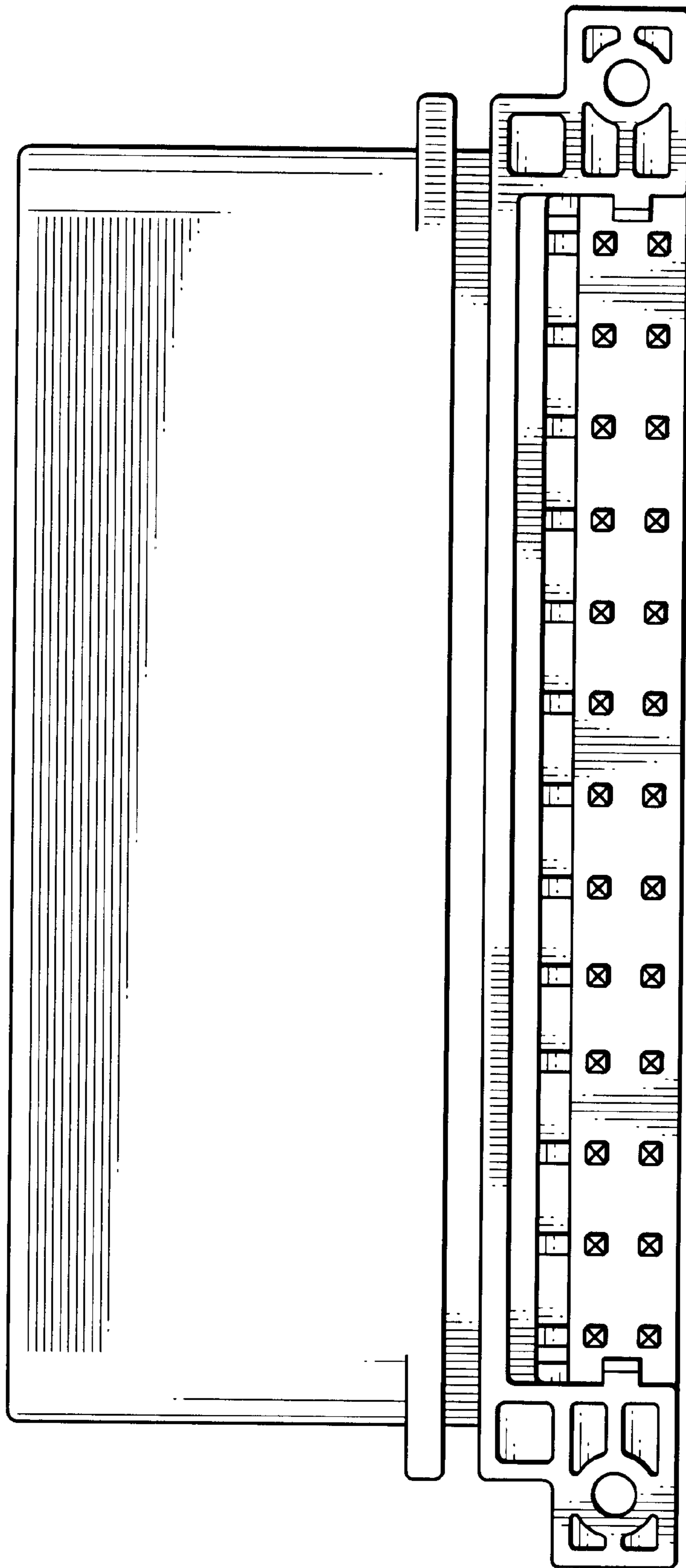


FIG.4

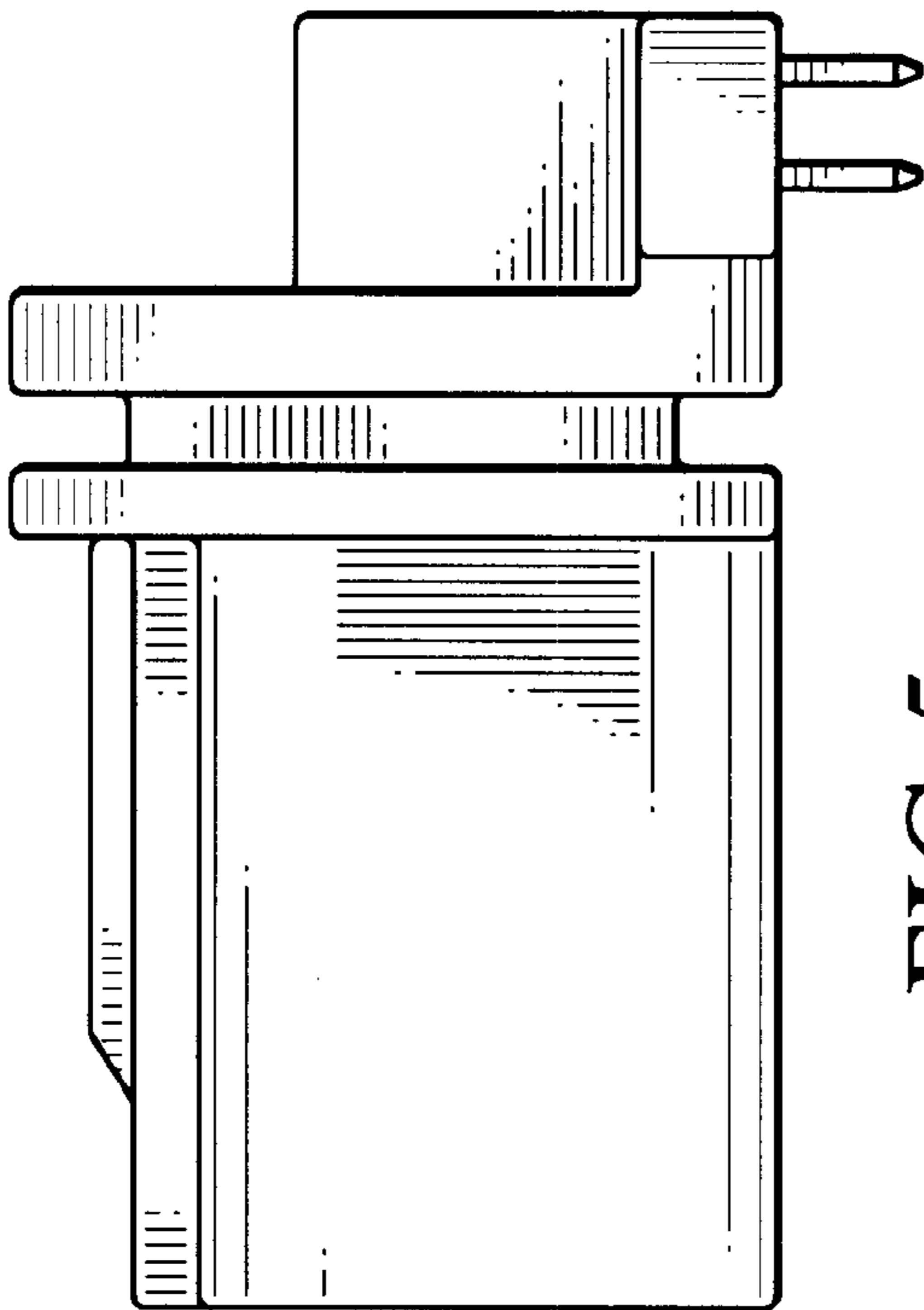


FIG. 5

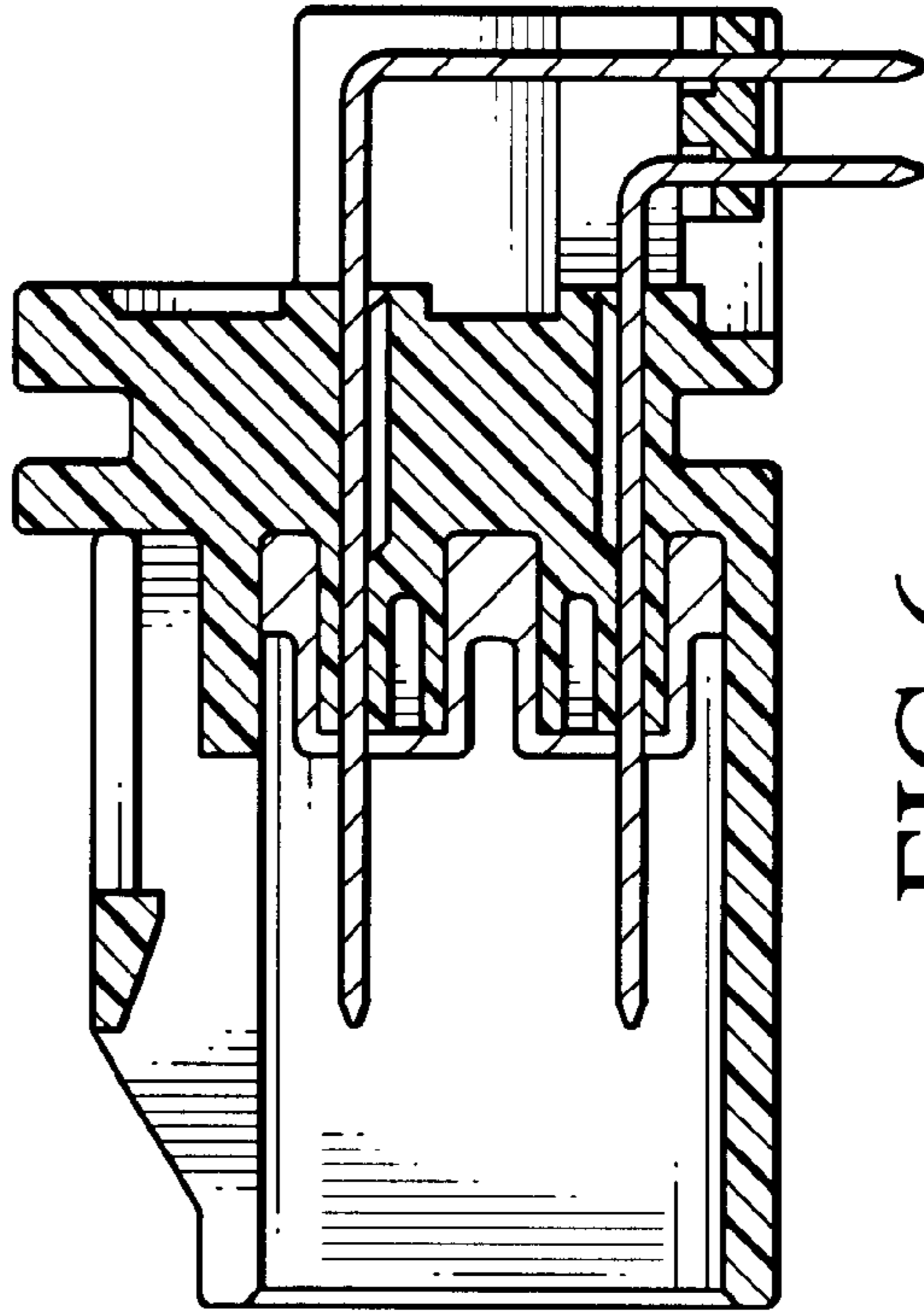


FIG. 6

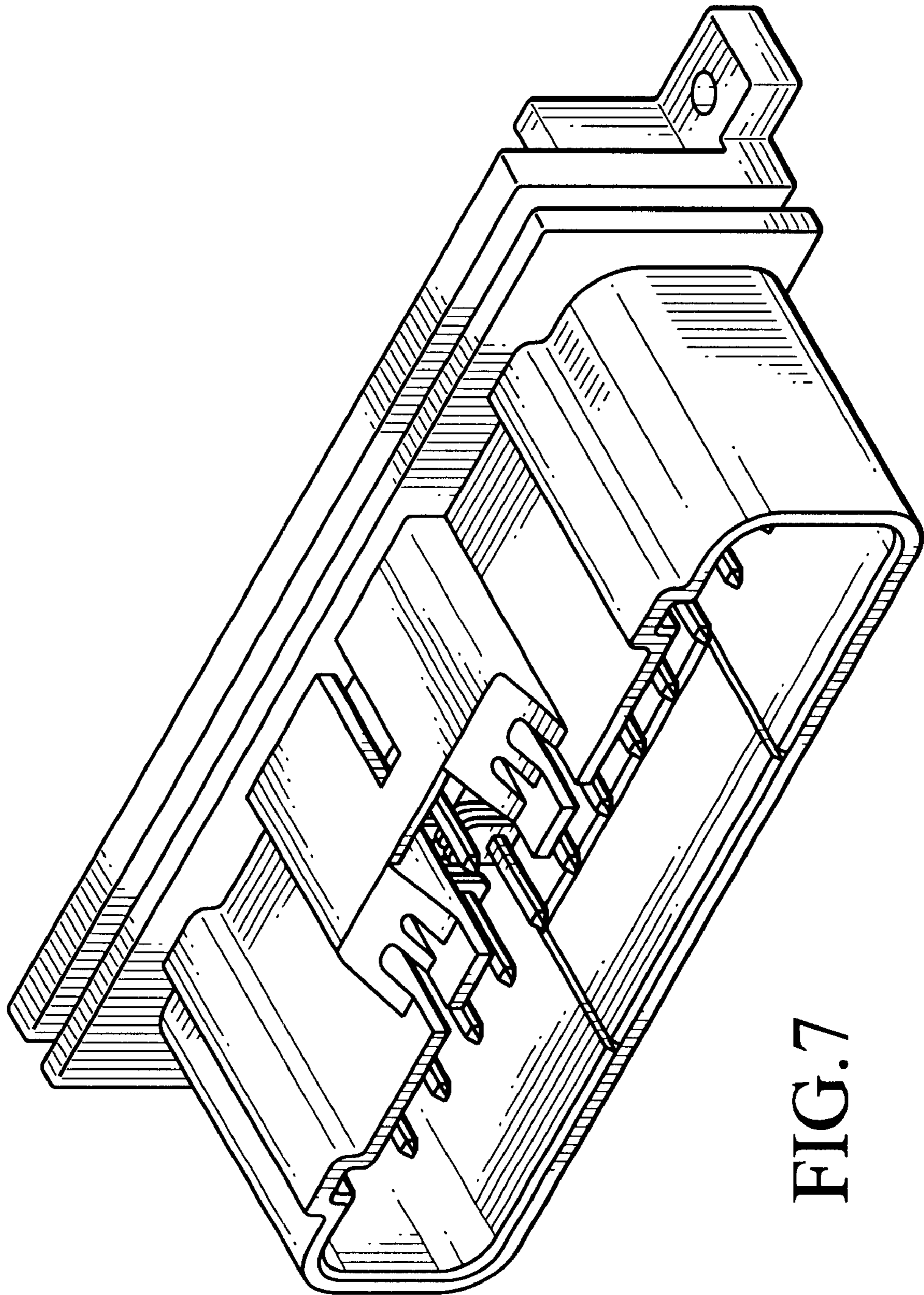


FIG. 7

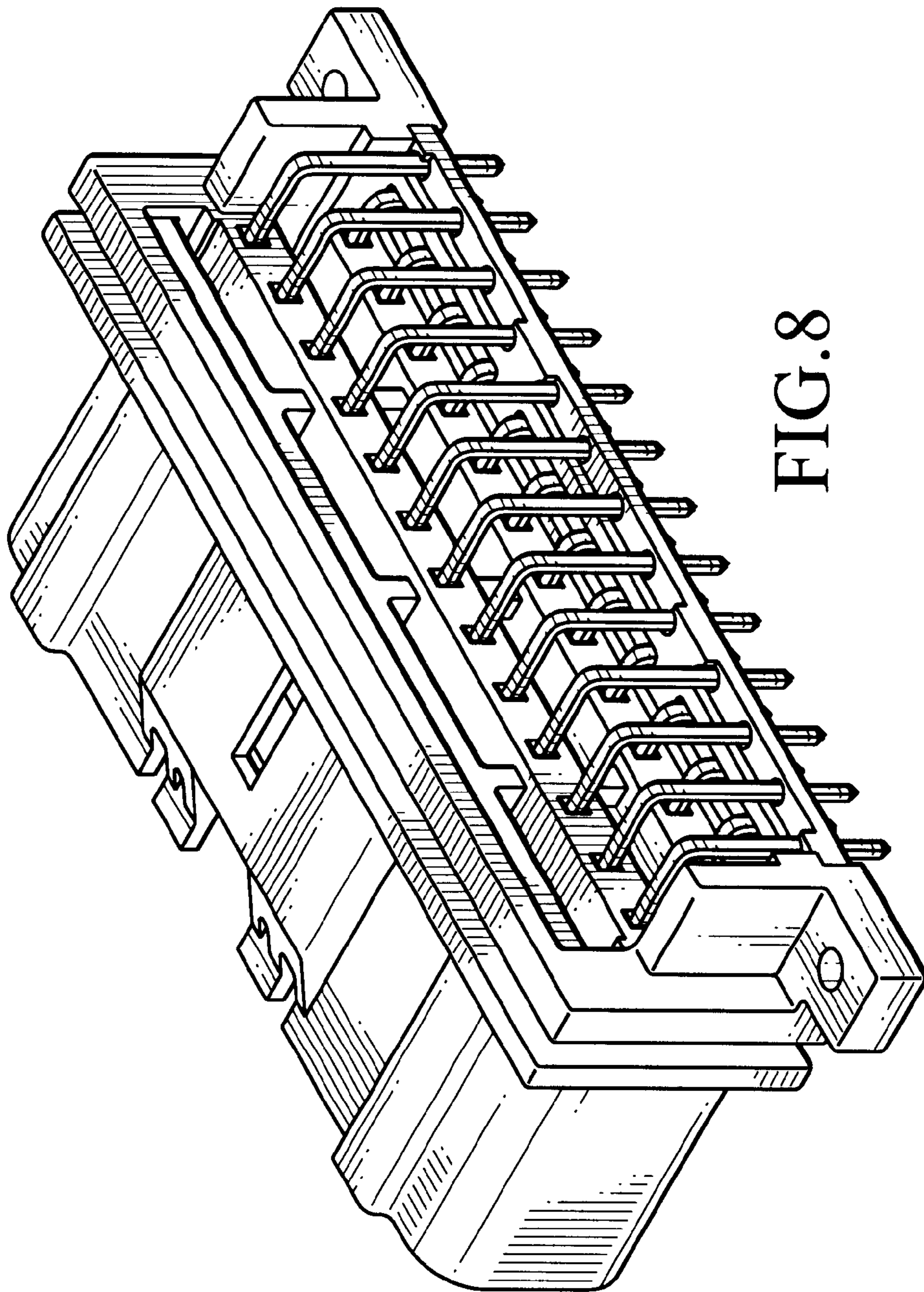


FIG. 8