

## ABSTRACT

### ELECTRICAL CONNECTOR

An electrical connector comprises a first connector part that has a male housing with an engaging portion formed on the outer periphery thereof; a second connector part 2 that has a female housing 3 provided with a portion defining a cavity for receiving the male housing; sensing means 7 that senses the mated state of the first and second parts; and locking means 6 that locks the first and second parts in the mated state at a regular mating position. The locking means 6 is made of a clip member made of a spring wire-like body and has first latch portions 63<sub>A</sub>, 66<sub>A</sub> and a second latch portion 67<sub>A</sub>. The sensing means 7 is made of a sliding sensing member having a sensing arm 73 made of a resilient piece provided with an engaging portion 73a' that latches into the second latch portion 67<sub>A</sub>. The female housing 3 at the outer wall thereof is provided with a portion defining a through-hole that projects the first latch portions 63<sub>A</sub>, 66<sub>A</sub> of the clip member 6 into the cavity. The spring wire-like body of the clip member 6 is mounted onto the surface of this outer wall. The sliding sensing member is fitted also onto the surface of the outer wall slidably in the direction of mating with the male housing, so that with the first and second connector parts mated the first latch portions 63<sub>A</sub>, 66<sub>A</sub> of the clip member 6 engage with the engaging portion of the male housing, and the engaging portion 73a' of the sliding sensing member latches into the second latch portion 67<sub>A</sub> of the clip member 6. Thus an electrical connector can be provided in which the operations of the sensing means and locking means are linked, so that mating and locking of the connector parts are reliable.

Selected Drawing: Fig. 2