

Title (en)

ZERO INSERTION FORCE CONNECTOR FOR MAKING A DISCONNECTIBLE ELECTRICAL CONNEXION

Publication

EP 0014511 B1 19830511 (DE)

Application

EP 80200104 A 19800207

Priority

CH 133279 A 19790212

Abstract (en)

[origin: EP0014511A1] 1. Zero insertion force pluggable connector (11) for establishing a releasable electrical connection between a multiple of electrically mutually insulated first (25, 25') and a corresponding multiple of mutually electrically insulated second (42, 42') connecting elements, with a non-conducting carrier and guide element (12) which carries the multiple of first connecting elements (25, 25') and their connections and into which the second connecting elements (42, 42') together with their carrier (22) can be inserted in an essentially straight line, in such a way that the contact faces of the first connecting elements come to lie against the contact faces of the second connecting elements, and with a pressing arrangement through which the contact faces of the first and of the second connecting elements can be pressed together to form the electrical contact, characterized by the feature that the pressing arrangement consist of at least the following elements, - a force deflector (30, 30') which converts the force applied by the carrier (22) of the second connecting elements (42, 42') in the direction of insertion (B) into a second force which is exerted at right angles (C, C') to the first force and which is applied equally and essentially in a vertical direction to all the first connecting elements (25, 25'), - a holder (28, 28') on the carrier and guide element (12) which carries the force deflector (30, 30') and acts as a resistance face for generated forces, - a force transmitter (18) which transmits to the force deflector (30, 30') the force generated in the direction of insertion (B) when the carrier (22) of the second connecting elements (42, 42') is inserted, - and a locking mechanism (36, 36', 40, 40') which holds the inserted carrier (22) of the second connecting elements (42, 42') in place independently of the forces acting on the force transmitter (18) and the force deflector (30, 30').

IPC 1-7

H01R 13/193; H01R 23/70

IPC 8 full level

H01R 12/85 (2011.01)

CPC (source: EP)

H01R 12/85 (2013.01)

Cited by

EP0378284A1; EP1760837A1; TR24642A; EP0896388A3

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

EP 0014511 A1 19800820; EP 0014511 B1 19830511; DE 3063010 D1 19830616

DOCDB simple family (application)

EP 80200104 A 19800207; DE 3063010 T 19800207