Title (en)

LOW INSERTION FORCE ELECTRICAL CONNECTOR WITH STRESS CONTROLLED CONTACTS

Publication

EP 0158413 B1 19900131 (EN)

Application

EP 85301007 A 19850215

Priority

US 59733384 A 19840406

Abstract (en)

[origin: EP0158413A2] Multiple contact electrical connector with stress controlled connector spring contacts (40) is provided for use in making electrical contact with a plurality of conductive pads (54, 56) formed along an insertable edge (58) of a printed circuit board (12). The contacts (40) are mounted in slots (38) formed along an elongated cavity (14) in a connector housing (13). Each spring contact (40) includes opposed, deflectable contacting portions (50, 52) for engaging the conductive pads (54, 56). Portions (50, 52) are at different elevations to define an opening through which the edge (58) of the printed circuit board may be inserted in the cavity (14) with low or zero insertion force. Subsequently, the printed circuit board is rotated upright into a final contacting position, in which the conductive pads (54, 56) engage and deflect the contacting portions (50, 52) with a relatively high contact force. The connector housing includes first and second integrally formed stop faces (46, 48) respectively associated with each of the opposed contacting portions (50, 52) that control or limit the deflection of the contacting portions and the resultant stress imparted to the spring contacts. Latches (28) hold the printed circuit board (12) in its upright position against further stop faces (60) or posts (20, 22).

IPC 1-7

H01R 13/193; H01R 23/68

IPC 8 full level

H01R 24/00 (2006.01); **H01R 12/83** (2011.01)

CPC (source: EP)

H01R 12/83 (2013.01)

Cited by

DE4110386A1; EP0223386A3; CN102165645A; EP0340730A3; EP0463381A1; EP0397075A3; EP0244192A1; EP0561288A1; EP0197623A3; GB2237151A; EP0433688A1; EP0283119A3; US4715826A; WO8803720A1

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