

Title (en)

Attachment device, assembly of attachment devices and method for mounting attachment devices to a component

Title (de)

Anschlusseinrichtung, Anordnung aus Anschlusseinrichtungen und Verfahren zur Montage von Anschlusseinrichtungen an einem Bauelement

Title (fr)

Dispositif de raccordement, agencement composé de dispositifs de raccordement et procédé de montage de dispositifs de raccordement sur un composant

Publication

EP 2023440 A2 20090211 (DE)

Application

EP 08104389 A 20080612

Priority

DE 102007031194 A 20070704

Abstract (en)

An electrical connector arrangement comprises rectangular hollow connector body formed by stamping and bending from conductive metal sheet including pair of parallel spaced vertical side walls (5a, 5d), horizontal top wall (5b), vertical end wall (5e), horizontal bottom wall (5c) and side walls; U-shaped resilient spring contact mounted in chamber; top wall connected with one of side walls by corner edge portion; and connector body having horizontal bottom connecting surface (10) adapted for connection with electrical component. Electrical connector arrangement comprises rectangular hollow connector body formed by stamping and bending from conductive metal sheet including pair of parallel spaced vertical side walls (5a, 5d), horizontal top wall (5b) orthogonally arranged relative to side walls, respectively, vertical end wall (5e) orthogonally arranged relative to side walls, horizontal bottom wall (5c) cooperating with side and end walls to define chamber, and side walls integral with and bent from parallel opposite edges of given end or top walls, respectively; U-shaped resilient spring contact mounted in chamber and includes horizontal bottom leg connected with bottom wall, top leg adjacent to top wall, and connecting portion connected between bottom and top legs, where top leg is resiliently biased away from bottom leg; top wall connected with one of side walls by corner edge portion containing access opening opposite to spring contact top leg; and connector body having horizontal bottom connecting surface (10) adapted for connection with electrical component. To bias toward top wall a bare conductor is introduced into chamber via an opening contained at one end of connector body. To permit insertion into chamber of the tip of operating tool, top leg is release from engagement with conductor withdrawn from chamber. An independent claim is included for a method of forming electrical connector.

Abstract (de)

Bei einem Verfahren zur Montage von Anschlussvorrichtungen, insbesondere Federklemmen, an einem Bauteil wie einer Leiterplatte, werden nach einem Abwickeln eines Montagebandes (13) mit den Anschlussvorrichtungen (1) von einer Spule (16) Solltrennstellen (14) zwischen einem Montageband und den Anschlussvorrichtungen (1) durchtrennt. Geschaffen wird zudem eine neue Federklemme, die sich für eine automatisierte SMD-Montage eignet.

IPC 8 full level

H01R 4/48 (2006.01); **H01R 43/16** (2006.01)

CPC (source: EP US)

H01R 4/48365 (2023.08 - EP US); **H01R 43/16** (2013.01 - EP US); **H01R 4/02** (2013.01 - EP US); **Y10T 29/49002** (2015.01 - EP US)

Citation (applicant)

- EP 1253670 A2 20021030 - WEIDMUELLER INTERFACE [DE]
- DE 19614977 A1 19961031 - WHITAKER CORP [US]
- US 6796855 B2 20040928 - FRICKE HERBERT [DE], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

US 2008286996 A1 20081120; **US 7507107 B2 20090324**; CN 101340024 A 20090107; CN 101340024 B 20130123; DE 102007031194 A1 20090108; DE 102007031194 B4 20190619; EP 2023440 A2 20090211; EP 2023440 A3 20111228; JP 2009043711 A 20090226; JP 5292582 B2 20130918; TW 200919875 A 20090501; TW I454003 B 20140921

DOCDB simple family (application)

US 21556508 A 20080628; CN 200810135735 A 20080703; DE 102007031194 A 20070704; EP 08104389 A 20080612; JP 2008167522 A 20080626; TW 97122665 A 20080618