

Title (en)

Matable electrical connectors having signal and power capabilities

Title (de)

Elektrische Anschlussblöcke mit Signal- und Leistungseigenschaften

Title (fr)

Accouplement de connecteurs électriques ayant un signal et des capacités de puissance

Publication

**EP 1605550 A1 20051214 (EN)**

Application

**EP 05019128 A 19990415**

Priority

- EP 03028187 A 19990415
- EP 99106269 A 19990415
- US 8209198 P 19980417
- US 16090098 A 19980925

Abstract (en)

The present invention relates to an electrical connector for power applications, the connector comprising: a) an insulative housing (76), b) a plurality of cavities (84, 86, 88) disposed in said insulative housing defined by a series of housing walls, and c) a power contact (10) disposed in each one of said plurality of cavities (84, 86), said power contact (10) comprising a pair of opposed contact walls defined by a first planar panel (28), a second planar panel (30), a medial space between the first planar panel and the second planar panel, a first flexible beam (18) adjoining the first planar panel (30), a second flexible beam (20) adjoining the second planar panel (28), and separated contact terminals (32, 34, 36, 38) that each extend from the first planar panel (28) and the second planar panel (30) in a direction perpendicular to the first flexible beam (18) and the second flexible beam (20). The first and second flexible beams (18, 20) define a heat flow path therebetween, heat dissipation can occur from the heat flow path defined between the first flexible beam (18) and the second flexible beam (20), and at least one of the first planar panel (30) and the second planar panel (28) is spaced from an adjacent housing wall such that heat dissipation can also occur from an exterior contact surface.

IPC 1-7

**H01R 12/16**

IPC 8 full level

**H01R 12/16** (2006.01); **H01R 13/11** (2006.01); **H01R 13/115** (2006.01); **H01R 13/432** (2006.01)

CPC (source: EP)

**H01R 12/7088** (2013.01); **H01R 12/727** (2013.01); **H01R 13/113** (2013.01); **H01R 13/432** (2013.01)

Citation (search report)

- [XA] US 5295843 A 19940322 - DAVIS WAYNE S [US], et al
- [A] US 5549480 A 19960827 - CHENG LEE M [US]
- [A] US 5618187 A 19970408 - GOTO KAZUHIRO [CA]
- [A] US 4820169 A 19890411 - WEBER RONALD M [US], et al
- [A] US 5605476 A 19970225 - MCNAMARA DAVID M [US], et al
- [A] US 5152700 A 19921006 - BOGURSKY ROBERT M [US], et al
- [A] US 5403206 A 19950404 - MCNAMARA DAVID M [US], et al

Cited by

ITMI20090662A1; CN105765797A; US10249974B2

Designated contracting state (EPC)

BE CH DE DK ES FI FR GB IE IT LI NL SE

DOCDB simple family (publication)

**EP 1605550 A1 20051214; EP 1605550 B1 20071017**

DOCDB simple family (application)

**EP 05019128 A 19990415**