

Title (en)

CUTTING CONTACT AND ELECTRICAL CONNECTOR FOR CONTACTING AN INSULATED WIRE THROUGH INSULATION

Title (de)

SCHNEIDKONTAKT UND ELEKTRISCHER VERBINDER ZUR KONTAKTIERUNG EINES ISOLIERTEN DRAHTES DURCH ISOLATION

Title (fr)

CONTACT TRANCHANT ET CONNECTEUR ÉLECTRIQUE POUR CONTACTER UN FIL ISOLÉ PAR ISOLATION

Publication

EP 3570378 A1 20191120 (EN)

Application

EP 19175146 A 20190517

Priority

IT 201800005498 A 20180518

Abstract (en)

Cutting contact (25) for contacting an insulated wire (7) through its insulation (55), the cutting contact (25) comprising a plurality of blades (45) which are arranged beside one another in a lateral direction (43) and which protrude from a base (47) (47) in an extension direction (49), each blade (45) having a slanted surface (71), the slanted surface (71) extending from a free end (73) of the blade (45) towards the base (47) and facing towards a passage (75) for receiving the wire (7), the passage (75) extending between the blades (45) in the lateral direction (43). Solutions of the art may suffer from an insufficient piercing connection stability and insufficient piercing connection reliability. Those are, however, essential for both, power and data transmitting applications. The inventive cutting contact (25) solves those problems by blades (45), which taper asymmetrically towards their respective free ends (73). The inventive electrical connector (1) solves the above problems by comprising an inventive cutting contact (25), wherein at least in an assembled state (115), the passage (75) extends at least partially in a wire receptacle (117) of the electrical connector (1).

IPC 8 full level

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CPC (source: CN EP)

H01R 4/2407 (2017.12 - CN); **H01R 4/2416** (2013.01 - CN); **H01R 4/2433** (2013.01 - EP); **H01R 12/721** (2013.01 - CN EP); **H01R 12/75** (2013.01 - CN EP); **H01R 13/11** (2013.01 - CN)

Citation (search report)

- [XY] US 5800187 A 19980901 - VERMON VIRGINIE [FR], et al
- [Y] US 3816818 A 19740611 - MEIER H
- [Y] EP 0437782 A2 19910724 - GROTE & HARTMANN [DE]
- [A] GB 2026256 A 19800130 - YAMAICHI ELECTRIC MFG

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3570378 A1 20191120; **EP 3570378 B1 20210623**; CN 110504575 A 20191126; IT 201800005498 A1 20191118

DOCDB simple family (application)

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