

Title (en)
ELECTRICAL CONNECTOR WITH ANTI-ARCING FEATURE

Title (de)
ELEKTRISCHER VERBINDER MIT ANTIKRÜMMUNGSFUNKTION

Title (fr)
CONNECTEUR ÉLECTRIQUE AVEC FONCTIONNALITÉ DE SUPPRESSION D'ARC

Publication
EP 2941799 A1 20151111 (EN)

Application
EP 13870163 A 20130104

Priority
US 2013020208 W 20130104

Abstract (en)
[origin: WO2014107156A1] A novel connector pair suppresses arcing during connection and disconnection. In one general aspect of the invention, first and second insulating barriers are configured to extend beyond corresponding first and second contacts, the barriers being arranged to cover a leading end of at least one of the contacts, and to engage with each other when the contacts are separated by a small gap, thereby closing off substantially all through-air arcing paths between them. In another general aspect of the invention, at least one electrical contact in a connector pair is a bimetal contact having a transitional segment made from high resistivity metal. The transitional segment is configured to make first and last contact during the initial phases of mating and un-mating, thereby increasing electrical resistance and significantly lowering the electrical current and the energy available for electrical arcing.

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