

Title (en)

Electric circuit protection device having electrical parts ultrasonically joined using a brazing alloy

Title (de)

Elektrischer Schaltungsschutzeinrichtung mit Ultraschall geschweissten elektrische Teilen unter benützung von einer Hartlötlegierung

Title (fr)

Dispositif de protection de circuits électriques comportant des parties électriques jointes par ultrasons au moyen d'un alliage de brasage

Publication

**EP 1261000 A1 20021127 (EN)**

Application

**EP 02078046 A 19980921**

Priority

- EP 98947169 A 19980921
- US 94133797 A 19970930
- US 94133497 A 19970930

Abstract (en)

An electric conductor assembly comprising: an electrically conductive contact having a i constituent comprising a non-alloying material and further comprising silver; and an electrically conductive contact carrier comprising a predominance by weight of nonferrous material, mechanically joined together at a particular location by the application of ultrasonic energy, brazing material being disposed between the contact and the carrier at the location where they are joined. The brazing material comprises at least two materials, with elemental copper being the largest single constituent of the brazing material, and the contact comprises serrations in the surface joined to the brazing material, said serrations being filled with excess silver from the contact, the brazing material forming a layer overlapping the serrations. <IMAGE>

IPC 1-7

**H01H 11/04**

IPC 8 full level

**H01H 1/023** (2006.01); **H01H 11/04** (2006.01)

CPC (source: EP)

**H01H 1/0231** (2013.01); **H01H 11/042** (2013.01); **H01H 1/5822** (2013.01)

Citation (search report)

- [Y] US 4019876 A 19770426 - STOCKEL DIETER, et al
- [Y] US 2694126 A 19541109 - BINSTOCK MARTIN H
- [A] WO 9311550 A1 19930610 - SIEMENS AG [DE]
- [A] US 4740770 A 19880426 - LAZARETH MICHEL [FR], et al

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

**WO 9917321 A1 19990408**; DE 69814432 D1 20030612; DE 69814432 T2 20040318; DE 69819791 D1 20031218; DE 69819791 T2 20040923; EP 1019930 A1 20000719; EP 1019930 B1 20030507; EP 1261000 A1 20021127; EP 1261000 B1 20031112; ES 2199463 T3 20040216; ES 2211852 T3 20040716

DOCDB simple family (application)

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