

Title (en)

Connection of an electrical aluminium cable with terminal made of copper, copper alloy and/or brass

Title (de)

Verbindung eines elektrischen Aluminiumkabels mit einem aus Kupfer, Kupferlegierung und/oder Messing bestehenden Anschlussstiel

Title (fr)

Connexion d'un câble d'aluminium avec une borne en cuivre, alliage de cuivre et/ou laiton

Publication

EP 1032077 B2 20160330 (DE)

Application

EP 00102020 A 20000202

Priority

DE 19908031 A 19990224

Abstract (en)

[origin: EP1032077A2] The connection (V) uses a friction welding method for connecting the end of an Al cable (1) with individual filament wires (2) to a Cu cable termination (4) enclosing the latter, e.g. a battery terminal clamp (5), with the friction heat between the 2 materials used for melting the latter so that they are welded together. An Independent claim for a cable termination connection method is also included.

IPC 8 full level

H01R 4/62 (2006.01); **H01R 11/28** (2006.01)

CPC (source: EP US)

H01R 4/62 (2013.01 - EP US); **H01R 11/283** (2013.01 - EP US); **H01R 4/625** (2013.01 - EP US)

Citation (opposition)

Opponent :

- DE 954805 C 19561220 - GABRIEL VICTOR ALPHONSE DUCH
- DE 2544927 A1 19770421 - ROESLER KARL HEINZ
- DE 19908031 B4 20090813 - AUTO KABEL MAN GMBH [DE]
- US 6538203 B1 20030325 - NOELLE GUENTHER [DE], et al
- DIN 46 225 "Gestanzte Krallenkabelschuhe"
- DIN 46 228 Teil 1 "Aderendhülsen"
- DIN 46 211 "Gestanzte Kabelschuhe"
- DIN 46 234 "Kabelschuhe"
- H-H BRAESS ET AL.: "Vieweg Handbuch Kraftfahrzeugtechnik", vol. 5, 2007, VIEWEG & SOHN VERLAG, WIESBADEN, pages: 401 - 402
- J. DILLINGER ET AL.: "Fachkunde Metall", vol. 55, 2007, VERLAG EUROPA-LEHRMITTEL, HAAN-GRUITEN, pages: 303
- R. GSCHIEDLE ET AL.: "Fachkunde Kraftfahrzeugtechnik", vol. 28, 2004, VERLAG EUROPA-LEHRMITTEL, HAAN-GRUITEN, pages: 157 - 158

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DE102014216833A1; DE102012024678A1; DE102010053768A1; DE102011011409A1; DE102009033168A1; DE102011017070A1; DE102011018353A1; WO2019007454A1; WO2010060780A1; WO2012139793A1; WO2012143154A1; WO2016030321A1; WO2018108342A1; DE10346160B3; DE102013101876B3; DE102010053768B4; DE10223397A1; DE10223397B4; DE102019104261A1; DE102019104261B4; EP3637553A4; EP2357706A1; DE102011011409B4; DE102011017070A8; CN102986088A; DE102011017070B4; DE102014216832B3; DE102010044241A1; DE102011017071A1; WO2014131402A1; DE102009033168B4; EP3537545A4; WO2012048992A1; WO202061884A1; WO2019101259A1; EP2887459A1; DE102014214068A1; DE102014012489A1; EP2615692B1; DE102014118505A1; US10707591B2; DE102017114994B3; US11158961B2; DE102008059481A1; US8448836B2; US10978815B2; DE102014112701A1; WO2016034166A2; US8840437B2; EP3435483A1; EP3537545B1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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