

Title (en)
Copper plated aluminum stranded cable and its fabrication method

Title (de)
Verkupfertes Aluminium Strangkabel und sein Herstellungsverfahren

Title (fr)
Cable toronne en aluminium cuivre, et procede pour sa fabrication

Publication
EP 1647996 A1 20060419 (FR)

Application
EP 05356180 A 20051005

Priority
FR 0411024 A 20041012

Abstract (en)
An aluminium cable electric conductor, incorporating at least one strand with a base of conducting wires (1) with a core (2) of aluminium coated with an intermediate layer (3) of copper which is coated with a superficial layer (4) of nickel, has the following characteristics : (A) the superficial layer of nickel has a thickness (E) of between 1.3 μm and 3 μm ; (B) the superficial layer of nickel has sufficient continuity to resist a continuity test in a bath of polysulphur for at least 30 seconds without the appearance of zones of attack of the copper, visible at an enlargement of times ten. An independent claim is also included for the production of this conductor.

IPC 8 full level
H01B 1/02 (2006.01); **H01B 9/02** (2006.01); **H01B 13/00** (2006.01)

CPC (source: EP US)
H01B 1/023 (2013.01 - EP US); **H01B 1/026** (2013.01 - EP US); **H01B 13/0006** (2013.01 - EP US); **H01B 13/02** (2013.01 - EP US);
H01B 9/008 (2013.01 - EP US)

Citation (applicant)

- DE 2052462 B2 19800911
- DE 2153316 A1 19730503 - KABEL METALLWERKE GHH
- DE 2306602 C2 19830511
- EP 0477029 B1 19950104 - TOTOKU ELECTRIC [JP]
- DE 2153316 A1 19730503 - KABEL METALLWERKE GHH

Citation (search report)

- [X] FR 2083323 A1 19711217 - BRITISH INSULATED CALLENDERS
- [X] DE 19633615 A1 19980226 - EDELHOFF ADOLF FEINDRAHTWERK [DE]
- [X] US 3915667 A 19751028 - RICKS HERBERT E

Cited by
CN104064256A; WO2008025547A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1647996 A1 20060419; **EP 1647996 A9 20060705**; **EP 1647996 B1 20080326**; **EP 1647996 B2 20161116**; **EP 1647996 B9 20080813**;
AT E390694 T1 20080415; CN 1760993 A 20060419; CN 1760993 B 20110511; DE 05356180 T1 20061012; DE 602005005598 D1 20080508;
DE 602005005598 T2 20090430; DE 602005005598 T3 20170406; ES 2259944 T1 20061101; FR 2876493 A1 20060414;
FR 2876493 B1 20070112; PL 1647996 T3 20080930; TW 200626746 A 20060801; TW I391525 B 20130401; US 2006102368 A1 20060518;
US 7105740 B2 20060912

DOCDB simple family (application)
EP 05356180 A 20051005; AT 05356180 T 20051005; CN 200510112745 A 20051012; DE 05356180 T 20051005;
DE 602005005598 T 20051005; ES 05356180 T 20051005; FR 0411024 A 20041012; PL 05356180 T 20051005; TW 94135308 A 20051011;
US 24783405 A 20051011