

Title (en)
METHOD FOR CONTINUOUSLY PRODUCING AN ELECTRICAL CONDUCTOR MADE OF COPPER-PLATED AND TIN-PLATED ALUMINIUM, AND CONDUCTOR SO PRODUCED.

Title (de)
VERFAHREN ZUR KONTINUIERLICHEN HERSTELLUNG EINES ELEKTRISCHEN LEITERS AUS VERKUPFERTEN UND VERZINNTEN ALUMINIUM UND AUF DIESE WEISE HERGESTELLTER LEITER.

Title (fr)
PROCEDE DE FABRICATION EN CONTINU D'UN CONDUCTEUR ELECTRIQUE EN ALUMINIUM CUIVRE ET ETAME, ET CONDUCTEUR AINSI OBTENU.

Publication
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Application
EP 94900865 A 19931122

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Abstract (en)
[origin: US5665219A] PCT No. PCT/FR93/01148 Sec. 371 Date Jun. 1, 1995 Sec. 102(e) Date Jun. 1, 1995 PCT Filed Nov. 22, 1993 PCT Pub. No. WO94/13866 PCT Pub. Date Jun. 23, 1994 Process for continuous manufacture of an electrical conductor consisting of an at least partially aluminium-based central core coated by continuous electrodeposition with at least one metal layer, including pretreatment of the surface of the core, characterized in that the following are subsequently performed successively on the core, a) an electrochemical deposition of copper in an aqueous bath maintained at a temperature of between 20 DEG C. and 60 DEG C., containing KCN, CuCN, K₂CO₃ and KNaC₄H₄O₆ with a current intensity of between 1 and 10 A/dm²; b) rinsing at ambient temperature; c) an electrochemical deposition of tin in an aqueous bath maintained at a temperature of between 20 DEG C. and 60 DEG C., containing essentially tin dissolved in methanesulphonic acid and, optionally, additives, with a current intensity of between 1 and 100 A/dm²; d) rinsing with water at 60 DEG C.

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IPC 8 full level
C25D 3/30 (2006.01); **C25D 3/40** (2006.01); **C25D 5/10** (2006.01); **C25D 5/44** (2006.01); **H01B 13/00** (2006.01)

CPC (source: EP US)
C25D 5/10 (2013.01 - EP US); **C25D 5/44** (2013.01 - EP US)

Citation (examination)
• METAL FINISHING vol. 65, no. 2 , Février 1967 pages 58 - 61 H. SHAPIRO 'electroplating aluminium . a controllable process' v
• ELECTROPLATING AND METAL FINISHING vol. 21, no. 3 , Mars 1969 pages 75 - 80 D.
• HORNER 'citric, tartaric and gluconic acids in metal finishing' v
• METAL FINISHING vol. 88, no. 1 , Janvier 1990 pages 17 - 21 C. ROSENSTEIN 'methane sulfonic acid as an electrolyte for tin, lead and tin-lead plating for electronics' v

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