

Title (en)
INSULATED ELECTRICAL CONDUCTOR

Title (de)
ISOLIERTER ELEKTRISCHER LEITER

Title (fr)
CONDUCTEUR ÉLECTRIQUE ISOLÉ

Publication
EP 3441986 B1 20210929 (DE)

Application
EP 18191902 A 20170320

Priority
• EP 16163536 A 20160401
• EP 17711216 A 20170320
• EP 2017056489 W 20170320

Abstract (en)
[origin: CA3019024A1] An insulated electric conductor and the method for producing it are described, the electric conductor having improved adhesion between conductor and insulating coating, wherein the insulating coating includes either at least one insulating layer made of thermoplastic material, or a plastic-containing intermediate layer, the electric conductor obtained by a method in which the electric conductor is placed under a protective gas atmosphere and is bombarded with ions of the protective gas in a gas plasma in order to remove an oxide layer formed on a surface of the electric conductor and/or to increase the surface energy of the electric conductor, and subsequently either the at least one insulating layer or, in the case that the coating comprises the plastic-containing intermediate layer, at least the plastic-containing intermediate layer is applied directly to the surface of the electric conductor (1) under a protective gas atmosphere.

IPC 8 full level
H01B 13/00 (2006.01); **H01B 3/30** (2006.01); **H01B 3/42** (2006.01); **H01B 7/02** (2006.01); **H01B 13/14** (2006.01)

CPC (source: CN EP KR US)
H01B 3/301 (2013.01 - EP KR US); **H01B 3/305** (2013.01 - KR); **H01B 3/307** (2013.01 - EP KR US); **H01B 3/427** (2013.01 - EP KR US); **H01B 7/02** (2013.01 - CN); **H01B 7/0208** (2013.01 - KR); **H01B 7/0216** (2013.01 - US); **H01B 7/0225** (2013.01 - CN); **H01B 7/0275** (2013.01 - KR US); **H01B 7/0291** (2013.01 - CN KR); **H01B 13/003** (2013.01 - CN EP KR US); **H01B 13/06** (2013.01 - CN KR); **H01B 13/14** (2013.01 - CN); **H01B 13/141** (2013.01 - CN EP KR US); **H01B 13/145** (2013.01 - EP KR US); **H01B 3/305** (2013.01 - EP US); **H01B 3/306** (2013.01 - EP US); **H01B 3/441** (2013.01 - EP US)

Citation (examination)
• WO 2016039350 A1 20160317 - FURUKAWA ELECTRIC CO LTD [JP], et al
• JP 2003031061 A 20030131 - MITSUBISHI CABLE IND LTD

Cited by
WO2021041200A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3226258 A1 20171004; **EP 3226258 B1 20181024**; BR 112018069576 A2 20190122; BR 122020003443 B1 20230411; CA 3019024 A1 20171005; CA 3019024 C 20220531; CN 109074918 A 20181221; CN 114520071 A 20220520; EP 3394861 A1 20181031; EP 3394861 B1 20190501; EP 3441986 A1 20190213; EP 3441986 B1 20210929; EP 3441986 B8 20211103; ES 2704893 T3 20190320; ES 2737298 T3 20200113; ES 2903093 T3 20220331; HU E056737 T2 20220328; JP 2019519062 A 20190704; JP 2021122007 A 20210826; JP 6877773 B2 20210526; JP 7055496 B2 20220418; KR 102455180 B1 20221014; KR 102587257 B1 20231010; KR 20180128920 A 20181204; KR 20220137813 A 20221012; MA 44174 A 20181031; MA 44633 A 20190213; MD 3441986 T2 20220531; MX 2018011979 A 20190115; MY 188833 A 20220107; PL 3226258 T3 20190430; PL 3394861 T3 20191031; PL 3441986 T3 20220307; PT 3226258 T 20190109; PT 3394861 T 20190708; PT 3441986 T 20211202; RS 58038 B1 20190228; RS 58877 B1 20190830; RS 62697 B1 20220131; TR 201910192 T4 20190821; US 2019131037 A1 20190502; US 2023040706 A1 20230209; WO 2017167595 A1 20171005

DOCDB simple family (application)
EP 16163536 A 20160401; BR 112018069576 A 20170320; BR 122020003443 A 20170320; CA 3019024 A 20170320; CN 201780026649 A 20170320; CN 202210097365 A 20170320; EP 17711216 A 20170320; EP 18191902 A 20170320; EP 2017056489 W 20170320; ES 16163536 T 20160401; ES 17711216 T 20170320; ES 18191902 T 20170320; HU E18191902 A 20170320; JP 2018551942 A 20170320; JP 2021040199 A 20210312; KR 20187028338 A 20170320; KR 20227034350 A 20170320; MA 44174 A 20170320; MA 44633 A 20170320; MD E20190207 T 20170320; MX 2018011979 A 20170320; MY PI2018703545 A 20170320; PL 16163536 T 20160401; PL 17711216 T 20170320; PL 18191902 T 20170320; PT 16163536 T 20160401; PT 17711216 T 20170320; PT 18191902 T 20170320; RS P20181483 A 20160401; RS P20190780 A 20170320; RS P20211525 A 20170320; TR 201910192 T 20170320; US 201716089270 A 20170320; US 202217932974 A 20220916