

Title (en)

METHOD OF COATING A SQUARE WIRE AND AN INSULATED WIRE OF A SQUARE WIRE

Title (de)

VERFAHREN ZUR BESCHICHTUNG EINES QUADRATISCHEN DRAHTS UND ISOLIERTER DRAHT EINES QUADRATISCHEN DRAHTS

Title (fr)

PROCEDE POUR APPLIQUER UN REVETEMENT SUR UN FIL CARRE ET FIL ISOLE PRODUIT A PARTIR D'UN FIL CARRE

Publication

EP 1623438 A1 20060208 (EN)

Application

EP 04732482 A 20040512

Priority

- JP 2004006687 W 20040512
- JP 2003133692 A 20030512
- JP 2003133693 A 20030512

Abstract (en)

[origin: WO2004100184A1] It is an object of the present invention to provide a method of coating a square wire capable of providing an insulated wire of a square wire that has a high dielectric breakdown voltage. A method of coating a square wire comprising a step of carrying out cationic electrodeposition on a square wire to form an insulating film thereon, by using a cationic electrocoating that stored in an electrocoating bath, wherein the shifting speed of the square wire in the electrocoating bath is set in a range from 1 to 80 m/min; the shortest distance from a liquid-contact portion of the square wire onto the cationic electrocoating to an electrode is set longer than 1/2 of the total shift distance of the square wire from the liquid-contact portion of the square wire to a liquid-separation portion in the electrocoating bath, the cationic electrocoating contains a resin composition of which a hydratable functional group is reduced directly by electrons and passivated, resulting in deposition of a film, and the cationic electrocoating contains crosslinked resin particles.

IPC 1-7

H01B 13/16; C25D 13/06; C25D 13/16; C09D 5/44; C09D 133/00; C09D 163/00; C09D 201/02

IPC 8 full level

C09D 5/44 (2006.01); C09D 163/04 (2006.01); C25D 13/16 (2006.01); H01B 3/44 (2006.01); H01B 13/06 (2006.01); H01B 13/16 (2006.01)

CPC (source: EP US)

C09D 5/4411 (2013.01 - EP US); C09D 5/4442 (2013.01 - EP US); C09D 5/4492 (2013.01 - EP US); C09D 163/04 (2013.01 - EP US); C25D 13/16 (2013.01 - EP US); H01B 3/447 (2013.01 - EP US); H01B 13/065 (2013.01 - EP US); H01B 13/16 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004100184 A1 20041118; EP 1623438 A1 20060208; EP 1623438 A4 20080709; JP 2006526259 A 20061116; JP 4757189 B2 20110824; US 2006219569 A1 20061005

DOCDB simple family (application)

JP 2004006687 W 20040512; EP 04732482 A 20040512; JP 2006507731 A 20040512; US 55037605 A 20050920