

Title (en)
SURFACE PRETREATMENT FLUID FOR THE METAL TO BE COATED BY CATIONIC ELECTRODEPOSITION

Title (de)
OBERFLÄCHENVORBEHANDLUNGSFLUID FÜR DAS DURCH KATIONISCHE ELEKTROTAUHLACKIERUNG ZU BESCHICHTENDE METALL

Title (fr)
FLUIDE DE PRÉTRAITEMENT DE SURFACE POUR UN MÉTAL DEVANT ÊTRE REVÊTU PAR ÉLECTRODÉPOSITION CATIONIQUE

Publication
EP 2112251 A4 20100428 (EN)

Application
EP 07850971 A 20071220

Priority

- JP 2007074536 W 20071220
- JP 2006343621 A 20061220
- JP 2007119665 A 20070427
- JP 2007303746 A 20071122

Abstract (en)
[origin: US2008230394A1] A surface treatment with a zirconium ion that enables sufficient throwing power, and superior anti-corrosion properties to be exhibited when thus surface treated metal base material is subjected to cation electrodeposition coating is provided. A metal surface treatment liquid for cation electrodeposition coating includes zirconium ions and tin ions, and has a pH of 1.5 to 6.5, in which: the concentration of zirconium ions is in the range of 10 to 10,000 ppm; and the content of the tin ions to the zirconium ions is 0.005 to 1 on a mass basis. Furthermore, a polyamine compound, copper ions, fluorine ions, and a chelate compound may also be included.

IPC 8 full level
C23C 22/06 (2006.01); **C23C 22/34** (2006.01); **C23C 28/00** (2006.01); **C25D 13/20** (2006.01)

CPC (source: EP US)
C23C 22/34 (2013.01 - EP US); **C25D 3/56** (2013.01 - EP US); **C25D 3/60** (2013.01 - EP US); **C25D 13/20** (2013.01 - EP US); **C23C 2222/20** (2013.01 - EP US); **C25D 13/04** (2013.01 - EP US)

Citation (search report)

- [XP] WO 2007100065 A1 20070907 - NIPPON PAINT CO LTD [JP], et al & EP 1997936 A1 20081203 - CHEMETALL GMBH [DE]
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EP2980272A4; US9382635B2

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 MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2008230394 A1 20080925; AU 2007335382 A1 20080626; AU 2007335382 B2 20120119; BR PI0721139 A2 20140401; BR PI0721139 B1 20180619; CA 2672854 A1 20080626; CA 2672854 C 20160712; EP 2112251 A1 20091028; EP 2112251 A4 20100428; EP 2112251 B1 20160420; ES 2581988 T3 20160908; JP 2008291345 A 20081204; JP 4276689 B2 20090610; MX 2009006618 A 20090813; PL 2112251 T3 20161031; WO 2008075738 A1 20080626

DOCDB simple family (application)
US 7742908 A 20080319; AU 2007335382 A 20071220; BR PI0721139 A 20071220; CA 2672854 A 20071220; EP 07850971 A 20071220; ES 07850971 T 20071220; JP 2007074536 W 20071220; JP 2007303746 A 20071122; MX 2009006618 A 20071220; PL 07850971 T 20071220