

Title (en)

METAL PRETREATMENT COMPOSITION CONTAINING ZIRCONIUM, COPPER, AND METAL CHELATING AGENTS AND RELATED COATINGS ON METAL SUBSTRATES

Title (de)

METALLVORBEARBEITUNGSZUSAMMENSETZUNG MIT ZIRKONIUM, KUPFER UND METALLCHELIERUNGSMITTELN SOWIE BESCHICHTUNGEN DARAUS AUF METALLSUBSTRATEN

Title (fr)

COMPOSITION DE PRÉTRAITEMENT MÉTALLIQUE CONTENANT DU ZIRCONIUM, DU CUIVRE ET DES AGENTS DE CHÉLATION MÉTALLIQUES ET REVÊTEMENTS CORRESPONDANTS APPLIQUÉS SUR DES SUBSTRATS MÉTALLIQUES

Publication

EP 2649219 A4 20171206 (EN)

Application

EP 11847810 A 20111207

Priority

- US 42050910 P 20101207
- US 2011063789 W 20111207

Abstract (en)

[origin: WO2012078788A2] Disclosed is a zirconium-based metal pretreatment coating composition that includes a metal chelator that chelates copper in the metal pretreatment coating composition and thereby improves adhesion of paints to a metal substrate coated with the pretreatment coating composition. The pretreatment coating composition has a longer pot life than one without the metal chelator and therefore can accommodate a wide latitude of application times. The chelating agent is present in a sufficient amount to ensure that in the deposited pretreatment coating on the metal substrate the average total atomic % of copper to atomic % of zirconium is equal to or less than 1.1. The pretreatment coating composition is useful for treating a variety of metal substrates.

IPC 8 full level

C23C 22/78 (2006.01); **C23C 22/06** (2006.01); **C23C 22/73** (2006.01); **C23C 22/80** (2006.01)

CPC (source: EP)

C23C 22/34 (2013.01); **C23C 22/73** (2013.01); **C23C 22/78** (2013.01)

Citation (search report)

See references of WO 2012078788A2

Cited by

EP4112773A1; WO2023275270A3

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)

WO 2012078788 A2 20120614; **WO 2012078788 A3 20120927**; BR 112013016613 A2 20171010; BR 112013016613 B1 20210427; CA 2819524 A1 20120614; CN 103249867 A 20130814; CN 103249867 B 20160420; EP 2649219 A2 20131016; EP 2649219 A4 20171206; EP 2649219 B1 20210414; ES 2872342 T3 20211102; JP 2014504333 A 20140220; KR 20130126658 A 20131120; MX 2013006286 A 20130715

DOCDB simple family (application)

US 2011063789 W 20111207; BR 112013016613 A 20111207; CA 2819524 A 20111207; CN 201180058954 A 20111207; EP 11847810 A 20111207; ES 11847810 T 20111207; JP 2013543321 A 20111207; KR 20137017605 A 20111207; MX 2013006286 A 20111207