

Title (en)

Method for zinc-phosphating metal surface to be treated by the cationic electrodeposition coating.

Title (de)

Verfahren zur Zinkphosphatierung von Metalloberflächen durch kationische Elektroplattierung.

Title (fr)

Procédé de zinc-phosphatation d'une surface métallique par traitement de revêtement par électro-déposition cationique.

Publication

EP 0564287 A2 19931006 (EN)

Application

EP 93302582 A 19930401

Priority

JP 8250992 A 19920403

Abstract (en)

By using a zinc-phosphating solution, which does not contain a nickel ion, but contains 0.1 to 4 g/l of a cobalt ion, 0.1 to 3 g/l of a manganese ion, a phosphating accelerator, 200 to 500 mg/l of a simple fluoride compound in terms of HF concentration and a complex fluoride compound in a mole ratio of 0.01 to 0.5 relative to the simple fluoride compound, a zinc phosphate coating film suitable for cationic electrodeposition coating and superior in coating film adhesiveness and corrosion resistance, especially in warm brine resistance and scab resistance, is formed on the metal surface simultaneously having an iron-based, a zinc-based and an aluminum-based surface by using an identical solution.

IPC 1-7

C23C 22/36

IPC 8 full level

C23C 22/18 (2006.01); **C23C 22/36** (2006.01); **C25D 13/20** (2006.01)

CPC (source: EP)

C23C 22/188 (2013.01); **C23C 22/36** (2013.01); **C23C 22/364** (2013.01); **C23C 22/368** (2013.01)

Cited by

US2013327435A1; CN103334099A; GB2275780A; US5456810A; GB2275780B; WO2021185449A1; EP0786540A1; US10081878B2; US11518960B2; WO9902759A1; WO02070782A3; WO9914397A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0564287 A2 19931006; EP 0564287 A3 19940323; JP H05287549 A 19931102

DOCDB simple family (application)

EP 93302582 A 19930401; JP 8250992 A 19920403