

Title (en)

Chloride based aqueous electrodeposition bath for the preparation of a coating based on zinc or a zinc alloy

Title (de)

Wassriges Elektroplattierungsbad auf der Basis von Chloride zur Herstellung einer Beschichtung auf der Basis von Zink oder einer Zinklegierung

Title (fr)

Bain aqueux d'électrodeposition à base de chlorures pour la préparation d'un revêtement à base de zinc ou d'alliage de zinc

Publication

EP 0887440 B1 20040128 (FR)

Application

EP 98401533 A 19980623

Priority

FR 9707985 A 19970626

Abstract (en)

[origin: EP0887440A1] Aqueous chloride based bath for preparation of coating based on zinc or one of its alloys in which pH > 4; concentration of zinc ions > 1mol.l⁻¹. The solution does not contain compounds with free electron pair such as those in group comprising sodium thiosulphate, nicotinic acid, (thio)urea, nicotinamide, and thioglycolic acid. The bath does contain, in solution, at least one polyethylene - glycol polymer with general formula R1-O-CH2-CH2-O)n-R2 in which n ≤ 13; R1, R2 = H and polymer has molecular mass < 500gmol.⁻¹, or R1, R2 = groups substituted at end of chain such as m-Calkyl, alkene, alkyne. m is sufficiently small to allow solution of polymer in bath; or ether, ester, carboxylic acid salt, sulphonyl, sulphonic acid salt, ketone, amine or nitrile. The polymer is adapted for incorporating into coating > 0.1% organic compound. Also claimed is the method for depositing the coating and the steel sheet which has been coated.

IPC 1-7

C25D 3/22; **C25D 3/56**

IPC 8 full level

C25D 3/22 (2006.01); **C25D 3/56** (2006.01)

CPC (source: EP US)

C25D 3/22 (2013.01 - EP US); **C25D 3/565** (2013.01 - EP US)

Citation (examination)

EP 0472204 A2 19920226 - KOBE STEEL LTD [JP]

Cited by

EP3581684A1; RU2749321C1; WO2019238454A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)

EP 0887440 A1 19981230; **EP 0887440 B1 20040128**; AT E258611 T1 20040215; CA 2242019 A1 19981226; DE 69821288 D1 20040311; DE 69821288 T2 20041125; ES 2213883 T3 20040901; FR 2765247 A1 19981231; FR 2765247 B1 19990730; US 6153079 A 20001128

DOCDB simple family (application)

EP 98401533 A 19980623; AT 98401533 T 19980623; CA 2242019 A 19980625; DE 69821288 T 19980623; ES 98401533 T 19980623; FR 9707985 A 19970626; US 10520398 A 19980626