

Title (en)

TREATMENT SOLUTION CONTAINING CHROMIUM(III) FOR A METHOD FOR PRODUCING AN ANTI-CORROSION COATING LAYER, CONCENTRATE OF SUCH A TREATMENT SOLUTION, AND METHOD FOR PRODUCING AN ANTI-CORROSION COATING LAYER

Title (de)

CHROM (LLL)-ENTHALTENDEN BEHANDLUNGSLÖSUNG FÜR EIN VERFAHREN ZUM ERZEUGEN EINER KORROSIONSSCHÜTZENDEN ÜBERZUGSSCHICHT, KONZENTRAT EINER SOLCHEN BEHANDLUNGSLÖSUNG UND VERFAHREN ZUM ERZEUGEN EINER KORROSIONSSCHÜTZENDEN ÜBERZUGSSCHICHT

Title (fr)

SOLUTION DE TRAITEMENT CONTENANT DU CHROME (III) POUR UN PROCÉDÉ DE PRODUCTION D'UNE COUCHE DE REVÊTEMENT DE PROTECTION ANTICORROSION, CONCENTRÉ D'UNE TELLE SOLUTION DE TRAITEMENT ET PROCÉDÉ DE PRODUCTION D'UNE COUCHE DE REVÊTEMENT DE PROTECTION ANTICORROSION

Publication

EP 3044348 A1 20160720 (DE)

Application

EP 14771781 A 20140915

Priority

- DE 102013015113 A 20130913
- EP 2014002486 W 20140915

Abstract (en)

[origin: WO2015036124A1] The invention relates to a treatment solution for a method for producing an anti-corrosion coating layer on a metal surface, wherein the surface to be treated is brought in contact with a treatment solution, which contains a chromium(III) ion source, a phosphate source, a zinc ion source, and a citrate source, wherein the amount-of-substance ratio of chromium(III) ions to zinc ions is 1 to at least 1.65 and the amount-of-substance ratio of chromium(III) ions to citrate is 1 to at least 1.4 and the treatment solution is substantially free of polymers that can be obtained by reacting one or more alkoxysilanes of the formula: $R_4-xSi(OR_1)_x$, wherein the groups R are the same or different from each other and each represent a substituted or unsubstituted hydrocarbon group having 1 to 22 hydrocarbon atoms, x is equal to 1, 2, or 3, and R1 stands for a substituted or unsubstituted hydrocarbon group having 1 to 8 hydrocarbon atoms, and one or more alkoxides of the formula: $Me(OR_2)_n$, wherein Me stands for Ti, Zr, Hf, Al, Si and n stands for the oxidation number of Me and R2 represents a substituted or unsubstituted hydrocarbon group having 1 to 8 hydrocarbon atoms.

IPC 8 full level

C23C 22/83 (2006.01); **C23C 22/17** (2006.01); **C23C 22/53** (2006.01)

CPC (source: EP)

C23C 22/17 (2013.01); **C23C 22/83** (2013.01); **C23C 2222/10** (2013.01)

Citation (search report)

See references of WO 2015036124A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 202013010956 U1 20141217; CY 1124966 T1 20230105; DE 102013015113 A1 20150319; DK 3044348 T3 20220207; EP 3044348 A1 20160720; EP 3044348 B1 20211208; ES 2905136 T3 20220407; HR P20220130 T1 20220415; HU E058902 T2 20220928; PT 3044348 T 20220203; WO 2015036124 A1 20150319

DOCDB simple family (application)

DE 202013010956 U 20130913; CY 221100067 T 20220127; DE 102013015113 A 20130913; DK 14771781 T 20140915; EP 14771781 A 20140915; EP 2014002486 W 20140915; ES 14771781 T 20140915; HR P20220130 T 20140915; HU E14771781 A 20140915; PT 14771781 T 20140915