

Title (en)

Process for applying phosphate coatings on metal surfaces.

Title (de)

Verfahren zum Aufbringen von Phosphatüberzügen auf Metalloberflächen.

Title (fr)

Procédé pour appliquer des couches de phosphates sur des surfaces métalliques.

Publication

EP 0454211 B1 19940622 (DE)

Application

EP 91200844 A 19910411

Priority

DE 4012795 A 19900421

Abstract (en)

[origin: CA2040859A1] The activating agent which is based on titanium(IV) phosphate and intended for use in the activation of metal surfaces before a zinc phosphating treatment contains one or more copper compounds and has a Ti:Cu weight ratio of 1:100 to 60:1 and optionally contains in addition at least one of the components consisting of condensed phosphate, silicate, complexing agent, water-soluble organic polymer, thickening agent, and surfactant. It is used to prepare aqueous activating baths for activating iron, steel, galvanized steel, zinc, alloy-plated steel, aluminum-plated steel and aluminum before a zinc phosphating treatment, which baths contain 0.001 to 0.060 g/l Ti, 0.020 to 1.2 g/l orthophosphate (calculated as P₂O₅), and 0.001 to 0.1 g/l Cu and so much alkali that the bath has a pH value of 7 to 11, preferably of 7.5 to 10.

IPC 1-7

C23C 22/80

IPC 8 full level

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CPC (source: EP US)

C23C 22/80 (2013.01 - EP US)

Cited by

DE102008054407A1; WO2010066765A1; US5503733A; DE102018216216A1; EP0554179A1; EP4339324A1; DE102019134298A1; CN106947967A; DE102008054407B4; WO2015155163A3; WO9531588A1; DE102008047533A1; US10480080B2; US9358574B2; US9364855B2; WO2014124866A1; WO2021116318A1; EP2731730B1

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EP 91200844 A 19910411; AT 91200844 T 19910411; BR 9101616 A 19910422; CA 2040859 A 19910419; CA 2040872 A 19910419; DE 4012795 A 19900421; DE 59101978 T 19910411; ES 91200844 T 19910411; JP 11801391 A 19910422; US 68682591 A 19910417; ZA 912943 A 19910419